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How consultancies evolve agile mindsets and cultivate their own agile transformation

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Abstract

This research examines how consultancies evolve agile mindsets and cultivate their own agile transformations. It identifies methods that are effective in initiating and embedding agile change and factors that influence the change to agile endeavours.

This study also builds on identified literature gaps. For one, research on agile change and consultancies has focused solely on consultancies' liaising with clients so that insights with respect to their own change endeavours are missing. Previous research has also lacked a thorough differentiation of agile adaption; both scientific and practice literature have widely ignored the differing needs of agile maturity in different consultancies and the general need for purposeful adjustments of agile change approaches to their respective cultural contexts.

This study begins with chapter 1 that outlines the research topic, aims, questions, and objectives as well as the methodology and methods of data collection and analysis. Chapter 2 then introduces the main concepts of this research, namely change management, agility, and organisation cultures. Chapter 3 follows with an outline of the epistemology, methodology, and methods that jointly form the implementation plan. Chapter 4 then provides case study reports and cross-case analyses. Chapter 5 finishes with a meaningful interpretation and highlights contributions to science and practice.

Data was collected from three multi-site, maximum-variation cases, which totalled 14 participants over a time of five months. Data collection methods included document analysis, focus groups, and surveys. Data analysis included case reports to provide a thick description of each case, participants' interactions, and types of communications as well as each case's subjective interpretations of agility and implications for agile change practices. The data analyses concluded with thorough cross-case analyses, which examined each case's differences and similarities.

This study primarily found that personal networks can be mindset-changing by enabling individuals to evolve and stabilising social systems. The research also found that the underlying organisation design acted as a mediating factor that either hindered or supported cultural change to agile efforts.

1 Introduction

1.1 Context

In today's world, disruptive forces such as the evolution of technology, digital globalisation, information democratisation, and (human) resource scarcity impact macroeconomies (Manyika *et al.*, 2016). As organisations are large parts of societies, they are also highly impacted by these shocks (Karimi & Walter, 2015; Porter & Heppelmann, 2015; Rigby, Sutherland & Noble, 2018; Zitkiene & Deksnys, 2018). In this volatile, uncertain, complex, and ambiguous (VUCA) environment, organisations faced unpredictable and disruptive change (Kotter, 1995; Luecke, 2003; Burnes, 2004; Balogun & Hailey, 2008). Organisational leaders realised that their organisational abilities to adapt were too slow to appropriately incorporate these accelerating environmental dynamics (Westley & Mintzberg, 1989; Kotter, 1995; Burnes, 2004). Thus, they focused on changes to organisational agility to achieve a fast-moving and highly adaptive organisational structure (Kotter, 1995, 2012a; Rigby, Sutherland & Noble, 2018; Kruse, 2020). This research considers the process of achieving agility as agile transformation.

Agility is considered to be a mindset (Schwaber & Sutherland, 2020). If this kind of mindset is cultivated within a group of individuals in a shared social environment like an organisation, an agile culture can evolve (Martins & Terblanche, 2003; Galván, Spatzier & Juvonen, 2011; Morris *et al.*, 2015). Hence, organisations trying to conduct an agile transformation often striving towards an agile organisational culture.

This research focuses specifically on consultancies. As part of the professional services industry (PFS), consultancies own a strong degree of organisational absorptive capacity, which supports accelerated learning and adapting to fast-changing environments (Cohen & Levinthal, 1990; Jones, 2006; Flatten, Engelen, Zahra & Brettel, 2011). According to research, consultancies are also characterised by high customer engagement, extensive customization, and high knowledge intensity (Brandon-Jones *et al.*, 2016). Their subject matter expertise is undergirded by large-scale client engagements (Brandon-Jones *et al.*, 2016; Conboy & Carroll, 2019), and their mindset is focused on developing sensitivity, organisational innovation, and speed (Chambers, 1998; Prats *et al.*, 2018). Thus, they offer extensive in-depth knowledge and expertise to provide appropriate responses to the VUCA environmental dynamics.

1.2 Literature gaps

Previous research has focused on consultancies' liaising with their clients (Kirby & Dylan, 1997; Nikolova, Reihlen & Schlapfner, 2009), so no research has examined how consultancies conduct their own agile culture transformations. In addition, approaches to increase organisational agility typically aim to achieve a fully agile organisation (Denning, 2016; Oestereich *et al.*, 2017). However, literature and practice mostly have ignored the fact that different organisations have different goals for how agile they want to become. Also, change approaches to agility are only limited by how they are adapted to their respective contexts. For instance, they broadly lack adaptions to an organisation's culture, which research has generally considered as crucial for successful change (Sathe, 1985; Schein, 2009, Hesselberg, 2018; Kruse, 2020).

1.3 Research approach

This study addresses the literature gaps by collecting and analysing context-rich data from case study research. By examining findings and deriving conclusions, this research builds a thorough understanding of each case's change to an agile endeavour. This approach enables the researcher to establish conclusions that are transferable to consultancies in comparable contexts and, ultimately, that guide this research to thoroughly answer the literature gaps.

1.3.1 Data collection

This study will rely on case study research. Data collection methods cover, firstly, collection of external documents (Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006; Hancock, 2006) such as press releases, newspapers, websites, and background papers (Bowen, 2009; Merriam & Tisdell, 2015; Salheiser, 2014; Yin, 2013). Those documents are publicly available and necessary to understand the specific context of each case as well as to prepare for the next phase. Secondly, this study will apply focus groups under the umbrella of a constructivist epistemology. The researcher will rely on knowledge workers from each case (key informants) because they use their subjective knowledge to construct new understandings. By building data-gathering activities on their perspectives, the researcher can maintain research validity. Key informants' knowledge is examined in terms of their current organisational cultures, contextual interpretations of "agility", and their general ways of interacting and collaborating. Focus groups will also shed light on their organisational challenges,

mitigation activities, and their general understandings of “success.” Thirdly, data collection will cover surveys. These aim not only to increase the depth of understanding with respect to focus group dynamics but also to provide feedback from the case study participants on the overall value contribution; in other words, surveys will be a crucial part of the participative consultative research process of this study.

1.3.2 Data analysis and findings

This study uses within-case analyses and a cross-case analysis because they are considered effective to gain a deep understanding from qualitative data (Eisenhardt, 1989; Gersick, 1988; Pettigrew et al., 1988). As part of the within-case analyses, the researcher creates detailed case study reports to provide a context-rich case description, which supports researchers’ understanding of participants’ interactions and types of communications as well as their subjective interpretations of agility and implications for agile-change practices. Based on this understanding, the insights provide case study participants with individual recommendations for action. Thus, this study provides a purposeful deliverable that is meant to guide the focus group in starting discussions about the why, how, and what of their agile culture transformations. The cross-case analysis examines the similarities and differences of each case. It differentiates kinds of communication (How do the participants drop statements and interact with each other?) from content (What do the participants say?) to derive a purposefully justified understanding of the current culture and its context. As to the nature of this study, the aim is to elucidate the participants’ respective understandings of agility and its correlation to their future target states of the culture.

1.3.3 Conclusions

Conclusions are drawn from the findings identified during the cross-case analysis. They not only lead to contributions to knowledge by answering the aforementioned literature gaps but also contribute to practice by emphasising the evolution of the researcher himself and by providing practitioners from consultancies with a comprehensive directory of effective methods for organisational change.

1.4 Research aim, questions, and objectives

Research aim: Provide evidence on how consultancies successfully initiate and embed their own agile transformations.

Research questions:

1. How do consultancies select and adjust change methods to achieve their required levels of business agility?
2. What factors influence their transformations?

Research objectives:

1. To investigate systematically the literature related to change, ambidexterity, agility, and culture to gain knowledge of theory and contemporary debate.
2. To establish factors that influence agile culture transformations in the professional services industry with respect to consultancies.
3. To provide evidence of actions that are effective in initiating and embedding agile culture transformations into different organisational cultures.

1.5 Chapter structure

The research is organized into five chapters and two appendices. Chapter 1 provides a summary of this research. Chapter 2 then covers a more encompassing introduction to the research approach and general research area. Chapter 3 includes the literature research that establishes the theoretical foundations and key concepts of this research. Chapter 4 covers the epistemology, methodology, and methods of this research, which provide a meaningful rationale for the implementation plan. Chapter 5 outlines findings from case study research and provides an encompassing discussion followed by conclusions with respect to effective change methods as well as a meaningful approach to organisational change. The research ends with a listing of references and the Appendix covering the entire Culture-Method tool as well as the data collection and analyses from case study research.

2 Literature review and theoretical foundations

2.1 Introduction

In accordance with the first research objective, the research aims to build a profound understanding in the research area by systematically investigating the relevant fields of knowledge, namely change, agility, and culture.

2.2 Research context: PFS industry and consultancies

According to research, organisations striving for agile transformations generally aim to achieve strategic competitiveness (Hooper, Steeple & Winters, 2001; Owusu-Tucker & Stacey, 2018; Udokporo *et al.*, 2020). Depending on their industry contexts, organisations consider strategic competitiveness in the following ways:

- decreased product costs and increased product quality as shown in the manufacturing industry by Goldman, Nagel, & Preiss (1995), Fliedner & Vokurka (1997), and Hasani, Zegordi & Nikbakhsh (2012)
- decreased lead time and product waste as shown in the fast-moving consumer goods (FMCG) industry by Bala & Kumar (2011) and Udokporo *et al.* (2020)
- increased operational flexibility as shown in the financial services industry by Hamad & Yozgat (2017) and Owusu-Tucker & Stacey (2018)
- or highly customized products and services delivered within a short period of time as shown in the automotive industry by Hooper, Steeple, & Winters (2001).

In contrast, consultancies as part of the PFS industry focus on developing sensitivity, organisational innovation, and speed (Chambers, 1998; Prats *et al.*, 2018). They own a different understanding based on deep subject matter expertise that evolved from consulting on long-term and large-scale client engagements (Brandon-Jones *et al.*, 2016; Conboy & Carroll, 2019). As such, they are of special interest for this study.

The PFS industry is characterised by high customer engagement, extensive customization, and high knowledge intensity (Brandon-Jones *et al.*, 2016). Knowledge in particular is considered crucial for the performance and long-term survival of organisations (Zarraga & Bonache, 2005; Collins & Smith, 2006; Greco, Grimaldi & Hanandi, 2013). Organisations thus foster their processes of gaining, adapting, and sharing knowledge as part of their knowledge management strategy (Nair, Ramalingam & Ravi, 2015). Knowledge education through knowledge sharing is

thereby deemed as especially important (Bock and Kim, 2002). Mechanisms to increase knowledge education typically rely on person-to-person relations (Brown, Dennis & Gant, 2006), which, in turn, are part of knowledge workers' characteristics (Cannella & McFadyen, 2016). Knowledge workers bring strong subject matter expertise and closely work within a client's exchange partners to provide context-specific experience and a broad resource base (Malhotra, Morris & Hinings, 2006; Reinhardt *et al.*, 2011; Zardkoohi *et al.*, 2011). They usually work in teams in which the level of individual experience varies intentionally. More-experienced members share their expertise on topics and the way this knowledge is gained and utilised so that less-experienced knowledge workers can learn. They in turn provide their perspectives on the topic of interest and thus enrich available knowledge. Their professional expertise is continuously deepened, which leads to the evolution of a sharing mindset among these intrinsically motivated individuals (Kidd, 1994; Wu, Hsu & Yeh, 2007; Chu, 2010; Wallgren & Hanse, 2011; Muo, 2013).

This research considers knowledge workers associated with consultancies. The focus on consultancies stems mainly from the previous lack of research on these organisations. As part of PFS, consultancies are classified as "management consultancies" and "trusted advisors" (Maister, Green & Galford, 2000; Karantinou & Hogg, 2001; Green & Howe, 2011; Srinivasan, 2014). Management consultancies are those that focus on delivering short-term results such as conceptualised recommendations for actions (Karantinou & Hogg, 2001; Srinivasan, 2014; Brandon-Jones *et al.*, 2016; Appelo, 2018; Conboy & Carroll, 2019). Conversely, trusted advisors are those that focus on building long-term relationships (Maister, Green & Galford, 2000; Green & Howe, 2011) that foster trust, openness, and commitment. As such, trusted advisors are meant to actively guide and help their clients evolve (Conboy & Carroll, 2019). Since the mindsets of these types of consultancies differ, the mindsets of their employed knowledge workers likewise differ. Hence, this study considers knowledge workers associated with management consultancies as consultants owning a delivery mindset and those linked to trusted advisors as coaches owning an enabling mindset. Since this study aims to offer rich insights, both types of consultancy organisations are considered in this research.

2.3 Theory context: Change management

2.3.1 History and contemporary knowledge

In the early organisational research, Taylor (1911) examined the relation between management and staff. The basic idea of this approach was to examine how productivity can be increased through the rational usage of manpower and machines and the optimisation of the workflow. The results of this research were summarised in the concept of scientific management, which treats a worker as “homo economicus” who is solely interested in maximising his salary.

While acknowledging the context of scientific management, Roethlisberger and Dickson (1934) conducted further experiments on productivity at the Western Electric Company. As the participants interacted with the researchers and each other, they experienced biased behaviour and identified informal social structures and underlying group dynamics. This was later known as the “Hawthorne effect.” The researchers argued that work force and thus organisational productivity was strongly dependent on social factors (e.g., type of leadership) and less on technical ones (e.g., salary). They summarised their findings in the human relations theory, which is a major contribution to today’s understanding of change management.

Acknowledging prior research, Lewin (1947a) postulated group behaviour as a set of symbolic interactions and forces that affected not only group structures but also individual behaviour. This, in turn, affected the behaviour and processes of the group (Lewin, 1947b). Lewin (1947b, p. 199) summarised these findings in the “field theory” and the theory about “group dynamics” in his concept of the “quasi-stationary equilibrium”. According to Lewin (1947b, p. 199), “Change and constancy are relative concepts; group life is never without change, merely differences in the amount and type of change exist.” Thus, patterns of group behaviour are constantly changing due to the forces that affect them. He finally suggested a three-step framework of change that aimed to modify group behaviour in accordance with an overarching goal. This framework is understood as crucial for the later evolution of change management approaches because it is considered a main contribution to the discipline of organisational development (Burnes & Cooke, 2012).

As change management became broadly known in practice, organisations tried to apply more structural change approaches and focused on, for example, business process redesign (Hammer, 1990). However, due to the high failure rates of change programmes (Kearney, 1989; Huczynski & Buchanan, 1991; Wastell, White & Kawalek, 1994; Waclawski, 2002), science started to underpin research with respect to the crucial success factors (Kotter & Schlesinger, 1989). A result of this research was presented by Kotter (1995, 2012b) who suggested eight steps for successful change management.

Given these past developments, it seems that change management has evolved to include an increasingly strong system-theoretic perspective (Schein, 1987, 1988, 2009a; Senge, 1990, 2006; Kotter, 2012a; Kruse, 2020). Senge (2006), for instance, stated that systems providing only poor guidance to their members cause a high degree of uncertainty. As a result, members must exert great efforts to establish certainty, which distracts them from conducting their daily business and further evolving. Since an organisation is based on its members, change initiatives are thus less likely to be carried out successfully. Based on these findings, Senge formulated the theory of system dynamics. Schein (1987, 1988, 2009a) acknowledged prior research and stated that all organisational (in-) efficiency is linked to humans and their processes because systems are based on them. He thus focused on processes that aimed to change an organisation's culture. Today, this focus is part of the discipline of organisational development (By, 2005). In terms of efficiency, Kotter (2012a) stated that organisations typically focus on exploiting (strategic) strengths rather than exploring new ways to evolve. He argued that most organisations work in hierarchical systems, and they relied for decades on a management that took care of efficiency. However, as the environment now changes more rapidly, organisations need to learn how to change accordingly (Karimi and Walter, 2015; Porter & Heppelmann, 2015; Rigby, Sutherland & Noble, 2018; Zitkiene & Deksnys, 2018). Therefore, Kotter (2012a, p. 50) suggested a "dual operating system", which is "a management-driven hierarchy working in concert with a strategy network." The strategy network timely provides innovative ideas as results from joint discussions that are fed back to the management of the hierarchy. Then, the management derives change initiatives and carries them out in line with known change management approaches. Kruse (2004, 2020) agreed with Kotter (2012a)'s dual operating system concept and conducted

further research that focused on strategy networks or network systems. He examined the success factors of network structures accompanied by hierarchical structures and discovered crucial prerequisites: The management of the hierarchy needs to legitimate the network system, to communicate a strong commitment, and to set up quality-ensured processes between the hierarchical system and the network system with respect to knowledge management and information sharing. Once the prerequisites were met, Kruse argued, the network needed to reach a high density of links among people to establish a strong momentum that, ultimately, enabled the network to make smart decisions. If this state is reached, the network is smarter than the pure addition of its parts. He identified several roles that needed to be combined to ensure a proper working of the network, namely the “Broker” (strong networking skills), the “Creator” (high creativity skills), and the “Owner” (subject matter specialist who can engage people).

Today’s scientific literature seems still to be discussing if change management evolves towards organisational development, if that evolution happens in the opposite direction, or if both disciplines actually emerge and should be captured in a broader understanding of organisational change (Worren, Ruddle & Moore, 1999; Farias & Johnson, 2000). This study acknowledges these discursive processes and proposes to adopt organisational change as an overarching term for the general discipline of change in organisations (Pettigrew, Woodman & Cameron, 2001; Lewis, Passmore & Cantore, 2016) and provides a definition in the following chapter.

2.3.2 Conceptualisation

A broadly accepted definition of organisational change seems difficult to find due to the multi-faceted nature of change (Waddell, Cummings and Worley, 2004). Critics have stated that the construct of change is still undefined (Pettigrew, Woodman and Cameron, 2001), which seems to be rooted in a lack of construct clarity. This, in turn, seems to be reasoned in the missing articulation of contextual conditions and underlying assumptions (Suddaby, 2010).

As such, scholarly researchers have tried to extend the understanding of organisational change by conducting typology-based research with respect to its scale (Stock, 1993; Boga and Ensari, 2009; Boyd, 2009); duration (Berwick, 1998; Ulrich,

1998; Shields, 1999); methodological approach (Juran, 1958; Lippitt, Watson & Westley, 1958; Deming, 1986; Conner & Conner, 1998); targeted outcome (Kendra & Taplin, 2004; Nicholas & Steyn, 2008); and hierarchy level such as individual, group, or system, or a combination of these (Miller, 1982; Meyer, Brooks and Goes, 1990; Beer and Nohria, 2000; Goes *et al.*, 2000; Burnes, 2004). While these typologies offered a substantial review, they were not able to clarify the epistemological status of change (Quattrone & Hopper, 2001) and thus could not overcome missing construct clarity (Pettigrew, Woodman & Cameron, 2001).

Acknowledging this lack of clarity, the researcher aims to provide transparency in his contextual conditions and assumptions. This research centres on organisational change and its self-referencing and reinforcing processes that enable an organisation to transform itself towards a state of matured business agility. It focuses on changing individuals' mindsets while addressing the ambidexterity of the environment, which is affected by internal and external disruptive dynamics (Porter and Heppelmann, 2015; Hartl and Hess, 2017; Zitkiene and Deksnys, 2018). Because organisations are social systems (Schein, 1987, 1988, 2009a; Lewis, 2015), they are assumed to be complex (Roethlisberger & Dickson, 1934; Katz & Kahn, 1978) and dynamic (Lewin, 1947b; Mabey & Mayon-White, 1993) by nature. Like all dynamic systems, organisations strive towards a state of balance and stability (Lewin, 1947c; Senge, 1990, 2006; Mabey & Mayon-White, 1993; Kruse, 2020). Once achieved, such systems try to maintain this stability at all costs as it offers certainty and predictability to its members (Senge, 1990, 2006). This enables the organisation to evolve in predictable iterations because the members can focus on learning rather than on establishing stability. Thus, stable systems enable organisational learning through the management of quality-ensured processes (Senge, 1990; Kruse, 2020).

However, this process is widely considered as happening slowly (Basten & Haamann, 2018), which is assumed to be contractionary in regards to the environmental dynamics organisations now face (Porter & Heppelmann, 2015; Hartl & Hess, 2017; Zitkiene & Deksnys, 2018). As slowly evolving consultancies are faced with the disruption of the environmental dynamics, they experience shocks pushing them into a state of instability. This causes a high degree of uncertainty, namely cultural entropy (Barrett, 2016; Kruse, 2020), for the members of the system, which causes them to exert high

levels of effort to re-establish certainty (Senge, 1990, 2006; Kruse, 2004, 2020). Consequently, the members are distracted from conducting their daily business and from evolving through learning, which puts the whole organisation at risk.

Kruse (2020) emphasised that the transition from a state of instability to stability needs to be guided in a way that actively engages members to contribute to moderated discussions on the future state of the consultancy. If results are jointly achieved, put into accordingly defined change initiatives, and carried out from the top of the hierarchy down, the organisation can reach a new state of stability. Acknowledging the research from Kotter (2012a) and Kruse (2020), this study agrees with this understanding of change management and applies a working definition as follows: “Organisational is change is a complex process of guiding a system and its members from a state of stability to instability and towards a new state of stability whereas it is moderated by leadership activities that aim to jointly develop, evaluate, and incorporate new ideas and concepts (potentially including new social norms, behaviours, and values)”.

2.3.3 Change readiness

A crucial prerequisite for any kind of change is change readiness (Carley, 1986; Cohen & Levinthal, 1990; Burnes, 2004; Kim & Lee, 2010; Rusly, Sun and Corner, 2015; Kuzel, 2017; Ossenbrink, Hoppmann & Hoffmann, 2019). In scientific literature, this is closely related to the ability of recognising, assimilating, and applying new knowledge, namely absorptive capacity (AC) (Cohen and Levinthal, 1990; Van Wijk, Jansen and Lyles, 2008).

Following Daghfous (2004), Matusik & Heeley (2005), Witherspoon *et al. (*2013), an organisation’s AC is based on individuals’ motivation and ability to gain new knowledge. Thus, organisational AC is strongly dependent on individuals’ AC. Enkel *et al.* (2017) acknowledged these findings and provided empirical evidence that external knowledge identification encourages individuals to find new ways of combining knowledge. They argued that individual AC contributes to exploratory and exploitative innovation, which promotes the organisation in its entirety. By concluding that “individual identification efforts support firms in simultaneously pursuing exploration and exploitation, thus fostering organizational ambidexterity” (Enkel *et al.*, 2017, p. 6),

they provided evidence on the linkage between organisational AC and organisational ambidexterity that jointly establish change readiness.

The term ambidexterity was originally located in neuro-psychology (Morf, 1951; Crovitz & Zener, 1962; Annett, 1972) and today is interpreted in the context of organisational development. Following Gibson & Birkinshaw (2004), He & Wong (2004), O'Reilly III & Tushman (2013), this term describes the contractionary idea of balancing explorative activities (e.g., radical innovation) and exploitative activities (e.g., incremental innovation). This balance is considered necessary: If organisations only rely on exploitative activities, they risk experiencing a competence trap in which core competences become core rigidities (Leonard-Barton, 1992). On the other hand, if organisations solely consider exploitative activities such as acquisition of other organisations to incorporate new knowledge, they may suffer from high acquisition costs for knowledge that is not applied, used, or exploited (Zahra & George, 2002). Thus, scientific research across disciplines has argued for a simultaneous and well-balanced application of explorative and exploitative activities (Gupta, Smith and Shalley, 2006). Over time, varying perspectives have arisen based on different theories, namely dynamic capabilities (Taylor & Helfat, 2009; O'Reilly & Tushman, 2013), organizational learning (Li *et al.*, 2016), or AC (Jansen *et al.*, 2008; Avimanyu, 2011; Flatten *et al.*, 2011). These led to different propositions of how ambidexterity can be applied.

"Sequential ambidexterity" describes the realignment of organisational structures and resources to switch sequentially between phases of exploration and exploitation (Tushman & Romanelli, 1985). Nickerson & Zenger (2002) and Boumgarden, Nickerson & Zenger (2012) argued that organisations can more easily change their formal structures than their informal structures and corporate cultures. Siggelkow and Levinthal (2003) agreed and argued organisations can only take full advantage if they focus on either an explorative or exploitative approach. However, Tushman & O'Reilly III (1996) contradicted this finding by stating that sequential ambidexterity is only effective in organisations that change evolutionarily and that in a rapidly changing environment, organisations need to apply these simultaneously. Hence, they suggest applying a structural approach.

“Structural ambidexterity” describes organisations with dual structures where exploiting business units are split from exploring ones (O’Reilly & Tushman, 2008). They have different competencies, incentives, processes, and cultures and are each internally aligned by an overarching business vision and a shared value base (Tushman and O’Reilly III, 1996; Benner & Tushman, 2003). They are also linked within the organisation to ensure that both unit types can leverage the organisation’s resources.

“Contextual ambidexterity” describes the organisational ability to achieve alignment (coherence in all activities to work towards one shared objective) and adaptability (ability to quickly reconfigure necessary assets and structures) at the same time (Birkinshaw & Gibson, 2004; Gibson & Birkinshaw, 2004). The organisation provides agreements, assets, and processes to its members and, in doing so, encourages them to judge for themselves when to follow explorative or exploitative activities. By providing a supportive context, the organisation shifts ambidexterity to the individual level (Birkinshaw & Gibson, 2004; O’Reilly III & Tushman, 2013; Lô & Fatien Diochon, 2020).

The latest research suggests the complementary nature of structural and contextual ambidexterity. O’Reilly & Tushman (2013), Hill & Birkinshaw (2014), Ossenbrink, Hoppmann & Hoffmann (2019) have argued for applying contextual and structural forms of ambidexterity concurrently to achieve an even, increased form of organisational adaptability. They emphasised the term “hybrid ambidexterity” and identified three types as applied in practice:

1. Ideation hybrids: few formal organisational structures but strong reliance on idea generation enables bottom-up innovation from members of all hierarchies and departments (e.g., organisation-wide idea competition with a jury).
2. Incubation hybrids: fluid organisational structures allow individuals to invent and pursue new business models that are supported by the organisation through space, time, and budget for that particular topic (e.g., an accelerator structured as a network that is affiliated with the organisation).
3. Integration hybrids: strong formal structure integrated into the organisation’s hierarchy (e.g., matrix organisation) that pools subject matter experts on a topic of strategic relevance (e.g., cross-functional task force).

Other research also mentioned further examples of hybrid ambidexterity. Leffingwell and Jemilo (2019 and Wohllebe (2021) suggested forming a cross-functional transition team that develops agile ways of working and initiates pilot projects across the hierarchy. The transition team operates thereby as a network to co-create agility in certain areas of the hierarchy. Hornung (2018) suggested sub-areas of an organisation (e.g., single locations or departments) that autonomously initiate agile pilot projects ("agile biotopes") to start local transformation processes. The intention behind the procedure is to transform 20% of the hierarchy's capacity into a swarm organisation (an autonomously acting network), which aims to increase the competitiveness of the overall hierarchy.

Since organisational changes are widely carried out by applying respective change management models (Welborn, 2001; O'Keefe, 2011; Kotter, 2012b, 2012a; Kuipers *et al.*, 2014; Cummings, Bridgman & Brown, 2016), the researcher provides a brief overview here.

2.3.4 Change management models and the "dual operating model" theory

In 1947, Lewin (1947a) described a three-stage change model. He stated that organisations need to be made aware of the need for change ("unfreezing") prior to its actual implementation ("moving"). During the last stage ("refreeze"), he aimed to stabilize the change efforts by supporting, for example, changed behaviours and by providing the organisation with a period of rest to ensure its long-term effectiveness. Critics stated that his approach was too vague and that he assumed an organisation as a static entity that needs to change evolutionarily rather than disruptively (Clegg, Kornberger and Pitsis, 2015; Cummings, Bridgman and Brown, 2016; Muldoon, 2020). The researcher agrees with the critics and thus excludes the change model due to its lack of effectiveness.

Later, Kotter (1995, 2012b, p. 2) suggested a change management model that covered eight consecutive steps: establish a sense of urgency, create the guiding coalition, create a vision, communicate the change vision, empower broad-based action, generate short-term wins, consolidate gains, and anchor new approaches in the organization's culture. Critics faulted this model's rigid and sequential approach that was meant to respond to episodic rather than disruptive changes (Burnes, 2004;

McNamara, 2010; O'Keefe, 2011; Kotter, 2012a). They argued that Kotter focused on a top-down approach, which implied that the management would make every decision on their own. Thus, critics suggested that affected employees were too removed from the decision process. As a result, the researcher acknowledges these critics and excludes this model from this study.

Other change management models described variations of these models. For example, Krüger & Bach (2014) suggested comparing an organisations' current state with an optimised future state to derive the need for change. This need should then be used to mobilise executives to trigger a five-step process covering initiation, conception, motivation, implementation, and settlement. Despite the idea of high flexibility that aimed to adapt the individual steps in accordance with the need for change, critics again emphasised the focus on the executive level (Fitzel & Fitzel, 2019). By focussing too much on a top-down approach, this model excludes many affected individuals. Hence, there is a high risk of failure. The researcher thus deems this model too inefficient to be further covered in this study.

Several years later, Kotter (2012a) provided a more efficient change model as he addressed critics of his former approach. Based on his eight-step approach, he refined his underlying assumptions to the following:

1. Change's nature is disruptive rather than evolutionary
2. Rely on a broad base of willing contributors rather than only on a small guiding coalition
3. Focus on leadership rather than management activities
4. Focus on implicit and social factors rather than solely on hard facts
5. Rely on two differently structured systems that form one organisation
6. It is necessary to rely on two differently structured systems that form one organisation

He stated a new way to apply change in a hierarchically structured organisation. He relied on means of AC and ambidexterity to emphasise the dual operating system theory, which is a network working in concert with a hierarchy. Accompanied networks need to be legitimated by the leadership of the hierarchy and rely on their willing volunteers.

According to Kruse (2004, 2020), the density of the accompanied network—meaning the successful linkage and activation of its individual members—determines its smartness. If the density gets significantly high, the network becomes smarter in its entirety than the pure addition of its members could be on their own. This collective intelligence then enables the network to evaluate its ideas, make smart decisions by itself, and achieve increased effective and efficient (Burton, Obel & DeSanctis, 2011) abilities to innovate (Kruse, 2004; Johnson, 2011). The decisions and innovations are fed back through quality-ensured processes to the management of the hierarchy who then derive change initiatives based on these decisions (Kotter, 2012a; Kruse, 2020). Because this change model is typically applied in practice and scientifically acknowledged, the researcher considers this change model as efficient enough to be covered in this study.

However, depending on the chosen literature, the interpretation of the term “network” and the description of its abilities and methods of interaction with the hierarchy seem to differ (Kruse, 2004; Kotter, 2012a; Leffingwell *et al.*, 2014). Hence, a terminological distinction is provided below.

2.3.5 Networks

Networks consist of a crowd of members that are interdependently connected (Kruse, 2004; Johnson, 2011) and organised around “purpose, complexity, and scope” (Laloux, 2016, p. 322). Whereas hierarchies rely on centralised and efficiency maximising decision processes that lead to a decreased cognitive load on individuals and organisational predictability (Roberts, 2007; Harford, 2011; Johnson, 2011), networks do not. Instead, they focus on decentralised decision processes based on local information (Roberts, 2007; Appelo, 2011; Harford, 2011) and foster the flow of information through establishing complex, interdependent links among their members (Kruse, 2004).

In their pure form, networks show a range of shared systematic design principles that researchers consider typical (Chan, 2001; Kruse, 2004; Hovorka & Larsen, 2006; Jones, 2014):

1. *Idealization* refers to a shared goal considered as an “ideal state or set of conditions that compels action toward a desirable outcome” (Fry, 2012; Jones, 2014, p. 105).
2. *Appreciating complexity* acknowledges “the dynamic complexity of multi-causal wicked problems and the cognitive factors involved in understanding the relationships that indicate problem complexity” (Warfield, 2001; Jones, 2014, p. 105).
3. *Purpose finding* describes the process of determining purpose by agreement. According to Ackoff and Emery (2006), Banathy (2009), and Jones (2014, p. 106), purposive systems are “institutionalised social systems that embed deterministic systems for a core purpose.”
4. *Boundary framing* refers to an iterative application of inspection and adaptation to create an “effective fit between” organisational “concepts and its target environment” (Jones, 2014, p. 117). It ultimately aims to energise people within a given organisational frame to trigger desired behaviour (Huczynski & Buchanan, 1991; Jones, 2014).
5. *Requisite variety* refers to Ashby (1961) who stated that an internal social system (e.g., an organisation) needs to be at least as complex as the external environment to successfully manage within it, or, in the words of Jones (2014, p. 118), “the functional complexity of a given design must match the complexity of its target environment”. That is what Kruse (2004, 2020) described as the need for social complexity established by an increased density of communication links among the members of a social system.
6. *Feedback coordination* is conceived as “compensatory” or “reinforcing” communication loops that guide “the output performance of a system to conform to desired effects” (Wiener, 1948; Jones, 2014, p. 119).
7. *System ordering* describes “the ordering of relations within a system” (Jones, 2014, p. 120). It aims to create “a compositional unity” that produces “humanly-useful structures” that are visible and salient “within complex situations” (Jones, 2014, p. 121; Nelson and Stolterman, 2014).
8. *Generative emergence* summarises “properties in complex social systems” that “are considered co-occurring with intentional, purposeful behaviours” (Jones, 2014, p. 121). They arise “from the interaction of system components” and “evolve from a pre-existing social … context that gives shape and direction to

an innovation" (Jones, 2014, p. 121). Because they use "pre-existing conditions of organizations, social systems and, their norms", they are "perceived to be novel or distinct from the mere collection of properties associated with the parts" (Jones, 2014, p. 122).

9. *Continuous adaptation* seeks to "consciously identify variations" of a system to its "environmental demands … over time" and to "signal the onset of emergent situations", which results in co-designed "adaptive responses" (Jones, 2014, p. 123). Jones (2014, p. 123) and Denning (2019) emphasised this ability as "adaptive monitoring", which is considered "essential for organizational resilience and strategic flexibility."
10. *Self-organizing* "serves positive feedback or reinforcing process that enables creative organization of social systems by its participants (Wiener, 1948; Ashby, 1961; Varela, Maturana & Uribe, 1974; Luhmann, 1984; Jones, 2014, p. 124). The (…) processes of negative feedback (guidance) serves a self-adaptation capacity, the regulation of behaviours within preferred or sustainable limits". It aims to "increase awareness, incentives and social motivations to accelerate organizing behaviours" (Jones, 2014, p. 124). Self-organising processes reinforce behaviour loops and increase participation which then reinforce "the self-organization of co-created content and purposeful interaction within the boundaries and norms of the social system" (Jones, 2014, p. 124). However, because networks are self-organising but not self-structuring, they require a "designed structure (…) to enhance variety, facilitate agreements and mitigate the selection of power within groups" (Jones, 2014, p. 125).

From an organisational design perspective, research mentions Holacracy and Sociocracy as typical examples of network organisations (Appelo, 2011; Laloux, 2016; Oestereich *et al.*, 2017). Robertson (2007, 2015) and Collins & Hines (2010) described Holacracy as a network of self-managing teams named "circles." They are based on individuals who voluntarily take on multiple roles based on the needs of the organisation. They are given the opportunity to act on tensions (tensions on operations affect the processing of work while tensions on governance affect the structure of the organisation), but decision-making processes are distributed throughout the organisation. The organisation constantly shapes its purposefulness while incorporating reality as provided by business. According to Endenburg & Bowden

(1988), Romme (1995), and Bockelbrink, Priest & David (2021), Sociocracy is organised in circles that are embedded in the administrative hierarchy. It is based on four ground rules ("decision making by consent; a hierarchy of circles in which every member of the organisation participates; double linking between circles; and election of persons by consent") that foster "downward as well as upward" communication among individuals (Romme, 1995, p. 1). By focusing on the principles of effectiveness (clarify the "why" in an efficient way), consent (social contracts), empiricism (choose options based on data), continuous improvement (iterative approach to change), equivalence (delegate responsibility and power to influence equally), transparency (open-access for information recording systems and transparent motivation for it), and accountability (acknowledge shared accountability), it fosters patterns of co-creation and collaborative evolution (Bockelbrink, Priest and David, 2021). It claims to provide a model for improving organisational "performance, engagement, and wellbeing … without the need for sudden radical reorganisation" (Bockelbrink, Priest & David, 2021, p. 10)

Research has generally emphasised networks' ability to adapt to complex, dynamic, and disruptive environments through self-organisation (Kauffman, 1993, 1996; Appelo, 2011; Jones, 2014; Laloux, 2016; Oestereich *et al.*, 2017). According to Jones (2014) and Laloux (2016, p. 135), such network organisations are "complex, participatory, interconnected, interdependent, and continually evolving systems." Their structure "follows the need", and "roles are picked up, discarded, and exchanged fluidly. Power is distributed" and "decisions are made at the point of origin" whereas "innovations can spring up from all quarters. Temporary task forces are created spontaneously and quickly disbanded again".

Thanks to their complex mechanisms of self-organisation (Kauffman, 1993, 1996; Appelo, 2011; Jones, 2014; Laloux, 2016; Oestereich *et al.*, 2017), networks are considered complex, adaptive systems (CAS) (Gell-Mann, 1992; Chan, 2001, p. 1; Kruse, 2004; Morowitz, 2018). According to Chan (2001, p. 2), CAS are "closely linked with all other relating systems making up an ecosystem." Despite agreeing with the fact that CAS are "able to adapt in and evolve with a changing environment" (Chan, 2001, p. 2), the researcher denies that there "is no separation between a system and its environment" (Chan, 2001, p. 2). The researcher argues that even in an

environment shaped by ongoing dynamics, systems require time to evolve in a circular and empirically driven organisational change process as stated by Kotter (2012a) and Oestereich *et al.*, (2017). Each major organisational change needs to be embedded in and fostered by resilient structures and processes prior to any further change to avoid impacting business activities due to organisational distraction (Oestereich *et al.*, 2017; Kruse, 2020). During the evolution from an old, stable state towards a new, stable state (potentially covering changed resilient structures and processes), a system and its environment differ from each other.

From an organisational change perspective, research has emphasised the need for patterns that are suited to balance ambidextrous organisation designs, namely a hierarchy and an attached network structure (Kruse, 2004; Appelo, 2011; Burton, Obel & DeSanctis, 2011; Kotter, 2012a; Hill & Birkinshaw, 2014; Maier, 2015). Appelo (2011), for example, suggested hiring what he calls “T-shaped people”; these are subject matter experts in an area who also bring a broad understanding of the wider context. He also suggested organising people in small and cross-functional teams around value streams that are supported by shared specialist units. He claimed these teams perform best thanks to their semi-stable nature (regularly varying team members) and argued towards open allocation. Likewise, Church (2012) found the concept of open allocation held people self-responsible since they could find projects of interest to foster intrinsic motivation. Appelo (2011) also stated the importance of letting teams differentiate and operate in accordance with their own rules as far as they do not contradict the systems’ rules; in other words, he argued for teams’ autonomy.

2.3.6 Summary

Hierarchies contribute predictability and efficiency whereas networks provide innovation and effectiveness (Kruse, 2004; Appelo, 2011; Kotter, 2012a). Healthy organisations make use of both structures (Appelo, 2011; Kotter, 2012a) whereas the external complexity and dynamics of the VUCA environment strengthen organisations’ focus on network structures (Ashby, 1961; Oestereich *et al.*, 2017). The more complex these dynamics become, the denser the linkages among the members of the organisation need to become to answer the changed customer needs in the most effective and efficient way (Ashby, 1961; Luhmann, 1984; Kruse, 2004). In their most dynamic form, organisations are structured as self-organising networks that evolve

through autopoietic means (Luhmann, 1984; Maturana & Varela, 2012) towards complex, adaptive systems (Gell-Mann, 1992; Holland, 1996; Chan, 2001; Morowitz, 2018). Nowadays, organisations change from hierarchical structures to ambidextrous structures (and possibly to network structures) and target a system's environment and not its members (Appelo, 2011; Oestereich *et al.*, 2017). More precisely, (Oestereich *et al.*, 2017) argued for creating a clear, distinguishable, new organisational context rather than adding rules to an existing one (e.g., the hierarchy). This context needs to be accepted by organisations' individuals to an extent with which they identify. Research has acknowledged this kind of organisational change as necessary because individuals support change triggered by purpose. As of this complex endeavour, research has stated the necessity of a change model and approach that appreciate that degree of complexity (Kotter, 1995, 2012b; Laloux, 2016; Oestereich *et al.*, 2017; Kruse, 2020). Kotter (2012a) suggested the dual operating model that advises general change whereas Appelo (2011), Leffingwell *et al.* (2014), Laloux (2016), Oestereich *et al.*, (2017), Hofert (2018b), and Schwaber & Sutherland (2020) suggested an agile approach to master the complex dynamics of external and internal change. Due to its importance to research and to this study, agility is described in the next section.

2.4 Theory context: Agility

2.4.1 History, contemporary knowledge, and conceptualisation

In 1940, Taiichi Ōno introduced the “Toyota Production System” (TPS) (Lander & Liker, 2007). It aimed to increase production quality by continuously improving organisations’ processes that help to establish and accelerate a constant production flow (e.g., by visualising elements and pulling them through a takt time). These processes also focused on avoiding any waste of corporate resources. The TPS targeted the entire organisation and included a joint base of shared values, knowledge, and procedures. It is used synonymously with lean principles and has a common foundation with agility in terms of values and intents (Lander & Liker, 2007).

Later on, “iterative and incremental development” (IID) was introduced by Benington (1956). It describes a stage-wise development approach that enables users to quickly react to changes (Larman, 2004). Despite the fact that IID did not suggest how exactly this process model should be implemented in small or large and distributed software projects, its basic idea is the foundation of a modern agile development process, and, as such, it is understood as a fundamental contribution to agility (Larman & Basili, 2003; Larman, 2004).

During the 1970s, researchers described the characteristics of an agile organisation (Parsons, 1977; Argyris & Schön, 1997) including the organisational ability to adapt to a VUCA environment (Bennett & Lemoine, 2014; Scheller, 2017). It is based on principles of organisation learning that imply constant sharing and evaluation of knowledge at all hierarchy levels (Senge, 2006; Basten & Haamann, 2018). The researchers also suggested to shift the focus from the developing software towards the stakeholders and argued that the software might change due to changed requirements from the stakeholders.

In 1986, Takeuchi and Nonaka (1986) mentioned agility for the first time. Their research implied that small and self-organised teams can reach outstanding performance if they are provided with objectives rather than tasks. Moreover, these teams need room to take and revise decisions so that they can best strive towards the shared objectives. The researchers also argued for reflective learning and organisational transfer of learning across those teams, built-in instability to challenge

chosen decisions, and subtle control during overlapping development phases. This research thus included key elements of the modern understanding of agility.

Later, Sutherland (1995) named Scrum as the first agile framework during the Conference on Object-Oriented Programming Systems, Languages, and Applications in Uppsala. He stated an approach that aims to develop complex products in a volatile, uncertain, complex, and ambiguous environment and relies on an iterative-incremental approach to deliver products of high quality to defined stakeholders. It includes empirical process control that relies on transparency, inspection, and adaption. He also argued for particular values that needed to be shared across all hierarchy levels (e.g., commitment, courage, respect, trust, transparency).

Then, in 2001, Beck *et al.* (2001) formulated the "Manifesto for Agile Software Development" that contained a list of agile principles. They suggested valuing individuals and interactions over processes and tools, working software over comprehensive documentation, customer collaboration over contract negotiation, and responding to change over following a plan. They added 12 principles that shape today's interpretation of agility.

During recent years, scholarly research increased and the understanding of agility seemed to mature. Anderson (2003), for instance, acknowledged the agile manifesto but refused to do so for some aspects of Scrum. Instead, he suggested prioritizing a constant flow of work-in-progress tasks over delivering increments in a tact time while sticking to the need for visualisation. He thus relied on agile principles in combination with the TPS and finally came up with a framework known as Kanban.

Thus, the evolution of agility seems to be ongoing whereas its meaning has been tailored to specific needs.

Hummel (2014) conducted literature research and investigated 482 papers to find an overarching, generalised definition of agility. He found that research-based taxonomies for the concept of agility are rare and that most papers relied on an interpretation of the agile manifesto as introduced by Beck *et al.* (2001). He concluded that the agile principles of the agile manifesto are not suitable as a solid theoretical grounding because they are stated by practitioners and not verified by researchers. He

summarised that “a universal understanding of what constitutes agility is not observable” (Hummel, 2014, p. 4718). Instead, a variety of researchers still acknowledge the agile manifesto and suggest definitions based on the context of their particular research. Anderson (2003), for instance, focused on the concept of “lean“, which implies avoiding resource waste and ensuring a constant flow of software development (Anderson, 2003; Petersen, 2011). In contrast, Schwaber (1997) and Schwaber & Beedle (2002) focused on an empirical process that aims to deliver complex products in tact time through an iterative-incremental approach. Beck (1999), moreover, referred only indirectly to agility. He focused on solving a programming task rather than following a formal approach and, consequently, favoured a customer orientation and quick reactions to changed requirements. However, it seemed that terminologies were missing clear differentiation. Conboy (2009), Petersen (2011), Wang, Conboy & Cawley (2012), for example, stated the distinct similarities and differences between “lean” and “agile” in scientific literature and argued that both definitions merge to an extent. Leffingwell and Jemilo (2019) agreed by providing a scaled agile framework that is based on lean-agile values and principles. They argued that every transformation aims to realise value to the customers and, hence, practically combining lean and agile approaches is beneficial.

The researcher acknowledges this previous research and provides a definition of agility that includes the most common factors: Agility is a mindset that employs a value-driven perspective and fosters personal mastery and continuous learning as part of a growth mindset. It relies on empirical-based decisions that are continuously evaluated following an “inspect and adapt” approach.

2.5 Theory context: Organisation cultures

2.5.1 History and contemporary knowledge and conceptualisation

Research has suggested a variety of historically evolved definitions of “organisation culture“, many of which are competing definitions. One reason is the blurred distinction between “organisation culture” and “corporate culture” (Dülfer, 1992). Gontard (2002) mentioned as causes different research viewpoints on the one hand and the complexity and multi-faceted nature of the social phenomenon of organisation culture on the other. This study acknowledges the terminological differentiation as stated by Gontard (2002) since its overarching terminological differentiation encompasses other widely accepted movements (Sackmann, 1992, 2017; Schmidt, 2008). Gontard (2002) suggested splitting terminological viewpoints into the objectivistic perspective (Sandner, 1988; Keller, 1991; Staehle, 1999; Sackmann, 2017), subjective perspective (Schnyder, 1989; Ogilvie, 1992; Wollnik, 1992; Sourisseaux, 1994; Bögel, 2003), and integrative perspective (Schwarz, 1990; Kaschube, 1993; Gontard, 2002).

The objectivistic perspective assumes that organisational culture is one of several variables that enable effective management (Krüger, 1988, p. 27; Krüger & Bach, 2014). Organisational culture is understood as a determinant that shapes cultural subsystems. Deal & Kennedy (1983, p. 4) defined culture as “a cohesion of values, myths, heroes and symbols that have great meaning for the people who work here.” Similarly, Kobi & Wüthrich (1986, p. 23) defined organisational culture as “... the set of norms, values and attitudes that shape the behaviour of employees at all levels and thus the appearance of an organisation.” Sackmann (1992, p. 155) summarised the objectivist view of organisational culture by stating: “Culture is one of several organisational variables that are created, developed, and changed by managers. It fulfils important functions for the achievement of goals and the success of an organisation. This variable … consists of many partial products that combine to form a homogeneous whole and are visibly expressed in the form of artefacts and collective behaviour.”

Schnyder (1989), Ogilvie (1992), and Ochsenbauer & Klofat (1997) advocated the subjectivistic perspective by assuming a socially constructed reality that does not exist objectively and is generated exclusively through cognitive interpretation processes of organisations’ members. They assumed organisations were an expression of human

consciousness (Wollnik, 1992; Sourisseaux, 1994) or a social, collective construction of organisational reality (Sackmann, 1992; Gontard, 2002). As such, reality is created through members' consensus on what is real and meaningful and, thus, seen as a collective perception created by thinking, feeling, and acting (Pondy & Mitroff, 1979; Smircich, 1983). In this context, Hofstede (1984, p. 25) defined organisational culture as "... collective programming of the mind that distinguishes members of one human group from another." Holleis (1987) defined organisational culture as the totality of bodies of knowledge, underlying beliefs, patterns of thought, norms of behaviour, perceptions of the world, and interpretations that are consciously or unconsciously expressed symbolically or linguistically by the individuals involved in thinking, speaking, and acting.

The integrated perspective integrates both of the preceding movements and emerged as a distinct approach with heterogeneous entitling (e.g., reflective functionalist, dynamic construct, integrated perspective) in scientific literature (Gontard, 2002). In accordance with this perspective, culture has tangible and intangible levels that interact in a complex and multi-causal way. Hence, there are aspects that are visible and directly observable while others can only be deciphered by drawing conclusions about the perceptions, thoughts, feelings, and actions of organisational members (Gontard, 2002). The integrated perspective states that organisational culture emerges through social learning processes of organisations' members (Schein, 1995; Gontard, 2002). As Schein (1995) suggested, for each individual or group in the organisation, for example, a challenge is mastered in a very specific way. If this method proves successful, it is repeated over time by other individuals until it has settled as the "right way" and is repeated unreflectively in similar situations over time. In that regard, Sackmann (1992, p. 34) described organisational culture as a "... set of jointly held cognitions that are held with some emotional investment and integrated into [a] logical system or cognitive map that contains cognitions about descriptions, operations, prescriptions and causes. They are habitually used and influence perception, thinking, feeling, acting." Similarly, Schein (1995) defined organisational culture as the pattern of joint basic assumptions of a group that it has "learned in coping with its problems of external adaptation and internal integration, which has proven itself and is thus considered binding." The researcher acknowledges the effective definition of culture as provided by Sackmann (1992) due to its encompassing character.

Similarly, the researcher acknowledges findings as stated by Gontard (2002) who argued for the effectiveness of the integrated perspective in constructivism research. Also, from an organisational change viewpoint, the integrated perspective states two relevant assumptions that prove its effectiveness: first, an organisational culture covers observable and non-observable characteristics that are linked in a complex and multi-causal way; and, second, a culture can be changed by influencing the social learning processes of its members.

The first assumption of changing a culture in terms of its visible characteristics is widely accepted by research from Hall (1976), Sackmann (1992), and Schein (2009a, 2009b). Schein (2009b), for example, differentiated among underlying assumptions, espoused values, and artifacts in his three levels of culture model.

The first level covers the artifacts that are all phenomena that can be seen, heard, and felt when encountering a new group and culture (Schein, 1984, 1995). They cover, for instance, architecture, language, technology usage, clothing, manners of address, myths, stories about the organisation, published lists of values, and observable rituals or ceremonies. Artifacts thus describe cultural manifestations commonly recognised as behaviour routines, organisational processes, or structural elements. His research is widely comparable to that of Sathe (1985, p. 17) who differentiated artifacts into shared things (e.g., furnishment of offices, physical locations, virtual conference room settings, individuals' clothing, variations of company logos), shared statements (e.g., war stories, sayings, typical sentences that open or close meetings), shared actions (e.g., routine procedures, group rituals, traditions), and shared feelings (e.g., equality among individuals). However, Schein (1984, 1995) emphasised that artifacts are challenging to decode for individuals who do not belong to the social context from which they originate. Hence, the meaning of the artifacts needs be deduced either in the course of time, through analysis, through named guidelines of the major norms and values, or by asking individuals who belong to the cultural context.

The second level covers the espoused values. Schein (1984, 1995) conceived of values as a problem-solving approach that serves as an orientation for an individual's behaviour in unknown situations. Values determine the "meaning" behind a behaviour so that, for example, a particular behaviour feels right or wrong, and, unlike artifacts,

they are not directly observable (Gontard, 2002, p. 27). Schein (1995, p. 32) mentioned the following example: If a group needs to solve a previously unknown problem, group members will try out a solution suggested by an individual that seems most promising. If this social validation process is successful, the solution will be judged as suitable and will be memorized by the group members. The value of the individual then becomes the shared value of the group. With continuing success, the value becomes an underlying assumption that is adopted by the group members and is no longer consciously questioned or reflected upon. Schein (1995) added that values do not always have to correspond to a logical structure and can even contradict each other, which is why a careful examination and differentiation of values and basic assumptions is necessary.

The third level comprises the underlying assumptions. According to Schein (1995, p. 33), they become "something so self-evident that little difference is encountered within a culture." Underlying assumptions are so deeply embedded that they have a decisive influence on the way members of an organization see, think, and act so that deviant behaviour becomes "inconceivable" (Schein, 1995, p. 33). May (1997) added that these underlying assumptions manifest themselves in patterns of action, interaction, and decision making, and a company-specific way of seeing and thinking becomes visible in everyday situations. These three levels are visualized in figure 1.

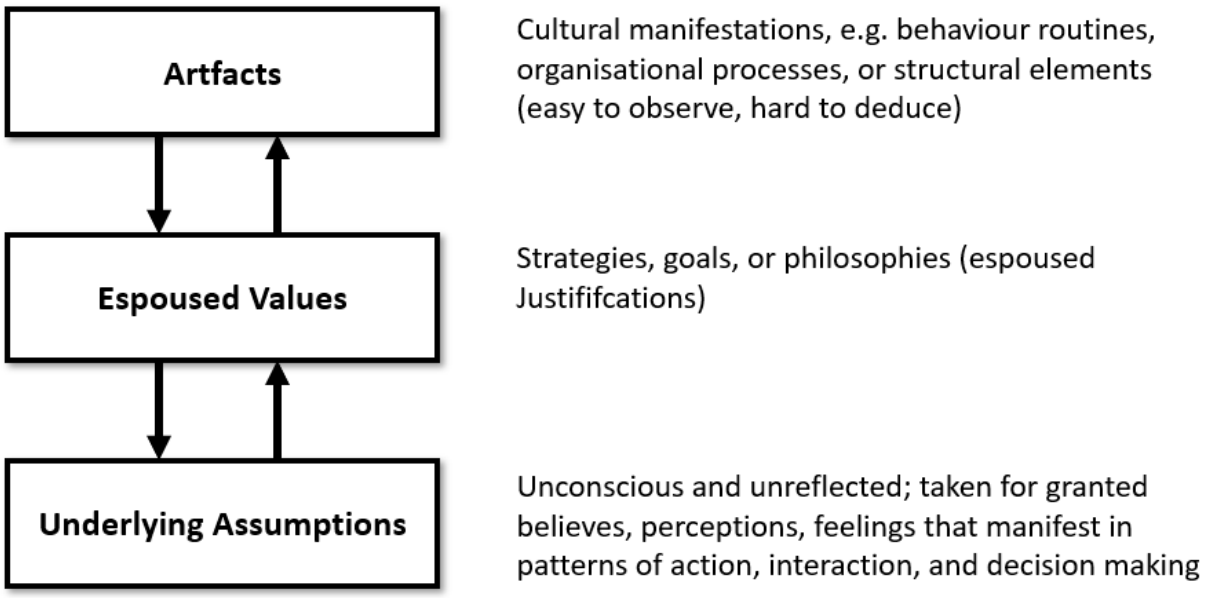

Figure 1: The three levels of culture (Schein, 2009a)

Another perspective on culture was provided by Barrett (2016). He also implied a distinction between intangible, indirectly observable characteristics such as attitudes, beliefs, values, and norms (the “concepta”) and tangible, directly observable characteristics (the “percepta”). Research from Osgood (1951), Hall (1976), Schein (1995), Scherm & Süß (2001), and Kutschker & Schmid (2011) widely acknowledged this interpretation and assumed culture as a social construct of a group of individuals that jointly share an environment (Sackmann, 1992, 2017; Schein, 1995).

