

Evaluation of Agile Team Performance

Exploring the gap between the current and ideal future state for empowered teams at a company with adoption of SAFe

Master's thesis in Quality and Operations Management

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Gothenburg, Sweden 2021

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Cover: Visualisation of the elements of culture, structure, task, and individual that
need to align with each other to enable high team performance.

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Abstract

The modern business landscape is part of a fast-moving, complex, and globally connected world. The conditions have made the industrial company investigated change from a traditional industrial strategy to a lean-agile strategy, including an adapted version of scaled agility. The former strategy with a hierarchical structure has given former success by standardisations' economical benefits, but the transition aims to provide future success by managing the new business environment with faster and more responsive product development processes.

One of the company's departments (the product area), consisting of approximately 20 agile teams, has been early adopters in the agile transformation. They have sought external eyes to evaluate how far they have come and what can be done next to improve the change process. One of the main challenges discussed at the product area regarding the transition from traditional to agile orientation was understanding how to enable empowerment within the agile teams. To seize this challenge, the researchers aimed to suggest improvements based on a qualitative case study of three areas decided as important for high-performing agile teams.

To provide improvements, a gap analysis was conducted. The current state and an ideal future state for empowered agile teams at the product area was determined by research question (RQ)1 and RQ2(a). The current state can be generalised into three parts. Firstly, the product area have structures and methods for doing agile, but lacks in individual agile mindsets and cultural behaviors. Secondly, individual conditions for empowerment were aligned with academic success factors for agile teams. Thirdly, scaled agility frameworks are built on the assumption of already having empowered teams. The ideal future state was determined to fulfilled dimensions for teams' agile success factors, self-organisation, and empowerment. RQ2(b) concludes a gap between these two states and how far the product area has come in their agile teams' transition. The gap mainly included different dimensions that can be improved to align individual expectations and cultural aspects with the team task and structure. The last RQ3 answers what actions are recommended to reach the ideal future state by reducing that gap, which is important for succeeding with the lean-agile strategy of scaled agility.

Conclusively, it was determined that there was no agile 2.0 for all teams. Each team needs to consider where they are today and where they want to be in the future while assuming that the team culture and individual expectations should be aligned

with the team structure and task. The researchers have composed three roadmaps that can be used to guide the product area with what dimensions are important to discuss with their iterative team developments. These roadmaps are directed to different stakeholders (the team, the team leaders, and management above team level), with different authority to affect team elements that align with organisational success.

Keywords: agile transformation, self-organisation, empowerment, team success factors, SAFe, high-performing teams, change management, agile roadmap.

Acknowledgements

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We are overall grateful for the experience of getting to know agile teams and investigate what makes them empowered. We have learned a lot that will be of high value for us in our upcoming professional careers.

Johanna Laussen & Angelina Sutanovac, Gothenburg, June 2021

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Vocabulary

ART - Agile Release Train; Many agile teams that together works incrementally towards a value stream. The value stream consists of all actions that come together to create the value that the customers are willing to pay for.

Backlog - The teams' lists of tasks that is prioritised to endorse the long-term strategic plans.

Brave agile teams - Agile teams that have been nominated to a title by having done something brave in alignment with the scaled agile transformation and are therefore considered early adopters in the change process. The criteria to be fulfilled for getting a nomination to the title of a brave agile team refer to having gone through education in agile ways of working and embracing working cross-functional, transparent, according to agile methodologies, continuous improvements, and collaboration. The team label is an internal phenomenon to engage people in adopting the agile way of working within the company by having the teams appearing in newsletters and internal web pages.

Empowerment- Term to describe when individuals have positive feelings and high motivation for what they do.

Empowered team - A team that have good conditions for high performance and motivated individuals. Related to Maslow's theory of motivation, examples on dimensions important for motivation are feeling safe in the team environment, having friendly relationships, feelings of accomplishment, and possibilities to achieve full potential.

MVP - Minimum Viable Product. A term used by team members to describe a product with enough features to be used by customers, who in turn can give valuable feedback to the team, which then can develop the product further with avoidance of unnecessary work at the beginning.

PI Planning - PI is a shortcut for program increment and PI planning is an event where mission and vision are aligned for the whole ART.

Product Owner - Team members with responsibility in prioritising the backlog to be streamlined with program priorities while ensuring integrity for the teams' features.

SAFe - The Scaled Agile Framework®. A generic and famous framework that presents how agility can be scaled.

Scrum Master - Servant leaders and coaches for agile teams. They make sure that the adopted agile process is followed and that the environment is continuous learning.

Sprint planning - A sprint is a short period of time in which an agile team working with scrum completes certain tasks. Sprint planning is the event for which this period is planned.

Team leaders - The product owner and the scrum master in collaboration, having the back of the team.

The product area - The department investigated in the study scope, with approximately 150 employees and 20 teams

UX teams and System teams - Both are agile teams but in the creation of different kinds of value flows. System teams are stated to use Scrum or Kanban, but UX teams do not have a stated practice.

CASAF - Company Adopted Scaled Agile Framework. The company's customised framework for scaled agile organisation and workflows.

VUCA - Volatility, Uncertainty, Complexity, Ambiguity. A term that captures how it is like to operate in today's globalised business environment with fast-evolving technologies.

T-shaped competency - Also known as cross-skilled competency, a term used when employees attain excellent skills and knowledge in one specific area but are skilled at collaboratively working with others.

Roadmap - Includes recommendations of actions for the product area to reach the future state of empowered teams. Included in "NOW" are the things that one can start with right away, "NEXT" are things that are coming up soon and "LATER" are things that one would like to work on in the future, but need to do more research before moving on.

1

Introduction

This chapter introduces the background to the research and its problem statements, objectives, and delimitation in the scope and sample.

1.1 Background

The world today is complex and changes fast, and is therefore called a VUCA-world (Systems Innovation, 2019). VUCA stands for Volatility, Uncertainty, Complexity and Ambiguity and describes crucial factors of social, economic and global developments that have become challenging for businesses to keep pace with (Mack, Khare, Krämer & Burgartz, 2015). New technologies and connected solutions makes multi-layered challenges, dependencies evolves, and necessary organisational changes are getting more difficult to predict (Lawrence, 2013). High global interconnection and an increasing rate of changes makes traditional industrial strategies with best-practices and standardisation outdated (Mack et al., 2015).

The company investigated in this research is a large organisation in the industrial sector. They have a history of traditional industrial strategies and a hierarchical structure, but has in the last years realised its need to adopt the organisation to stay competitive. They have made a breakthrough change in their strategy by transitioning into an agile-oriented organisation. The agile approach is argued to minimise wasteful shares in the process of software development and increase the customer focus (Solinski & Petersen, 2016), which is argued to make the organisation faster and more responsive. Because of the size of the company and the complexity of its products, the transitioning process has been implemented with a scaled agile framework, the Company Adopted Scaled Agile Framework (CASAF), inspired the world's leading framework for scaling agile across enterprises, SAgile (SAgile, 2021).

The agile transformation is ongoing, and one of the departments at the company (from now on given the name "the product area"), which was early in adapting to the new lean-agile strategy now seeks external eyes with new perspectives to evaluate the transition so far and identify possible improvements. The clients at the product area were especially interested in working towards increased levels of team empowerment. With this background, the researchers have narrowed down the scope of finding improvement suggestions about the agile transformation to investigate agile teams' empowerment and performance in the product area.

1.2 Aim

This master thesis embodies a qualitative case study at one of the company's departments, the product area, to acquire contextual and concrete in-depth knowledge about their agile teams' performance and empowerment. It aims to investigate how the teams perform today, determine their ideal future state, and identify what is lacking between them by conducting a gap analysis. The concluding part of the report aims to present recommended actions in roadmaps to work with now, next, and later at the product area to reach the determined ideal future state.

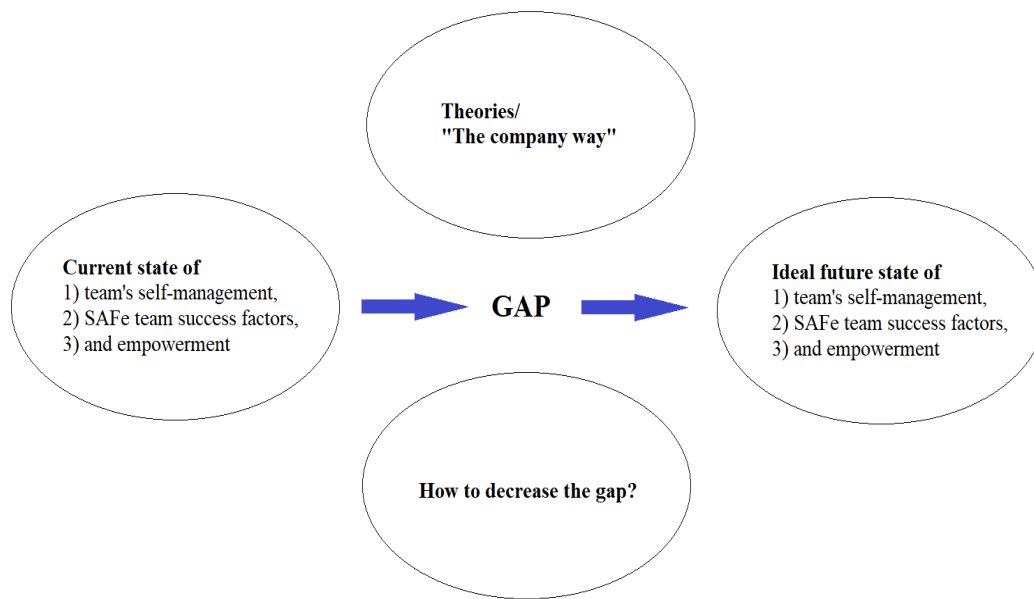


Figure 1.1: *The figure illustrates the researchers' consideration of theories & the company way (internal company documents and business specific goals) when analysing the gap and how to decrease it.*

1.3 Objectives

The objectives for fulfilling the aim consist of answering all of the three research questions presented below.

1.3.1 Research Question 1

What is the current state for empowered teams at the product area?

To answer the first research question, data will be collected about agile teams self-organising, SAFe team success factors, and empowerment. The empirical findings summarizes the data collected in interviews and the survey. This summary will later be analysed and compared to academic theories about agile teams to determine the current performance for the product area, which finalises the answer to the research question.

1.3.2 Research Question 2

- a) Relating to the current agile team state, internal goals, and academic theories, what is the product area's ideal future state for agile teams?*
- b) How far has the product area come in their agile team transformation compared to the ideal future state?*

The future state should be realistic by being determined to align with organisational goals and be achievable to strive towards from the current state. By combining and analysing academic theories about high-performing agile teams with the determined current state from research question 1, a realistic ideal future state will be determined, which answers research question 2a. Research question 2b will be resolved by identifying the gap between the current teams state and the ideal future state and analysing the difference between them.

1.3.3 Research Question 3

What improvements and actions are recommended to reach the ideal future state of empowered teams?

The third and last research question is handled by three steps. Firstly, the gap will be analysed with a congruence model (Nadler & Tushman, 1980) that is beneficial for diagnosing factors that affects change in an ongoing transformation. Nadler & Tushman (1980) argue that the model is an effective diagnostic tool to use for evaluating how well the various elements within organisations work together and is therefore chosen by the authors of this research. The analysis aims to identify what aspects of agile teams are missing, unnecessary, and/or need development to build a bridge to the ideal future state. Secondly, roadmaps will be set up with recommended actions to do now, next, and later in the transformation process. Conclusively, a postcard from the future will be presented to visualise how empowered and thriving the teams of the product area will be when the ideal future state is reached. The postcard is aiming to create a motivation among all appointed stakeholders to take action towards improvements.

1.4 Delimitations

Delimitations of this research are presented below.

1.4.1 Research Scope

The research was conducted at an industrial company, but the scope was delimited to investigate agile teams at a specific product area. The teams of the product area are functionality-based and mostly co-located on several locations globally. There are approximately 150 individuals within it and the teams vary in size from 6-8 people, with a few exceptions. The total number of teams is therefore approaching about 20 in numbers. The teams are cross-functional with members from different

1. Introduction

functions depending on what individuals and skills are required to deliver.

The researchers delimited the scope in performance to investigate three areas; team success factors (SAFe, 2021; Google, 2021); conditions for individual and team empowerment; and dimensions suggested important for teams' self-organising (Moe et al., 2009; Karhatsu, Ikonen, Kettunen, Fagerholm & Abrahamsson, 2010). It was based on what the researchers have evaluated to be essential for successful and empowered agile teams.

The first area relates to self-management, and for it, 6 dimensions have been chosen to be investigated with inspiration from theories about high-performing agile teams. The dimensions are shared leadership, autonomy, communication & collaboration, redundancy, learning, and team orientation. The second area of the scope concerns empowerment, for which the researchers have delimited the scope to individuals' preferences in what factors needs to be fulfilled to feel empowered. The third and last research area concerns agile team success factors, stated by SAFe and researchers at Google. These have been in the study for the participants to express their level of agreement as well as to get to talk openly about their feelings and opinions. The scope's delimitation are shown in the figure below.

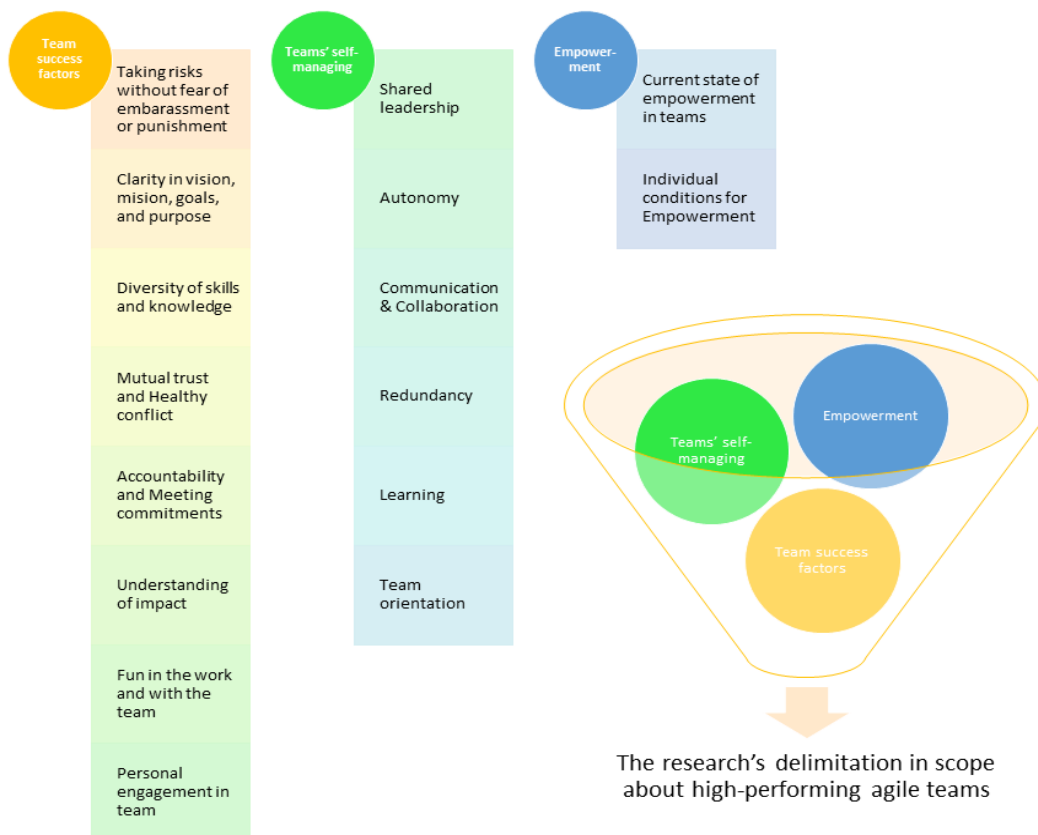


Figure 1.2: An illustration of the delimitation made of the thesis scope, that comprises three areas that affects the performance of agile teams at the product area. The illustration is made by the researchers themselves.

1.4.2 Data collection methods

Regarding data collection methods, observations was also discussed to be included. The prerequisites to do observations were however not great due to COVID-19 and its consequence on the teams within the product area working from home. This research was required to be done out of office in a digital format, which made the researchers exclude observations as a data collection method. Nevertheless, three data collection methods combined were counted to be enabling a sufficient level of data quality for determining what the current agile team state was like and what the ideal future state could look like.

2

Methodology

This chapter motivates the choice of research strategy and design with related quality criteria. Presented are also the research process, the data collection methods, and ethical aspects of the work.

2.1 Research strategy

Research strategies are supposed to provide plans of actions on the logic and rationale in how to address the research questions (Denscombe, 2014), which is what the researchers will do in this section. There are different rationales for social research but the practice can in general be classified as quantitative or qualitative depending on its nature and related considerations and assumptions about the world (Bryman, 2016). Quantitative research is deductively testing theories with lots of data measures, has epistemological considerations of natural norms and usage of the natural scientific model, and ontological considerations of viewing social reality as an objective reality (Bryman, 2016). Qualitative research are more interested in the meaning of words than quantified data, has an inductive approach that focus on generation of theories, has epistemological considerations making a point of individuals' interpretations of their social world, and ontological considerations that emphasise the social reality as constantly shifting depending on individuals' actions (Bryman, 2016). The orientation of this research is qualitative, with a focus on investigating words of people to understand their interpretation of their reality and with the presumption that social reality can shift.

Even though qualitative research normally focuses on generation of theories, this research will have a different approach than inductive or deductive. Instead, an intertwined research process will be applied that both tests and builds theories continuously, which is argued by Dubois & Gadde (2002) as suitable when having a case study as a research design. Dubois and Gadde (2002) present an abductive logic approach called “systematic combining”, as a method to deal with the criticism against case studies lacking in basis for scientific generalisation (Yin, 1994). The case study as a research design is valid for developing theories and frameworks because of the insights possible to achieve with an in-depth understanding of a case context. Still, the matching and analysing between theory and reality can with the systematic combining method be continuous during the research process. The ideas of how to solve challenges that is being built up during the process can then be redirected when empirical observations within the case lead to new related issues.

Related issues can with this method be emphasized on more in the continued data collection from the empirical case.

2.2 Research design

The research has a case study design at an industrial company. It includes longitudinal research, as the researchers were conducting a first set of data collection through interviews during an interval of time as well as they completed retrospective analysing of documents and a second but smaller collection of data through follow-up questions with management above team level. Case studies are common as research designs for investigating single cases in depth and detail, but it is also common to include longitudinal elements of research in it (Bryman, 2016).

Reliability, replication, and validity are three important quality criteria for any research to consider when deciding how to design it (Bryman, 2016). In qualitative research, these criteria can however be better translated into validity, reliability, and generalisability (Mason, 1996). The replication criteria is however still remaining, but translated and labelled as external reliability within the reliability chapter.

2.2.1 Validity

Firstly and probably most importantly, the criteria of validity reviews if the conclusions that have been generated from the investigations in the research are interrelated (Bryman, 2016). External validity concerns the results' generalisability for other contexts depending on the chosen samples (Bryman, 2016), and is therefore further explained under chapter 2.2.3 Generalisability. Validity also concerns ecological validity and for qualitative research; trustworthiness and authenticity.

Ecological validity

Ecological validity concerns the potentiality to practice the research results in everyday life by people in the real world (Bryman, 2016). This thesis is conducted fully virtually due to COVID-19, meaning that all data collections will be done via online forums and digital meetings. The researchers are aware of that it is not the most natural environment to interact with people. To increase the ecological validity without compromising the necessary digital format, the researchers tried to create an easygoing and welcoming environment. At the beginning of the meeting, it was made time to say hello properly and ask about the well being of the day as well as to inform the participant about the aim of the work and why their input were requested, useful, and significant.

Trustworthiness

If it is assumed that there can be several explanations to the same reality, the internal validity of the research depends on the credibility of its results since that determines the general opinion in feeling like it is trustworthy (Bryman, 2016). The credibility of the research includes that research is conducted by the rules of the

methodology and that it is validated by the people that are part of the context of reality that is investigated (Bryman, 2016). To achieve credibility, two actions were taken. Firstly, the methodology was considered to fit the aim of the research. Secondly, the interview notes were sent to the participants after the meeting to confirm the accuracy of the match in what they had said.

Trustworthiness is also related to the transferability of the research results (Bryman, 2016). Qualitative research emphasizes in-depth knowledge about few people compared to quantitative analysis that studies to gain a broad understanding about many people. The criteria of transferability is therefore in qualitative research handled by doing detailed descriptions of the culture and context so that others can evaluate how transferable the results are to another context (Bryman, 2016), which has been done in this research. Furthermore, dependability and confirmability regards trustworthiness but are described under the next section about reliability.

Authenticity

There are five criteria for originality or authenticity that have been considered throughout this research as a part of its validity. The research is supposed to: give a fair representation of different opinions and interpretations within the sample, help the people involved in the study to better understand the social situation they are part of, help the people involved in the study understand other people's perspective within the same social situation, help the participating people manage to change their situation, and, help the people involved with greater opportunities to make the action that is demanded to change.

2.2.2 Reliability

The criteria of reliability review the consistency of results, meaning if it is possible to get the same result if the research were to be conducted again or if it is highly affected by occasional coincidences in the studied case environment (Bryman, 2016). Bryman (2016) suggests that dependability and confirmability should be considered within the reliability criteria to achieve trustworthiness in qualitative research. Accordingly, the replication quality criteria can be translated into external reliability in qualitative research.

Dependability

The judgement of dependability is related to trustworthiness and can be done by continuous auditing all phases in a research process (Bryman, 2016). To evaluate the correctness of choices in strategy, design, and methods for the research in relation to its scope and aim, a draft of the planned methodology of this research was sent to its supervisor from Chalmers as well as the company for feedback before starting the research process. In the final phase of the research, the report was detailly reviewed and given feedback by two other master thesis students of the Quality and Operations Management program.

Confirmability

It is impossible to get complete objectivity in social research. Still, the researchers have been aware of the risk. They have considered and intentionally acted in good faith to not let personal values or theoretical preferences from respondents or the researchers themselves affect the interpretation of participants' values, opinions, and experiences.

Replicability/External Reliability

Qualitative research reviews external reliability as the replicability of the research (Bryman, 2016). The replication criteria review the possibility to conduct a repeat of the same research with its belonging methodology (Bryman, 2016), and can be translated into external reliability for qualitative research. This criterion has been addressed by the writing of chapter two, where the methodology of this research has been described in detail.

2.2.3 Generalisability

When using case study design in qualitative research, it is useful to reflect upon if the results are applicable for other cases. This research has chosen to investigate all of the roles within a traditional agile team to achieve input from all perspectives. There are teams at the company called "Brave Agile Teams" that are appraised as good examples adopting to the agile transformation within the company. Three of the interviewees were from these brave agile teams, to create an internal benchmark against the teams of the product area. The rest of the data was collected from 5 individuals part of teams from the product area since it is the case studied in this research. The product area work with software and was early adopting to implement agile ways of working just like software departments often are (Karhatsu, Ikonen, Kettunen, Fagerholm & Abrahamsson, 2010). Both samples are thereby generalised as early adopters in the scaled agile transformation process and therefore they hypothetically could share commonality in characteristics for team performance. With the total sample including data from many of the teams seen as early adopters in the agile transformation, the results could presumptive be valid for other teams at the company.

Other considerations that affected the choice of sample was to not choose many people from the same team so that they would be exposed to many occasions of lack in manpower. Another consideration was not to overlap the samples with other master thesis students conducting data collections from team members within the same product area. The sample from the product area was firstly localised with help from team managers (management above team level) and actively chosen to fulfill the above mentioned demands.

It is understandable that the results from this case study will not be applicable for other companies in the industry sector because of its belonging investigations taking place in the specific context of the company. Positively for generalisability

within the company is that the interviews and the workshop were conducted with all of the three roles that an agile team has across all departments, giving a diverse understanding of a general agile team at the company. The researchers are however aware that specific conditions will affect the results like processes, tools, roles, and cultures, both at the product area and the belonging departments of the Brave agile team members participating in the research. However, the results are possibly applicable for other departments of the company because of their commonality in some parts of the culture and the adoption of agile ways of work originating from the original SAFe-framework.

Additionally, as mentioned in the section above, both the brave agile teams and the teams of the product area have served as role models for agile teams which increases the generalisability of the research. It has also been argued that the “systematic combining” method can help to achieve generalisability in case studies (Dubois & Gadde, 2002), and this research has an adopted version of systematic combining.

2.3 Data collection methods

A literature review, interviews, and inspections of documents were the first used methods for collecting data to the research.

2.3.1 Literature Review

To explore what characteristics a team should have to be empowered, the researchers have investigated and summarised previous peer-reviewed research and theories of high-performing teams and factors for successful agile teams and individual motivation. The investigation was mainly done on Google Scholar and the database at Chalmers library, but also books. To be able to later decide what dimensions that the interview template should include to investigate the performance of agile teams, empowerment has also been investigated theoretically by theories about individual motivation and team majority. The literature review comprises literature about agile methodology to understand underlying values and principles that affect the teams and information about SAFe and its structure to understand the basis of the company’s adoption to large-scaled agility.