Cultural artifacts created through negotiation (and thus based on group consensus) underline the second assumption of the integrated perspective: If observed and interpreted in their social context, cultural artifacts can be used to draw on individuals’ minds (Schein, 1995; Barrett, 2016). Moreover, if consciously changed, cultural artifacts can influence individuals’ patterns of behaviour as part of their social learning processes (Schein, 1995; Barrett, 2016). This, in turn, influences individuals’ norms and values, which, ultimately, evolves their minds (Giorgi, 1985; Schein, 1995; Barrett, 2016; Cooley & Larson, 2018).

2.5.2 Artifact theory and activity systems

Vygotsky (1962, 1978) and Leontev (1978, 1989) emphasised the role of artifacts in interactive systems as part of directly observable cultural characteristics and stated two models: the first constitutes individuals’ activity (“the individual model”) and the second describes the mediating role of artifacts to examine tensions among different elements of a system (“the activity system model”). As such, it acknowledges research from Schein (2009a, 2009b) and Barrett (2016).

The individual model describes activities in a hierarchical way. At the bottom level, similar to that described by Schein (2009b), Vygotsky (1962) started with “operations” as non-reflected, routinised behaviours. These are followed by “actions” that describe a goal-oriented and thus conscious behaviour that is then followed by “activities” carried out for distinct motivations. The observable meaning that determines context thereby decreases from the bottom to the top level: To deduce individuals’ behaviour, a researcher needs to examine motives to explain activities, identify goals to explain actions, and elicit cognitive conditions to explain operations. Vygotsky (1962) added

that the levels are interchangeable and can transform each other if the cognitional trigger is just strong enough. Figure 2 presents this model visually.

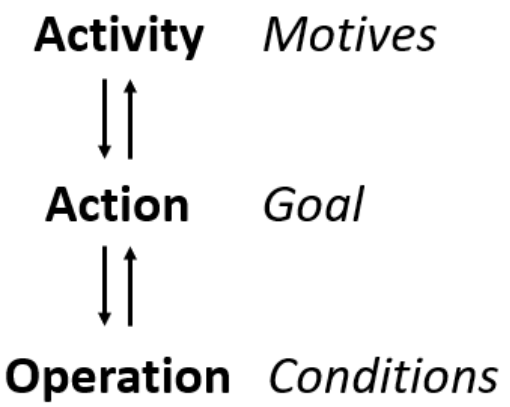

Figure 2: Activity theory (Vygotsky, 1962, 1978)

In its extended form, activity theory (AT) as stated by Engeström (1999) and Kaptelinin & Nardi (2012) models the relation of an object's being influenced by an activity as performed by an individual (subject) or a group of individuals (community). The subject, community, and object are thereby mediated by artifacts that embody social practices and meaning as negotiated by the community. The process of negotiating meaning among members of a community (or their recognition of new members as they join the community) is considered a social learning process that forms a community's culture. Figure 3 provides a visual overview of AT.

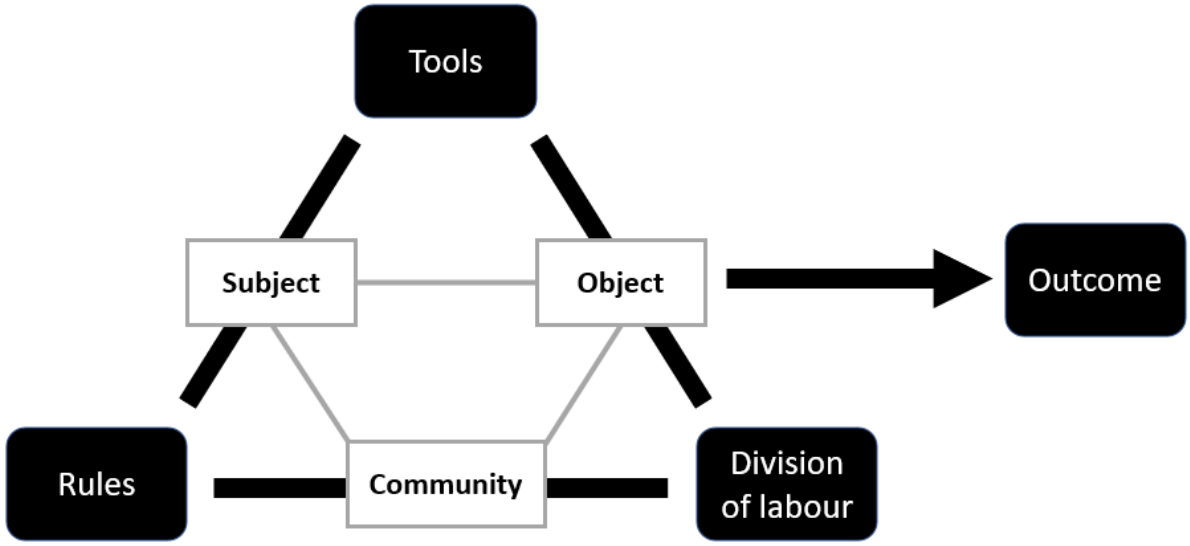

Figure 3: Activity model theory (Engeström, 1999; Kaptelinin & Nardi, 2012)

As suggested by Engeström (1999) and Kaptelinin & Nardi (2012), artifacts encompass tools, rules, and divisions of labour. Tools cover physical artifacts (e.g., signs, logos, clothing, brandings, commonly used software tools for collaboration purposes) as well as means (e.g., commonly used terms, metaphors, sayings, or phrases) and mediate subjects and objects. Rules describe jointly agreed policies or conventions (e.g., “bring your own device“, trusted working time, remote availability, travel time and overtime regulations, respectful behaviour in virtual large room meetings) and mediate subjects within the community. Divisions of labour cover hierarchy-determining decisions towards distinctive role models (e.g., less hierarchy-driven role models as in Holacracy or Sociocracy or more hierarchy-bound role models as presented in functional line organisations) and mediate the community with objects.

It is remarkable that Engeström (1999) and Kaptelinin & Nardi (2012) suggested an only slightly varying understanding of artifacts in comparison to Schein (1984, 1995) or Sathe (1985), which is especially notable in the roles for which artifacts are considered. However, research seems to widely accept that artifacts in general need to be interpreted within their social contexts and cannot be considered “as is” (Schein, 1984, 1995; Sathe, 1985; Christiansen, 1996).

The researcher considers AT as effective and acknowledges its application in the course of this study as follows: Case study participants (“subjects”) are members of the same organisation (“community”) who aim to jointly inspect and adapt their organisational culture (“object”) to initiate and embed transformation processes resulting in an agile organisation culture (“outcome”).

From a practical point of view, the researcher collects case-bound data and documents artifacts as observed at the moment of appearance. The researcher also pays special attention to sayings that implied shifts in the meaning of recognised artifacts. If the meaning cannot be deciphered by participants’ sayings, stories, or interdependent interactions, the researcher will ask for brief elaboration. The researcher also pays special attention to individuals’ and collective’s experiences or stories that might have indicated changes to values, norms, and behaviours.

2.5.3 Cultural entropy and psychological safety

As shown above, values are important for an organisation's culture. They shape individuals' behaviour and determine their motivations (Maslow, 1943, 1954; Schein, 1995; Barrett, 2013), which jointly influence not only teams' but also organisations' performance (Lewis & Sheppard, 2006; Barrett, 2013; Lee & Hidayat, 2018). Values reflect individuals' psychological development including their unmet basic needs (Maslow, 1943, 1954; Barrett, 2013). If members of an organisation lack, for example, the basic need for safety, they are not participating in social learning processes (e.g., working for personal mastery) or working in the interest of the organisation; instead, they are maximising their efforts to meet this need (Maslow, 1954; Ashby, 1961, 1991; Barrett, 2013). According to Barrett (2016, p. 70), their fear-driven behaviour about meeting their deficient needs is shown in day-to-day interactions with other individuals of the organisation. It ultimately results in a lack of personal mastery on an individual level and, because organisations are social systems and based on their members, it leads to missing cultural evolution on the organisational level. This effect is known as cultural entropy and defined as "the amount of energy that is consumed in an organisation doing unnecessary or unproductive work that does not add value. It is a measure of the conflict, friction, and frustration that employees encounter in their day-to-day activities that prevent the organisation from operating at peak performance" (Barrett, 2013, p. 37). From an organisational change perspective, cultural entropy is triggered and maintained by the leaders of a hierarchically structured organisation as embedded in its "structures, systems, policies, and procedures" (Barrett, 2013, p. 37), or, in the words of Engeström (1999) and Kaptelinin & Nardi (2012), in organisations' cultural artifacts. As such, organisations' cultures in hierarchically structured systems are a reflection of leadership consciousness, and cultural evolution starts with leaders' personal evolutions (Barrett, 2013, 2016).

Cultural readiness to change requires minimising cultural entropy by providing psychological safety (Barrett, 2013; Kruse, 2020). Research emphasises this requirement due to its significant correlation with individuals' learning behaviour (Edmondson, 1999; Edmondson, Kramer & Cook, 2004). Barrett (2013) found that psychological safety stimulates members' developmental and motivational psychological processes. Kegan, Kegan & Lahey (2009) mentioned an individual's ability to handle complexity and identified three stages of mind development, namely

the socialised mind (high deficiency needs), the self-authoring mind (transition from met basic needs to still-unmet growth needs), and the self-transforming mind (met growth needs). Their findings underlined the correlation between personal needs and their ability to evolve towards a growth mindset or agile mindset (Barrett, 2013, 2016; Bushe & Marshak, 2014; Leffingwell *et al.*, 2014; Cooley & Larson, 2018; Hofert, 2018a; Leffingwell & Jemilo, 2019; Kruse, 2020).

The researcher considers an organisation as suited for cultural transformation initiatives as soon as the organisation provides psychological safety to its members, which facilitates psychological and motivational development to trigger social learning processes that evolve mindsets. Because research suggests a variety of terminological interpretations of an “agile mindset“, the researcher next provides a definition to be used in this study.

2.5.4 Agile mindsets

This study defines agility as consciousness, which is in accordance with numerous past studies (Maister, Green and Galford, 2000; Doshi, 2016; Dexheimer, 2019; Schwaber & Sutherland, 2020). A mindset is a result of cognitive developmental processes that are based on individuals’ values and norms (Kegan, Kegan & Lahey, 2009). Research widely acknowledges agile mindsets as being characterised by elements from the agile manifesto and lean thinking movement (Israel *et al.*, 1998; Anderson, 2003; Larman & Vodde, 2016; Schwaber, 2017; Prats *et al.*, 2018; Leffingwell & Jemilo, 2019; Schwaber & Sutherland, 2020). These characteristics (in italics) are summarised and presented in the following paragraphs to provide an encompassing overview used in the course of this study. They are sorted according to their internal modes of action (related to the individual himself, e.g., personal values and norms) and external modes of action (related to the interaction of the individual with the collective, e.g., interaction with a group) and, thus, reflect past research findings (Schein, 2009a; Hofert, 2018a).

From the perspective of developmental psychology, *trust* arises when individuals recognise reliable patterns in the behaviour of their counterparts that do not harm themselves and therefore feel that they are being treated fairly in the sense of equity theory (Hofert, 2018a, 2018b). Trust is thus established through transparency

(Leffingwell *et al.*, 2014; Leffingwell & Jemilo, 2019). In practice literature, Leffingwell *et al.* (2014) described trust as the ability to confidently rely on another to act with integrity, particularly in times of difficulty. In contrast, Beck *et al.* (2001) mentioned that motivated and enabled individuals are believed to deliver their day-to-day goals if provided with the support they need. Trust is thus expressed through the willingness and skills of organisations' members. On an organisational level, if leaders and managers lack trust of their members, this scarcity of trust is the most common cause of resistance to organisational change (Freyth, 2019).

As elucidated by Schwaber & Beedle (2002), Doshi (2016), and Ockerman (2017), *commitment* is about dedication to doing the very best. It means identification with the purpose and values of the organisation (Reichel & Becker, 2015; Barrett, 2016) and arises from sharing a common vision from which the group can derive appropriate and necessary patterns of behaviour (Reichel & Becker, 2015). Research acknowledges commitment as central to members' motivations because it makes individuals responsible for their behaviour (Reichel & Becker, 2015; Fox, 2017). Typically, individuals owning commitment rely on empiricism and maintain a collaborative manner of work (Ockerman, 2017).

Next, as stated by Beck *et al.* (2001) and Reichel & Becker (2015), *focus* implies carrying out pieces of work sequentially rather than simultaneously. It thus emphasises avoiding subpar work resulting from frequent context switching. Similarly, Schwaber (1997) mentioned focus as the potential to provide high business value through working in a concentrated and result-oriented way. Focus-driven values are typically shown in agile teams through prioritisation and limitation of work (Schwaber, 1997).

Additionally, according to Leffingwell *et al.* (2014), Reichel & Becker (2015), Barrett (2016), and Hanschke (2017), *self-reflection* is the ability to question oneself with respect to a given context and requires a willingness to tackle a potentially negative aspect of the self despite humans' natural striving for a positive perception of the self. Reflection refers to a less individual interpretation and, as such, is considered a general ability to question circumstances. On an organisational level, reflection leads to a culture that welcomes experiments and potential mistakes for the sake of the organisation's further evolution (Schwaber, 1997; Leffingwell *et al.*, 2014; Aghina *et al.*,

2018; Kruse, 2020). In other words, reflection leads to a culture shaped by continuous (Schwaber, 1997) or relentless (Leffingwell *et al.*, 2014) improvement.

Self-management requires leaders to trust in the willingness and ability of organisations' members and to commit to provide them with the autonomy they require (Beck *et al.*, 2001; Hanschke, 2017). If leaders offer self-management, Reichel & Becker (2015) and Hofert (2018a) stated that organisations' members are then able to develop personal mastery and to work in a focused manner while autonomously aligning their activities with organisational goals (Schwaber, 1997; Reichel & Becker, 2015; Fox, 2017; Hofert, 2018a). Research emphasised the high business value delivered by teams that are enabled and empowered to develop and maintain self-management on their own (Beck *et al.*, 2001; Reichel & Becker, 2015)

According Reichel & Becker (2015), *open-mindedness* or *willingness to change* requires a general positive attitude to welcome changing requirements even late in the development. It is defined by the need to spend energy to get from the old stable state of a system to the new stable state as triggered by the VUCA environment (Kruse, 2020). Kotter (2012a, 2012b) mentioned the necessity to establish both a sense of urgency so that individuals understand the importance of change and the ensuing motivation of the individual to embrace it. From an organisational change perspective, leadership has to exemplify the sense of urgency by behaving consistently via messages conveyed by corporate communication (Mast, 2015; Barrett, 2016; Sackmann, 2017), which suggests that leadership act as role models for change (Kotter, 2012b; Brosseau *et al.*, 2019).

Additionally, *customer-value orientation* describes the focus on the outcome for the stakeholders, which covers identifying and fulfilling customer needs (Reichel & Becker, 2015). Similarly, Leffingwell *et al.* (2014) defined customer-value as customer-centricity and emphasised the importance of establishing positive experiences for the customer. Agile teams employ a value-oriented perspective by constantly incorporating stakeholders' feedback (even at an early stage of the work) to include their requirements and fulfil their needs (Schwaber, 1997; Reichel & Becker, 2015).

Next, based on Beck *et al.* (2001), *collaboration* describes team members' joint work towards a shared goal. It is a reciprocal relationship with the work goal, responsibility, resources, and reward for goal achievement (Mattessich & Monsey, 1992). It arises if team members jointly share the same values and norms (Barrett, 2016; Fox, 2017). Agile teams that display collaboration favour transparency in daily work and deliver as a team rather than as individuals (Schwaber, 1997; Anderson, 2003).

Lastly*, communication* is crucial in order to provide team members with the relevant information to successfully deliver their work. Research has emphasised face-to-face communication as the most effective and efficient method of conveying information to and within a team (Beck *et al.*, 2001). Consequently, agile teams aim to establish close-distance communication through daily meetings or remote video conferencing, which fosters transparent and personal communication (Mast, 2015; Reichel & Becker, 2015).

2.6 Summary

2.6.1 Existing knowledge in literature

Organisations are social systems based on their members who carry out the actual work (Kruse, 2004; Vega-Jurado, Gutiérrez-Gracia & Fernández-de-Lucio, 2008; Jones, 2014). From an organisational change perspective, systems need to provide time and space to the members (e.g., time for innovative and discursive processes, space for meeting rooms and collaborative software) through ambidexterity (Kruse, 2004, 2020; Kotter, 2012a, 2012b; Leffingwell & Jemilo, 2019) to establish organisational change readiness. But they also need to establish cultural readiness (leadership acting as role models to contribute organisational and motivational psychological prerequisites that foster self-organisation) through fostering psychological safety to reduce cultural entropy (Edmondson, 1999; Hu *et al.*, 2018). Only a system owning both dimensions of change readiness can contribute the necessary requirements to its members so that their agile mindsets can evolve.

Schein (1995, 2009a) and Barrett (2016) thereby stated that a system's culture is shaped through the social learning processes of its members. They differentiated directly observable cultural characteristics, namely artifacts, from indirectly observable ones, namely values and norms, which are correlated in a complex and multi-causal

way. They stated artifacts (as based on actions) influence members' activities, which shape individuals' norms and values so that, ultimately, consciously changing artifacts triggers social learning processes that shape members' mindsets.

Additionally, Vygotsky (1962, 1978) and Leontev (1989) provided the AT to explain members' activities and the moderating role of artifacts among elements of the same system. As such, they preceded findings from Schein (1995, 2009a), Barrett (2016), and S5S7 (2020) and provided dimensions to purposefully examine systems' cultural artifacts (e.g., by labelling and instantiating specific observations for an activity system). Schein (2009a) emphasised that artifacts are easy to observe but hard to decode, so research requires context-rich evidence.

2.6.2 Literature gaps and research objectives

The researcher systematically investigated the field of change, agility, and culture literature and gained deep knowledge of theory and contemporary debate. This study identified the following gaps in current scientific and practice literature:

1. Focuses solely on consultancies liaising with their clients so that there is no evidence on how consultancies evolve themselves to achieve an increased agile-matured culture.
2. Assumes consultancies evolve to a completely agile culture so that consultancies striving towards a less agile matured state are not considered by research.
3. Approaches change as being synonymously understood as simply enrolling pre-defined change models rather than broadly focusing on cultural aspects.

Considering the research aim, this research will focus on literature gaps 1 and 3 by providing evidence for how consultancies evolve themselves towards an agile-matured culture. It will examine the factors that influence consultancy's evolution as well as the actions that are effective in initiating and embedding cultural change in consultancies. The study will also provide evidence on "change to agile" approaches that focus on a consultancy's culture. The researcher maintains the cultural perspective as the dynamics of social learning processes determine a social system's evolution; in other words, considerations of culture are significant to successful change (Kruse, 2020).

The evidence provided to address the identified literature gaps is thereby understood as the researcher's contribution to knowledge. To gain this evidence, the researcher conducted case study research as outlined in Chapter 4 whereby he ensured proper guidance by establishing research objectives. They are grounded on the outlined literature gaps:

- To establish factors that influence agile culture transformations in the PFS with respect to consultancies.
- To provide evidence of actions that are effective in initiating and embedding agile culture transformations in different organisational cultures.

3 Methodology

3.1 Introduction

This chapter is structured in accordance with the framework for qualitative research as stated by Carter & Little (2007). It emphasises research quality by building on a clear differentiation between epistemology, methodology, and methods. For each part, a brief overview will show the general availability in qualitative research as well as those which have been adopted in examining organisational change. The researcher will then take a choice and provide a justified rationale for it. The chapter ends with the implementation plan of the chosen methods.

3.2 Epistemology

Epistemology refers to “the branch of philosophy that studies the nature of knowledge and the process by which knowledge is acquired and validated” (Gall, Borg & Gall, 2003, p. 13). Cohen *et al.* (2007, p.7) added that epistemology is also concerned with how knowledge is “communicated to other human beings.” For the purpose of this research, epistemology is “the study of the nature of knowledge and justification” (Schwandt, 2001, p. 71), which includes “issues about an adequate theory of knowledge or justification strategy” (Harding, 1989, p. 20). As shown in figure 4, the researcher considers epistemology a guiding concept that both influences methodology and methods and justifies and evaluates new knowledge.

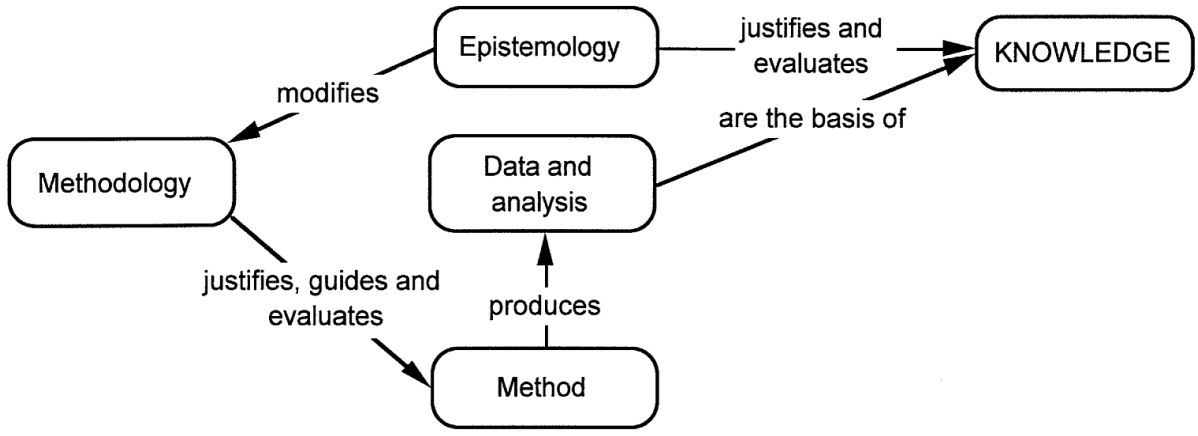

Figure 4: Relationship visualisation (Carter & Little, 2007, p. 1317)

According to researchers, the most common epistemologies are positivism, critical realism, pragmatism, constructivism, and individualism (Guba & Lincoln, 1994; Hancock, 2006). They are described in the subsequent paragraphs.

First, *positivists* believe that there is a single reality, which can be measured and known. They assume an independent researcher who only relies on measurable information as received by means of the senses. Positivists work with observable reality and rely on the importance of generalisations by considering pure data and facts without being impacted by interpretations from human bias (Saunders, Lewis & Thornhill, 2009; Scotland, 2012; Saunders *et al.*, 2019). Knowledge is created by developing hypotheses that are tested for validity and justified by quantifiable correlations and causal comparatives. As such, positivist epistemics are shaped by strict methodologies and quantitative methods (Crotty, 1989; Creswell, 2014). In the context of this research, a positivist would focus on observable and measurable facts, namely the count of agile certified practitioners or the structure of agile events, to establish credibility and meaningfulness in data on agile culture transformation. By aiming to examine causal relationships within collected data, the researcher would establish law-life generalisations to "explain the studied behaviour or events within organisations" (Alharahsheh & Pius, 2020, p. 41). Research has argued for positivism because it creates clear evidence and a high quality of research data (Cohen *et al.*, 2007). Dörnyei and Griffee (2010) argued to establish reliability through statistical analysis, namely by identifying the internal consistency or correlation among the variables. Johnson and Onwuegbuzie (2004) instead mentioned the high replicability for different groups or subgroups of populations. Research, however, has also judged positivistic epistemology as non-applicable in measuring phenomena "related to intention, attitudes, thoughts of a human because these concepts profoundly may not explicitly be observed or measured with sense experience or without evidence" (Hammersley, 2012, p. 23). Also, since positivism aims to create generalisable results, Pham (2018) mentioned the danger of neglecting individuals' revealed understandings and interpretations of phenomena.

Next, as explained by Collier (1994) and Bhaskar (2002, 2013), *critical realists* distinguish the "real" world from the "observable" world. Reality is independent of humans' perception and constructed from observable perspectives and experiences.

In such a world, unobservable events cause observable events (Caulley, 2010), and the social world can only be understood by examining the hidden structures that create them (Archer, 1998; Bhaskar, 2002, 2013). Critical realism addresses issues related to „what reality is like and how it can be known“ (Armstrong, 2019, p. 570). Knowledge is created by interpreting the causal structures of observable events within given conditions of a fixed setting. In the context of this research, a critical realist would argue for longitudinal studies that focus on a defined part of an organisational culture that is targeted to be changed. Within the setting, he would thoroughly approach the participants to understand the deeply covered social structures that form social interactions and guide the organisational change. He would document the change artifacts to gather the means of change. Critical realism is widely chosen for “its appreciation of complexity, its recognition of meaningful activity, and its compatibility with multiple methodologies” (Armstrong, 2019, p. 570).

Third, *constructivism* assumes reality as a product of an adaptive, subjective, and self-referential cognition process of an individual who senses his surrounding world (Von Glasersfeld, 1974; Von Glasersfeld, 1989; Olssen, 1995). Constructivists argue that what is known cannot be the result of the passive acquisition of knowledge. Per Von Glasersfeld (1974) and Olssen (1995), the knower actively acquires new knowledge by using existing knowledge to construct new understandings. This means knowledge does not exist independently of knowers and is understood as a human construction, or as Von Glasersfeld (1989, p. 182) stated, “knowledge is actively built up by the cognising subject.” As such, there are multiple realities constructed by the people who are actively involved in the research process (Vygotsky, 1978; Olssen, 1995; Haug, 2004). In the context of this study, the researcher would attempt to understand the complex world views of each participant and of the group since it might be considered a self-sufficient social entity. He would rely on qualitative methodologies and group participants in a trustworthy environment so they would speak freely. By observing their answers to the research questions and their interdependent interactions with each other, he would understand the values of the participants that drive the jointly shared culture. Based on that understanding, the researcher would gain insights to the decision processes, which would create the understanding of the chosen transformation approach. By reflecting on gathered insights in the context of the researcher’s experience as a practitioner, he would derive conclusions and thus create

new knowledge. Research has argued that constructivist epistemology can cause a high degree of confusion because implicit assumptions are typically not made explicit, which leads to a different understanding of common terms, namely reality (Guba & Lincoln, 1994; Avenier, 2010). However, given a setting in which participants can strongly interact which each other, discussions in terms of their subjectively differing perspectives on the world will arise (von Glasersfeld, 1974; Marin, Benarroch & Jiménez Gómez, 2000). According to Von Glasersfeld (1974), this fosters the process of knowledge assimilation and accommodation.

Finally, *interpretivists* believe in multiple realities (Hudson & Ozanne, 1988) and, because they depend on other systems for meaning (Lincoln & Guba, 1985), they assume reality to be of a relative rather than a fixed nature (Neuman, 2000). Interpretivists focus on time- and context-bound meanings, motives, and reasons among other subjective experiences (Hudson & Ozanne, 1988; Neuman, 2000). They create knowledge by using a personal and flexible research approach (Carson *et al.*, 2001) to capture meanings in human interaction (Black, 2006) so that they can make sense of what is perceived as reality (Carson *et al.*, 2001). Interpretivists, even if informed prior to entering the field, consider reality as too complex and unpredictable for developing an *a priori* research design (Hudson & Ozanne, 1988). Instead, they rely on an emergent and collaborative approach in which the researcher and the participants are interdependent and mutually interactive (Hudson & Ozanne, 1988). Throughout the study, interpretivist research remains open to adapted knowledge and new social realities (Hudson & Ozanne, 1988). In the context of this research, an interpretivist researcher would seek to understand the chosen cultural context that is to evolve to be agile. He would focus on the specific and concrete to gain knowledge on participants' distinctions between facts and values that enable him to understand and interpret their realities. By relying on qualitative methods, the interpretivist researcher would allow feeling and reason to govern action while accepting influence from scientific and personal experience. Research has argued for interpretivism as a suitable epistemology to gain in-depth insights in terms of cultural or ethical studies. Primary data is considered to be of high validity because research tends to be trustworthy and honest (Myers, 2019; Saunders *et al.*, 2019). However, due to the subjective nature of such research, interpretivism is heavily impacted by the

researcher's viewpoint and values so that reliability and generalisability are considered to be generally undermined (Myers, 2019; Saunders *et al.*, 2019).

The researcher aims to approach participants' reality to understand their specific contexts. In other words, the researcher incorporates participants' perspectives, which contradicts a positivist epistemology (Saunders, Lewis & Thornhill, 2009; Scotland, 2012; Saunders *et al.*, 2019). Thus, positivism is excluded from the further research so that the remaining epistemologies can be briefly discussed. As part of organisational change (Moe & Mikalsen, 2020), agile culture transformations aim to change an individual's mindset by cultivating distinct values (Schwaber, 1997; Leffingwell *et al.*, 2014; Ebert *et al.*, 2016; Leffingwell and Jemilo, 2019; K Schwaber and Sutherland, 2020) that evolve a growth mindset (Bushe & Marshak, 2014; Leffingwell *et al.*, 2014; Cooley & Larson, 2018; Leffingwell & Jemilo, 2019). The consideration of epistemologies thus requires a separate discussion on axiological assumptions.

According to Christensen, Raynor & McDonald (2016), axiology refers to the values that underpin a research endeavour. Critical realists assume a value-laden research (Collier, 1994; Guba & Lincoln, 1994; Archer, 1998; Bhaskar, 2002, 2013). They focus on understanding the core values of individuals to explain how they shape their behaviour as members of an interdependent and self-reinforcing network, namely a social system. Such a researcher seeks to understand what changes to values explain changes in behaviour so that the researcher can examine what methods (individual level) might be appropriate to conduct organisational change (systemic level). He thereby addresses decisions to organisational change methods and mitigation activities, to interdependent interactions, and to a potentially redefined agile vision (target state) by approaching individual values.

On the other hand, constructivists acknowledge a value-driven perspective (Guba & Lincoln, 1994). They consider values as learned by conditioning, for instance, through familiar and professional education, and motives for cognitional decision-making processes (Nakoneþný, 2011; Antlová *et al.*, 2015). A constructivist researcher seeks to understand participants' experiences with agility in their corporate context; how they evolved so far; what they learned in terms of their agile vision (potentially redefined target state) and potentially influencing factors; how they value potential challenges;

and, based on their new knowledge gained so far, how they mitigate these challenges. Such a researcher seeks to learn how they show lean and agile values (e.g., value respect, openness, and courage among others) in an interdependent and self-reinforcing social context. He also aims to understand how they choose effective methods to become agile. A constructivist considers values as key to evolving an agile culture transformation.

Contrarily, an interpretivist researcher assumes a value-bound perspective (Guba, Lincoln & others, 1994; Saunders, Lewis & Thornhill, 2009; Saunders *et al.*, 2019). He acknowledges his impact on the research and aims to be highly reflective on the effects that influence not only participants but also his own values within the research context. Interpretivist research focuses on time- and context-bound values and how they are potentially changing in a social environment that is affected by a mindset-targeting culture transformation. Such a researcher refers questions about the subjective definition of agility, the overall agile vision, and the influencing factors and their challenges and mitigation activities, to the contextual situation in which the culture currently is whereas prospective conclusions are widely limited to the very near future. In other words, the researcher considers an interpretivist's perspective to be focused on a component of the social system that is deemed to be transformed in its entirety. A summary of the axiological assumptions is given in table 1.

	Critical realism	**Constructivism**	**Interpretivism**
Ontology	Reality is split into the "real" world and the "observable" world. Reality is independent of humans' perception and constructed from observable perspectives and experiences (Collier, 1994; Bhaskar, 2002, 2013).	Reality is a product of an adaptive, subjective, and self-referential cognition process of an individual who senses his surrounding world (Vygotsky, 1978; Olssen, 1995; Haug, 2004)	Interpretivists believe in multiple realities (Hudson and Ozanne, 1988) and, because they depend on other systems for meaning (Lincoln and Guba, 1985), they assume reality to be of relative rather than fixed nature (Neuman, 2000).
Epistemology	Knowledge is created by interpreting the causal structures of observable events within a fixed setting (Archer, 1998; Bhaskar, 2002, 2013.	Knowledge does not exist independently of knowers and is understood as a human construction; it "is actively built up by the cognising subject" (Von Glasersfeld, 1989, p. 182). Knowledge is personal and socially constructed	Knowledge is created by capturing meanings in human interaction (Black, 2006) so that they can make sense of what is perceived as reality (Carson *et al.*, 2001).
Axiology	Value-laden research; the researcher acknowledges bias caused by cultural experiences and focuses on staying as objective as possible (Collier, 1994;	Value-driven research; conducted and sustained by a reflexive researcher who acts based on his doubts and beliefs while trying to minimise his influence on the	Value-bound research; the researcher is part of the researched phenomenon. Reflexive researching ensures rich interpretations (Schwandt, 2000; Pham, 2018; Saunders *et al.*, 2019;

	Archer, 1998; Saunders *et al.*, 2019).	research (Guba, Lincoln *et al.*, 1994; Avenier, 2010).	Alharahsheh and Pius, 2020).

Table 1: Epistemologies in the context of organisational change

This research adopts a constructivist epistemology for several reasons. For one, this study uses a participatory and consultative approach, which is not assumed to be contractionary to a constructivist's epistemology (Safdar *et al.*, 2016). The researcher aims to apply an open-ended method and includes means of data triangulation to minimise researcher bias (Patton, 1999; Flick, 2004; Denzin, 2012). The researcher also excludes participants from data interpretation activities to minimise their influence on this study. However, as the research progresses, the participants are given a recommendation for action that addresses their subjective realities and aims to contribute to the research topic; this is what the researcher considers as consultative part. Also, the researcher gathers participants' feedback on the recommendation to build an understanding on the subjectively experienced value-add to maintain the participatory nature of this study. By maintaining a clear statement on the role of a quasi-independent study, the researcher maintains a constructivist epistemology.

3.3 Methodology

Methodologies are "concerned with the general research strategy" that "[identifies] the methods to be used" (Alharahsheh & Pius, 2020, p. 40). Because methodologies justify methods and methods create knowledge through data collection and interpretation, methodologies have epistemic content. As mentioned previously, this study uses a constructivist epistemology. Per Carter & Little (2007), commonly associated methodologies cover phenomenology, ethnography, grounded theory, action research, and case study research, which are briefly described below.

First, *phenomenology* is the study of objects as they seem to be and not how they necessarily are (Husserl, 1929). It describes rather than explains and starts from a perspective free from hypotheses or preconceptions (Husserl, 1970). It relies on qualitative methods (e.g., interviews, observations, action research, focus groups, and analysis of personal texts among others) to build a deep understanding and spotlights the phenomena specifically. Thus, in the context of this research, the aim is to identify effective culture-transformation methods and effects through how they are perceived

by the actors (participants) in a situation of fundamental change (Giorgi, 1985; Polkinghorne, 1989; Moustakas, 1994). In accordance with Schutz (1970), Moustakas (1994), and Spradley (2016), phenomenological methodologies are effective because they highlight individuals' experiences and perceptions from their own perspectives, which enables the researcher to challenge structural or normative assumptions. However, due to the nature of qualitative data and its collection and interpretation methods, phenomenological studies are likely to be researcher-biased, which also impacts establishing reliability and validity.

Next, *ethnography* is the study of culture and includes qualitative methods carried out by a reflexive researcher in longitudinal research (Hammersley & Atkinson, 1995b; McCall, 2000). It can provide rich data suited to reveal facets of human behaviour (Hammersley & Atkinson, 1995b; Moravcsik, 2014). In the context of this research, an ethnographical approach focuses on an organisation's culture to understand mindsets so that it can explain the behaviour of the individuals who are affected by the culture transformation. It does not rely on the words of the participants, so it is not dependent on people's ability to verbalise (Hammersley and Atkinson, 1995b; Wolcott, 1999; Jabar *et al.*, 2009). This provides another source of testimony. In addition to the fact that data gathering takes much time, the researcher is highly involved in this process so that necessary objectivity can suffer and research might be biased (Hammersley & Atkinson, 1995b; Wolcott, 1999; McCall, 2000; Jabar *et al.*, 2009; Moravcsik, 2014).

Third, *grounded theory* is concerned with the generation of theory (Glaser, Strauss & Strutzel, 1967; Glaser & Strauss, 2017) that is based on systematically collected and analysed data (Strauss & Corbin, 1994). It aims to uncover social processes such as social relationships and group behaviour (Crooks, 2001) by writing analytic narratives (Charmaz & Belgrave, 2015). Grounded theory relies on qualitative research methods such as interviews, focus groups, and open-ended surveys among others (Chun Tie, Birks & Francis, 2019). In the context of this research, a researcher applies iterative data gathering (e.g., interviews or focus groups on the culture-transformation process) and data interpretation activities (e.g., initial, intermediate, and advanced coding) (Chun Tie, Birks & Francis, 2019). The gained insights are then used to come up with a theory that explains the hidden social processes that form and shape the transformation and its outcome to the organisation as a social system. Grounded

theory ensures rigor and trustworthiness in the emergent theory by emphasising both systematic theory generation and procedures, which jointly allow inductive insights into the phenomena under research (Rolfe, 2006; Starks & Brown Trinidad, 2007; Cooney, 2011). Conversely, research has noted the exhaustive and time-consuming nature of this method due to the encompassing coding requirements (Charmaz & Belgrave, 2015; Myers, 2019). It also contains methodological pitfalls in terms of sampling methods as soon as the data-collection process is controlled by emerging theory (Charmaz and Belgrave, 2015).

Additionally, *action research* (AR) is a "form of self-reflective enquiry undertaken by participants … in order to improve … their own practices, their understanding of these practices, and the situations in which the practices are carried out" (Carr & Kemmis, 2003; Kemmis, 2008, p. 248). It is a "series of commitments to observe and problematize through practice" (McTaggart & Kemmis, 1996, p. 248) rather than simply a series of activities, as stated by Lewin (1947b). Research has mentioned a variety of methods associated with AR, including interviews, observations, surveys, and document analysis among others (Andersen, Henriksen & Aarseth, 2006; Adams & McNicholas, 2007; Beard, Dale & Hutchins, 2007). In the context of this study, a researcher would need to build on a close and trustworthy partnership with the participants. Based on existing knowledge on how consultancies generally evolve their own agile cultures, the researcher would jointly work with the participants to plan, act, develop (implement), and reflect on the necessary methods to cultivate social change within their organisations. The gained insights would then be used to adapt the next iteration cycle. Advocates for this method note a high level of practical relevance since action research allows not only gaining in-depth knowledge about organisations' challenges but also finding solutions for them (Brydon-Miller, Greenwood & Maguire, 2003; Bradbury-Huang, 2010; McDonnell & McNiff, 2015). In contrast, critics emphasise the lack of repeatability and rigour but also mention the issue of distinguishing between action and research while ensuring the application of both (Brydon-Miller, Greenwood & Maguire, 2003; Carr & Kemmis, 2003).

Lastly, *case studies* explore "a real-life, contemporary bounded system (a case) or multiple bounded systems" (Creswell, 2013, p. 97) to capture the complexity of the phenomena under research (Stake, 1995). They integrate "naturalistic … and holistic

research methods" (Stake, 1995, p. 11) to maintain a "particularistic, descriptive and heuristic" focus on the values and intentions of the participants (Merriam, 1988, 2009, p. 46; Merriam & Tisdell, 2015). By employing cases in terms of units of analysis (Yin, 1994; Merriam, 2009; Creswell, 2013), case studies typically cover qualitative methods such as interviews, focus groups, observation, and documents and artifact analysis among others (Hancock, 2006; Zainal, 2007; Gray, 2009; Yin, 2013). In the context of this research, a researcher would build a rationale for a sampling strategy that identifies consultancies that are within their agile-culture transformations. He would select methods such as document collection and focus groups to gain particularistic and descriptive insights, which are then analysed through a detailed case description (within-case analysis) and a comparison among the cases (cross-case analysis). Critics of this method state that it misses specific requirements on the design decisions that guide case research so that, in the past, case study research resulted in many poor studies lacking quality or credibility (Meyer, 2001; Hyett, Kenny & Dickson-Swift, 2014). However, research also has argued that case studies enable a researcher to collect certain kinds of information that can be difficult or even impossible to glean via other means (Sykes, 1990). Yin (1994, p. 59) noted that case study research "investigates a contemporary phenomenon within its real-life context and addresses a situation in which the boundaries between phenomenon and context are not clearly evident."

As described earlier, organisational change in terms of agile-culture transformations focuses on a deep understanding of participants' socially constructed reality and their mindset, which is shaped by their values through conscious, cognitive processes. Appropriate methodologies need to employ a perspective on the borders of a system, its members, and their mindsets. Per the aforementioned research, phenomenology, ethnography, grounded theory, AR, and case studies each support this research while addressing differing focuses (Glaser, Strauss & Strutzel, 1967; Giorgi, 1985; Merriam, 1988; Hammersley & Atkinson, 1995b; Wolcott, 1999; Carr & Kemmis, 2003; Yin, 2013; Charmaz & Belgrave, 2015). First, phenomenology focuses on how members of a system experience change, which impacts their individual contexts. It expresses the complex nature of change by highlighting the subjective experiences and perceptions of the affected individuals. Second, ethnography explains what factettes shape human behaviour, especially individuals' mindsets that express cultural aspects. The nature

of change is shown by identifying the meaning in individuals' words and behaviours. Third, grounded theory aims to uncover social processes through narrative writings and expresses changes' complexity by developing data-based theory. Fourth, AR describes an iterative and reflective approach of self-education that aims to find solutions (e.g., methods of change) for the own social contexts. As such, it is designed for longitudinal studies. Fifth, case study research employs a real-life bounded system perspective. By focusing on the values and intentions that form an individual's mindset, it contributes clarification to the complex nature of organisational culture change.

This research proposes to adopt case study research as described by Merriam (1988, 2009) and Merriam & Tisdell (2015). However, the researcher argues especially against an AR approach because AR is designed for longitudinal studies, so it requires a significant amount of time. Since organisational change takes too long for the small window of opportunity, the researcher would not be able to gain meaningful insights that enable impactful change.

Case study research also supports the system-theoretic perspective of the researcher by focusing on cases as units of analysis (Yin, 1994; Merriam, 2009; Creswell, 2013). This type of research maintains a particularistic and descriptive focus on values and intentions that form and shape an individual's mindset (Merriam, 1988, 2009, p. 46; Merriam & Tisdell, 2015). As such, it is suitable to support agile-culture transformation research, which centres on evolving mindsets of members of a social system.

The researcher thereby considers the constructivist approach to case study research as stated by Merriam (2009), who assumed that reality is socially and experimentally constructed through developing meaning and understanding. This stands in contrast to the post-positivist approach of Yin (2013). He acknowledged a replicable case study approach that relies on falsifying hypotheses, minimising subjectivity, and pursuing generalisation. It thereby retains the idea of an objective truth and thus reality. Similarly, Stake (1995) acknowledged an interpretivist case study approach that is based on a strong motivation to examine and evaluate meaning and understanding in context. It considers subjectively differing experiences of reality and focuses on highly subjective interpretations. Brown (2008, p. 9) synthesizes these views by stating, "Case study research is supported by the pragmatic approach of Merriam, informed by

the rigour of Yin and enriched by the creative interpretation described by Stake." By mentioning Yin (1994) on the epistemological, quantitative end and Stake (1995) on the qualitative one, Brown (2008) argued for Merriam (2009) to hold the centre position. The researcher acknowledges this argument and follows the constructivist approach of Merriam (1988, 2009) and Merriam & Tisdell (2015).

3.4 Methods

Methods are "practical activities of research" (Carter & Little, 2007, p. 1318). This research considers only qualitative methods because it aims to generate "inductive reasoning and interpretation rather than testing [a] hypothesis" (Merriam, 2009; Harrison *et al.*, 2017, p. 10). The chosen epistemology also supports this approach. Per Stake (1995), Merriam (2009), Sinek (2009), and Yin (2013), the most common methods are observations, interviews, focus groups, and document and artifact analysis, each of which is explained below.

Research describes *observation* as a method for "collecting data using one's senses, especially looking and listening in a systematic and meaningful way" (Given, 2008). It is this systematic way that classifies observations as a scientific research method and differentiates it from everyday observations in social life (Ciesielska, Boström & Öhlander, 2018). Although the importance of observation is undisputed, it is one of the most diverse terminologies (Ciesielska, Boström & Öhlander, 2018), which makes it difficult to find a widely accepted differentiation. For example, Werner and Schoepfle (1987) suggested differentiating observation into *descriptive observation* (a researcher focusing on everything while taking nothing for granted), *focused observation* (a researcher focusing on well-defined and observable entities while ignoring those deemed irrelevant), and *selective observation* (a researcher focusing on a specific form of general entities). Moreover, Mack (2005) argued for splitting the term into *participant observation* (a researcher being immersed in the cases' culture as an accepted member), *direct observation* (a researcher striving to be as unobtrusive and detached as possible), and *indirect observation* (a researcher focusing on results of an interaction, process, or behaviour). Ciesielska, Boström, and Öhlander (2018) differentiated *participant observation* (a researcher being immersed in the cases' culture as an insider), *non-participant observation* (a researcher focusing on the world, relationships, and interactions), and *indirect observation* (a researcher relying on

observations done by others). In fact, even equal differentiations may be differently understood by research. Nonetheless, research has argued in favour of observation since it produces rich data (verbal sayings and non-verbal behaviour) within its natural environment (Grove & Fisk, 1992). Conversely, critics have stated that "observations are not generalizable beyond the moment of observation and, thus, not representative of anything other than of that moment of production" (Bergman and Coxon, 2005, p. 2). Smit and Onwuegbuzie (2018, p. 2) also stated that observations are "filtered by … the lens through what is familiar or known"; in other words, they are often biased by the researcher.

Next, *interviews* are a "face-to-face dyadic interaction in which one individual plays the role of interviewer and the other takes on the interviewee, and both of these roles … are willing contributors" (Millar, Crute & Hargie, 1992, p. 2). This two-person conversation serves the "specific purpose of obtaining research-relevant information" and is "focused on content specified by research objectives" (Cannell and Kahn, 1968, p. 530). Interviews are typically characterised by their structure type: unstructured, semi-structured, or structured. Depending on their nature, interviews provide advantages and disadvantages. According to Qu and Dumay (2011), advantages include rich data that provide subjective insights into participants' reality (unstructured) by a flexible and intelligible design uncovering facets of human and organisational behaviour (semi-structured) and pre-established questions to minimise researcher bias, which results in generalisability of findings (structured). On the downside, disadvantages range from a strong researcher bias (unstructured) to time-consuming planning activities before, during, and after the interviews (semi-structured) and missed findings concerning human nature (structured). Finally, research has mentioned interviews' extensive preparation time, which can lead to disappointing results if anticipated (Haufe *et al.*, 1996).

Focus groups are an additional research method that "collects data through group interaction on a topic determined by the researcher" (Morgan, 1996, p. 130). This method acknowledges the active role of the researcher as an interviewer. It is often equated to a form of group interview if the formal setting is emphasised (Fontana & Frey, 1994; Rabiee, 2004; Krueger, 2014; Stewart & Shamdasani, 2014) or to a group discussion if the interaction among the members is emphasised (Debus, 988; Kumar,

1987; Wong, 2008). Further, Doyle (2004), Gray (2009), Qu & Dumay (2011), and Carter *et al.* (2014) argued in favour of focus groups because the interdependent dynamics among participants reveal commitments that might be challenged and, as such, defended via further explanation. That is what Carey and Smith (1994) called "the group effect" and is suited to significantly enrich research. Doyle (2004) and Qu & Dumay (2011) also highlighted the effectiveness of this method thanks to a reduced amount of time and a reduced bias if the active role of the researcher is limited to contributing topics or asking questions. In contrast, Agar & MacDonald (1995) and Saferstein (1995) stated participants might experience the group dynamics as burdensome because they need to continuously defend themselves. Moreover, they stated that the moderating role of the researcher can disrupt group interactions and, consequently, their flow of communication.

Additionally, *surveys* are a method applicable to both quantitative and qualitative research (Morgan, 1996). In qualitative research, surveys mainly return descriptive content that is considered to be suited at the development stage or at the interpretation of results stage of a study (Safdar *et al.*, 2016). Richardson & Kabanoff (2014) and Rahman, Jiang & Nandi (2020) argued that surveys in qualitative research contribute insight-based anecdotal comments, which enrich the research. Hutton (1990) provided a more precise argument by stating that unstructured and semi-structured questionnaires with open-ended questions create insights to, for instance, managerial decision-making. He stressed the point that "respondents are encouraged to qualify or elaborate on a point … wherever they feel this helps clarify their point of view" (Hutton, 1990, p. 219). However, critics have stated the challenging nature of surveys due to processing difficulties and resource requirements needed for a thorough evaluation (Bolden and Moscarola, 2000). They also have noted a typically low response rate of only 20% to 30% (Drees *et al.*, 2014; Safdar *et al.*, 2016).

Finally, per Bowen (2009, p. 31), *document and artifact analysis* is a "systematic procedure for reviewing … documents that [splits] into document collection, selection and analysis." It may include interviews, participant or non-participant observations, and artifacts such as documents since all types of documents "can help the researcher uncover meaning, develop understanding, and discover insights" (Merriam, 1988, p. 118). It is often combined with other methods as a means of triangulation (Jick, 1979;

Hancock, 2006; Bowen, 2009; Denzin, 2012) to establish a “confluence of evidence that breeds credibility” (Eisenhardt, 1989, p. 110). Bowen (2009) argued in favour of document and artifact analysis as an efficient research method because data *selection* is less time-consuming than data *collection* and external documents are “obtainable without the authors’ permission” (Bowen, 2009, p. 31). Indeed, as Merriam (2009) noted, documents are only limited by one’s imagination and industriousness. In contrast, research has highlighted insufficient details because documents are typically not produced for the same purpose as that of the research (Bowen, 2009). Also, research has mentioned “biased selectivity” (Yin, 1994, p. 80), which occurs if the selected documents cannot be collected due to missing documentation. Per Bowen (2009), this may occur due to how an organisation handles record-keeping or if limiting policies are in place.

The researcher acknowledges the broad acceptance of these methods in qualitative research (Stake, 1995; Merriam, 2009; Sinek, 2009; Yin, 2013) and emphasises their advantages and disadvantages in the particular context of organisational change. For one, observations contribute especially rich evidence in natural environments whereas findings are limited to the very moment of appearance (Grove & Fisk, 1992; Bergman & Coxon, 2005). Second, interviews favour in-depth insights on a phenomenon under research from the very perspective of one particular individual (Qu & Dumay, 2011). Third, focus groups provide deepened insights on a research topic while also offering evidence on participants’ interdependent interactions (Smircich & Morgan, 1982; Carey & Smith, 1994). Third, surveys contribute insight-based anecdotal comments, which might include participant-triggered, self-reflective justifications of their points (Morgan, 1996; Richardson & Kabanoff, 2014; Safdar *et al.*, 2016; Rahman, Jiang and Nandi, 2020). Lastly, document and artifact analysis is suited to broaden the researcher’s understanding and is mostly used to build *a priori* knowledge or to triangulate findings (Yin, 1994; Bowen, 2009; Vom Brocke *et al.*, 2009).

For this study, the researcher includes focus groups, surveys, observations, and document and artifact analysis because of their effectiveness in the context of this research.

From a constructivist's perspective, the focus group method provides evidence through the verbalised answers from participants' socially constructed perspectives. The group dynamics enrich the researcher's overall understanding since they support the examination of what values and mindsets the participants own as individuals and share as a group. Because the participants share a social environment, namely the community at their employer, the researcher can draw on the culture of the consultancy. Surveys are applied to enrich and justify gained knowledge. The researcher offers the participants the opportunity to provide follow-up statements. He thus ensures that they can elaborate on or add certain points. The researcher combines focus groups with surveys to produce rich data that will contribute to the overall research.

However, some scientific research challenges such a combined approach. For one, Morgan (1996) stated that this combination can only rarely be found. He reasoned that since focus groups are qualitative methods and surveys are quantitative methods, combining methods from differing paradigms can cause epistemological and technical issues (Lincoln & Guba, 1985; Hancock, 2006). The researcher acknowledges this point but argues that surveys are used not only in quantitative research but also in qualitative studies (Richardson & Kabanoff, 2014; Safdar *et al.*, 2016; Rahman, Jiang & Nandi, 2020). It is evident that a survey's nature determines its epistemological paradigm (Safdar *et al.*, 2016). In this study, the researcher relies on semi-structured surveys in which participants are offered unlimited text fields to input their statements in an unrestricted way. Consequently, surveys as applied in this study are considered part of a constructivist epistemology and qualitative inquiry, which justifies their combined application in this research.

The researcher conducts an exploratory study that mainly relies on rich evidence. Since observations focus not only on verbal sayings but also on non-verbal behaviour, they support this aim (Grove & Fisk, 1992) and thus are applicable in this study.

The document and artifact analysis is applied as stated by Jick (1979), Patton (1999), Bowen (2009), and Denzin (2012). It aims to build the researcher's *a priori* knowledge prior to assessing the cases and enrich the findings by providing meaning, i.e., by providing contextual information on the cases and their informants. The researcher

acknowledges new insights that can potentially reshape the survey questions. By doing so, the researcher might have asked the participants to justify sayings or interpretations. This analysis also serves as a means of triangulation because findings are used to validate gathered data and, as such, to breed credibility.

Figure 5 below summarises the previous choices:

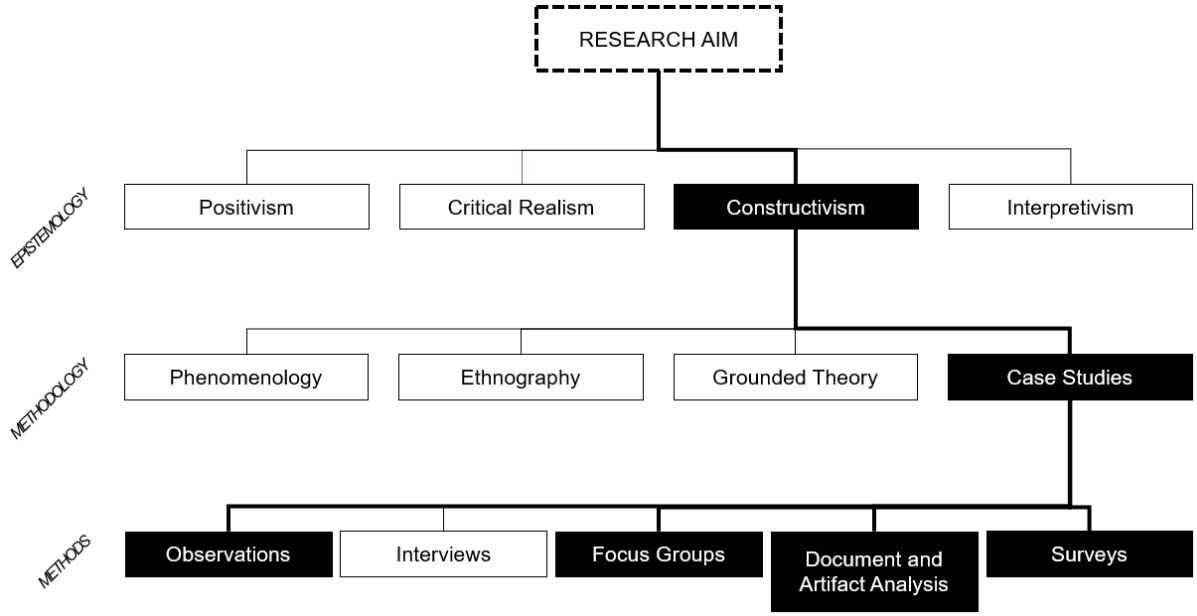

Figure 5: Decision tree for chosen epistemology, methodology, and methods

3.5 Implementation plan

The outcome of this research is dependent on the general quality design that shapes the implementation plan. Per Korstjens & Moser (2018), qualitative inquiry needs to establish trustworthiness by taking into account credibility, transferability, dependability, and confirmability.

Credibility is described as “confidence in the truth of the findings” (Korstjens & Moser, 2018, p. 122) and can be established by applying prolonged engagement, persistent observation, triangulation, and member check (Lincoln and Guba, 1985; Guba, Lincoln and others, 1994; Sim & Sharp, 1998). Prolonged engagement aims to increase invested time so that the researcher can better understand the context, build trusting relationships, or test for misinformation (Lincoln & Guba, 1985; Korstjens & Moser, 2018, p. 121). Persistent observation describes the researcher’s activity of re-evaluating the research characteristics and elements to ensure that the most relevant

are chosen for further research. Triangulation identifies variation of research data, research method, and the researcher and aims to ensure the evidence validity. Lastly, member check describes an activity in which the researcher provides the participants with the recorded evidence so that they can reconfirm its accuracy. In accordance with Lincoln & Guba (1985), Patton (1999), and Korstjens & Moser (2018), transferability refers to a thick description that covers not only participants' behaviour and experiences but also an encompassing description of the context. Dependability and confirmability are considered as a scientific audit trail. As such, they aim to thoroughly describe the research steps as transparently as possible and to keep records of the research path throughout the entire research process.

The researcher acknowledges research quality as stated by Lincoln & Guba (1985), Patton (1999, 2005), Chenail (2014), and Korstjens & Moser (2018) and appreciates transparency in establishing trustworthiness. In the following sections, the researcher describes the implementation plan and covers how trustworthiness in particular is established.

3.6 Implementation of methods in case study research

The plan of implementation follows a practice-based perspective. Following Nicolini (2012), Latour (2013), and Nicolini & Monteiro (2017), practice-based research (PBR) focuses on activities, or, according to Latour (2013), it describes the organisational rather than the organisation. By observing human behaviour and organisational artifacts, PBR offers a new perspective on social systems that goes beyond what its members say or do (Schatzki, 2001; Reckwitz, 2002; Gherardi & Nicolini, 2006; Nicolini, 2012). It emphasises that organisational behaviour is shaped through the mindset of its members, which supports the researcher's primary aim. Consequently, the researcher acknowledges PBR and maintains a focus on participants' interdependent actions (focus groups, observations) and organisational artifacts (document and artifact analyses, observations).

According to Gerring (2004) and Seawright & Gerring (2008), the term "case study" is ambiguous and thus intensively discussed over the last decades (Merriam, 1988; Eisenhardt, 1989; Chelimsky & Grosshans, 1990; Stake, 1995; Hancock, 2006; Gagnon, 2010; Yin, 2013; Vaismoradi *et al.*, 2016) while only little is known on the

relevant steps that form an effective approach (Hancock, 2006; Gagnon, 2010; Rashid *et al.*, 2019). Rashid *et al.* (2019) suggested a four-phase approach that is adapted in accordance with the suggestions of Merriam (1988, 2009) and Merriam & Tisdell (2015) and in terms of the choices of the epistemological paradigm and research methods:

1. Foundation phase: identification of case study types, sampling strategies, selection strategies; literature review on agile transformation methods (Culture-Method tool); identification of a procedure to conduct the field phase of the case study research
2. Pre-field phase: document and artifact analyses
3. Field phase: focus groups, feedback surveys
4. Reporting phase: within-case analyses, cross-case analysis

3.6.1 Foundation phase

3.6.1.1 Case study types

Merriam (2009) acknowledged research that suggested differentiating case studies in terms of their type, function, or the quantity of involved cases. Based on her literature review, Merriam (2009, p. 47) provided a typology, which classifies cases into "historical and observational" (Bogdan and Biklen, 2007; Yin, 2013), "intrinsic and instrumental" (Stake, 2005), and "multisite case studies" (Schwandt, 1996; Stake, 2005; Taylor, 2006). The researcher adopts multisite case studies by emphasising that case study research is considered to be intrinsic by nature, which contradicts the argumentation of Bogdan & Biklen (2007) and Yin (2013). Moreover, multisite studies allow a more compelling interpretation of each particular case (Merriam, 2009). Indeed, Miles & Huberman (1994, p. 29) noted: "By looking at a range of (…) cases, we can understand a single-case finding, grounding it by specifying how and where and, if possible, why it carries on as it does. We can strengthen the precision, the validity, and the stability of the findings."

3.6.1.2 Sampling strategies

In accordance with the findings of Marshall (1996, p. 522), sampling is highly relevant for research as it is "rarely practical, efficient or ethical to study whole populations." In qualitative research, there is a variety of different sampling strategies available that

vary in their application and even their terminological interpretation Coyne (1997), Creswell & Clark (2011), and Kuzel (2017). Morse (1991) and Glaser & Strauss (2006) emphasised, for instance, purposeful sampling whereas Sandelowski, Holditch-Davis & Harris (1992) and Sandelowski (1995) stated that sampling strategies are purposeful by nature. The researcher acknowledges research from Sandelowski, Holditch-Davis & Harris (1992) and Sandelowski (1995, p. 3) consider selective sampling valuable in this study. Specifically, selective sampling "refers to a decision made prior to beginning a study to sample subjects according to a preconceived, but reasonable initial set of criteria." Consequently, the researcher varies participants' inclusion and exclusion criteria in this study:

1. Inclusion criterion "organisational hierarchy"
    - Description: Participants own a role that is responsible for making either strategic decisions (e.g., executive level) or operative decisions (e.g., managing level).
    - Rationale: Kotter (1990, 2012b) and Kruse (2020) stated that organisations are hierarchical systems in which decisions are generally taken by the accountable leadership level. Based on these decisions, leadership derives initiatives that are implemented top-down. Thus, participants in leadership positions are considered informed about the results of the transformation initiatives, which suits this research.
2. Inclusion criterion "professional experience"
    - Description: Participants need to have at least 6 months of professional experience in the field of agility and need to be actively engaged in the current or past agile transformation of the researched organisation.
    - Rationale: Participants need to be experienced to understand the concept of agility and how judgement of (un-)successful changes can be examined. They thus need to look beyond typical management key performance indicators (KPIs) to be able to provide relevant insights for this study.
3. Exclusion criterion "disagreement"
    - Description: If key informants refuse to take part in the study, the researcher will exclude them from the list of possible participants.
    - Rationale: The researcher commits to do no harm to the participants and respects their choices at all times.

Selective sampling enables the researcher to identify suitable individuals or groups of individuals, namely key informants, who are crucial to build what is known as information-rich cases (Bernard, 2006; Gläser & Laudel, 2010). Key informants own in-depth knowledge about or experience with the agile culture transformations in consultancies so that they can contribute an important and unique perspective (Trost, 1986; Bernard, 2006; Mason, 2017). They will be identified during the primary selection (Morse, 1991) and chosen if they can articulate their experiences, opinions, and beliefs in a reflective and expressive manner and if they are willing to make themselves available (Poggie Jr, 1972; Bernard, 2006; Lewis & Sheppard, 2006; Stage & Spradely, 2013). In accordance with Morse (1991, p. 136), this approach “is the ideal method of sampling” since it is “clearly efficient“, which underscores the need to keep the sample size as small as possible.

3.6.1.3 Selection strategies

In accordance with the research of Seawright and Gerring (2008), the case types of the sample might differ with respect to the aimed research endeavour. In the context of the explorative nature of this research, Seawright & Gerring (2008, p. 297) suggested a variety of case selection strategies, namely a diverse strategy (cases express the minimal or maximal variation of the population), an extreme strategy, a most-similar strategy, or a most-different strategy.

For this study, the researcher adopts the maximum variation diverse strategy.

Because this study is exploratory in nature, it aims to provide a deep understanding of not only each case but also the similarities and differences among the cases, which are best provided by a most-different selection strategy (Seawright and Gerring, 2008; Rashid *et al.*, 2019). In the words of Merriam (2009, p. 40), “The greater the variation across the cases, the more compelling an interpretation is likely to be.”

The researcher considers two differentiation characteristics that are known to influence agile culture transformations across industries: organisational culture and organisation size (Schein, 2009b; Strode, Huff and Tretiakov, 2009; Wallgren & Hanse, 2011; Abidin, 2017; Appelo, 2018). In terms of organisational culture, the researcher differentiates management consultancy organisations from trusted advisor

organisations. Management consultancies are considered by the researcher to own a profit-driven mindset, which aims to leverage short-term results (Karantinou and Hogg, 2001; Srinivasan, 2014; Brandon-Jones *et al.*, 2016; Appelo, 2018; Conboy and Carroll, 2019). The researcher identifies them by their public presentation, for instance, by examining websites and brochures. They are named as “management consultants.” Trusted advisors are considered to own a purpose-driven mindset that aims to establish long-term client relationships (Maister, Green & Galford, 2000; Keizer & Kempen, 2006; Green & Howe, 2011). They aim to foster trust, openness, and commitment to actively evolve the liaised clients (Conboy & Carroll, 2019). Similarly, they are identified by their public presentation and named “management coaches.” The researcher differentiates between organisation cultures that are considered to own a less-agile matured mindset (management consultancies) and those owning a matured-agile mindset (trusted advisors).

In terms of organisation size, the researcher differentiates small-medium sized organisations (up to 250 employees) from corporates (more than 250 employees) in accordance with the official journal of the European Union (EU, 2003). Research has suggested different approaches to choose an effective number of case studies: Yin (1994, 2013) argued for two cases while Eisenhardt (1989) believed 4 to 10 cases were optimal. Another evaluation approach was presented by Sandelowski (1995) and Charmaz (1995). They suggested stopping data collection if information saturation was reached. Despite some researchers’ argument that saturation is “not as objective and indisputable as it might appear … from a peer reviewer perspective“, it is efficient considering a constructivism epistemology where a total amount of facts (Alvesson & Sköldberg, 2009; Haraway, 1991) is not supported because “knowledge is considered partial, intermediate, and dependent of the situated view of the researcher” (Sandelowski, 2015, p. 7). In its essence, information saturation is a constant, comparative method to theorise from empirical data (Glaser & Strauss, 1999). According to Sandelowski (2005, p. 6) and Charmaz (2006), saturation is reached during data collection if the “researcher compares sequentially added events until exhaustive saturation of properties of categories and of relations among them is obtained.”

The researcher acknowledges information saturation as an effective concept in qualitative research from a viewpoint of a constructivist researcher carrying out an exploratory study. The researcher begins by researching two cases and increasing the number if information saturation is not reached. The researcher judges saturated information as follows: The researcher analyses and theorises from empirical data to purposefully come to meaningful insights. If new information from additional cases does not provide significant new themes and, thus, insights from the viewpoint of the researcher, the researcher stops collecting data.

3.6.1.4 Literature review

Following Eisenhardt (1989), Chelimsky & Grosshans (1990, and Borchardt & Göthlich (2009), the literature review generally enables the researcher to gain contemporary knowledge with respect to the phenomena under review. Given the context of this study, the researcher will apply the literature review to accomplish the following:

- identify methods that are effective in initiating and embedding agile culture transformations into different organisational cultures.
- derive a harmonised definition of agility to express the relative agile maturity of different organisational cultures.

The researcher adopts a literature review approach as stated by Fettke (2006) who argued for the following encompassing structure:

1. Problem statement
    - Build basic understanding of the research topic and conceptualise main topics
    - Identify problem statement
    - Define research aim, questions (regularly inspect and potentially adapt as new knowledge is acquired), and goals
2. Literature research
    - Define keywords based on conceptualised main topics
    - Define databases and ensure research quality criteria
    - Search for literature
    - Establish long list covering all identified literature
3. Literature analysis
    - Filter for relevant literature by applying analytical reading

- Apply analysis on relevant literature by identifying literature that describes a certain purpose that links it to potentially suitable methods

4. Presentation
   - Discuss results by explaining the identified methods and their value proposition in detail
   - Present the Culture-Method (CM) template and add chosen methods

These steps are explained in detail below.

1. Problem statement

The researcher starts by building a general understanding of the research topic by reading past and contemporary literature. By consulting "sources most likely to contain a summary or overview" (Baker, 2000, p. 222), the researcher conceptualises the main concepts, namely change management, agility, and organisation cultures, which jointly provide the theoretical foundation of this thesis. The researcher continues by identifying the research gap, which leads to the identification of a problem statement. Thanks to the understanding of the detailed research subject, the researcher then outlines the research aim, questions, and goals.

2. Literature research

In accordance with Webster & Watson (2002), the literature research describes a structured approach to find reliable sources to be covered in a study. In terms of scientific literature, the researcher only considers peer-reviewed papers such as conferences proceedings and scholarly journals in order to meet the quality criteria of reliability and validity (Welch & Patton, 1992; Webster & Watson, 2002; Chenail, 2014). In terms of practice literature, the researcher is not able to rely on peer-reviewed papers because their publication processes do not typically follow the scientific standard procedures. The researcher identifies databases and uses queries based on the main concepts identified during the conceptualisation of the topic.

3. Literature analysis

The researcher applies analytical reading to draw on the usefulness of identified literature. Per Asquith (2001) and Jones & Hale (2019), analytical reading covers reading the abstract, preface, introductions, and conclusions. This reading helps the researcher to judge whether the identified journal is related to the topic of interest. If

so, the journal is read entirely. Analytical reading ensures that no relevant journal or paper is overlooked (Asquith, 2001; Jones and Hale, 2019).

The researcher closely examines literature that covers the main concepts to understand the differing interpretations of agility and what methods are effective with respect to different organisational and cultural parts. Similar to the content analysis (see below), the researcher follows a latent approach to capture not only the explicit sayings but also the implicit meanings.

4. Presentation

During this step, the researcher recapitulates the maturity levels of the CM tool and outlines the associated methods as identified in scientific and practice literature. This enables him to map the demonstrated levels of cultural maturity to the relative scale of this study (less matured, matured) and link the associated methods accordingly. All findings are documented in table 2:

Category	Subcategory	Method Name	Method Description
...	…	…	…
...	…	…	…

Table 2: Literature analysis of effective change methods

Procedure to conduct the field phase during case study research

Any data collection activity within the field phase follows a defined procedure that ensures the researcher covers all research-specific topics in a way that ensures participants are fully informed and comfortable to contribute (Morgan, 1996; Brandon-Jones *et al.*, 2016). The researcher acknowledges past findings and establishes a respective case study guide in table 3:

Stage	Description
Welcoming	• Greeting and get-together • Thank participants for their time and voluntary contribution
Introduction	High-level summary of the • Overall research aim • Goal of this appointment • Usage of the collected data in the context of the general research • Benefits as participants (Recommendation for action, CM tool) and in general (DBA thesis)
Reassurance of informed consent	Detailed description of the data-collection activities • Focus group interview (120 min, 10 questions, different question types)

	• Focus group feedback survey Detailed description of the data-collection means • Confidentiality • Anonymity • Data storage • Data withdraw Reassuring participation by asking for valid consent
Data collection preparation	Agreement on ground rules for the timeboxed data collection activities • Mute smartphones, close your MS Outlook, and other working tools • Bear in mind being respectful to each other even in potentially emotional discussions • Additional points to be included in the working agreement as raised by the participants
Data collection activity “focus group”	• Briefing: introduction and briefing on guidelines, briefing on timebox • Interview activity: questions about “current state of the organisational culture“, “cultural and contextual definition of ‘agility,’” “target state of the organisational culture” • Debriefing: ending last discussions, clarification of last questions, next steps (surveys upcoming, recommendation ready in about 2-3 months)
Formal closure	Ending of dual data collection method • Casual chatting incl. clarification of questions Information about the next steps • Information on upcoming feedback surveys and timeframe (in about 2-3 months) Ending of virtual appointment • Thank participants for their time and voluntary contribution • Encourage them to take part in the feedback survey

Table 3: Procedure to conduct the field phase during case study research

3.6.2 Pre-field phase

3.6.2.1 Document and artifact analysis

According to Bowen (2009, p. 15), this analysis is a “systematic procedure for reviewing … documents that [splits] into document collection, selection, and analysis.” It draws “upon multiple sources of evidence” and may include interviews, participant or non-participant observations, physical artifacts, and documents (Yin, 1994). Bowen (2009) stated that the term “documents” is thereby complex because it encompasses a variety of printed and electronic document types. Internal documents may include application forms, meetings minutes, and organisational and institutional files whereas external documents may cover press releases, newspapers, websites, and background papers. Merriam (1988, p. 118) stated that documents “of all types can help the researcher uncover meaning, develop understanding, and discover insights relevant to the research problem.” To ensure data confidentiality and establish a

trustworthy relationship with the participants, the researcher relies on external documents (Bowen, 2009; Yin, 2013; Salheiser, 2014; Merriam and Tisdell, 2015) while expanding the list of document types if they are judged to be valuable for particular cases. The identified documents are clustered in terms of their nature and ordered sequentially in table 4:

Filetype and Name	Source	Document type	Access date
Culture Change	External	Website article	13/11/2021, 9:48 AM
…	…	…	…

Table 4: Exemplary data collection for the document analysis

The document and artifact analysis method aims to enrich the data collection. It is often used to provide "evidence that breeds credibility" (Eisner, 1991, p. 110), which aims to increase the validity of qualitative research (Flick, 2004). As such, it is considered a means of data triangulation (Patton, 1999; Scandura and Williams, 2000; Flick, 2004). Data triangulation refers to evidence retrieved by different sources, places, and points in time (Flick, 2004; Denzin, 2012), which is suited to overcome researcher bias (Flick, 2004).

Based on past research, this study applies document and artifact analysis to accomplish the following:

- Build *a priori* knowledge so that the researcher can ask informed questions during the focus group as mentioned by Hudson & Ozanne (1988)
- Enrich data collection from focus group and surveys as mentioned by Hutton (1990)
- Triangulate data as mentioned by Jick (1979), Hancock (2006), Bowen (2009), and Denzin (2012)

The process of searching, finding, and analysing documents includes iteratively applied checks for cross-references. If new literature is found, it is evaluated for whether the information is about a new fact, a significant change in known facts, or a repetition. Repetitions are not documented for redundancy reasons.

3.6.3 Field phase

3.6.3.1 Focus groups

The focus group method encourages information saturation (Wilkinson, 1998; Rabiee, 2004). The researcher acknowledges previous research from Patton (2014) who argued for groups with 8-10 participants because those groups widely fulfil the targeted degree of information saturation while, at the same time, still being manageable.

The researcher relies on a natural focus group composition, which is characterised by individuals from the same organisation (Leask, Hawe & Chapman, 2001). Per Morin, Charles, & Malyon (1984), natural focus groups provide a group of individuals with psychological safety, which is especially relevant if they jointly experience an uncertain environment or situation (Bennett & Lemoine, 2014; Sultanow, Duane & Chircu, 2020). Psychological safety enables them to focus on valuable contributions instead of re-establishing their basic need for safety (Maslow, 1943, 1954; Barrett, 2013). In scientific research settings, individuals are faced with the situation of being questioned by an unknown researcher, which may unnerve them and lead to a subjectively experienced lack of safety (Edmondson, 1999). By relying on focus groups, the researcher provides the participants with a psychologically safe environment that is assumed to make them more willing to speak freely (Hu *et al.*, 2018). This approach is also research-based. For instance, Edmondson (1999) argued against individual interview settings for challenging topics because they typically lack the group-level construct of psychological safety.

According to research, natural focus groups are also assumed to stimulate meaningful insights (Oko, 1992; Witzel, 2000) thanks to the group dynamic via participants' interactions (Leask, Hawe & Chapman, 2001; Doyle, 2004; Gray, 2009; Qu & Dumay, 2011; Carter *et al.*, 2014). They are thus considered to enrich the overall understanding of the case (Sim, 1998; Stewart & Shamdasani, 2014) and to clarify participants' views and perspectives (Kitzinger, 1995). Leask, Hawe & Chapman (2001) mentioned natural focus groups that represent their corporate cultures, which enables the researcher to understand participants' statements within their subjective contexts and to draw from the mindsets and their originating organisational cultures.

The dynamics of a group interview or discussion reveal the participants' commitment to their views because others may disagree with their statements, so speakers often need to explain or defend their views. This publicly expressed statement and the reaction of the other participants enables the researcher not only to witness the held convictions but also to examine the social relation among the participants. Hence, the researcher gets to know the full range of experiences and opinions of the group (Weiss, 1998; Walston & Lissitz, 2000). Group interviews are thus frequently used in qualitative research (Sandelowski, 2002; Horton, Macve and Struyven, 2004; Nunkoosing, 2005; Qu & Dumay, 2011; Kallio *et al.*, 2016) such as explorative studies and complex research (Alvesson and Deetz, 2000; Kvale and Brinkmann, 2009) because this strategy provides valuable insights to the participants' views of the world and their situational contexts (Fontana and Frey, 1994).

Acknowledging the nature and scope of this research, the researcher considers focus groups as an efficient means of data collection thanks to their ability to make participants comfortable and to cover not only prospective data (e.g., future methods to transform the organisational culture including potential obstacles and mitigation activities) but also retrospective data (e.g., learnings from the greatest success or failure and their future implications).

To apply focus groups, the researcher needs a particular set of skills. This is obligatory because situations might be complex due to participants' realities and professional settings (Fontana & Frey, 1994; Sandelowski, 2002; Qu & Dumay, 2011; Patton, 2014). The researcher must possess soft skills in order to make the participants as comfortable as possible so that they can speak freely and be willing to answer even those questions that address differences in their views of the world (Wong, 2008; Qu and Dumay, 2011). The researcher also needs to be able to listen to participants' words and to react in an empathic way to recognize challenging situations. This is even more important because a discursive conversation among the participants might lead to emotional sayings and responses. The researcher is also required to garner professional expertise in the area of interest so that he can ask informed questions. During the focus group activity, the researcher needs to be capable of asking questions clearly and holding a neutral position while taking notes of relevance in parallel to participants' sayings. During the activity, the researcher works to move from a surface

level of conversation to a profound and meaningful discussion. To do so, the researcher applies different question typologies as depicted in table 5:

Typology	Purpose	Example
Introducing question	To start off the conversation; To introduce the topic; To lead to the main interview	Do you remember a situation in which…? Please tell me…
Follow-up question	To focus on raised topics; To deepen understanding	For which reasons…? What happened then?
Probing question	To clarify raised statements	What do you mean by…? Can you describe…?
Specifying question	To gain a more precise understanding	What does that mean in particular? Can you provide me with a specific example?
Structuring question	To end a topic	With regards to the passed time, do you agree we should move on?

Table 5: Question typologies adapted from (Kvale, 1999)

The researcher initially asks introducing questions and keeps probing the responses by choosing either questions designed beforehand or by improvising follow-up questions (Rubin & Rubin, 2005; Hardon *et al.*, 2007). Probing questions are key to clarify and deepen statements, which are typically on a surface level initially (Ritchie *et al.*, 2013). While moderating the focus group activity, the researcher continually ensures participants' understanding by using simplified language that avoids technical terms and doubled negations (Lamnek & Krell, 2010). In case technical terms arise spontaneously, the researcher ensures a common understanding to prevent information loss (Qu & Dumay, 2011). The researcher also probes his understanding of participants' statements by applying verbal and non-verbal reactions as shown in table 6 (Lune and Berg, 1998; Kvale, 1999):

Signal	Purpose	Example
Pause/Silence	To let thoughts come up; To let statements take affect	"Ok…"
Verbal sounds	To express that the researcher keeps listening	"Hmm"
Nodding	To express the researcher's understanding of the raised statements	-

Paraphrasing	To express the researcher's understanding of the raised statements	"So, you are stating that…" "Can it be summed up with…?"

Table 6: (Non-) Verbal signaling

As suggested by Gläser & Laudel (2010) and Lamnek & Krell (2010), the researcher asks the participants questions that are structured by the focus group guide shown in table 7 to ensure continuity across focus groups, to stimulate the flow of communication (Oko, 1992; Witzel, 2000), and to avoid abrupt topic changes (Helfferich, 2011). The focus group guide hence supports participants' free speech. It is based on the principles mentioned by Gläser & Laudel (2010).

Research area	Asked questions	Value proposition
Cultural definition of "agility" and current state of the organisational culture	Assume a new colleague is hired. What would you answer if he asks what agility means to you?	The definition of agility is dependent on participants' socially constructed reality and the culture of the group, so what insights do they give me by providing the definition?
	Assume he is quite curious and asks what kind of "community work" do you do for the greater good of your community. What would you answer?	Are there any cultural artifacts that are made explicit to those who are new to the culture? Are the participants aware of their own artifacts, or are they coded implicitly in their values and social norms?
	Assume the new colleague realises that community work means quite a time commitment as it needs to happen in addition to project engagements. As he gets paid anyway, he asks you why he should do this. What would you answer?	Is there a clear reasoning, or is it just because it is "fancy"? Is it expected from the bosses? How do the others react if a participant reasons this way whereas others assume a clear value-add? Is there intrinsic motivation?
	In the beginning, you explained what agility means to you, and you explained what kind of community work you are doing. Considering both, would you consider your community as agile? Please explain your answer.	Only a culture itself can judge if it is agile or not. Is there an implicit consent or dissent about it?
Target state of the organisational culture and evolving towards the agile organisational culture and influencing factors	What's your vision for your community or your targeted future state of your community?	Two questions at once might be overwhelming to my individual participants. How do they manage this kind of complexity? How do the other participants react by seeing a team member struggle? Do they know what they want as a group? What is the prospective view of the individuals? Is there a consensus among individuals?
	How do you plan to achieve this vision? Are there any methods, practices, or initiatives that are worth being mentioned or highlighted?	Are there any explicit thoughts to evolve the culture that go beyond typical community work?
	How do you decide what to do?	Is there a decision-making process that encourages a broad base of willing individuals? Or is it decided in a hierarchical way? How do they prioritise

		what to do first/last? How do they manage conflicts? Do they (need to) follow company internal or external guidelines? Are there other factors that influence their decisions?
	How do you judge if you're successful in what you are doing? What is success to you and how do you measure it?	Do they reflect? If so, on a regular basis? Is this coded as a cultural artifact and made explicit as a social learning process? Or is it made implicit by each individual? Do they share lessons learned? How do they take care to serve the greater good of the culture?
Cultural learning	How do you typically manage challenges, especially those that might set your success at risk?	What might be typical issues today (which would also show up in future)? How do they react to challenges (do they strive for an individual solution or ask for help)?
	How would you ensure that your lessons learned are not lost down the road, and that everyone in your community is aware of your learnings?	Do they share their learnings? How do they deal with new knowledge?

Table 7: Focus group guide

The researcher documents the focus group activity by taking notes (May, 1991; Bernard, 2006) and by using a voice recorder (Pontin, 2000; Wolcott, 2005; Bernard, 2006). While taking notes and recording participants, the researcher captures personal details about the participants, which is classified as sensitive data by nature. As such, the researcher needs to pay special attention to ethical considerations. For example, the researcher needs to ensure that any documentation is kept confidential at all times. It is also important to keep data from different case studies separated. In any case, it is in the responsibility of the researcher to avoid harm to participants by violating their privacy.

Voice and video recordings are transcribed along a chosen transcription system. In accordance with Mayring (2002), Rehbein et al. (2004), Kowal & O'Connell (2005), Höld (2007), and Dresing & Pehl (2015), research offers a variety of transcription systems. They differ from each other in the degree to which they capture verbal and non-verbal elements in the transcription process (Kuckartz, 2016).

For this study, the researcher adopts a simple transcription system as formulated by Kuckartz & Rädiker (2019, p. 42) and described as follows:

1. Speech is transcribed verbatim, i.e., not phonetically or in summary form. Dialects are not transcribed but translated as accurately as possible into the standard form, e.g., standard English.

2. Language and punctuation are standardized slightly where necessary, i.e., to approximate written language. For example, “He’s gonna write a book” is standardized to “He is going to write a book.” The word order, definite and indefinite articles, and others are retained even if they contain errors.
3. Clear, longer pauses are indicated by ellipses in parentheses (...). Depending on the length of the pause in seconds, one, two, or three points are used; for longer pauses, a number (in digits) corresponding to the duration in seconds is used.
4. Intentionally stressed words are underlined.
5. Very loud speech is indicated by all capital letters.
6. Affirmative or agreeing utterances made by interviewers (“hm…”) are not transcribed as long as they do not interrupt the flow of speech of the interviewee.
7. Short interjections made by the other person, such as “yes” or “no“, are included in brackets in the speech without starting a new paragraph.
8. External interruptions or interferences are noted in double brackets stating the cause, e.g., [cell phone rings].
9. Vocal utterances made by both the interviewee and the interviewer are noted in parentheses, e.g., (laughs), (groans).
10. For videos: nonverbal actions are placed in parentheses, e.g., (opens the window), (turns away).
11. Incomprehensible words and sections are identified by (unclear).
12. All information that would allow an interviewee to be identified is rendered anonymous.

The choice of an appropriate transcription system stems from the researcher’s aim to obtain evidence for participants’ justified choices rather than to focus on getting to know which particular statements have been made for which reasons. This research thus excludes complex transcription systems such as GAT, HIAT, and CHAT (Dittmar, 2004; Rehbein *et al.*, 2004; Dresing & Pehl, 2010). The researcher acknowledges practical implications from Kuckartz (2016) who stated that the effort to conduct simplified transcriptions may take between 5 to 10 times the length of the actual focus group. The effort thereby may increase with even more complex transcription systems, which, in turn, impacts the conscientious processing of the transcripts in the long run. Moreover, the readability of the transcripts can be made considerably more difficult by

the complex nature of the transcription rules. This also may impact the later transcript analyses and the duration of the research.

3.6.3.2 Surveys

In qualitative research, scientific literature considers surveys in terms of feedback forms to be of limited use due to processing difficulties and resource requirements needed to evaluate evidence (Bolden & Moscarola, 2000). At the same time, research has acknowledged qualitative data as much richer than expected (Richardson & Kabanoff, 2014). The researcher considers surveys as feedback forms and relies on semi-structured questionnaires. They include open-ended questions and aim to capture the experiences, opinions, and beliefs of the participants. The gained evidence is analysed by applying the thematic analysis method to reveal patterns of shared meaning to capture individuals' opinions and to draw from the opinion of the group.

Feedback survey 1: Focus group

This survey centres on the experience with the focus group activity and is sent out the subsequent day. Each participant can add, change, or reject statements raised by him or her or the others and provide information where he or she deems necessary. This survey aims to enrich evidence that deepens the researcher's understanding.

Feedback survey 2: Recommendation for action

This survey focuses on the recommendation for action and is also sent the day after the survey link is shared. The researcher starts by asking for reasoned statements if the recommendation is of general use within their organisational context (Rashid *et al.*, 2019). Also, participants are asked if the recommended methods are already applied, planned to be applied, or not planned to be applied in the future. As such, this survey aims to increase credibility by ensuring prolonged engagement and member check as stated by Patton (1999) and Korstjens & Moser (2018). In addition, this survey aims to increase the research engagement to capture retrospective data, which allows the researcher to ensure his exhaustive understanding of the subjective context. In that regard, it contributes even further to a prolonged engagement. As to member check, the researcher asks the participants if the methods they mentioned are correctly documented in the recommendation. The researcher then ends by asking for the

usefulness and appropriateness of the recommended methods since they are derived from the understanding of the subjective context of the case.

Regarding ethical considerations, the researcher is aware that participants offer personal information such as perspectives or feelings. It is therefore important that the researcher maintains confidentially since this information may harm the participants if it would become public knowledge. Considering this ethical challenge, the researcher does not record participants' names or any other personal details that would enable a third party to link participants' statements and their identities.

3.6.3.3 Observations

The researcher employs direct observations as suggested by Mack (2005) in order to enrich evidence about participants' behaviour and organisational artifacts gathered during the focus group activity (Tellis, 1997; Djamba & Neuman, 2002; Mack, 2005; Zainal, 2007; Abidin, 2017; Aiello *et al.*, 2018). The researcher aims to carry out observations as unobtrusively as possible by minimising moderating activities and solely asking questions covered by the focus group guide.

The researcher also tries to maintain a detached perspective by emphasising his researcher role, which contradicts his role in daily business life. He relies on video recordings to review participants' types of communication and their interdependent interactions. That enables a retrospective analysis with the researcher's full attention to potentially discover researcher-biased situations. The researcher employs direct observation only for the duration of the focus groups.

3.6.4 Reporting phase

The researcher finally adapts an approach as stated by Rashid *et al.* (2019) to aggregate gathered evidence of all kinds. Figure 6 shows this approach in overview.

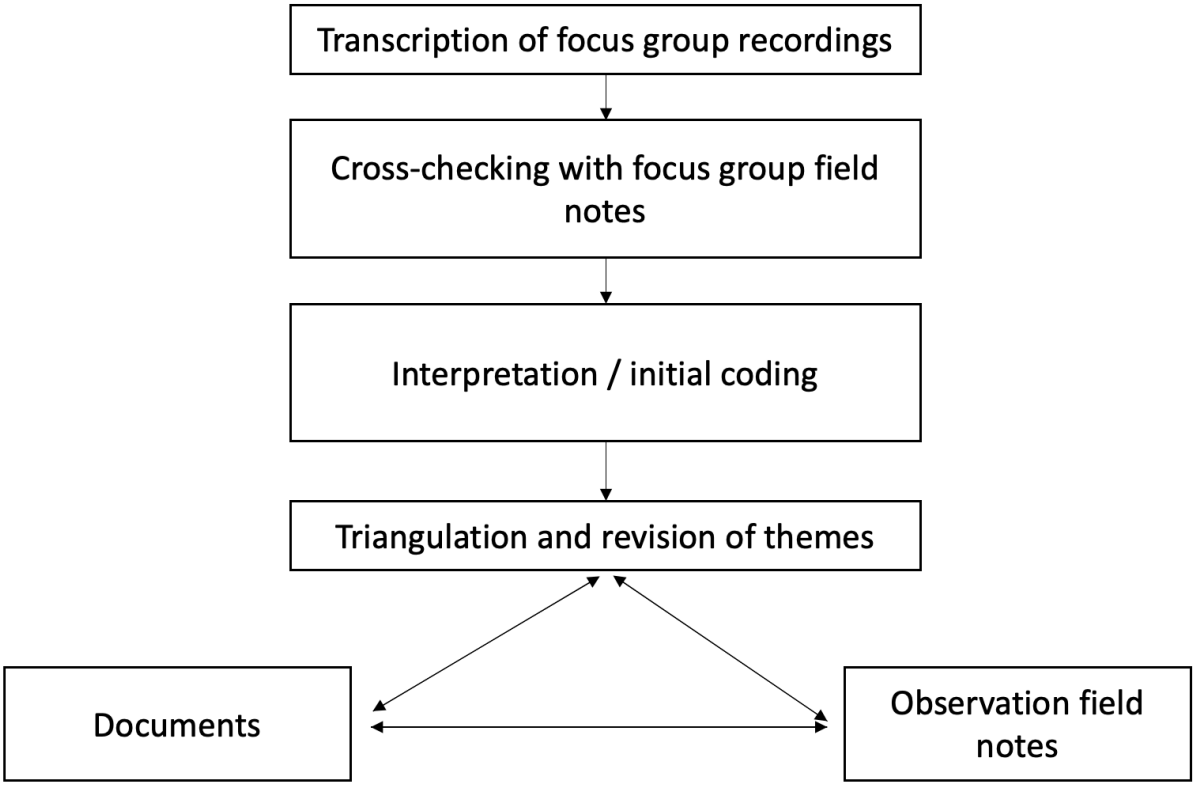

Figure 6: Analysis approach as adapted from Rashid et al. (2019)

The recordings are transcribed using simple transcription rules as stated by Kuckartz & Rädiker (2019, p. 42) and cross-checked with the focus group field notes to ensure correct understanding (Rowley & Slack, 2004). The researcher then applies the thematic analysis as stated by Braun & Clarke (2006). This analysis subdivides into open coding, axial coding, and selective coding. The researcher first analyses all collected evidence and labels excerpts as “codes” to identify hidden means. By doing so, the researcher can elicit themes from the raw data. They are then triangulated, obscured, and revised as new knowledge is gained (Flick, 2004; Mayring, 2004; Vaismoradi, Turunen & Bondas, 2013) and finally summarised into broader themes to gain a wider understanding. This coding also anticipates the researcher’s personal notions. During axial coding, the researcher links the themes to a set of categories, namely the following:

- Category 1 *causal conditions* outlines “why” this phenomenon is happening.
- Category 2 *phenomenon* explains “what” will be explored.
- Category 3 *strategies* highlights what the focus group does “because of the phenomenon.”
- Category 4 *consequences* asks “what happens as a result of this strategy?”

- Category 5 *context and intervening conditions* provides information about the circumstances in which the strategies take place and the factors that influenced focus group participants' behaviours.

Based on the aggregated insights, the researcher then starts the within-case analyses.

3.6.4.1 Within-case analyses

The w*ithin-case analysis* supports "researchers to cope early in the analysis process with the often enormous volume of data" (Eisenhardt, 1989, p. 541). It provides a highly detailed description of the case (Gersick, 1988; Pettigrew *et al.*, 1988), supports creating thick descriptions (Lincoln & Guba, 1985; Patton, 1999; Korstjens & Moser, 2018), and, thus, supports transferability, which establishes trustworthiness. It also guides the researcher to "become intimately familiar with each case as a stand-alone entity" (Eisenhardt, 1989, p. 542).

The researcher acknowledges past research on this topic and adopts meaningful write-ups that clearly outline the contexts and their value contribution to this study. The researcher starts by providing a description of the case to highlight its respective context as emphasised by Gersick (1988), Pettigrew *et al.* (1988), and Eisenhardt (1989). It will cover the following:

- Case description
- Business area
- Description of accessed documents
- Focus group description
- Justification

The researcher continues by providing an overview with a narrative write-up of the thematic analysis results as suggested by Braun & Clarke (2006). This is followed by acknowledging and adapting the two-step approach from Vicsek (2007). In the first part, Vicsek (2007) examined participants' interactions and types of communication by addressing "how the participants say something and what they want to achieve with their communication" (Vicsek, 2007, p. 22). This is what he referred to as an analysis of situational factors. To do so, the researcher examines participants' interactions by focusing on those who exhibit the following:

- Change their opinion in the course of the discussion for the sake of group conformity
- Support the statements of others to help them out
- Form an alliance of joint perspectives
- Are major topic contributors and the reaction of the other participants to those contributions

The researcher also pays attention to laugher, storytelling, jokes, sarcasm, or rhetorical questions to identify different kinds of communication. By seeking deep knowledge on these factors, the researcher aims to build a thorough understanding of the focus group as a whole. Findings are then summarised to support the general understanding prior to moving to the second part, the thematic analysis.

The second part focuses on what has been said in terms of the following:

- Agility (definition, agile vision, judgement if the participants consider themselves to be agile according to their definition)
- Factors that influence their agile culture transformations
- Actions that are effective in initiating and embedding their agile culture transformations

The researcher thereby seeks justification of what has been said by paying attention to how these statements have been said.

The researcher examines if the focus group covers elements of the definition of agility as defined in this study. In case of a close match, the researcher considers the case as agile matured. If the match is only partial or poor, the researcher considers that a less-matured culture. This method serves as a means of normalisation and aims to compare the subjectively differing interpretations of agility across cases, which is shown later. The researcher considers this normalisation process essential to plot the relative degree of agile maturity of the researched cases. According to this normalisation, cases showing a higher agile maturity will be plotted further right on the x-axis in contrast to those showing a lower maturity, as depicted in figure 7:

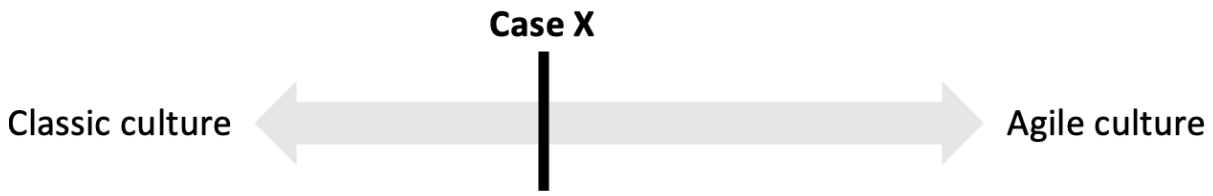

Figure 7: Exemplary visualisation of a case agile maturity degree

The researcher then provides evidence on a case's methodological approach to cultural change. The researcher thoroughly describes each of the practices applied in the case in order to successfully initiate and embed its cultural self-renewal process. The description covers the context, procedure, and evaluation of the value proposition in the context of organisational change.

3.6.4.2 Cross-case analysis

Similar to the within-case analysis and in accordance with the research of Vicsek (2007), the researcher focused first on how statements were said prior to focusing on what was said.

First, the researcher examines the similarities and differences between the cases in terms of their interactions and types of communication. Thus, cultural differences and similarities are linked to their degree of maturity, which supports the judgment of their relative agile maturity as compared to each other. Second, similarities and differences among agility, influencing factors, and effective actions are identified and interpreted with respect to the degree of agile maturity of the originating cultural context. Similarities and differences are then discussed to identify transferable findings that are helpful for the broader audience given a particular context (Vicsek, 2007).

3.6.5 Summary

In previous sections, the researcher explained the epistemology, methodology, and methods of this research and how they are operationalised while maintaining trustworthiness. All applied methods are sequentially ordered whereas some will be iteratively applied as new information is gained.

The iterative revisiting of topics is thereby that kind of reflexivity that is considered an important part of acquiring information saturation.

Moreover, reflexivity is crucial for the continuous learning and evolution of the researcher himself. By focusing multiple times on the same topics (e.g., literature review influences research questions, which in turn influence further literature review) or the same methods (e.g., multiple focus groups over the course of the research), the researcher can achieve a meta level of learning. For instance, the researcher revisits multiple times the same central concept so that he becomes aware not only if this is the proper concept and if it is properly researched but also of how he decides what "proper" in the context of the research actually means. Thus, reflexivity enables the research to employ triple-loop learning for the sake of personal evolution and quality of research (Georges L. Romme & van Witteloostuijn, 1999; Tosey, Visser & Saunders, 2012).

Past research considers this approach typical in qualitative research (Hammersley & Atkinson, 1995a; Robson, 2011). Indeed, Hammersley & Atkinson (1995a, p. 24) stated that qualitative research is widely considered a "reflexive process operating through every stage of a project." With respect to the iterative research process and the researcher's maintaining triple-loop learning, this research can be considered to own inherent reflexivity.

The researcher acknowledges Hammersley & Atkinson (1995a) and presents the reflexive research process in figure 8:

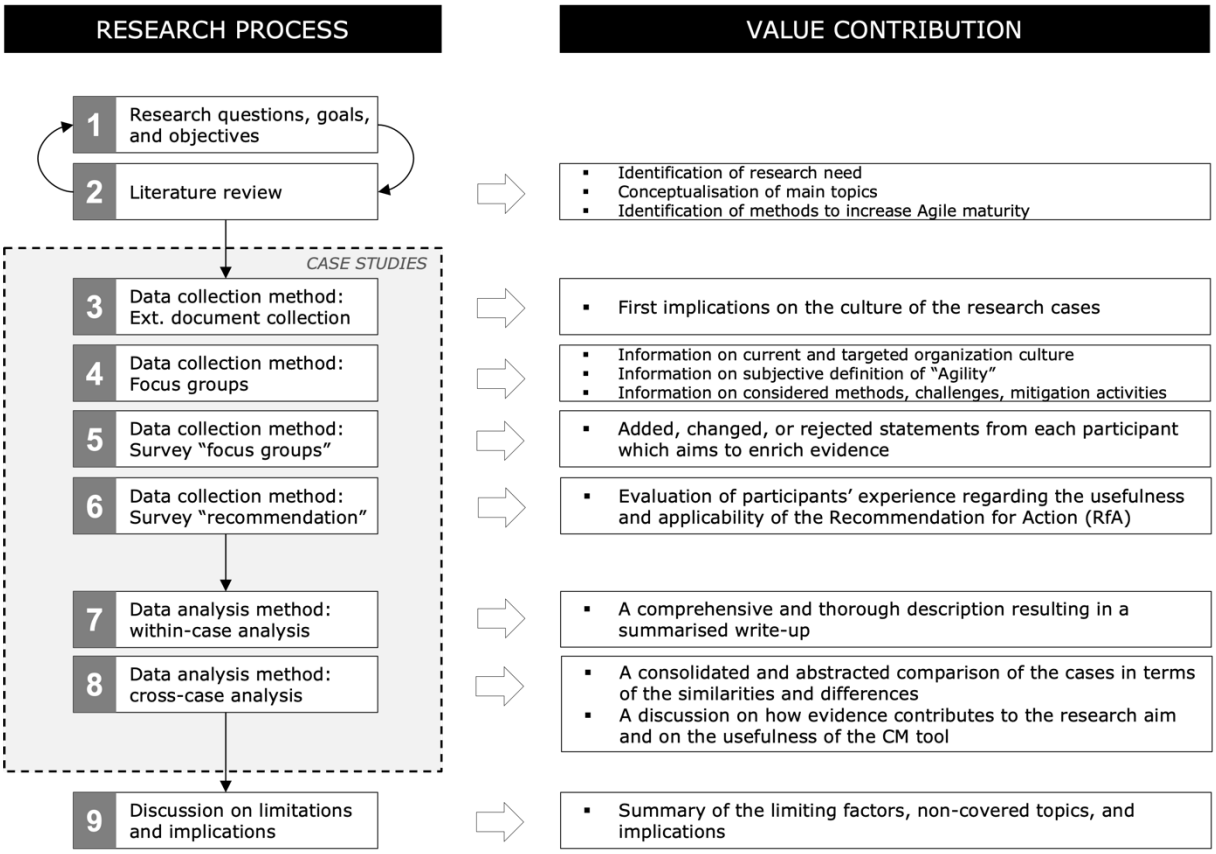

Figure 8: Reflexive research process

Considering the aforementioned methods of document collection, focus groups, surveys, and observations, the researcher emphasises the personal and contextual rationales that justify their inclusion. As a personal rationale, the researcher possesses strong knowledge thanks his having used these methods in prior research. He is thus not only familiar with their application but also aware of the ethical and practical challenges that may arise. As such, the experience of the researcher suits the quality of research. As a contextual rationale, the researcher expects the research approach to be beneficial for not only the personal evolution of the researcher but also competence development. Since each focus group will rely on participants' answering from their individually constructed realities, the researcher expects unforeseen situations that improve his existing skillset. These will be captured as "researcher learning" for the sake of transparency.

In the following sections, the researcher records the data collection activities in accordance with the reflexive research process. The researcher conducts two to four maximum variation cases whereby each case needs to provide justification for its relevance via a detailed conversation with the respective gatekeeper. For each case, the researcher gathers 8 to 10 volunteering participants who match the inclusion criteria to ensure their relevance in the context of the research area. To ensure required depth of conversation, the researcher makes participants as comfortable as possible, namely by not scheduling the focus group between important meetings or by letting them choose their preferred language of conversation (German or English). Considering participants' full workdays on the one hand and the required need for information depth on the other, the researcher sets the duration of the focus group to 90 – 120 min with another 30 min set aside for potential side conversations or questions.

The researcher encourages every participant of the focus group to take part in the follow-up surveys. To do so, he first provides the participants with a purposeful justification of their value contribution with respect to this research and, second, compares to the limited amount of time it takes for their completion. From a high-level perspective, the researcher expects the overall data collection activities to be finished within 5 five months.

4 Findings

4.1 Introduction

The researcher conducted three focus groups with 14 participants, which totalled 4 hr and 49 min of recording (see Appendix B, pp. 269-313, pp. 342-367, pp. 392-425). Evidence was enriched by survey data and triangulated by data from document and artifact analysis to increase the credibility of research. In the following sections, the researcher presents the findings as outlined in the methodology chapter: For each case, the researcher briefly describes the organisation, its business area, the accessed documents, and the focus group composition, which jointly lead to the justification for the case's inclusion in this study. The researcher continues by providing evidence for the interactions and types of communication prior to focusing on participants' respective interpretations of agility as well as the implications for agile change practices. All cases are examined in terms of their similarities and differences. Finally, all evidence is summarised and interpreted in the context of this study. An encompassing list of all collected data and analysis results can be found in Appendix B (pp. 263-445).

4.2 Within-case analyses

4.2.1 Case 1

4.2.1.1 Case description

The first case is a small-medium sized consultancy with approximately 150 employees. After its founding in the 1970s, it was able to establish long-term relationships and to own leading positions worldwide. It is a self-managed and self-responsible organisational entity under the umbrella of a corporate consultancy that covers over 500.000 employees and serves over 6000 clients in over 100 countries.

4.2.1.2 Business area

The business area is focused on establishing business agility. As part of its business model, it joins client transformation engagements in their early phases and considers leaving only if agility has demonstrated measurable outcomes. Staffed employees are subject matter experts with diverse individual contexts and drive clients' agile delivery efforts via a Scrum master role, agile coach role, or agile delivery lead role.

4.2.1.3 Description of accessed documents

The researcher accessed documents of the following types:

- Website articles: articles indicating the advertisement of the official culture versus those implying the actual culture (see Appendix B pp. 263-265)
- E-mails: official communications (see Appendix B p. 264)
- Screenshots: meeting artifacts (see Appendix B p. 264)
- Videos: focus group recording (see Appendix B pp. 263, 269-313)
- Notes: field notebook covering notes from document and artifact analysis and observations during the focus group (see Appendix B pp. 266-268)
- Surveys: case study participants' responses with respect to the focus group and the recommendation for action (see Appendix B pp. 314-327, 332-336)

The accessed documents were employed for several different purposes. First, they were used to prepare the researcher prior to conducting the focus group activity. For example, the researcher investigated the self-presentation of the case for the broader audience in order to understand their self-perception (see for reference the documents "Who we are" and "What we do" in Appendix B p. 265). The documents also enabled the researcher to learn about the case's interpretation of agility and how the business aimed to evolve an organisation (see document "**Fehler! Verweisquelle konnte nicht gefunden werden.**" in Appendix B p. 263 and "What is agile transformation" in Appendix B p. 264). Second, the documents were used to enrich data collected during the focus group and surveys. For instance, the documents enabled the researcher to glean insights on how the case organises itself from an organisational point of view (see "Organisation model" in Appendix B p. 264), how members of its culture make decisions (see "Parliament group decision process" in Appendix B p. 264), and how they innovate their own culture (see "Incubators", "OKR", "Local Hubs", and "Career Model" in Appendix B pp. 263-264). Third, the documents enabled data triangulation. The researcher compared the advertised cultural statements (see "Who we are" and "What we do" in Appendix B p. 265) with the cultures displayed during the focus group (see Appendix B pp. 269-313).

4.2.1.4 Focus group description

The focus group participants included two women and four men. Their ages ranged from 23 to 44 years old, and they hailed from Austria, Germany, Switzerland, and the United Kingdom. The participants joined the company 2-3 years ago and occasionally worked together on varying client projects or community engagements. Their hierarchical positions ranged from senior Scrum master (two participants) to senior agile coach (one participant) to agile delivery lead (three participants). In terms of their organisational roles, three participants were considered to be part of the leadership team.

All participants joined the focus group activity and actively contributed over the duration of their attendance. 83% of focus group members answered the follow-up survey, which took them approximately 15 min 13 s on average. The follow-up survey on the recommendation for action ("agile playbook") was answered by 67% of the participants and took roughly 13 min 35 s on average.

4.2.1.5 Justification

The case relies on long-term and sustainable client relationships, so it can be classified as a trusted advisor organisation. The community is faced with internal shocks (rapid growth of headcount, increasing number of internal goals), which provide an impetus for their organisational change efforts.

4.2.1.6 Interactions and kinds of communication

Participants preferred to take up given statements by other participants and to only add their thoughts or slightly adjust the statements rather than coming up with completely different statements. Once a statement was shared among the group, it seemed they took it as a fact and reference point for discussions. Some examples of such behaviour are the following:

> *"I would add and expand on that a little bit, just to specify the goal of agility a little bit." Participant A9N6 at time mark 6m44s*

> *"If we are then in the supplementary stage, then perhaps we should also address the focus again." Participant J5H3 at time mark 7m29s*

“I would not have disagreed. I would have said it very similarly to what J5H3 said, but I would have made a single adjustment by saying, ‘This is one way to deal with complex challenges.’” Participant N7B9 at time mark 11m7s
“Perhaps in addition to that, there is the issue of success.” Participant A9N6 at time mark 1h19m45s

“Can I add one more thing?” Participant L1W7 at time mark 1h43m19s

It seemed that participants tried to avoid conflict and strived to conform.

However, participants showed two major perspective alliances: the management perspective and the community perspective. Both perspectives showed significant differences. The management perspective was driven by a focus on goal satisfaction, company return, and chargeability of the employees. These excerpts exemplify this perspective:

“As an American-listed stock company” Participant S4F1 at time mark 1h14m36s

“But at the end of the day, it is the game we are in. And therefore, to answer your question "When are we successful?": (...) in case we increased the share price … higher than a year ago, than a month ago, than whenever, that is definitely one of our key criteria for success.” A9N6 at time mark 1h19m45s

“But it is precisely this that is very much linked to the topic of financials, i.e., to the company’s investors and, in conjunction with this, to shareholder value maximisation one day. That is one of the primary goals.” Participant A9N6 at time mark 1h22m08s

In contrast, the community perspective was driven by motivational questions, community values, and sustainable well-being, as evidenced in the following excerpt:

“If people can’t come down and recover, then everyone will be in pain in the long run, because at some point people will no longer be able to do that. If one day they can take it up again with a new spirit and new energy, then that will probably [be] more successful instead of pushing it now into the system.” Participant L1W7 at time mark 54m47s

Individuals from the management perspective realised they possessed a blind spot and tried to seek a better understanding from the individuals of the community perspective. It seemed that they tried to bridge differences by showing a strong motivation to take conflicting statements seriously and by trying to deeply understand the reasons behind them. Once understood, they shared their understanding with the broader leadership to effectively address it in the system and to drive the improvements. The following excerpts make this clear:

“So, that’s where I would want to jump in... Didn’t the ambitions that were set up by the Stewards give you a bit more focus on what we want to do? Like the four objectives that we used?” Participant A9N6 at time mark 1h8m24s

“I pick up a lot of impulses here as a representative of the leadership team.” Participant A9N6 at time mark 42m29s

This learning culture also showed up in participants’ vocabulary. They avoided the terms “mistakes” or “failures” for unsuccessful experiences, as evidenced in the following:

“I don’t like to the word FAILURE; it is so negative. Actually, I shouldn’t fail at all. I do something. And it goes in the box of ‘good practices’ where I know that if I put something in the box, grab something, then I have a high probability that it will turn out well. But it can also go into the ‘bad practices’ box, where I know that if I reach into the box, then there is a high probability that it will come out rather negatively. (...) There can be exceptions. But if I don’t know whether it goes into Good Practice or Bad Practice, then I’ve failed because I don’t know it and I could have put that in the box and in the

box. That is exactly for me the philosophy and the mindset that I also try to raise with the client, that is the culture of failure. It's not failure; it's 'I know which way it's going.' Failure is so negative and has a mindset effect of 'Oh, I failed' and leads to 'I'll never do it again; something could go wrong.' It has such a negative connotation for me, that's why I resist the word." Participant S4F1 at time mark 51m08s

This viewpoint was then immediately respected and assimilated by the other participants from the community perspective as shown in this excerpt:

"So, let's rephrase the question. What have we learned from ideas that have not worked well?" Participant N7B9 at time mark 54m7s

So, the focus group showed a strong learning culture that has been culturally inculcated as part of their terminology.