2.3.2 Interviews

Interviews are plausibly the most practiced method in qualitative research (Bryman, 2016). Compared to conducting observations which demand the researcher/s to be present at a certain location for a longer period of time, interviews are popular due to their flexibility (Bryman, 2016). Interviews in quantitative research are very structured to maximize the reliability and validity in answering precise research questions. In contrast to that, interviews in qualitative research tend to be less structured to allow the respondents’ perspectives and perceptions and empower the means to answer more general research questions (Bryman, 2016). Since the researchers wants the respondents’ opinions and perspectives on what challenges

are most important, this research's qualitative interviews can deviate in the order of the questions, with follow-up questions, and content that changes by learning of what issues are important during the process (Bryman, 2016).

Sample

Individuals from teams within the product area as well as individuals being part of so called "brave agile teams" outside of the product area will be participating in interviews and a preparatory survey to. All of the teams at the product area are agile, but they do not have any teams nominated as brave agile teams, so the participants from these teams were part of other departments. Brave agile teams have been nominated to that title for having done something brave in alignment with the scaled agile transformation and are therefore considered to be early adopters in the change process, just like the product area. Therefore they are hypothetically common in characteristics, which makes both samples interesting to investigate relating to agile team efficiency within the scope. The brave agile teams are additionally seen as one kind of internal benchmark. The benchmark could indicate possible patterns in team performance between teams similar in adopting to agility.

The full sample for data collection are from teams that are identified to be early adopters in the scaled agile transformation process. Since the scope of the study is on team-level, the roles asked to participate in the study were team members, product owners, and scrum masters. Additional discussions has been held with management above team level when discussing the empirical findings during the research process. Empirical data was mainly collected from a survey and interviews. One individual from five different teams from the product area participated, and one individual from three teams was part of brave agile teams. Below, an illustration of the delimitation made in the total sample is presented.

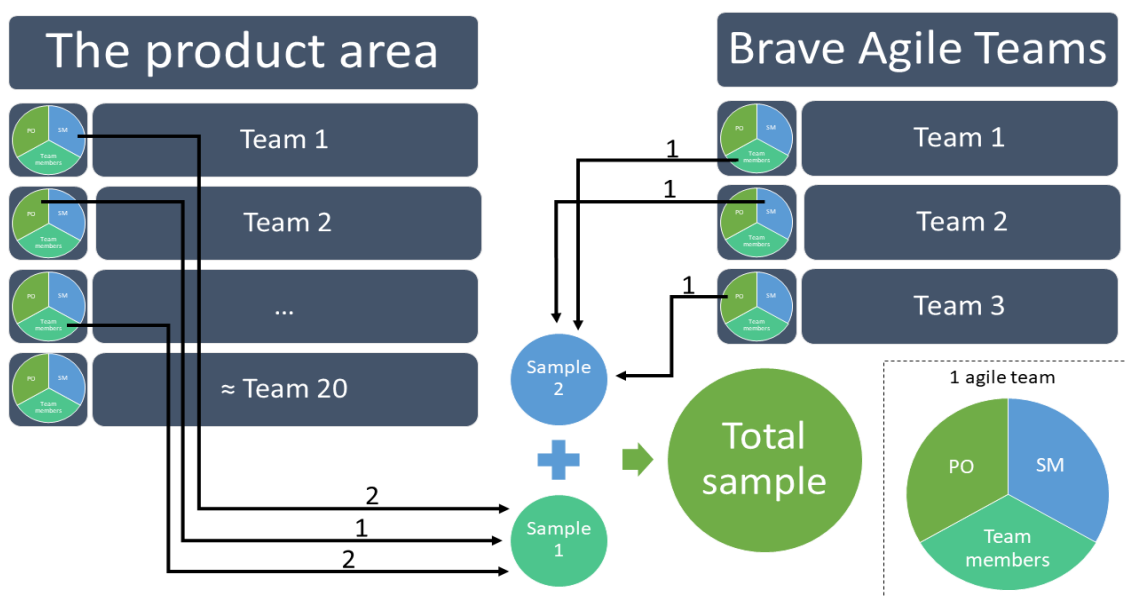


Figure 2.1: The figure illustrates the delimitation made in the total sample.

The targeted sample was to have two interviews with each role from each cluster which would give a total of twelve interviews, but it was delimited to a total of eight due to the limited research time and difficulties in finding respondents with time to participate in addition to their regular work.

The obtained information is collected from a single organization. Since no data has been analysed from other organisations, the recommended improvements might only be applicable for the company. However, since the participants are part of teams believed to be mature in agility, the results may be applicable for other departments or functions in the company.

Semi-Structured Interviews

In contrast to a research where the aim is to explore a vague subject or theme, this research had a comparatively clear focus from the start to analyse the product area's team performance by a gap analysis. Bryman (2016) suggests when the focus is clearer than broader, semi-structured interviews are preferred over unstructured interviews, which is one reason for choosing to conduct this thesis' interviews semi-structured. Moreover, Bryman (2016) explains that semi-structured interviews contribute to fewer differences in the conduction of interviews when more than one researcher is doing them, which is the case for this research with two researchers. The semi-structured structure is also beneficial for better comparability between cases when the study investigates several units (Bryman, 2016), and the interviews are not only conducted at the product area but also at other departments because of that the individuals participating from brave agile teams.

Another reason for choosing semi-structured interviews is that in-depth interviews with one person at a time can be appropriate for the researchers' possibility to observe emotional responses and undertake actions for distressing the participant when talking about sensitive subjects such as team health and personal preferences or values. The participants shall get flexibility in deciding for themselves how long time they want to talk about a certain question, but each interview is estimated to take maximum one hour so the researchers had to prioritize the questions that they evaluated to be most important throughout the interviews. The interviews are set to not be more than one hour to keep the meeting efficiency at a good level. The interviews will be conducted with an interview guide that includes the three areas determined to effect the agile team performance (self-management, SAFe team success factors, and empowerment).

The questions that will be in the interview guide do not need to be asked in the same order in each interview, and additional questions that are not included in the guide could be asked if it is connected to something that the participant say that the researchers evaluate to be meaningful for the thesis scope. Some questions may also be added to the formal interview guide during the process of collecting data, to make use of perspectives of issues explained by earlier participants. By doing so, the research process gets iterative with a snow-ball effect for input (Bryman, 2016). Though, the plan from the start of the interview process is to follow the interview

guide with the literal questions.

Creation of Interview Guide

A semi-structured interview guide for qualitative research does not need to be very specific but rather comprises a semi-structured list of the issues that shall be dealt with to get information about the interviewee's perception of their world with flexibility (Bryman, 2016). When creating this interview guide, the researchers deliberated on the research questions and the unknown in their issues. The themes that were evaluated to be topical for this research are the dimensions of self-organizing teams, which are autonomy, learning, communication and collaboration, shared leadership, learning, team orientation, and redundancy. The interview guide was created by asking how the participant interpret these dimensions in their team but also what individual needs they have, and how they interpret the organisational culture, structure, and tasks to understand their context to fit how the results shall be analysed with an adoption of the Nadler & Tushman's (1980) congruence model.

Before concluding which final questions to use in the interview guide, a pilot guide was created and tested to see how effective it was. After completing the pilot guide, the researchers removed some subjects where the respondent's answer was likely to overlap. The researchers aimed to delimit the subjects because they believed that the respondents' answers will be of higher quality when the interview template is more narrowed and focused on bringing forward data that will enable an effective analysis.

Even if the questions were formulated as non-dictatorial and planned to follow an order rated to be beneficial for the research, it was approved to change their order in accordance to fulfill flexibility for the respondents' answers. Relevant notations were also made to understand a person's answers in a specific context and included information about the respondents' backgrounds such as ages, genders, positions in the organization, and years within a particular group.

Recording and Transcription

Recordings of interviews are essential for making a detailed analysis of the respondents' verbatim answers in qualitative research. It is not only interesting for qualitative researchers what the respondents state but how they state it. Therefore it is good to go back and re-listen to their statements to improve our natural memory from the moment the information was shared and interpreted for the first time (Bryman, 2016). A recording takes distraction off making notes of statements and enables focus on the conversation and making follow-up questions on interesting sayings (Bryman, 2016). Even if all of the interviewees accepted a recording, the interview was planned to be conducted even though someone refused to record it since it is the participant's right to do so according to research ethics and because this respondent was likely to bring vital content to the table. Transcriptions are a very time-consuming activity (Bryman, 2016), and was first decided not to be part of this research. With the same reasoning as with the recordings, the researchers transcribed the interview answers from the recordings because the transcriptions

were used to better summarize the empirical findings.

The researchers of this paper assured quality by assigning them different responsibilities during the interviews. One of them focused on leading the interview and asking follow-up questions when the researcher found their answer interesting for further investigation or needed to understand. The other one could focus on jotting down relevant notes during the interview. After having finished an interview, the researchers reflected upon how it went, ideas that popped up during the completion, and if the environment was calm or messy. The qualitative data and the things that the researchers evaluated to be important for the research scope were analysed during these continuous after-interview reflections. The analysis phase was conducted using “open coding,” meaning that data is read thoroughly while writing down comments and notes (Waller, Farquharson & Dempsey, 2015). All conducted interviews were reviewed, and when significant insights appeared, those were written down on post-it notes. The post-it notes were clustered into different categories in an iterative process. By doing this, the researchers continuously dealt with meaningful analysis and did not push a massive amount of data to analyse for their future liabilities creating an insurmountable mental workload (Bryman, 2016). If something was unclear during these discussions, the researchers could go back and re-listen to the recording to re-evaluate a consensus on the issue.

2.3.3 Inspections of Documents

It has been recognized that the practice of agile methodologies is not often performed in the saint format of theoretical frameworks (Solinski & Petersen, 2016). Therefore it has been vital to analyse the collected data with academic theories as well as the company’s own frameworks for agility that are supporting their needs and goals with the implementation, so that the concluding recommendations gets aligned with the circumstantial conditions and adoptions of other frameworks. To create an ideal future state combining theories with company strategies and goals, it was vital to investigate internal guidelines, frameworks, maps of processes, and other additional documents crucial to get a more generalised understanding of the organisational context. Further, the documents were useful for the researchers in the iterative process of building new theories by the continuous analysis and testing them in the organisational context.

2.4 The Gap Analysis

There is a space between what performance there is and what performance is wanted in every organisation, creating a gap. Understanding how to build a bridge between those states is crucial for business success and can be done by a gap analysis. To conduct a gap analysis, one must identify what is missing and needed to reach a determined ideal future state. The study evaluates agile teams by investigating dimensions for self-organising, team success factors, and empowerment. These three areas are chosen because self-managing is the basics for a well-functioning agile team (Moe, Dingsøyr & Kvangardsnes, 2009) and empowered teams are the core of SAFe

(SAFe, 2021). The determined ideal future state are not defined as indicating that the agile transformation is done and the final ideal team state has been reached. It is defined as the next ideal state considering the determined current state and business goals. The gap between the states will be analysed in depth with a congruence-model (Nadler & Tushman, 1980) in order to develop strategies and/or improvements for how it could be reduced. This is accomplished by investigating key characteristics, meanings, and implications of the case.

2.5 The Research Process

The research follows a nonlinear process to enable an iterative approach and learning by doing. Internal company documents were read and investigated continuously throughout the data collection process to understand the case context. Academic theories were continuously investigated in a literature review and could affect what parts of the empirical world were essential to explore more of. It could also be used to adapt the research scope or redirect which findings from the interviews and the survey that was most relevant for the research's analysis. The empirical world could also redirect the research scope in some cases if a participant brought up an issue that the researchers wanted to hear more about from other participants.

After collecting all data from the survey and interviews, the empirical findings were summarised in the structure of four elements that are important to fit together for organisational success (Nadler & Tushman, 1980), namely the task, formal organisation, informal organisation (culture), and individual. This structure was chosen because the final and most vital analysis in the report, the analysis of the gap in performance between the current state and the ideal future state, will be done by analysing the fit between these elements. Since it is the most essential analysis in the report, the researchers judge it efficient for the reader to follow the empirical findings with the same structure. The analysis will however go back to the "research scope structure" again, to facilitate the analysis for the researchers to not miss out on any important issues relating to any of the dimensions within each of the three areas. Another motivation for the difference in structure between the empirical findings and analysis lies in the quality criteria of trustworthiness related to transferability of the research results. This research is qualitatively investigating a few people to gain in-depth knowledge of their experiences and perceptions of the research scope. If others are to evaluate how transferable the results of the research are to another context, a detailed description of the culture and context is necessary. The structuring of empirical findings in the elements of the congruence model enables one-quarter of the presentation of the empirical findings to describe the informal organisation, which is equal to the culture.

From the point of analysis of empirical findings in the total research process, the process continued in a more linear manner than before, which is illustrated in the figure below. The figure also visualises the process of all analysis made and how it lead to the researchers' creation of final roadmaps with recommended actions to lower the gap between the current state and the ideal future state for empowered

and high-performing teams.

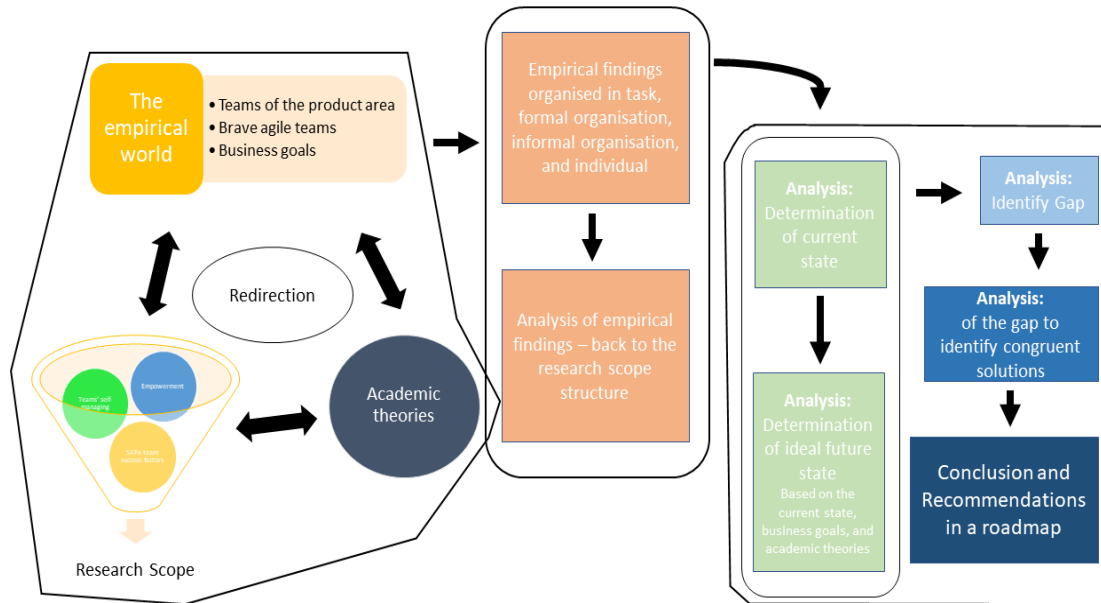


Figure 2.2: An illustration of the applied research process which was inspired by Dubois and Gadde (2002). During the period of time that data were collected, the process was nonlinear with systematic combining.

2.6 Analysis Structure

Before the final gap analysis, the empirical data are analysed with the "research scope structure" to ensure that all dimensions important for high-performing agile teams are analysed before determining the current and ideal future state which are combined to identify the gaps between them. Below, the tools and theories that have served as inspiration for all of these analyses are presented with accounting for their research adoptions.

2.6.1 Research Scope Structure for Identification of Gap

This subsection presents the theories analysed for the determination of the current state, the determination of the ideal future state, and the identification of the gap between them.

Analysis of CASAF and SAFe

To understand the product area's prerequisites for managing agile teams' structures and tasks, their framework for scaled agility were investigated and compared to the worldwide generic framework for scaled agility (SAFe, 2021).

Self-organising Dimensions

It is credible that a team need to function in a certain way if it aims to follow the agile manifesto's values and principles. The team should according to agile values have a culture of trust, respect, and collaboration (Beck et al., 2001). The agile principles (Beck et al., 2001) are highlighting some specific characteristics for teams to inhibit such as customer focus, frequent re-directions if change is beneficial (no matter how late in the team work process), short timescales for deliveries, direct communication, self-organising, trust between all to work autonomous, measures the progress by working products, and learning-loops by reflection on how the team could be more effective. The researchers believe that self-organisation is the fundamental feature for authorising the rest of the important dimensions. Therefore, it has been chosen to use dimensions for successful self-organising teams presented by Moe et al. (2009) and Karhatsu et al. (2010) as a research base in the interviews. The analysis on teams' self-organising abilities included all their dimensions for self-managing which follows:

1. Shared Leadership
2. Autonomy
3. Communication & Collaboration
4. Redundancy
5. Learning
6. Team Orientation

Order of Agile Team Building Blocks

The analysis of the dimensions for teams' self-managing will give an in depth understanding of the teams current state of it. Additionally, relating to the mentioned order of building blocks of agile teams transformation process (Karhatsu et al., 2010), an analysis of what building block in the recommended order can be the most relevant to focus on for the determination of the ideal future state.

Empowerment

It is difficult to define what empowerment is since it is highly personal what it takes for an individual to feel empowered. Surely, there are theories such as Maslow's motivation theory stating that people being motivated of self-realisation as a last step when the needs of esteem, love and belonging, safety, and basic things like food and water is fulfilled (Aroseus, 2016). However, researchers mean that the subject is very difficult to do research on since the model is not specific enough, and that it with its little support of empirical data, therefore, rather should be seen as a source for inspiration (Nilsson, 2014). Another criticism for the model is that it is too general to consider the different needs of people because of individualism and culture (Nilsson, 2014). The researchers of this study were anyhow eager to execute an attempt to specify the theories of motivation and empowerment in the case context and had two questions about it in the survey. One question asked about the experienced current state of empowerment and one open ended question asked about what conditions are fulfilled when being empowered. The latter question is

less specific than the rest of the measurements based on research for what makes a self-organised and high-performing agile team, but nevertheless an interesting measure to do and analyse to understand the team members' needs for thriving and feeling motivated in what they do.

Team Success Factors

The success factors used in the research are a combination from SAFe success factors (SAFe, 2021) and team success factors identified by researchers at Google to be important for an efficient team (re:Work, 2021). Many of Google's team success factors overlapped with SAFe's team success factors, with exception for the factor "meaning" indicating if the work was personally important to the team member or not. That factor together with the SAFe factors constituted the second part of the survey measurements (the first part being about empowerment). This part of the survey measured the participants interpretation of how much they agreed with the team success factors correspondence to their team on a scale from 1 (strongly disagree) to 5 (strongly agree), where a 3 indicates an undecided opinion. These measurements have been used to analyse the current fulfillment of the factors and adds additional credibility for the final recommendations that will be based on more than the dimensions for self-organising teams.

2.6.2 Congruence Model for Analysis of Gaps

When the gap between the current and the ideal future state had been determined, the researchers analysed possible solutions to reduce the gap. To do so, an analysis-model about organisational congruence developed by Nadler and Tushman (1980) was used. The model diagnoses organisational behavior and is commonly used to analyse and observe transformation processes. It was used for this research as it is frequently used when conducting gap-analysis in an organisational context. The congruence model is built on a theory that the task, informal organisation, formal organisation, and individual need to interact and fit in their relationship between each other to achieve organisational effectiveness. The model has been the inspiration for the final analysis since the researchers wanted to build solutions to the gap that were congruent in the elements that affect the organisational success.

2.7 Ethical aspects

Bryman (2016) states that ethical aspects consider integrity, voluntariness, anonymity, and confidentiality for the directly involved people in the research. Several ethical principles need to be taken into consideration when studies are conducted to protect the people and at the same time ensure a high quality of the study. Firstly, Bryman (2016) argues that it is important to provide the participants with information about the research and its purpose. Essentially, participants need to be informed that they may withdraw from the study at any time because it is completely voluntary. They will also be informed that their decision to withdraw will not be questioned. The researchers will apply the information principle by assuring the participants that the

purpose with the study is not to point out certain teams or individuals but rather to understand the existing situation and challenges and assist with their development.

All participants and the provided data will remain confidential throughout the study to protect humans' integrity and mitigate any risk of the study's result harming their employment status. Everyone has a right to privacy, and therefore researchers should keep in mind not rejecting this right when conducting a study (Bryman, 2016). Information about the research and the consent about interview and workshop participants will be provided to the participants in advance in email invitations. However, the information about consent and ethical aspects will be stated again as a reminder during the interview and workshop occasions. Aligned with Bryman (2016), all participants will be treated with respect, and if there are any risks with participation in the study, these need to be communicated early and clearly. All participants will be allowed to ask questions about the research and consider the decision to participate. The researchers will not reveal personal details to persons that are not included in the study.

3

Theory

This chapter comprises theories and models utilised for the research's conduction. It presents literature and theories about agile values and principles, traditional and agile teams, team maturity, motivation, change management, SAFe, and analysis tools.

3.1 Change Management

This section embodies Kotter's theory of change that relates to change management and transformation processes, since the research scope has embraced a change towards scaled agility and is continuously evolving.

3.1.1 Kotter's 8 Step Model of Change

Kotter (1995) have investigated over 100 companies going through change processes to become more competitive in the market, and concluded that a transformation process goes through a series of phases, in total eight, and usually require a certain amount of time. None of these steps should be skipped, since it will create an illusion of speed and the change itself will never produce a satisfying outcome, (Kotter, 1995). Furthermore, if mistakes appear in any of these eight phases, it can have a negative impact on the change process. Thus, respect the change and let it take the length of time needed to go through all phases. Accordingly, Kotter (1995) argues that new employee behaviors and norms tend to fall back to the old ways when there is no longer pressure for change, and it is essential to put effort into a change to make it sustain. As stated above, Kotter's model of change consists of eight steps which are presented exactly as follows (Kotter, 1995):

1. Establish a Sense of Urgency
2. Forming a Powerful Guiding Coalition
3. Creating a Vision
4. Communication a Vision
5. Empowering Others to Act on the Vision
6. Planning for and Creating Short-Term Wins
7. Consolidating Improvements and Producing Still More Change
8. Institutionalizing New Approaches

3.2 Agile Methodology

This chapter describes the agile values and principles that were introduced by seventeen professionals within software development who wanted to articulate and share new ways of working with development, methodologies, and organisations to other people in their profession (Beck et al., 2001).

3.2.1 Agile values

The agile manifesto articulates specific ideas on an agile way of working, but those are built upon certain values and a culture of organisational trust, respect, and collaborations (Beck et al., 2001). The manifesto consists of four values which are phrased exactly as follows (Beck et al., 2001):

1. **Individuals and interactions** over processes and tools
2. **Working software** over comprehensive documentation
3. **Customer collaboration** over contract negotiation
4. **Responding to change** over following a plan

The right side of the sentences above seems to be structured manner of organisational methodologies, but the values are not described as anti-methodology even though the left side of the sentences are the items preferred (Beck et al., 2001). The authors value the right side of the sentences but simply value the items to the left more in favor of reducing overproduced documentation that is rarely used and plans that need to change too often in a turbulent environment. (Beck et al., 2001).

3.2.2 Agile principles

There are twelve principles that should be followed according to the Agile Manifesto, which goes exactly as follows (Beck et al., 2001):

1. Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
3. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
4. Business people and developers must work together daily throughout the project.
5. Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
6. The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
7. Working software is the primary measure of progress.
8. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

9. Continuous attention to technical excellence and good design enhances agility.
10. Simplicity—the art of maximizing the amount of work not done—is essential.
11. The best architectures, requirements, and designs emerge from self-organizing teams.
12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

3.3 Teams

A process such as software development involves human interaction, and following, it leans on team performance (Moe & Dingsøyr, 2010). This chapter describes the difference between groups and teams, what qualities a high-performing team has, agile teams, and theories about motivation.

3.3.1 Groups Versus Teams

When several skills, view-points, and judgements are necessary to combine in real time to facilitate performance at a delivery point, working in teams is the best option (Katzenbach & Smith, 2008). Katzenbach and Smith (2008) claims that not every group can be defined as a team and that there are some characteristics for a group to achieve the team label. Groups can be convened for enabling a sharing of information, perspectives, insights, etc., between members to help each individual to perform their job better (Katzenbach & Smith, 2008). Teams are however building something more than the sum of each individual's work and require joint accountability for the results (Katzenbach & Smith, 2008). One definition of a team follows:

“A team is a small number of people with complementary skills who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable.”

(Katzenbach & Smith, 2008)

3.3.2 Team Performance

Teams are argued to be important to achieve nowadays, as many companies go through major transformations that need behavioral change from a broad range of people to be performing (Katzenbach and Smith, 2008). It is however a challenge to amplify performance for a large number of teams within an organisation (Katzenbach and Smith, 2008). To accomplish amplification of performance for many teams, it is important to construct management processes that are performance-focused (Katzenbach and Smith, 2008). The top management must assure that the teams in the organisation can identify what particular purposes and goals there are so that they do not confuse the broader organisation's mission with goals decided in a small group (Katzenbach and Smith, 2008). Also, the team need a purpose. Without a specific team purpose, it is hard to build a real team which go beyond their individual responsibilities and collaborates to create something more valuable than singular work products (Katzenbach and Smith, 2008). The building of team performance

do not have a specific best-practice but there has been observed some qualities that many successful teams inhibits, which are shared commitment, shaping of a purpose, and translation of team purpose into specific performance goals (Katzenbach and Smith, 2008).