The participants also showed a strong inclination to use either metaphors or examples from their professional histories to clarify their thoughts as the following participant did:

"I was triggered by another word. I think you said, L1W7, 'gain experience.' And for me, that has to do with expertise. I didn't just get to know the theory, but also the practice. So, I didn't just visit the school of football, but I also was on the playing field and was part of the team that was successful." Participant N7B9 at time mark 18m17s

Interestingly, and confirming previous findings, other participants acknowledged the metaphors or examples as given means of clarification for a given discussion topic and employed them to clarify, in turn, their own statements, as did this participant:

"It's like (...) like in the football example before. I think if you are just a football fan and you are in the same corner as all the other football fans of the same team, you just have the time and the conditions to go in the same direction." Participant S4F1 at time mark 26m32s

Despite different perspectives on particular topics, the participants seemed to be respecting and accepting other participants' ways of being.

Summary

The findings imply that participants' personal and professional backgrounds shape their individual perspectives. Despite differing viewpoints, participants showed a strong emotional intelligence, which enabled them to empathically understand differences for the benefit of the overarching community. They maintained an open-minded and prospective mindset in terms of joint learnings and anchored it within their environment by evolving cultural artifacts. For example, they strongly rejected the terms "failure" and "mistake" and preferred "learning." Similarly, participants avoided direct conflicts between differing perspectives so that statements were preferably "reshaped" instead of being "rejected." Throughout the focus group activity, participants maintained a pleasurable and comfortable atmosphere.

The researcher expected members of a perspective alliance to be part of the same circle. In the context of the case, holacratic "circles" are small organisational entities within the holacratic organisational structure that are organised around a subject matter topic. Because individuals are closely working within the circles, they are expected to have aligned their values and social norms as expressed by their respective behaviour. Therefore, circles are considered as subcultures so that members belonging to the same circle are assumed to originate from the same subculture. Despite the researcher's expectation, evidence showed that individuals of a perspective alliance belonged to different circles, namely "Employee Lifecycle", "Customer Lifecycle", "Community Lifecycle", and "Stewards", among others. Findings also implied that perspective alliances cover individuals who share a strong personal network. For example, participants frequently emphasised their relationships to each other, whether based on a strong personal relationship (friendship) or professional relationship (passion about shared topic of interest), as depicted in these excerpts:

> *"I feel that friendships have also emerged beyond the work. Interpersonal relationships, at least I can speak for myself, which also makes it worthwhile, where you are always happy to have built up this network, who always support a lot and then at some point, it also comes down to the fact that if*

you do something in the same place and can simply talk about other topics than just work." Participant L1W7 at time mark 1h43m19s

"And the most important thing is that you have to do it with passion." Participant S4F1 at time mark 24m40s

It seems that personal and professional relationships formed individual networks whose members shared similar perspectives based on shared social norms and values. It thus seems that individual networks by themselves are subcultures that span organisational entities (circles). Considering the existence of personal relationships and their importance for the members of the community perspective, it is reasonable to expect similar connections among the members of the management perspective.

The researcher concludes that strong relationships arise as people work closely together. According to the evidence, this might occur in the same circle, at the same client engagement, or in other situations. Also, since the relationships influenced the amount and depth of shared information and thus the quality of decisions, the researcher concludes that individual networks exert a significant influence on the outcome of community-wide change efforts.

4.2.1.7 Interpretations of agility and implications for agile change practices

The participants showed a heterogenous interpretation of the term "agility" in which they covered topics such as collaboration, mindset, decentralised decision-making (team empowerment), value-driven behaviour, and regular inspection and adaptation, as the following excerpts show:

"To me, agile working is a different approach to collaboration. Really HOW people work and interact with each other. Which then quickly leads to the topic of culture and of course mindset and so on. (...) All these classic ideas of bridging gaps." Participant D5M4 at time mark 7m50s

"I would add (....) it is trust, empowerment (...) and little or no centralised control." Participant S4F1 at time mark 7m50s

“I set the focus on continuous improvement, (...) trying to find the best solution, being open-minded. But also (...) to take time to inspect it again and again. Are we jointly on the right track? And (...) the cultural aspect, which focuses on the individual. So, the focus is (...) how can I achieve the best (...) given what we are fitted with.” Participant J5H3 at time mark 10m16s

The heterogenous understanding of agility was also shown when participants were asked if they judged themselves as agile. Interestingly, the management perspective alliance judged their culture as agile while the community perspective did not:

“After all, I have been working for many years. And I have never experienced such a community with such a single or uniform mindset--not to overuse the word ‘mindset’--where everyone really pulls in the same direction, thinks in the same way.” Participant S4F1 (management perspective) at time mark 26m33s

“If we say that we are agile, that these are important values for us (...) then we must also be aware that there are certain goals. They will always be there; they cannot be ignored. (...) But if you look back again, it’s really too much for us... the passion picks up, the enthusiasm picks up, the collaboration picks up, the togetherness picks up (...) These are perhaps OUR criteria for success, i.e., passion, collaboration, community. When you say these are the most important values to be able to work agilely. (N7B9 nods).” Participant L1W7 (community perspective) at time mark 1h16m27s

Their responses indicated they do not follow a joint goal; actually, they were entirely missing an agile vision and, instead, followed a variety of goals that satisfied different stakeholders as in these excerpts:

“Yes, to me there’s no agile vision either.” Participant J5H3 at time mark 39m21s

“Honestly speaking, we don’t have a vision. (...) This is a very, very difficult topic, where we could somehow invest 5, 6, 7 hours just to solve this question.” Participant A9N6 at time mark 42m29s

“[Department 1 of our umbrella company] is a target. That is the target picture (...). Of course, on the one hand we are (...) our own brand (...). But [Department 1 of our umbrella company] gives us the targets of chargeability, recruitment quota, everything around that. (...) And then we build another 10 other goals AND then there are another 10 goals from [Department 2 of our umbrella company]. What is our target? Which target are we actually contributing to? [Case 1] of the future or [Department 1 of our umbrella company] of the future or [Department 2 of our umbrella company] of the future?” Participant J5H3 at time mark 41m39s

4.2.1.8 Factors influencing the agile culture transformation

The number of goals and the lack of an agile vision also influenced participants’ views of themselves as an agile culture. Interestingly, the management perspective considered themselves as following a joint goal and as agile whereas the community perspective strongly disagreed, as evidenced in the following:

“I have never experienced such a community with this united or homogeneous way of thinking--not to put too much strain on the word ‘mindset’--where everyone is really pulling in the same direction, thinking. It’s like I think at least like the football example before. I think if you’re just a football fan and you’re in the same corner as all the other football fans of the same team, you just have the time and the conditions to go in the same direction. I think you can have disagreements about that. Discussions of course always happen. (...) Everything else, that we somehow work according to Holacracy and are set up in circles, (...) for me that is something on top. It’s okay that we do it this way, and I think it’s good. But it’s the community that makes it possible and makes it work.” Participant S4F1 (management perspective) at time mark 26m32

“I think I would be a bit tougher on that, but maybe also because I have a higher standard for us than I might for a client. Simply because I say we all think like that and we preach to a lot of clients that we want to work in an agile way. It may be due to the fact that we are actually all working 100% with the client and that we therefore don’t have much time to really evolve towards agility. If you go deeper in the direction of agility, to the point at which you can really live it, then you also have to be aware of: what is our goal? What is our focus? To concentrate on the right ones and get them done. From my point of view, we have grown to a size where it is no longer possible to coordinate among ourselves. (...) And I think we now do a lot of duplicate work in [Case 1]. (...) If you look into a SAFe, for example, you say at a certain size, you scale. And I think (...) we have not scaled for a long time. And as a result, (...) at some point we run the risk of the system collapsing in on itself.” Participant L1W7 (community perspective) at time mark 28m33s

Evidence implies that an overwhelming number of targets are not the only factor that hinders the agile culture evolution. From a system perspective, missing incentivisation, missing time to enable and share individual learnings, mandatory requirements from stakeholders, and the pure complexity of the system itself seem to be encumbering factors.

Regarding missing incentivisation, data showed the following:

“We don’t have a joint incentivisation system, and we don’t have joint goals. Of course, I want to support that the company doesn’t collapse. But why shouldn’t I find a cosy corner where I can do my thing? Maybe that’s a harsh way of putting it, but I think that’s where the incentivisation system comes in; everyone has to find the lighthouse they stand for.” Participant N7B9 at time mark 1h4m12s

Additionally, excerpts such as the following provided data on missing time to enable and share individual learnings:

“It is difficult when we are tight on time and also have little time to transfer things back into assets. That’s how I feel. In this respect, I think we have a LOT of upside potential. The only question is whether this is important enough for us. And whether that is the success of our community (...) and I do NOT see that this is our priority at the moment. (..) I don’t see that we invest a lot in it.” Participant N7B9 at time mark 1h27m02s

Data also showed the problems inherent in mandatory requirements from stakeholders:

“We make sure that we satisfy our mothership in some way so that we can grow in some way in that environment. And that is a dysfunction that we definitely have. No question about it.” Participant A9N6 at time mark 42m29s

Additionally, participants provided data on the impact of systems complexity:

“Our structures have become inefficient (...). We no longer manage to self-organise.” Participant J5H3 at time mark 33m10s

From the perspective of an individual, influencing factors include constant pressure, individual overload, and dissatisfaction hindering motivation as evidenced in the following:

“I think you can take time for each other, but you can’t drag everyone along and always proactively bring everyone up to the same level. I am someone who is very interested. (...) I am someone who is very interested. But that’s my problem, that I jump on all the topics that come up. And then at some point you’re no longer focused. That means the other way round: when I need something, I’m quicker on Google (...) to look ‘is there any inspiration for me’ than to ask in the community because everyone is busy. You can’t get hold of people(...) It’s a big challenge for me.” Participant N6B9 at time mark 1h36m50s

“It is more important to us that people are doing well and that they recover and regenerate and don’t have five or six calls instead of keeping issues alive. Because we always say: If people don’t come down and can’t recover, then everyone will have pain in the long run because at some point, people CAN’T perform any more. If at some point they can take it up again with fresh courage and new energy, then that will probably help us more than we have been pressing into the system up to now. Even if it only has a small impact at first and we lose some of our value.” Participant L1W7 at time mark 54m47s

“Intrinsically motivated, the systemic diet would have worked. It also worked in general. But then something else came along (...) that was not initiated by the Circles but popped up from somewhere. That’s what bothers me a lot more, for example, that it was actually a successful experiment, but was ultimately destroyed by something else.” Participant S4F1 at time mark 58m23s

In contrast, data also showed factors that supported evolution. For example, from a system perspective, a supportive environment drives individuals’ happiness, which is thereby created through individuals’ strong personal relationships as in the following:

“Interpersonal relationships, at least I can speak for myself (...) where I am really happy to have built up this network, which always provides a lot of support.” Participant L1W7 at time mark 1h43m19s

From the perspective of an individual, beneficial factors included empiricism’s driving (self) learning and conducting experiments as well as happiness and passion’s driving motivation.

Data on empiricism and experiments included the following:

„Focus on engagement health and staffing situation as based on data.“ Document „Engagement Circle” in Appendix B p. 263

"You want to build on what you've learned. Maybe there is a certain department where you know you want to go in. Then pick that. Otherwise, just gain experience. Just go to the next best project and jump in. And you'll probably say, 'No, not that anymore' more times than you'll say, 'Yes, that again please.' But even this 'No, not that again' is super helpful for shaping (...) because you can open up paths, so to speak, along the lines of 'No, I don't want to go there again. I've already been there. I didn't like it. I found it tedious.' And that's why the decision is easier the next time." Participant D5M4 at time mark 19m3s

Evidence also showed self-learning and conducting experiments to be helpful:

"Of course, it's always based on a mindset (...). And then you also have to think about: what are the skills that I bring along? Whether it's Management 3.0 (...). or whether you should consider becoming an agile delivery lead instead of just going to delivery lead trainings to learn (...). And there are many, many different facets of how you can train yourself (...). So, I would like to be an agile coach and really do advisory on a project to gain my own coaching experience and practice. Or to learn how to coach someone out of the agile mindset. Or do I want to work agile myself and gain experience as a product owner or enable a team? I think there are many, many training opportunities." Participant L1W7 at time mark 13m2s

"You have to experiment, try it out, and then reflect and improve again." Participant L1W7 at time mark 39m21s

Happiness and passion also drove motivation as evidenced in the following excerpts:

"I am so proud of my People Dev Team. They've really got it together. They've really built themselves up in the last 6 months. They are becoming more and more responsible; they are super reliable, super helpful. It's a team spirit. It's open, constructive. Everyone is committed; everyone makes an effort. If one of them says, 'Hey, I don't have time for a project,' the other

one jumps in immediately and it's really for each other and with each other. And I find that... very, very cool." Participant L1W7 at time mark 1h39m22s

"What works very well is that people pick time for each other when they have the desire to do so. And that often very, very inspiring discussions arise and that we all bring along a lot of commitment for the topic and for the content. And that we can learn a lot from each other and then have the opportunity to exchange ideas. That is great." Participant N6B9 at time mark 1h41h05s

"My song! (sends a 'love' graphic in the chat) Would like to dance, but then the little one's milk will become a shake LOL (he holds his baby in front of the webcam)." Document "Friday Stand-Up Meeting" in Appendix B p. 263

4.2.1.9 Effective actions to initiate and embed the agile culture transformation

Evidence shows that a variety of major and minor actions are effective in initiating and embedding cases' cultural evolutions. However, it seems that all actions can be narrowed down to topics such as honesty (theme "honesty"), fairness (theme "fair evaluations"), respect (theme "system respects well-being of its members"), personal mastery and reflection (theme "individual characteristics influence personal evolution"), and mindset (theme "mindset focus").

With respect to honesty, the community transparently addresses cultural issues and honestly asks for the reasons behind them. Feedback is gathered at different groups. Leadership welcomes diverse perspectives and acts as a role model in case of changes of any kind. The following excerpts demonstrate this topic:

"So, that's where I would want to jump in... Didn't the ambitions that were set up by the Stuarts give you a bit more focus on what we want to do? Like the four objectives that we used?" Participant A9N6 at time mark 1h8m24s

"Become the most inclusive workplace in the digital age, where we welcome diverse perspectives, ensure a sustainable and fair working environment, act as a role model to others, and lead by example." Document "Diversity" in Appendix B p. 263

“We have become super diverse.” Participant J5H3 at time mark 31m28s

“We do a lot of onboarding. That costs us a lot of time because we really pick a few days a month to onboard the new colleagues. That means organisation, preparation, and then we do a survey [entitled] ‘Have you had a good welcome?’” Participant L1W7 at time mark 1h8m56s

In terms of fairness, data implied participants’ strong desire to initiate and embed fair evaluations and judgement, as in the following:

“The parliament and its members meet regularly to debate and vote on all aspects of [Case 1]. Why? To create greater involvement and relate to [Case 1]'s objectives. Transparency, inclusion in decisions, and the possibility to be heard. Abandon structures and hierarchies in order to communicate one’s concerns to [Case 1]. The possibility to debate rather than persuade. And discussing and voting on aspects that are important to individual colleagues but have impact for all.” Document “Parliamentary Group Decisions” in Appendix B p. 264

“You will receive an E-Mail by the Engagement Circle asking for collaboration by providing it with your top 3 skills and project preference.” Document “Skillset and Unique Selling Points” in Appendix B p. 264

“As Engagement Circle, we want to be able to handle engagements and requests of members in an accurate, fair, and transparent way. Therefore, a close collaboration with the following partners is essential for us..” Document “Engagement Circle” in Appendix B p. 264

Regarding the topic of respect, data showed the following:

“Our vision: Become the most inclusive workplace in the digital age, where we welcome diverse perspectives, ensure a sustainable and fair working environment, act as a role model to others, and lead by example.
We work to achieve that through...

- *education on diversity topics to expand the knowledge in our team supporting*
- *an Equal Workforce and the global [umbrella corporation] goals ('Getting to Equal 2025')*
- *supporting working parents*
- *raising awareness on the different diversity dimensions affecting our team*
- *sharing information on initiatives supporting our circles regarding diversity topics (especially with business relevant topics)*

Find more details in our [Case 1] Diversity OKR's." Document "Diversity" in Appendix B p. 263

"Our vision is to create, roll-out, and improve a holistic [Case 1] Career Model which provides transparency & clarity about the [Case 1] career process, includes attractive career paths, helps to develop market relevant skills, increase[s] employee satisfaction, [and] provides clarification how to prioritise community work and chargeable work." Document "Career Model" in Appendix B p. 263

"The Health Advisor is a role designed to increase overall satisfaction of [Case 1] members staffed on their projects. Therefore, the Health Advisor can be understood as an additional touchpoint for 'people topics' on projects. The Health Advisor...
... is, generally speaking, taking care of [Case 1] employees on projects
... supports Engagement Circle and Opportunity Owner(s) in gathering insights regarding the account and projects
... supports the professional development of our [Case 1] members
... supports the Engagement Circle in making the best possible staffing decisions
... discusses the Account Health with Opportunity Owners and Engagements Circle in quarterly reviews." Document "Health Advisor" in Appendix B p. 263

Data also showed the importance of personal mastery and reflection:

“Skills are one thing; they can be learned. Many of them can be learned. And I think we have many skills that we don’t even know we have. I think there are many, many skills in many, many fields that we have that we don’t even know we have them.” Participant J5H3 at time mark 1h45m45s

“I think there are many, many training possibilities and then, from my point of view, it also comes with experience and trying things out for yourself, that is, trusting yourself and saying: I don’t know, I’ll just do a retrospective in an unusual way by going for a walk with the team and talking to each other. And then you will understand whether that can work or whether it won’t work.” Participant L1W7 at time mark 13m2s

“I am someone who is very interested in this, and most of the time when I communicate via chat, I present the challenges that I have and hope that someone has a clever idea about it. It’s not so much that I come back with what I’ve learned when I reflect for myself personally.” Participant N7B9 at time mark 1h30m20s

Mindset was also an important topic as demonstrated by the following data points:

“We try to really do the right thing for our customers and to generate the highest possible added value for this stakeholder group.” Participant A9N6 at time mark 6m44s

“This comes from building trusted relationships (..) to align them to customer value.” Document “Agile Transformation” in Appendix B p. 263

“It is the trust, empowerment (....) to give power back to the base and the team and to have little or no centralised control.” Participant S4F1 at time mark 7m50s

“You get involved with the subject matter. Maybe do one or the other certification. Learn about it and try to educate yourself in this way of thinking

and determine your own agile mindset (..).” Participant A9N6 at time mark 15m21s

4.2.1.10 Conclusions from thematic analysis of case 1

Findings imply that the participants are struggling with an overwhelming number of competing goals and that they lack overall alignment and transparency. By not being aware what goal contributes to what part of the strategic intent of the case, participants cannot validate what goal needs to be prioritised. Missing knowledge leads to lack of confidence and missing trust, which increases cultural entropy and decreases psychological safety on the level of the overarching community. These factors jointly cause distraction on the individual level, which hinders energisation and, ultimately, impacts cultural evolution. However, with respect to contextual and intervening conditions, leaders commit to the sustainable well-being and contribute a strong cultural commitment. This leads to regular feedback for individuals’ satisfaction, happiness, and motivation, which serve as means of transparency and inspect and adaptation. As part of their strategies, leadership and a broad base of members focus on honesty and fair evaluations throughout all applied actions. Findings are made transparent, jointly discussed, and fed back to the community by methodological means of system thinking. It seems that leaders need not only to establish necessary circumstances, e.g., enough time to learn and share learnings or enough transparency on the priority of goals, but also to keep close track of particular factors, e.g., honesty and sustainable well-being of the individuals.

From a theory-building perspective, it seems that a fast-growing and dynamic (organisational) structure can cause significant complexity, which is in line with past research (Kruse, 2004). The researcher thus theorises that when a critical number of individuals is reached, a critical mass of communication paths is created, which increases complexity in such a way that a system’s further evolution is impacted. Findings thereby imply that social operating mechanisms might be beneficial as they overcome the limitations of an organisation’s structure while supporting members’ need for connecting themselves. Figure 9 provides a visual overview of the coding results.

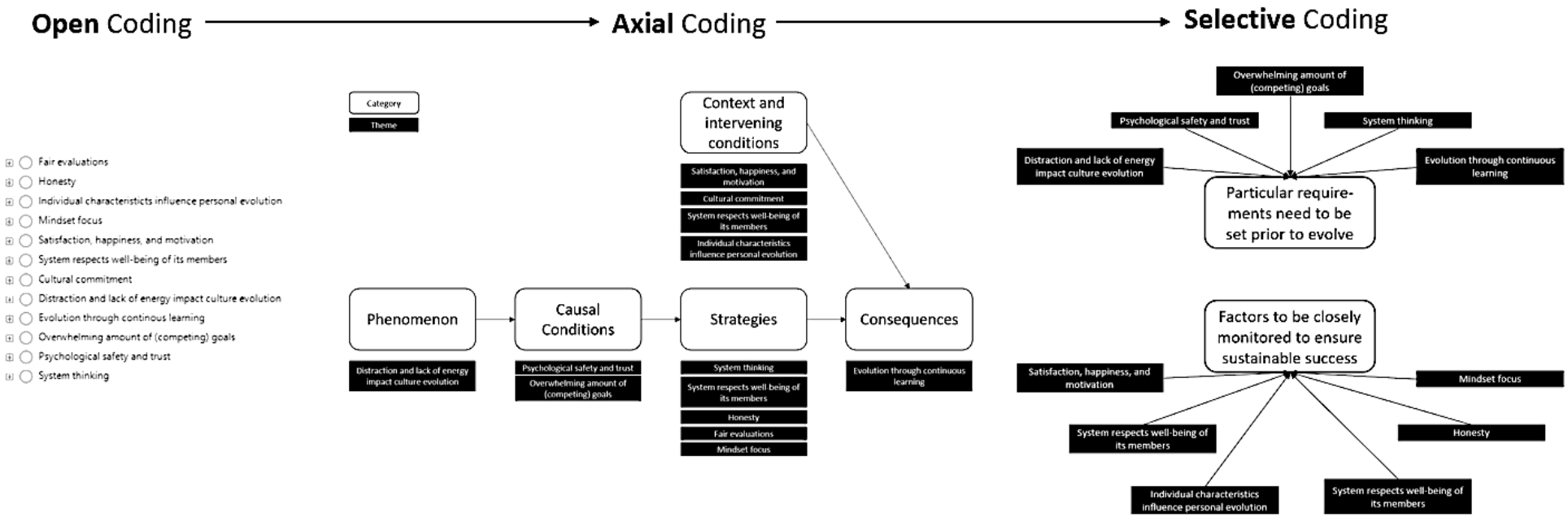

Figure 9: Results from coding (case 1)

4.2.1.11 Classification of culture maturity

The case showed numerous agile elements in its culture. Participants maintained a strong culture-centred perspective and expressed value-driven thinking (themes "value-focused thinking", "focus on valuable delivery increases organisational strengths"), personal mastery (themes "personal mastery requires reflection on existent skills, missing skills, and blind spots", "failures are an opportunity to learn") and self-learning (themes "self-learning and experiments drive the evolution of a mindset", "continuous learning on people-level and organisation-level"), empiricism (theme "empiricism drives organisational learning"), as well as inspection and adaptation (themes "community actively addresses its culture", "community welcomes diverse perspectives", "ask for the reason behind it").

By acknowledging the above-mentioned evidence, the researcher considers case 1 as an agile-matured culture, as shown in Figure 10:

Figure 10: Visualisation of agile maturity (case 1)

4.2.1.12 Evolved change practices

Participants reported different culture-evolving change practices. They recognised particular issues (e.g., individual overload, no communication channel to talk about cultural issues) and proactively started discussions on how to best tackle these challenges. The discussion results are the below-mentioned methods, which were suggested by volunteers across the cases' hierarchy.

Method 1: The parliament

Source: Participant L1W7.

Addressed issue: Decisions are made top-down without sufficiently employing the individuals and subject matter experts who are expected to either carry out the work or contribute to it.

Purpose: People-centred decision-making.

Description: The parliament aims to promote more participation, to make inclusive decisions, and to give every colleague a voice to ultimately make these decisions in debates. It thereby also aims to awaken entrepreneurship among all the employees. It is based on three bodies: the board of directors, parliament, and general members. The members of the board of directors are not elected for a fixed term but are permanently appointed. The parliament is the legislative body and consists of representatives and a speaker team (four people in total). These people are elected by all employees. A maximum of four members can be elected to the parliament from each circle. A quota of 20% of the employees is aimed for. The parliament meets every 2 weeks for 2 hours and is re-elected every 4 months. In consultation with the board of directors, the parliament determines the opinion of the entire unit and has the power to make decisions on all matters not delegated by the articles of association to another body (e.g., board of directors). A veto right is permanently available to the board of directors. The parliament thus picks a control function and can instruct the board of directors to take further action. Furthermore, the parliament is responsible for the approval of all proposals, the control and activities of the circle's initiatives, and all other matters. All other members outside parliamentary work can also introduce motions. Otherwise, like the circles, they are the information recipients of parliamentary decisions. Those outside of parliament have the following qualities:

- They cannot/do not have to be active in circles/teams/hubs/initiatives/projects.
- They do not have the right to vote in parliament
- They vote collectively on who sits in parliament
- They can submit motions and represent them before the parliament
- They can listen to parliamentary sessions

There may also be proposals that are explicitly voted on by the whole company and where every member is asked to vote.

The parliamentary procedure is as follows:

(Preparation of the meeting)

1. Determine topics
2. Determine the order of speakers

(During the session)

1. Applicant can present his proposal in the given time

2. During the speaking time, members of parliament can ask questions in the meeting chat
3. After the presentation, the applicant has time to respond to possible questions
4. Members of parliament can communicate objections without the applicant's being allowed to respond to them
5. Applicant decides whether to adapt his proposal based on the objections or to vote on the proposal directly
6. Parliament votes on the proposal in the meeting chat and with a two-thirds majority, the proposal is accepted
7. The result of the vote is documented

(After the meeting)

1. Publish minutes and documentation
2. Communicate results

Evaluation in the context of organisational change: This method works in a psychologically safe environment that serves intrinsically motivated individuals who voluntarily take part in decision-making. It is like the consent decision-making process as mentioned by Oestereich *et al (*2017). It is valuable to distribute power among the members of a system; however, due to the leadership's veto power, the members' power is ultimately limited, which is a major difference from Oestereich *et al (*2017). The researcher acknowledges this method as an experimental one to revoke existing power structures and to establish an alternative that fosters transparency, alignment, fairness, honesty, and courage.

Method 2: Systemic Diet

Source: Participants L1W7, S4F1, J5H3.

Addressed issue: An overwhelming number of parallel initiatives cause distraction and loss of energy for the individuals who are assumed to carry out the actual work.

Purpose: Provide transparency on the purpose of each initiative in order to drop the non-value-adding ones.

Description: Being empowered by the leaders, willing volunteers ask everyone in the community to list every current or planned initiative that aims to influence the culture in any way. They are also asked to cluster their initiatives according to "must have", "should have", or "could have" while providing a rationale why the particular initiative is

crucial to the company's success or culture. Initiatives of no strategic importance are classified as "won't have." To do so, the volunteers provide a central document or website, which is accessible to and known by each member. Table 8 provides an example of such a document:

	Circle 1	Circle 2	Circle X
Must have	*Initiative/Incubator (rationale)*	-	*Initiative/Incubator (rationale)*
Should have	-	*Initiative/Incubator (rationale)*	-
Could have	*Initiative/Incubator (rationale)*	-	-
Won't have	-	-	*Initiative/Incubator (rationale)*

Table 8: Example of the systemic diet (case 1)

As soon as all initiatives are gathered and clustered, leadership decides on the priority ones and is expected to proactively address questions in cases of unclear rationales.

Evaluation in the context of organisational change: The method supports providing systemic transparency and aims to reduce individuals' workloads. It is highly valuable in environments of high complexity, which impact the system in terms of their evolution.

Method 3: Fuckup Afternoon

Source: Participants L1W7 and J5H3, document "Fuckup Afternoon – Stories About Failure."

Addressed issue: Missing format to honestly talk about failures.

Purpose: Honestly address concerns to sustainably support mental health.

Description: This method supports the culture around failure inside of cases' culture. It is based on the concept on the famous "fuckup nights" at which the presenter tells one of his biggest failure stories. Regarding the required level of honesty and trust, it is based on a strong code of ethics: "Talking about one's own mistakes is not a natural thing to do. HR in particular is not known for willingly admitting its own mistakes, no matter how honourable they may be. Especially when HR does not have a 'front runner' reputation anyway. Therefore, the following rules apply: (1) No live streaming! (2) No one tweets failures (=shares it outside that round)! (3) Vegas rule apply (=what happens there stays there)."

The procedure for this method is the following:

1. Intro fuckup nights incl. codex (2 min)

2. Intro speaker
3. Fuckup story (speaker)
4. Q&A from an allowed list of questions, e.g.:
    a. Project Setup?
    b. Task/Topic?
    c. What did you want to archive?
    d. What happened?

Evaluation in the context of organisational change: This method aims to make serious cultural issues transparent. It can be narrowed down to an internal perspective (own culture) or an external perspective (client culture impacting own culture), and it is flexible enough to be applied in various contexts. Because honest and open-minded volunteers can make an impact in discussions about culture, this method is acknowledged as valuable in the context of organisational change.

4.2.1.13 Researcher learning

The researcher possessed strong subject matter experience and wide knowledge regarding organisations' change to an agile focus. During the focus group, the researcher noticed the participants' language was highly subjective, which affected the understanding among the participants and the researcher due to their individual perspectives. Ultimately, a time-consuming meta-conversation was needed to synchronise terminology and wordings. Without this effort, insights from the focus group would have been less deep. Reflecting on this learning, the researcher proposes to make these kinds of requirements transparent to the participants prior to starting a focus group. The researcher learned to use "thinking out loud" and similar methods to support a thorough understanding.

4.2.2 Case 2

4.2.2.1 Case description

The second case is a strategy consultancy practice that is part of a corporate consultancy that covers over 500.000 employees and serves over 6000 clients in over 100 countries. The practice itself consists of approximately 80 people, and the sub-community of the focus group covered roughly 40 people.

4.2.2.2 Business area

The business area is focused on delivering strategy services across industries. As part of its business model, the consultancy supports clients in defining and delivering visions that aim to increase profitability and organisational effectiveness. These concepts typically cover methodological recommendations of agility for the sake of organisational resilience. Staffed employees are subject matter experts in their respective industry, which is communication, media, and technology (CMT). The consultants of this case typically conduct workshops and create visionary concepts in collaboration with the client management.

4.2.2.3 Description of accessed documents

The researcher accessed documents of different kinds:

- Whitepapers: “thought leadership” booklets that imply the perspective of case 2 with respect to different knowledge areas, e.g., resilience in organisation, complexity from a system-thinking viewpoint, mindset-evolving change techniques, and management philosophy (see Appendix B p. 338)
- Videos: focus group recording (see Appendix B pp. 342-367)
- Notes: field notebook including notes from document and artifact analysis, observations during the focus group, etc. (see Appendix B pp. 339-341)
- Surveys: case study participant responses with respect to the focus group and the recommendation for action (see Appendix B pp. 368-379, 383-386)

The accessed documents were employed for several different reasons. First, they were used to build *a priori* knowledge prior to the focus group. For example, the researcher examined the case’s public self-presentation to understand the business’s self-perception (see the document list in Appendix B p. 338). The documents also supported the understanding of the researcher of the case’s interpretation of agility as

well as their approach to transform an organisation (see “Appendix B p. 338). Second, documents enriched data from the focus group activity and both surveys. For instance, they clarified how the case deals with trust (see the document list in Appendix B p. 338). Third, the documents increased the credibility of findings by enabling data triangulation. For example, the researcher compared privately shared statements on cultural benefits with those statements mentioned during the focus group (see “Survey 1 – Focus Group” in Appendix B pp. 368-376 and the transcript of the focus group in Appendix B pp. 342-367).

4.2.2.4 Focus group description

The focus group participants included three men and one woman who all lived in Germany. The participants joined the company between 1.5 and 5.5 years ago and have worked together on client projects or community practices. Their hierarchical positions ranged from manager (three participants) to senior manager (one participant).

All participants made themselves available and joined the focus group activity. They actively contributed over the duration of their attendance. Seventy-five percent of focus group members answered the follow-up survey, which took them on average 31 min 31 s. The follow-up survey on the recommendation for action was answered by 50% of the participants and took on average 19 min 43 s.

4.2.2.5 Justification

The case relies on short- to mid-term client relationships. Its core business covers fit-gap assessments and solutioning concepts, which classifies it as a management consultancy and a major contrast to case 1. The community experiences strong client demand for agile approaches, which explains their efforts for organisational change and continuous learning. This is another major difference from case 1, which primarily explained their organisational change in response to their own cultural challenges.

4.2.2.6 Interactions and kinds of communication

The participants showed a heterogeneous understanding of terminologies. For example, they showed a quantitative approach to success as well as a cultural perspective:

“It’s also successful when (...) well, many internal things also serve the purpose of being able to monetise them on the market. (...) So (...) be it some study, then there are a few thousand clicks on LinkedIn and, bang, it’s successful. Or you develop some concept (...), you can use it in an offer and the customer buys the offer (...), then it is also successful.” Participant A8R2 at time mark 51m4s.

“I would (...) always define success for me like this: ‘How many people could I somehow touch with this? How many people could I inspire and motivate to participate?’ Also: ‘How relevant was the implementation afterwards? How many people got added value from this idea that was implemented? And did it actually make it into practical everyday life?’” Participant M9S1 at time mark 49m54s

Despite possessing different understandings, they interacted in a respectful way with each other and seemed to generally respect other people’s opinions. Depending on their opinions, they often used a shared opinion and enhanced it based on their perspectives:

“And in addition to the point already made by B5B1... It is also successful when (..).” Participant A8R2 at time mark 51m4s

“I would like to add one more point.” Participant B5B1 at time mark 26m18s

However, there were also situations in which participants challenged each other who then defended themselves by justifying their strong statements:

“Often it is simply the one who has a higher rank who decides!” Participant T5H7 at time mark 37m53s

“T5H7 is quite painless; he gives the responsibility to the manager and says, ‘You decide!’” Participant M9S1 at time mark 38m43s

“No, not that at all. Well, I mean, often (...) it depends, of course (...). The higher the importance of the decision, the greater the sensitivity regarding the choice of solution (...). And if we are in a situation where we need an idea quickly (...) in other words, where we can’t afford or allow a trial error, then the solution is often picked by the person who has the most experience, and I would say that is often the senior manager. So maybe that’s background information.” Participant T5H7 at time mark 38m49s

The focus group members thus did not seem to own perspective alliances. Instead, individuals supported other individuals’ opinions if they made sense to them:

“As I said, I have somehow already had an experience with a managing director (...). In the end, I was somehow right and he was also a bit right. In order to find a solution, we somehow found out that half of his idea was good, half of mine was good, and then you put them together and threw the rest away. And that worked out well.” Participant A8R2 at time mark 42m36s

“I also know what you are describing, A8R2! If you have two solutions, you simply start with both solutions (...) and after one sprint, you have a check: What did we get out of it? And the people exchange ideas and usually it is easier after a sprint to bundle new findings together and then merge them in order to continue the strongest of the two, so to speak.” Participant T5H7 at time mark 43m8s

The participants frequently used nicknames instead of their formal names. Regarding the joint evidence, it seems that they maintained close relationships with each other. In the excerpt below, one participant unintentionally interrupted another participant who had just started to speak:

“That's why (...) I would kind of, sorry T5H7, I kind of interrupted and slowed you down now. What did you want to say?” Participant A8R2 at time mark 38m27s

While interacting, participants rarely used linguistic means. For example, metaphors were only used three times:

> *“That doesn’t usually fall from the sky.” Participant M9S1 at time mark 35m33s*

> *“If you don’t ask the people who it affects, (...) then your transformation fails. Just because you will end up with something that you put on the shelf with holes in the middle.” Participant A8R2 at time mark 45m22s*

> *“It’s more like a big colourful bouquet of flowers.” Participant B5B1 at time mark 6m15s*

They seemed to favour instead clear examples and fewer linguistic means to express their thoughts.

Summary

The participants seemed not to have a culture that originated in one of the organisational units. Instead, they understood “their culture” as a community of people who are closely working together. This work was often at client engagements or internal topics where intrinsically motivated individuals jointly drove a subject-matter topic:

> *“I think there’s the close community, with the people with whom you always do something... so that’s several circles that then move around, that always get a bit bigger. And even if I say ‘our CMT community,’ there are also a few colleagues with whom I have never done anything... Even if they are in my community because I don’t do anything with them either, because we do different things in terms of content. But it’s similar in our practice; there’s partly an overlap with the CMT community, and I do something with them. But there are also many with whom I don’t do anything or who are from other departments that actually have nothing to do with what I do in terms of content, but who also happen to do CMT. That’s why it’s such an onion construct.” Participant A8R2 at time mark 57m11s*

So, despite being structured in communities of practices (CoPs) and industry focus communities, they experienced the benefits of a network organisation. Thanks to their close interactions with day-to-day colleagues, strong personal relationships arose, which supported them by judging the reliability of their colleagues. This created trust (Kruse, 2004). Because of this trust, they formed highly motivated teams (Edmondson, 1999; Zarraga and Bonache, 2005; Collins and Smith, 2006) that did not hesitate to challenge other members' opinions or defend their opinion for the sake of transparency. Interestingly, the process of forming trusting networks seemed to be unintentional and showed up only when participants were asked with which community they identified themselves:

> *"Communities are not separated in a straight line for us. I'm in at least two communities. Then I'll take my closer project team as a starting point. Or (...) well, we are a community here. So, we have to assume CMT (..) but actually it depends." Participant B5B1 at time mark 56m30s*

4.2.2.7 Interpretations of agility and implications for agile change practices

The participants demonstrated a heterogenous understanding of agility. For instance, one participant stated that agility is a collection of methodologies that need to be applied in daily business to establish an agile mindset. Interestingly, the participant thereby followed implicitly the approach of consultancies who typically introduce agile frameworks that are meant to influence social norms and values, which are expected to form an agile mindset. Other participants defined agility as iterative-incremental with a client-focused perspective. Only one participant referred to a mindset as a starting point for the other mentioned parts:

> *"Agile encompasses many methods, so it's more like a big, colourful bouquet. And, as of its origins, it came about because people simply wrote down how they already worked anyway." Participant B5B1 at time mark 6m15s*

> *"Agility also means that you break down very large problems into many small problems (...) and then structure them in such a way that they become a first small product that you can test on the customer (...). And then, as*

B5B1 said earlier, this is enhanced incrementally." Participant M9S1 at time mark 9m55s

"Agility is not just a method, but (...) a mindset and how you approach things. That's also something that we like to do in the consultancy (...) there's a new problem and we want to solve it as quickly as possible. But (...) maybe the 80% solution is enough instead of the 110% solution. And (...) agility is also about reacting quickly and creatively to changing market conditions (...)." Participant A8R2 at time mark 6m56s

Additionally, the focus group participants showed aspects of reflection, growth mindsets, a culture-focused perspective, and system thinking, which is, for this study, part of an agile mindset:

"So, in principle we need a consultant (...). I think something like that can also be good. Of course, we always like to think we can do everything, we know everything, because as advisors we can tell the client everything. But I think we don't see our own mistakes (...) because we are part of the system." Participant A8R2 at time mark 1h14m22s

"If you just do something like (..) 'show me how we can make the sprint better,' (...) I just keep doing that too. That's why we can also just continue to develop in the direction where you just take over the things that work really well." Participant B5B1 at time mark 26m28s

"And I think (the company) does that very well, because you always get invitations to some kind of survey. Whether they are employee surveys in the area of 'Do you feel good?' or whether they are things like 'What is your opinion about where the next Christmas party should take place?' (..) This survey culture in the company is really great." Participant T5H7 at time mark 49m1s

“And the culture of our company also encourages discussion. I have never experienced anything like this before.” Participant A8R2 at time mark 43m39s

“But I think we don’t see our own (...) crossroads where we turn because we ourselves are part of the system.” Participant A8R2 at time mark 1h14m22s

Despite showing elements of an agile mindset, they judged themselves as not being agile:

“So, I think it’s often said that we are agile when we work in squads. Which, by the way, is not an agile operating model. And yet they say ‘We are agile when we do stand-ups’ and so on and so forth.” Participant T5H7 at time mark 18m1s

When asked if they followed a long-term goal to develop mindsets, the participants tended to explain a vision for how they wanted to liaise with the clients. It seems that they did not have an explicitly formulated agile vision:

“So, I don’t really have a direct vision of agility, but rather a vision of being even better and faster, etc.” Participant T5H7 at time mark 28m28s

4.2.2.8 Factors influencing the agile culture transformation

Nevertheless, participants showed a strong willingness to try out new methods to react faster to market needs through small experiments. Depending on the definition, this can be understood as an implicitly followed agile vision. When asked if they judged themselves as agile, they reflected on the influencing factors of their cultural development. They mentioned their system as not providing systemic support for their evolution, which is shown not only in a lack of workday time to evolve, client contracts, and pricing models but also in the nature of their work as defined by a stock-exchange-listed company and its owners. They also noted a lack of leadership commitment as a result of the influencing factors and a lack of recognition and people with an agile mindset.

Regarding a lack of workday time, one participant noted the following:

> *“That’s another topic that B5B1 just mentioned, time, because the focus is very much on the project work. And then of course there is the expectation of doing something on top of that. But that is also important (...) that you somehow don’t start at midnight.” Participant A8R1 at time mark 1h1m3s*

With respect to a lack of support, they stated:

> *“It’s so difficult, so the whole issue of ‘what do we look like now in this hybrid setup’ and ‘how do we work together?’” Participant A8R1 at time mark 1h3m1s*

> *“We are running an extremely hybrid approach. But I don’t think it’s bad at all because there are good points from both the classic waterfall world and the agile world that you can mix together in principle. And I believe that the organisation in which you operate really has to create the foundations or guardrails, so to speak, and that is simply not the case here.” Participant T5H7 at time mark 18m1s*

Regarding issues with client pricing mechanisms and general contracting, one participant noted:

> *“Of course, this also has something to do with monetisation and pricing mechanisms. For example, halfway through the project, we could hand over a half-finished concept to the client and say: ‘Look, this is now your MVP, take a look at it. Is that OK so far?’ And then after some time they continue to work on it. But that must also be in the contracts with the client: ‘You have a fixed budget. But what comes out later, we'll have to see.’ But that’s exactly the difficult part because we don’t want to leave the clients in the dark. Besides, our company is a fan of work contracts. And then we are supposed to work agilely within these contracts. And that clashes. That’s the area of tension.” Participant A8R1 at time mark 30m30s*

Another participant also noted the issues inherent in the nature of their work:

> *"But this is also a huge challenge for our entire business because on the one hand, we have clients who often work in very conservative structures and also think in a very deliverable-oriented way. This means that they really say: 'Hey, I'm going to contract your company to create a test concept.' And we then answer: 'That costs about so and so many euros and should take about 12 weeks.' This will then be written into the recommendation for action and then our company will come and offer it in exactly the same way. That means: '(...) We create test concepts here (...) and build the pillars.' But that is not an agile approach per se." Participant T5H7 at time mark 21m52s*

The nature of their work and the general client contracting are therefore strongly interdependent. For example, business owners emphasise zero-based organisations (ZBO) or zero-based supply chains (ZBSC) as a part of their latest overarching change methodology ZBx. This methodology describes a change of the client's hierarchical operating model towards a fluid, project-focused organisation. However, for most, the methodology aims to raise profitability, which they claim to achieve by checking all cost posts of an organisation that are then adjusted for the sake of significant cost reduction:

> *"By radically shifting cost curves and boosting performance across supply chain, business can create new value to fuel sustained growth in the Never Normal World." Document "Zero-Based Supply Chain" in Appendix p. 338*

So, this strategy focuses on profitability by focusing on a client's key projects, which are narrowed down to work packages that are assigned to resources to establish responsibility. They also establish organisational and individual KPIs to increase individual accountability. People are only a part of this change model, and evidence implies that business owners try to identify those with a mindset that would welcome exactly these changes:

> *"The right people share the purpose of the organization." Document "Zeroing Out the Past POV" in Appendix B p. 338*

This, by nature, excludes a broad base of people and flips typical change approaches upside down. By disregarding the mindsets of a range of people who are assumed to carry out the work packages of the key projects they define, business owners neglect the general importance of a discursive and inclusive culture, which is crucial to initiate and embed sustainable cultural change. Because these offerings reflect a business owner's point of view, it can be assumed that their own organisation is similarly affected. This is also indicated by the evidence since participants mentioned their ownership structure as impacting their cultural evolution efforts, as in the following:

> *"So, (we are a company), public company, but we also have a shareholder value that we must contribute, of course. Yes, maybe that has something to do with it (...) That means that you simply owe your shareholders certain things, so to speak. They are less interested in agility and anything else, but only in bare figures." Participant T5H7 at time mark 34m29s*

This is also shown on a day-to-day basis as a lack of commitment:

> *"Lack of commitment. So, it's just not enough... It's just not important enough for them. (...) It doesn't have enough relevance in the community (...) for those who want to lead the community." Participant M9S1 at time mark 44m34s*

This exclusion also affects their approach of sustainably attracting a broad base of motivated knowledge-workers. Those who are already part of the culture experience a lack of recognition, which leads to a high staff turnover that, ultimately, hinders developing an agile vision as an overall guideline of cultural evolution:

> *"People are constantly saying: 'Yes, we need more people. Yes, we are 100% busy and we can't deliver the things we sell.... yes, we just need more people!' But to really sit down in a more dedicated way and think, 'Okay, how can I make that happen that I just get the right people on board?' Very few people really take the time to think about that. And when they do, it is simply not valued and recognised accordingly." Participant T5H7 at time mark 1h3m22s*

"Consulting firms also have a very high internal turnover. And that also means that the community is not constant and has to renew itself again and again. Which is why it is of course also difficult to anchor an agile vision, to work together towards it, so to speak, and to continue shaping the mindset of the people." Participant B5B1 at time mark 45m4s

4.2.2.9 Effective actions to initiate and embed the agile culture transformation

Participants also stated a range of actions that they deemed effective and efficient to support cultural changes. They mentioned their strong personal networks within the formal organisational structure (theme "members' strong personal networks stabilise and evolve the system"), the opportunity to drive topics of high personal interest (theme "system offers plenty of different subject matter areas, which drives personal mastery"), an incentivisation systems that supports their internal cultural change efforts (theme "incentivisation models influence opportunities of individuals' evolution"), storytelling to share learnings (theme "learnings are shared throughout the personal network through story telling"), and regular surveys as a means of gathering feedback on employees' satisfaction and motivation (theme "cultural success is understood as employee satisfaction").

Regarding the organisational structure, participants implicitly showed a desire to be part of multiple subcultures. They belonged to a practice (strategy consulting), an industry (CMT), and differing CoPs:

"We don't separate communities in a clear-cut way. I'm in at least two communities." Participant B5B1 at time mark 56m30s

"I think there is the community with the people with whom you always do something (...) so there are several circles (...) that are always getting a bit bigger. And even if I say 'our CMT community,' there are also a few colleagues with whom I have never done anything (...) because we do different things in terms of subject matter. But it's similar in our practice; there's partly an overlap with the CMT community, and I do something with them. But there are also many with whom I don't do anything or who are from other departments that actually have nothing to do with what I do in

terms of subject matter, but who also happen to do CMT. That's why it's such an onion construct." Participant A8R1 at time mark 57m11s

Thus, by closely working with colleagues over a given period, participants developed trusting relationships. When they are trusted by their direct colleagues, they connect to further individuals so that, despite the formal organisational structure, an informal network structure arises. Evidence implies that these connections result in a strong personal network:

"Well, there is such an unwritten law within (the company) that every colleague does not leave another colleague in the lurch. (...) That means there is a 24-hour response time, which is sometimes 48 hours or 76 hours. But either way, it's always about one never leaving the other hanging. So, what M9S1 says, I also noticed this and I think that's just extremely great. You always help someone out of a problem, no matter what it is." Participant T5H7 at time mark 54m23s

According to evidence, the participants had the opportunity to join every CoP, which enabled evolution in a chosen subject-matter topic:

"Because we have four or five different practices, different pillars in different subject areas, we are so broadly diversified that you meet all kinds of people and, depending on your own personal area of interest, you can also develop there. (…) For example, in any working group for any topic that you are passionate about (...) whether you do a project course or change practice. I think you can make (the company) your own place to be." Participant B5B1 at time mark 55m25s

"How many people could I touch with my internal work? How many people could I get excited about it and motivate to participate, to participate in that idea again?" Participant M9S1 at time mark 49m54s

Regarding incentivisation systems, one participant stated:

“The whole thing is difficult (...) in this hybrid setup (...) there is also the issue of (...) time. (...) And then of course the expectation to do something on top of that. But that is also financially rewarded, that you also do something for the further development of the company.” Participant A8R1 at time mark 1h1m3s

With respect to knowledge transfer and shared learning, the focus group participants stated:

“Most of all, knowledge transfer depends on reports of experiences: ‘This happened to me and then we did this.’” Participant A8R2 at time mark 1h10m12s

“Yes, I also think storytelling is the most valuable means. Sharing experiences, giving insights. Sharing knowledge by always putting it in the relevant context, by sharing your own experiences. That’s usually what’s most memorable and most exciting to share your knowledge. I don’t think a 100-page PowerPoint slide will still bring as much knowledge as a good story.” Participant M9S1 at time mark 1h10m47s

Finally, regarding surveys, one participant explained:

“So (...) in our company, surveys are simply a means of listening in on the community (...) that’s practically an hour or so per level, in which we talk relatively openly and freely about how we’re doing or where we see potential for improvement. So that, for example, is something we always do on a quarterly basis.” Participant B5B1 at time mark 48m55s

4.2.2.10 Conclusions from thematic analysis of case 2

Case 2 is characterised by a strong hierarchy. A business owners’ goal to maximise profitability and increase income is a trade-off with the investment of non-billable time for the sake of cultural change. For instance, findings show this trade-off is often perceived as a lack of leadership commitment to free employees for the sake of

learning. By following this directive, participants seem to monetise their limited learnings for the sake of the company goals.

It seems that members were missing a system that provided them with sufficient systemic support, which impacted their personal mastery and evolution. In response, participants built strong personal networks among their close colleagues. This community-interpreted social subculture provided them with support, whether they approached each other to get answers in terms of a particular subject-matter topic, wanted to start methodological experiments and seek participating volunteers, or wanted to share learnings with their community through means of storytelling. The researcher theorises that support from other colleagues seems to be mandatory to enable an individual's happiness, satisfaction, and motivation, which jointly drive personal mastery and evolution. Because an individual's development causes the development of the social system itself, it drives evolution. In sum, Figure 11 provides the results from coding this case.

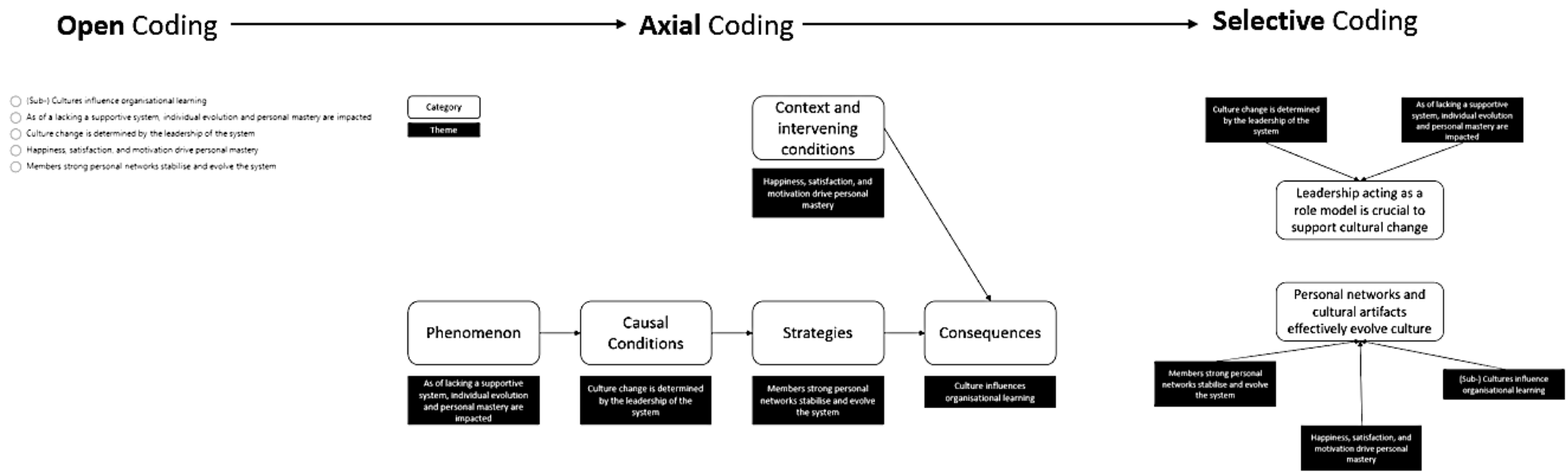

Figure 11: Results from coding (case 2)

4.2.2.11 Classification of culture maturity

The participants defined agility as a method for delivering early prototypes with an iterative-incremental approach. Interestingly, per the group discussion, they used the points mentioned by others and developed an enhanced definition as a team. With respect to this team definition, agility was understood as a method to work against a potentially changed vision with an iterative-incremental approach while relying on feedback cycles. The overall goal of agility was defined as reacting quickly to fast market changes. The topic of a mindset was only mentioned as a subsequent result of working in a dynamic way towards a vision.

Following the definition of agility as provided in this research, participants showed only some elements of agility in their culture. For instance, value-driven thinking (theme "methodology is chosen for its value in the respective context"), personal mastery and self-learning (theme "learnings are shared throughout the personal network through story telling"), empiricism (theme "empiricism supports learning and enables smart decisions"), and inspection and adaptation (theme "iterative-incremental approach increases value of delivery") were only shown with respect to client engagements and not as part of their cultural evolution.

By acknowledging the above-mentioned evidence, the researcher considers the culture of case 2 as less agile-matured than that of case 1:

Figure 12: Visualisation of agile maturity (case 2)

4.2.2.12 Evolved change practices

Participants mentioned a range of change practices that they experienced at client engagements. For their own culture, they solely highlighted trying to work in an iterative-incremental and cadence-based approach. They did not provide any specific and adapted practices.

4.2.2.13 Researcher learning

The participants have shown that it is important to them to highlight the unspoken to jointly examine the root cause. At the same time, it seems important for them to discuss respective solutions. Thanks to the participants, the researcher learned about the importance of becoming self-aware with respect to unspoken topics or sensed blind spots. If this experience is taken further, the researcher should check himself even more for assumed but unverified assumptions. Only if the researcher can bring this level of reflection into the research process itself can he increase the value contribution for the participants by shaping their awareness in terms of cultural issues.

4.2.3 Case 3

4.2.3.1 Case description

The third case is a small-medium sized consultancy with fewer than 30 employees. Since its founding in the 2010s, it has focused on temporarily supporting clients through sessions of different kinds, e.g., agile innovation workshops, innovative sessions to solve complex strategy challenges, or the setup of an agile community to initiate and embed agile culture change.

4.2.3.2 Business area

The case focuses on initiating and embedding agile spotlights or lighthouses by introducing agile means such as design thinking, Scrum, human-centred design, customer journeys, and many more. The general service portfolio splits into three parts: learning, projects, and culture. To the learning part, the case offers methods for human-centred and agile-innovation development, which aim to enable the client to develop new products, services, or business models. Regarding projects, the case focuses on clients' approaches to complex strategic and innovation projects without a clear solution. Lastly, regarding culture, the case aims to spread agile minds across the entire client company by building a sustainable, agile culture.

4.2.3.3 Description of accessed documents

The researcher accessed documents of different kinds:

- Website articles: implying the perspective of case 3 with respect to advertised cultural values, learning, and evolution approaches (see Appendix B p. 388)
- Videos: focus group recording (see Appendix B pp. 392-425)
- Notes: field notebook including notes from document and artifact analysis, observations during the focus group, etc. (see Appendix B pp. 389-391)
- Surveys: case study participant responses with respect to the focus group and the recommendation for action (see Appendix B pp. 426-437, 441-444)

The accessed documents were employed for different reasons. First, the documents were used to prepare the researcher for the focus group. For example, the researcher learned about the case's self-perception by accessing information about their values (see document "Values" in Appendix B p. 386). Second, documents were analysed to enrich data collection from focus groups and surveys. For example, the documents

suggested that case participants applied client-bound approaches to learning to their own cultural context (see document “Culture Labs” in Appendix B p. 388). Third, the documents enabled the researcher to triangulate data. The researcher compared data from the focus group activity (see Appendix B pp. 392-425) with data from publicly available articles (see document “Values” in Appendix B pp. 388).

4.2.3.4 Focus group description

The focus group participants included three women and one man who all lived in Germany. The participants joined the company between 2 and 6 years ago and occasionally worked together on varying client projects. They jointly shared an internal community of practice, namely “facilitators“, and regularly worked together in experiments to develop their culture. Despite being facilitators, one participant held an additional role as one of the two business owners. He thus represented leadership in the course of this case.

Four of seven invited participants joined the focus group activity and actively contributed over the duration of their attendance. Half of the focus group members answered the follow-up survey, which took on average 2 hr 6 min 37 s. The follow-up survey on the recommendation for action was answered by 50% of the participants and took 11 min 34 s on average.

4.2.3.5 justification

The case relies on both short- and long-term client relationships. However, its core business is shaped by engagements as a “trusted partner” who guides implementation of projects or culture changes, which justifies its classification as a trusted advisor. The community is characterised by frequent culture experiments that aim to foster an equal, sustainable, and productive environment. Case 3 is similar to case 1 in terms of its business model but differs from the other cases with respect to its small size. Also, case 3 differs from the other two cases in its reason for change. While case 3 actively aims to evolve for the greater good, cases 1 and 2 felt the need to change in response to internal or external shocks.

4.2.3.6 Interactions and kinds of communication

Participants generally showed supportive behaviour, which implied a close, personal relation to each other. For example, the researcher moved on to the next question while accidentally interrupting one participant. As a result, another person intervened on behalf of this person:

> *"I think L8K5 was going to say something too." Participant K3B2 at time mark 1h9m11s*

During the focus group, a participant mentioned having employed the leadership board in a way that facilitated getting a decision for a particular topic. Because leadership had reacted in a surprised way, another participant helped to explain the historically evolved reason for this kind of behaviour:

> *"When we were still SO small, where actually one person had a lot to say and we were not so free and this person also very much had the impression that he was the only one who could also make decisions.... (S5S7 coughs, whereupon J5W7 starts laughing) (...) but somehow it is still a bit anchored: Okay, am I really allowed to take decisions by myself now?" Participant K3B2 at time mark 1h9m11s*

The participants also frequently used visual language. For instance, during the self-introduction, they "[threw] an imaginary ball" in the "middle of the virtual room" to indicate when each was finished with his or her individual presentation. The next individual then "caught" the ball to imply being next up:

> *"Okay, I'll pass the ball then..." Participant J5W3 at time mark 5m32s*

> *"Ok, I'll take up the ball then... (after being finished, she throws the ball towards the webcam)" Participant K3B2 at time mark 6m43s*

> *"(She moves both hands towards the camera to catch the imaginary ball) Thanks! Hi all!" Participant L8K5 at time mark 7m36s*

The business owner also followed this behaviour but adapted it by indicating a dunk. He thus acted out not only making a point but also closing the session since he was the last in the round to self-introduce. Interestingly, the other participants recognised this behaviour and jointly laughed and mimicked him, which made him instantly comment on his own behaviour:

> *"(Picks up the ball and dunks it into the basket) OK, now that was a dunk." Participant S5S7 at time mark 8m38s*

The participants also showed a strong inclination to use metaphors:

> *"Well, the first thing I thought of was the animal world. If the whole industry is so complicated, it's like sending someone to the zoo to look at ants." Participant J5W3 at time mark 20m42s*

> *"In other words, helping the customers to disrupt. These waves that are emerging, that we can bounce off. We are not so bold as to say, 'We want to create the next 10 waves,' but we only look at what is coming directly - for example from China, from Bangalore, from Silicon Valley. That they feel empowered and enabled to ride these waves and stay above water." Participant S5S7 at time mark 43m50s*

> *"And I can imagine that this long breath, if you don't have it (...) that is, if you don't harvest any more flowers (…) that it then (...) fails." Participant J5W3 at time mark 56m00s*

Interestingly, the participants do not seem to have an agile vision for their own culture which might be reasoned, following evidence, that they simply were not aware of the need of having it:

> *"(laughs) What's the problem? The employees! (S5S7 shows non-verbally that it was meant ironically but the other participants do show any reaction)" Participant S5S7 at time mark 1h0m19s*

4.2.3.7 Interpretations of agility and implications for agile change practices

The participants showed a heterogenous understanding of agility. For example, a participant understood agility as a means to focus on human needs, which ultimately reduced complexity:

> *"By putting the human being in the centre and picking a people-centred approach, you actually manage to cut off a huge rat's tail of complexity and say: 'Hey, who is it actually about in the end?' (...) It is still complex enough, but it is much more reduced when I ask: 'What do the people who are involved need?'" Participant S5S7 at time mark 16m31s*

Another participant understood agility as a means to provide structure in unmanageable situations for the sake of the individuals of the system:

> *"For me, agility means trying to structure chaos and complexity by creating (...) spaces (...) and rules (...) in order to create more freedom for the people who work within this system and to being able to react faster to changes. It's about bringing disciplines together (...) and breaking down silos (...) and working under a joint set of values." Participant L8K5 at time mark 15m7s*

Still another participant understood agility as a set of principles that jointly focus on value-delivery and inspection and adaptation:

> *"So, when people ask me, I always say it's a question of attitude--(...) to put people above processes and tools (...). Living a bit more of a culture of error by showing and asking for feedback without it having reached a certain level of maturity." Participant J5W3 at time mark 17m55s*

Despite the heterogenous understandings of agility, the participants judged themselves as being agile:

> *"We have many agile aspects in our work. For example, we work largely according to the pull principle, or we have implemented certain tools in the organisation that lead to agility. Whether it's the salary structure or the value*

of entrepreneurship and the importance we place on having the freedom to drive forward our own ideas and projects internally, (...) I think we are very agile and have, perhaps, too much freedom, but we work a lot in experiments." Participant L8K5 at time mark 26m49s

"I would say we are agile because I have this feeling that there is really room for change. (...) And I also have the feeling that each of us is heard. I think (...) that with the whole topic of 'individuals over processes and tools' (...) that sometimes (...) the content is more important than the person behind it (...). I feel that each of us is heard when he or she is not doing well or has a problem." Participant J5W3 at time mark 28m59s

Interestingly, the participants did not seem to have an agile vision for their own culture, which, according to evidence, might be due to the fact that they simply were not aware of the need to have such a vision:

"So as a (company) we don't have a stated strategy yet, so I think I can only answer that individually." Participant K3B2 at time mark 41m41s

"There is actually just our vision for our customers." Participant S5S7 at time mark 43m50s

"We don't have a vision (…). I don't think our leadership has a clear vision either (…) but it's okay if we brainstorm our personal ideas at this point?" Participant J5W7 at time mark 41m55s

4.2.3.8 Factors influencing the agile culture transformation

In terms of influencing factors, participants stated fairness (theme "fair evaluations"), sufficient time to experiment on cultural changes while maintaining a sustainable pace (themes "evolution through continuous learning" and "cultural commitment"), clarity (theme "satisfaction, happiness, and motivation"), and entrepreneurship (theme "mindset focus"). Also, strong personal connections (theme "strong personal connections lead to trust and psychological safety") seemed to be outstanding and worth highlighting.

Regarding fairness, participants mentioned equal pay:

> *"(...) that we have implemented certain tools in the organisation that lead to agility, for example the wage structure. (..) In the facilitator team we have equal pay at the same level." Participant L8K5 at time mark 26m49s*

Interestingly, the participants lived the value of equality actively in their culture. All participants used the German language throughout the focus group.

Evidence also implied that sufficient workday time is necessary to actively drive experiments that aim to evolve the culture:

> *"I think we are very agile. (...) We work a lot in experiments, most recently (..) with our 4-day week. We were actually at 32 hours with 5 days. Now we've gone down to 4 days at 32 hours. And we have also brought this back into the organisation as an experiment." Participant L8K5 at time mark 26m49s*

This then feeds participants' intrinsic motivation because it facilitates acting as a cultural intrapreneur:

> *"We have many agile aspects in our work. For example, that we actually work largely according to the pull principle (...) or the value of entrepreneurship. In other words, we attach importance to having the freedom to push forward our own ideas and projects internally as well." Participant L8K5 at time mark 26m49s*

At the same time, evidence shows that the culture did not want people to work beyond their agreed time and to work at a sustainable pace:

> *"We have the premise of 11 project days and with this time software, we should and want to make it even more transparent that we are only sold a few days a month, so to speak. And the other days we have for internal*

development or project development." Participant J5W3 at time mark 56m00s

"The reason why everyone must measure the time now is because in the OKRs we have the goal that we all want to work within our working hours." Participant K3B2 at time mark 1h9m11s

Evidence also shows honesty was a crucial factor in initiating and embedding cultural change. It was implemented in the culture through regular meetings:

"For example, our values retro, where you can raise issues that you felt violated certain values. Or if you have the feeling that certain things are not quite in line with them." Participant L8K5 at time mark 1h11m30s

"But then also a values retro, where we look at our own values retrospectively. Where was a value not lived? Or in the feedback meeting, where we mirror ourselves, so to speak, how we are doing and receive feedback." Participant J5W3 at time mark 20m42s

According to the findings, clarity also seemed to be necessary. For example, clarity about meetings helped members understand the meetings' distinct purposes. This enabled members to judge the value-add of their contributions and enabled inspecting and adapting the culture's current state:

"In the meetings, which are reduced to the minimum and are staffed differently, informal spaces are created (Weekly Check-In), information is shared (Bizz Meeting), values are reflected (Values Retro), professional knowledge is shared (Facilitator Well-Fit Studio), facilitation skills are practised and improved (Facilitation Peer Camp), training content is tested and iterated (Agile Coach Learning Session)." Participant in the first survey

Clarity was also important regarding upward feedback processes:

“For example, there was a meeting called the Moderation Peer Camp, where we as moderators, and thus as a target group, were supposed to practise different moderation methods together. That was actually a relatively safe environment. And we had the feeling: This doesn’t really fit right now. And then it was also difficult: Are we now allowed to say to you, ‘Hey, our needs, which we actually have, are not met by this meeting format, are we allowed to write it down or change it?’ Or should we go back to the owner of this meeting, and can he be comfortable with that? Or, or, or (…)” Participant K3B2 at time mark 1h9m11s

Evidence also showed the importance of strong personal relationships as a prerequisite for motivation:

“I am particularly proud of the fact that I could meet anyone from the team on a project with the best conscience. So, I would trust everyone 100% that he or she has the competence (…) or doesn’t have the competence yet (…) that he or she would support me totally well and wouldn’t let me down. I am not in any way afraid of being betrayed. (..) And I am really TOTALLY proud of the fact that I can say that I really like working. For me, it has somehow become a phrase and I can personally say that for the very first time, in addition to the social activities I have done, with 100%. I work here (...) because I really enjoy this exchange and because I actually take something away from every day. The talent of our HR people and bosses and ex-bosses to choose these great minds is fantastic (K3B2 nods in agreement).” Participant J5W3 at time mark 1h22m22s

“I’d like to pick that up: I personally am EXTREMELY proud to work in a team where everyone is intrinsically motivated to such a high degree. There is no one who says, ‘No, I’m really not motivated today.’ So that just doesn’t happen. And sure, there are sometimes topics that are kind of annoying or less fun. But everyone is intrinsically motivated and believes in what they are doing, otherwise they wouldn’t do it. And I found that VERY remarkable.” Participant L8K5 at time mark 1h23m52s

It thereby seems that frequent socialisation was crucial to maintaining these connections:

> *"So really, we care, we show interest, we always leave room for personal things when we are not doing well or when we don't have time or when we get sick or whatever. So, there are immediately three other colleagues ready to take over or support. (...) So I think that's also incredibly good, that I always have the freedom to do something (...) or that I always don't have to do something. (...) That's something I'm very grateful for and also all the circumstances, for example the 4-day week (…) yes (…) also what we had before, doing sports together (…) in the past there were a lot of team events, birthday parties, so really on the social life together. (...) Everyone can come or not come." Participant K3B2 at time mark 1h24m27s*

> *"We make sure that people go out a little happier and have a slightly more exciting job with an even more meaningful activity. Maybe that they also laugh when you work with your hands and go home and are not quite so frustrated in the evening. So, the way you just described it, K3B2. And hopefully also pass on some of this better energy, also to the world. And the third point (...), I'm really proud of it, we have a team where I'm really looking forward to sitting together again as soon as possible. After the pandemic and spending time with each and every one of them. And I don't take that for granted. I think that's great." Participant S5S7 at time mark 1h25m51s*

The findings thereby implied the importance of information exchange, which led to transparency, which, in turn, enabled trust:

> *"We have an extremely high degree of transparency in the organisation. And that is somehow, it becomes so self-evident when you are in the middle of it. But it's actually not like that at all. So, we have insight into everything and can get all the information. As long as we know where they are, everything is accessible and open. And if something is not there, you can ask for it." Participant L8K5 at time mark 35m20s*

“I am particularly proud of the fact that I could meet anyone from the team on a project with the best conscience. So, I would trust everyone 100% (..) that he or she would support me totally well and wouldn’t let me down. I am not in any way afraid of being betrayed. (...) And I am really TOTALLY proud that I can say that I really like working. (...) I work here (...) because I really enjoy this exchange and because I actually take something away from every day.” Participant J5W3 at time mark 1h22m22s

“I would staff or sell anyone on a project if they had the time and expertise because I am CONVINCED that the person is in it with heart and soul and would do anything to help the client take a step forward. (...) I find these success stories from the project (...) good for transparency (...). (...) And for us, the value of satisfaction is also very important. We measure it every 2 weeks to see if we are happy here. And that also confirms my feeling.” Participant J5W3 at time mark 1h16m26s

The data, however also suggested various factors that hindered cultural evolution, namely lack of trust (theme “individuals feel unsafe to make decisions because leadership revised them in favour of its own”), leadership’s missing ability in terms of self-reflection (theme “cultural commitment”), and a less-developed conflict culture (theme “cultural approach to failures influences cultural approach of resolving conflicts”). Evidence also shows a lack of clarity to be hindering organisational learning and, thus, cultural evolution (theme “unclarity impacts culture evolution”).

Regarding the historical cultural development, the members had negative experiences making decisions on their own:

“When we were SO small, where actually one person had a lot of say and we were not so free in our decisions and this person also very much had the impression that he was the only one who could also make decisions. (…) (S5S7 coughs, whereupon J5W7 starts laughing) (...) but somehow it is still a bit anchored in me: Okay, am I really allowed to take decisions by myself now? Because, in the past, it often happened that I brought in an idea and then it was, ‘OK, go ahead’ (...) and then I did something and then

it was, 'No..., I don't want it to be like that.'" Participant K3B2 at time mark 1h9m11s

As a result, members of the system viewed making decisions and shaping a personal space as problematic whereas leadership did not seem to be aware of this cultural issue:

"The empty space remains? (S5S7 laughs) It should be nicely filled up by yourself! (Participants look at the floor and an uncomfortable atmosphere arises)." Participant S5S7 at time mark 24m25s

"(laughs) What's the problem? The employees! (S5S7 shows non-verbally that it was meant ironically but the other participants do show any reaction)." Participant S5S7 at time mark 1h0m19s

"(S5S7 laughs disbelievingly and gestures) Do you really put the decisions for which you need an okay on the managing director's board? So, you're putting it on our board? (All participants laugh agonised). Then we have to talk about the process again. (Smiles while all the others are tense)." Participant S5S7 at time mark 1h7m14s

Interestingly, it seems that the leadership recognised these situations from time to time without being able to reflect on their meaning:

"So, life goes on for sure, look at K3B2's face; there is sand in the machinery." Participant S5S7 at time mark 1h8m56s

It seems that leadership possessed a blind spot that impacted the individuals' motivation to evolve:

"So maybe taking decisions was an experiment. Maybe that is somehow only a small part that blocks these decisions. We also talk about failure. And for some, it's the decision itself that fails. (...) How long can I resist until I need to take it? (All participants laugh; J5W3 partly hysterical; K3B2 looks

pained; leadership is motionless) And I have now also understood that I think it's simply not possible any more. That I personally just have to drag along (…) and maybe it helps to somehow rely on a supportive network (fan base) or (...) that at some point you have understood that you have lost." Participant J5W3 at time mark 1h7m44s

The participants also indirectly discussed the cultural approach to failure. "Failure" seemed to have a negative connotation and was to be avoided as much as possible:

"I do have a thought about why experiments (..) well, don't fail (..) but may bring along problems." Participant L8K5 at time mark 1h11m30s

This reticence also seemed to impact the conflict culture:

"Overall, our conflict culture is also not very well developed." Participant response during the first survey

Ultimately, participants' statements were shaped by formulations that limited opinions to the specific individuals:

"I also think, well I speak for myself, but I think that we also have quite high standards for ourselves." Participant K2B3 at time mark 1h14m26s

"But that is MY feeling now." Participant L8K5 at time mark 1h1m11s

Finally, the lack of clarity on when they could make decisions impacted individuals' self-organisation and satisfaction:

"I think that's also a bit of a sticking point (...) because we have certain aspects where self-organisation is at the top and others where (...) decisions are based on the PUSH principle; these are those situations at which a decision can come from leadership. I believe that this is perhaps what gives rise to these moments of resistance because it is not possible to say exactly

for every topic: 'Up to this point, you have the authority to decide for yourself.'" Participant L8K5 at time mark 1h2m55s

"This point (…) I think it's justified, but it really comes up often. In any case, I notice that there is such a need for clarity (...). When do we need a command? When does it need to be free? What would help you there? So, for you it is a clear decision to play delegation poker and then to know exactly for which are we do what? When you talk about it, what is it that would somehow make you more satisfied?" Participant J5W3 at time mark 1h3m22s

4.2.3.9 Effective actions to initiate and embed the agile culture transformation

Evidence shows that a variety of major and minor actions are effective in initiating and embedding the cases' cultural evolution. However, it seems that all actions can be narrowed down to topics such as honesty (theme "honesty"), fairness (theme "fair evaluations"), respect (theme "system respects well-being of its members"), personal mastery and reflection (theme "individual characteristics influence personal evolution"), and mindset (theme "mindset focus").

Participants regularly talked about an honest and fair approach to how values are coded as artifacts in their daily business. They thereby continually mentioned fairness with respect to equal treatment between men and women. They showed this cultural artifact by using gendered language and in salary discussions:

"In our company, we have equal pay at the same level." Participant L8K5 at time mark 28m51s

At the same time, they frequently addressed the value of entrepreneurship, which involves the freedom to self-responsibly launch experiments that target topics of strong interest. From a systemic perspective, the system thereby acknowledged members' need for change and offered them sufficient workday time to test their ideas for the sake of the individuals and, thus, the system itself:

“It is important to us that we also have the freedom internally (...) to push forward our own ideas and projects. We work a lot in experiments, most recently (..) with our 4-day week. We were actually at 32 hours with 5 days. Now we’ve gone down to 4 days at 32 hours. And we have also brought this back into the organisation as an experiment. In this respect, there are an incredible number of levers that we use and some that we don’t use and some where we have to negotiate again and again how we do it.” Participant L8K5 at time mark 26m49s

Regarding their engagement, members recognised longer working hours than actually agreed. Because this fact impacted sustainability and energisation, which influences satisfaction and motivation, leadership and members jointly agreed to introduce a time tracking software. Its purpose was thereby not to track the members; rather, it served the members by making their efforts tangible and acknowledging at what point in time they were working beyond the contractual day:

“We have the premise of 11 days and with the new time software we should and want to make it even more transparent that we are only sold a few days a month. And the other days we have for internal development or project development. And we did that because the projects are so many that the actual working time is often not adhered to.” Participant J5W3 at time mark 56m00s

Evidence also shows that an ongoing approach of inspection and adaptation best addressed reality and those aspects of reality best drove organisational learning:

“We are currently in the process of redesigning the sales process. And we start the brainstorming process by generating the problem framework and ideas (...) We’re doing all that really well. But then going into implementation and really implementing it and iterating again and again and again (…) and really crafting a clean way of doing things, it’s clear that we’re learning even more.” Participant J5W3 at time mark 56m00s

4.2.3.10 Conclusions from thematic analysis of case 3

Evidence shows that leadership intentionally contributed only the bare minimum of required organisational structures because the members of the culture were expected to proactively create their own rules of engagement within the organisation's ground rules:

> *"During the personal talk with leadership, I asked that again because I had the feeling that there was so much empty space. It had somehow remained untouched in the onboarding process, leaving many questions unanswered. And then I was told: 'Yes, that's because you can decide how to shape your own conditions and because you are by yourself responsible for shaping this empty space, so to speak.'" Participant L8K5 at time mark 22m50s*

Leadership thus aimed to foster a climate of proactiveness and self-organisation. Findings, however, imply that members felt uncertain about making decisions on their own as they experienced a systemic dysfunction, which impacted their culture. In the beginning, leadership communicated that the members were expected to self-responsibly make decisions, which were then revised in favour of leadership's own. According to evidence, this seemed to be caused by a blind spot at the leadership level. The gain and loss of power led to a lack of trust among the culture's members so that if they were asked to make a decision on their own, they did not know if they were honestly expected to make decisions or if the request was just an empty value pod. This unclarity impacted cultural evolution because it influenced the cultural approach to failures because of the decisions about (systemic) conflicts that members never made.

Today, the culture fosters systemic thinking to proactively respect members' well-being by applying holistic means that influence satisfaction, happiness, and motivation. Members jointly gather honest feedback on the individual level and feed it back as a group to leadership by employing formalised events. Evidence implies that leadership honestly tries to focus on fair evaluations and to provide cultural commitments, which jointly support a mindset-focused way of thinking. The researcher theorises that the strong personal networks of individuals provided them with psychological safety. They enabled individuals to overcome cultural barriers and proactively develop

understanding with leadership, which in turn affects the future design of the social system itself. Figure 13 shows the results from coding this case.

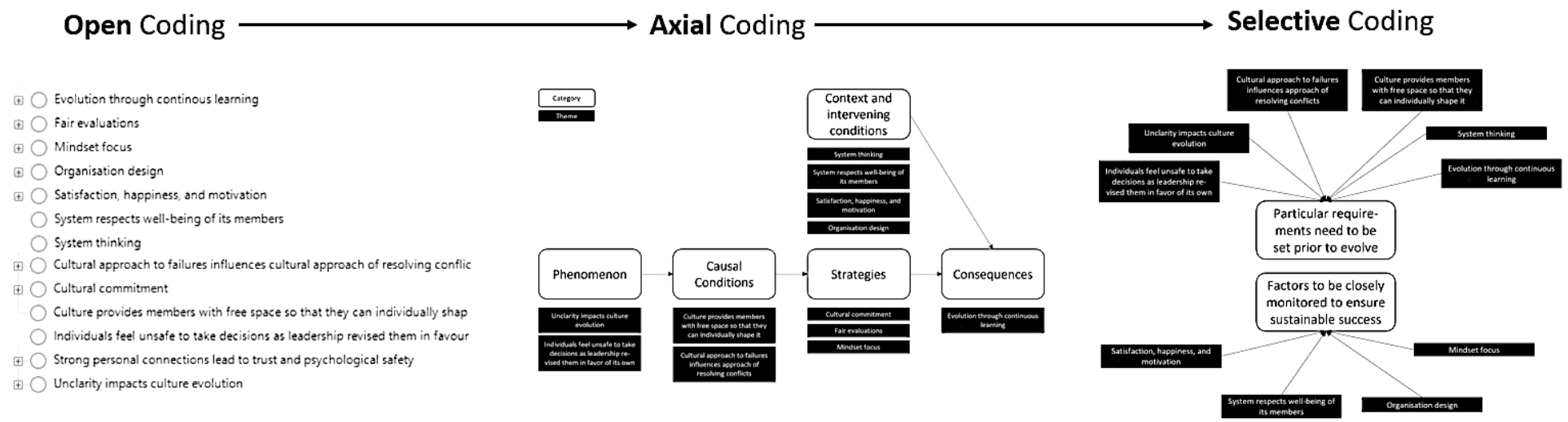

Figure 13: Results from coding (case 3)

4.2.3.11 Classification of culture maturity

The case demonstrated numerous agile elements in its culture. While maintaining a strong focus on their culture, they showed value-driven thinking (themes “value-driven thinking“, “self-organisation of autonomous teams”), personal mastery (theme “success is defined as being happy with the result”), self-learning (themes “experiments are an opportunity to learn“, “individuals share their knowledge”), empiricism (theme “individuals evaluate decisions based on data”), and inspection and adaptation (themes “iterative-incremental delivery“, “individuals reflect”).

By acknowledging the above-mentioned evidence, the researcher considers case 3 to be an agile-matured culture as depicted in Figure 15. Despite the aforementioned leadership issues, the case displayed a strong feedback culture, and a respectful, honest, and trusting relationship among members, which led to a growth-mindset fostered by frequent organisational learnings (experiments).

Figure 14: Visualisation of agile maturity (case 3)

4.2.3.12 Evolved change practices

Participants reported different culture-evolving practices. Faced with cultural challenges, volunteers proactively suggested solutions, which were discussed in the entire community and introduced as cultural experiments. These solutions are described below.

Method 1: Value Retrospective

Source: Participant J5W3.

Addressed issue: Individuals are not behaving as agreed, so a formalised structure is needed to properly address this antipattern.

Purpose: Raise awareness of violations of cultural agreements.

Description: Members meet every 2 weeks to reflect on their values for about 1 hr. A volunteer facilitates the meeting. The purpose of the meeting is that members are

expected to talk about values that have not been respected in some way. The moderator thereby keeps focusing on naming the issues but not on finding a solution for them. It is a reflective feedback meeting that respectfully asks members to identify violations and clarify the reasons for them. As everyone has the equal right to speak, it is a method to increase transparency.

Evaluation in the context of organisational change: This event is less structured but focuses on members' motivation and happiness. It is a formalised opportunity to actively take care of the members of the system and, as such, an effective tool for culture change.

Method 2: Feedback Meeting

Source: Participant J5W3.

Addressed issue: Individuals perceive that they are missing touchpoints to talk about their feelings and topics of general concern.

Purpose: Raise awareness to (upcoming) challenges.

Description: Every fortnight, members sit down for 1 hr, and all members get a chance to talk about how they are feeling and what their concerns are. Although the meeting is typically attended by all members, what is said is treated respectfully and confidentially. The order of speaking is voluntary. Each member has 3 min to speak about the issues about which he or she feels strongly. The team then has 3 min to react.

Evaluation in the context of organisational change: This method provides individuals with a psychologically safe environment, which enables them to talk about topics of interest. The researcher acknowledges this method as highly effective in the context of sustainable change.

4.2.3.13 Researcher learning

During the focus group, the researcher sensed emotionally challenging situations that partly lacked empathy and sensitivity. The researcher concludes that efficient communication requires emotional intelligence (EQ) to properly approach those kinds of situations. Despite being aware of this fact prior to the study, the researcher found that this turned out to be of even higher importance than expected. Also, the researcher recognised that perception can be increased if focus is set on what is said (verbal expressions) and shown by body language (non-verbal expressions). Continuing that

thought, the researcher strives to be more self-aware, which he can make transparent to resolve challenging situations.

4.3 Cross-case analysis

4.3.1 Overview

The cross-case analysis is based on the code map, which covers the results from open coding as depicted in figure 15:

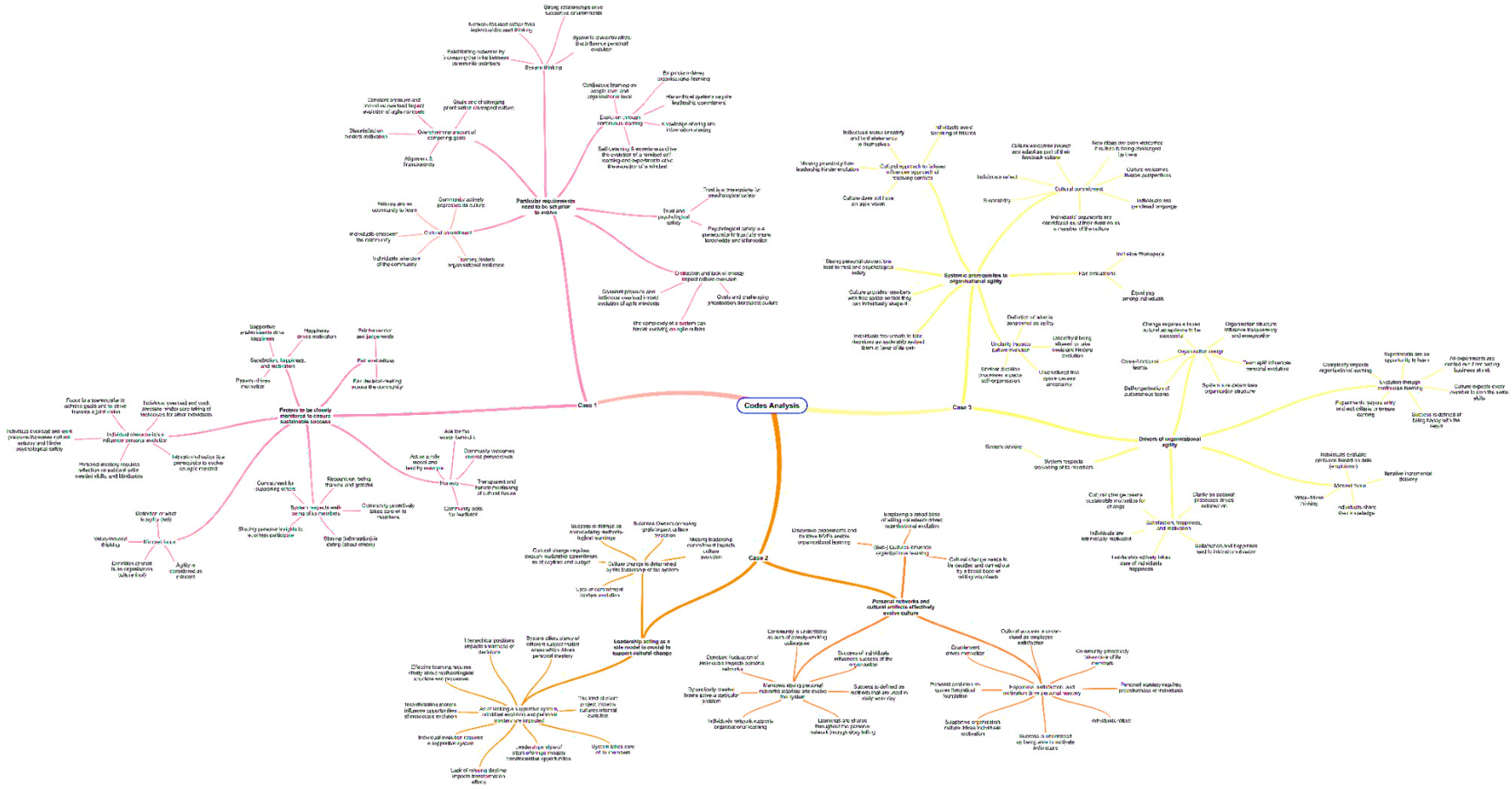

Figure 15: Cross-case analysis (outlining different cases)

The analysis thereby focuses on a comparative analysis to examine the similarities (exemplarily highlighted) and differences among the cases as depicted in figure 16:

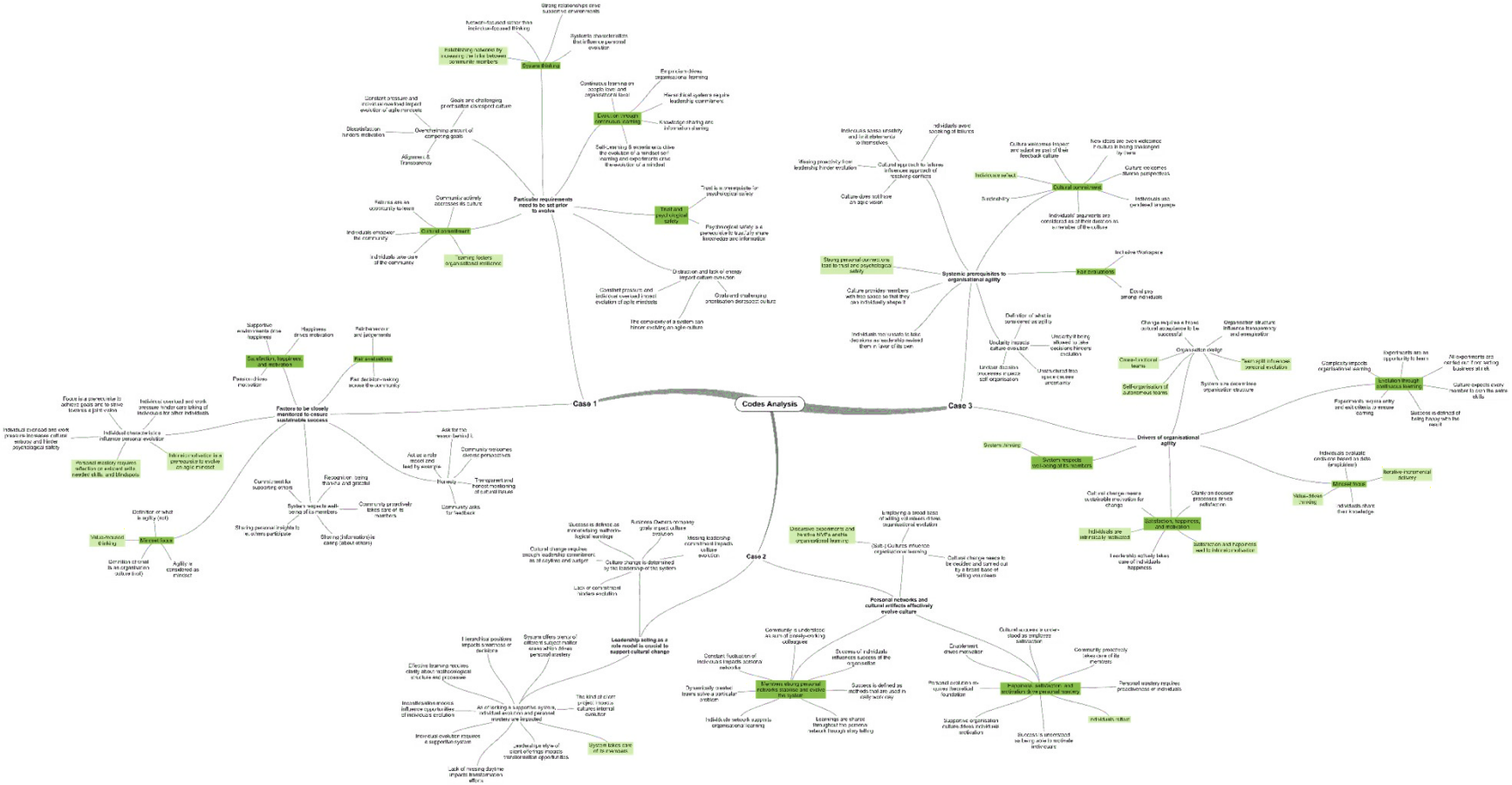

Figure 16: Cross-case analysis (exemplary similarities)

4.3.2 Similarities and differences

According to evidence, cases 1 and 3 widely showed similar codes:

- “System thinking” (see Appendix B pp. 263-265, 329, 438)
    - Case 1: The system supports individual networks (“network-focused rather than individual-focused thinking”) to increase support to individuals (“commitment to supporting others“, “recognition, being thankful and grateful“, “community proactively takes care of its members“, “systemic characteristics that influence personal evolution”).
    - Case 3: The system proactively takes care of its members (“system respects well-being of its members”).
- “Cultural commitment” (see Appendix B pp. 263-265, 328, 438)
    - Case 1: Concerns are addressed (“community actively addresses its culture”) via a reflective culture (“failures are an opportunity to learn”) that also welcomes personal networks (“teaming fosters organisational resilience”).
    - Case 3: Concerns are addressed (“culture welcomes diverse perspectives“, “sustainability”) as part of a strong feedback culture (“culture welcomes inspection and adaptation as part of their feedback culture”).
- “Trust and psychological safety” (see Appendix B pp. 328, 438)
    - Case 1: The culture acknowledges the interdependent relationship between trust and psychological safety (“trust is a prerequisite for psychological safety“, “psychological safety is a prerequisite to trustfully share knowledge and information”).
    - Case 3: The culture acknowledges the interdependent relationship among strong personal networks, trust, and psychological safety (“strong personal connections lead to trust and psychological safety”).
- “Evolution through continuous learning” (see Appendix B pp. 263-265, 328, 338)
    - Case 1: Experiments are an opportunity to support individual learning (“self-learning and experiments drive the evolution of a mindset”), which drives organisational learning (“continuous learning on people level and organisational level“, “empiricism drives organisational learning”).
    - Case 3: Experiments are drivers of organisational learning (“experiments are an opportunity to learn“, “experiments require entry and exit criteria

to ensure learning") that are based on a culture-driven understanding of success ("success is defined as being happy with the result").

- "Fair evaluations" (see Appendix B pp. 265, 328, 438)
    - Case 1: The culture respects fairness on the individual and organisational levels ("fair behaviour and judgements", "fair decision-making across the community").
    - Case 3: The culture focuses on the individual level and closely addresses potential differences among male and female members ("equal pay among individuals", "inclusive workspace").

Similarities were broadly found across the very foundations of the culture (trust, psychological safety, and fairness as part of a cultural commitment), which are governed from a system-thinking perspective and evolved through continuous learning on all levels of the organisation. The commonalities make particular sense given the level of agile maturity of both cultures. Case 1 showed a strong inclination to determine purpose by agreement (themes "ask for the reason behind it", "community actively addresses its culture", and "value-focused thinking") and to provide boundary framing by iteratively applying inspection and adaptation (theme "fair evaluations"). Case 1 also applied system ordering to create humanely useful structures to foster transparency and alignment (themes "empiricism drives organisational learning", "systemic characteristics influence personal evolution"). In the context of the holacratic organisational design, case 1 expressed shared systemic design principles while covering most aspects of an agile culture; it thus demonstrated a matured agile culture. Similarly, case 3 showed significant tendencies towards purpose-driven agreements (themes "individuals use gendered language", "equal pay among individuals", "team split influences personal evolution", "self-organisation of autonomous teams", "success is defined as being happy with the result") and feedback coordination (themes "system respects well-being of its members", "leadership actively takes care of individuals' happiness", "cultural change means sustainable motivation for change"). Both factors jointly support mechanisms of system ordering, which lead to the evolution of cultural artifacts (themes "value-driven thinking", "iterative-incremental delivery", "new ideas are welcomed even if culture is being challenged", "inclusive workplace", "equal pay among male and female individuals"). Thus, the members of the system also shared

design principles of a network organisation, and the participants fulfilled most of the criteria of an agile matured culture as outlined in chapter 2.

Interestingly, both cultures were impacted by their leadership and evolved strong personal networks in response. Leadership in case 1 was not aware of the high number of competing goals with which the members of the culture were confronted. As a consequence of the constant pressure and missing prioritisation, individuals were distracted and lacked energy, which jointly impacted cultural evolution (themes “constant pressure and individual overload impact evolution of agile mindsets“, “goals and challenging prioritisation disrespect culture“, “individual overload and work pressure increase cultural entropy and hinder psychological safety”). Evidence showed that individuals were thus impacted by leadership’s blind spot, which caused the evolution of psychologically safe subcultures within the holacratic circles. In other words, individuals evolved strong personal networks that provided support in terms of guidance, experiments, and more (themes “self-learning and experiments drive the evolution of a mindset“, “strong relationships drive supportive environments“, “commitment for supporting others”). Similarly, leadership in case 3 also demonstrated a blind spot that instead affected trust and psychological safety on the community level. Because leadership violated trust and lacked empathy to recognise the high cultural entropy, the members of the system felt unsafe to make decisions on their own (themes “individuals feel unsafe to make decisions because leadership revised them in favour of its own“, “unclarity if being allowed to make decisions hinders evolution“, “unclear decision processes impact self-organisation“, “unstructured free space causes uncertainty”). Evidence implies that the members of the system evolved strong personal connections to regain trust on the individual level, which enabled them to jointly make at least some decisions and continue personal growth (themes “strong personal connections lead to trust and psychological safety“, “individuals share their knowledge”).

Case 2 shared the individual strong personal networks but showed a widely differing cultural context. From an organisational design perspective, case 2 was a strongly hierarchical matrix organisation that owns cross-functional teams built around certain topics of interest, namely CoPs. The organisation’s vision seemed also to influence the cultural approach to evolution. For instance, the business owners strongly

communicated the goal of achieving a defined annual turnover, which was achieved by maximising billable time at client engagements (theme “business owners’ company goals impact cultural evolution”). Non-billable time for evolving the culture for the better was effectively not supported. Leaders employed this figure-driven mindset to form a performance-driven system. Individuals thus could only achieve personal development outside of client work time (theme “lack of workday time impacts transformation efforts”). Alternatively, individuals might have received non-billable time for personal development if it could have been used for an existing project or sold to a new client (theme “success is defined as monetarising methodological learnings”). Thus, the findings show that the culture of case 2 matches the definition of an agile culture only at its minimum, so case 2 demonstrated low agile maturity. However, evidence also shows that members within this non-supportive system developed strong personal connections to other members (themes “individuals offer support to other individuals“, “learnings are shared throughout the personal network by storytelling”). In contrast, Cases 1 and 3 did not define the members of a community in accordance with the organisational design. Instead, they understood that idea as the sum of colleagues with whom they were closely working (theme “community is understood as sum of closely working colleagues”). While acknowledging their respective subject-matter expertise, the members could quite clearly determine which individual could provide the support they needed in a particular situation (theme “supportive organisational culture drives individuals’ motivation”). Thanks to the network, they started to apply agile principles and methods to drive their personal learning towards personal mastery of a respective subject area (themes “personal networks provide support to carry out experiments despite systemic impediments“, “discussions drive individual learning“, “learning from practice drives personal evolution”).

It also seems that the strong personal networks of individuals evolved cultural artifacts; for instance, small-scale experiments were used for organisational learning (themes “discursive experiments and iterative MVPs enable organisational learning“, “dynamically created teams solve a particular problem”), which then evolved the system itself (themes “members’ strong personal networks stabilise and evolve the system“, “success of individuals influences the success of the organisation“, “learnings are shared throughout the personal network by storytelling“, “success is defined as a method being used in daily work days”). Interestingly, strong personal networks could

be found in each case and within different systemic contexts. According to evidence, it seems that motivated individuals can rely on their personal networks to motivate other individuals, which then causes self-amplifying effects of organisational learning. This then results in an increased dynamic of improvements that shape the system in which they are occurring and influence the individuals therein.

To better understand this interdependent relationship, the researcher closely examined the similarities and differences of the influencing factors and evolved actions among cases. Evidence shows that the cases seem to have in common three major influencing factors: leadership, personal networks, and network organisational designs.

Leadership determines the wider system, which significantly influences how much support a system provides to its members. The excerpt below demonstrates this factor:

> *"(…) I believe that the organisation in which you operate really has to create the foundations or guardrails, so to speak, and that is simply not the case here." Participant T5H7 from case 2 at time mark 18m1s*

This factor is also reflected, for example, via the coding from case 2 (themes "leadership acting as a role model is crucial to support cultural change", "individual evolution requires a supportive system") and is in line with the latest research (Kruse, 2020).

Additionally, following evidence from all the cases, *personal networks* can provide individuals with the support missing from the overarching system and foster happiness, satisfaction, and (intrinsic) motivation (themes "strong relationships drive supportive environments", "supportive environments drive happiness", "happiness drives motivation", "enabling drives motivation", "satisfaction and happiness lead to intrinsic motivation"). Data implies that these factors provide clarity and structure (theme "clarity drives satisfaction"), which then acts as a mechanism of stabilisation for the overarching system (theme "members' strong personal networks stabilise and evolve the system"). Because these small networks support empiricism, i.e., learning by conducting experiments and making decisions based on these learnings, they can

evolve cultural artifacts within their subcultures. Since they are shared within the personal networks, this then can influence a broader base of individuals who, ultimately, reshape the social system (theme “personal networks and cultural artifacts effectively evolve culture”). Thus, personal networks seem to be able to effect mindset changes that trigger self-reinforcing dynamics, which have the power to evolve the system itself. Despite being indicated by this study’s evidence, relationship is not yet covered by research as part of effective cultural change.

Finally, in accordance with data from Cases 1 and 3, *network organisational designs* seem to be linked to individual development (themes “organisational structure influences transparency and energisation“, “team split influences personal evolution“, “cross-functional teams”), which influences organisational learning and resilience (themes “teaming fosters organisational resilience“, “individuals empower the community“, “self-organisation of autonomous teams”). These designs also seem to establish new ways for individuals to connect among each other, which act as supporting factors to evolve personal networks. This link seems to be a dynamic, circular process that can influence the feedback culture and, consequently, the organisational design of the system (themes “community asks for feedback“, “culture welcomes inspection and adaptation as part of their feedback culture”). Thus, evidence shows an interdependent and dynamic link among the organisational design, personal networks, and leadership. Evidence from case 2 confirms these findings (themes “individuals reflect“, “learnings are shared throughout the personal network through storytelling“, “dynamically created teams solve a particular problem“, “success of individuals influences success of the organisation“, “individual networks support organisational learning“, “discursive experiments and iterative MVPs enable organisational learning”).

Thus, it seems that three factors significantly influence a social system’s cultural transformation:

1. Leadership seems to act as a formal system-determining factor (top-down communication).
2. Personal networks seem to act as an informal system-evolving and system-stabilising factor (bottom-up validation).

3. Network organisational designs seem to act as a mediating factor that influences both previous factors positively and negatively in terms of cultural evolution.

4.3.3 Summary

Evidence showed that Cases 1 and 3 were faced with similar cultural change challenges in terms of leadership's blind spots. However, they benefitted from a network-driven organisational design and evolved personal networks that acted as social validation mechanisms, which effectively reshaped the system. From an agile change point of view, these cases contrast with case 2 to the extent that leadership widely prevented cultural change for the sake of monetary return, which was communicated by company goals through a hierarchy-driven matrix organisation. Nonetheless, participants established networks around subject-matter topics and evolved strong personal networks to jointly drive personal development in areas of high personal interest.

From a high-level perspective, leadership seemed to be crucial for evolution due to its formal system-determining role. Still, a closer look reveals that strong personal networks were an equally important factor for successful evolution because they provided members with support. According to evidence, this leads to happiness, satisfaction, and (intrinsic) motivation. It also turned out that the organisational design had an inherent influence on supporting or impacting its evolution. Currently, these joint factors are widely ignored by change management research and only covered by research in cybernetics (Kruse, 2004, 2020). However, even that coverage lacks a connection to agility, culture change, or consultancies. Regarding this research gap, the findings of this study provide a major contribution to change management literature in terms of actions that are effective to initiate and embed culture transformation.

Chapter 1 outlined consultancies as being part of the PFS whose members are characterised by high absorptive capacity; this is confirmed by findings of this research. It seems that participants from all cases were intrinsically motivated to drive their personal development. Development is the result of being able to quickly learn and adapt new knowledge to new contexts, which is absorptive capacity in its most basic definition.

However, the motivation to continue personal development until mastery has not been researched in depth in change management literature yet. Researchers have either argued for growth mindsets as crucial prerequisites for personal development or outlined the beneficial consequences of achieving personal development; the motivation itself has been only implicitly assumed. This study also contributes to this lack of clarity in research. According to evidence, knowledge gains (e.g., personal mastery) seem to be an important personal goal of intrinsically motivated knowledge workers (themes “evolution through continuous learning“, “satisfaction, happiness, and motivation”):

> *“That’s why I would (...) say (...) that I enjoy it. (...). I am really happy that we have the time to really get into it. And I also believe that we will learn a lot here.” Participant J5W3 from case 2 at time mark 5m32s*

From a cultural change perspective, it actually seems that case study participants carried out their actions to gain and share knowledge in order to quickly develop themselves or others (themes “self-learning and experiments drive the evolution of a mindset“, “knowledge sharing and information sharing“, “continuous learning on the people and organisational levels”):

> *“Do I want to be an agile coach and really do advisory on a project later on, to gain and practice my coaching experience myself first? Or do It want to learn how to coach someone from the agile mindset? Or do I want to work agile myself and gain experience as a product owner? I think there are many, many training opportunities.” Participant L1W7 from case 1 at time mark 6m44s*

> *“What works very well is that people pick time for each other when they want to and that very often very, very inspiring discussions arise. That we all bring along a lot of commitment for the cause and for the content and that we can learn a lot from each other and then there is the possibility (…) that we can exchange ideas. That is great.” Participant N7B9 from case 1 at time mark 1h41m5s*

Another reason participants carried out actions seems to be a desire to re-establish psychological safety in an environment of high cultural entropy (see statements expressed by the “community perspective alliance” in case 1 at Appendix B on pp. 269-272). In this regard, this study again confirms change management research.

5 Discussion and conclusions

5.1 Introduction

Research indicates consultancies are challenged by internal and external shocks (i.e., VUCA). According to Kruse (2020), cultures experiencing shocks leave their stable states of being and apply means of organisational change in response to them. By doing so, they achieve new stable states. However, the choice of applied change methods and the way they are embedded in the culture significantly determine the outcome of the transition process. Evidence implies this is especially true in the context of consultancies. Thanks to their high absorptive capacity on the individual and organisational levels and their increased sensitivity resulting from experience with clients in ambiguous contexts (Chambers, 1998; Prats *et al.*, 2018), they evolved a high degree of reflectivity. Consequently, they often have a heightened awareness of the (in)effectiveness of their methods or the ways of embedding them with respect to the originally intended purpose and are thus able to adapt them accordingly.

Interestingly, this study's findings imply that the appropriateness of methodological choices seems to differ among consultancies. The researcher concludes that consultancies (considered as social systems) are highly dependent on their cultures and that they implicitly determine the appropriateness of organisational change methods. In other words, different cultures consider different change methods as appropriate (Beck & Cowan, 2013; Laloux, 2016; Oestereich *et al.*, 2017). In that regard, consultancies do not differ from other organisations. However, thanks to consultancies' ability to reflect, they intuitively apply double-loop and triple-loop learning (Tosey, Visser and Saunders, 2012) without being explicitly aware of this learning process. The evidence in this study suggested this process at work when knowledge workers triggered discussions about the value contribution of their originally initiated and embedded methods after receiving their recommendation for action. By doing so, they strived to jointly define what "appropriateness" in their respective contexts actually meant.

Regarding this conclusion, the researcher aims to guide practitioners (management consultants, agile coaches) with a comprehensive directory of effective methods for organisational change to greater agility. This research aims to raise awareness of change by turning unconscious learning processes into conscious decisions so that

learnings can be leveraged for the greater good. The study also establishes links among an organisational culture and a variety of different methods that are considered appropriate in the respective contexts. Therefore, this process is named the Culture-Method tool (CM tool). The researcher also provides guidelines that are acknowledged by research to be effective and efficient in cultural change endeavours.

5.2 Relevance of organisational change in consultancies

The CM tool (see Appendix A pp. 224-262) provides guidance to turn the complex and dynamic tensions of cultural change into organisational value. It addresses practitioners who are within their change transitions by providing them with a culture classification and a rationale to support them in judging the agile maturity of their own cultures. Depending on the maturity, practitioners are guided to a particular section of the tool. Each section provides them with different methods that are clustered along topics of organisational change. If the choice of methods follows the proposed guidance and the implementation is carried out in accordance with the recommended approach, practitioners should be able to quickly internalise the respective learnings to achieve sustainable value.

5.3 Justification of data basis

This study's methods are based on scientific and practice literature. Each method has at least one reference that confirms its effectiveness in its respective context. The CM tool is enriched by methods from the recommendation for action from the case studies. These methods are combinations of particular methods but adapted to the respective context of each case study. The directory of methods is thus grounded in research, which has successfully demonstrated its value in practice.

5.4 Guidelines for successful change

Despite a culture's uniqueness, the principles of successful change are universal by nature (Kotter, 2020). According to research, organisational change to greater agility requires a practitioner to maintain a particular set of guidelines (Kruse, 2004, 2020; Appelo, 2011, 2016; Kotter, 2012a, 2012b; Oesterreich *et al*, 2017):

- Ensure honest leadership commitment by, for example, asking leadership to model desirable behaviour.

- Invite a broad base of willing volunteers across an organisation's hierarchy to participate in the culture change. For example,
  - jointly judge the agile maturity of the culture to determine the focus points.
  - jointly choose methods by fostering participative and inclusive discussions that clarify to what extent these methods contribute to the culture's values and organisation's strategic intent.
  - jointly discuss contextual adaptations so that the chosen methods meet their originally intended need.
- Start with a small experimental scale and discuss both what success might look like and how it can be measured in an objective (non-biased) and transparent (results accessible by everyone) way.
- Acknowledge the interrelated dynamics of culture by continuously inspecting the implemented methods. Consider adapting them if you feel they do not match anymore the originally intended need.

5.5 Structure of the CM tool

From a general viewpoint, the CM tool influences cultural artifacts that influence individuals' behaviour, social norms, and values. It thus initiates and embeds change in the culture the same way today's transformation frameworks do (Leffingwell & Jemilo, 2019). To make its usage as valuable as possible, it is split into the sections "basic" (see Appendix A pp. 224-230) and "advanced" (see Appendix A pp. 231-262), which are further differentiated into subcategories around specific change topics.