3.3.3 Guide for effective Teams by Google

Researchers of Google have investigated what makes their teams effective and the findings showed that it was not as important who was in their team but more important how the individuals' in the team worked together (re:Work, 2021). Five factors that was found to be important were ranked as follows (re:Work, 2021):

1. Feeling safe to take risks and be vulnerable in the presence of the team.
2. Dependability by meeting commitments with quality and on time.
3. Structure and clarity for roles, plans, and goals.
4. The work is personally meaningful to each team member.
5. Team members believe that they have impact and that their work matters.

3.4 Theories of Motivation

Several theories relating to motivation, job satisfaction, and job dissatisfaction are presented below.

3.4.1 Maslow's Theory of Motivation

In 1943, Maslow developed an idea for human motivation that came to be known as Maslow's hierarchy of needs. Maslow further developed his vision in 1950, and since then, several researchers have built on his theory (Nilsson, 2014). The hierarchy of needs is a model examining how human needs are prioritised. According to Maslow, an individual's needs can be divided into five different categories, and each of these categories have a specific level of priority for individuals (Aroseus, 2016). The conditions can exist simultaneously; however, needs in the higher categories do not become important for the individual until lower-ranked needs are met. Maslow's five needs follow a triangular shape, starting from the bottom, and consists of the elements that follow (Aresoeus, 2016): Psychological Needs (such as air, water, food, shelter, etc.), Safety Needs (health, resources, personal security), Love and Belonging (family, friendship, intimacy), Esteem (respect, freedom, strength) and finally, Self-Realisation (desire to become the most that one can be).

3.4.2 Intrinstic & Extrinsic Motivation

Motivation can be defined in several ways and have different meanings for different individuals. According to Söderfjäll (2012), motivation is defined as the energy for action, specifically what drives a person to act. Locke & Lanthem (2004), on the other hand, define motivation as the internal factors that force action and the external factors that act as driving forces for action. Accordingly, Ryan & Deci

(2020) divide motivation into two parts; intrinsic and extrinsic motivation. The authors define intrinsic motivation as actions or activities performed in an inherently interesting or enjoyable manner and that those are done for the individual's own sake. Extrinsic motivation concerns external incentives, i.e., when a behaviour appears from other sources than inherent satisfaction.

3.4.3 Herzbergs Two-Factor Theory

Herzberg's two-factor theory build on a concept that there are difference between motivation- and hygiene factors, and it is widely common in reserach about job satisfaction (Alshmemri, Shahwan-Akl, & Maude, 2017). In job related cases, the motivation factors that concern individuals' needs for growth and self-actualisation are more important than the hygiene factors that concerns unpleasant feelings (Alshemri et al., 2017). One mentioned aspect of the motivational aspect related to the work and if it was considered to be easy or hard and compelling or lacking interest (Alshemri et al., 2017), meaning that the answer on those statements affect an individual's level of job satisfaction. On the other hand, the hygiene factors affect the individual's level of dissatisfaction at job. One of the hygiene factors is stated to be working conditions (Alshemri et al., 2017), meaning that an individual that in under constant pressure is probable to feel highly dissatisfied with their job.

3.4.4 Job Satisfaction

Hackman & Oldham (1974) investigated job satisfaction and established a model for job characteristics. The authors proposed that five core job dimensions affect job satisfaction, and these are identified as follows: autonomy, feedback, skill variety, task identity and task significance. Job satisfaction generally refers to personal feelings and satisfaction with the work, which contributes to motivation to perform the work (Brief & Weiss, 2002). Ali, Said, Abk Kader, Latif & Munap (2014) argue that the success of organisations depends upon the feeling towards the job among employees, including the collection of individuals (both leaders and subordinates). Therefore, it is vital to consider the dimension presented by Hackman & Oldham (1974) to evaluate whether job satisfaction is high among individuals or not. Further, it is essential to identify the job characteristics in an organisation and analyse how they affect employees' job satisfaction. Suppose there is a presence of high job satisfaction among individuals within an organisation. In that case, employees will arguably contribute to an increased level of organisational effectiveness by continuing carrying out assigned tasks (Hackman & Oldham, 1974). Ali et al. (2014) concluded in their research that autonomy, skill variety, feedback, task significance and task identity contribute to job satisfaction, both among leaders and subordinates.

3.5 The Scaled Agile Framework (SAFe)

The Scaled Agile Framework (SAFe) was established based on features from both Agile and Lean principles to help large scale organisations implementing agile in a holistic manner (Leffingwell, 2007). The author presents the first version of SAFe named

"Scaling Software Agility" to be applied mainly within large software development projects; however, this version of the framework also included non-developmental departments of the organisation (Leffinwell, 2007). This version of the framework has evolved into what we today know as The Scaled Agile Framework (SAFe). SAFe includes four levels; team level, program level, large solution level, and portfolio level (SAFe, 2021), indicating it can be implemented on various organization levels. Depending on the type of organisation wanting to implement it, SAFe is categorised into four different configurations, presenting different elements needed to achieve success with SAFe (SAFe, 2021). It is important to note that SAFe mainly provides the initial agility into an organisation. Still, it is the organisation's responsibility to customise and frame it based on its own needs and goals (SAFe, 2021).

3.5.1 SAFe Core Values

The core values and fundamental beliefs for SAFe to be productive are presented as alignment, built-in quality, transparency and program execution (SAFe, 2021).

Alignment

In order to keep pace with fast-moving external and internal changes, alignment is crucial for empowered agile teams. Alignment is supported at all levels of SAFe and throughout the organisation. Alignment should rely on the organisations' business objectives rather than on the empowered agile teams' combined opinions. However, alignment within SAFe should not encourage a top-down approach; instead, it should occur when the teams work towards a common goal (SAFe, 2021). Empowerment, autonomy and decentralised decision-making are enabled within the agile teams when alignment is in order, allowing them to contribute to value creation (SAFe, 2021).

Built-In Quality

Built-in quality ensures that every process step and component of the product or service throughout the development life cycle reflects quality standards, and that those standards are not added later. Built-in quality is one of the most central factors of SAFe, and is crucial to organise quality thinking.

Transparency

The development of various solutions might not always work out as planned. Transparency is needed to avoid uncertain facts about why it did not work out as planned and prevent decision-making based on assumptions and lack of data (SAFe, 2021). In order to ensure transparency and openness, trust is needed throughout the organisation. If there is a lack of trust within the business, it is challenging to build high-performance teams and programs and create a fun and motivating working environment (SAFe, 2021). Building trust is time-consuming and it is argued that transparency is a crucial enabler for it. Several SAFe practices have been developed to implement transparency within agile organisations. For instance, stakeholders

and other executives can always see program backlogs and have a clear understanding of the content. Further, Agile Release Trains have visibility into the team's backlogs and other new initiatives (SAFe, 2021). Agile Release Trains (ART) is a permanent collection of several agile teams, which, along with other stakeholders, incrementally develops, delivers, and where applicable operates, one or more solutions in a value stream" (SAFe, 2021)

Program Execution

The main purpose of SAFe is to deliver value continuously. SAFe puts a strong focus on business outcomes and working systems. Since solution development can be difficult, SAFe promotes program execution to support agile teams in the development process. It is announced by implementing "inspect" and "adapt" workshops, allowing agile teams to close the loop and execute even better in the upcoming project increments (SAFe, 2021).

3.5.2 SAFe Principles

SAFe is based on ten fundamental principles inspired by Lean-Agile tenets. The principles are a basis for inspiring and informing about the different roles and practices within SAFe (SAFe, 2021). The SAFe (2021) principles in their exact definition:

1. **Take an economic view** to deliver value and quality for people and society in the shortest sustainable lead-time.
2. **Apply system thinking** to build understanding about the more significant aim of the system where workers and user operate, to enable improvements.
3. **Assume variability; preserve options** to maintain multiple requirements and design options for an extended period in the development cycle and at the same time enable usage of empirical data to narrow the focus, which will result in a design that provides good economic outcomes.
4. **Build incrementally with fast, integrated learning cycles** to allow more rapid customer feedback and mitigate risks, resulting in subsequent increments to build on previous ones.
5. **Base milestones on objective evaluation of working systems** to allow evaluation throughout the development life cycle.
6. **Visualise and limit work-in-progress, reduce batch sizes, and manage queue lengths** to achieve a state of continuous flow.
7. **Apply cadence, synchronise with cross-domain planning** to provide the elements needed for operational effectiveness if development uncertainty is present.
8. **Unlock the intrinsic motivation of knowledge workers** to provide autonomy and purpose and reduce constraints among employees, resulting in an environment of mutual influence.
9. **Decentralise decision-making** to reduce delays, improve product development flow, allow for faster feedback and create more innovative solutions.
10. **Organise around value** to enable value delivery more quickly, significantly when market and customer demands change.

3.6 Agile teams

This section describes how agile teams function due to identified success factors and barriers, team roles, and leadership.

3.6.1 Fundamentals of an Agile Team

Agile teams consists of empowered and motivated individuals that creates and deliver value for enterprises to attain the profit of lean-agile development (SAFe, 2021). Referring to principle 11 in the agile manifesto, agile teams should be self-organising for the best products to emerge. In self-organising teams, the leadership should be decentralised and shared among the team members by rotating it to the person with key knowledge and skills for the specific task or issue that they are working with (Moe et al., 2009). The transition to self-managing teams from individual self-managing professionals is challenging when first starting to work with agile development (Moe & Dingsøyr, 2010). The change demands time and efforts to be successful, not only from team members but also from management which needs to re-orientate the business processes and provide accurate resources and strategies for the teams to be successful in self-management (Moe & Dingsøyr, 2010). Trust, shared mental models, highly specialised skills, corresponding division of work, and the Dickinson and McIntyre team model has been identified as important to achieve effective teamwork in agile teams (Dingsøyr et al., 2012).

The SAFe framework separates technical teams from business teams (SAFe, 2021). The technical teams are cross-functional groups of 5-11 people with diverse skills which defines, builds, tests, and in short intervals of time delivers incremental values in solution deliveries (SAFe, 2021). The business teams collaborate with the agile teams to support their delivery but is just like them also aiming for efficient learning when working in short intervals of time with batches of work to build incremental value (SAFe, 2021). Both agile variants sanctions the ART and thereby the whole enterprise since the many ARTs that collaborates give rise to the enterprise vision and roadmap (SAFe, 2021).

3.6.2 Agile Teams Success Factors and Challenges

An agile team is by its self-managing responsible for ensuring that deliveries that matches both the customers' and the stakeholders' needs and wants (SAFe, 2021). They also have responsibility for each other as well as other teams in that deliveries should be made with quality and on time (SAFe, 2021). There are lots of research that are describing barriers and success factors for agile processes and teams (Moe et al., 2009; Karhatsu et al., 2010; Cohn & Ford, 2003; Kozak, 2013). Cohn& Ford (2003) conclude that the success of an agile process highly depends on how it is introduced, but an approach that worked good in a specific case must not work in the next. The same authors wrote an article in 2003 and forecasted that some kind of best practice probably would be developed within years (Cohn & Ford, 2003).

Predicted and done, dimensions that later has been suggested to be vital for self-organising teams to be successful are autonomy, team orientation, shared leadership, redundancy, and learning (Moe et al., 2009). The same authors exemplified two main challenges in organising shared leadership; that structures and/or instruments for efficient learning is missing, and; difficulties in forming the right degree of autonomy for all stakeholders (Moe et al., 2009). Autonomy is a critical dimension for team effectiveness (Karhatsu et al.,2010) and is defined by the authors as the authority and responsibility the team has in with their tasks. Team orientation characterise how well the goals of the individuals and the teams are meeting. Shared leadership refers to decentralised decision making as well as providing the leadership role to those individuals with the best skills and knowledge. However, shared leadership also requires team autonomy. Self-organising teams need redundancy to enable shared responsibilities and team members to have complementary skills to perform each other's tasks (Karhatsu et al.,2010). Further, learning is embedded in the majority of dimensions, since it is a great part of both agile methodology in general and self-organising teams in particular. Lastly, learning indicates that team members learn from each other and the work environment, for instance, how to make decisions in changing settings (Karhatsu et al.,2010).

The SAFe (2021) framework describe that the team composition and dynamics are more important than talented individuals when discussing team performance. SAFe (2021) presents following characteristics as important for high-performing teams:

1. A safe environment for taking risks without fear of embarrassment or punishment
2. Alignment on a shared vision with clear goals and purpose
3. Diversity of knowledge and skills to make quick, effective decisions independently
4. The mutual trust that allows for healthy conflict
5. Accountability to each other and the organization by reliably completing quality work and meeting commitments
6. Understanding of their work's broader impact on the organization
7. Fun with their work and with each other

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3.6.3 Order of Implementing Success Factors

Karhatsu et al. (2010) acknowledged the team success dimensions developed by Moe et al. (2009). They used them as a foundation to create a framework for building self-organising teams in which building blocks follow a particular order of implementation. In addition to the dimensions created by Moe et al. (2009), they have another building block called communication and collaboration, which is added to the five core elements as it is argued to play an essential role for successful self-organising teams. Delivering and receiving information is defined as communication, while collaboration refers to individuals actively working together (Karhatsu et al.,2010). Communication and collaboration is required to achieve success within the five core dimensions. The most fundamental things to get in order according to

the framework is autonomy and communication and collaboration (Karhatsu et al., 2010). The authors expressed a curiosity for further research to investigate if the framework can be used in other contexts and if so, what factors of activities would be relevant for the building block (e.g. does the team members' experiences cultural background influence self-organised behaviors and team performance?)?

3.6.4 Agile Team Roles

An agile team prefers to be small in numbers because the quality of communication declines as the numbers increases (SAFe, 2021). The most common roles of an agile team is a scrum master, a product owner, and team members (SAFe, 2021). The product owner sets the team story and makes sure that the program priorities are met in the team by prioritising the backlog, in close collaboration with the team members (SAFe, 2021). The scrum master is rather a so called "servant leader", that is to coach and support the team with the agile process (SAFe, 2021).

3.6.5 Agile Leadership

Traditional managers allocates individuals to activities but in the SAFe approach, work is moved to the teams and trains that decides for themselves what can be done in an iteration and how the work can be implemented (SAFe, 2021). Lean-agile leaders shall deliver necessary qualities for high team performance such as the vision, leadership, and correct level of autonomy since the teams are self-managing (SAFe, 2021). Since decision-makings are decentralised, the leaders foremost responsibility aligns with coaching and mentoring (SAFe, 2021). Within the team, there are two important leading roles called the product owner and the scrum master (SAFe, 2021).

The Scrum Master

The scrum master can have many stances and is skilled when knowing how and when to make use of different qualities needed in different team contexts, to name a few, like when to be a servant leader, when to be a remover of obstacles, when to be a coach, when to be a mentor, or when to be a teacher (Overeem, 2017). SAFe explains the scrum master as educating the team in agile methodologies, ensuring of that the decided process for the agile valueflow is followed, removing of obstacles, and lastly removing of obstacles to enable an environment with continuous flow and improvements (SAFe, 2021).

The Product Owner

The product owner is also part of and supporting the team by having their back in making sure that the technical and conceptual integrity is kept when working with stakeholders outside of the team to streamline the backlogs for the long-term plans (SAFe, 2021). The main responsibility is to prioritise the backlog, maximise the value that the team contributes with, and making sure that it answers to the needs of the user (SAFe, 2021).

3.6.6 Team Cohesion & Team Size

Wheelan (2009) investigated perceived group productivity, efficiency and development in 329 different work groups across companies to evaluate whether group size had an impact on those specific elements or not. The findings indicated that group size is a vital factor for increasing or decreasing the features presented above (Wheelan, 2009). Group cohesion was reduced when group size increased. Teams consisting of more than 9 members are significantly less productive and developmentally advanced than teams with 3 to 8 members (Wheelan, 2009). Berkowitz (1958) argues that more disagreement and less satisfaction are present in larger teams than in smaller ones, since interaction levels became more complex. Moreover, Hawkins (1962) discusses that individuals less initiated individuals' communication as team size increased. Essentially, Wheelan (2009) stated that members being part of larger teams perceived less team unity. It was concluded that team efficiency, cohesion, development, and unity were easier enabled in small face-to-face groups consisting of a maximum of 6 people. According to SAFe (2021), empowered agile teams are comprised of 5-11 people with diverse skills and knowledge, creating value for the organisation.

3.7 Analysis Tools

Below, the tool used for analysis in this research is presented.

3.7.1 The Nadler & Tushman model

Nadler & Tushman (1980) developed a model known as the congruence model for diagnosing organisational behaviour. The authors describe that organisations can be viewed as a mixture of different components that need to interact and "fit" with each other in order to achieve proper function and effectiveness within the organisation (Nadler & Tushman, 1980). Primarily, the model requires an analysis of the inputs and outputs of an organisation, before digging into fits of elements. The inputs can be viewed as the environment, history and resources of an organisation. On the other hand, the outputs concern what the organisation produces, how it performs, and how effective it is (Nadler & Tushman, 1980).

If there are a poor fit and interaction between the components, challenges such as low performance and dysfunctions will occur. In a transformation process, several elements such as individual behaviours, traditions, culture and norms, are being directly or indirectly challenged. Thus, initiations to change can disturb these fits between the components. The congruence model for organisational behaviour puts a major emphasis on the transformation process, including the identified components: task, individuals, formal organisation and informal organisation, and measures the congruence among them as well as the quality of the fits (Nadler & Tushman, 1980). Firstly, the authors define tasks as the necessary and daily work that needs to get done within an organisation; this also includes the knowledge and skills required to complete the job and the environment where the work is complete. Further,

the individuals are the people performing the tasks, consisting of the skills and knowledge that the individuals have as well as their needs and preferences. Formal organisation concerns the diverse structures, methods and procedures established for the individuals to perform tasks, for instance, the working environment, the job design and more. The final component, informal organisation, is characterised by Nadler & Tushman (1980) as the unspoken attitudes and norms that impact the various behaviours in an organisation. Informal organisation can be synonymous with culture and includes intergroup and intragroup relations, as well as leadership behaviour (Nadler & Tushman, 1980).

4

Empirical findings

The following chapter presents results from interviews, a survey, and company internal documents and frameworks about agility. The chapter aims to provide the reader with the empirical data that are indicating on symptoms of possible improvement areas, which are summarised in the final section of the chapter.

4.1 Business Goals

Below, the identified internal documents and frameworks that describe goals and missions regarding scaled agility, mindsets, leadership, and teams are presented.

4.1.1 Company Goals for Scaled Agile

The desired state for the product creation to deliver in alignment with the company vision is explained in CASAF and includes abilities in speed and responsiveness. The development system is therefore built to qualify rapid adaption to new business and continuous delivery on brand promises. The core of the development system is the engineering teams, aiming to be cross-functional and empowered. The team prioritize content from backlogs with solid architecture every twelfth week. This requires skilled engineering teams. Solutions are continuously developed by the engineering teams so that vehicles can be released nonstop and features updated on demand. Every part of the system is cared for to get them synchronized and well functioning. Key measurements relate to the flow, speed, and quality. To get faster, barriers are identified and solved in the flow with methods such as value stream mappings and continuous improvements. Another objective concern building awareness by having real time data dashboard that are available and easy to follow so that people understand what, where, and when decisions need to be taken. Data is being collected from the field, which helps understand how the products function, and the data is continuously investigated to understand future needs. The goal lies in prioritized development to gain speed and be prior to the competitors, in which the agile teams play the most vital role.

4.1.2 Mindset and Principles

CASAF presents mindsets and principles that support the organisational transformation. There are four subjects in the core, which are value and flow, speed, built-in quality, and empowered teams. Empowered teams are described as innovative, collaborative, cross-functional. The empowered teams subject also includes that the

teams have mandates and competencies to make needed decisions. The common principles are identified to be equal in title as the SAFe principles, which are lean-agile postulations. All of the principles affect the business goals for how a team within the organisation should function and be aligned between task, individual, formal organisation, and informal organisation and to summarise, the goal is to have an organisational wide mindset that is aligned with the SAFe principles as well as the core of value and flow, speed, built-in quality, and empowered teams. To give an example of one of the principles, the company has a history of success that has created growth and development into a large organisational hierarchy of functions, such as HR and finance, to give two examples supporting the company to function effectively. The hierarchy does generate benefits and stability but can, on the other hand, lead to the entrepreneurial network and customer focus being left behind. To manage this phenomenon, the company "organise around value" (principle number 10) by leveraging the hierarchical system benefits while restoring an entrepreneurial network with speed and innovation in product research, development, delivery, and maintenance. For the total operating system to function, the network and the hierarchy must be agile in flows but designed and optimised for various causes. The network aims to create fast and customer-centred value transferable to the hierarchy, which provides a stable balance for the total system.

4.1.3 Leadership

The current managerial vision for the company is about a change in mindsets wherein leaders are the ones empowering and encouraging individuals to bring out the best in them. The old business models with a top-down approach, toxic leadership styles and an organisation based on control and fear are not applicable in the continuously changing business landscape. Thus, leaders need to be flexible in their managerial style in order to adapt to the dynamic work environment. The aim is to guide individuals to shift mindsets and behaviors from old leadership styles to new ones to be able to lead the company in a healthy, fast and efficient manner. Decision-making capabilities need to be distributed among individuals, to make them feel that they have authority to lead. The company is aware of the demand and effort this shift of mindset and behaviour requires and has therefore developed leadership principles to inspire and guide the people in the organisation throughout the managerial change process. These principles encourage trust, ownership, coaching, and inspiration through purpose creation.

As part of a large scale agile oriented organisation, the team managers at the product area encourage the teams to employ CASAF and its belonging mindset, principles, structures and methods. The decision-making aims to be decentralised which on a team level means that it is the team that is best skilled for deciding about how to perform their work. The decentralisation targets faster product development flow and feedback, more innovative solutions, and strengthened empowerment. To fulfill this principle, the teams has shared responsibility for leading the work. The teams however have a product owner and scrum master to support, facilitate, coach, and motivate the team's in their work. However, the leaders are still formally

accountable for the outcomes because of their role's expected abilities to understand the market, a longer perspective, and the business financial aspects. Accordingly, strategic decisions that have far-reaching effects outside the scope, responsibility, or even knowledge, of the teams should be centralised. Most of the decisions are on the counter-side not infrequent, long-lasting, or providing significant economies of scale and should therefore be decentralized to fulfill the goal that the workers with the local context and knowledge of the situation should make the decision-making in that situation. There are different agile leader roles in the organisation, but there is a role called team manager in direct relation to the team level. In comparison to the product owner, the team manager has full responsibility for the employees and their working environment and aims to have a servant leadership style that iterative works with aligning different teas in long-term strategies.

4.1.4 System teams & UX-teams

The CASAF framework presents two different teams with different liabilities in what value to create for the organisation and in what corporate level they function. Each of these teams however consists of one or more agile teams and can have a product owner, scrum master, and team members. CASAF shows that the system teams enables fast feedback and maximize flow by ensuring and governing deployment environment with practice of Scrum or Kanban. The UX-teams enable fast feedback and optimizes attributes by enabling flow in product development but do not currently have any stated practice that they use.

4.2 Data of Experienced Team Performance

The current experienced team performance has been summarised from empirical data and is presented below in a structure of elements which alignment effect organisational success which are task, formal organisation, informal organisation, and individual. The data regards the total research scope but with a main focus on the dimensions for self-organising teams, which is one of three areas investigated in the research.

4.2.1 Task

A task is defined as the carried out work by the organisation and its parts (Nadler & Tushman, 1980). The core of the task element in the congruence model includes what steps are being taken to maximise task efficiency. This subsection will present perspectives from participants on required skills, carried out tasks, task efficiency, and obstacles.

Carried Out Work

Approximately half of the interviewees stated that the teams' different tasks are related to maintaining systems and to continuously optimising the various software systems for other teams to perform their work in that system. In contrast, the rest

mentioned tasks related to specific product deliveries that had dependencies to other teams and departments because the different deliveries should be intertwined and finalised into one end solution. The second type of tasks demand a higher focus on timelines because of their dependencies, compared to the first-mentioned teams that mainly focus on the quality of a system that needs to be up and running 24/7. It is concluded that different teams and tasks create different values for the organisation. Three respondents argued that they performed their tasks according to a strategy called minimum viable product (MVP), wherein they produced deliveries with just enough features to be used as early as possible by consumers. Further, improved features will be added later in the process based on consumer feedback. This process is argued to have less focus on quality work and more on maximising task efficiency. Those respondents who were working according to MVP discussed that it could be challenging to focus on delivering high-quality tasks when using MVP since it demanded that the teams peel off some parts they thought to be important in the development process.