The basic section provides major value for less agile-matured cultures. According to this research, those cultures are characterised by high cultural entropy and low psychological safety that need to be in place prior to any successful change initiative. As such, methods from this section seek to establish change readiness:

- Category *Management and Leadership* (see Appendix A pp. 224-229)
  - Subcategory *Alignment* (see Appendix A pp. 224-226)
  - Subcategory *Raising Awareness* (see Appendix A pp. 226-229)
- Category *Psychological Safety* (see Appendix A pp 229-230)
  - Subcategory *Transparency and Trust* (see Appendix A pp. 229-230)
  - Subcategory *Clarity and Motivation* (see Appendix A p. 230)

In contrast, the advanced section considers cultures to already possess psychological safety at least to a sufficient degree. So, methods from this section focus on facilitating the agile evolution by providing the following structure:

- Category *Team Empowerment* (see Appendix A pp. 231-238)
    - Subcategory *Decision-Making* (see Appendix A pp. 231-233)
    - Subcategory *Self-Organisation* (Appendix A pp. 234-236)
    - Subcategory *Personal Mastery and Team Competency* (see Appendix A pp. 236-237)
    - Subcategory *Reflection* (see Appendix A pp. 237-238)
- Category *Team Motivation and Engagement* (see Appendix A pp. 238-253)
    - Subcategory *Motivation and Happiness* (see Appendix A pp. 238-243)
    - Subcategory *Team Alignment* (see Appendix A pp. 243-244)
    - Subcategory *Cross-Team Collaboration* (see Appendix A pp. 244-245)
    - Subcategory *Team Transparency and Trust* (Appendix A pp. 245-252)
    - Subcategory *Roles* (see Appendix A p. 253)
- Category *Living Community* (see Appendix A pp. 253-259)
    - Subcategory *Value Focus* (see Appendix A pp. 253-256)
    - Subcategory *Cultural Artifacts Focus* (see Appendix A pp. 256-258)
    - Subcategory *System Focus* (see Appendix A pp. 258-259)
- Category *Scaling Structure* (see Appendix A pp. 259-262)
    - Subcategory *Network Designs* (see Appendix A pp. 259-260)
    - Subcategory *Scaled Agile Framework Designs* (see Appendix A pp. 261-262)

Figure 17 outlines the previous description:

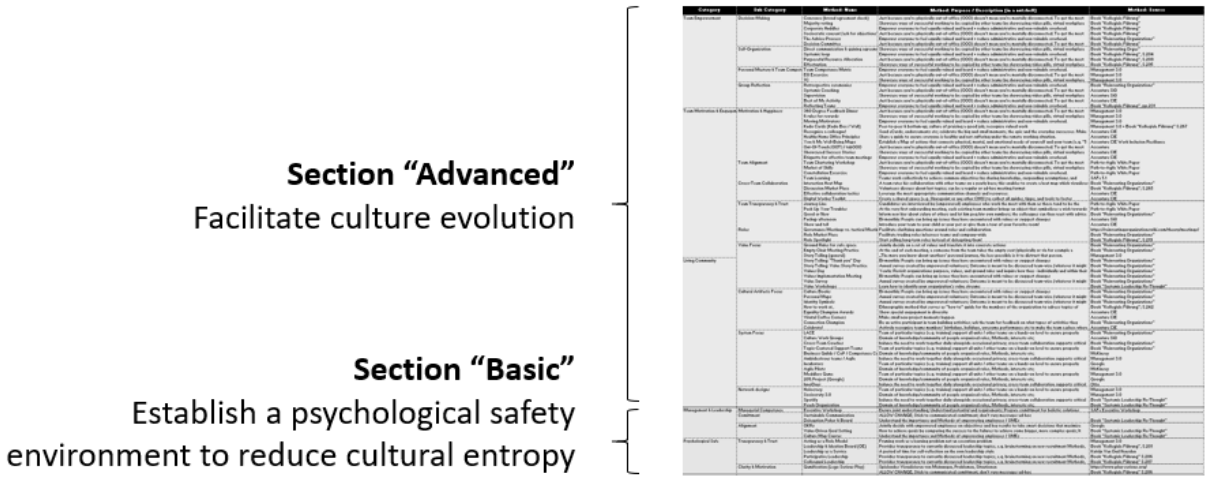

Figure 17: Illustrations of focus sections of the CM tool

5.6 Change procedure for the CM tool

Acknowledging the guidelines for successful change and the structure of the CM tool, the researcher proposes that practitioners should consider the following steps:

1. Invite volunteers to jointly judge the maturity of your culture. To do so, either employ (a) the maturity assessment as provided in this study or (b) a proprietary type of maturity assessment.
    a. Consider the definition of agility and compare your culture against it. To what extent does your culture cover (i) a value-driven perspective, (ii) personal mastery and continuous learning as part of a growth mindset, (iii) empiricism, and (iv) inspection and adaptation?
    b. Consider employing a maturity assessment as jointly accepted by the volunteering individuals of your culture.
2. Based on the maturity assessment, jointly choose a section of the CM tool.
3. Jointly choose the most important (sub-)categories and respective methods.
4. Jointly reflect if (sub-)categories from the non-chosen section also cover valuable methods. If their value contribution to culture or strategic intent of the organisation cannot be clearly outlined, jointly reject their inclusion.
5. Jointly adapt the final choice of methods to your cultural and organisational contexts.
6. Jointly operationalise the implementation of your adapted methods (discuss workload, find a responsible volunteer, define success factors, and define experimental scale and duration).
7. Jointly monitor the progress and effects on your culture over the course of their application.
8. Regularly reflect with a broad base of volunteers on the progress and outcome. Jointly judge the (dis-)continuation of each method's realised value-add.

In the following sections, the researcher presents the CM tool.

5.7 Culture-method tool

The below description presents a summary of the value contribution of each method. For an encompassing description, including the prerequisites and approach of each method, please see Appendix A (pp. 224-262).

5.7.1 Basic section

Table 9 shows the focus section for less agile-matured cultures:

Category	Subcategory	Method name	Value contribution of each method
Management & Leadership	Alignment	Delegation Poker (Appelo, 2011)	Delegation Poker aims to establish a joint understanding of who is responsible for what. (It can be easily transferred to a RACI or Delegation Board). It fosters self-organisation by providing a controlled environment for decision-making.
		Delegation Board (Appelo, 2011)	Delegation Board can be set up either physically (e.g., whiteboard drawing, flipchart paper) or virtually (e.g., Miro board) and conveys areas of key decisions and the respective level of delegation.
		OKRs (Doerr, 2018; Hoerger, 2020)	Objectives and Key Results (OKRs) aim to establish alignment across hierarchy. Every quarter, a culture chooses up to five objectives with up to four key results each.
		Value-based goals (case study 1 recommendation)	Value-based goals is a contextually adapted method that combines different methods and aims to challenge existing goals in terms of their value contribution to the being of the company (see “Purpose-2-Practice” and “1-2-4-All” as suggested by (Humbert, 2003; Steinhöfer, 2021; Ebers, 2022)). It provides value in an environment shaped by high workload related to goal setting.
	Raising Awareness	TRIZ (Steinhöfer, 2021; Ebers, 2022)	TRIZ creates new perspectives on current situations with the aim to develop innovative solutions for the greater good. It applies principles of creative destruction and abolishment of success-hindering factors. The question “What do we have to stop doing to achieve our most important goal?” causes a serious but at the same time fun and courageous conversation. Since laughter is often involved, taboo topics can be uncovered and tackled in a relaxed atmosphere. This kind of creative destruction creates the opportunity for renewal as innovation fills the vacuum that has been created.
		Critical Uncertainties (Steinhöfer, 2021; Ebers, 2022)	Critical Uncertainties aim to develop strategies to deal with uncertainties in organisations. They validate existing strategies by revealing assumptions and uncertainties and increase the ability of individuals to adapt quickly and develop their own resilience to disruption. This, in turn, also affects an organisation’s approach to disruption while its strategies are accordingly challenged by distinguishing between robust and safeguarding ones.
		Ecocycle Planning (Zimmerman, Lindberg & Plsek, 2013; Steinhöfer, 2021; Ebers, 2022)	With the help of Ecocycle, actions can be viewed, prioritised, and planned together with all those involved in the activities, instead of, as is usually the case, only with a small group behind closed doors. In addition, it becomes clear how one’s own activities fit into the overall picture of all activities. It invites managers and decision-makers to focus on the phases of creative destruction and renewal in addition to the classic topics such as growth or efficiency. The Ecocycle enables agility, resilience, and sustained performance to be driven by considering all four phases of development in the planning process.
Psychological Safety	Transparency and Trust	Acting as a Role Model (Edmondson,	In a hierarchical system, leaders need to take proactive roles by modelling and leading the change they expect from other individuals. By role modelling behaviour, leaders create a “value orientation and commitment to the purpose and values of the

		1999; Edmondson, Kramer and Cook, 2004; Sinek, 2017; Solga, 2021)	organization (normative alignment). Here, acting as a role model is crucially important and making fairness tangible in all its aspects is key (from inquiring about others' expectations to taking decisions in a well-balanced and principled way to creating transparency to treating people with respect)" (Solga, 2021, p. 11).
		Leadership and Ideation Board (Oestereich *et al.*, 2017, p. 200)	The Leadership and Ideation Board method serves the purpose of significantly increasing cross-hierarchy transparency regarding management-relevant activities. These activities might be decisions or ideas. The board also outlines the status of every item.
		Participative Leadership (Oestereich *et al.*, 2017, p. 286)	An approach to leadership that includes the opinion of the team.
		Collegial Leadership (Oestereich *et al.*, 2017, p. 287)	An approach to leadership as shaped by the team itself.
	Clarity & Motivation	Lego Serious Play (Roos and Victor, 1999, 2018)	Serious Play is a method to enable hierarchical decision-makers to visualise, describe, and challenge their perspectives on their business model, organisational change, or other wide-ranging, relevant challenges.

Table 9: CM Tool for less agile-matured cultures (overview)

5.7.2 Advanced section

Table 10 shows the focus section for agile-matured cultures:

Category	Subcategory	Method name	Value contribution of each method
Team Empowerment	Decision-Making	Majority topic choice (Oestereich *et al.*, 2017, p. 197)	This method is a democratic majority voting process that aims to identify that topic that receives the greatest number of votes.
		Consensus (Oestereich *et al.*, 2017, p. 160)	The consensus decision process focuses on quickly finding a solution by conducting a majority vote and thus considering less highly minority needs.
		Consent (Oestereich *et al.*, 2017, p. 161)	The consent decision process focuses on objections and aims to minimise them by integration through a moderated and iterated discussion process.
		The Advice process (Laloux, 2016, p. 100)	The advice process aims to enable everyone to self-responsibly make decisions by seeking advice upfront from subject matter experts or upfront named roles. It significantly accelerates decision-making by allowing elements of self-organisation.
		Decision leader (case study 3)	This method is a combination of the Decision Matrix (Appelo, 2011), the Advice-Process (Oestereich *et al.*, 2017), consent-driven decisions (Oestereich *et al.*, 2017), and other methods. This methodological aggregation serves the purpose of making transparent what decisions are leadership-driven and facilitator-driven while being based on the strong personal network you already evolved.
	Self-Organisation	Direct communication and gaining agreement (Laloux, 2016, p. 113)	This method enables a team to self-responsibly clarify any disagreement, e.g., an interpersonal conflict, breach of values, etc.
		Purposeful Resource Allocation (Oestereich *et al.*, 2017, p. 208)	As resources are limited by nature, every system requires an effective and efficient resource allocation mechanism. Research offers guiding principles and a group-based decision process to ensure that the system is supported in the best possible way.
		Effectuation (Faschingbauer, 2017; Oestereich *et al.*, 2017, p. 295)	Effectuation describes how experts (entrepreneurs) act under the VUCA environment. Similar to nature's evolutionary processes, it does not focus on making long-term plans but rather on coming up with a plan for the current situation (Harford, 2012). Effectuation shows various possibilities that enable a company to be successful with existing resources in a future that cannot be planned but can be shaped.
		Corporate huddles (Appelo, 2011)	The corporate huddles method aims to quickly come to a horizontally made decision among peers. It is a (full) meeting format at which peers inform each other. It should be focused on a discussion topic to which everyone can and wants to contribute. The topic can thereby something interesting from non-work life or focused on a subject matter of joint interest. It is about cultivating an informal event that also covers fun activities or surprising elements. Ultimately, it fosters teaming and has the potential to cultivate a group of experts around a subject matter, specifically to informally evolve a business guild or CoP. It is therefore not about the discussion itself but, instead, about making people joyous by coming together and discussing a topic of high (personal) interest.
		Discovery and Action Dialogue (Steinhöfer, 2021; Ebers, 2022)	Discovery and Action Dialogue (DAD) aims to discover and unleash local solutions to chronic problems. It makes it easy for a group or community to discover practices and behaviours that enable some people (without access to specific resources and with the same constraints) to find better solutions to common problems than their peers. These are called positive deviant behaviours and

			practices. DADs enable members of a group, department, or community to discover these positive deviant practices for themselves. DADs also establish favourable conditions for stimulating participants' creativity and create a space where they feel safe enough to develop new and more effective practices. Resistance to change vanishes once participants are freed from their shackles and freed to choose which practices to use or adapt and which problems to address. DADs enable people to make their own personal solutions.
	Personal Mastery & Team Competence	Team Competency Matrix (Appelo, 2011, 2016)	The Team Competency Matrix examines gaps in personal experience and expertise in regards with oneself and the team members. It also sheds light on what learning goals are already existent and if they support the strategic community goals.
	Reflection	Retrospective ceremonies (Derby & Larsen, 2018; Rigby, Sutherland & Noble, 2018; Ken Schwaber & Sutherland, 2020)	The purpose of the Sprint Retrospective is to plan ways to increase quality and effectiveness. The Scrum Team inspects how the last Sprint went with regards to individual's feelings and perceptions, interactions, or communication processes. Individuals discuss what went well during the Sprint, what challenges they encountered, and how those problems were (or were not) solved. The Scrum Team identifies the most helpful changes to improve its effectiveness. The most impactful improvements are addressed as soon as possible in the next sprint.
		Peer feedback (Bockelbrink, Priest & David, 2020, p. 102)	Peer feedback describes an individual's providing another one with constructive feedback in regards with performance, role, the general contribution, or any other personal development area.
		"Best of me" counselling	The "best of me" activity is a method to carry out counselling. It is typically applied by a counsellor for his counselees and helps them to understand who they are and how they think, feel, and behave. Reflections about strengths help the counselees to bring the best of who they are to what they do and discover their natural leadership styles. It also aims to improve team effectiveness.
Team Motivation & Engagement	Motivation & Happiness	360-Degree Feedback Dinner (Appelo, 2011)	The 360-Degree Feedback Dinner is a team-focused event to be carried out occasionally or frequently. It aims to learn more about oneself and the other team members while leaving room for improvements.
		Feedback Wrap (Appelo, 2011)	The Feedback Wrap is a structured approach to provide feedback in a reflective way. It can be used to provide individuals or an entire group with feedback. Thanks to its easy application, it can be easily copied by other motivated individuals. In addition, since it employs a value-centric perspective and the explicit expression of emotions, it can serve as a cultural transformation if regularily applied.
		Six rules for rewards (Appelo, 2016, p. 5)	The rewarding rules aim to strengthen meaningful recognition. According to research, individuals are not simply motivated by financial rewards. Instead, honest recognitions of colleagues or supervisors are considered to strengthen motivation and happiness, which is crucial to cultivate high-performing teams.
		Leaving bonus (Laloux, 2016, p. 175)	This method aims to keep only those individuals who have a general fit with the organisational culture. If they decide to take the money instead of continuing to work for the organisation, then the individual should leave instead of being caught in a situation that is not meant to be.
		Moving Motivators (Appelo, 2016; Deci, Olafsen & Ryan, 2017)	Based on individuals' 10 intrinsic desires, Moving Motivators aim to reflect on motivation and its influence on organisational change.
		Kudo Cards (Appelo, 2016, p. 12)	Kudo cards are a written, public, and peer-to-peer recognition across teams, departments, and organisations. They aim to break down hierarchical limitations by encouraging every individual to provide positive feedback without hesitation. They thus strengthen individual happiness and motivation and, thus, intrinsic motivation across layers of hierarchy.

		Colleague Groups (Oestereich *et al.*, 2017, p. 220)	Colleague groups is a method to cultivate motivation and happiness through self-organisation around purpose and a shift of power from leadership to groups of individuals. A colleague group is a stable group of colleagues, at least in the medium-term, who support each other confidentially in their personal and professional development, while also jointly taking on employer tasks (e.g., HR tasks).
		Business Guilds / Community of Practice (Oestereich *et al.*, 2017, p. 97)	CoPs are informal and frequently occurring meetings. They are set up in a self-organised way by the members themselves. They bring together subject matter experts and other individuals to share experiences, knowledge, and joint learning. This method aims to increase social density and social complexity of the organisation for the sake of information exchange and spreading innovation.
		Sustainable work practices: focus on individuals	Sustainability is achieved if work follows individuals' energy. Sustainable practices therefore focus on self-awareness and healthy behaviours.
		Sustainable work practices: focus on the team	Individual sustainability can only be effective if the individual is provided with a supportive environment. Therefore, the team to which the individual belongs to, needs to drive according alignment.
		Healthy Home Office Principles	Paying attention and practicing these principles is effective for our health and maintains personal productivity in the long run.
		TabOOO	Time-off is essential for greatness and supporting others is essential for time-off. This method turns "out of office" (OOO) into "out of touch" (OOT) because being physically OOO does not mean you are mentally disconnected. It thus supports personal recovery.
		Celebration grid (Appelo, 2016, p. 45)	This method aims to sharpen awareness on learning from experiments, for example as of failed good practices or as of mistakes which were successful by chance. It emphasises the role of networks and how it supports learning by exploring opportunities and running experiments. It its essence, it celebrates successful experimentation while maintaining a focus on good practices within ambidextrous organisations (those who own hierarchies for the sake of repeating good practices and exploiting successes while also relying on networks to effectively innovate).
	Team Alignment	Market of Skills	The purpose of this method is to shed light on the skills of team members in accordance with their tasks to jointly identify areas of personal mastery. It also serves as mean for alignment within the team as of being capable to support each other as of personal and professional development.
		Constellation Exercise	The constellation exercise helps team members to examine their feelings, thoughts, or perspectives in relation to their team members.
	Cross-Team Collaboration	Interaction Heat Map (Laloux, 2016, p. 165)	This method aims to support inter-team collaboration across the whole system. Once a year, each team rates the collaboration with other teams as of quality of interactions. It is visualised with a heat map which indicates what teams need to strengthen communication in order to improve collaboration. It also aims to ensure a joint understanding and to shape awareness among the members of the teams.
		*-isms in the Workplace (Laloux, 2016, p. 165)	This method serves as opportunity for individuals to indicate if the company should pay more attention to -ISM topics, e.g., racism, sexism etc. The method therefore aims to foster an inclusive workplace and fair collaboration.
		Wise Crowds (Steinhöfer, 2021; Ebers, 2022)	Wise Crowds enables participants in a small or large group to help each other immediately. Wise Group counselling can happen either with a small group of four or five people, or with many small groups at the same time. At a large meeting, the group can even be a hundred or more people strong. Individuals, called clients, can ask for help and receive it at short notice through the other members of the group. Each individual counselling session taps into the expertise and resourcefulness of everyone in the group

			simultaneously. In the process, clients gain greater clarity for their question and increase the opportunity for self-reflection and self-understanding. Wise Crowds develop our ability to ask for help. They deepen the ability to ask and advise. In the process, helping relationships develop quickly. During a Wise Crowds event, the many individual consultations lead to a cumulative learning experience, as each participant benefits from being both a client and a counsellor several times in a row. Transparency is created through Wise Crowds. Together, the group is smarter than the expert.
	Team Transparency & Trust	Journey Line	The journey line method aims to evaluate experiences of an individual as positive or negative. It also helps to make the team aware, and, by establishing this level of transparency, it aims to foster trust.
		Pack Up Your Trouble (Sutherland & Janene-Nelson, 2020)	This method aims to shed light on personal or professional challenges and to employ the crowd mind (team members) to jointly find a solution. By fostering transparency, it supports trust. It is similar to the 1-2-4-All method.
		Good or New (Laloux, 2016, p. 161)	The good or new method is meant to increase teaming and to foster an atmosphere of "we" instead of "me" or "you."
		"Thank you" day (Laloux, 2016, p. 161)	This method aims to foster recognition and gratitude. If done frequently, teams' mood and motivation might be influenced for the better.
		New Hire Welcome Wish (Laloux, 2016, p. 160)	This method aims to help teams to welcome new colleagues. By making the team members' expectations or thoughts and feelings transparent, it aims to establish a trusting relationship.
		Peer-based salary process (Laloux, 2016, p. 123)	This method aims to address individuals' salary in a transparent and fair way. It is based on a self-set salary, which includes feedback from an annually elected compensation committee.
		Fuckup Afternoon (case study 1)	The fuckup afternoon method aims to share stories around failures among individuals.
		Mentoring (Oestereich *et al.*, 2017, p. 217)	Mentoring is a process aiming to develop a less experienced colleague in regards with his personal or professional ambitions. It is led by an experienced colleague and is expected take a long period of time.
		5 Roles of Development	This method aims to provide support with a structured approach towards a value-driven development path towards personal mastery.
		Birth Map	This method helps team members to get to know each other better by showing their places of birth and by sharing stories about it.
		Circle activity log (case study 1)	This method is an aggregation and adjustment of different methods as suggested by Ostereich *et al* (2017). The method jointly aims to share relevant information about ongoing and planned activities to build awareness across the business (teams, departments, business areas, functions, circles, etc.) and, thus, across the entire community. It is assumed to support the understanding in terms of where the teams are evolving and to what extent they are loaded with work.
		Community pitch (case study 1)	The method is an adaption of the consent-moderation approach as mentioned by Oesterreich *et al.* (2017, p. 168). Its purpose is to ensure all perspectives are sufficiently covered to enable smarter decisions, which are made by the community (network) itself. This method has its roots in network theory: Structure is essential for an organisation to provide guidance, but, at the same time, it also divides. Social operating mechanisms, instead, are required to direct the various activities contained within a structure towards an objective (Chahan, 2009). These social operating mechanisms (in this context understood as decision-making processes) will manifest the values and principles of your community. They are thus considered a method of cultural evolution.

		Conversation Café (Steinhöfer, 2021; Ebers, 2022)	You can involve any number of people to understand the meaning of confusing or shocking events and thus lay the groundwork for new strategies to emerge. The Conversation Café format helps to create calm and deep conversations that are more about listening and less about debating and arguing. Sitting in a circle, with a simple set of rules and a (virtual) talking stick, small group dialogues emerge without unproductive conflict. A shared understanding of the challenge to be met emerges, and this helps the group discover entirely new ways of solving the problem.
		Social Network Webbing (Steinhöfer, 2021; Ebers, 2022)	Social Network Webbing maps informal connections and helps decide how to strengthen the network to achieve a goal. It works by showing a group of individuals what resources are hidden within the existing network of relationships and what steps are needed to use these resources. It also reveals what opportunities exist to strengthen these connections or make new ones. The comprehensive approach makes the network visible and understandable to everyone in the group at the same time. It encourages individuals to take initiative and form a stronger network rather than receiving instructions from above. Informal or loose connections, even a friend of a friend, are also integrated in a way so that it creates a strong influence on progress through them. It's done without detailed planning or large investments.
		Generative Relationship STAR (Steinhöfer, 2021; Ebers, 2022)	You can help a group of people understand how they work together. In doing so, you identify what changes they can make to improve the performance of the group. All members of the group diagnose what patterns are currently present in their relationships and decide what actions they can take together to move forward without needing help from others. The STAR Compass helps the members of the group to understand what makes their relationships more or less productive. The compass used in the initial diagnosis can later be used to help measure progress towards more productive relationships.
	Roles	Role Marketplace (Laloux, 2016, p. 122)	The role marketplace aims to facilitate trading roles across teams and throughout the organisation. It cultivates self-responsibility and engagement by bringing together the expectations of the role and interested individuals. This method supports individuals in signalling their interest for particular roles. The role marketplace helps them to offload or to pick a new role more easily.
		Role Spotlight (Oestereich *et al.*, 2017, p. 219)	This method aims to clarify the expectations of a role and to find motivated individuals to pull roles that match their personal and professional goals. It therefore aims to start selling long-term roles instead of delegating them.
Living Community	Value Focus	Empty Chair Meeting Practice (Laloux, 2016, p. 204)	The empty chair method aims to actively address an organisation's perspective by supporting a temporary switch of roles. It sharpens awareness of the impact of decisions on the strategic intent of the organisation and how they influence the underlying values.
		General Storytelling (Laloux, 2016, p. 159; Oestereich *et al.*, 2017, p. 239)	This method aims to share personal details with other individuals to establish a workplace of trust. It supports establishing meaningful relationships by making transparent who we are and what is important to us. It is based on a psychological principle that the more you are aware of others' personal journeys, the less possible it is to distrust them.
		Storytelling "Thank You Day" (Laloux, 2016, p. 161)	Once a year, management offers everyone one extra day off and an amount of money (e.g., 100€) which can be used to thank someone (e.g., someone from his family, a neighbour, stranger, colleague, whoever). There only 1 simple rule: once a participating colleague returns to work, he is expected to share what gift he had bought and how it was received.
		Values Day (Laloux, 2016, p. 153)	Values day is a method to regularly inspect actual lived values. It provides the opportunity for every member of the system to address cultural issues to the top leadership in order to seek improvement. Through introspective activities, individuals can revisit the purpose of the organisation, its values, ground rules, and how they are brought to life.
		Value retrospective (case study 3)	A regular format to raise awareness to violated values. It aims to prevent future violations by discussing the reasoning behind observed antipatterns. Every participant has the equal right to speak up. This event is less structured but focuses on members motivation and happiness.

		Value Survey (Laloux, 2016, p. 154)	This method aims to anonymously collect honest feedback across all hierarchy levels of the system.
		Cultural exploration journey (case study 2)	The method is an aggregated adaption of different methods, namely management monitor (Oestereich et al., 2017), cultural exploration days (Appelo, 2011), management by working out loud (Steinhöfer, 2021; Ebers, 2022), and further ones as mentioned by Laloux (2016). The purpose of it is to empower your cultures‘ intrinsic motivation so that individuals can experiment without being chased for charging billable hours.
		Valuing values (Case study 2)	This method is an aggregation and adjustment of consent moderation (Oestereich et al., 2017), 1-2-4-All (Steinhöfer, 2021; Ebers, 2022), and other methods as suggested by Laloux (2016). It aims to increase awareness, empathy, and listening which is assumed to generally evolve servant leaders.
		HSR: Heard seen respected (Steinhöfer, 2021; Ebers, 2022)	HSR helps to practice active listening and empathic interaction between colleagues. We encounter many situations where no immediate answer or clear solution is. Once realised and responded with empathy, the "cultural climate" improves, and trust builds between group members. HSR helps people respond in a way that does not over-promise or over-control. Unwanted patterns are noticed and interactions in the group are guided into productive paths. Participants experience what it feels like to act compassionately and the benefits this brings.
	Cultural Artifacts Focus	Culture Books (Appelo, 2011)	Culture books cover the perspective of a member of a culture which is then shared with other members of the culture. They aim to align constraints and share knowledge about existing and wished values.
		Personal Maps (Appelo, 2011)	Personal maps increase transparency, collaboration, and trust by increasing members’ knowledge about the other members. It therefore helps them to relate to each other and to share common ground.
		Identity Symbols (Appelo, 2011)	This method aims to support colleagues to make themselves comfortable and feel part of a (new) community. The feeling of belonging to a culture is crucial for the group’s identity, which shapes individual actions and vice versa. To do so, the method aims to provide a clear name and image to the culture.
		Company Breakfast (Oestereich *et al.*, 2017, p. 240)	The company breakfast is a method which aims to evolve the culture of the team.
		Event Manager (Oestereich *et al.*, 2017, p. 240)	This method aims to make a group of individuals become more familiar with each other by offering personal details and sharing fun moments.
		How to work at.. (Oestereich *et al.*, 2017, p. 242)	The “How to work at...” method owns an inherent ethnocratic character and aims to provide new colleagues with an orientation in regards with the organisation and to provide a platform to discuss cultural observations.
		Equality Champion Awards (Laloux, 2016)	These show special engagement in categories that are jointly aligned among participants. For example, think about naming “equality network winners” who support the organisation by providing others with continuous learning or helping to connect communities (e.g., kick-off disability inclusion events or events focusing on deepening the conversation about the attraction, retention, and development of individuals belonging to difference races and ethnicities).
	System Focus	Topic-Centred Support Teams (Leffingwell *et al.*, 2014; Laloux, 2016, p. 320;	This method helps self-managing teams to provide support with respect to a chosen topic.

		Leffingwell & Jemilo, 2019)	
		Agile Workspaces (Laloux, 2016; Oestereich *et al.*, 2017; Hesselberg, 2018; Leffingwell & Jemilo, 2019)	Agile workspaces aim to support new work ambitions by effectively providing cross-team collaboration and visualisation of work to unleash high team productivity.
		Google 20% Project (Vise, 2007; Brandt, 2011)	This method guarantees employees 20% free time during which they can work on their personal projects. There are only two rules: Any invention belongs to the company for the greater good; and if requested, individuals must be able to showcase how their personal project shows the cultural values or the company's strategic intent.
		InnoDays (Berndt, 2019)	Within 72 hr, a broad base of willing colleagues come together to jointly brainstorm about topics of an organisation's very interest.
Scaling Structure	Network designs	Holacracy (Robertson, 2015, 2016)	Holacracy is based on sociocracy. It is built upon a central set of rules (Holacracy constitution) that covers roles, circle structure, governance processes, operative processes, and adoption matters. Decisions are dynamically taken by volunteering roles in governance meetings (which are different from tactical meetings) following an objection-integration process to gain broad agreement and clarity.
		Sociocracy 3.0 (Bockelbrink, Priest & David, 2020, 2021)	Sociocracy 3.0 (S3) is a set of social operating mechanisms, a so-called "social technology", that aims to evolve agile and resilient organisations at any size. It fosters transparency and collaboration through flexibility, which is understood as the application of adaptive, independent, and mutually reinforcing patterns. It is based on the principles of consent, empiricism, continuous improvement, equivalence, transparency, and accountability to purposefully define key concepts (driver, domain, agreement, objection, governance, and operations) that jointly evolve an organisation.
		Spotify (Kniberg & Ivarsson, 2012; van der Wardt, 2015; Oestereich *et al.*, 2017)	The Spotify model is based on the principles of transparency and alignment, experiments and failure culture, and welcome innovation. It covers elements from the Scrum framework and operates based on the organisational entity's squads (agile teams, 8-10 people), tribes (covers squads, up to 150 people), chapters (covers tribes), and guilds (covers chapters). It combines fewer formal processes and ceremonies and relies more strongly on self-management and autonomy.
	Scaled agile framework designs	SAFe (Leffingwell *et al.*, 2014; Leffingwell & Jemilo, 2019)	Scaled Agile Framework (SAFe) is a transformational framework that is built around cross-hierarchy business value. It focuses on seven core competencies and 10 principles to enable business agility throughout the organisation.
		LeSS (Larman & Vodde, 2016)	Large Scale Scrum (LeSS) is based on the Scrum framework. Being focused on the "More with LeSS" principle, the framework focuses on understanding the root causes of issues within complex organisations to build a Scrum-scaled structure.
		Scrum@Scale (Sutherland, 2016)	The Scrum@Scale (S@S) addresses effective coordination among several Scrum teams and builds on a linear-scaling approach to organise multiple networks of Scrum teams to achieve business agility.
		Nexus (Schwaber, 2017)	The Nexus framework covers up to nine teams by aiming to minimise cross-team dependencies and reduce integration challenges.

Table 10: CM tool for agile-matured cultures (overview)

5.8 Contribution to practice

This research contributes to practice not only by driving the researcher's development but also by providing the case study participants with an exhaustive recommendation for action (see Appendix B pp. 332-336, pp. 383-386, and pp. 431-444). It also offers the wider target audience of this research (practitioners from trusted advisor organisations and management consultancies) with a comprehensive directory of methods (see Appendix A pp. 224-262).

With respect to personal development, the researcher learned that language is a complex social construct that requires time-consuming reflection. The participants and the researcher used different interpretations of terminologies such as "agile" or "community." It turned out that, despite providing context, participants owned strong socially constructed interpretations that widely differed from the perspective of the researcher. Despite being aware of individual perspectives and interpretations, the researcher did not expect that significant difference since both parties shared a professional background. In consequence, agreements for used language were necessary and meta conversations about wording and *ad hoc* joint definitions arose quite often. This experience supported the researcher's understanding of the roots of the different interpretations, which also increased his awareness for similar situations in his non-professional life. Additionally, over time, the researcher started to proactively reflect on terminology in the beginning of every focus group to increase transparency of language and to use the available time more efficiently. The researcher learned that methods like "thinking out loud" (verbalising thoughts) and the increased use of paraphrasing significantly enhanced the perceived value of discussions. Also, the researcher experienced efficient communication requiring empathy and sensitivity. During a focus group, the researcher sensed that participants felt uncomfortable due to a spontaneously arising situation. Interestingly, this feeling was shared by another participant who stepped in voluntarily to provide context with respect to the perceived situation. This experience led to two learnings: One, the ability to listen to what is non-verbally expressed is of high importance, and two, personal emotions always influence the targeted direction of a conversation. Building on this thought, the researcher realised that non-verbal expressions and emotions could help other conversation partners by indicating if statements are meant literally or if they are only used, for example, to save someone from embarrassment. They are thus a means of

transparency, which helps others to better understand if they can trust each other; consequently, they are a means of unconsciously establishing trust. Once aware of this, the researcher informally asked the participants in the next focus group how they perceived the moderation and if they trusted the researcher to maintain confidentiality as agreed upon in the non-disclosure agreements. The researcher judged these questions as a result of his personal evolution: How did they perceive the researcher? Was there a gap between what was explicitly said and what was implicitly expressed? What could the researcher learn for the sake of personal development? Interestingly, the participants confirmed the trusting relationship, which also confirmed their non-verbal behaviour to correspond with their verbal statements. This method, however, contributed to the researcher's personal development.

Regarding the recommendation for action, this research provided case study participants with a practical value contribution with respect to their own transformation journeys (see Appendix B pp. 332-336, pp. 383-386, and pp. 431-444). The researcher closely examined each case to deeply understand their current and targeted state of agile-culture maturity. He classified the cases according to either category 1 (less matured) or category 2 (matured) to establish a rationale for a meaningful choice of effective methods, which were then further adapted to cases' specific needs. The recommendation was finally enriched by guidelines of good change practices (see chapter 5.6 "Change procedure of the CM tool"). According to evidence, this individually adapted toolkit was broadly accepted. For example, participants from case study 1 immediately started to internalise the recommendations and reported a strong value contribution even at an early state of their cultural change endeavour. Later, other individuals from the broader organisation of case 1 provided similar feedback to the case study participants who, in turn, forwarded it to the researcher. Thanks to this confirmation, the researcher believes he provided practitioners from the case studies with an effective recommendation for action.

With respect to the CM tool, this research provides practitioners with transferable insights with respect to which methods are effective in matured or less-matured cultural contexts. The research thus supports practitioners by initiating and embedding their cultural change efforts. The tool is based on case evidence, scientific literature, practice literature, and the researcher's professional experience. It also covers

guidelines to ensure its proper consideration. For instance, each method from the CM tool has shown great value in its respective context so that a context-related choice is based on a method's effectiveness. So, the researcher proposes consultancies with a less-matured agile culture (category 1) should primarily use methods from the basic category whereas consultancies with a matured agile culture (category 2) should primarily consider methods from the advanced category. Thanks to this classification, consultancies know their best available choices and can focus on the most valuable sections and associated methods. The researcher also provided a change to the agile approach to guide practitioners while emphasising a people-centred and, thus, culture-driven perspective. When changes are based on an honest leadership commitment (leadership role models change), a broad base of willing volunteers across a consultancy's hierarchy (joint decision-making through honest and inclusive discussions slicing across all hierarchical levels), small-scale experiments (agile pilots), continuous inspection (feedback mechanisms), and adaptation (discussion formats), they can be meaningfully reasoned and sustainably initiated and embedded in the culture. This approach was reported to be effective by participants from case 1. They were made aware of this purposeful, inclusive, and participative change approach within their recommendation for action. Participants reported experiencing a broadened perspective including increased transparency with respect to the actual needs and challenges of the individuals. The approach also increased their awareness of the importance of reflecting on their own behaviour in emotionally challenging situations. Regarding this effectiveness, focusing on cultural aspects is acknowledged to lead to an efficient change approach. This finding can be transferred to comparable contexts: If practitioners from consultancies initiate and embed effective methods by following this inclusive and participative approach, they will also experience significant value-add. This way, the researcher provided the broader audience of practitioners from management consultancies and trusted advisor organisations with an effective and culture-centric approach.

5.9 Contribution to knowledge

In regard to the first literature gap, this study's findings suggest the importance of knowledge workers' networks within consultancies. It turned out that networks among closely working individuals served them with a psychologically safe environment, which fostered happiness, satisfaction, and (intrinsic) motivation. It also seemed to satisfy

their needs in terms of support in conducting experiments and probing ideas, which jointly enable personal mastery. Evidence shows those learnings were spread within the network, which triggered discussions and evolved new social learning processes among its members. This way, networks seem to cause mindset-changing effects. Over time, knowledge workers from a network also educate those from outside their network so that learnings are shared with a broad base of further individuals. As shared learnings are discussed, challenged, and probed, they seem to trigger new dynamics in the overarching social system. Evidence implies these dynamics are self-reinforcing so that, in consequence, mindsets of a broad base of individuals seem to be influenced, which then influences the jointly shared culture of the social system. Evidence thus implies knowledge workers' networks initiate and embed culture-evolving effects. Findings thereby emphasise the role of consultancies as part of the PFS. Based on the participants' ability to consume knowledge in a short time, to assimilate it, and to apply it in their respective contexts, they seemed to possess particularly high absorptive capacities. Because consultancies are social systems that are based on their individuals, they would thus also own high absorptive capacities, which support the self-reinforcing dynamics of their members' social-learning processes. In this way, this research broadened the knowledge base with respect to consultancies.

Findings also imply that the evolution of knowledge workers' networks is influenced by the underlying organisational design. It turned out that organisational designs seem to own an inherent influence that either supports or harms networks. In accordance with cases 1 and 3, network organisation structures like Holacracy or Sociocracy seem to support individuals in establishing links so that the density of the personal networks increases, which supports the exchange and validation of information. This seems to support knowledge workers' social-learning processes and encourages them to initiate and embed reflective discussions and actions (e.g., workshops around the value contribution of cultural experiments, meeting formats such as value retrospectives to challenge violations to social agreements), which support the evolution of the social system itself. In contrast, evidence from case study 2 indicated hierarchy-driven organisational structures (e.g., matrix organisations) hinder the evolution of knowledge workers' networks. If the rules of engagement of the formal organisations are strictly implemented, individuals seem to focus on following the rules rather than establishing links among each other. Still, evidence showed that individuals successfully connected

to an extent despite being part of an unsupportive environment mainly by relying on storytelling and feedback mechanisms to initiate and embed good practices that drove their learning. However, due to the significant influence of the formal organisation, they lacked energy and available time, which seems to significantly impact the evolution and expansion of knowledge workers' networks. Thus, overall, organisational design significantly influenced each case's cultural evolution ambitions.

5.10 Main conclusions

The main conclusion is closely linked to the contributions to knowledge. Organisational change to greater agility requires contextual decisions and adaptations, ongoing inspection of effective methods, and participative implementation with a broad base of willing volunteers to make use of the dynamics of social systems and to turn change efforts into organisational value. Knowledge workers' networks seem to stabilise change efforts by contributing bottom-up validation whereby the design of the system (organisational design) determines the organisational ability to incorporate this information. The researcher thereby emphasises the importance for an organisation to acknowledge the bottom-up validation processes. If neglected for the sake of top-down communication, links among the members of the personal networks will increase and information will not be shared beyond those individuals' networks. Since information will not be transferred from the informal organisation (networks) to the formal organisation (leadership), a shadow organisation may arise. In consequence, formal organisations will significantly lack the ability to evolve as they will lack valuable information from the individuals who are carrying out the actual work.

Reflecting on the contributions of this thesis, current and past research misses a variety of significant aspects.

Research has widely emphasised the importance of a leadership commitment for successful change (Kotter, 1990; Beck & Cowan, 2013; Denning, 2016) but has generally failed to acknowledge the importance of individual relationships (personal networks). This research provided evidence that successful change to greater agility is only partly dependent on a leadership commitment. Thanks to strong personal networks, participants from case 2 were able to gain information about cutting-edge topics, to self-organise around a specific topic of interest, and to carry out experiments

within the areas of their personal interest, which enabled them to drive personal mastery. Evidence, however, also showed that these efforts were limited to a small scale and that broader experiments were prevented by apathetic leadership. In that regard, research seems to miss a clear differentiation.

Also, research has acknowledged the effects of the organisational design on organisational change by proposing the dual operating model theory (Kotter, 2020), which describes a network's (providing ideation) being attached to a hierarchy (providing efficacy). Still, literature seems to limit the influence of an organisational design to its ability to explore and exploit. Evidence from this study shows that hierarchies that solely consume ideation input (from an attached network) will not be able to properly make use of it. Thus, past research seems to miss that both the hierarchy and the network will need to enable their members to evolve personal networks across organisational entities and operating models. For instance, if individuals are hindered from evolving personal networks in the hierarchy of an organisation, they will not be able to validate the top-down input from the network. Without validation, the individual's understanding and learning processes will be impacted, which, in turn, will impact the organisation's evolution. This finding is also supported by past research: An organisation's abilities are based on the abilities of its associated individuals (Enkel *et al.*, 2017).

Moreover, scientific literature typically proposes generic change models for any organisation because such models have implied general value in the past (Welborn, 2001; Powell, 2002; Senior & Fleming, 2006). However, it seems that these models significantly lack contextual adaptions so that even specific literature remains of less value in terms of effectiveness. Similarly, practice literature recommends cultural adaptations but focuses, in turn, solely on one distinct change model that is not challenged for its general effectiveness in the respective context. This generic model is typically rolled out in the organisation without further validation (O'Keefe, 2011; Sutherland, 2016; Leffingwell & Jemilo, 2019). Literature thus misses both a reflective approach if the underlying change model fits the formal needs and what contextual adaptations might be necessary to make it a valuable contribution in the context of a respective culture.

Research also seems to underestimate the power of the informal organisation. If (groups of) individuals are interrelated, they typically support each other and share information among each other inside and outside of their personal networks. If this information is not shared with individuals from the formal organisation (leadership), information asymmetry might arise, which significantly decreases the quality of decisions in the formal organisation. Literature on change seems not to acknowledge the importance of personal networks for their complex social-learning processes that contribute information that is of significant influence on the outcome of agile-cultural change procedures within the formal organisation. However, an exception is worth mentioning for the field of neural science and cybernetics. Kruse (2020) acknowledged the importance of such networks and suggested focusing on the creation of resonance in networks because they are part of the social system. By aiming to manage the process rather than controlling the result, the system changes itself for a greater outcome. He thereby emphasised the importance of links that also cover individuals from the formal organisation. Studies in the field of agile-culture change miss that research, though; they also do not consider organisational change within consultancies but focus instead solely on consultancies' liaising with their clients.

Considering the aforementioned literature, it is worthwhile to step back and reflect on the difference between an agile evolution and other types of organisational changes. For example, research provides rich evidence on changes targeting the formal organisation such as an organisation's target operating model that covers changes in system landscape, process map, governance, and other areas (Kroll, Boeing & Schmidt, 2017). Despite their differences with respect to the changed object (systems, processes, or roles), these types of changes are similar in the way the change is carried out. Given a change vision, the current state is analysed using fit-gap assessments, which determine a conceptual future state. This concept is then operationalised and rolled out top-down throughout the organisation. In contrast, agile evolutions are different. They are not about a tangible object like a system or a process that can be rolled out by a third party; rather, they are a mindset that needs to evolve via the individual who owns it. Acknowledging that individuals form the social system and, thus, the organisation itself, culture changes own an inherent and interdependent process of top-down communication and bottom-up validation. Agile-culture change thus requires only at its beginning formal prerequisites (organisational change

readiness to design the surrounding system) after which the focus then shifts to informal ones (cultural change readiness to initiate and embed self-reinforcing dynamics). Ultimately, some of the individuals might no longer identify themselves with the values of the system because of the significant differences from their personal values, motivations, and goals. In this context, agile evolutions can lead to profound changes that might have not been considered significant by leadership during the beginning of an agile-culture transformation.

5.11 Limitations

The research contains a number of limitations.

For one, with respect to study design, the researcher acknowledges that science challenges the concept of *information saturation* in case study research under constructivist epistemology. In accordance with research, information saturation is reached if no new themes emerge from raw data so that no new knowledge is gained (Sandelowski, 1995; Charmaz, 1995). However, judgement of new themes is ultimately based on the subjective perspective of the researcher, which influences the research (see pp. 61-62 in chapter “3.6.1.3: Selection strategies”).

Also, regarding *participant choice*, the researcher applied selective sampling, which utilizes the choice of a “reasonable initial set of criteria” (Sandelowski, Holditch-Davis & Harris (1992, p. 302) to include or exclude participants in the research endeavour. The researcher selected inclusion criteria based on a participant’s role in the organisational hierarchy and professional experience in the field of study. Despite being effective in the context of this study, this process could have employed a more encompassing set of criteria. For instance, the researcher could have asked participants if they could show they had an active role in past transformation engagements or if they could prove being intrinsically motivated. This way, the researcher could have ensured the inclusion of participants who were highly motivated and experienced. An encompassing set of inclusion criteria could have led to a more effective choice of key informants. However, the researcher is aware that abilities vary among individuals and that the nature of consulting work might lead to self-exaggeration. Considering the limitations of an extended set of criteria and the actual contribution of the chosen key informants that enabled the researcher to build

information-rich cases, he acknowledges the applied set of inclusion criteria to be efficient. The choice of cases and participants led to information saturation as mentioned by Sandelowski (2005, p. 6) and Charmaz (2006). In other words, the acquired information-rich evidence enabled the researcher to gain deep insights and meaningful findings, which confirmed the choice of this study to select only three cases and 14 participants. The researcher approached key informants by either directly contacting those from his professional network or by identifying gatekeepers. However, the researcher found that the gatekeepers tended to have limited availability, which might have impacted their efforts to identify relevant case study participants. The researcher acknowledges this issue as unavoidable; however, since the set of inclusion criteria was effective in the context of this study, the researcher believes he is able to differentiate valuable from non-valuable key informants.

Regarding limitations with respect to *participant engagement*, some participants did not show up despite their confirmation to participate. They explained their missing participation as a result of short-term client requests. The researcher expected these kinds of challenges and anticipated them by inviting a large number of participants. However, the number of cancellations was surprisingly high (e.g., Case 1 lacked 33% of confirmed participants). The researcher is aware that the dynamics of the conversation could have been affected due to the smaller number of participants. At the same time, the quality of participation was quite high. Most participants across cases showed a strong ability for self-reflection, which triggered group reflection processes. Their strong individual skills increased the group dynamic, which was highly appreciated by the researcher. The participants also showed high motivation to participate in the respective activities; everyone participated actively in the focus groups and more than two-thirds participated in the follow-up surveys, which significantly increased the required information saturation.

Regarding *credibility*, this research covers partial limitations. Per Korstjens & Moser (2018, p.122), credibility is defined as “confidence in the truth of the findings” and is established by applying prolonged engagement, persistent observation, triangulation, and member check (Lincoln & Guba, 1985; Guba, Lincoln *et al*., 1994; Sim & Sharp, 1998). Prolonged engagement aims to increase invested time so that the researcher can better understand the context, build trusting relationships, or test for

misinformation (Lincoln & Guba, 1985; Korstjens & Moser, 2018, p. 121). The researcher addressed prolonged engagement by conducting surveys that enabled case study participants to revisit questions from the focus group and add, correct, or confirm their responses. However, surveys only covered one point in time, which limited the effectiveness of prolonged engagement. If this research had not used a case study methodology but instead an action research one, it could have engaged case study participants even longer in the participative and reflective research process. This could have not only led to deeper learnings and even more enriched findings but also increased the confidence in the truth of the findings. In other words, it would have increased credibility. However, action research is designed as longitudinal study, so it requires a significant amount of time. Since the time-consuming process of organisational change takes too long for this small window of opportunity, the researcher would not have been able to gain meaningful insights that enable meaningful change. Also, triangulation aims to ensure finding validity and covers in the context of this research a variation of data sources, research methods, and investigator triangulation (Patton, 1999). To ensure confidence in the truth of the findings, the researcher applied data source triangulation and method triangulation. Data collection methods covered case studies and surveys. Surveys covered open-ended questions that aimed not only to validate questions from the focus groups but also to introduce new questions. In that way, this research validated its findings. However, this study did not apply investigator triangulation, which is an important limitation to credibility because constructivist epistemology owns, by nature, a strong researcher bias. Since the researcher's perspective evolved through his childhood, education, and career, the investigator triangulation could have enriched the meaningfulness of findings thanks to a different, subjective interpretation. Persistent observation describes the researcher's activity of re-evaluating the research characteristics and elements to ensure that the most relevant was chosen for further research. This research applied persistent observation by iteratively accessing transcripts from focus groups, responses from surveys, and field notes from the researcher notebook. For instance, the researcher approached data from cases 1 and 2 while researching case 3. This strategy was an important way to judge information saturation. In other words, revisiting data and analyses enabled the researcher to ensure that no new themes arose from the raw data and, thus, that information saturation was reached. Next, member check describes an activity in which the researcher provided the participants with the

recorded evidence so that they could reconfirm its accuracy. This research performed only minimal member check. Participants were provided with surveys that requested feedback to verify the researcher's correct understanding. However, this research provided participants with neither the transcript from the focus groups nor the data collected during the surveys. Because they were only presented with a general request for feedback, participants did not have the opportunity to correct the researcher's understanding in detail. This could have revealed misunderstandings or details enriching evidence that could have further increased the credibility of the research.

With respect to *psychological knowledge*, the researcher built a solid understanding of psychological safety, mindsets, and culture. During this study, the researcher acquired fundamental knowledge to inductively draw from these concepts for the sake of the research topic. Because this study was designed as part of a professional doctorate program and written in a limited amount of time, the researcher needed to judge the depth of learning required. As research has suggested, a basic understanding was sufficient. However, if the researcher had learned more about the developmental psychology of human beings, it may have led to a deeper understanding of the evolution of an individual's identity, its interdependent correlation (see the concept of "group identity"), and how individuals subjectively construct reality. Such understanding may have enabled the researcher to uncover potentially overlooked cultural artifacts and their contextual interpretations.

5.12 Implications

Still, this research fills gaps in the current research in the field of organisational change to greater agility and provides further research implications. For one, evidence implies that organisational design seems to be an influencing factor for cultural evolution; for example, evidence indicates its influence on personal mastery (level of the individual) and organisational learning (level of the organisation). It further implies that this phenomenon is not dependent on the size of the social system. It seems that a resilient system needs to own a network structure to enable strong personal connections, trust, information sharing, and knowledge transfer and to dynamically build cross-functional teams to solve arising challenges. And it seems to further need a hierarchical structure including specialisation of individuals to maintain basic operations driven by empowered individuals who work in a focused way. Currently, evidence does not show

to what extent a system should own a network component and a hierarchy component or how social-operating mechanisms can leverage benefits of a given organisational design. Further research may clarify how a culture-driven network organisational design might look given a particular size of a social system and if a design can be correlated to distinct social-operating mechanisms.

5.13 Outlook in this area of research

The next steps in this field of research could cover a longitudinal study that investigates the correlation of cultural evolution with organisational design in the PFS. In this respect, research could challenge the dual operating model and validate its efficiency. A further study might research how social-operating mechanisms can be employed to overcome the limitations of structure-determining challenges, or, in other words, how social-operating mechanisms increase the efficiency of organisational change to agile approaches.

Once further research is conducted on organisational change in consultancies, the contributions to knowledge might be leveraged by other types of businesses in the PFS. For instance, these contributions could be utilised by accounting firms or technology leaders (biotech, R&D, etc.). To do so, a researcher would have to thoroughly discuss how culture is determined and shaped by the underlying business and if there are influencing limitations. It would be also required to investigate to what extent insights might be transferable or generalisable and how they could be leveraged to contribute to research and practice.

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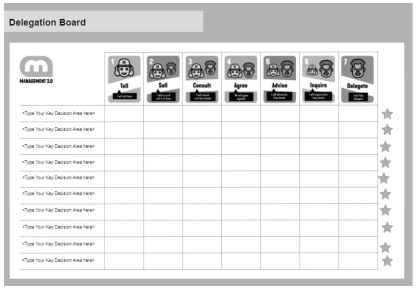
Appendix A: Culture-Method-Tool

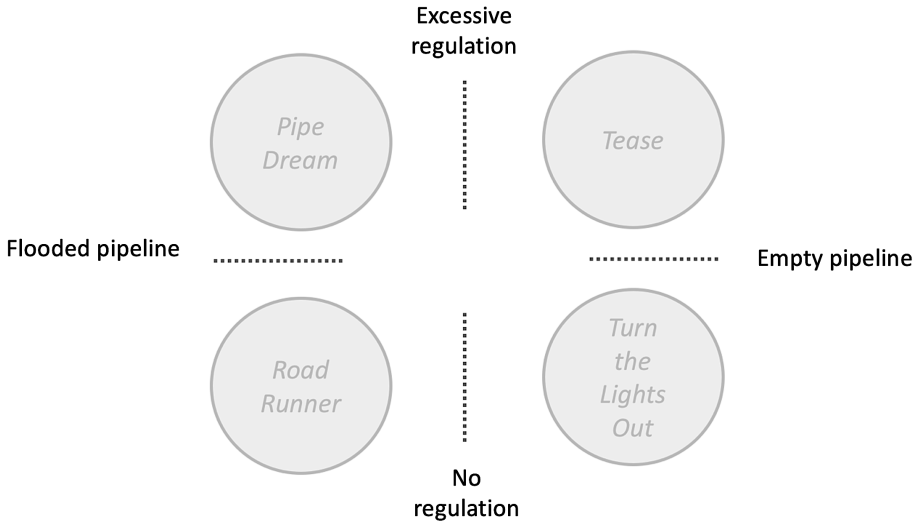
Basic section

Focus section for agile less matured cultures

Category	Subcategory		Method Name	Method Description
Management & Leadership	Alignment		Delegation Poker (Appelo, 2011)	Delegation Poker aims to establish a joint understanding who is responsible to what (it can be easily transferred to a RACI or Delegation Board). It fosters self-organisation by providing a controlled environment for decision-making. *Be aware* • There are plenty shades of decisions between command and control and pure sociocracy – delegation is not binary. • It is a gradual process that needs to evolve over time and adjusted to its respective context be as valuable as possible. For example, mind the 7 levels of integration by considering them as being adjustable to match best your context:  *Figure 18: 7 levels of delegation* (Appelo, 2011) *Prerequisites* 1. Find a group of 3-7 individuals. 2. Jointly prepare a list of standard decisions and exceptional decisions to which a delegation policy is felt required. 3. Everyone is explained the 7 delegation levels. *Procedure* 1. Everyone chooses a situation and read it out loud. Alternatively, a personal story about a recent situation can be shared. 2. Everyone then privately chooses 1 delegation level to outline what level of delegation he would have chosen given this particular situation. 3. If everyone chose a delegation level, then the choices are shared with the group. 4. Everyone earns points in accordance with the level of delegation (e.g., 5 points for level 5). Attention: the individual with the highest points who is belonging to the minority do not earn any points (“highest minority rule”). 5. The individuals with the lowest and highest choices jointly discuss to understand the reasoning of the others choices (e.g., delegation level 1 and 7). 6. The group then jointly decides on the delegation level for that particular situation and document it accordingly.
			Delegation Board (Appelo, 2011)	Delegation Board can be setup either physically (e.g., whiteboard drawing, flipchart paper) or virtually (e.g., Miro board) and conveys areas of key decisions and the respective level of delegation:

				 *Figure 19: delegation board* (Appelo, 2011) *Prerequisites* 1. Results from Delegation Poker or a joint discussion *Procedure* 1. Outline the general authority for each key decision area (horizontal dimension) by marking the respective delegation level 2. Add an additional note to clearly state how encompassing this authority is expected to be.
			OKRs (Doerr, 2018; Hoerger, 2020)	Objectives and Key Results (OKR) aim to establish alignment across hierarchy. Every quarter, a culture chooses up to 5 objectives with up to 4 key results each. *Prerequisites* • Define a long-term vision for the company or community that serves as north star of the joint efforts. • Jointly decide how OKRs can be shared across the culture so that everyone has always access to them. Transparency of the results is key. *Procedure* 1. Groups of individuals (e.g., departments or teams; not the managing individuals who worked out the overarching vision) define their objectives in accordance with the overarching vision while aiming for an 80% shot. More precisely, objectives are defined very ambitious so that achieving 80% is defined as success. 2. The same groups of individuals then define key objectives which describe how exactly their belonging objective will be fulfilled. Individuals typically define them in a S.M.A.R.T. (Doran, 1981)way.
			Value-based goals (summarised from context-specific recommendation for action of case 1)	Value-based goals is a contextually adapted method that combines different other methods and aims to challenge existing goals in terms of their value contribution to the being of the company (see “Purpose-2-Practice” and “1-2-4-All” as suggested by (Humbert, 2003; Steinhöfer, 2021; Ebers, 2022)). It provides a procedure to ask „what for“ to purposefully determine the „why“; which is to provide a purposeful justified rationale. It thus provides value in an environment shaped by high workload as of goal setting. *Prerequisites* • A broad base of willing volunteers is invited to come together whereby individuals who are formally empowered to take decisions are mandatory to take part in person. • Participants prepare an encompassing list of all activities they are currently facing. The list should be made available to the entirety of individuals of the company. This serves the purpose to offer everyone the opportunity to check it and to judge on the value of his or her participation. • Breakout rooms (either physical or virtual) should be prepared

				Procedure 1. All goals are shown and briefly explained by volunteering participants. At this stage, only clarification questions are allowed (1 question per individual) which is then shortly answered. Avoid starting discussions at this point. 2. Participants voluntarily build groups of 4 people and assign themselves to 1 goal. They then drop to their breakout rooms. 3. Everyone starts brainwriting by reflecting on the chosen goal in regard with the following topics: I. Purpose i. "What for": What value is the goal contributing to? How does this goal contribute to the purpose of the being of the company? ii. "Why": Why is the goal important to me? Why is the goal important to the other individuals? II. Principles: What rules must absolutely be obeyed in pursuit the purpose? III. Participants: What SME must contribute or included to achieve it? How to ensure that this SME is available? IV. Structure i. "Macro structure": How can we as a community provide the required time (besides project work, community work, etc.) to make the goal achievable? ii. "Microstructure": How do we manage overtime as of chasing this goal? How do we manage well-being despite of overtime? V. Practices: What are the tangible outputs and outcomes? How do we judge if the goal has been successfully achieved? VI. Priority: Is the achievement of this goal crucial to keep operations up and running and to evolve our culture towards the targeted direction? What is the goal priority as of MoSCoW? 4. Everyone in the breakout room now shares his thoughts on steps 1-5 within the small group while paying special attention to purpose and priority. The group then jointly examines and clarifies similarities and differences to build a joint understanding. Once finished, the group votes on the following questions: I. As a community, do we really need to do that goal? II. If not, can it be cancelled? III. If not, should it be postponed? If the small group does not success to consent, they note their discussion result to provide a reasoned justification on to all other participants later. Such as dissent is crucial and should not be avoided as of avoiding conflicts. It helps to clarify the goal and to challenge its pure nature of being – this insight is valuable for the other participants. 5. The teams come back from the breakout rooms and meet in the original meeting room. From each breakout team, a voluntary briefly outlines the discussion results to (dis-) continue / start the chosen goal. All participants then vote on the following questions: I. As a community, do we really need to do that goal? II. If not, can it be cancelled? III. If not, should it be postponed? After documenting the results in a way that it is transparent to the broader community, the next goal is presented and voted. 6. After all goals are sorted according to their jointly decided priority, participants leave a confidence vote if they assume the number of goals are achievable. In case of low confidence, the process is iteratively repeated.
	Raising Awareness		TRIZ (Steinhöfer, 2021; Ebers, 2022)	TRIZ creates new perspectives on current situations with the aim to develop innovative solutions for the greater. It applies principles of creative destruction and abolishment of success-hindering factors. The question "What do we have to stop doing to achieve our most important goal?" causes a serious but at the same time fun and courageous conversations. Since laughter is often involved, taboo topics can be uncovered and tackled in a relaxed atmosphere. This kind of "creative destruction" creates the opportunity for renewal as innovation fill the vacuum that has been created. *Prerequisites* • Approach TRIZ with an attitude of serious fun. • Do not accept ideas for new or additional things: suggestions should stop activities or behaviours, not start new ones. It is worth waiting for.

				• Start with a VERY undesirable outcome and have your suggestion validated by the group. • Take time with groups to look at the similarities with what they are currently already doing and explore why this is harmful. • Involve the people who will be involved in stopping the activities and ask "Who else needs to be involved?" • Make sure there are real decisions about what to stop! Actions can be numbered 1,2,3... or recorded as "I will stop..." or "We will stop...". *Procedure* 1. A voluntary presents a bad outcome of a situation, project, or initiative. 2. Every participant starts by silently reflecting on the below-mentioned questions (brainwriting). 3. The answers are then shared with the group and discussed to come up with a consolidated list of activities. o Round 1: Answer the question “How can I reliably cause the undesired outcome?”. o Round 2: Answer the question “Is there anything we do which is similar to what is shown on my list of activities?”. o Round 3: Answer the question “What can we do to immediately stop achieving the undesired outcome? What is our very first action?”
			Critical Uncertainties (Steinhöfer, 2021; Ebers, 2022)	Critical Uncertainties aim to develop strategies to deal with uncertainties in organisations. It validates existing strategies by revealing assumptions and uncertainties and increases the ability of individuals to adapt quickly and develop their own resilience to disruption. This, in turn, also affects organisations approach to disruption while its strategies are accordingly challenged by distinguishing between robust and safeguarding ones. *Procedure* 1. Ask participants to make a list of uncertainties by asking: "What factors in our working environment are impossible to predict or to control? 2. Prioritise the most critical factors by asking: "What factors threaten our ability to act successfully?" 3. Based on the group's history and experience, select the two most critical and most uncertain factors. Create a grid and draw criticality on the X axis and uncertainty on the Y axis while acknowledging the one end of the continuum “less” and the other “more”. This creates four quadrants as the example implies:  *Figure 20: Critical uncertainties matrix (Steinhöfer, 2021; Ebers, 2022)*

4. All participants then decide on what quadrant they want to focus on and find themselves together in working groups together (1 group per quadrant makes 4 working groups in total).
5. Each of the 4 groups looks for a creative name for one of the quadrants and comes up with an example scenario to go with it.
6. Afterwards, the four groups briefly share their scenarios.
7. Each of the 4 groups works out 3 strategies that will help them to be successful in the scenario they described earlier.
8. The four groups then briefly share their strategies.
9. All participants review the results together to determine which strategies are robust (strategies that can succeed in multiple quadrants) and which strategies are hedging (strategies that succeed in only one scenario but protect the group from plausible misfortune). The balance of strategies can be successful in only one scenario.
10. Each small group debriefs with a reflective session such as a retrospective (see What, So What, Now What?).
11. The four groups share the findings of their debriefing and decide on first steps based on the findings from Now What.

Ecocycle Planning (Zimmerman, Lindberg & Plsek, 2013; Steinhöfer, 2021; Ebers, 2022)

With the help of Ecocycle, actions can be viewed, prioritised, and planned together and at the same time with all those involved in the activities, instead of, as is usually the case, only with a small group behind closed doors. In addition, it becomes clear how one's own activities fit into the overall picture of all activities. It invites managers and decision-makers to focus on the phases of creative destruction and renewal in addition to the classic topics such as growth or efficiency. The Ecocycle enables agility, resilience, and sustained performance to be driven by considering all four phases of development in the planning process.

Prerequisites

- Participants are provided with the Ecocycle worksheet:

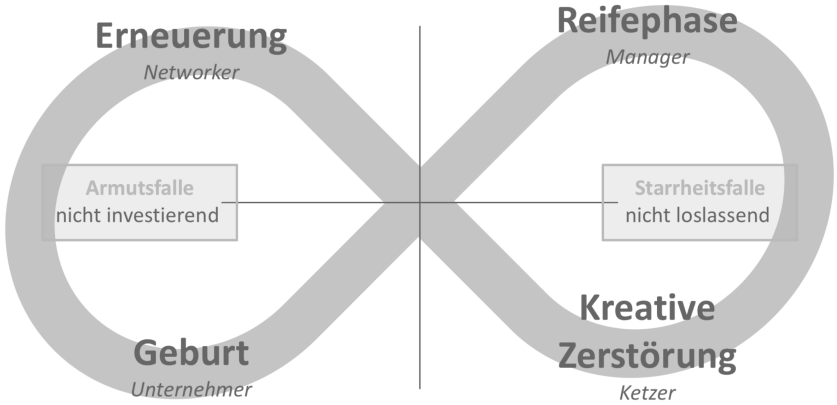


Figure 21: Ecocycle planning visualisation (Appelo, 2011)

Procedure

1. Each participant creates his individual list of activities: "For your work group (e.g., department, function or whole company), create a list of all the activities (projects, initiatives) you spend time on".
2. In groups of two, participants place the activities on the Ecocycle worksheet.
3. Participants will now form groups of four to finalise the placement on the Ecocycle together worksheet.
4. Each activity is written on post-its (see for example Sticky Notes on a Miro Board). To create a joint picture, each group in turn places their activities on the large Ecocycle image on the (digital) whiteboard.
5. All groups now take a step back to let the resulting pattern sink in. They now focus on those activities where there is consensus about the placement. The answer the question: "Which activities do we need to creatively destroy or stop pursuing? Which activities do we need to expand or start pursuing?".

				6. Small group work: for each activity to stop pursuing (activities in the rigidity trap), put up a first action point. 7. Small group work: For each activity that should be started or that needs more resources (activities in the poverty trap), put up a first action point. 8. Now the groups take care of all those activities for which there is no consensus. In a short discussion round, the reasons for the dissent should be revealed. If possible, create initial action points to deal with these activities.
Psychological Safety	Transparency and Trust		Acting as a Role Model (Edmondson, 1999; Edmondson, Kramer & Cook, 2004; Sinek, 2017; Solga, 2021)	In a hierarchical system, leaders need to take a proactive role by leading the change they expect from other individuals to follow as well. By role modelling behaviour, leaders create "value orientation and commitment to the purpose and values of the organization (»normative alignment«). Here, acting as a role model is crucially important and making fairness tangible in all its aspects is key (from inquiring about others' expectations to taking decisions in a well-balanced and principled way to creating transparency to treating people with respect)" (Solga, 2021, p. 11). In day-to-day activities, it describes leaders to 1. Frame work as a learning problem not an execution problem to trigger the evolution of a growth mindset (it enables individuals to openly voice concerns and to learn from failures). 2. Acknowledging own ability to fail and to model own vulnerability in front of the team by admitting mistakes or by sharing stories of failures. Edmondson (1999) also mentions the power of apologise for not having made it safe enough for individuals to approach them about concerns in the past. 3. Being curious by asking interested questions and by encouraging diverse points of view. For example, if being approached by an individual who faced problems, start by separating the individual from the problem. Then invite him on a joint exploration for the greater (Edmondson, Kramer and Cook, 2004; Sinek, 2009).

			Leadership & Ideation Board (Oestereich *et al.*, 2017, p. 200)	The Leadership and Ideation Board method serves the purpose of significantly increasing cross-hierarchy transparency as of management-relevant activities. These activities might be decisions or ideas. The board also outlines the status of every item.
				
				Be aware
				• Ensure that the board to be assigned to only one single management function, area, department, or circle.
				• Ensure to cover only activities of overarching importance (=ideas for change or management decisions).
				• On the board, 1 item should cover only 1 activity.
				• Each item should outline the
				  ○ what" (purpose, goal)
				  ○ "decision taker" (role, individual, or organisation structure such as a circle)
				  ○ "decision process" (consent, consence, etc.)
				  ○ "status" and date of revisiting this activity
				• Changes to the board are only jointly taken as a result of the respective meeting.
				
				Prerequisites
				• Create either a physical or virtual Kanban board whose columns address the purpose of the board (e.g., an ideation board might outline the columns "new idea" to document brainstormed ideas, "prepared", "in progress", "work done, awaiting reflection", "reflection done", "implemented").
				• A decision or idea log should be created in advance to accelerate discussions.
				• All affected individuals are invited to this frequently occurring meeting.
				
				Procedure
				• Participants jointly discuss on the activities.
				• All items are then put on the board for documentation purposes.
				• Once the meeting is finished, results is shared in the entire company to raise awareness to the mentioned topics and address a broad base of volunteers.

			Participative Leadership (Oestereich *et al.*, 2017, p. 286)	This methods fosters an approach to leadership that includes the opinion of the team: • Team lead (TL) is named from management. • TL follows team decisions if the TL can hold accountability for it.

				• TL owns the delivery goals of the team. • TL judges on team members performance while considering the opinion of the team. • TL defines team goals and facilitates their completion. • TL takes care of administrative impediments. • TL takes care of conflicts and personal issues between team members.
			Collegial Leadership (Oestereich *et al.*, 2017, p. 287)	An approach to leadership as shaped by the team itself: • Team self-responsibly creates roles and links it to an individual by following a consence-based team decision process. • The team is hold accountable for the completion of its committed delivery goals. • Team members provide and receive feedback from the other team members (intra-team), potentially also including other teams (inter-team). • Team and role owner work based on jointly defined and committed team agreements. • Conflicts are being moderated by coaches who do not belong to the team.
	Clarity & Motivation		Lego Serious Play (Roos and Victor, 1999, 2018)	Serious Play is a method to enable hierarchical decision-takers to visualise, describe, and challenge their perspective on their business model, organisation change, or other high-impact challenges. *Be aware* • Serious Play focuses on building technical and metaphorical skills. • It also aims to train storytelling and further communication methods, such as auditory, visual, and kinaesthetic communication. *Procedure* 1. The facilitator presents participants the task. This must not have an obvious or "correct" answer. 2. Participants build their response with specially assembled LEGO bricks. As they build, they attribute meaning to their models and develop a story. All individuals are expected to participate. 3. All participants share their stories and interpretations with each other. They listen to each other's stories. The facilitator steers the process and awakens curiosity for deeper meanings. 4. The facilitator encourages participants to reflect on what they have heard and seen in the models.

Table 11: CM tool for less agile-matured cultures (complete)

Advanced section

Focus section for agile matured cultures

Category	Subcategory	Method Name	Method Description
Team Empowerment	Decision-Making	Majority topic choice (Oestereich *et al.*, 2017, p. 197)	This method is a democratic majority voting process that aims to identify a topic which has the highest voting. *Procedure* 1. The facilitator ensures to jointly clarify the voting conditions, namely a. What needs to be the minimum number of participants/votes to accept the voting? b. How to ensure the chosen topic is equipped with the necessary resources (time, budget, staff)? c. Should pro and contra arguments be jointly gathered? d. Should the voting be private or public? e. Should the results be made transparent to the group in their entirety or should only the winning topic be named? f. How should the result be documented so that it is accessible to individuals with a respective information need? 2. The facilitator then invites every topic owner to pitch his topic while allowing brief clarification questions to ensure a joint understanding. 3. The facilitator then provides access to the virtual or physical voting tool. 4. He then shares and documents the results as agreed upfront.
		Consensus (Oestereich *et al.*, 2017, p. 160)	The consensus decision process focuses on quickly finding a solution by conducting a majority voting by less considering minority needs. *Procedure* 1. The facilitator introduces the ground rules in terms of timekeeping (how much time for what step) and moderation (excluding himself from contribution). 2. An individual formulates his decision need by providing information about the context and the value-add. He answers potentially upcoming clarification questions to ensure a joint understanding. 3. The facilitator then asks to everyone to leave a voting (support, indifferent, no support), while potentially allowing critical vetoes (e.g., non-addressed business risks or other highly critical situations with a high likelihood to occur). 4. As based on the result, the decision is either accepted, discarded, or changed. If being changed, the process is iterated from step 3.
		Consent (Oestereich *et al.*, 2017, p. 161)	The consent decision process focuses on objections and aims to minimise them by integrating them through a moderated and iterated discussion process. *Prerequisites* • An individual feels the need for a decision. • A facilitator is named upfront. *Procedure* 1. The facilitator introduces the ground rules: a. Everyone is allowed to raise objections against the presented decision proposal. Those who raised it are however expected to contribute to its solution. b. The objection integration is only successful if no further objections of an agreed level are existent during the resistance poll. c. The alternative to the consent decision is always the as-is situation. 2. An individual formulates his decision need by providing information about the context and the value-add. He answers potentially upcoming clarification questions to ensure a joint understanding. 3. The group of participants jointly brainstorms a potential solution. 4. The facilitator conducts a resistance poll against the solution a. Everyone is asked to show if he has concerns: “I have a concern, but I do not want to hinder that decision” → “minor objection” → “major objection” → “veto” b. Every veto and major concern are then addressed whereas the group tries to find a suitable solution for it. 5. (Optional) If no solution is found, the decision proposal is either discarded or changed. If changed, the process is iterated from step 4.

	The Advice process (Laloux, 2016, p. 100)	The advice process aims to enable everyone to self-responsibly take decisions by seeking advice upfront from subject matter experts (SME) or named roles. It significantly accelerates decision-making by allowing elements of self-organisation. *Prerequisites* • Management needs to agree what decisions individuals are allowed to take, including the respective context ("guardrails"). • Agreement may cover the individuals, roles, or organisation units that need to be approached for advice prior to taking a decision as well as how the taken decision is made transparent to the broader community (e.g., Wiki page). *Procedure* 1. Management releases broad communication which outlines to allow self-responsibly taken decisions within the defined guardrails. 2. Every individual who requires a decision seeks advice at named SMEs or roles. The broader the decision, the broader the cast of approached SMEs or roles (e.g., including the CEO or board of directors if necessary). The individual is thereby under no obligation to integrate every piece of advice, but every advice must be seriously considered by the individual to be able to take informed decisions. 3. The individual then takes the decision and documents it as agreed upfront with the management to foster transparency and alignment.
	Decision leader (Case 3)	This method is a combination of „The Decision Matrix" (Appelo, 2011), „The Advice-Process" (Oestereich *et al.*, 2017), „Consent-Driven Decisions" (Oestereich *et al.*, 2017), and other methods. This methodological aggregation serves the purpose of making transparent what decisions are leadership-driven and facilitator-driven while being based on the strong personal network you already evolved. *Procedure* 1. Discuss typical types of decisions: Jointly discuss what kinds of decisions are typically taken in the community. List all regularly arising decisions ("standard decisions") and decide how you want to generally take care of those as one community. Be as exact as possible by defining them. Once finished, decide how you want to handle exceptional decisions like those of high urgency and importance that arise on very short notice ("exceptional decisions"). 2. Add the "peer-advice process" to enable trusted member-driven decisions. The advice process generally describes that any volunteer can self-responsibly take decisions after seeking advice from (1) everyone who will be affected by the decision of from (2) individuals with subject matter expertise in the topic. This process does not aim to cover everyone's perspective and whish. It is used to gather and understand relevant perspectives in order to accessing collective wisdom & to choose the best course of action. No one who is asked for advice can raise a veto or take over the decision. It is simply and solely an advice. This adapted process thereby employs 2 willing volunteers who jointly take the role of the advice seeker – as a tandem. Thus, it expands the concept of shared wisdom while being based on the trust as of the personal connections. Once the tandem has asked for advice, it jointly takes a decision and ensures that everyone is aware about it (e.g., via a Wiki page to which everyone has access). To do so, apply the following approach: a. In your community, jointly discuss what decisions should be taken with the advice process. Ask for explicit leadership approval and discuss consequences if granted but revoked later in the decision process. b. Jointly discuss if you prefer chosen tandems or dynamically formed tandems. c. Jointly discuss with what tool/at what place taken decisions should be shared with the community. 3. Add the "consent process" for member-driven decisions. A consent is different from a consensus. This decision process allows a decision-taker to present the context, the benefits, and the impact of a to-be taken decision. It is not necessary that everyone agrees but it provides the others with the opportunity to raise reasoned and justified objections. It is less time-consuming than the advice process and aims to cover other perspectives for the sake of smart decisions. To add it, apply the following approach: a. The decision take invites for either a dedicated decision-meeting or for an existing meeting which can be purpose-wise re-used. The decision taker invites either those people with subject matter expertise or those who are deemed as of owning valuable perspectives. The decision taker briefly explains to the attendees: i. What is the decision about? ii. What is the context of the decision? iii. Why is it crucial to be taken? iv. What are the benefits and risks? v. How is the decision assumed to be taken by the decision taker? b. All attendees then can briefly think about it to react in the following ways: i. They show "thumbs up" to indicate being okay with it ii. They raise their pointing finger to indicate minor objections iii. They raise their fist to indicate major objections iv. They raise their hand to indicate a blocker

a. The decision taker then addresses the people who raised a blocker or major objections and ask them for their reasoning. These people have then the opportunity to reason their statements in 2-3 sentences.
b. Each of these people can be asked for clarification questions by the decision taker (max 2 clarification questions).
c. IF the blocker or major objection can be RESOLVED as of question, the decision is considered as approved by the community.
d. IF they can be NOT RESOLVED, the decision has to be either adapted or cancelled.
e. In case the decision is adapted, the process is iterated by step "b".

4. Document the results. Document all your decision types and discussion results accordingly in your "Team Decision Matrix" as suggested by (Appelo, 2011):

	Leadership	Members *Peer-Advice Process*	Members *Consent Decision Process*
Hire & Fire			
Budget decisions above X.XXX€			
Budget decisions below X.XXX€			
Provide approval to start and experiment			
Provide approval to start other initiatives			
Change of the Team Decision Matrix after joint discussion			
...			

Figure 22: Decision matrix (Appelo, 2011)

5. Share learnings after *each* taken decision. Once the decision is taken, learnings are shared in a respective setting, namely either in a new created decision learning meeting format or by re-using an existing meeting format (e.g., Bizz Meeting, agile Coaching Session, etc.). The feedback should thereby cover:
   a. What was the outcome (valued-add) and impact (influence on culture, other decisions, etc.) of the decision?
   b. How was the role as "decision-taker" or "tandem decision-taker" respected or not respected by the others (facilitators, leadership)?
   c. How did it feel incorporating this role?
   d. What did you learn and what do you want to improve?

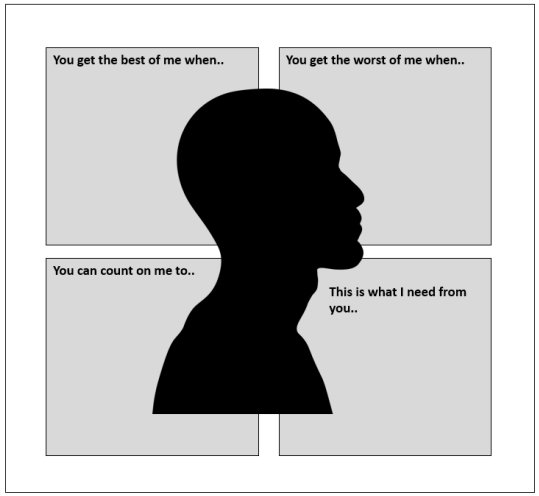
   In case the role was not accepted as agreed by the members or leadership as committed, the decision taker is expected to proactively provide feedback (either in the group or directly to the respective person) by applying the feedback wrap approach (Appelo, 2011):
   a. Start by offering context to increase the other person's understanding and appreciation of your situation. Example: "I need to tell you what I sensed during the last decision."
   b. You then offer observations – without finger-pointing – of specific examples and instances. Example: "I recognized that my decision was significantly influenced by your "proposition" despite I only seeked advice."
   c. You let the recipient know how you feel about the facts, creating awareness of the impact of the facts on you, without blaming anyone in particular. Example: "I felt a bit disappointed because I we had agreed on the power of the decision-taker and the process to be followed."
   d. You explain your needs, because the receiver just may not realize what is important to you. Example: "It is important to me stick to what is agreed."
   e. You allow the person to figure out what needs to be done to close the gap between needs and facts and you offer a suggestion or two to move things forward. Example: "I hope we can fix that. If so, I will be happy to try to again to take decisions according to the process.

	Self-Organisation	Direct communication & gaining agreement (Laloux, 2016, p. 113)	This method enables a team to self-responsibly clarify any disagreement, e.g., an interpersonal conflict, breach of values, or similar. *Procedure* 1. The individual who feels the need for clarification approaches the other individual(s) who he is in conflict with. 2. Both parties sit together and try to sort privately. The initiating individual is thereby expected to make a clear solution proposal (not a judgement) to which the other individual(s) can respond with a "yes", "no", or counterproposal. 3. If both parties cannot identify a solution suitable to both of them, they nominate another colleague as "mediator". While the mediator cannot impose a solution, he is expected to support both parties in their process of solutioning. 4. In case of failed mediation, both parties request a panel of subject matter-related colleagues. Similar to the mediator role, the panel is expected to help shaping a solution by carefully listening whereby it cannot force a solution. 5. In case of another failure, the leading level subject matter expert(s) such as a CxO can be called into the panel to increase the panels' moral weight.
		Purposeful Resource Allocation (Oestereich *et al.*, 2017, p. 208)	As resources are limited by nature, every system requires an effective and efficient resource allocation mechanism. Research offers guiding principles and a group-based decision process to ensure that the system is supported in the best possible way. *Prerequisites* • Emphasise a company-wide agreement that covers, for instance: a. Local responsibility. Every circle, role, and colleague are self-responsible to manage available resources. An overriding need for coordination only arises from the fact that resources are limited overall and must be negotiated among the members of the system. b. Fixed superior responsibility. It needs to be clearly outlined who assigns the decision on resource allocation. It might be limited to a role, circle, or – in the case of the "Purposeful Resource Allocation" – a plenum covering the leading individuals of the system. *Procedure* 1. Purpose-based focus. In order to make members to align themselves with the interests of their organisation, the purpose of the organisation must be clear to them (e.g., by providing 2 to 3 focus points of organisations' strategic intend). These points can be used to set the content and strategic focus points and, most importantly, to clarify the purpose. The clearer the focus points are, the more better as colleagues will be more efficiently guided. 2. Ideation. The purpose of the ideation phase is to generate as large and broad a set of ideas (divergence phase). To start with, before colleagues generate ideas, basic information can be shared (e.g., helpful techniques and attitudes such as interviewing and prototyping techniques, Design Thinking practices, etc.). All ideas are then presented to a plenary. All colleagues then jointly decide in a transparent way who supports what idea. Ideas that do not find any or enough supporters are eliminated (convergence). 3. Prototyping. The remaining ideas are now implemented by teams creating prototypes. Typically, the features with the greatest practical or demonstrative benefit are developed in a short time so that they can be demonstrated and tested. At the end of this phase, all prototypes are presented and evaluated by the plenary, a jury, or both to further reduce the set of possible projects. Winners may also be selected for different categories. 4. Resource allocation decision. In this final phase, the remaining project ideas are evaluated once again according to how well they fit with organisations' strategy or the initially introduced focus points. This approach serves the purpose to select only those prototypes that will be awarded with the contract, i.e. company resources for completion and implementation. Regardless of the quality and fit of the remaining idea, at least one project should receive resources and should be pursued in the end. Otherwise, the whole competition would lack credibility.
		Effectuation (Faschingbauer, 2017; Oestereich *et al.*, 2017, p. 295)	Effectuation describes how experts (entrepreneurs) act under the uncertainty of the changing environment (VUCA). Similar to nature's evolution processes, it does not focus on making long-term plans but to come up with a plan for the current situation (Harford, 2012). Effectuation shows various possibilities that enable a company to be successful with existing resources in a future that cannot be planned but shaped. In its essence, it describes 4 basic principles: 1. *Means orientation*. Start to identify existing means by asking "Who are we?", "What do we currently know?", "Who do we know?". The provided answers help to find out more about yourselves, the inherent motivation, and the opportunities with respect to the planned project.

			2. *Affordable loss of resources*. Time, budget, and people are crucial for any endeavour. Prior starting, it must be clear how much can be invested – and potentially lost – without setting the entire business at risk. Be aware that the maximum possible amount of lost resources identifies of the very bottom line of potential risks. 3. *Accept coincidences and surprises as opportunities*. Evaluate surprising situations as of their potential of improvement. Keep asking "Now that we are being faced with it, how can we use it to make our project work?", "What additional means does this situation provide us with?", and "What new goals can we achieved given this new situation?". 4. *Build agreements and partnerships (meaning-driven networks)*. Once motivation, means, and affordable losses are examined, start building professional networks based on the underlying motivation. Liaise with partners to further shape the project and identify those who are matches best in regards with their motivation, means, and affordable loss. By building networks around a motivation-driven project, uncertainty is significantly reduced.
		Corporate Huddles (Appelo, 2011)	The corporate huddles methods aim to quickly come to a horizontally taken decision among peers. It is a (all-hands) meeting format at which peers inform each other. It should be focused on a discussion topic to which everyone can and wants to contribute. The topic can thereby something interesting from the non-work life or focused on a subject matter topic of joint interest. It's about cultivating an informal event that also covers fun activities or surprising elements. Ultimately, it fosters teaming and has the potential to cultivate a group of experts around a subject matter topic; namely to informally evolve a Business Guild or Community of Practice. It is therefore not about the discussion itself but, instead, to make people having joy by coming together and discuss about a topic of (high) personal interest. *Prerequisites* • Gather topics upfront and name it in the all-hands meeting invite. • Emphasise it as informal event focused on an ever-changing topic as based on participant's proposals. • Consider changing the role of the facilitator regularly so that everyone can pick a topic out of the proposals and (informally) guide the group discussion in a way that everyone can participate. • Consider including elements of surprise or joy to make the corporate huddle event more fun (e.g., employ a guest speaker / facilitator or use the slot for a company celebration etc.) *Procedure* 1. The facilitator presents the chosen topics to the participants. 2. Everyone participates in a discussion about it.
		Discovery & Action Dialogue (Steinhöfer, 2021; Ebers, 2022)	Discovery and Action Dialogue (DAD) aims to discover and unleash local solutions to chronic problems. It makes it easy for a group or community to discover practices and behaviours that enable some people (without access to specific resources and with the same constraints) to find better solutions to common problems than their peers. These are called positive deviant behaviours and practices. DADs enable members of a group, department, or community to discover these positive deviant practices for themselves. DADs also establish favourable conditions for stimulating participants' creativity and create a space where they feel safe enough to develop new and more effective practices. Resistance to change vanishes once participants are freed from their shackles and freed to choose which practices to use or adapt and which problems to address. DADs enable people to make their own personal solutions. *Procedure* 1. Invite people to uncover tacit or latent solutions to a common challenge in the working group, department, and community. Invite anyone interested in the solution to join the group and participate in a DAD. Ask this group these seven sequential questions: o How do you know that problem X exists? o How do you effectively contribute to the solution of problem X? o What stops you from doing this all the time? o Do you know anyone who has solved such a problem several times and overcome obstacles? What behaviours or practices have made this success possible? o Do you have any other ideas? o What needs to be done now to make it happen? Are there volunteers? o Who else needs to be involved?

			Procedure 1. Invite a broad group of willing participants. Ensure to be clear about the meeting purpose, the DAD method, and attach the worksheet. 2. Ask the 7 questions one by one in the order given. Ask them to the whole group and provide everyone with the opportunity to contribute to each question. Make sure the recorder takes down the insights and ideas for action as they emerge because important ideas typically emerge when you least expect them. 3. Ask the recorder to recap the insights, ideas for action, and possible other contributions. *Method worksheet*  Wie erkennst Du, wenn _____ (*das Problem*) vorhanden ist? • Die vorhandenen Kenntnisse der Teilnehmer über das Problem bestätigen • Möglichkeiten bieten, um Fragen auf den Tisch zu bekommen Wie trägst Du effektiv zur _____ (*Problemlösung*) bei? • Konzentriere dich auf persönliche Praktiken und NICHT auf das, was Andere nicht tun • Erweitere oder Bestätige das Wissen der Teilnehmer über effektive Praktiken Was hält Dich davon ab, dies zu tun/diese Maßnahmen schon die ganze Zeit zu ergreifen? • Identifiziere wirkliche Hindernisse und Einschränkungen für das effektive Verhalten • *Was hindert dich daran?* identifiziert eher Barrieren anstatt *Warum machst Du nicht?* zu fragen, das klingt vorwurfsvoll Kennst Du jemanden, der häufig in der Lage ist, _____ (*das Problem mit der Überwindung von Hindernissen*) zu lösen? • Etabliere das Umgehen von Barrieren • Identifiziere die existierenden, aber ungemein erfolgreichen Strategien • Wecke Neugierde und Erfindungsgeist Hast Du irgendwelche Ideen? • Identifiziere die Stützen, die das Wunschverhalten wahrscheinlicher machen • Biete den Teilnehmern die Möglichkeit, neue Ideen zu generieren und auszutauschen, die das Wunschverhalten ermöglichen Was muss getan werden, um das zu ermöglichen? Freiwillige? • Identifiziere Maßnahmenschritte, Zieldaten und Feedbackschleifen für Metriken • Lade Freiwillige für jede Maßnahme ein (Erfasse Ideen, die noch keinen gekennzeichneten Aktionsplan oder einen Freiwilligen haben) Wer muss noch involviert werden? • Erweitere den Kreis der Personen, die an der Entdeckung und Erfindung von Lösungen beteiligt sind, indem sie "*ungewöhnliche Verdächtige*" einbeziehen *Figure 23: Worksheet (Steinhöfer, 2021; Ebers, 2022)*
	Personal Mastery & Team Competence	Team Competency Matrix (Appelo, 2011, 2016)	The Team Competency Matrix supports by examining gaps in personal experience and expertise in regards with oneself and the team members. It also sheds light what learning goals are already existent and if they support the strategic community goals. *Prerequisites* • Acknowledge one matrix for one single project or change endeavour. • Create a respective matrix (for example, a physical whiteboard or a virtual Miro board). Outline the competency requirements, e.g., “Topics & Subject Matter Expertise”, “Tooling & Technologies”, “Processes”. Outline the 3 levels of competence: Red = Novice (“What is that?”), Yellow = Practitioner (“I can do it”), Green = Expert (“I can teach it”). • Decide what competency level are needed at what piece of the project and create a list indicating these expectations (e.g., “What skills are crucial to achieve the goals?”), and categorize them in accordance to the 3 levels of competency. • Send out invites to the individuals who are expected to contribute to the project. *Procedure* 1. Explain the purpose of the Team Competency Matrix to the attendees (e.g., honest evaluation of skills mapped against crucially needed skills in order to identify individual learning areas). 2. The group then fills out the Team Competency Matrix whereas each individual focuses on his role at the project 3. A following discussion helps to ensure a joint understanding of the individual needs and how they can be provided in an effective, efficient, and valuable way.

		Visualisation  *Figure 24: Team Competency Matrix (Appelo, 2011)*
Reflection	Retrospective ceremonies (Derby & Larsen, 2018; Rigby, Sutherland & Noble, 2018; Ken Schwaber & Sutherland, 2020)	The purpose of the Sprint Retrospective is to plan ways to increase quality and effectiveness. The Scrum Team inspects how the last Sprint went with regards to individual's feelings and perceptions, interactions, or communication processes. Individuals discuss what went well during the Sprint, what challenges they encountered, and how those problems were (or were not) solved. The Scrum Team identifies the most helpful changes to improve its effectiveness. The most impactful improvements are addressed as soon as possible in the next sprint. *Procedure* 1. Set the stage by considering methods such as "Check-in", "Focus On/Focus Off", "ESVP", "Team Agreement", or others. 2. Gather data by considering "Timeline", "Triple Nickels", "Colour Code Dots", "Mad, Sad, Glad", "Satisfaction Histogram", "Team Radar", "Like to Like", or others. 3. Derive insights via "Brainstorming/Filtering", "Force Field Analysis", "5 Whys", "Fishbone", "Prioritize with Dots", "Learning Matrix", or others. 4. Decide what to do by considering "Retrospective Planning Game", "SMART goals", "Circle of questions", "Short Subjects", or others. 5. Closure by using methods such as "+/Delta", "Recognition", "Temperature Reading", "Helped, Hindered, Hypothesis", "Return on Time Invested (ROTI)", or others.
	Peer-Feedback (Bockelbrink, Priest & David, 2020, p. 102)	Peer-feedback describes one chosen individual providing another individual with constructive feedback as of performance, valuable behaviour as of a defined role, general contribution, or any other important area. *Prerequisite* • Reflect who might be willing and able to provide feedback. • Think about the duration of the feedback meeting (e.g., 15-30 minutes). • Prepare the meeting invite by outlining the topic and emphasising that you seek not only appreciations but also actionable improvement suggestions) and send out the invite to the respective individual. • Block yourself some time afterwards so that you can reflect on the received statements. *Procedure* 1. Open the meeting and let the individual express the feedback. 2. Ensure taking notes to that you can later remember the details of the meeting. 3. While doing so, paraphrase the said to ensure correct understanding. 4. Consider asking clarification questions in case the intended meaning might be unclear to you. Attention: avoid discussions or judgements on the received feedback. 5. End the meeting by thanking the individual. 6. Afterwards, review your notes and reflectively decide on the value and inclusion of the received feedback.

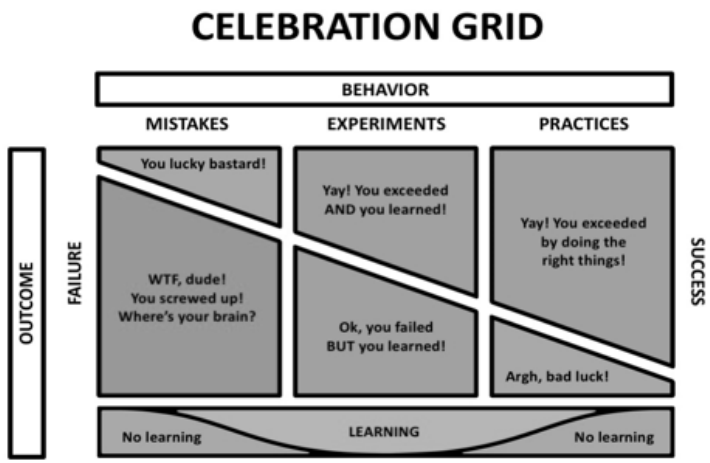
		"Best of me" counselling	The "Best of me" activity is a method to carry out counselling. It is typically applied by a counsellor towards his counselee and helps to understand who he is, how he thinks, feels, and behaves. Reflections about strengths help the counselee to develop himself in the possible way and to discover, for example, his natural leadership style. It also aims to improve team effectiveness. *Prerequisites* • Reserve some time and invite the counselee to block some time afterwards to self-responsibly reflect about the outcome. *Procedure* 1. Provide the counselee with the worksheet. 2. Ask him to silently think about the 4 quadrants and to note his answers. 3. Ask him to share his responses while considering the "Share your answers" guide. 4. Reflect on your counselee's learnings and observations about their strengths. Add your thoughts and observations about how you've noticed them using their top strengths to achieve success. 5. Encourage your counselee to explore next steps and make a commitment: • What are you going to start doing in order to develop yourself (e.g., as of in his role, relationships, or similar)? • What strengths can you use to achieve your priorities? • How can I help you stay accountable? *Worksheet* **SHARE YOUR ANSWERS** --- • What is it that you like most about one of your strengths? • What is something interesting you discovered in the course of this process? • Provide examples how your strengths show up in your role?  *Figure 25: "Best of me" counselling method*
Team Motivation & Engagement	Motivation & Happiness	360 Degree Feedback Dinner (Appelo, 2011)	The 360 Degree Feedback Dinner is team-focused event to be carried out occasionally or frequently. It aims to learn more about oneself and the other team members while leaving room for improvements. *Procedure* 1. Invite the team members to a dinner meeting. 2. Feedback is shared during the meal. As the team lead, start by honestly asking for feedback in regards with a. an evaluation of performance, b. behaviour, c. everything else that is worth to mention as of the perspective of the others. 3. Ensure to thank everyone who provided feedback.

		Feedback Wrap (Appelo, 2011)	The Feedback Wrap is a structured approach to provide feedback in a reflective way. It can be used to provide individuals or an entire group with feedback. Thanks to its easy application, it can be easily copied by other motivated individuals. In addition, as employing a value-centric perspective and the explicit expression of emotions, it can serve as method of culture transformation if applied frequently. *Procedure* 1. Describe your context. 2. List your observations. 3. Express your feelings as observing a particular behaviour. 4. Offer some suggestions. 5. Explain the value-add of your suggestions.
		6 rules for rewards (Appelo, 2016, p. 5)	The rewarding rules aim to strengthen meaningful recognition. According to research, individuals are not simply motivated by financial rewards. Instead, honest recognitions of colleagues or supervisors are considered to strengthen motivation and happiness which is crucial to cultivate high performance teams. *Procedure* • Don't promise rewards in advance. Give rewards at unexpected moments, so that people don't change their intentions and focus on the reward. • Keep anticipated rewards small. Sometimes you cannot prevent people anticipating a potential reward. In such cases, according to research, big rewards are likely to decrease the performance of people. • Reward continuously, not just once. Do not look just once per month or once per year for something to celebrate. Every day can be a day to celebrate something. • Reward publicly, not privately. Everyone should understand what is rewarded and why. The goal of giving rewards is to acknowledge good work and have people enjoy it too. • Reward behaviours, not only outcomes. Outcomes can often be achieved through shortcuts, while behaviour is about decent work and effort. Reward peers, not only subordinates. — Rewards should not come just from the manager. Find a way for people to reward each other because peers often know better than managers which of their colleagues deserve a compliment.
		Leaving bonus (Laloux, 2016, p. 175)	This method aims to ensure to keep only those individuals which have a general fit with the organisation culture. If they decide to better take the money instead of continuing to work for the organisation, then the individual should better leave instead of being caught in a relationship that is not meant to be. *Procedure* 1. Align on a trial period for new hires, e.g., a 6-month orientation phase. 2. If a new hire is about to reach the end of the 6 months orientation phase, check if he has second thoughts and considers quitting. 3. If so, offer them a one-time bonus of an agreed amount of money (e.g., 500€) if he decides to leave at explain the rationale behind it.
		Moving Motivators (Appelo, 2016; Deci, Olafsen & Ryan, 2017)	Being based on individual's 10 intrinsic desires, Moving Motivators aim to reflect on motivation and its influence on organisational change. *Prerequisites* • Consider starting with a brief discussion about the 10 motivators and their meaning to achieve a correct and joint understanding of the method. • While playing, consider the "thinking out loud" method to become aware to your thoughts and feelings. • After playing moving motivators, always allow discussions. This is where the greatest value lies when it comes to discovering something about people own motivation. *Procedure* 1. Define for yourself what motivators are the most important and place them from least important (left hand side) to most important (right hand side).

			2. Based on an exemplary situation of change, move beneficially influenced motivators up and impacted motivators down. Discuss about your result from a high-level perspective by observing if most motivators were moved up or down. Based on this insight, reflect on how this change might affect your motivators. 3. Reflectively discuss with the other participants what motivators are of minor or major importance to them to also learn their motivators.
		Kudo Cards (Appelo, 2016, p. 12)	Kudos are a written, public, and peer-to-peer recognition across teams, departments, and organisations. It aims to break down hierarchical limitations by encouraging every individual to provide positive feedback without hesitation. It thus strengthens individual's happiness and motivation and, thus, intrinsic motivation across layers of hierarchy. *Procedure* 1. Explain Kudo cards in a meeting that includes a broad base of individuals from different hierarchical levels: Kudo are expressions of being thankful for the effort of a colleague. The cards are used to provide this colleague with recognition either in a more public way (Kudo board, public Confluence page) or private way (Kudo box). Emphasise that Kudos need to be hold in a positive way. 2. Jointly name a space to store provided Kudo cards. For example, in a physical office, consider a Kudo wall at a frequently passed by area so that every Kudo is immediately visible to everyone. In a remote working situation, it might be a sticky note on a frequently used Miro board or a dedicated section on a Confluence page of your organisational entity (team, function, business area, or similar). 3. Jointly name how Kudos should be shared within the community. 4. Invite everyone to provide Kudos at every time, either in a personal or anonymous way.
		Colleague Groups (Oestereich *et al.*, 2017, p. 220)	Colleague groups is a method to cultivate motivation and happiness through self-organisation around purpose and a shift of power from leadership to groups of individuals. A colleague group is a stable group of colleagues, at least in the medium term, who support each other confidentially in their personal and professional development, while also jointly take on employer tasks (e.g., HR tasks). It typically covers 3 to 5 individuals who jointly agree that everyone is self-responsible for his professional and personal development (while being supported by the group members in doing so). This very basic principle covers, for instance, one's own work organisation, the design of one's own work context, the procurement of personal work equipment, one's own job satisfaction, and one's own contributions to the entirety. In its essence, colleague groups are self-organised meetups without further specifications. They might be however guided by central guidelines provided by the organisation. They might be also optional or mandatory meetings such as workshops, coaching sessions, or feedback meetings. *Prerequisites* • Engage a broad base of willing volunteers across the hierarchy to jointly agree on the setting of colleague groups: o What do we want to achieve with colleague groups as an organisation and as individuals? o What human resource processes can be substituted by colleague groups (e.g., provisioning of regular feedback to derive a job reference if requested) and how do we ensure relevant information is fed back from the colleague groups to human resource department? • Jointly agree on the minimum quality standards of outcomes *Procedure* • Colleague groups meet frequently as agreed among the members of the group for a fixed duration (e.g., every 2 weeks for 1 hour) to talk about topics of urgency or interest. • It might be also that a colleague simply starts to talk about an urgent topic or that the members start by talking about how they felt the last time. Whatever is discussed in the group is treated confidentially and is only shared with others if jointly agreed so. Meetings can be also structured around an upfront shared checklist in regards with evaluation or development. To do so, everyone is provided with a prepared checklist template and prepares oneself upfront the colleague group meeting. The answers as provided to the checklist are then discussed during the colleague group. *Example for a colleague group worksheet that focuses on evaluation* 1. Tasks: What tasks did you fulfil as of a typical business day? Please note only those who are of major importance to you or that took the majority of time.

			2. Feedback and evaluations: Who provided you with feedback, coaching, supervision, or onboarding? Who evaluated you as of performance and social skills? You might consider not only colleagues but also external parties such as customers. Please note the most important statements, insights, and evaluations including name, date, and content. 3. Skills: What professional skills do you claim? Do you feel it too narrow or wide? How are your existent skills matching to client requests or organisational needs? Please document your self-perception and your colleague group foreign perception. 4. Sustainability: What is your actual vs. sensed work load? How many overtimes do you currently have (if >50 then let the colleague group know, if >200 let the human resource department know)? Please document your facts and perception but also that ones from the colleague group. *Example for colleague group focusing on individual development* 1. During a colleague group, everyone answers the following questions as of his perspective: a. What did I achieve? b. What do I want to achieve next? c. How can I improve myself? 2. Then, everyone documents what he needs from the organisation to achieve the planned development (this might cover, for example, changes of working hours and sabbaticals or additional trainings and coaching sessions). 3. These needs are then discussed within the colleague group and, if no veto is raised (see consent decision process), it is brought to the human resource department for documentation purposes. If the needs do not exceed a given amount of money, they are expected to be approved automatically.
		Business Guilds / Community of Practice (Oestereich *et al.*, 2017, p. 97)	Business Guilds or Communities of Practice (CoP) are informal and frequently occurring meetings. They are setup in a self-organised way by the members themselves. They bring together subject matter experts and other individuals to share experiences, knowledge, and joint learning. This method aims to increase social density and social complexity of the organisation for the sake of information exchange and spread innovation.
		Sustainable work practices: focus on individuals	Sustainability is achieved if work follows individuals' energy. Sustainable practices therefore focus self-awareness and healthy behaviours. *Procedure* 1. Set a routine to start your day with energy and focus. This can include non-work rituals like morning exercise, coffee, or meditation. 2. Aim to have a dedicated place to work. 3. Block yourself deep working slots to plan your work throughout the work day. 4. Take short breaks throughout the day, go for a walk, recharge with a colleague chat, or use self-awareness apps to take mini mental breaks. 5. Structure your calendar in accordance with your bio rhythm to maximize quality of work. 6. Structure your day to maximise your productivity while considering your personal biorhythm ("levels of levels during the day"): • Start or end your day at a time that works best for the time zones that your team works in (Outlook Working Time can help). • Reduce and consolidate meetings where possible by challenging your value contribution as participant. • Look to end meetings early (e.g., 25 minutes instead of 30 minutes) to enable short bio breaks prior to the next meeting. • Block off time for out-of-office (see also "TabOOO" method). • Block deep work times to plan your work day. • Turn on DND status, let your team know ahead of time and set your Teams Mobile to quiet hours.
		Sustainable work practices: focus on the team	Individual sustainability can only be effective if the individual is provided with a supportive environment. Therefore, the team to which the individual is belonging to, needs to self-responsibly align in accordance. *Procedure* 1. Jointly establish work practices as a team by aligning on an optimal working cadence which covers how to work effectively as a team while respecting individual work schedules and business needs. Create a working agreement (team agreement) which reflects a shared reality that fosters trust and accountability. • Design habits of team interactions • Accommodate other time zones. • Use "Delay Message" in Outlook when messaging outside of working hours. • Honour lunch, PTO, and EOD times.

			• Check before requesting an out-of-hours call (sometimes it is unavoidable) but don't assume individuals can make themselves available. • Use video only when needed (e.g., facilitating a workshop, presenting, etc.) and communicate expectations prior to meetings. • Agree on team availability: For example, certain mandatory work hours or designated focus time (e.g., no meetings on Fridays). • Coach and encourage others to role model these behaviours: Celebrate when we get it right. 2. Jointly agree an etiquette for effective team meetings: Use collaborative technology and intentionality to create a positive, equitable experience for all team members, regardless of where they're working: • Start every meeting with a moment of inclusivity, e.g., by asking "Can everybody hear me?" or "Is there anything to adjust prior to starting?" • Set ground rules and plan activities that keep the group engaged (no side conversations for those onsite, instead speak up or use teams chat). • Have an in-person co-host and a remote co-host. • Rotate the agenda between the two co-hosts, fostering a sense of inclusion and reducing proximity bias for those physically present. • Ensure those working remotely are included in the casual conversation at the start of meetings. Share who is in the room and who is virtual. • When possible, encourage remote people have an active/assigned speaking role and always check in on key decisions 3. Jointly agree on collaboration tactics: When we collaborate well, we are able to unlock ingenuity. If a team is hybrid (even if just 1 or 2 people are virtual), please collaborate as if your entire team is virtual. Use tools, behaviours, and practices that accommodate the needs of all team members. • Determine if an activity requires synchronous (e.g., real-time input like co-creation, brainstorming, strategy work) or asynchronous (e.g., reviews, approvals, edits) tasks. • Check your set up for seamless collaboration, e.g., use of Microsoft Teams Rooms, good acoustics, video cameras that track speakers in the room, and Surface Hubs, etc. • Book onsite resources and design your meeting to be inclusive of those outside of the room by using the right technology. • Add interactive elements e.g., Mentimeter, Miro, or Mural to maximise engagement of all participants.
		Healthy Home Office Principles	Paying attention to "healthy principles" needs to be practiced. However, it's great for our health and ensures personal productivity in the long run. *Consider the following;* 1. Posture a. Avoid 'tech neck' (excessive bending toward screen) by aligning on the top half of your screen to your eyes and sit an arm's length away. b. Take standing or moving meetings. c. Incorporate stretch breaks in your schedule. 2. Light a. Optimize natural light or take outdoor breaks throughout the day. b. Protect yourself from screen fatigue with blue blocking glasses; control brightness on devices and take screen breaks. 3. Ergonomics (evaluate your furniture setup) a. The seat/chair should provide a level of back support (use a cushion if this helps). b. When using a keyboard or mouse your elbows should be at the height of the keyboard/benchtop and next to your rib cage. c. Your feet should be flat on the floor – if you need extra height, you can use a household item such as a box or cushion to provide support. d. Top half of screen should be at your eye level and approx. an arm length away. 4. Environment a. Indoor plants can reduce stress and filter air. b. Declutter your workspace and aim to have a dedicated workspace.

		TabOOO	Time off is essential for greatness and supporting other is essential for time off. This method turns “Out of Office” (OOO) into “Out of Touch” (OOT) because being physically OOO doesn’t mean you’re mentally disconnected. To get the most out of your time away, try going OOT by doing the following steps: 1. If you’re traveling, leave your laptop home. 2. Turn off all notifications. 3. Try turning off the phone. As a team’s approach to unavailable times is crucial, jointly agree on OOT rules as part of a team agreement: 1. Create a master OOT calendar for your team. It fosters transparency and helps people coordinate coverage. It also ensures that everyone can get away without feeling guilty. 2. Have fun with your OOT message. Instead of writing a boring auto-response in Outlook, get creative, for example: a. Hello, I am taking time off from [date] to [date] and won’t be online or checking email as I need to fully disconnect at this time. If you email me on [date], it’ll be at the top of my inbox. b. Hi, I’m taking a few days off and I’m having a blast. I’ll return on [date] recharged and ready to go. Don’t forget to take some time for yourself so you can be at your best too! c. Hi, I’m away from my desk from [date to date] and while your message is important to me, it’s just a little less important than this insanely competitive Scrabble marathon. [Or insert activity of your choice.]
		Celebration grid (Appelo, 2016, p. 45)	This method aims to sharpen awareness on learning from experiments, for example as of failed good practices or as of mistakes which were successful by chance. It emphasises the role of networks and how it supports learning by exploring opportunities and running experiments. It its essence, it celebrates successful experimentation while maintaining a focus on good practices within ambidextrous organisations (those who own hierarchies for the sake of repeating good practices and exploiting successes while also relying on networks to effectively innovate). The celebration grid can be used to support learning in a safe environment:  *Figure 26: Celebration Grid (Appelo, 2016, p. 45)*
	Team Alignment	Market of Skills	The purpose of this method is to shed light on the skills of team members in accordance with their tasks to jointly identify areas of personal mastery. It also serves as mean for alignment within the team as of being capable to support each other as of personal and professional development. *Procedure* 1. Each participant answers the following 4 questions through visualisation (e.g., sketch notes, picture, some painting, or other kinds that are fun and helpful):

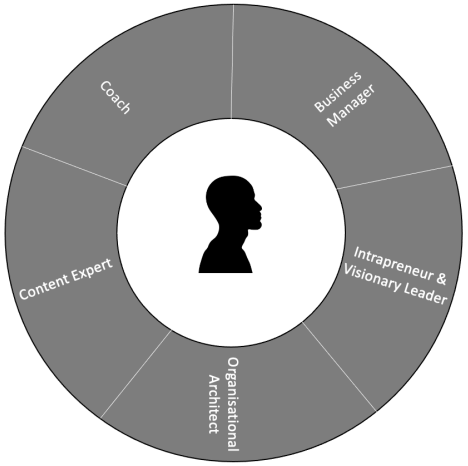
		• What motivates me at work? • What are main skills as of my role in the team? • What are my secondary skills? • What are my desired skills? 2. All participants come together. Each team member sells his skills to the team. 3. While presenting, if other team members feel the need of a missing skill, they make a proposal for that new skill. It is then discussed and potentially added to the list of personal skills.
	Constellation Exercise	The constellation exercise helps team members to examine their feelings, thoughts, or perspectives in relation to their team members. *Procedure* <u>Round 1</u> 1. As based on experience with the team or as provided by the team, a facilitator creates about 10 statements around a topic of interest. Example: if the team is about to jointly form a working agreement, the facilitator might drop the following statements: • "If being under pressure, I prefer guidance by being told what to do" • "I'm okay receiving feedback" • etc. 2. A chosen object (e.g., a chair, paper sheet, or similar) is placed in the centre of a working space. 3. The facilitator reads out loud all statements, one by one while pausing between each statement for a few seconds. If the participants agree to the statement, they move closer to the object. If they disagree, they move away from it. 4. After all statements are read out loud, the facilitator invites the participants to note where the rest of the team stands in relation to their own position. He further invites them to honestly discuss about their observation. <u>Round 2</u> 5. The facilitator invites every participant to write their own statements (limited to 2-3) and then proceeds with the same procedure. He pays attention to pause for some more moments after the statements from one individual are read out loud prior starting with the statements of the next one.
Cross-Team Collaboration	Interaction Heat Map (Laloux, 2016, p. 165)	This method aims to support inter-team collaboration across the whole system. Once a year, each team rates the collaboration with other teams as of quality of interactions. It is visualised with a heat map which indicates what teams need to strengthen communication in order to improve collaboration. It also aims to ensure a joint understanding and to shape awareness among the members of the teams. *Prerequisites* 1. Jointly agree what business functions, teams, etc. should be covered. 2. Jointly decide how quality of interactions is visualised, for example by aligning on a colour code (green = great, blue = okay, yellow = need for a conversation, red = need for a mediation). 3. Jointly agree on the means of visualisation, for example a virtual board like Miro or physical board such as a whiteboard. 4. Jointly align on a yearly date to create the Interaction Heat Map. 5. Jointly decide if a simple conversation is enough or means of reflective group discussions (retrospectives) should be applied. *Procedure* 1. Each team comes together and discusses what interactions they typically have with other teams. 2. Each team rates the quality of interaction by using the agreed visualisation. 3. In a big room session, all teams have a look at the Interaction Heat Map to ensure same information. 4. The teams with the highest differences in their rating find themselves together in a break-out room to discuss about their differences.
	*-isms in the Workplace (Laloux, 2016, p. 165)	This method serves as opportunity for individuals to indicate if the company should pay more attention to -ISM topics, e.g., racism, sexism etc. The method therefore aims to foster an inclusive workplace and fair collaboration.