Required skills

From one team manager, with a holistic view over the product area, it was stated in an e-mail conversation that important skills and knowledge for individuals to have to work in agile teams were:

- Basic knowledge of agile methodology such as scrum
- Being a team player
- It was stated to be great if they understood the concept of team maturity and what it takes to be an efficient team member. One interviewee stated that they evaluated their team efficiency with with Susan Wheelan's model for team maturity.
- A positive mindset and willingness to learn
- Being able to have an iterative approach to inspect and adapt

Task Efficiency

Regarding the steps taken to maximise task and skill efficiency, the majority of respondents stated some essential factors to be close collaboration, good communication, and information sharing. Two scrum masters also highlighted the importance of coaching the team to enable shared responsibilities in completing the task and to help each other and cover for each other if needed. Diversity of knowledge and skills are high, according to the majority of the interviewees. Thus, the team members could perform each other's tasks if necessary. All of the interviewees agreed on the importance of continuous learning to meet new challenges, such as team member turnovers. Two of the interviewees that were part of brave agile teams highlighted the importance of creating T-shaped competence and team members' capabilities. They discussed that T-shaped skills enable the members to have excellent knowledge in specific areas and possess the knowledge needed to have strong collaboration skills with others in their areas of excellence. This was also confirmed by one product owner at the product area, who stated that a good flow and focus was accomplished within their team by the fact that they had T-shaped skills. Many of the team

members in that specific team knew quite a lot and some of them are better at certain things, but they helped each other if needed.

Obstacles for Task Efficiency

According to one scrum master, self-organisation is not always the best strategy. Depending on the nature of the tasks, kanban or waterfall might be better in some cases. One team member stated that they could focus on quality when applying the Kanban methodology. The same respondent also highlighted that some individuals did not feel comfortable or thriving when being in a decision-making role, and suggested that maybe not everyone should need to. Moreover, two team members stated that their work could be difficult to predict in timelines because of the break-through nature of their tasks. When asked about their work's broader impact on the organisation, three interviewees responded that the complexity of the projects and the break-through nature of tasks made it challenging to have total clarity in goals, purpose, and understanding of the value creation's fit in the organisation.

4.2.2 Formal Organisation

The formal organisation includes the perspective of team structures and encompasses the processes, procedures, methods, and systems that are formally created and existing to support teams and individuals to perform their tasks. Accordingly, perspectives on decision-making capabilities and the formal authorities in the organisation will be introduced in this part of the chapter.

Team Structure

Both brave agile teams and teams at the product area that participated in interviews were encouraged by leaders to use CASAF and Scrum to deliver value with speed and responsiveness. During the interviews, the general team structure was agreed upon to consist of team members (developers and/or designers), a scrum master, and a product owner. Three respondents said that the management structure could have some deviations. For instance, one team had a line manager with the line perspective that worked in close collaboration with the product owner. Another team practiced a trio set up as a dedicated management supporting one or two teams and this trio focused on the same group of individuals. The trio consisted of a scrum master, a product owner, and a team manager who collaborated to support and encourage their specific team/s. Two of the respondents were scrum masters for two teams each, which they stated to work out well. One of these individuals discussed that being a scrum master for two teams were a better setup than for one since it enabled them to focus entirely on the role and the teams. When being scrum master with only one team, you are formally laying 50 % of your time on it, but when being it for two teams, you can focus on the role to 100 %. The same respondent also shared that being a scrum master for only one team usually often meant that you postponed the responsibilities within the scrum master role in favor of the responsibilities you had with the regular work and the product/delivery.

Formal Authority and Decision Making Capabilities

When asked about the formal authority and decision-making capabilities, all interviewees except one answered that the product owner is formally responsible for the team's tasks. One team member however stated that their product owner were not really present or engaged within the team. Instead, they had a business analyst that were doing the tasks of a described product owner as in CASAF. Accordingly, all interviewees agreed that the product owner has the formal mandate to prioritize the backlog and deliveries, participate in the development of acceptance criteria for stories, and collaborate closely with those creating the roadmap. Three respondents however added that when the roadmap and prioritisation were done and had become a feature, the team had the shared responsibility and ownership for breaking down the features into stories and tasks. Further, one scrum master highlighted the importance of team and individual ownership and responsibility. His team members did not wait to be fed and told what to do, but moved forward on their own initiatives. The scrum master believed it was crucial to flip the table from how it has used to be when leaders had pointed out for the teams what to do. Before, there were so called group leaders who had decided in detail or at least a lot what the teams should do. Now, they had turned it around and let the teams get that responsibility. One team member and one product owner also stated that the team members were free to raise if they disagreed with the prioritisation made by the product owner. They were open to listening to the member's thoughts and ideas about better solutions.

Team Size

As previously stated, the interviewees who participated in this study are part of agile teams who mainly practiced scrum. The different team sizes that were stated varied between six to seventeen people, including the team members, the scrum master, and product owner (sometimes also a team manager). One product owner said that they were six people in total within their team, which the respondent stated as a team size making them successful in implementation of the scrum strategy. The team was stated to be small and uncomplicated; in where the four team members were very independent and driven, and could work with a prioritised backlog and other priorities efficiently. The product owner had previously worked with eight team members in one team and did in that case not have the same flow and focus with scrum as he had with the current team. Further, the product owner mentioned that basic conditions exist to have a prioritized backlog, and that it was challenging to achieve those when the team was too large in size. The same respondent however made it clear that they were unaware about the possibility of having such a small team size at other departments at the company due to that other teams could have other needs in knowledge and skills than them to be able to deliver in their work. Nonetheless, team size were not stated to be the only element crucial for a successful scrum implementation. Another respondent stated that there were no good conditions for some teams in some other deliveries, and there, agile could be very burdensome. If the right conditions are not present and you do not understand what everyone in your large team does, one may have to sit in sessions and

go through things that are not related to what you do. That is then just because organisationally, it is stated to be needed to be a certain number of team members in your group/team. The same respondent quoted:

"If one wants to get out the true value of scrum, conditions for scrum have to be ensured, and I do not think it is everywhere yet."

The interviewees that belonged to teams with fifteen and seventeen people discussed several aspects of the large size. One interviewee stated that their deliveries were too complex to have a minor team and that all individuals were needed to be able to divide the work and focus on completing the tasks' purpose. According to another respondent whose team consists of sixteen members, the team members by themselves had divided into smaller groups with three to four people in each which had resulted in a lack of alignment between the team members. This issue arose because they did not feel an unity for the team task when not collaborating closely with all of them. In addition to this, the respondent stated that they thought it was inappropriate to practice scrum and agile when having a large team. Another scrum master also noted that the team size and some other structures and processes were inadequate for the respondent's team to perform their task.

Formal Structures, Methods and Processes

All of the respondents stated that there are fundamental processes present in the formal organisation that guides the teams to work agile. The majority stated that these processes were all present in CASAF. However, seven out of eight participants discussed challenges with the methods and processes in the formal organisation, such as them not being adequate for the teams to perform their tasks. According to one of the seven respondents, there were no available processes or methods for how to work with UX design, even though the company works a lot with UX daily for how their end product should look like and function. The same respondent experienced the formal organisation to believe that internal support by systems for UX was unnecessary, and that was believed because they had stated that it is better to adapt the system for the people than adopting the people to the systems. The respondent thought that this was careless for the users and felt like the organisation above team level did not really care about their UX role in the team. The interviewee was confident in that internal systems is in need to be developed for creating the capability to build and deliver good cars if there are no internal systems that supports the added that it is crucial to have internal systems at the company that support the progress of developing the cars.

Further, three respondents added that not all processes and methods had embraced the same level of agility as the teams and were still behind in the old ways of working. This was stated to be challenging for task performance since the old methods and processes did not align with the new and agile methods and processes. One interviewee mentioned one example of this to be the purchasing and budget processes in which they could sometimes have a way too long lead time. This was stated to be because they had not come as far in the agile implementation process.

In turn, this could have a domino effect, and the interviewee's team was affected by also having increased lead times when important deliveries had not arrived on time. The same interviewee added that they were allowed to provide the purchasing department with feedback for improvement, but at the end of the day, the respondent thought that the people at purchasing need to take change into their own hands. Another participant highlighted that the part of the organisation that they belonged to were all convinced in that it is agile they run now. They have the whole agile setup with ceremonies etc., and they create as good an environment as possible for the teams that work there. The mindset is that they questions how things are done, or come with suggestions on how things could be done differently. Simultaneously, some traditional systems were still judged to be critical, like the ones handling their products and getting all the right data to production. Bringing an end product is complex and requires systems that connect the entire value chain.

Management Above Team Level

Based on data collected from interviews, the researchers gained an overall interpretation that the participants did not want to refer to the leading positions in the company as "the management". However, one scrum master stated that they were dissatisfied with the management above team level since they felt like they had taken on far too much of the decision-making authorities that the team thought that they could be responsible for themselves. The nature of the statement was again brought up by a product owner who added that the company needs to get better at letting the teams make decisions. There are dependencies between the teams, but a balance is required for where decisions are made. The teams get stuck in processes and thus, better infrastructure is stated to be needed. One team member mentioned that the top-down information sharing flow is inefficient and that the teams often need to search for information by themselves. Sometimes they felt like they did not know what they were looking for but that they needed to keep looking. Another team member discussed the annoyance that they felt come along with a lack of information sharing from management, such as changes in the backlog being made without informing the whole team. The same team member highlighted that increased information sharing flow needs to be solvable, even though they currently work digitally.

4.2.3 Informal Organisation

The informal organisation includes tangible aspects like values, vision, and leadership style. Intangible aspects like employee-management is however also part of the subject. With data collected from the interviews, presented below is some of the perspectives of trust, empowerment, support offered to decision-makers, and ethics of management expectations.

Trust and Healthy conflicts

One of the interview questions concerned mutual trust that allows for healthy conflict. One person disagreed with the statement of if mutual trust and healthy conflict

existed, but the rest agreed or strongly agreed. One individual was part of a team in which the members had worked together in other projects before, which had made them well welded together. When new members have come to the team, it has been easy to maintain the mutual trust because of the steady basis of culture. Another individual said that they can debate issues in nuanced discussions where people stays with their different opinions while anyways agreeing on what step to take forward. The same individual referred to a model for group development and explained that their team has passed the polite phase and the conflict phase, and now they focused on getting things done and building structures for how to work efficiently together. There is a fourth phase in which everything works sovereign, and the team commuted between phase three and phase four. Quoting:

"With where we are in the group development phase, people dare to say what they think and feel, and we respect each other."

Another interviewee part of another team quoted similarly:

"We definitely have healthy discussions everyday. There are no conflicts as such, but there are disagreements. Everyone though has the same vision, to do things better for the company".

One person that were part of a larger team said that it was difficult to put to record what the levels of trust were since much of their working time was spent in smaller groups within the team. Within the little group of mainly three people, there was an existence of open minds and trust for each other that resulted in great collaboration and good and creative solutions. Another person with a leading position said that their team had good conditions for healthy conflict since their team was a mix of junior and senior individuals that had worked at the company for a long time. The same person told that they were the only one who was not consultant in the team, but their claims were questioned in a healthy way with motivations for disagreeing and alternative suggestions. The interviewee had however in other deliveries formerly experienced that some people did not dare to share their good ideas and especially not if it was in contradiction to the interviewee's ideas. This was thought to be because of the interviewee's seniority and permanent employment, even if the people had more knowledge about the subject that they were discussing. There were no such problems in the interviewee's current team, but it occurred when junior consultants from other cultures became part of the team. Two other interviewees have also mentioned that people with other cultures than the Scandinavian have been avoiding getting into any kind of conflict. One of those two interviewees stated that there are other teams with mixed nationalities where this is not a problem. The person believes that is because they have adopted the European culture of everyone agreeing that it is okay to say no and disagree with each other, but that it takes time to get there. Another person interviewed from a brave agile team who were based in China said, quote:

"At team member level, the discussions are good. The team members are at the

same age and have similar backgrounds. But maybe I am not the role model for this, because I am older than them and normally they will respect me and will not challenge me, so maybe I should not be deeply involved in their daily work, especially not in technical discussions. Or else, I will stop them to open their minds."

The same individual continued explaining a frustration for the management because good ideas that the team had is not authorised for them to decide about, but it must go through stakeholders and the head quarter, even though it is the locals that knows the local customers best. A Quote about it follows:

"We can increase our volumes if we can meet the customer needs But our voice makes no difference because our company wants to stay within the one global strategy and that's our frustration. "

Another leader mentioned that the mutual trust was something that the team had worked a lot with and now had reached a good situation with. The same leader had been part of a bad team environment earlier that they did not wanted to experience ever again. The leader rather tried to adopt their experiences from healthy teams, and tries to exterminate behaviors such as comments on someone raising a bad question or people being yelled at if they did something wrong. A quote from that person about which culture they implement follows:

"You fail as a team and you succeed as a team. You do not point fingers at anyone and everyone's tasks is equal in worth."

The effort for change seemed to have worked well since the environment was experienced as healthy today.

Communication and Collaboration

Some of the interview questions related to interceptions of communication and collaboration. All of the interviewees presented their main communication as taking part of scrum ceremonies and meetings on the digital platform named Teams. One interviewee said that it was extra appreciated to have the agile ceremonies already implemented at the time when everyone got forced to work from home due to the current circumstances, quoting:

"It is great that we have implemented all these ceremonies that are already in place. Because, it has not been such a big change due to prevailing circumstances."

Some of the teams modified the ceremonies to suit their needs which can be exemplified in the following quote:

"We think it's too much to have stand-up meetings everyday. We focus on minimizing meetings so that the team can focus on their daily work, and we trust

the team to perform their task. "

One interviewee explained what they communicated about daily as sharing, discussing, and syncing if anyone needs help, how the team can collaborate, when meetings shall be hold, and/or other practical issues. Another interviewee shared that the communication and collaboration in their team was mostly on teams now during COVID-19. Normally they are co-located and it was presented to be challenging for the team. The interviewee thought that it affected their productivity since the writing of messages and calling people took a lot of time outside of their regular work instead of just being able to turn around and talk to people as they would normally. A third person shared that the virtual context could be challenging but worked just fine due to that the team's scrum master was good at coordinating meeting, while a third mentioned that their scrum master could get better at coordinating. The third party quoted:

"Our collaboration is quite good, but there are some small conflicts and irritations within the group that I think should be resolved even if we are working from home. The whole world works online, so we can not just ignore small issues and say that we will solve them when we get co-located again because it can result in small conflicts growing. "

The same person presented that many decisions were made without communicating to everyone within the team. There was still information missing about changes in the backlog that had not either been communicated to all. Later, the interviewee experienced that the work they did in their smaller group within the whole team got reprimanded for work they should have done different if they were aware of changes that their team mates had not told them about. The individual who was part of a large team of 15-16 people quoted:

"It creates irritation that we are forgotten and that no one notifies us when things should be re-prioritized when we have earlier sat the whole team and decided. I think people are extremely stressed and pressured due to tight schedules and then you miss such things. "

The same respondent also thought that it would benefit the team if the scrum master could develop two skills; a better sense of urgency to make sure to get new team members introduced to the whole team; and a better prone to change due to their contrasting perspective to the respondent that the tasks within the team could not be executed if the size of the team were managed and down sized. Another interviewee was part of a team that collaborated a lot with another department and where the communication worked better. In that collaboration they had communities of practice where they discussed their road maps and any new changes that they might be rolling out. The next person shared that some team members did not like to share their work with others but rather preferred to sit by themselves with their area of expertise. The interviewee, who had a leading position within the team, reflected upon the issue and mentioned that it was part of their job to mediate

a sense of psychological safety for those people who might feel like they could be replaced when others gets involved in their work. A quote from the interview follows:

"We are not sharing what we do and what we know so that we can replace a team member and their skills more easily, but because we can accomplish greater things when collaborating."

The same respondent felt for the team members since they understood that it can be experienced dangerous to share if you believe that it makes you easy to replace. The team is now actively working with the team spirit together and one person had newly held education in pair programming to facilitate progress.

Team Environment

When asked to openly speak about how the participants experienced the environment when tasking risks in the team, the majority of the interviewees agreed or strongly agreed that they felt safe in doing it without fear of embarrassment or punishment. When talking freely about the environment, they said that it is always okay to ask "stupid questions", and it is okay to fail, make wrong decisions, and get a chance to explain yourself and turn the situation. One of the interviewed leaders stated that they would never accept any kind of punishment or reprimand for failures. A leader agrees but emphasises a concern quoted:

"as long as you do not see it as an exemption card to be careless or fail because of carelessness, I feel at ease with that mistakes can be made and that individuals hopefully are learning by doing them".

The same person stated that the sense of ease can depend on individual personality traits and how comfortable each person is with standing for their mistakes. A reflection was also stated concerning the Swedish culture and how it naturally brings comfort in questioning and failures, while other cultures do not feel at the same ease with taking risks, making making mistakes, or stand for the mistakes that has been made. The leader hoped that the team felt safe in the environment but had not yet experiences any serious or possibly embarrassing failures to happen yet, but smaller mistakes have been discussed and without struggles, embarrassment, or punishment. Another interviewee that was part of a brave agile team and based in China addressed the same issue, quoted:

"There is a big difference between the culture in Sweden and China. In Sweden, you are more straightforward, but we are not. Even though we are working for VCC, we still keep our traditional culture, so normally we would not speak up and normally we would not raise risks or bad news directly in meetings, but maybe we would talk individually and privately."

One further leader agreed with the statement about taking risks without fear as long as it related to their team. The individual had however heard that team members had experienced insecure feelings when talking to upper management, and therefor,

the individual had the image of a rancorous environment between product owners and leaders above them in the organisation. The interviewees that did not agree with the question statement about taking risks without fear were part of a team that had been growing very much the last two years. From the beginning, the team consisted of 4-5 people and had an open and good climate for discussions. As the team stocked up with new people with competencies needed for cross-functional teams and shared leadership, they are now 15-16 people. Many are still new at work and comes from a culture where one is not used to dare to speak out about issues. The fact that people are quiet rather than speaking created a lot on conflicts within the team. The individual had experienced that the scrum master did not approve when they spoke out against others within the team because they had told the individual to stop doing it. The individual felt like their opinion were being moved to the shadows but that the cause could be that the team do not meet up anymore which makes it harder to read body languages, emotions, and reactions to what was being said. A cause for a lot of the misunderstandings and smaller conflicts is said to be that people seldom have their web-cameras on.

Team Unity

One person describes an unawareness of which the newest people in the team is and a lack of cohesion. Within a small group within the team is instead where the respondent work efficiently and have fun with their work. The smaller group consists of three individuals and the total team is estimated to be 15-16 people at the moment. The same respondent explains that the situation might would have been different if the team was co-located at the company, but anyway suggests that the scrum master should make sure of that new team members will be introduced to everyone, even if one person miss the first meeting that the new employee attends.

There has naturally been a decreased level of interactions between team members due to COVID-19 and the transition into everyone working from home. All of the interviewees were normally co-located in the same office or partly at the same office depending on the international team members citizenship. Interviewees within leader roles such as product owners and scrum masters have mentioned their use of scrum as an asset in the situation because of its natural interaction points during the scrum ceremonies. They have stated that the transition could have been more difficult if they did not have these occasions as obvious portions in the team members' calendars. The same interviewees mentioned that one benefit of everyone working from home is that the conditions to participate is more equal for everyone. The few team members that are not co-located normally used to be the only ones that were digitally connected to the meeting, which could affect the quality of their contribution in comparison to the team members that sat in the same room. Those with team member roles, such as developers or UX-designers, have mainly mentioned the effects of fully interacting online and working from home as decreased quality of the work.

4.2.4 Individual

Individual defines the attributes of individuals within the organisation. Perspectives on the individual needs, preferences and expectations will be presented in this section based on the collected information from employees at the product area and from Brave Agile Teams.

Empowerment

All interviewees agreed upon that empowerment was crucial for being part of a successful and high-performing self-organising team. Several perspectives were identified when asked what factors were essential for each individual to feel empowered in their daily work. One scrum master and one product owner that were part of brave agile teams highlighted that trust as an essential factor for empowerment. For them, trust was about being provided with responsibility and ownership from the company as well as from the team, so that they got free reins to lead their teams and make decisions to the best of their ability, without asking the management team for permission all the time. Respondents further strengthened this at the product area, wherein one product owner added that empowerment, in general, is about gaining confidence in making certain decisions. If the team think that they have a good solution for something, it should weigh heavy for the organisation because you have faith that those who work with it have the best insights about it. In short, the respondent liked the principle of "freedom under responsibility". As long as the team delivered what is needed, the respondent thinks that empowerment should mean quite large measures of freedom, but that it is linked a bit with the car delivery. Another team member said that he/she feels empowered when given more significant responsibilities, more opportunities, and when working with some amount of autonomy. Three other interviewees stated that satisfaction at work is vital; you get through good colleagues, helpful team members, exciting tasks.

One interviewee discusses the lack of empowerment within their team. They worked in a complex business operation and the interviewee joined the team at a late stage, which meant that the individual lacked in knowledge and skills compared to the others for the specific task. The same respondent stated that if the knowledge and skills for oneself increased, the person would feel more empowered. The same respondent added that there were a lot of aspects around them that made the respondent think they were not empowered, such as old ways of working still being present in the new agile organisation. Improvements were thought to be needed to be managed and within their specific team; for instance, the old ways of working should be removed along with previous leadership styles, and the team should get the opportunity to organise themselves in an extended manner. Then, the respondent thought that the level of empowerment would increase.

Self-Development and Team Goals

The majority of participants described individual goals when asked about in what extent their individual goals for how a team should work aligned with the overall

team goals. In contrast, four interviewees only described team goals and did not focus on personal preferences. Overall, it was identified to be an overall alignment between individual goals and team goals. Two interviewees stated that personal goals are related to self-development goals. Still, they usually were too busy with their daily work and rarely had time to improve the self-development capabilities since the main focus were on the task and the high workload. Further, their team manager continuously encouraged self-development. Even though they wrote a well-thought-out plan for the self-development process, they did not perceive to have the time to work on it due to urgent tasks and a stressful working environment. Thus, the speed of self-development were low. This is in line with the statement of another respondent who as a consultant did not have development talks with line managers like permanent employees did. Work-related, the person however knew what to do in the upcoming increments and sprints, and set their own goals. One scrum master discussed how different roles that a scrum master should take could be found in "scrum master stances", and those could be an inspiration when looking for inspiration to set personal goals. The roles included being a servant leader, a facilitator, a coach, a mentor, a change agent, and a scrum teacher. The abilities for the roles that a scrum master should take are what this respondent wanted to develop and improve. A quote from this respondent goes as follows:

"It is exciting because you work so much with goals within the team, and I need to find which goals I should set for my own sake. They must also not conflict with the team."

Further, when asked about alignment between individual goals and team goals, only one interviewee belonging to a brave agile team mentioned that they synchronised this every year. Thanks to the fact that they had a workshop at least once a year, they synchronised individual goals among team members with the team goals. An outcome of this was that the team could align things they wanted to change or improve, and make everyone aware of it. Additionally, the interviewee highlighted that according to theory in SAFe and scrum, the team should have PI objectives and sprint objectives. It was described to be the next step as part of how they should get to the wanted structure of becoming more efficient as a team. The respondent mentioned another subject concerning team goals alignment which was that there are overall hopes and goals from the organisation that teams should feel agile and empowered. However, the respondent emphasized that to understand it correctly, one must understand its meaning and reflect on whether it is the right way to go. As quoted from a respondent:

"I do not believe that we as individuals should set goals for becoming a high-performing agile team; it is instead something that all teams, from different dimensions, must work towards together."

Another participant added that they had a bunch of buzzwords within the organisation about how agile teams should be; they should have autonomy, it should be fun, and fast, and bold. More than that, the respondent was not familiar with any more concrete goals on a team level. It was said that it is all agile principles in general that were communicated to the team.

Individual Expectations on Teams

Respect, fun, efficiency, and collaboration were the main keywords considered crucial when asked about individual expectations and perceptions of their teams. The majority of the interviewees agreed in that they had a very independent team. They added that some were senior, and some were a little newer, but everyone worked well together since they understood each others' strengths and weaknesses. This was also the expectation among the all of the interviewees; that the understanding for each other will remain. The teams faced new challenges now and then, such as keeping things interesting in the daily work. However, one respondent experienced that their team received plenty of formal appreciation for their work which made every team member feel encouraged. This was in line with a statement of another respondent regarding formal information-sharing systems;

"if one gets information about why certain decisions are made, everyone will have a unified picture and understanding about the various functions being developed. The challenges with information sharing are instead about the large team size and the remote working routines."

The same interviewee added that the company needs to establish processes for team unity that are applicable even in a digital context, because, otherwise team cohesion challenges would remain. Moreover, some teams have lost some team members along the path which have not been replaced. However, one respondent discussed a positive outcome of this, quoting:

"the team had to be helped across borders. There are no longer just some individuals working on their respective areas, but rather individuals that need to help each other across project boundaries."

The same respondent stated:

"It has created an unique culture. We have started talking less and less about the role you have and more and more about the skills you possess to encourage T-shaping in a better way. I see this as a movement we are doing but which we are not yet finished with."

In contrast, there are some concerns regarding high levels of employee turnover among a two respondents. An expectation from another participant was to decrease the stress levels by getting more people recruited. It will contribute to a more fun working environment wherein the team will "work for fun" rather than "work for work." In conclusion, the respondent stated that *"it should be a particular environment and respect within the team. Everyone should be approachable with the mentality of support.* Further, a sense of urgency was stated to be crucial; *"if it gets too much, one must speak up. There should be no oddities to make it easier for the individual."* This expectation and need have emerged recurrently in every interview.