			Procedure 1. A bi-monthly meeting is set-up (naming convention might be like ""isms in the workplace" or similar). 2. Anyone feeling the need to talk about racism, sexism, or any other kind of -ISM in the workplace is invited to join the meeting and to honestly discuss about it. 3. Any subtle form of -ISM is addressed as raised so that the organisation is aware about it to finally pay more attention to the specifically mentioned form or occurrence.
		Wise Crowds (Steinhöfer, 2021; Ebers, 2022)	Wise Crowds enables participants in a small or large group to help each other immediately. Wise Group counselling can happen either with a small group of four or five people, or with many small groups at the same time. At a large meeting, the group can even be a hundred or more people strong. Individuals, called clients, can ask for help and receive it at short notice through the other members of the group. Each individual counselling session taps into the expertise and resourcefulness of everyone in the group simultaneously. In the process, clients gain greater clarity for their question and increase the opportunity for self-reflection and self-understanding. Wise Crowds develop our ability to ask for help. They deepen the ability to ask and advise. In the process, helping relationships develop quickly. During a Wise Crowds event, the many individual consultations lead to a cumulative learning experience, as each participant benefits from being both a client and a counsellor several times in a row. Transparency is created through Wise Crowds. Together, the group is smarter than the expert. *Procedure* 1. The client describes the challenge and asks for help. 2. Counsellors ask the client to understand the challenge. 3. The client turns his back to the counsellors and gets ready to take notes. 4. While the client has their back to the counsellors, they ask questions, give advice, and make recommendations as a team. 5. The client gives feedback to the counsellors on what has been useful for them and what they can use.
	Team Transparency & Trust	Journey Line	The journey line method aims to evaluate experiences of an individual as of a positive and negative character. It also helps to make the team aware and, by establishing this level of transparency, it aims to foster trust. *Procedure* 1. Each participant is provided with a sheet of paper (virtual teams might stick to Miro or another online collaboration tool). 2. Each participant draws an X-axis (timeline) and Y-axis (positive or negative experience) and plots the respective experience: experiences above the X-axis are positive (the higher on the Y-axis, the more positive) and below ones indicate negative experiences. 3. Everyone then presents their results by providing context to the respective experiences.
		Pack Up Your Trouble	This method aims to shed light on personal or professional challenges and to employ the crowd mind (team members) to jointly find a solution. By fostering transparency, it supports evolving trust. It is similar to the 1-2-4-All method as mentioned by (Sutherland & Janene-Nelson, 2020). *Procedure* 1. The team (big group) jointly agrees to focus on either personal or professional challenges – or votes to cover both categories. 2. Every participant notes his challenges on a sheet of paper and add some context so that an uninformed 3rd person understands it. 3. All sheets are collected. 4. All team members group themselves into small groups or find someone to pair with. 5. Each small group or pair is randomly provided with one of the sheets to discuss it, while potentially coming up with a solution proposal. 6. All small groups or pairs regroup as a big group. Every small team presents their respective challenge to the big group while acknowledging additional to solve the challenge. 7. Then, everyone compares the challenges as of their similarities or differences and evaluates them in terms of a solution proposal. This step aims to build a deepened understanding and valuable solution. 8. The individual who initially provided the challenges is invited to silently think about the input and decide if he accepts it. He does not have to share his decision with the group despite being invited accordingly.
		Good or New (Laloux, 2016, p. 161)	The good or new method is meant to increase teaming and to foster an atmosphere of "we" instead of "me" or "you". *Procedure*

			1. Every time a team meets for the first time during a day, a talking stick is passed around (virtual teams might use something equivalent instead). 2. Whoever has this stick can share either something *good* (e.g., a simple story which might be good to know for the other team members) or *new* (professional topics, noteworthy news as of the newspaper, a personal success, news from the private life, or anything else). 3. Once an individual has finished, the next one is invited to do so.
		"Thank you" day (Laloux, 2016, p. 161)	This method aims to foster recognition and being thankful. If done frequently, teams' mood and motivation might be influenced for the greater. *Procedure* 1. Every employee is offered is offered an extra day off and an additional bonus of 100€. The money come from company funds and can be spent in any way that individual likes to. 2. If the individual decides to take it, he must use the money to thank someone special during that day. This might be a someone from his professional life such as a colleague or someone from his personal life such as a neighbour. 3. Once he returns from his day off, he is expected to share with the team what he has bought, who it was given, and how it was received.
		New Hire Welcome Wish (Laloux, 2016, p. 160)	This method aims to help teams to welcome new joining colleagues and to make them feel welcomed. By making the team members' expectations, thoughts, and feelings transparent, it aims to evolve a trustful relationship. *Procedure* 1. A team schedules a "welcome meeting" for a new joining individual. 2. During the meeting, each team member presents a personal object that symbolises a wish for the new colleague.
		Peer-based salary process (Laloux, 2016, p. 123)	This method aims to address individuals' salary in a transparent and fair approach. It is based on a self-set pay which includes feedback from an annually elected compensation committee. *Procedure* 1. Once a year, everyone writes a compensation letter (or fills out a jointly agreed template) that outlines the raise in salary the individual believes to be fair. In case of less valuable year, the increase might be in line with a cost-of-living raise. But if the individual feel to have taken serious responsibility and outstanding achievements, it might decide to choose a more significant increase. 2. Every individual thereby provides a rationale for justification purposes, covering any relevant data on performance indicators for which the individual is responsible for. 3. Once completed, the individual gathers feedback from the colleagues he was working closely with over the last year. The colleagues are expected to provide their feedback in a written way. 4. The letter including performance data and feedback is then brought to the compensation committee which reviews it and provides feedback in terms of the raise of salary. Depending on the context, the committee might also go into a "gaining agreement" process with that individual. 5. As the committee has only advisory power, the individual can decide to go along with the recommended salary raise or to stick with his initial request.
		Fuckup Afternoon (Case 1)	The Fuckup afternoon method aims to share stories around failures among individuals. *Prerequisites* One or more volunteer prepares a failure story. *Procedure* 1. The facilitator introduces the meeting and the codex: a. No live streaming. b. No one shares stories about failures. c. Vegas rule applies - what happens in the meeting stays in the meeting.

			2. The (first) speaker introduces his story while covering the following aspects: a. Project setup. b. Tasks/Topic. c. What did I want to achieve. d. What happened. 3. The group is then invited to clarify questions (“Q&A”).
		Mentoring (Oestereich *et al.*, 2017, p. 217)	Mentoring is a process aiming to develop a less experienced colleague in regards with his personal or professional ambitions. It is led by an experienced colleague and is expected take a long period of time. *Prerequisites* • The management needs to outline the rules of engagement for the mentor-mentee-relationship, e.g., a mentor is named for a new joining colleague during his onboarding process. • The mentoring process should be limited to an agreed period of time (e.g., 6 months). The ending procedure might be a tiny celebration gesture which marks the end so that mentor and mentee can meet at eye level in future. • As honest mentoring requires time, the mentor needs is expected to be granted with a percentage of his daytime to guide the mentee. If he works 40 hours a week at a client engagement, he might be assigned with 2 hours per week solely to mentoring (which reduces his available time for client engagements by nature). *Procedure* 1. The mentor serves as contact point for the mentee in terms of all potentially upcoming questions. 2. The mentee might do work shadowing in selected meetings of the mentor to gain profound experience in good practices. 3. The mentor is open-minded to any suggestion the mentee might be upcoming with
		5 Roles of Development	This method aims to support with a structured approach towards a value-driven development path. *Prerequisites* The counsellor shares the worksheet with the counselee and blocks a meeting slot. The counsellor thereby pays attention to schedule the meeting not between important meetings and ensures enough time being available. *Procedure* 1. Counsellor and counselee ensure a joint understanding of the roles as outlined in the worksheet. 2. The counselee silently reflects on his past contribution as of the outlined roles. He provides examples for each contribution and reflects about he felt by incorporating this role. 3. The counselee silently reflects on his personal and professional goals and how they can be reached by the outlined roles and his past contributions. 4. The counselee jointly discusses with the counsellor the results of the worksheet and his reflections. They jointly draft the goals for the next period.

Worksheet



Coach
Supporting an individual or group of individuals in achieving a specific personal or professional goal by providing training and guidance.

Content Expert
Having broad and deep competence in terms of knowledge, skill, and experience through practice and education.

Business Manager
Administrating the organisation.

Intrapreneur & Visionary Leader
Thinking about or planning the future with imagination or wisdom.

Organisational Architect
Shapes and environment for people to effectively learn and collaborate.

Figure 27: 5 Roles of Development

Birth Map

This method helps teams to get to know each other better.

Procedure

1. At the beginning of a teambuilding meeting, share a world map (virtual teams might upload a respective picture to their online collaboration tool).
2. Invite team member to pick a sticker or a pen and mark the place they were born.
3. Invite each member to point out their birthplace while sharing a short story about what they love the most about it.

Circle activity log (case 1)

This method is an aggregation and adjustment of different methods. They jointly aim to share relevant information about ongoing and planned activities to build awareness across organisation entities (teams, departments, business areas, functions, circles, etc.) and, thus, across the entire community of employees. It is assumed to support the understanding in terms of where the teams are evolving and to what extend they are loaded with work.

Prerequisites

1. *Constitute role*. Each team constitutes a „documentary" role whose responsibility is to ensure that every relevant activity and its discussion results are made available to the other departments. To do so, research implies the circle to provide first information about this new role by naming the minimum requirements:
    a. Name of the role?
    b. Responsibilities?
    c. To what circle is this role belonging to?
    d. Who is the current role owner?
    e. When/How was the last volunteer assigned to the role?
    f. When will the role be re-assigned or confirmed?

    The team documents a summary of these minimum requirements in a „role constitution" which is publicly documented (e.g., at a Wiki page). The team then asks for an individual or a group of individuals who are willing to volunteer for the next X months. It then updates the role constitution accordingly. In case the circle agrees, this can also be done by the team representative who already guides the

			team. It is recommended that every team constitutes this role either as separate role or as enrichment of an existing role. Each role enrichment should also be made transparent to the fellow colleagues. 2. *Establish a public documentation tool*. Establish a Team Activity Log to ensure that each relevant decision on a planned activity is made transparent to the other teams at all times. It is a simple collection of currently ongoing and planned team activities. The log can be set-up as a Kanban board whereas its columns might cover the following: a. „Activity planned for Q1/2023“ (you might not stick to a quarter-wise approach and change it to a fiscal year iteration) b. „Activity accepted“ c. „Activity rejected“ It is community-wide accepted to be the single source of truth with regards to ongoing and planned team activities. *Procedure* 1. *Get updated*. The circle documentary role takes part in the regular team calls in order to attend discussion on decisions that affect teams‘ activities. He can attend as regular participant or as of his role as circle documentary. It is however important to make the currently incorporated role transparent to the other attendees. 2. *Update the Team Activity Log*. Once the circle documentary has noted the update, he ensures to populate it at the Team Activity Log. He is responsible that the information is shown there in a timely manner. 3. *Update Community*. In addition, the team documentary might share this new, relevant information at the regular calls of the next hierarchy level (e.g., function level) as of his formal function. Always bear in mind: this method might apply to team-level, function-level, or similar (e.g., on circle-level in an organisational Holacracy set-up).
		Community pitch (case 1)	The method is an adaption of the consent-moderation approach as mentioned by Oestereich *et al.* (2017, p. 168). The purpose is to ensure all perspectives are sufficiently covered to enable smarter decisions which are taken by the community (network) itself. This method has its roots into network theory: Structure is essential for an organisation to provide guidance but, at the same time, it also divides. Social operating mechanisms, instead, are required to direct the various activities contained within a structure towards an objective (Chahan, 2009). These social operating mechanisms (in this context understood as decisions-making processes) will manifest the values and principles of your community. They are thus considered as a method of culture evolution. *Prerequisites* The moderator ensures that all relevant and interested parties are invited and attending (e.g., moderator, individual(s) ready to pitch an idea such as a new incubator, a broad base of community members) whereas the moderator should be different from pitching individual(s). *Procedure* 1. *Clarify decision process*. Once started, the individual(s) pitch their idea to the broader community by presenting answers to the following questions: a. *“What for?”* → answers the question to what community value this idea contributes to what extend b. *“Why?”* → refers to the value contribution and how it pays off to the purpose and strategic intention of the general company c. “How?” → answers questions about the amount of time of need by the responsible to implement it (thereby addressing how the responsible will be impacted by other concurrence goals) The moderator then allows the community to ask clarifications questions – but only those for that moment time being. 2. *Identify missing information*. The moderator asks the community if they miss further information to take informed decisions. Each attending community member is then allowed to raise his most important point which he or she misses. The pitching individual addresses each raised point one-by-one by briefly providing context. The moderator ensures no other individual is being involved in this clarification activity to prevent early discussions. He further prevents follow-up questions to let others raise their point in a timely manner. After all individuals have had the chance to raise their point, the moderator asks if further points need be clarified and, if so, he kicks-off the next round following the same approach. 3. *Clarify and form opinions.* The moderator asks the community members for their thoughts, feelings, statements of agreement or disagreement etc in regards with the pitched idea. Each statement from a community member is immediately addressed by the pitching individual(s) as they are raised so that it can be sufficiently clarified. It also prevents the statement from falling behind. It is important that the moderator keeps this a one-by-one talk. Once the pitching individual answered the question, the community member can ask a second, short question which is also answered immediately. 4. (Optional) Adjust pitched idea. The pitching individual re-assess their pitched idea based on what he has heart whereas the following options are possible:

a. Repeat suggesting the idea while making it the best possible way tangible (e.g., apply the „Postcard of the future“ method or a similar one) – then repeat step 3 „Clarify and form opinions“.
b. Adjust the idea - then repeat step 3 „Clarify and form opinions“.
c. Withdraw the idea.

5. Form consent using resistance poll. The moderator asks the community members how confident they feel to go with this idea in the community. Each community member can answer following the following scale:
   a. No objections / Full agreement
   b. No objections / Abstention
   c. Minor objections (should be heart)
   d. Major objections (should be addressed)
   e. VETO (should be focused as I expect this idea to be impacting the community)

   If there are VETOs or major objections, then the moderator asks the individual to briefly explain their VETOs and the major objections, followed by a brief explanation of the minor objection. He ensures to allow only clarification questions from the other attendees. The moderator then tries to resolve the VETOs and major objections by doing one of the following:

   Ask the VETO contributor for a proposal:
   f. Ask the pitching individual for a proposal.
   g. Offer an open discussion round.
   h. Postpone decision and offer pitching individual to return with an adjusted idea.
   i. Postpone decision and offer a 10-minute coffee break after which the decision on it is repeated.

   Once all VETOs and major objections are addressed, the moderator repeats the resistance poll. These steps are repeated until there are no further VETOs or major objections. If there are no VETOs or major objections, the moderator ensures documenting the result of the meeting. He then asks the pitching individual to take it over and operationalise it (e.g., by offering a meet-after to align on capacity for a willing volunteer).

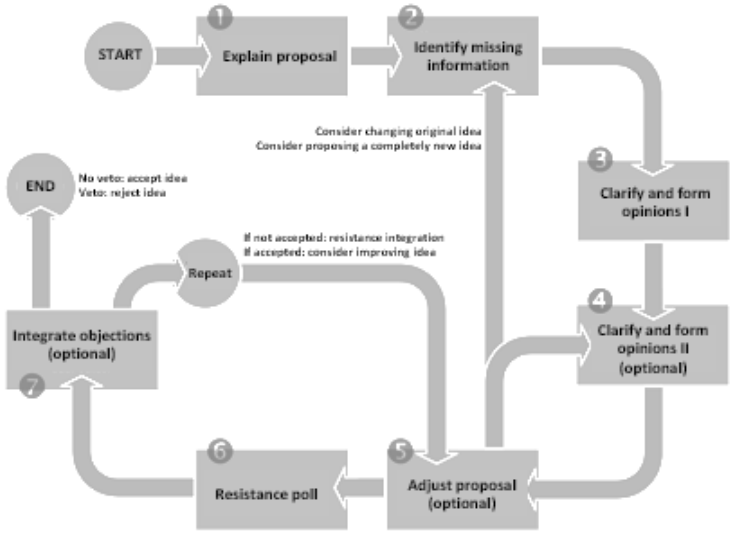


Figure 28: Adapted objection integration approach from Oestereich et al (2017)

		Conversation Café (Steinhöfer, 2021; Ebers, 2022)	You can involve any number of people to understand the meaning of confusing or shocking events and thus lay the groundwork for new strategies to emerge. The Conversation Café format helps to create calm and deep conversations that are more about listening and less about debating and arguing. Sitting in a circle, with a simple set of rules and a (virtual) talking stick, small group dialogues emerge without unproductive conflict. A shared understanding of the challenge to be met emerges. And this helps the group discover entirely new ways of solving the problem. *Procedure* 1. State the topic of the conversation, usually in the form of a question. Explain that there will be 4 rounds at each table: first 2 with a (virtual) talking stick by, for example, "raising your hand", then a third in the form of an open conversation and a fourth round, this time again with talking stick. Also share the duration of each round. 2. Distribute the Talking Sticks 3. Review the 6 rules of the Conversation Café: 4. Share general rules of engagement: a. Try as best you can not to judge what is said b. Respect each other c. Try to understand rather than persuade d. Welcome and value different opinions e. Talk about things that move you and mean something to you f. Focus on honesty and depth rather than one long rant 5. Find a volunteer host at each table (or virtual conference room). The host is a full participant who only intervenes if someone breaks one of the six rules. In most cases, only the flow of speech needs to be stopped. 6. Kick-off the conversations: a. 1st round with Talking Stick: Everyone tells what they think, feel or do in relation to a specific topic. (1 minute per person) b. 2nd round with Talking Stick: Everyone shares their thoughts or feelings after listening to everyone else. (1 minute per person) c. 3rd round: Open conversation (with the option of using a Talking Stick). (20-40 minutes) d. 4th round, again using Talking Stick: everyone shares what they "take away" from the rounds. (5-10 minutes)
		Social Network Webbing (Steinhöfer, 2021; Ebers, 2022)	Social Network Webbing maps informal connections and helps decide how to strengthen the network to achieve a goal. It works by showing a group of individuals what resources are hidden within the existing network of relationships and what steps are needed to use these resources. It also reveals what opportunities exist to strengthen these connections or make new ones. The comprehensive approach makes the network visible and understandable to everyone in the group at the same time. It encourages individuals to take initiative and form a stronger network rather than receiving instructions from above. Informal or loose connections, even a friend of a friend, are also integrated in a way so that it creates a strong influence on progress through them. It's done without detailed planning or large investments. *Prerequisites* • Invite the participants of a working group and the common goal to create a map of their network and decide how they want to grow and strengthen it. • Ask them to identify the people they are currently working with and who they would like to add in the future (e.g., people with influence or expertise they need to achieve their goal). • Invite them to 'weave' connections into their network to get closer to their goal. *Procedure* 1. Creates a legend of all key groups in the network that are needed to achieve a goal. Each group is assigned a post-it colour or symbol. 2. Each member of the working group writes their name clearly on a post-it. Group the (virtual) post-its on the (virtual) wall. 3. Ask all participants: "Who do you know who is actively involved? Each name that is mentioned is also written on a post-it. These people are then located on the wall depending on how well the participants in the working group know them. 4. Ask the participants, "Who else would you like to be involved in the work?". Invite them to brainstorm and to write post-its for these individuals. Arrange the post-its into a map, with a core and a periphery (this is to represent current and desired involvement). The individuals on the map can also be friends of friends. The legend may need to be expanded to include more categories and colours. 5. Invite participants to take a step back and ask themselves: "Who knows whom? Who has influence and expertise? Who can prevent progress? Who can accelerate progress?" Document answers with connecting lines. 6. Facilitate the group develop strategies to... a. Invite, attract and "weave" new people into their work b. Work around blockages

c. Accelerate progress.

Generative Relationship STAR (Steinhöfer, 2021; Ebers, 2022)

You can help a group of people understand how they work together. In doing so, you identify what changes they can make to improve the performance of the group. All members of the group diagnose what patterns are currently present in their relationships and decide what actions they can take together to move forward without needing help from others. The STAR Compass helps the members of the group to understand what makes their relationships more or less productive. The compass used in the initial diagnosis can later be used to help measure progress towards more productive relationships.

Prerequisites

- Invite participants to assess their working group or team in terms of the following four attributes:

  S - Separateness: the degree of difference in perspective, expertise, and background of the group members.
  T - Tuning: the degree of intensive listening, reflection, and shared understanding of challenges.
  A - Action: the number of opportunities to work on ideas or to innovate together.
  R - Reason for working together (Reason): the benefits of working together.

  Invite the participants to jointly design steps that will produce even better results.

Procedure

1. The individual participants give their assessment of where the team is in terms of the four elements.
   a. S - How different are we as a group? Do we manage to perceive the different perspectives of the participants?
   b. T - How much are we aligned with each other?
   c. A - How often do we act together?
   d. R - How important is it that we work together? How clear is our objective?
2. In the small group, each participant places a point along the compass axes and then talks with their neighbours about the placement. Attention is paid to consensus and differences.
3. The small groups work out what kind of outcomes are produced by their collaboration patterns (e.g., high level of coordination and no action = we get along well but don't get anything done. Lots of action but little coordination = routine results without much innovation. Lots of coordination, lots of diversity, lots of action, little reason to work together = lots of false starts...).
4. Brainstorm action points in the small groups to identify elements for improvement.
5. Whole group collects a list of action points and decides: "What first steps can we take immediately?"

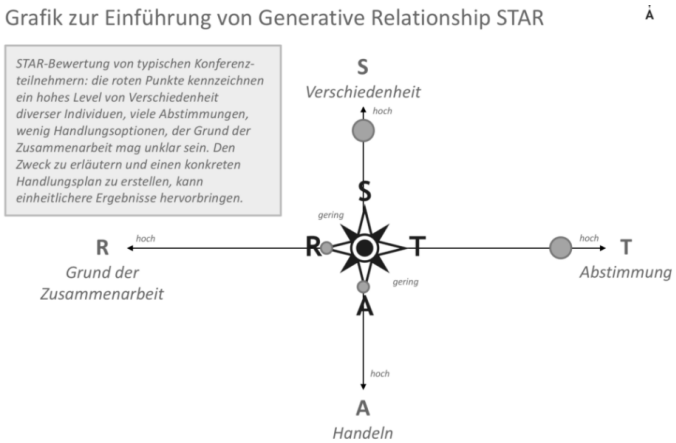
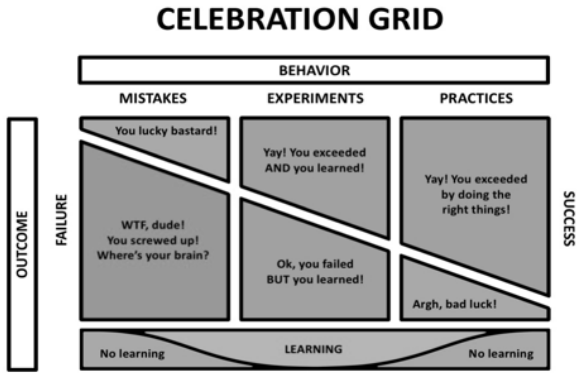


Figure 29: STAR visualisation (Steinhöfer, 2021; Ebers, 2022)

	Roles	Role Market Place (Laloux, 2016, p. 122)	The role marketplace aims to facilitate trading roles - across teams and through the entire organisation. It cultivates self-responsibility and engagement by bringing together the expectations of the role and interested individuals. This method supports individuals in signalling their interest for particular roles. The role marketplace helps them to offload or to pick a new role more easily. *Procedure* 1. Prepare a page in the intranet or wiki of the organisation. 2. All currently existing roles are documented including a short description of their responsibilities. 3. Every colleague is invited to rate every role they currently fill by using a scale from -3 to +3. For example, ratings might express if they find the role energising (+) or draining (-), if they find talents aligned (+) or not aligned (-), or if they find their current skills and knowledge conducive (+) or limiting (-) in this role. 4. Invite a discussion within teams or projects to clarify if individuals might shift their role(s) for the sake of personal mastery and organisational growth.
		Role Spotlight (Oestereich *et al.*, 2017, p. 219)	This method aims to clarify the expectations of a role and to find motivated individuals pull roles that match their personal and professional goals. It therefore aims to start selling long-term roles instead of delegating them. *Perquisites* • Hierarchically leading individuals jointly agree that roles can be exchanged (voluntarily taken over or proactively given back to the community) by individuals, potentially following an agreement process. • They then jointly agree on a potential minimum and maximum duration of a switched role. *Procedure* 1. Everyone agrees on roles' expectations: a. Does the business need to create or keep the role? b. What are the current and future responsibilities? c. What formal power does the role own? d. How does the escalation path look like? e. How can individuals take over the role from a process point of view? How to deal with the request from an individual who wants to replace his current role with the new role? f. How can this role be given back to the community from a process point of view? g. What touchpoints to other roles? h. Can individuals generally switch their role to voluntarily take over the role? i. How is the role communicated in the organization? 2. The new role is properly communicated by documenting it in a lean way at a shared space, for example at an internal wiki page so that everyone can easily access it to inform oneself. 3. Every interested individual reflects if he might take over the role: a. What skills or experiences do I have that match the requirements of the role? b. How can I recognise that the role does not match to my professional skills? c. How is the role related to my current role and tasks and would I have enough capacity to additionally take over the role? 4. If an interested individual wants to try out the role, he can opt-in for an agreed duration by communicating it in accordance with the process.
Living Community	Value Focus	Empty Chair Meeting Practice (Laloux, 2016, p. 204)	The empty chair method aims to actively address an organisations perspective by supporting a temporary switch of roles. It sharpens awareness to the impact of decisions on the strategic intend of the organisation and how they pay-off on the underlying values. *Procedure* 1. At every meeting, dedicate an empty chair in the office room to the organisation (virtual teams might use a background paper or a sticky note that is hold towards the camera).

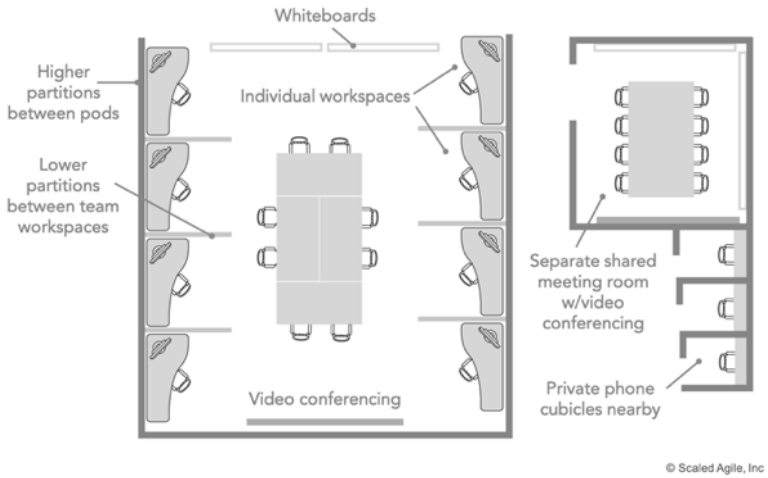
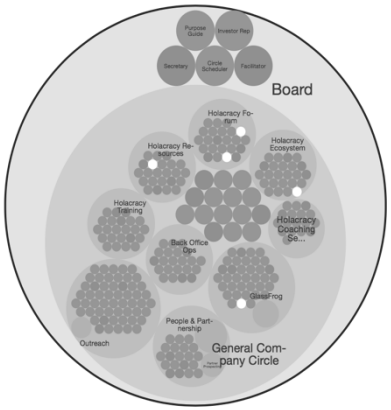
			2. Every participant can at every time take this seat – and immediately becomes the voice of the organisation. As of the organisations' perspective, the volunteering individual might ask: • What value have the discussion and decision provided to the organisation? • What stands out from todays' meeting? How does it support our system to improve?
		General Story Telling (Laloux, 2016, p. 159; Oestereich *et al.*, 2017, p. 239)	This method aims to share personal details with other individuals to establish a workplace of trust. It supports establishing meaningful relationships by making transparent who we are and what is important to us. It is based on a psychological principle that the more you are aware of others personal journey, the less possible is it to distrust them. *Procedure* 1. Approach an individual you feel to be not that close. 2. Ask simple question to learn more about him. Ask, for example: What is something that good friend would tell me about you? How do you become who you are today? Also share your experiences, learnings, perspectives with the individual. 3. Alternatively, use a conversation starter app such as https://burble.buzz/story/ to make story telling more fun and surprising.
		Story Telling "Thank you Day" (Laloux, 2016, p. 161)	Once a year, management offers everyone 1 extra day off and an amount of money (e.g., 100€) which can be used to thank someone (e.g., someone from his family, a neighbour, stranger, colleague, whoever). There only 1 simple rule: once a participating colleague returns to work, he is expected to share what gift he had bought and how it was received.
		Values Day (Laloux, 2016, p. 153)	Values day is a method to regularly inspect actual lived values. It provides the opportunity for every member of the system to address cultural issues to the top leadership in order to seek improvement. Through introspective activities, individuals can revisit the purpose of the organisation, its values, ground rules, and how they are brought to life. *Procedure* 1. Seek the commitment and support of a values day from the top management board and ensure that the frequency of the event, used tools or methods etc. are clarified and communicated to the broader organisation. 2. Free that day from every business topic related meetings and emphasise that everyone is invited (not obligated) to take part. 3. Plan the day to cover fun and surprising retrospective and introspective activities with e.g., means of retrospective events or team building formats. Always ensure that feedback and insights related to actually lived versus agreed values, ground rules, or similar is documented in a way that every individual can access it. 4. At the end of the day, consolidate the input to derive meaningful improvement items (Culture Kaizens). 5. Also analyse them in regards with the organisations purpose and document them publicly so that everyone can access them with ease.
		Value retrospective (Case 3)	A regular format to raise awareness to violated values. It aims to prevent future violations by discussing the reasoning behind observed antipatterns. Every participant has the equal right to speak up. This event is less structured but focuses on members motivation and happiness. *Prerequisites* • A regular meeting spot is scheduled every 2 weeks for about 1 hour. • A volunteer being familiar with retrospective methods is named upfront. He then facilitates the meeting in a neutral and respectful way and keeps the focus on naming issues rather finding a solution. *Procedure* 1. The facilitator opens the ceremony by emphasising everyone's right to speak up each after another and to keep statements and observations in a respectful way. 2. Each member voluntarily speaks up and talks about disrespected values. 3. The group then ensures a joint understanding by voluntarily coming up with clarification questions. 4. The group then jointly tries to find the reasoning for it. If observations are related to only one person, then this person might enlighten the group with a reasoning. 5. Then the 2nd round starts with another individual speaking up.

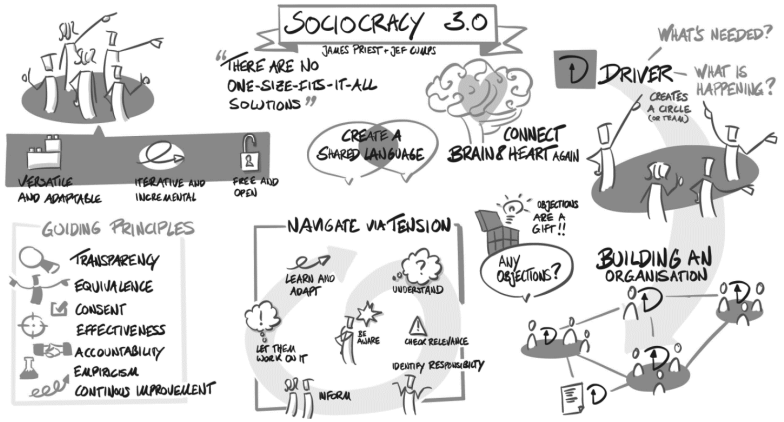
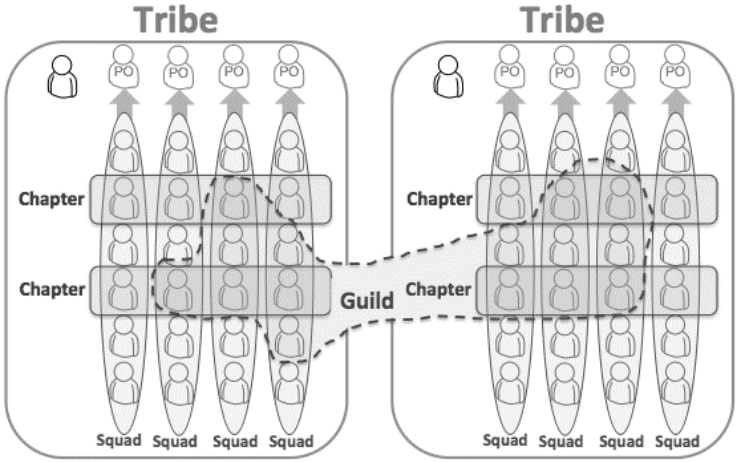
		Value Survey (Laloux, 2016, p. 154)	This method aims to anonymously collect honest feedback across all hierarchy levels of the system. *Procedure* 1. A volunteering group of individuals (volunteering task force) defines a set of questions. 2. These questions are captures into a survey tool and send out to the entire organisation. 3. The results are presented by the top leadership. 4. Every organisational unit is expected to discuss about the outcome of the survey in order to operationalise them according to the identified improvement items (Kaizens).
		Cultural exploration journey (Case 2)	The method is an aggregated adaption of different methods, namely management monitor (Oestereich *et al.*, 2017), cultural exploration days (Appelo, 2011), management by working out loud (Steinhöfer, 2021; Ebers, 2022), and further ones as mentioned by Laloux (2016). The purpose of it is to empower your cultures' intrinsic motivation so that individuals can experiment without being chased for charging billable hours. *Procedure* 1. Communicate cultural evolution activities: Ensure everyone are invited to participate (ensure to free them from work for the time being). 2. Introduce monthly team agreement sessions. Team agreements are a basic set of expectations for how to work together. It supports your culture by avoiding basic miscommunications in terms of what kind of information is shared by using what ways. As one culture, leaders as well as non-leading people jointly decide on the frequency and duration of their cultural exploration days. In the beginning, it makes sense to spend 24 hours per month at which (leading & non-leading) individuals are invited to join. Leadership only takes care that willing individuals are not being forced to join nor receiving punishments as of (non-billable) participation. 3. Offer regular "manage expectations" formats. Leadership is not about selecting the best ideas but to create a system that allows for the best ideas to emerge. In turn, individuals are assumed to welcome the opportunity and to proactively volunteer for the greater. 4. Introduce "cultural exploration days" which is a day full of events that take care about developing a culture of respect, trust, and openness. Consider including a variety of methods as selected by the perceived need of both, management as well as staff. 5. Consider a cultural exploration activity board. Once the journey is started, a bunch of activities might arise. In order to document it in a transparent way so that everyone can inform himself about all currently planned or started activity, an activity board might make sense. According to research, this may be done with an adaption of a Leadership and Ideation board (Oestereich *et al*., 2017).
		Valuing values (Case 2)	This method is an aggregation and adjustment of consent moderation (Oestereich *et al.*, 2017), 1-2-4-All (Steinhöfer, 2021; Ebers, 2022), and other methods as suggested by Laloux (2016). It aims to increase awareness, empathy, and listening which is assumed to generally evolve servant leaders. *Prerequisites* Consider a value-focused journey that spans a fiscal year and covers a range of events. Despite targeting leadership audience, it also involves a broad base of non-leaders as learning is an interactive, dynamic, interdependent, and complex process as it happens in a dynamic and complex social system. It thereby challenges current norms and behaviours of your formal organisation so that including everyone in leadership learning is crucial to build a broad acceptance of learning outcomes. *Procedure* 1. Introduce *half-year value meetings*. Leaders share their motivators with the team and the teams share it with them. This is a bidirectional process to shed light on similarities and differences. Leaders are not only expected to emphasise challenging discussions and diverse perspectives, but they are also assumed to respect opinions that are different from their one. Discussions should be based on justification, not the hierarchical position of a certain leader. The overall purpose of this method is to build awareness of a cultures' different perspectives and to consent on a tangible outcome. In order to do so, once all discussions ended, all participants jointly decide on a set of values which are translated into concrete actions. Consider the 1-2-4-All method (Steinhöfer, 2021; Ebers, 2022) to ideate and brainstorm. Once concrete actions are formulated, participants emphasise what they expect as outcome and how they measure if they were successful. Then, leadership asks for volunteers. At the end of the meeting, each participant leaves a vote on how confident he/she is to pursue that action. In case of low confidence, an open discussion round is offered to address concerns and find consent-driven solution as mentioned by Oestereich *et al.* (2017). 2. Introduce *half-year value surveys*. Either leaders or empowered volunteers create a survey to sense your cultures' diversity as of values. The outcome of these for example either free text fields or the agreement / disagreement votes against a given set of values is meant to be discussed community-wise or team-wise. It may also be used as reference point for the cultural meetings. It's important

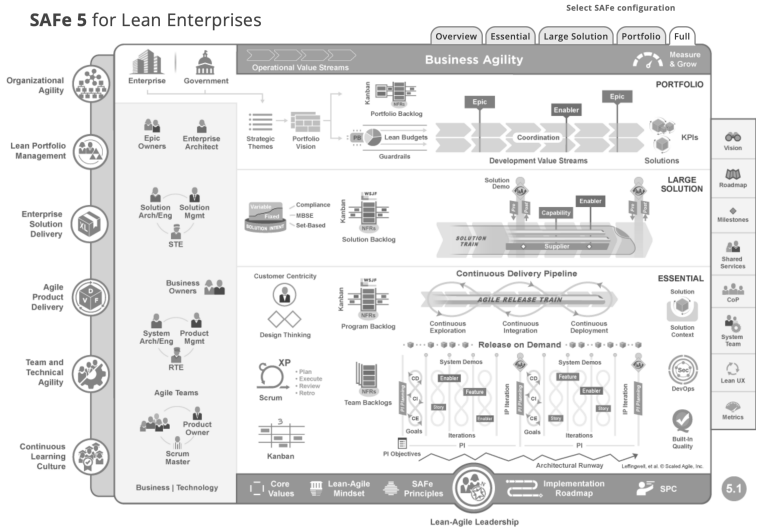
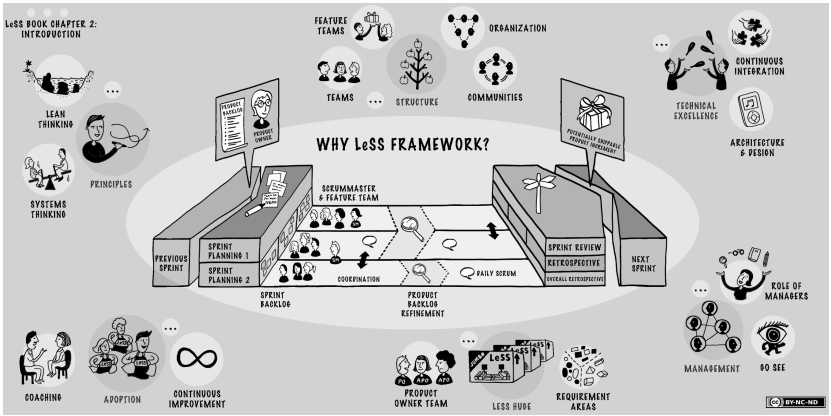
			to document the outcome in a way that individuals are not identifiable and (2) that everyone can transparently access it. Finally, leadership commits to providing the volunteering individual(s) with the required time to work on the action in parallel to their project engagement. 3. Introduce *annual „Thank you" day*. Once a year, leadership offers everyone 1 extra day off and an amount of money (e.g., 100€) to be used to thank someone (for example someone from his or her family, a neighbour, a stranger, colleague etc.). There only 1 simple rule: once he returns to work, he is expected to share what gift he had bought and how it was received. 4. Introduce a *Celebration Grid*. Celebration grids are a visual way to present the outcome of an experiment. It highlights whether that experiment has succeeded (can we celebrate good cultural practices?) or failed (what can we learn from it?). Each person should fill out his or her own celebration grid and use it as a basis to start discussions in regards with the learnings and upcoming experiments and adventures he will head toward next.  *Figure 30: Celebration grid (Appelo, 2016, p. 45)*
	HSR: Heard seen respected (Steinhöfer, 2021; Ebers, 2022)	HSR helps to practice active listening and empathic interaction between colleagues. We encounter many situations where no immediate answer or clear solution is. Once realised and responded with empathy, the "cultural climate" improves, and trust builds between group members. HSR helps people respond in a way that does not over-promise or over-control. Unwanted patterns are noticed and interactions in the group are guided into productive paths. Participants experience what it feels like to act compassionately and the benefits this brings. *Procedure* 1. Listen without seeking a solution and without evaluating what is heard. So, each person in turn has 7 minutes to tell a story in which someone was not heard, seen, or respected. 2. Others share their experiences of listening and telling: "How did it feel to tell my story and how did it feel to listen to yours?". 3. Invite everyone to join an open discussion by asking: "What patterns were evident in the stories? What importance do you attach to these patterns?" 4. Reflect how HSR can be used to overcome the challenges behind the patterns and what other methods could be used in addition. 5. Finally, thank everyone.
Cultural Artifacts Focus	Culture Books (Appelo, 2011)	Culture books cover the perspective of a member of a culture which is then shared with other members of the culture. They aim to align constraints and share knowledge about existing and wished values. Procedure 1. Provide them with a list of values so that everyone can choose his core or wish values. 2. Ask individuals to share a personal story that reflects a value they feel in the culture. 3. Agree on eliminating some of them in order to come up with a list of 5-7 core and wish values. 4. Ensure that everyone can see the value lists of the others. For example, ask the individuals to create visualisations of their values which made be enhanced by personal stories of photos and put them to a physical or virtual whiteboard.

			5. Document all the visualisations in 1 document, which is then named “Culture Book”. 6. Share this book with new joining colleagues and encourage everyone to update it regularly.
		Personal Maps (Appelo, 2011)	Personal maps increase transparency, collaboration, and trust by increasing members knowledge about the other members. It therefore helps them to relate to each other and to share common grounds. *Prerequisites* • Find a volunteering facilitator. • Prepare a (virtual) flipchart with 4 blank quadrants. • Block an agreed time slot and pay attention that every individual respects the agreed slot. *Procedure* 1. By yourself, silently brainwrite main categories that describe you in the best way. Put them on a (virtual) flipchart so that they are visible to the entire team. 2. Find a volunteer who either leaves the (virtual) meeting room or stays but remains quiet and do not help the team. 3. The team jointly tries to gather as much information as possible about the volunteering individual. Alternatively, everyone notes his knowledge by silently reflecting about it, sharing it, and then discussing about it with the other ones. 4. All documented information is then clustered in accordance with the 4 main categories. 5. The volunteer is then called back. 6. The facilitator reads out loud all the gathered information. 7. The volunteer is invited to comment the written information while adding information that are not known to the others. 8. Repeat the method with the next individual.
		Identity Symbols (Appelo, 2011)	This method aims to support colleagues to make themselves comfortable and feel belonging to a (new) community. The feeling of belonging to a culture is crucial for the groups identity which shapes their actions, and vice versa. To do so, the method aims to provide a clear name and image to the culture. *Procedure* 1. Ask teams, functions, divisions, or departments about a symbol of their identity. You might prepare an excuse to ask so, for example you need to find images that represent that cultural entity in order to create a brochure for new joining colleagues etc. 2. Focus on collecting good or bad examples and don’t let them get away by referring to the Q&A department or similar. 3. Ensure that the members of the culture are willing to associate themselves to the respective symbol. If they don’t then reject the symbol. 4. Start using the identified cultural identity symbol throughout all internal communication.
		Company Breakfast (Oestereich *et al.*, 2017, p. 240)	The company breakfast is a method which aims to evolve the culture of the team. Procedure 1. Honestly ask your team members if they are interested in joint activities like a company breakfast. 2. Find a voluntary who is willing to schedule a respective (potentially recurring) time slot. 3. During the breakfast, focus on talking about off-topics (non-work topics) such as private stories, recent experiences, or similar. *Alternative procedure* 1. A volunteering, experienced team member invites colleagues to a joint breakfast while paying attention to include another experienced colleague and the new joining ones. 2. Alternatively, consider scheduling company breakfasts with 2 experienced and 3 new joining colleagues. The experienced colleagues might share “war stories” and past experiences to welcome the new joiners.

		Event Manager (Oestereich *et al.*, 2017, p. 240)	This method aims to make a group of individuals become more familiar with each other by offering personal details and share fun moments. *Procedure* 1. Find an individual who is willing to take over the role of the internal Event Manager. 2. That individual schedules a company excursion based on his personal preference or ethnographic or cultural background. Example: A Greek colleague might schedule a weekend in his favourite city in Greece to share his experiences with the Greek culture and special moments he might have experienced.
		How to work at.. (Oestereich *et al.*, 2017, p. 242)	The "How to work at..." method owns an inherent ethnocratic character and aims to provide new colleagues with an orientation in regards with the organisation and to provide a platform to discuss cultural observations. *Procedure* 1. A volunteering individual approaches different individuals across the hierarchy. He asks them different questions in regard to how organisational processes are actually followed in daily business. Examples: "How do we come to decisions?", "How can I get knowledge about my yearly budget?", "How do we work together as of collaboration?", "How can I talk about increasing my salary?", "What are my opportunities to change my subject matter area?". The results are then documented. 2. An external examiner (preferably an Ethnographer) is employed and provided with the results. He looks for other real-world stories of similar patterns in the communication or behaviour of individuals. His insights are documented. 3. Both documentations are consolidated and examined as of the underlying principles and similarities. These are then generalised, topic-wise clustered, enriched by descriptions, and finally documented in an "organisation user guide". 4. Once new colleagues join the organisation, they are provided with the user guide. They are also expected to approach other individuals to clarify questions or request examples to become familiar with the organisation culture.
		Equality Champion Awards	Show special engagement in categories that are jointly aligned among participants. For example, think about naming "equality network winners" who support the organisation by provide others with continuous learning or helping to connect communities (e.g., kick-off disability inclusion events or events focus on deepening the conversation about the attraction, retention, and development of individuals belonging to difference races and ethnicities).
	System Focus	Topic-Centred Support Teams (Leffingwell *et al.*, 2014; Laloux, 2016, p. 320; Leffingwell & Jemilo, 2019)	This method helps self-managing teams to provide support with respect to a chosen subject matter topic. *Procedure* 1. Get a joint understanding what skills are needed for the targeted change endeavour and identify respective subject matter experts (company-wide and across hierarchies). 2. Jointly agree on the responsibilities of the support team. For instance, consider: • Communication of the perceived business need and how the group of SME can help other teams in regards with a defined subject matter topic. • Establishing of communication channels to reach the support team from every hierarchy level with ease. • Conducting one-on-one trainings and coaching and team workshops, if requested by the respective individual(s). • Participation in critical meetings which subjectively suffer the experience. • Offering feedback to inspect and adjust changed skills within the support team. 3. Depending on the number of SMEs, consider training further individuals who are at least initially in those topics. 4. Officially invite everyone in the organisation to reach out to the support team.
		Agile Workspaces (Laloux, 2016; Oestereich *et al.*, 2017; Hesselberg, 2018; Leffingwell & Jemilo, 2019)	Agile workspaces aim to support new work ambitions by effectively providing cross-team collaboration and visualisation of work to unleash high team productivity. To do so, room layouts support for instance space for individual focus, occasional privacy, and space for regular ceremonies (e.g., daily stand-ups) meetings or other collaboration situations (whiteboards). As illustrated below, teams covering 8-10 individuals are offered the opportunity to work in semi-private sections, so called cubicles, but also with rooms for conferencing etc. This room design aims to foster informal information exchange and ad-hoc collaboration.

			 *Figure 31: Agile workspaces (Leffingwell et al., 2014; Leffingwell & Jemilo, 2019)*
		Google 20% Project (Vise, 2007; Brandt, 2011)	This method guarantees employees 20% free time at which they can work on their personal projects. There are only 2 rules: (1) Any invention belongs to the company for the greater. (2) If requested, individuals must be able to showcase how their personal project pays off the culture values or the company's' strategic intend.
		InnoDays (Berndt, 2019)	Within 72 hours, a broad base of willing colleagues come together. They group themselves in cross-functional teams that are organised around personal topic of high personal interest. Being focused on purpose, they create working prototypes which are shown to volunteering customers. The customers are then invited to vote on them so that a "winner" is nominated. The InnoDays are repeated on a yearly base.
Scaling Structure	Network Designs	Holacracy (Robertson, 2015, 2016)	Holacracy is based on Sociocracy. It is built upon a central set of rules (Holacracy constitution) that covers roles, circle structure, governance processes, operative processes, and adoption matters. Decisions are dynamically taken by volunteering roles in governance meetings (which are different from tactical meetings) following an objection integration process to gain broad agreement and clarity.  *Figure 32: Holacracy visualisation by Bowers et al (2022)*

		Sociocracy 3.0 (Bockelbrink, Priest & David, 2020, 2021)	Sociocracy 3.0 (S3) was release in 2015 and is a set of social operating mechanisms, a so-called “social technology”, that aims to evolve agile and resilient organisations at any size. It fosters transparency and collaboration through flexibility, which is understood as the application of adaptive, independent, and mutually reinforcing patterns. It is based on the principles of consent, empiricism, continuous improvement, equivalence, transparency, and accountability to purposefully define key concepts (driver, domain, agreement, objection, governance, and operations) which jointly evolve an organisation to make sense of it.  *Figure 33: Sociocracy visualisation (Pohl, 2022)*
		Spotify (Kniberg and Ivarsson, 2012; van der Wardt, 2015; Oestereich *et al.*, 2017)	The Spotify model is based on the principles transparency & alignment, experiments & failure culture, and welcome innovation. It covers elements from the Scrum framework and operates based on the organisational entities squads (agile teams; 8-10 persons), tribes (covers squads; up to 150 persons), chapters (covers tribes, and guilds (covers chapters). It combines less formal processes and ceremonies and relies more strongly on self-management and autonomy.  *Figure 34: Spotify visualisation (van der Wardt, 2015)*

	Scaled Agile Framework Designs	SAFe (Leffingwell *et al.*, 2014; Leffingwell and Jemilo, 2019)	Scaled Agile Framework (SAFe) is a transformational framework which is built around cross-hierarchy business value. It focuses on 7 core competencies and 10 principles to enable business agility throughout the organisation.  *Figure 35: SAFe 5.1 framework (Leffingwell et al., 2014; Leffingwell & Jemilo, 2019)*
		LeSS (Larman and Vodde, 2016)	Large Scale Scrum (LeSS) is based on the SCRUM framework. Being focused on the “More with LeSS” principle, the framework focuses on understanding the root causes of issues within complex organisations to build a Scrum-scaled structure.  *Figure 36: LeSS framework (Larman and Vodde, 2016; Conboy & Carroll, 2019)*
		Scrum@Scale (Sutherland, 2016)	The Scrum@Scale (S@S) addresses effective coordination among several Scrum teams. It builds on a linear scaling approach to organise multiple networks of Scrum teams to achieve business agility.

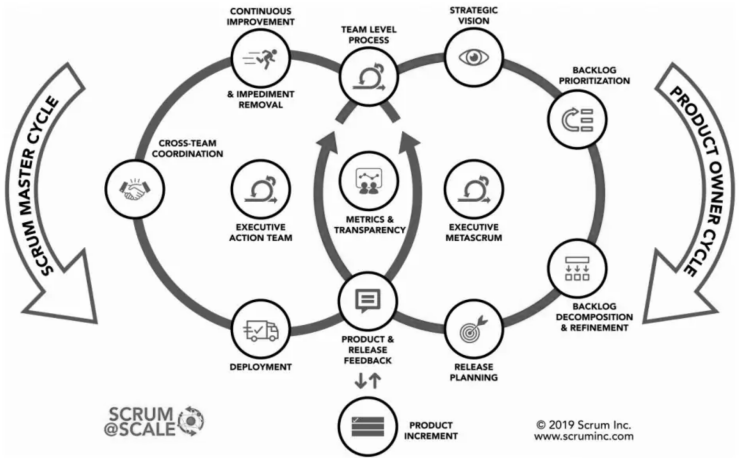


Figure 37: Scrum@Scale framework (Sutherland, 2016; Conboy & Carroll, 2019)

Nexus (Schwaber, 2017)

The Nexus framework covers up to 9 teams by aiming to minimise cross-team dependencies and reduce integration challenges.

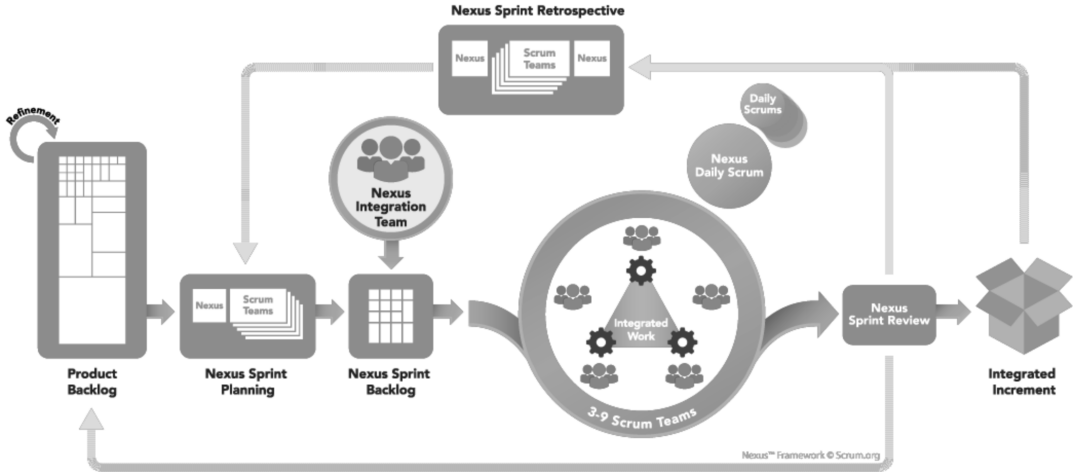


Figure 38: Nexus framework (Schwaber, 2017)

Table 12: CM tool for agile-matured cultures (complete)