4.3 Data on Empowerment

Below, data from a short survey (preparatory survey before the interview) is presented. The sample of participants is the same as for the interviews, which were 8 people in total whereof 5 were from the product area and 3 from brave agile teams. Every respondent agreed or strongly agreed on statements about accountability,

meeting commitments, and understanding of the team's work's broader impact on the organisation. Undecided, was answered by a minority to statements about fun in the work and with the team, personal engagement in the team, and believing that the team had a diversity of knowledge and skills. Statements that had respondents that disagreed included; taking risks without fear of embarrassment or punishment; clarity in vision, mission, goals, and purpose; and having mutual trust that allowed for healthy conflict.

Current Empowerment state

One statement in the survey was:

"I feel empowered in my current team and working environment."

Below is the rate of agreement presented from the individuals participating in the study. It is clear that the predominant feeling is in agreement of the statement with 2 individuals fully agreeing. One participant did not agree but were not strongly disagreeing. The experiences leading to this feelings, along with other respondents' experiences and improvement suggestions are presented in the qualitative data presentation in the above chapters concerning the formal organisation, informal organisation, and individual.

Answered: 8 Skipped: 0

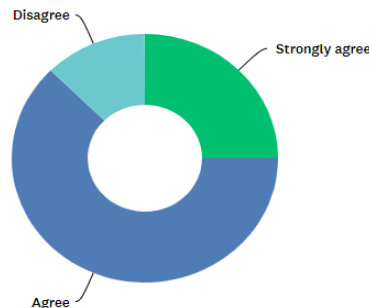


Figure 4.1: The figure represents the answers of how much the participants in the study agree with the statement, with options from strongly disagree to strongly agree. Answered: 8. Skipped: 0.

Conditions for Empowerment

One survey question followed:

"What conditions and/or factors are fulfilled when you feel empowered in your team?"

The responds is summarized in having an open working climate with good collaboration, having ownership for the product and authority in decision-making, trust between team members as well as management, respect, transparency, feeling heard when speaking up, and being in control of what the team does with pride.

This summary is based on the following answers that were collected from the survey in which the respondents got to write freely in a comment box (Answered: 7. Skipped: 1.):

- We own our backlog and plan our sprints according to our team capacity. We help each other and build trust in the organization by having control of what we do and feel proud of it.
- Taking up bigger responsibilities
- Straight forward/quick decision making (i.e. not tied down in long approval processes)
- We are encouraged to accept/reject/challenge incoming request from other teams and also make decisions by ourselves about tech. solution etc.
- Trust, respect, no prestige, and full transparency
- Being listened to
- I feel that management and the team trust me

4.4 Data on Team Success Factors

Taking Risks Without Fear of Embarrassment or Punishment

One survey statement followed:

"In my team, I feel a safe environment for taking risks without fear of embarrassment or punishment."

Figure 4.2 presents that a majority of the participants agreed with the statement and one quartet did not. Of those who agreed, more people strongly agreed that in the earlier statement about current empowerment state, but one more individual also disagreed to this statement.

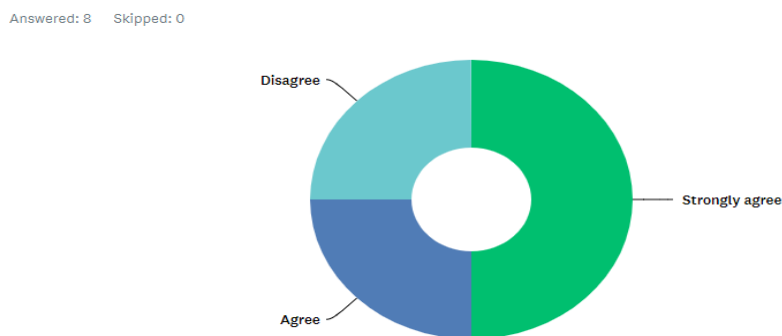


Figure 4.2: The figure represents the answers of how much the participants in the study agreed with the statement, with options from strongly disagree to strongly agree. Answered:8. Skipped: 0.

Clarity in Vision, Mission, Goals, and Purpose

One survey statement followed:

"I believe that we have an alignment on a shared vision with clear goals and purpose in my team."

This statement showed the lowest rate of people that strongly agreed. The majority agreed and one individual disagreed, which can be seen in figure 4.3.

Answered: 8 Skipped: 0

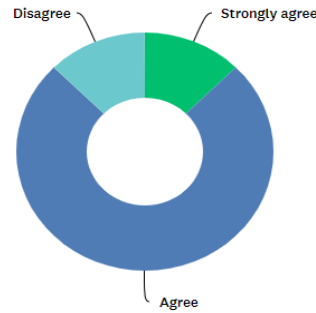


Figure 4.3: The figure represents the answers of how much the participants in the study agree with the statement, with options from strongly disagree to strongly agree. Answered: 8. Skipped: 0.

Diversity of Skills and Knowledge

One survey statement followed:

"I believe that we have a diversity of knowledge and skills to make quick, effective decisions independently in my team."

None of the respondents disagreed with this statement. The distribution of individuals who agreed and strongly agreed was in line with other statements' statistics. A few of the respondents were however undecided, which can be explained by unawareness of the teams' possession of team skills, or, by not understanding the statement which related to T-shaped competencies and being able to cover for and help each other when needed. See illustration of chart for this statement in figure 4.4.

Answered: 8 Skipped: 0

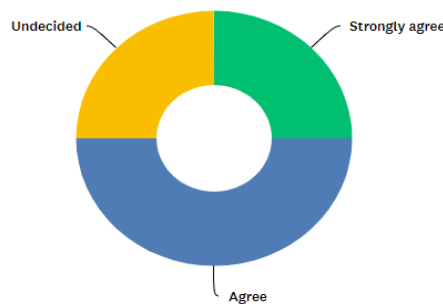


Figure 4.4: The figure represents the answers of how much the participants in the study agree with the statement, with options from strongly disagree to strongly agree. Answered: 8. Skipped: 0.

Mutual Trust and Healthy Conflict

One survey statement followed:

"The mutual trust that we have allows for healthy conflict."

The definition of healthy conflict was described as that parties respect each other's viewpoint, calm and non-defensive, readiness to move past the issue towards resolu-

tion, desire to seek compromise, believe that confronting the conflict will benefit the individuals and the team. The statistics are presented in figure 4.5 and are showing a similar pattern to earlier statements where there are two individuals at most that are disagreeing and the rest are agreeing or strongly agreeing. It is however not the same individuals that are disagreeing to all statements. When filtering the answers on the submissions that are disagreeing to this statement, it become clear that they are also agreeing with other statements. However, the respondents that were disagreeing on this statement were also disagreeing on the statement of taking risks without fear of embarrassment or punishment, which both relates to the team culture.

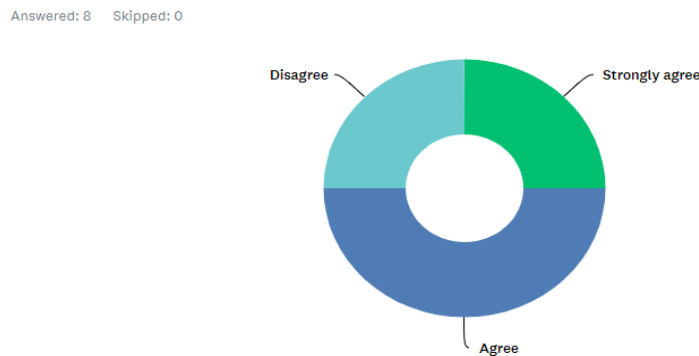


Figure 4.5: The figure represents the answers of how much the participants in the study agree with the statement, with options from strongly disagree to strongly agree. Answered:8. Skipped: 0.

Accountability and Meeting Commitments

One survey statement followed:

"In my team, we are accountable to each other and the organization by completing quality work and meeting commitments."

This is one of two statements where everyone agreed or strongly agreed, which implies that every respondent felt an accountability within and to their team and the organisation. See illustration of chart for this statement in figure 4.6.

Answered: 8 Skipped: 0

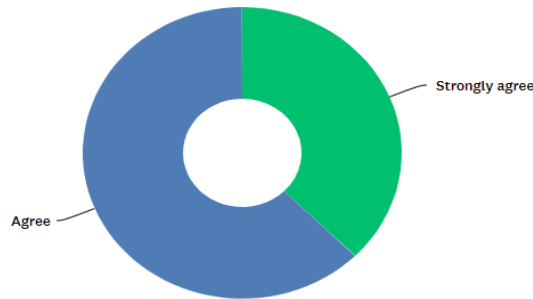


Figure 4.6: The figure represents the answers of how much the participants in the study agree with the statement, with options from strongly disagree to strongly agree. Answered: 8. Skipped: 0.

Understanding of impact

One survey statement followed:

"I believe that my team has an understanding of our work's broader impact on the organization."

The second statement presented in figure 4.7, every respondent agreed or strongly agreed, which implies that everyone believed that their team understood their work's broader impact on the organisation.

Answered: 8 Skipped: 0

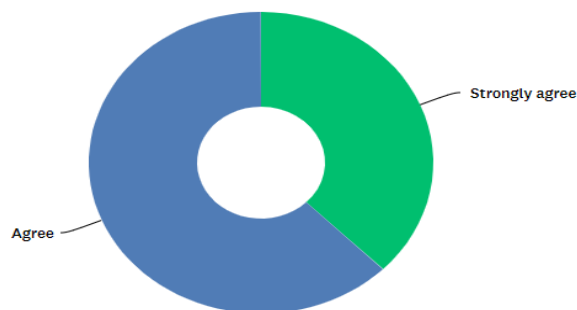


Figure 4.7: The figure represents the answers of how much the participants in the study agree with the statement, with options from strongly disagree to strongly agree. Answered: 8. Skipped: 0.

Fun in the work and with the team

One survey statement followed:

"My team is having fun in our work and with each other."

The majority of respondents agreed or strongly agreed with the statement, as showed in figure 4.8. An individual were undecided. COVID-19 demanding everyone to work from home seems to have affected many respondents according to the interviews. More thoughts and details about having fun at work can be found in the earlier sections of this chapter.

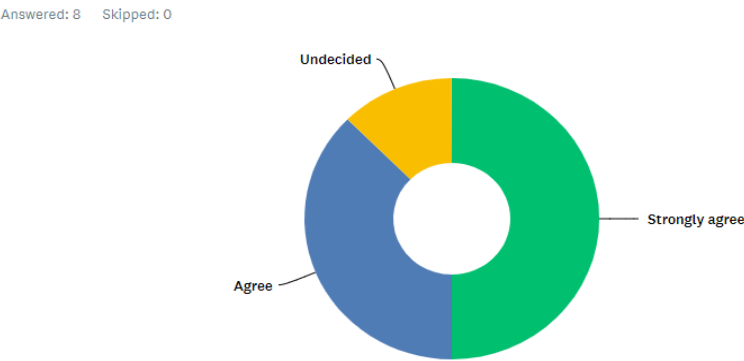


Figure 4.8: *The figure represents the answers of how much the participants in the study agree with the statement, with options from strongly disagree to strongly agree. Answered:8. Skipped: 0..*

Personal engagement in team

One survey statement followed:

"The work of your team is personally important to you."

This statement has the highest percentage of respondents who strongly agree, which can be interpreted like many people feeling strong personal engagement in their team. One individual was undecided about it, but no one disagreed. See illustration of chart of personal engagement in team in figure 4.9 below.

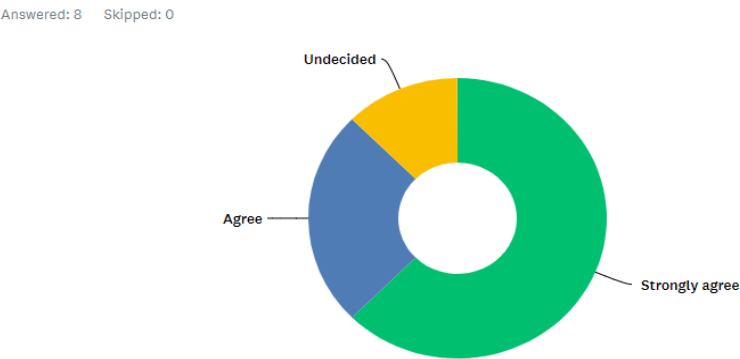


Figure 4.9: *The figure represents the answers of how much the participants in the study agree with the statement, with options from strongly disagree to strongly agree. Answered:8. Skipped: 0.*

4.5 Summary of empirical findings

Key takeaways from the empirical findings are presented in two sub-sections below with a structure in tables that aims to provide the reader with a quick recall of the chapter and enable a clear and easy overview of it.

4.5.1 Business goals

The summary of this sub-section is related to the business goals of the company, following:

- Abilities in speed, responsiveness, flow, and quality
- Cross-functional, skilled, and empowered teams
- Business understanding at team level for relevant decision makings
- Prioritized development by agile teams
- Having an organisational wide mindset that is aligned with the SAFE principles as well as the core of speed, value & flow, built-in quality, and empowered teams
- Leading roles that supports the teams are the scrum masters, product owners, and team managers
- Agile teams should have autonomy, have fun, be empowered, and be fast and bold

4.5.2 Qualitative data

The summary of this sub-section is related to each specific element from the core of the congruence model and based on results from five interviews that were held with people at the product area and three people that were interviewed from brave agile teams outside of the product area. Brave agile teams were chosen to get some kind of benchmark for the team performance at the product area against other teams in the organisation that is judged to have come far and is being in similar stages in the agile implementation process. The empirical findings are going to be analysed in the next chapter of this report, wherein the researchers take into account that the limited selection of eight interviewees is giving an indication of the current state but might not be representative for the whole product area.

Related to the formal organisation:

- CASAF supports team in how to be agile.
- Many processes do not support the team task.
- The leadership style is currently converting from traditional to agile.
- Teams want to have more decision-making authority.
- Some lack processes that they wish existed.
- It is experienced that management do not care for some team roles.
- Teams are cross-functional, agile, and using scrum or kanban to deliver with speed and responsiveness.
- Small teams are described to be more efficient in collaboration and efficiency than larger ones.

- Which roles who had the leading responsibility within a team could vary between scrum masters, product owners, business analyst, team managers, and line managers.

Related to the task:

- Different management levels and strategies vary depending on which department the teams belong.
- Different tasks create different value for the organisation.
- MVP is a common strategy used to maximise task efficiency, resulting in some people struggling with the demand of restricting quality.
- Shared responsibilities, close collaboration, good communication and information sharing are crucial factors for task efficiency.
- Diversity of knowledge and skills are high, enabling team members to perform each others tasks.
- T-shaped competence is to be developed, to accomplish a good flow and focus of tasks.
- Depending on the nature of the tasks, scrum might not always be the best strategy to maximise task performance.

Related to the informal organisation:

- People that had been part of a team for a long time had had the time and prerequisites to build up a mutual trust that allowed for healthy conflicts, but people that were new to a team or part of a large team struggled more in creating trust and openness. Another experienced obstacle for healthy conflict was when team members would not challenge people with more seniority or higher age out of a described respect that seems to be regular outside of the European culture.
- People outside the European culture sometimes struggled with daring to question older and more senior individuals.
- Some people experienced a mistrust for management above team level due to the rumors about a rancorous (hätskt på svenska) climate between product owners and higher management.
- Some individuals did not have good trust in the management due to experienced attitudes of neglecting and non-prone to change regarding improvement suggestions from leaders, without transparency in communication concerning why.
- Scrum ceremonies are experienced as positive and giving natural opportunities to communicate, share, discuss, synchronise, and collaborate with your team.
- Working from home has led to experienced lower quality on work and informal communication, and more irritations and small conflicts.
- People have been stressed due to tight time schedules which has led to poor communication and bad team unity.
- Teams that are large in size experience lacking in team unity.
- One individual hesitated in speaking out in their team due to that the leader had called them out to stop with doing so.

Related to the individual:

- Trust with responsibility and ownership from the company to the team and from the team to the individual was most important to feel empowered.
- Other factors were freedom under responsibility, confidence in decision-making, when given more responsibilities and opportunities, working autonomous and self-organised, thriving at work, personal development, and removal of old processes.
- Individual goals are often equal to overall team performance goals.
- Individuals expect their teams to have independent team work, to be skilled, to be open about progress and soft values, a good, respectful, and healthy working environment, and good cohesion and collaboration with other teams.

5

Analysis

This chapter aims to analyse the empirical findings in relation to academic theories. The analysis have a particular structure. Firstly, the difference between SAFe and CASAF is analysed. Secondly, the current state of the agile teams at the product area is analysed by each dimension of the research scope (self-organisation, team success factors, and empowerment). With these analysis as a basis, the current state is evaluated and determined. Thereafter, an ideal future state is determined based on the current state and business goals. Relevant parameters in the gap between the states is lastly identified and analysed with an adoption of the Nadler & Tushman congruence model. Final recommendations will be made in the next chapter, based on the final congruence analysis.

5.1 Comparison between CASAF & SAFe

This section includes a comparison between SAFe and CASAF that is to be analysed. By discussing similarities and differences between the two frameworks, the readers will overview the mindsets and principles that are the basis for organisational inspiration in terms of agility. Further, to present what has been added and replaced in the company's version of the framework for large-scale agile. All subsections are a summaries of internal documents and data gathered from interviews.

5.1.1 Organisational Purpose

The company was inspired by SAFe when transforming from a traditional organisation to an agile-oriented organisation. The advantage of SAFe is that organisations have the latitude to tailor it to support an agile way of working. Moreover, to fit their purpose and context. With the help of CASAF, the company can create cross-functional teams and continuous learning and at the same time develop products and solutions for a changing society. The company's scaled framework uses the complete SAFe configuration as a basis, with some items entirely based on the generic framework and others that are more company-specific and represents the company's way of working. Some items are still under construction, meaning that definition and deception of how to include those in the company context is ongoing. It is important to have in mind that both CASAF and SAFe are continuously updated and adjusted to meet the frequently changing external environment. Both differences and similarities were identified in this section of the analysis and are presented below.

5.1.2 Agile roles and Responsiveness to Change

One significant difference was the added number of roles vital for value creation in the company context. In the more generic framework SAFe, not as many roles are present. Nonetheless, all roles except one from SAFe have found an equivalent in CASAF. That one role that is missing from SAFe is, however, embedded in other added roles in CASAF. Roles containing business perspectives crucial for backlog creation and prioritisation are also adjusted to fit the company context. Another difference was the lack of competency "Organisational Agility" present in SAFe and a significant core competency critical to respond sufficiently to change (SAFe, 2021). This organisational agility competency allows organisations to focus on innovation and growth and build operational systems to tackle the threats of the digitisation journey (SAFe, 2021). Since this competency is communicated in three dimensions, wherein two are mainly about agile teams applying Lean and Agile principles and practices to improve, deliver and support solutions, one may argue that it is questionable not finding it in CASAF. In contrast, CASAF has a core value named "empowered teams" consisting of innovative individuals with the right competence to take needed decisions. Interestingly, the empowered teams seem to have innovative, cross-functional, and collaborative competence to attain value creation in a relatively short lead-time, but that overall organisational agility competency is not stated anywhere in CASAF.

According to Dingsöyr (2012), the agile principles were established to encourage value creation practices that allow and respond to change, both internally and externally. In addition to what allows responsiveness, SAFe demonstrated the organisational agility as a competency wherein speed is highlighted as a competitive advantage to respond to changes. This is a part of SAFe but is not existing in CASAF. One may argue that the company should implement this core competency to notice all parts of the organisation about speed and its ability and strength to deliver value in the shortest yet sustainable lead time. Another advantage of having the organisational agility competence within the core of CASAF can be its inspiration to the agile teams within the company. CASAF can thereby influence the teams to develop new strategies quickly and reorganise themselves to respond to the digitisation journey more efficiently and the changes it contains. An outcome of involving the competence in CASAF can as well be that the organisation becomes agile enough to sense the market in a new way and to change and adapt their strategies if necessary.

5.1.3 Agile Principles and Core Values

The principles presented in SAFe are the main similarity since the same mindsets and principles are explained in CASAF. Ten Lean-Agile principles within SAFe and CASAF are the basis to inspire and inform practices and roles of the two frameworks. In compliance with the findings from SAFe, the principles are aligned with

the company's goals to have an organisational-wide mindset and deliver value continuously. By looking at the empirical results, CASAF contains four core values. Only one of them is the same as one in SAFe, that is, "built-in quality". The other three in CASAF are value and flow, speed, and, as stated before, empowered teams. In SAFe these are alignment, program execution, and transparency. Transparency is somehow ingrained in the CASAF value built-in quality, saying that the company is transparent in gathering feedback and staying in sync through continuous integration. The core value called "alignment" in SAFe, discusses that alignment needs to rely on the whole enterprise and not only on the empowered agile teams per se.

Further, alignment can be achieved by having trust from all parts of the organisation (SAFe, 2021). However, trust does not seem to be a significant factor in CASAF since it is not stated anywhere in the core values. In opposition to alignment in SAFe, CASAF appears to rely on alignment within their core value of empowered teams. Program execution in SAFe is defined in the same way as Value and Flow in CASAF, including teams executing and continuously delivering value. Speed in CASAF contains optimization of flows to be fast in responding to customers and disruptive markets. As discussed before, speed is a significant part of organisational agility competence. Even though speed is present in the core values of CASAF, it can be more beneficial having it categorised as a competence. Thereby, the teams can develop skills, knowledge, and attitudes needed to enable value creation and to meet market and customer needs over time.

5.2 Analysis of Self-organisation

In this section, each theoretical dimension for a successful self-organising team is analysed in the context of the the current team state at the product area.

5.2.1 Shared Leadership

According to the empirical data distributed among the team members, team leadership was in self-managing teams. The respondents' shared that decisions were made together and continuously by having continuously planned scrum ceremonies. The teams that did not practice the scrum methodology also stated that every team member were part of decision making continuously. The scrum masters, product owners, and other roles of the agile leadership within the product area were seen as servant and supporting rather than in charge of decision making and allocating of individuals to activities, which is in line with the agile leadership which is including coaching and mentoring as leaders' foremost responsibility (SAFe, 2021). The teams deciding for themselves how and what can be done in an iteration is in line with the SAFe (2021) guidelines about agile leadership. Relating to the following quote:

"...while the traditional perspective of a single leader suggests that the leadership function is a specialised role that cannot be shared without jeopardizing group effectiveness, when leadership is shared, group effectiveness is achieved by

empowering the members of the team to share the tasks and responsibilities of leadership."

- Moe et al., 2009

the team members needs to be empowered to share the tasks and responsibilities of leadership. The empirical findings indicated that not all individuals are thriving with the new ways of sharing tasks and having responsibility of a shared leadership. To enable efficient and agile teamwork, individuals need to adopt to the new responsibility. When reflecting about this misfit and presuming that the vision to have self-organising teams should not be changed due to individual preferences in shared leadership, there are two possible solutions to the matter. Either, and the most preferred one, is that the scrum master can encourage and guide the individuals to adopt the shared leadership. This demands the individual to have or get the will to thrive and feel empowered in sharing tasks and responsibilities of leadership at some point.

The company team goals encourages people in the organisation to be bold, supporting, and positive to learning and changing and adopting to the team goals. Change processes take time (Kotter, 1995), and one should be humble that changing people's mindset with a history of other mindsets that has brought success historically until now is challenging. If the willingness is not existing for the individual to develop the skills or knowledge needed to feel empowered in the new responsibilities, another alternative to solve the issue could be to support and guide this individual to find a new role in a place where shared tasks and responsibility in leadership is not a criteria for high performance. It is fair to the person that signed up for a specific role that was allocated individual tasks, and is not thriving with new responsibilities that have come along with a new agile role, to get guidance in alternative career choices. Also, the company and the leaders with personnel responsibilities should be aware that people that do not or will not ever change from the old mindset into the agile mindset will be a barrier for high performance with the agile strategy.

Structures for Efficient Learning

Moe et al. (2009) presented two main challenges when organising shared leadership. The first challenge concerned lack of structures and/or instruments for efficient learning. As indicated in the empirical findings, every individual within the formed agile teams had attended training in the responsibilities and impact with their new roles. This indicated that instruments for learning is existing which is beneficial for the implementation of shared leadership. Some data stated that individuals felt like they did not have enough time to work with personal development alongside their regular work, which shows an absence of structures for continuous learning. The challenge of organising shared leadership at the product area could therefore be facilitated by meeting the needs of structures for efficient learning. In conclusion, structures are present for efficient learning within some areas. However, those structures seem to be absent for continuous learning regarding self-development in particular.

The right degree of Autonomy

The second main challenge in organising shared leadership was difficulties in forming the right degree of autonomy for all stakeholders (Moe et al., 2009). It is logical that the team can not embrace a shared leadership for their task if they do not get trust from all stakeholders in that they are the best suited to have that responsibility. All of the interviewees agreed that trust existed within their team for the common ability to complete their task. In those cases where the trust within the team was lacking, it had to do with other factors such as communication, collaboration, and the barrier of a large team size. The data from a small number of interviews compared to the total number of teams at the department shows that team size varies from 6 to 17 people.

Analysing the effect on communication when the team increases, the network of dialogues increases a lot when everyone is supposed to talk to each other, as is necessary within a team. One eye-opener is illustrated in Figure 5.1 below which shows one of the reasons for not wanting to have too large team sizes (Perkin, 2017).

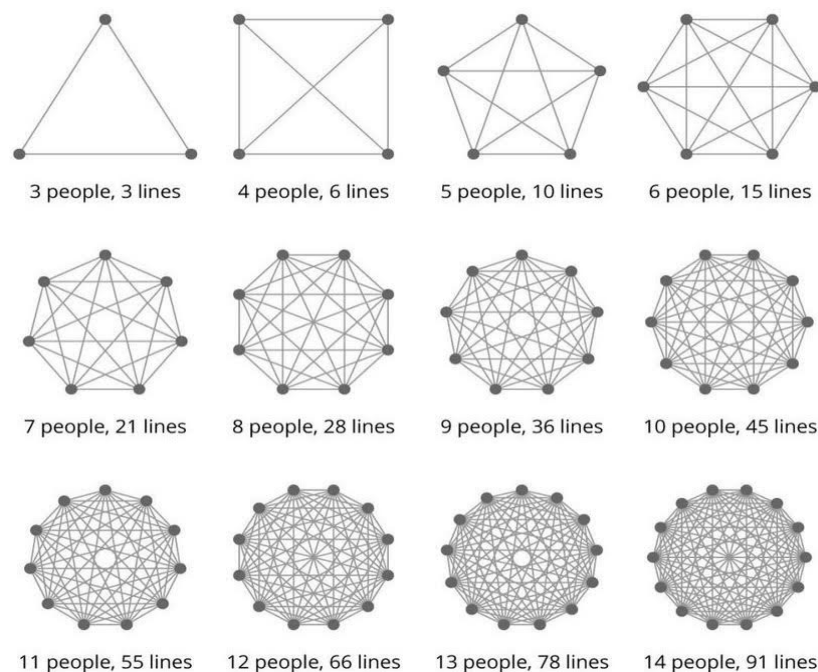


Figure 5.1: *An illustration of how more interactions, communications, and communication is needed in teams when the size goes from 3 to 14 people (Perkin, 2017).*

There are different suggestions on what makes a good team size. Susan Wheelan's model for group development suggest that a group of more than eight people gets less efficient (Wheelan, 2009). Katzenbach & Smith (2008) have said that there are no team if there is no small group. SAFE (2021) suggest that a team should be 5-11 individuals. The researchers take all of these viewpoints into account and believe that team efficiency can increase if limiting the team size to maximum of 8 people. Some interviewees found it necessary for the task to be large in team size, but the researchers suggest that it would be better to divide the larger team into several

small teams that communicates between each other via coordinating leading roles instead of having everyone talking to each other in a too large network of interactions. Richard Hackman, a Harvard professor with expertise in team dynamics, suggests that the number of unique interactions between people increases exponentially as the number team members increases, which affect the team effectiveness (Perkin, 2017).

Some interviewees also indicated that trust related to other stakeholders was perceived as lacking. Individuals wanted an higher level of authority and more possibilities in making decisions related to their task. According to Karhatsu et al. (2010), autonomy is one of the first and most important thing to achieve when building a self-organising software development team. It is also one of the corner stones in the orifinal agile theories (Beck et al., 2001). This is why it is very important to have all stakeholders with influence on a team's task to trust the team and authorise them to make the decisions that they should, relating to their unique competencies and skills in the team. Based on the interviews and talks with team managers at the product area, everyone are doing agile, but not everyone are being agile. Transitioning in mindset about trust is the most essential improvement area to start with relating to theories in how to build self-organised teams (Karhatsu et al., 2010). Targeting an achievement of shared leadership, autonomy is the most important factor with leaders that are being agile, product owners that protect their team/s, and a middle management that authorise the teams.

The most essential part of the organisation is stated to be empowered agile teams and the individuals within them who creates the value. It is vital for people to thrive and feel comfortable in the working environment, but it was identified that some people did not thrive with working with scrum. Some were told to feel stressed with the daily stand-ups and others did not thrive with the shared responsibility instead of being told what to do and prioritize. In an ideal future state, these people are challenged, supported, and coached by great leaders that who's goal is to make the team feel empowered by the authority of the task. Each individual shall feel that there is trust from the management above team level that it is them that is best suited to make decisions related to their task. No one should feel questioned or punished on scrum ceremonies or other equivalent meetings where progress is reported on. On the opposite, in an ideal future state it is the trust, authority, and transparency about the progress towards all relevant stakeholders that encourages and empowers the team.

5.2.2 Autonomy

Agility is more about attitudes and mindsets than processes and methods. Accordingly, having an informal organisation where agile principles is common and people's mindsets are being agile is more important than having agile processes and methodologies as common practice. The informal organisation affects the team environment and in the ideal future state, teams are empowered and agile. Informally, it should be known that being agile is more important than doing agile. Scrum, for instance,

is not guaranteed to be the best practice for all agile teams. It is better to consider the task, its dependencies to other teams, and what method that best supports that when deciding on which method to use.

During the interviews conducted with agile teams at the company, autonomy was a common factor discussed among respondents. Karhatsu et al. (2010) stated autonomy is a vital dimension for self-organising teams and is defined as the team's authority and responsibility with their performed tasks. The exact dimension is further presented in SAFe (2021), discussing that alignment is achieved mainly when, among other factors, the autonomy among teams is in order. Accordingly, Hackman & Oldham propose that autonomy is one of the five dimensions essential for achieving job satisfaction among employees. Thus, this can be seen as a fundamental dimension to focus on when building high-performing and successful self-organising teams. During the interviews, data indicated that team members feel empowered in their daily work when performing their tasks in an autonomous and self-organising manner. Further, trust from the company that the team is given the responsibility and ownership to perform their task is another essential factor for interviewees to feel empowered. "Freedom under responsibility" is an interesting principle that has emerged during the data collection phase and can be argued as a good starting point for teams to enable the interpretation of autonomy in their daily work. Teams should be trusted since they perform the tasks daily, and the organisation should have faith that those have the best solutions and insights about it. Thereby, as long as the teams deliver what is needed, autonomy and large measurements of freedom are vital. This is in line with the fifth agile principle presented in the agile manifesto by Beck et al. (2001). The topic of discussion is that one should build projects around motivated individuals and give the individuals the required environment and support and trust them to get the work done. Therefore, managing and fostering motivation is essential for maintaining such an agile methodology premise and a sense of autonomy in their work.

Ryan & Deci (2020) divide motivation into intrinsic and extrinsic, wherein intrinsic motivation relates to the activities performed because they are considered inherently exciting and enjoyable and are performed for the individual's own sake. Both the SAFe principle number eight and the CASAF principle with the same number aligns with the definition of intrinsic motivation presented by Ryan & Deci (2020), wherein the principle goes as follows:

"Unlock intrinsic motivation of knowledge workers to provide autonomy and purpose and reduce constraints among employees, resulting in an environment of mutual influence".

Managers should therefore cultivate autonomy in the workplace by continuously motivating teams to express what they consider as exciting and enjoyable in their tasks. Another way to motivate individuals and make them feel autonomous can be to frequently ask them about opinions and feedback and act on those. Along the lines of feeling ownership and responsibility to perform their tasks, teams should be given the opportunity to discuss how they like to perform their tasks, including

what environments and task setups they find most productive.

A suggestion to further increase the autonomy level among teams can connect their task to a larger goal or company mission. This is in line with data that has indicated that teams have a good understanding of their works' bigger impact on the organisation, as in one of the success factors presented in SAFe (2021). However, the success factor should be maintained by continuously communicate the alignment between the task and the bigger impact. Autonomy can mean different things to different individuals. Thereby, it is essential to define what autonomy means for each team to avoid misunderstandings and confusions. A good starting point is to ask the teams how they feel about their current levels of autonomy. Moreover, to ask them if they feel a sense of ownership and choice regarding their work. Even though most of the teams in this research work with tight and stressful deadlines, teams can still demonstrate their preferences for autonomy by meeting those deadlines, working independently, asking for help when needed, and perhaps offering solutions and feedback on existing tasks.

5.2.3 Communication and Collaboration

Communication and collaboration are suggested to be the most vital dimensions to get in order first when building successful self-organising teams and are required to attain success within self-organising teams (Karhatsu et al., 2010). Nevertheless, it is highly recommended for the teams at the case company to interpret high levels of communication and collaboration in order to achieve high performance, success, as well as robust value creation. The dimension is embedded in all five core dimension presented by Karhatsu et al.(2010) and is in agreement with the agile values described by Beck et al. (2001), stating that the agile manifesto is built upon organisational collaboration, trust, and respect. Most respondents discussed the scrum and agile ceremonies, such as sprint planning, sprint reviews, etc., to be the fundamental enablers for communication and collaboration for teams. Normally, the teams are co-located and can easily share information and collaborate. However, due to the outbreak of COVID-19, some respondents argued that communication and collaboration have been affected in quality and decreased. The virtual context is challenging, as some teams experienced daily meetings and stand ups through digital platforms to be too time consuming and not as valuable as before.

Information Sharing & Communication

Information sharing regarding changes in backlog and introduction of new team members have not been communicated to all team members. The particular reason for this circumstance was stated to be the digital way of working, which can contradict to the findings in academic theory defining communication and collaboration as the work performed together in an open workplace, daily information sharing, and visualisation of progress (Karhatsu et al. 2001). Even though it can be challenging for the teams to achieve high levels of communication and collaboration in this new format, one could find new strategies and solution for it to work. In this case, it could be beneficial to have a person with leadership role, perhaps the scrum masters

or product owners, to coordinate and schedule daily digital meetings wherein information and changes are shared among all teams members. Thereby, team members will count on these and set aside time for participating in the meetings.

Data indicated that the majority of teams already practice daily stand-ups that are efficient and creates value for them. In contrast, other teams made a joint decision not to have those meetings every day because it did not add any form of value for them. To motivate teams that are in need of daily stand ups, leaders can encourage the employees to visualise their progress as a way of being transparent with their tasks and performed work. Transparency is one of the core values presented in SAFe (2021) crucial to build high-performing agile teams, since it enables a clear understanding of the content for the whole organisation, including executives and stakeholders. Further, to design the meetings in a way so that they include only team members that will add to and benefit from the meeting to avoid reducing productivity and rather enhance it.

To sum up everything that has been stated so far, even though agile project management value face-to-face communication as the best way to convey information (Beck et al., 2001), the organisation should have in mind that the virtual format will most certainly become more and more common. Employees might be comfortable working from home a few times per week. The agile methodology is based on quickly responding to changes over following a plan (Beck et al., 2001). The virtual way of working is a change per se. Therefore, all parts of the organisation should be managed and redirected by implementing new strategies for communication and collaboration to work efficiently in digital platforms. In turn, success within the self-organising teams of the company can be achieved and incremental value can be created.

Networks of Collaboration & Team Unity

One individual saw positive outcomes from staff turnover because it had forced them to work across project boundaries, encouraged them to possess T-shaped competencies and talk less of the specific roles within the team. The majority however wanted to recruit more people due to the missing of people that they had lost along the way and had not been replaced, or to decrease the team's stress levels. The researchers can not evaluate the exact amount of people needed within different teams with different demands of competencies and cross-functional collaborations for efficiency. However, the team size should probably not be larger than 8, preferably 5, people, according to theories about team efficiency. In an ideal future state, efficiency is maximised by not having more people than that in a team. If the task need larger networks of collaborations, more teams that collaborates between each other could be created instead. An efficient number of people in the team could also decrease the stress levels, which should never be continuously high since that is devastating for the team health.

During the interviews, concerns regarding team unity and collaboration have occurred. Since the team sizes varied from six up to seventeen people, some workflow,

focus, and collaboration challenges arose within the more prominent teams consisting of more than eight team members. Group size is a crucial factor for increasing and decreasing both group productivity and development. Wheelan (2009) investigated group development and productivity wherein the findings indicated that when group size increased, group cohesion reduced. Lack of cohesion was also confirmed by a large team at the company that has expanded from four persons to fifteen, discussing it was challenging to put the record on trust and collaboration levels since the team has divided themselves into smaller groups with mainly three people in each. As a result, there were higher levels of trust, collaboration, and solution creation within these smaller groups. This data is in line with the findings by Wheelan (2009), discussing that teams consisting of more than nine members are significantly less productive and developmentally advanced than teams with three to eight members. Further, Berkowitz (1958) added that more disagreements and less satisfaction among larger teams were found than in smaller ones. In this case, the issue of lacking team unity and high levels of collaboration seems to be the most present in larger teams since those have been the ones mentioning low levels of satisfaction and lack of cohesion. It can be concluded that it is challenging to achieve cohesion when part of a large team. One reason for this can be the loss of support from both teammates and management, which employees might feel when the team size is too big. It can be difficult finding time and effort "pleasing" all individuals in a team when there are too many of them in it. Thus, sticking to small teams is proven to provide more efficient and productive outcomes.

Some respondents discussed tasks that were too complex to handle with fewer team members. However, if the organisation can encourage and facilitate team bonding and personal interactions among team members in small teams, the obstacle of handling complex tasks can decrease. For instance, teams should be inspired to get together outside working hours now and then or do a group activity once a month and strengthen the interaction. Some teams at the company are already at the forefront with group-dynamic activities and strategies, even in the digital format. For example, a scrum master stated that they practiced the maturity model for effective teams developed by the famous researcher Susan Wheelan and was an efficient strategy for increasing team cohesion. By implementing the strategy by Susan Wheelan within all teams at the department, teams can provide ongoing training and feedback on goal settings regarding team cohesion and efficiency. One thought is that individuals usually can have more similarities than differences; thus, interactions and satisfaction with team members may have a major impact on group dynamics and may be easier to attain when working in smaller groups. Another interesting finding was that many teams participating in this study were good at celebrating success, no matter team size. A little appreciation can be a good starting point for teams to boost team morale and keeping the team engaged. Developing team cohesion is continuing; therefore, celebration within the team can make the bond between members tighter and more integrated.

Collaboration & Leadership Influence

Another curiosity arose when a scrum master highlighted the impact of leadership roles' influence on how the team's collaboration is structured and works. For instance, the scrum master strongly argued the importance of having experience from a team member level before becoming a scrum master, to enable facilitation and coordination for good collaboration among team members. However, those statements differs from the eleventh principle in the agile manifesto presented by Beck et al. (2001) referring to agile teams being self-organised for best efficiency and products to emerge. It is therefore interesting to question why the scrum master had such a strong opinion regarding the particular experience on team member level, and why it is vital for all scrum masters to attain it. Perhaps, the person enjoyed the role as a coordinator which a scrum master embraces and felt that the outcome in terms of team collaboration became more efficient by having that distinct experience.

The organised context can be further improved by experience sharing and situated practice of ongoing process management and leadership among team members. Moreover, the empirical findings indicated that some experienced a lack of understanding from leaders for how team task is carried out as well as an absence of communication top-down. By promoting managerial behaviour that contains attention for communication to satisfy the needs of their subordinates, collaboration levels can become more productive from all directions of the organisation. One may argue that it is equally essential for managers to be continuously involved in the work progress and ongoing tasks of their employees to create an understanding and interest for the value development of each team. However, consequently such a behaviour may distance the managers from the roles as controllers and decision-makers and instead places them in a coordinating and facilitating position, as predicted by Barley (1996).

5.2.4 Redundancy

In a self-organised team, a dimension of redundancy is needed to enable a sharing of responsibilities (Karhatsu et al., 2010). With other words, the dimension refers to preventing the team from getting a bottleneck in the team if any individual is missing. The interviews identified that the product area are currently working towards achieving T-shaped competencies in the teams, which means that one individual can be highly skilled in one area of expertise but should at least be familiar with the other areas of expertise that needs to be in your team.

One respondent in the interview quoted about an experienced evolving culture within the team where they had began to talk less and less about which role everyone had and more about the skills the team possessed. Another respondent shared that they used a competence matrix in which all skills that the team needed were showing and a T-shaping could be planned within. The team had open dialogues about this matrix which is a great example on how to make redundancy transparent for all, which enables a sharing of responsibilities and a more efficient self-organising team. The first respondent mentioned that they felt like the movement in the culture has

begun but is yet not finished yet, and that is the current state that has been identified to be true for all of the interviewees' teams. Some teams were more mature about agreeing on a team uniformity than others due to individuals being used to being in charge of their own task and feeling safe with being singular about a certain skill, but the implementation is positively already clearly set in motion.

The best way moving forward would be for the scrum masters to keep working with implementing T-shaped competencies which aligns with achieving great redundancy, which can be done by discussions with the team and dialogue with individuals about its vitality for achieving self-organising. It could be beneficial for the implementation to have the dimension brought up on continuous events held about the team development and team unity to make sure that it is a subject that is persisted in the agile transformation, a subject that is continuously being discussed, as well as it would send a message and make an influence on everyone that it is an important dimension for the team efficiency.

5.2.5 Learning

A large company has a large amount of people. Regular change processes takes time since they must include eight necessary steps for a satisfying outcome (Kotter, 1995), and one should be humble about giving it time. A change process in a large company that affects a large amount of people should be given even more time and resources, using the same logic. The company's change process includes a whole new strategy and organisational structure, and failing at one of these eight steps can affect the outcome badly (Kotter, 1995).

Changing formal processes, methods, and structures takes practical time, but what demands even more time and resources includes changes in the informal structures and individuals' mindsets. Moe et al. (2009) did not just exemplify that the re-orientation by developers and management to transition from individual work to self-managing teams requires time and resources, but that time and resources are vital for the change towards agile methods based on self-organisation to be successful. The transition need to take its course in iterations and therefore it is great that the empirical findings shows that the teams work with continuous improvements and learning. The formal organisation described in the empirical findings were indicating that the the product area have clear structures for learning in ways of using scrum and iterative sessions of planning the work. Learning is important as a great part of agile methodology, but also in sense of self-organising as it is embedded in all of its dimensions (Karhatsu et al., 2010), which means that it can be analysed for each of the subsections beneath the section about the analysis of self-organising. However, learning is not only vital for each dimension, but also for the team members to learn from each other and the work environment (Karhatsu et al., 2010). Here again, important factors for the team to succeed in that kind of learning is trusting each others' intentions, and feeling comfortable and empowered in sharing information and knowledge.

5.2.6 Team Orientation

Team orientation relate to the level of fit between individual team member's goals and the team goals (Karhatsu et al., 2010). One individual indicated that the teams were actively aligning these goals via a biannual event where they set goals for where the team wanted to be in six months as a team. In this event, the team members had the possibility to raise if the team goals would contradict with their individual career goals, which indicated good team orientation. Other interviewees did not really state any individual goals or preferences for how the team should work, but overall, none of the interviews indicated a misfit between personal goals and team goals. The team orientation based on the cluster sampling is therefore believed to be very good. One of the interview quotes gave a clear insight about one of the individuals awareness about team orientation since they reflected about how excited they were to set goals for their own sake that did not conflict with the team.

The performance of team orientation is seen to be well, but two factors that could affect it, now and in the future, concerns continuous goal-setting and structures for self-development:

1. Only one individual mentioned having biannual events of goal-settings for the team vision. It does not necessarily mean that more teams do not do it, but if it is not a continual happening, it is a splendid suggestion of event to get going to improve the team orientation. One quote from the interviews regarded some individuals tendencies in setting individual goals that concerned becoming a high-performing agile team but that it is rather something that all teams should work towards together. With biannual events for the team's common goals, it might be clearer for the team members that their personal goals should be about just them and their individual wanting of development.
2. Also, an implementation of structures for self development could increase the levels of team orientation since many of the interviewees felt like they did not had time outside of their regular work to lay on self-development efforts. The goals are in those cases not even existing to be risking to contradict the team goals, but it is probably not positive for the individuals' basis for thriving and feeling empowered at work if they do not have time to consider their personal development.

5.3 Analysis of Empowerment

The history of the company has led to prior business success, but as new technologies emerges faster and the current business landscape is fast paced and digitalised, the organisation realised the need to adopt their ways of working to keep their competitiveness in the market (Mack et al., 2015). The company has already changed in strategy and organisation towards a lean and agile orientation aligned with the VUCA world, wherein fast and empowered agile teams at product creation is in the center of attention. Below are analysis of data about individual empowerment and team empowerment that was collected from a survey and interviews.

5.3.1 Analysis of empowerment from Survey

Two questions in the survey related to empowerment. The participants were asked if they agreed with a statement about current empowerment, and what factors needed to be fulfilled to feel empowered. Only one individual disagreed with the statement, but all of the respondents had ideas on how to further improve the conditions for team empowerment during the interviews. Answers from the survey of conditions for empowerment such as "taking up bigger responsibilities", "Straight forward/quick decision making", and "Feeling that the management trust me", relates to the self-organising dimension of autonomy. Answers of conditions such as "We own our backlog and plan our sprints according to our team capacity", and "feeling that the team trust me", aligns with the self-organising dimensions of shared leadership and redundancy. The answer "being encouraged to accept/reject/challenge incoming request from other teams and make decisions by ourselves about tech. solution etc", is in compliance with the self-organising dimensions of autonomy and shared leadership. Collaborating with other teams to find the best holistic solution for incoming requests craves cross-functional skills and embracing of shared leadership even between teams. Making decisions within the team about the solution requests autonomy, and actually communication, collaboration, redundancy, and shared leadership, if the decisions is going to be efficient (Karhatsu et al., 2010). Other answers such as "Trust, respect, no prestige, and full transparency", and "being listened to", aligns with the self-organising dimensions of communication and collaboration. Actually, "being listened to", can be related to team orientation as well. Relating to the section about team orientation, feeling heard about wishes for personal development, and the manager of individuals making sure that there are development plans for each individual that aligns will the team goals is essential for individual empowerment. The only dimension for self-organising that had no clear prominent in the survey responses, but as Karhatsu et al. (2010) stated, learning is vital in all of the other dimensions for them to be fulfilled. So, since the survey answers about conditions for empowerment were all about self-organising dimensions, it can be concluded that all of the respondents feel empowered in the context of a well-functioning agile team.

5.3.2 Analysis of Empowerment from Qualitative Data

One of the first implications from team managers when discussing the limitation of the thesis scope being on a team level was that they wanted teams and individuals at the department to feel more empowered. The interviews embraced that many individuals stated conditions for empowerment that are aligned with the dimensions for self-managing teams. To bring up one example, one individual stated that the team were nowadays more empowered because they had adopted a cross-functional teamwork and ownership for the total product. It is clear that in an ideal future state, individuals and teams are empowered in what they do by being self-managed. To get there, the authors believe that individuals need personal development plans and time to work with them to feel like they are on a journey towards fulfilling their personal career visions. Great leaders that enjoy working with people is therefore a part of the ideal future state. It is vital that individuals feel their manager is hearing

them, and therefore, it is important that the leaders are people that naturally care about people and likes to challenge individuals and see each of them develop.

In the interviews, the respondents elaborated on conditions for empowerment and highlighted trust as essential. High performing teams, according to SAFe (2021), have mutual trust that allow for healthy conflict, and relationships within the team that are based on trust. The majority of the individuals participating in the interviews were saying that they interpreted a good level of trust within the team, which is positive according to the SAFe team goals. However, when individuals from brave agile teams kept on explaining what kind of trust they needed for empowerment, it had less to do with trust within the team and more to do with trust from the company. The respondents with facilitating and guiding roles in the teams wanted to be provided with responsibility and ownership to lead from their teams and make decisions without asking the management about permission in the current amount of times they have to. In the product area, it was also stated that trust within the team and oneself in the ability and confidence to make decisions is essential. It seems that trust is vital in all levels both in the product area and in other teams that are in a similar situation with the agile implementation, and incredibly trust to the team to decide on issues they should from the management above team level. In goals and strategies, trust is mentioned as an important factor within an agile team. However, the data collected shows that it is vital for empowerment in more dimensions - for oneself, within the team, between teams, and for the management above team level.

Other reflections about what made the individuals feel empowered concerned freedom under responsibility, given bigger responsibilities and more opportunities, working with some degree of empowerment, self-organising, renewing old processes and leadership styles, and when thriving with your colleagues and your tasks. The company have done a large scale transition from a traditional and hierarchical organisation to become a fast-moving organisation with an agile strategy forward. Naturally, it is an enormous change process, and changes take time. Even so, agile teams and agile methodologies are already used all over the product area. The challenge forward lies in transitioning in more than methods. The most important change in agile strategy is the mindset of values and principles, and here, the empirical data indicates opportunities for improvement. All of the challenges presented as important for empowerment in this sub-section are aligned with agile values and principles as well as the dimensions for self-organising. The interviews, therefore, gave the same indications as to the survey, but with even more focus on trust. It will be important to include trust as a vital parameter in the ideal future state. All should feel empowered at work, and the current state's investigation shows that people want improvements regarding it. Moreover, the individuals in the organisation embracing an agile mindset are vital in the ideal future state for empowerment. When the mindset is aligned with agile values, the iterative change, learning, and renewing of methods and ways of working will go more smoothly forward.

5.4 Analysis of Team Success Factors

SAFe values skilled individuals but state that for achieving high-performing teams, it is more important to consider how individuals work together (SAFe, 2021). The SAFe success factors combiner with a complementary Google team success factor (Google, 2021) gives the characteristics that the researchers suggest that teams have in common when they are high-performing. Therefore, it is positive that the respondents in the study agreed to the majority of statements comprising the team success factors. The disagreeing or undecided answers to the statements are the ones that are identified to be challenging in the current state. The statements where respondents disagreed relates to the team culture, personal engagement, and diversity in team skills and knowledge, which has also been analysed in the above section and will be part of the determination of the current state.

5.5 Analysis of the Order of the Agile Team Building Blocks

The agile teams building blocks were supposed to give an increased understanding for which parts of the self-organising dimensions to work with first and the analysis of it is presented below.

5.5.1 Current Building Block Status

From the empirical findings, it can be concluded that the product area have some level of fulfillment in all of the dimensions for self-organising teams, which can be related to that that there are large potential in the basis of building efficient agile teams. CASAF presents a formal structure where the teams are authorised for decision-making, where cross-functional teams collaborate, communicates continuously, and learn from each other. When discussing with team members during the interviews, it became clear that some teams struggled with their team orientation and shared leadership while others still felt a need of a higher levels of autonomy and trust from various parts of the organisation. To evaluate what is important forward relating to the building blocks, we want to relate the company's agile transformation process to a change process visualisation shown in Figure 5.2.

The evaluation is that the product area has created a sense of urgency in that if they want to stay relevant and keep up with the VUCA-world, they need to change their organisation. They have started this process and have come quite far. They have set up a structure for the new organisation (CASAF) and appointed new agile leadership roles. There are also change agents in the overall company have become a guiding and powerful coalition which creates a good climate for change. The change vision is communicated by management above team level, educations are held about the new roles, and informative texts exists in the CASAF that explains the vision and mission with agile teams, scrum, and value streams. The researchers believe that the product area should now focus on empowering others to act on the vision,

which is one of the steps for engaging and enabling the organisation to succeed with the agile strategy.

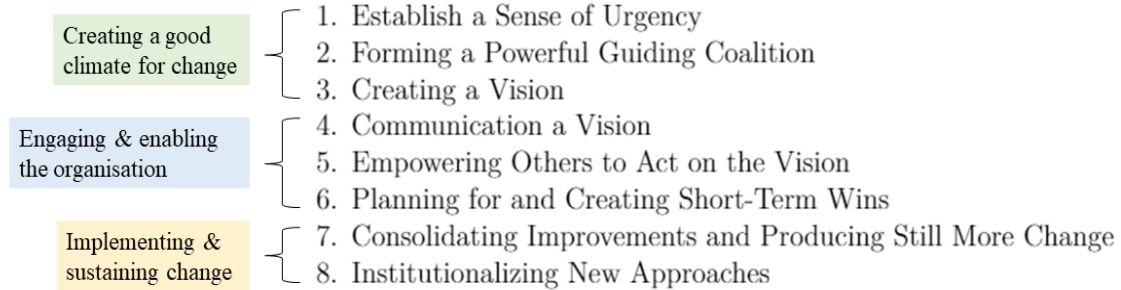


Figure 5.2: *An illustration of Kotter's 8 step model of change in three clusters of purposes for the steps.*

5.5.2 Leadership Styles

As discussed previously, the researchers believe that the empowerment of broad-based action needs servant leadership that supports the people and teams in the organization to identify and develop what they need to thrive at work and being empowered. Last year, all new agile leaders got an education about agility, their new role, and its fit and value creation in the new organisation. It is known that change is a process in itself. The new roles comes with new values and principles which demands people to change their intrinsic motivation, directly accept the meaning of the philosophy, and be an ambassador for this new kind of leadership style. The empirical findings indicated that leaders in the new organisation are stuck in an leadership style that was common before the agile transformation, which has been perceived as controlling and needing of being present at and in charge of decisions made. When the organisation transitioned into agile, some of the responsibilities that the traditional manager had were moved to the teams and the traditional hierarchy was removed. Traditionally, managements had to make smart decision and be in control of what people did by for example clear paths of accountability, standardisation, budgets, reports, and deadlines.

After going agile, clear paths of accountability, reports, and deadlines are usually removed and exchanged for providing of guidance, support, and trust for teams and individuals to take on bigger responsibility and succeed (SAFe, 2021). In the company context, there are still a lot of standardised processes and paths of accountability left, but when looking at the product area team level, the structure show that it is the team that should have the authority to make decisions about their task. The management above team level are not deciding and directing individuals to specific tasks, but should support teams, provide guidance, and trust them to prioritize in alignment with the vision. It is however identified that this structure is not always aligned with the team culture or individual preferences.

Trust & Interest in People

Historically, a traditional leader could have full responsibility for a product, but agile leaders need to delegate the authority. This requires trust in people as much as it requires an interest and engagement in people to discover what their strengths are and support them in leveraging those in their work. One may argue that it is not essential to have agile leaders that gets their joy from authority, control, and overseeing decision-making. It is essential that agile leaders love individuals in the sense of wanting to see them reach their full potential, support and enable feedback and guidance, resolve barriers, and help to establish healthy dialogues. Another example of how important trust is is presented in one of the agile principles that highlights results over time. The agile leader should have trust in that their team is prioritising and delivering without micromanaging and demands on very specific office hours.

Brian Rabon is a worldwide leader in agile transformations with the vision to revolutionise leadership, and he stated in a podcast that the biggest roadblock that he sees in new agile leaders that are converting from traditional organisations and leadership styles into adopting the agile concepts regards the struggle of fully trusting people and letting go of control and decision-making authority (The Center For Agile Leadership, 2019). These statements made by Brian Rabon are in line with those predicted by Barley (1996), discussing the importance of placing managers in a coordinating and facilitating position rather than having them as controllers and decision-makers. The history and implementation timeline shows that the company has a bunch of new agile leaders within the organisation that are currently converting their leadership style, which makes the parameter of leadership by trust and servant agile leaders important to bring as a parameter for the ideal future state. When you have changed the formal organisation implemented agile teams, you have adopted the practices of agile. However, related to the core of agility with the first known values and principles, it can be judged that to be a successful agile leader, being agile is more important than doing agile. The authors believe that an agile leader that has embraced this will enable trust for the team, which according to the analysis will enable authority and shared responsibilities needed to function as an efficient self-organising team.

Emotional Transparency

Related to the subject of an efficient agile leader is many many qualities, but trust is the most vital one. There are multiple actions that can be done to increase trust. Metrics and data helps business make smart business decisions based on facts. The authors believe that these metrics and business decisions also can increase trust, if they are clear and transparent for the team. That is a judgement based on the empirical findings of what factors individuals need to feel empowered and trusted by the management on a team level and above. Transparency in decision-making and business vision and mission is one of the agile principles that is identified relevant and promising to the majority, for the creation of business understanding and achieving a sense of contribution from the teams to the value creation for the final

product. Emotional transparency was not discussed in the interviews but scrutinised to be just as important in effecting trust.

The interviews implied that there are many 'traditional' leader styles in the organisation wherein the leader is naturally solid and stable. Therefore, it could be important for leaders to reflect upon their emotional transparency and what benefits in trust and building of relationships it enables to show their feelings in certain situations. When not being emotional transparent, false expectations and confusion can be created in a team which in turn effects the trust within the team. If a leader is very angry or upset about something in a conversation with the team without showing their feelings, the receiving part might misunderstand the seriousness with the conversation. If the situation leads to actions from the leader that will surprise the team because they have misread the emotions in the earlier conversation, the trust for the leader and their transparency can decrease. True agile leaders therefore need to understand that emotional transparency is not only as relevant as regular transparency in data and decision-making, it is the most vital part of connecting with the team and having authentic communication. The company have done organisational wide health measures that are indicating that the company are transparent about the current state of health in the organisation. Their open web page visibly state quite low numbers as a natural part of being in a transition of a large scale agile and digital change process. Since this is where the current state is, great agile leaders and emotional transparency will be included as important parameters in the next ideal future state.

5.6 Determination of Current State

The product area is at the forefront of organisational agility as one of the early adopters in the scaled agile transformation, which shows in the empirical findings. Most participants perceive their team as agile, empowered, and meeting its commitments. The empirical findings have also indicated that in the current state of the product area's agile transformation process, the focus has so far been on implementing tools and methods and less on underlying aspects such as the culture and structures for a learning organisation. Scrum was being used and incremental planning sessions for the team tasks with redundancy and shared leadership were present, but what was unknown was the underlying values of being agile over doing agile. Team members experience trust issues regarding authority and decision-making within teams and between team members and management above team level, which is a challenge when trying to achieve an efficient, agile team-based organisation. The researchers evaluate a misfit between the formal structures decided by a top-down implementation of the scaled agility and the informal organisation with individual mindsets that are not fully aligned with the agile mindset yet.

The company has adopted an organisation wide framework called CASAF, inspired by SAFe. These kinds of scaled agile frameworks have been identified to build on the assumption that agile teams in the organisation are efficient, empowered, and delivering solutions with effect. In most cases, the product area had team

members who experienced empowerment, efficiency, and team unity. A minority of individuals experienced teams that did not feel empowered nor efficient due to large team size and lack of collaboration, communication, learning, and authority in decision-making. The total number of different teams participating in the study from the product area was 5, which means that this determination of a current state is not motivated to represent the whole product area. Nevertheless, the data collected indicated a random spot-check on existing challenges regarding team performance in at least two different teams at the product area and two different brave agile teams outside of it. The researchers suggest that one or more of the challenges identified could be occurring in more teams in the product area and in all departments, which has been part of the agile transformation and implementation of scaled agility. Even if only a minority struggles with their team, the challenges are critical and should not be ignored. That is because, as stated before, the scaled agile framework is built on the assumption that agile and empowered teams already exist but need to organise on a large scale to manage dependencies required for the development of complex products. Without high-performing teams, there is an organisational chart in which success relies on the assumption that is not true. With the same logic, if one team is not empowered, it affects other teams' dependencies, necessary for a scaled agile organisation.

5.7 Determination of Ideal Future State

The ideal future state for high-performing teams determined for the product area teams' includes fulfilled dimensions of self-organisation, empowerment, and the SAFe success factors. These dimensions are recommended to be important for the business goals of having high-performing agile teams. To make the ideal future state successful, it is determined to be congruent between the elements of team task, individual, formal organisation, and informal organisation. Literature suggest that organisations only can be successful when these elements are in congruence (Nadler & Tushman, 1980), and that is why the researchers believe it is important to consider the harmony between them in the next ideal future state as well as in all future ideal states of iterative team improvements.

Aligned with the overall business goals and considering the challenges in the current state of team performance in the product area, the determination of vital parameters in an ideal future state is to be set on a team level and stakeholders in the organisation. These parameters are evaluated to have an impact on team efficiency. This state is created to be specific, measurable, and realistic for the product area, but later in the thesis' conclusion and recommendations determined in estimated time limits with a "Now-Next-Later Roadmap".

The ideal future state includes following targets:

1. Teams are empowered.
2. Teams shall be able to work with speed, good flow, and a strategic decided quality to inhibit responsiveness to changes in the market and the outside world.

3. Teams shall be trusted in from stakeholders and the team itself to be autonomous and to dare to make bold decisions.
4. Individuals within teams shall have fun in their work and with each other
5. Individuals in the teams as well as in the whole organisation should embrace the agile principles and values.
6. Teams shall evaluate if scrum is best for their strategy about how their team should work or actively work with figuring out which methodology to use that suits their tasks and deliveries.
7. Leaders within and above team level should be transparent in strategy, practical matters and emotions.
8. Teams should have, and continuously work with, an own vision about how the team should be. Goals should also be set in intervals relating to the team vision, including collaboration, communication, and what makes work fun.
9. The leading roles within the team should be aware of the levels of trust within their team and, if needed, talk about and plan for enabling it.
10. Teams should be aware of and understand their task's value for the organisation to get a sense of purpose in the workplace.
11. Self-development should be prioritised for every individual.
12. Sustain and develop great agile and servant leaders that are aligning the teams to long term strategies and the agile mindset.
13. There are no more than 8, preferably 5, people within one team to maximise team efficiency.
14. Stress levels are never continuously high.
15. Servant and coaching leadership is part of the formal organisation and leaders strives towards being less and less facilitating with the aim of team being fully self-organised
16. Leaders are transparent in strategy, decision-makings, and emotions.
17. When there are many dependencies between teams and the product owners do not have the time to coordinate between all of the other product owners related to the solution, there should be one chief product owner for coordinating the product owners.
18. Teams are aware of that it is more important for their success that they are being agile over doing agile.
19. Leaders are supporting and coaching individuals to feel empowered with shared responsibilities.
20. Leaders enjoy to work with people and see them develop, and individuals have time to work with their personal development.
21. Teams are empowered by trust, authority, and transparency from and towards all relevant stakeholders.
22. Trust is implemented as a form of core value in CASAF, resulting in an assurance that it permeates the entire organisation.
23. Individuals thrive in having shared responsibilities and transparency in progress.

5.8 The Gaps

Until now, the thesis report has aimed to create an understanding of the attributes of the current state and the ideal future state. Now, it is time to determine what gaps exist between them to have as a later foundation for building recommendations for what steps to take to close the gaps and reach the business goals.

Following gaps exist between the current and the ideal future state:

1. Relating to team empowerment, there are gaps in perceived autonomy, trust from all stakeholders, self-organising, being agile over doing agile, and having more authorities in decision making.
2. Present are formal structures that allow for speed, flow, and quality. Some gaps exist in structures and could be improved (like the large team size in some cases), but the most significant gap relates to the misfit between the formal organisation and the informal organisation and individuals, which affects the team ability to work in accordance with the structures to inhibit capabilities of speed, flow, and responsiveness.
3. There exists a gap in trust between management and team as well as within the team in some cases where the team size is large.
4. The study showed that the majority of individuals have fun in their work and with each other. The small gap that exists with people not enjoying their work concerns cases where there was a lack of team cohesion, communication and collaboration, and a change in co-location due to COVID-19.
5. As stated above, there is a gap in an existing lack of being agile. Both individuals within teams and management above team level have been experiencing agile structures without agile mindsets.
6. One gap is suspected to be a product area wide adoption of a best practice using scrum while not considering which methodology that best suits the team task and individual. A gap concerns the team awareness and understanding of how the team methodology supports the strategy and task.
7. A gap has been identified in team members not perceiving that the product strategy and decision makings are mediated with full transparency. At least, not all are aware of their value creation and its meaning for the end product.
8. There has been identified a gap between the ideal future state of continuously working with a team vision and a current state of team members not being sure about team goals relating to collaboration, communication, and what makes work fun. Yet, all teams are positively aware of what task the team is responsible for and could answer on how and where the whole team planned for each and sprint. Also, all teams were participating in program increment planning where the whole ART aligns in a shared vision and mission. The gap is therefore not relating to a team vision about goals relating to the task, but all dimensions relating to the team self-organising, personal differences in preferences, and ways of working together.
9. Another gap related to trust within the team. The current state showed that not all team members were feeling trust within the whole team. It is not known if the leading roles know and plan for enabling it, but it is definite in

the ideal future state.

10. According to the research results, there are no large gap to consider about teams' understanding of their value contribution for the organisation. Every individual felt a sense of purpose in the workplace relating to their task value.
11. A gap exists in time for self-development, which is not prioritised today but should be in the ideal future state.
12. There are great structures for agile and servant leaders, but there has been identified a gap in leadership styles relating to trust, distributing bigger authority to the teams, and transparency in decision-making, information-sharing, strategy, and the agile mindset.
13. According to data, a gap is identified in some teams regarding the total number of members that can be up to 17 people in one team, resulting in a lack of team cohesion and efficiency. In the ideal future state, team size is no larger than 8, preferably 5, people in one team. Hence, the gap is between 9-12 people.
14. The researchers determined a gap related to stress levels based on the results from this study. Respondents can feel very stressed when working with tight deadlines and dependencies on other teams and stakeholders. Stress levels are never continuously high in the future state, and this needs to be regulated within some teams to bridge the gap.
15. The gap in leadership is not identified to concern the formal structure but rather the values and principles present in the culture and individuals within leading positions. The experience of leader behaviors was that they were aware of their formal role but not as keen to change in leadership styles towards encouraging the team to become fully self-managing in their task.
16. Currently, some interviewees experience that some leaders make decisions and changes in, for instance, backlogs without sharing the information throughout the teams. The gap can be stated as levels of lack of transparency from leaders in some areas wherein there is room for improvement.
17. A gap that concerns the lack of meeting the demand for facilitation of facilitators, which can be meaningful when scaling agile. Currently, product owners experience that dependencies between teams can be challenging and time-consuming. Still, in the ideal future state, there are some kind of facilitation above team level to coordinate the product owners and dependencies to become more efficient.
18. The transition to becoming an agile-oriented company has brought a gap of people feeling forced to work in a certain way instead of adopting the methodology judged to have the best fit with the agile values and principles. The gap can be reduced by promoting agile as a mindset and culture and visualizing its value on a team and organisational level. One may argue that the large-scale agile transformation is ongoing; therefore, becoming agile takes time and creates these kinds of gaps.
19. A gap between leadership styles being controlling and in charge of decision-making instead of leaders being coaching and facilitating exist. Data indicated that some current leaders do not enjoy that former responsibilities of the leader now are distributed on a team level. Thus, change of mindsets among leaders is vital for coaching teams achieving shared responsibilities and in turn feel

more empowered in their work.

20. In the current state, employees barely have time to work with self-development since the main focus is on task efficiency. Thus, a gap in the lack of methods, tools, or time to focus on self-development is present. Current leaders seem to enjoy working with people, but can improve their strategies for encouraging team members to work on their self-development processes.
21. There is a lack of decentralised decision-making capabilities and transparency within some teams wherein high levels of formal authorities are present. The most significant gaps are between centralised and decentralised decision-makings where stakeholders are not transparent regarding certain decisions being made.
22. Trust is part of one core value in CASAF's description of "empowered teams" (judged by the reserachers to include system teams and UX-teams) but is not implemented as a core competency for the rest of the teams and individuals in the overall framework. This is resulting in a gap of trust as an organisational wide significant competency.
23. Lack of some dimensions crucial for self-managing and high-performance such as incorrect levels of autonomy and lack in shared leadership resulting in team members not feeling empowered.

5.9 Analysis of the gap with the Nadler & Tushman Congruence model

This analysis is a starting point for identifying how the root causes of performance issues described in earlier sections of this report can be mitigated. Comprised below is an analysis of how to bridge the the summary of gaps between the current state and the determined ideal future state regarding the dimensions enabling high performance for agile teams. The recommendations created are referred to all stakeholders with authority to affect the team task, culture, structure, and individual. The analysis constitutes an exploration of how the elements in the Nadler & Tushman Congruence Model can be harmonized towards the ideal future state. The principle of the model is that when there is a poor fit in organisations or teams between the work, the people who do it, the organisational structure, and the culture, problems will arise (Nadler & Tushman, 1980). That is why it is important that this analysis, which will be the basis for the recommendations, considers that these elements shall harmonize for this and all future iterative team developments. Another important consideration is that the bridge of actions are communicated clearly directed to the different stakeholders who have authority to manage the different elements in the organisation.

5.9.1 The fit between individual and formal organisation

Formal structures that allow for speed, flow, and high quality are present in the organisation. These structures are the basis to help and enable individuals to work together efficiently. Further, to allow and create a sense of purpose, goals, vision and mission among individuals. However, one may conclude that the formal structures

are clear in theory, but not for individuals in practice, creating a misfit between the formal organisation and individuals that are a part of it. The structures do not fully meet individual expectations and needs, and it can be argued that individuals' perceptions of the formal organisation is distorted and not completely clear. This misfit in turn affects the team ability to work according to the formal structures to inhibit capabilities of speed flow and responsiveness. Root causes associated to this misfit relates to existing gaps number 13 (team size), 10 (value contribution), number 5 (being agile over doing agile), number 17 (CASAF roles) as well as gap number 23 (lack of dimensions for self-managing). Below, each of these gaps will be analysed in order to determine how to decrease them and in turn reach the ideal future state.

Gap #5. Being Agile Over Doing Agile

One should make it straightforward for every team that the overall goal for the formal organisation is to BE agile and not to DO agile. For instance, the usage of scrum is not necessary for a team to become agile, but instead implementing the agile mindset among individuals and teams. The goal is to adopt the correct agile principles and apply those to accommodate changing situations and environments. A specific goal to bridge this gap is to set up iterative visionary meetings with the whole team, wherein agile principles, values, and practices are communicated and followed up. Executing and transforming strategies, principles, practices and values is a change in itself, and change takes time (Kotter, 1995). According to Kotter (1995), the first step in a change process refers to creating a sense of urgency. It is crucial for a change to happen that all parts of the organisation want it to happen. Developing a sense of urgency around the need for change is, therefore, a suggestion for the product area to inhibit the agile mindset over time. Starting the conversation is step 1.

Gap #10. Understanding of value Contribution

A majority of individuals participating in this research experience that they had an understanding of their value contribution for the organisation in a sense of purpose. Thus, there is no significant gap relating to a sense of value contribution. However, the value contribution and a sense of intent should be kept in mind as important for team empowerment. To maintain a sense of purpose and value in the workplace, teams need to maintain, or if not existing build, awareness regarding the business purpose. Based on internal documents, real-time data dashboards enable visualization and get all teams on board when deciding when and where decision-making needs to occur. Accordingly, value stream mappings and others relevant methods help teams identify barriers in a process flow and are identified to be occurring. It is the team that got the expertise in what support they need to execute their task but to make that decision aligned with what other teams need from them to be able to do their tasks; they need support from leaders to understand the bigger picture of organisational dependencies. This understanding can naturally be complex due to the complex nature of the organization's products but should be communicated continuously as an important enabler for empowerment.

Gap #13. Team Size

To lower the gap between the formal organisation and individual, team size needs to be examined and improved. Large sizes are currently negatively affecting the dimensions enabling high team-performance, which with a domino-effect also affect other teams that have dependencies with them. Decreasing team size is crucial to enhance team cohesion, efficiency, productivity, performance, and speed to quickly shift focus to meet the changing environment, as predicted by Wheelan (2009) and Berkowitz (1958). Even though some argue that team structures containing a larger number of people are vital to performing complex tasks, the formal organisation can encourage and facilitate team bonding in smaller teams to handle complex tasks. It can, for instance, be done by implementing formal strategies and structures that are specifically suitable for smaller teams, which can lead to higher performance within them. As previously stated, it may not be easy to please all individuals in a large-sized team. Thus, to create a fit between the individual and formal organisation and to meet individual needs of the formal structures, team sizes need to be reduced to a maximum of 8 people in one team.

Gap #17. Roles in CASAF

The formal organisation of the product area has fully transitioned into agile teams, agile methods, and clearly described agile leadership roles with their purpose and responsibilities in CASAF. There are already roles above team level implemented in CASAF concerning roles that facilitates teams and help coordinate dependencies between teams for an increased workflow and efficiency. However, the researchers have identified that a coordinating role for product owners that do not have time to coordinate with all teams they have dependencies with. On the opposite, one may argue that CASAF should be viewed as an inspiration rather than a control tool with already set roles. It should rely on the teams (perhaps especially the product owner) to understand the team needs and dependencies. Ryan & Deci (2020) discussed the three fundamental psychological needs to feel motivated in their work: relatedness, autonomy, and competence. By having a clear understanding within the existing team regarding conditions and dependencies, and CASAF as an inspiration, those three psychological needs can be fulfilled and individuals can feel more motivated. With a clear understanding of dependencies and need for coordination between teams, one can more easily determine if a "superior" product owner might be valuable for coordinating many dependencies above team level. Implementing new roles comes with new values and principles that demand people to be ambassadors for this new kind of duties and tasks, which may make people overwhelmed and demotivated. Thus, the gap relating to lack of roles in CASAF can be bridged by mainly considering the need for coordination of dependencies and thereafter add roles for this facilitating if needed. The framework can be kept as an inspiration to make teams understand their need coordination and motivate them, resulting in an increased level of relatedness, autonomy, and competency as predicted by Deci & Ryan (2020).

Gap #23. Lack of dimensions for self-managing

The gap relating to the lack of dimensions vital for high-performing and self-managing teams can be reduced by increasing shared responsibilities and a stabilised level of autonomy. This is stated to make team members feel more empowered in their formal structures and environment, which is why there is a misfit between these elements. However, autonomy and shared responsibilities can mean different things to different people. Therefore, it can be a good starting point to ask individuals how they feel about their current levels of autonomy. This will create an understanding of what level of autonomy is beneficial on an individual level. Further, the discussion about preferences is recommended to promote and cultivate autonomy. By continuously motivating teams to express what they consider exciting and enjoyable in their work, the team will be more aware about how their ways of working contribute to empowerment. Another way to bridge the gap and make individuals feel more autonomous can be by leaders frequently asking team members about their opinions regarding the formal structures and tasks. When having these opinions, it is important to give feedback about the change process they have led to. Because, it is identified to be a large individual demotivator in empowerment to not feel heard and that improvement suggestions are not being followed up. Autonomy is an essential dimension for attaining self-organising teams and making them feel empowered, which is why the structures for autonomy should be improved by leaders' communications and action on individuals' improvement suggestions.

5.9.2 The fit between individual and task

As outsiders working and investigating the content of the teams' tasks, it should be highlighted that the researchers of this thesis lacks understanding of the full complexity of the tasks, as well as their cause and effect on inter- and intra-dependencies. Nevertheless, with the perspective as outsiders investigating team members' experiences and feelings about the task, suggestions on improvements can be made regarding coordination and facilitating (Söderqvist, 2021). It is determined that participants of the research felt like they had the skills and abilities needed to meet the demands of their task. It was also determined that their individual expectations on what they did in the team was fulfilled. Because of the examples above, the researchers determined that there exists a good fit between the elements of individual and task. One example of how to ensure that individuals have abilities to meet task demands was shown by a continuous work by scrum masters that worked with implementing T-shaped competencies within the team, meaning that one individual have deep knowledge in one subject and at least common ground knowledge about the other competencies needed for the team task. The researchers emphasize that the product area can maintain the fit between individual and task by a couple of active actions. It is recommended to continue working with these T-shaped competencies, handling gap number 14 about stress levels below, and consider a minor gap relating to the fit between individuals in leading positions and the team task, gap number 9.

Gap #14. Stress levels

Gap number 14 determined that stress levels need to be regulated to bridge the gap. It is suggested that whether an individual's task is too easy or too hard, affect their job satisfaction (Alshemri et al., 2017). This means that a good level of challenge (not too high!) in the task have a motivational effect and contribute to job satisfaction. Related to the same source and the two-factor theory (Alshemri et al., 2017), constant pressure is highly affecting job dissatisfaction for individuals, which can be determined to have a negative effect on their ability to perform their task. Other theories of motivation also suggest that being under constant pressure due to workload is neglecting for the individual, such as "Maslow's motivational stairs" which describes it as the first step of three for motivation. The need to feel safe, in which stress do not relate, is primary for individuals to feel motivated. Since the company want the employees to feel empowered, with chance to fulfill secondary needs and even emotional needs, there should not be questioned that constant stress for individuals within team can not be acceptable. The researchers recommend the leading roles within team and above team level to directly start working with identifying the root causes for high stress levels within teams and for specific individuals and work actively towards minimising them. The researchers also want to take the opportunity while talking about stress levels to emphasise that this work can be used as an example to spread and communicate about at the product with the aim of creating an influence pattern that affect a non stressful culture among teams.

Gap #9. Planning of actions enabling Trust

The gap enumerated as 9 was not a clear gap but anyhow important to bring up as an action directed to leading roles within agile teams - to reflect about. The authors suggest that individuals within leading roles should have action plans for how to work with enabling trust within the team, or, action plan for keeping the trust in attendance within the team when elements that affect the team changes, such as the team size, new team members, or when new skills and learning are needed for new tasks.

5.9.3 The fit between individual and informal organisation

The relationship between the team individual and informal organisation can be described by the level of which the individual characteristics, expectations, needs, and background are aligned with the informal organisation consisting of leader behavior, intra-, and intergroup relations, communication styles, and influence patterns. The gaps related to this are number 1 relating to team empowerment, number 3 relating to trust within the team and from stakeholders, number 4 about fun at work and with each other, and number 16 about leader behavior of transparency and sharing of information to the whole team. The identified root causes of these gaps in performance will be discussed and analysed with the aim of determining how these can be bridged and aligned between the individual and informal organisation towards the ideal future state.

Gap #1. Team empowerment

To fix the misfit of team empowerment relating to the relationship between individuals and the informal organisation, the trust and change in mindsets are the major issue to focus on. The product area could make use of individuals who believe in the agile values and principles to engage others and enable the organisation to communicate about being agile and empower action. This is aligned with Kotter's middle steps of his model presenting what steps are part of a change process (Lynch, 2021), and a suitable action towards the ideal future state of all teams being empowered considering the current state in which a majority of the teams are already empowered. With that motivation, the product area could really make use of the individuals who are already being agile in their mindset to engage others. These kinds of subjects easily "fall between chair" due to that elements like individual and culture are less specific than elements like task and structure. That is why the researchers recommend to make some kind of process of it to make these discussions happen. Start a powerful coalition of change agents with time set aside to help others talk about this gap. The researchers want to highlight the importance of making sure that these communications will be on a good level. Not every individual needs to hear how their team is aligned to every part of CASAF, but every individual need to understand agile principles and have values that are aligned with agile values to enable high-performing agile teams and empowered teams. When the mindset is changed in the total culture including team member and management above team level, the researchers believe that the current gaps in autonomy and a good level of authorities within the team will be easier to collaboratively discuss and solve. A part of the journey towards the product area being agile over doing agile also relates to trust. Actions for bridging the gap of trust is further described in other parts of the congruence analysis.

Gap #3. Trust within team and from stakeholders

To fix the lack of trust within the team and from relevant stakeholders relating to the elements of individual and informal organisation, the researchers suggest that each team at the product area conduct an own gap analysis of their level of trust for each other and other parts of the organisation. This research has given insights about trust issues existing at the product area, but the real action for improvements need to happen within each team and each individual. The elements of individual and informal organisation are matters that are not practical but felt and experienced. It is elements that are not written down in processes or organisational charts, but characteristics of individual preferences, knowledge and skills relating to the individual, and behaviors, communications, and informal arrangements relating to the informal organisation (Nadler & Tushman, 1980). That is why each team need to work with these elements on their own to create a shared understanding that are important to align on for increased trust. Performing a gap analysis is one way to identify issues and set up an action plan for how to solve them. One team might struggle with communication issues which in turn affects the trust. Another team might struggle with team members not daring to speak up and share their great ideas if they contradict a more senior individual's. That is why the researchers suggests that

each team benefits from setting up a personalised improvement plan for their own struggles and needs, executed by making time for the team to talk about trust. This research is practiced by a gap analysis with a lot of dimensions investigated, but the content could also be specifically about trust to help the team stay focused on improving the dimension that is suggested to be the most important enabler for high team performance.

It has been proven that trust between individuals in a team improves their independence (Hasnain et al., 2013), which is an enabler for other important dimensions for a high-performing agile team. When each team at the product area have completed their analysis and reached their targets regarding trust, their collaboration between each other concerning dependencies might work more sufficient. Also, when having higher levels of trust within the team, it might be easier to start working actively with enabling trust for other stakeholders that affect the team elements. However, trust is about relations between individuals and relationships demand time and effort to work efficiently from all parts included in that relationship. Therefore, the team must not only talk about trust within the team but also with stakeholders. When the team trust the stakeholders and vice versa, the researchers believe that transparency and continuous communication will work better. Within the team, and towards stakeholders, communication and shared vision is key.

Gap #4. Fun at work and with each other

The gap of having fun at work is predicted to decrease naturally post COVID-19 and people getting back together in the offices with increased informal communication and relations. Reasons for the gap also related to lack of cohesion, communication and collaboration. The researchers believe that the gap analysis about trust will help the team to decrease this gap as a positive bi-effect. To further bridge this gap, the researchers suggest that each team should set up goals for what the individuals' preferences are about how their interrelationships should look like, and thereafter set up a team building plan to achieve better cohesion. Nadler & Tushman (1980) suggest that individuals being satisfied with the team culture will enable team success because it aligns the elements of individual and informal organisations. That is why setting up a team building plan with belonging long-term relationship goals is a good idea, according to the researchers.

Gap #16. Leader behavior and Transparency

The last gap to discuss in relation to the fit between the elements of individual and informal organisation are individuals within leading responsibilities in relation to cultural leader behavior and transparency. The researchers recommend leading individuals to align their personal values with agile values to make a better cultural influence. It is not only important to have knowledge about the specific task and the structural goals with the agile transformation, but to create a communication pattern of what should be highly valued at the product area. This fix is directed toward learning and development for agile leaders within the team and above team level. When leaders are being agile, they will later also effect the total informal agile

landscape by the nature of their roles including influencing other people's mindsets. The domino-effect of this would lead to a great fit between individual preferences and knowledge, and the informal organisation's leader behaviors, influence patterns, and inter,- and intra team-relationships.

5.9.4 The fit between informal and formal organisation

Some goals, rewards, processes and structures of the company in the formal organisation are present in the organisational culture. For instance, there is a perception of how leaders act in the company, how the formal organisation is being discussed in the teams and how team members are talking about the company. Thus, the informal and formal organisation complement one another in most cases. Nonetheless, the researchers identified nine gaps that are associated with a misfit between these two elements and will be analysed below with suggestions for improvements.

Gap #8 Formal Agility & Cultural Agility

Gap number 8 concerns a misfit between formal structures in how teams should collaborate and how they actually collaborate, which is affected by team culture (and organisational culture for sure). Formal structures of agility are present in CASAF where teams are described and suggest that teams have a shared vision and collaborates efficiently. This is not always the case as identified by the empirical findings, so the researchers want to suggest that each team should talk about these things at least twice a year. One good example on how motivation can be raised about talking about these softer kind of challenging that is not directly linked to the executing of the team task, is to share the model of Nadler & Tushman (1980) for the team and explain that these elements need to be congruent for the team to be successful and aligned with the overall company. Everybody knows that there are new formal ways of working to be faster and more responsive. Now, it is time to make everyone know that for the organisation to be successful, team collaboration and self-organising teams need to be successful. For them to be so, each team need to work with aligning leader behavior, relationships, and communication patterns, as well as individual preferences, knowledge, and skills, to match with the agile methodology in the formal organisation that is already implemented.

Gap #7. Low Levels of Transparency

This particular gap relates to team members not perceiving that product strategy and decision makings are mediated with full transparency to the whole team. In the ideal future state, leaders should be fully transparent in strategy, decision-makings and emotions that concerns the team. As stated earlier, transparency is one of the core values presented by SAFe (2021), to gain and share a common understanding among teams and stakeholders what is being done. Transparency is in this study concluded to be critical for team and organisational success. It is therefore crucial to implement improvements to reduce this gap and to simultaneously increase transparency between leaders and teams. For those teams who feel comfortable in working with high levels of autonomy, and still feel that they lack authority to

make certain decisions, improvements need to happen on an intermediate level. For instance, product owners should be transparent in how the team performs and communicate maturity levels in teams towards management above team level to discuss improvement areas for more autonomy.

As the researchers have concluded before, it is essential that leaders strives and challenges team to inhibit more and more autonomy. Based on the maturity levels of teams, teams should be challenged to take on more autonomy. The scrum masters are recommended to analyse the team maturity and challenge the team with the amount of autonomy suitable for their maturity level. When the team have good levels of maturity, the scrum master shall feel comfortable relying all of the decision-making on the team. The team should be trusted with having a good ability to make good decisions about their task independently, but might need support from a leader to thrive with it themselves. Conclusively, this maturity analysis and determination of how much autonomy is suitable for teams should be transparently communicated to management above team level which have the authority to affect the team structure. To achieve this, the product owners and the scrum masters should sit down together and plan for how to start communicating with the team members and the management above team level about maturity levels and how much autonomy is suitable for their teams.

Gap #12, #15 and #19 Servant and Coaching Leadership

Gap number 12 determined that there are still "traditional" leadership styles in the organisation, gap number 15 determined that some leaders thought it to be important the leading scrum master role should be facilitating the team task and be skilled in details and knowledge about the task, and gap number 19 determined that leaders did not always wanted to be facilitators at all but in lead of decision-makings. In the ideal future state, leadership is servant and facilitating but leaders strive towards being less and less facilitating since that will allow teams to get more and more self-organised. The researchers conclude that it is currently experienced that leaders have awareness of their formal roles but that they are not as keen to change in servant leadership styles and towards allowing the team to become fully self-managing. This creates a misfit between the formal and informal organisation, identified in the three gaps that introduced this section.

To bridge these gaps about formal agility and leading individuals and support an product area wide servant leadership, informal strategies could be implemented. This strategy does not need to be printed and saved as a formal documentation but part of the informal organisation that is being talked about in the hallways of the product area. One suggestion is to invite all leading team roles with facilitating responsibilities to share and discuss their experiences from their team of doing so. With the current team state identified in this thesis, the researchers would recommend to talk about following topics in such a meeting:

1. How to be a servant leader.
2. How leaders are leading by example and how to communicate to the team that their work is vital for the organisation.

3. How to encourage collaboration and employee engagement and help the team to grow and develop.
4. How to show emotional and practical transparency towards the team and the management above team level.

Emotional transparency was mentioned previously and is argued to be essential in servant leadership strategies for building strong relationships with the team and for being clearer in communication. Accordingly, the researchers recommend leaders to ask team members for feedback about the topics presented as important for facilitators to talk about above. Achieving such feedback directly from the team that is being facilitated is great for the individual to become more aware of possibilities for development, which could be discussed in the forum with other facilitators of teams. The above recommended actions may enable leaders to become more facilitating and coaching in their roles instead of controlling, as predicted by Barley (1996). One may argue that it is about changes and improvements of people's perspectives rather than a change of structures. One can still speak about formal leadership and authorities and keep its idea, but reconsider and re-coordinate the leadership roles without changing the formal structure. The prior thing is to redefine the language for communicating leadership, enabling teams to become more self-managing.

Gap #18. Promotion of the Agile Mindset

A gap concerning the implementation of agile as a mindset is present, resulting in a misfit between the formal and informal organisation. Further, it is perceived that people can feel forced to work in a certain way since agile is determined to not yet be completely implemented in the organisational culture. The gap can be minimized by promoting agile as a mindset and culture, by visualising its values on a team and organisational level. As predicted by Kotter (1995), significant transformations and changes are complex and take time. Thus, one should respect the change and let it take the time it needs. However, it is recommended by the researchers to promote the agile culture continuously in meetings and team improvement workshops to enhance the agile structures and the core of ways of working. It is unnecessary to present CASAF for teams to reinforce a particular culture, but rather to encourage leaders to communicate the culture to create an understanding among teams. A mindset can be equivalent to culture that one implements with the incentive to adopt the cultural norms. In turn, the culture can contribute to higher performance.

Gap #22. Trust as a Significant Parameter

Trust is proven to be a crucial parameter for achieving high-performing and self-managing teams. As discussed throughout the analysis, trust permeates as a significant factor in the ideal future state. It is suggested to be implemented as one of the core values in CASAF or other formal guidelines as an inspiration to enhance trust as part of the informal organisation and to help in decision-making processes. To implement a core value in the workplace, one should make values visual throughout the organisation and consistently communicate values. It can be beneficial having formal roles responsible for these kinds of implementations to assure that it will happen. Essentially, leaders should recognize and reward values as well as integrate

them in regular conversations with their teams. Trust is argued to be critical when creating high performance within an organisation. Thus, reducing the gap related to trust issues is one of the main actions that the researchers recommend the company to focus on.

5.9.5 The fit between informal organisation and task

As outsiders from the teams which work with complex tasks within software and installations, the team task element is the one that the researchers within the subject of quality and operations management feel that they had the hardest time with gaining in-depth knowledge about. Due to the outbreak of COVID-19, the researchers were unfortunately not either able to observe teams when working with their task in the company environment. Maybe that would have facilitated the understanding of the task element. The researchers did not find any gaps relating to the informal organisational hindering task performance and have therefore determined a congruence between the elements of task and informal organisation. One of the interviewees had stated that their scrum master's behavior in not giving feedback about improvement suggestions affected their ability to perform their task, which can be related to this fit. Leader behavior are though covered in other parts of the analysis. Accordingly, no recommended actions are suggested.

5.9.6 The fit between formal organisation and task

The researchers put confidence in that structures, processes, and methods in the formal organisation are adequate for the teams and their individuals to perform their tasks. Examples are shown in CASAF which shows processes for working with scrum, backlogs and storeys, program increments, and ceremonies as well as educational descriptions of the different team roles' purpose and tasks. Two gaps however, number 2 and 13, concerned organisational arrangements of team sizes that was not adequate for the team task.

Gap #2 & #13. Team size affecting the task

It was said to be necessary with large teams for achieving the competencies needed to complete the task, but the researchers recommend to decrease the sizes as soon as possible anyhow. The task complexity is not ignored, but some management above team level with authority to effect the team structure is recommended to investigate possible way to reorganise the team structure without necessarily risking the variation in individual skills needed for the total task. To give an example, one team of ten people that are needed for one task are recommended to divide into two teams of five people to enable higher performance. Their remaining dependency to each other might need a tighter collaboration between the two teams' product owners to optimize their shared delivery. However, the researchers recommend the product area to always try to minimize the total number of dependencies due to increased complexity in the operations. There are no universal solution to these kind of issues so someone need to make time and put effort into how to do it in each context, but the researchers recommend it to be done soon.

Gap #17. Roles in CASAF

The gap concerning lacking of roles which effects the task relates to the issue described above. The researchers have considered the input from empirical findings that showed different opinions in how large a team size need to be and what characteristics leaders and facilitators in the organisation should have to manage the task and the existing dependencies within and between teams. If necessary, a new kind of superior product owner could be added to the product area or to a certain amount of teams with dependencies to each other. This individual could coordinate the other product owners to facilitate the collaboration needed for the increased dependencies that might be the result of reduced team sizes.

Gap #20. Lack of Methods for Self-Development

The researchers identified a gap associated with the lack of time and tools for individual self-development. Leaders should put more emphasis on encouraging team members to spend time on individual development. One may argue that when people spend time and put effort into self-realisation in line with their personal values, needs, and strengths, they will most certainly gain better focus and performance in the team since. That is something that is done for the individual's personal sake, which creates intrinsic motivation and drives an individual to act with energy (Söderfjäll, 2012). Thus, getting to work with personal development contribute to overall team benefits.

It is necessary for leaders to interest in team members having a sense of direction in the workplace and not only to focus on task efficiency, since that loss of movement and self-development may essentially negatively affect the task. The researchers suggest that leaders should be the ones making sure that there are formal structures for working on self-development and encouraging it. Leaders can encourage self-development by providing personal development resources, such as tools or podcasts, databases for self-development, etc. The more resources the leaders provide for the team members, the more likely they will find something that resonates. Essentially, leaders should encourage personal goals alongside professional goals. In the current state, it was experienced that there is no fine line between personal and professional goals. When asked about personal goals, the majority of respondents talked about team goals related to the task. Therefore, the researchers believe that it is vital for leaders to emphasize starting to set personal goals to identify and offer individuals the support they need to reach them. Conclusively, team leaders or managers with responsibility for careers and development are recommended to build strategies with individuals and schedule time for team members to work on self-development.

6

Conclusion and Recommendations

The final chapter comprises two parts. The first part concludes the answers to the research questions of this study. The second part of the chapter aims to present a postcard describing a future scenario of how content and successful the teams at the product area are when having reached the determined ideal future state of empowered teams.

6.1 Conclusion of Research Questions

This subsection concludes the answers to the three research questions.

6.1.1 Research Question 1

"What is the current state for empowered teams at the product area?"

Empowered and efficient teams are the core of product creation at the company as they have customised SAFe into an own framework for scaled agility called CASAF. With basis of the analysis of the difference between CASAF and SAFe (including business goals and prerequisites of formal structures for the teams), the self-organising dimensions, empowerment, and team success factors, the current agile team state was decided. The agile teams are by assumption when using scaled agile frameworks already empowered and efficient. In contrast, the case study determined that there are teams that are yet not. This is due to different challenges within the three areas decided important for enabling high-performing agile teams, investigated within the thesis scope. The current state of the product area is in general determined to teams doing agile by having agile structures and tasks, but lacking in being agile. This finding means that individuals are not convinced about how the agile structure is beneficial for their task and purpose as a team, and was identified when investigating the team culture of relationships and communications, and individual preferences and expectations of current team performance. The findings of the current state of empowerment and what conditions were fulfilled for people to feel empowered showed that the conditions were aligned with agile team success factors including the SAFe success factors as well as the dimensions for self-managing.

The study must not represent the whole product area due to delimitation in scope, but can be seen as an indicator of existing gaps at least within some teams. The researchers believe that if it exists challenges in some places of the product area, it

can be elsewhere as well. One team which do not have good prerequisites for empowerment and performance can in turn affect other teams that they have dependencies to and collaborate with, which makes the challenges vital to act upon.

6.1.2 Research Question 2

- a) *"Relating to the current agile team state, internal goals, and academic theories, what is the product area's ideal future state for agile teams?"*

Following the determination of the current agile team state, an ideal future state was decided with help of internal business goals and academic theories of what characterises an high-performing team. It resulted in 23 bullet points of quite specific targets that are to be reaches in the ideal future state. To summarise the most vital points, the ideal future state include teams being empowered, self-organised, and having fulfilled team success factors. These were the areas which the researchers suggested as important for enabling high-performing agile teams, which in turn enables the new business strategy of scaled agility, speed, and responsiveness to be successful.

To give some more specific examples on content relating to the current agile team state at the product area, some of the most essential targets described in the bullet points for the ideal future state were set to be trust within the team and for all stakeholders, transparency and servant leadership, a healthy team environment, communications about team development, enablers for good collaborations, and improved team cohesion by changed team size or addition of facilitating roles for the product owners. Teams are also targeted to be aligned in the key elements of organisational success (Nadler & Tushman) and considered for future change initiatives to maintain that alignment for future iterations of team developments.

- b) *"How far has the product area come in their agile team transformation compared to the ideal future state?"*

The 23 bullet points of the ideal future state have 23 corresponding bullet points that presents the gaps between that and the current state. The list is long and specific due to that the researchers wanted to keep practical examples from the product area to analyse in the final analysis chapter where it is investigated how the gaps can be reduced. To conclusively answer this research question, the most essential content of these points and how far the product area have come in their agile team transformation compared to the determined ideal future state are shortly summarised hereafter. The product area was early adopting to the agile transformation and have many structures, methods, and processes in place as a good foundation for succeeding with scaled agility. What is left to implement in comparison to what is missing from the ideal future state, is agile mindsets of individuals. This mindset will affect the team individuals' preferences and expectations of their team and in turn the team culture including leader behaviors, communications, relationships, collaborations, and influence patterns.

6.1.3 Research Question 3

"What strategies, improvements, and/or actions are recommended to reach the ideal future state of empowered teams?"

General Recommendations

The research concludes that there are no agile 2.0 for all teams at the product area. Each team need to consider where they are today and work with iterative improvements. The researchers also conclude that it does not exist that much research about scaled agility because it is a quite new phenomena for enterprises to implement agile practices in scale. Therefore, there is a lack of research that could be used to make valid best practice recommendations for team improvements. That is also why it is important for each team to consider their own needs for improvements to make the scaled agile transition successful. As a suggestion, what should be considered by all teams are the three areas determined to be important for empowerment and high performance, including dimensions for self-organising, team success factors, and empowerment.

Roadmaps for Team, Team Leaders, and Management Above Team Level

After determining the gaps between the current and the ideal future agile teams state, these gaps were each analysed with a model for diagnosing organisational behaviours. The analysis identified solutions for how to reduce the gaps between the two states by fixing the identified performance challenges and make the teams' task, structure, culture, and individual congruent, which is important for organisational success (Nadler & Tushman, 1980). One example of a recommended action is that each team is recommended to perform an own gap analysis about trust. That is to identify goals for improvement and set up personalised plans that is different in content depending on team members' preferences and needs about how they want to collaborate, communicate, and build trust. Likewise this example, more recommended improvement actions are presented in Figure 6.1 (directed to management above team level), Figure 6.2 (directed to product owner and scrum master), and Figure 6.3 (directed to the teams) below. The figures illustrates roadmaps with actions that are possible to start with right away, actions that can be done next, and what could be done later for different stakeholders with authority to change the different elements that are recommended be aligned for the team to reach the ideal future state of empowered teams, as predicted by Maccoby et al. (1958).

The researchers hope that these roadmaps can inspire each team, team-leading couple, and manager above team level to understand what areas and dimensions are important to discuss, evaluate, and continuously improve for enabling agile team performance, and what structures affect their conditions to be fulfilled. The roadmaps are executive summaries of section 5.9 and can be found in their full format in Appendix 1.

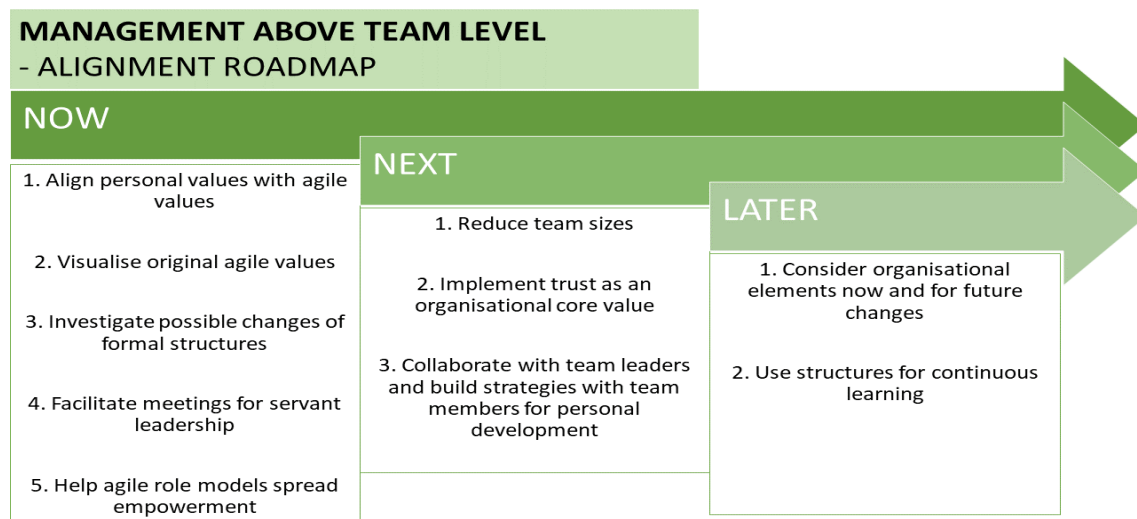


Figure 6.1: Illustration of roadmap in Appendix A.1 with time-prioritised measures recommended for the product area teams' management above team level to act on now, next, and later.

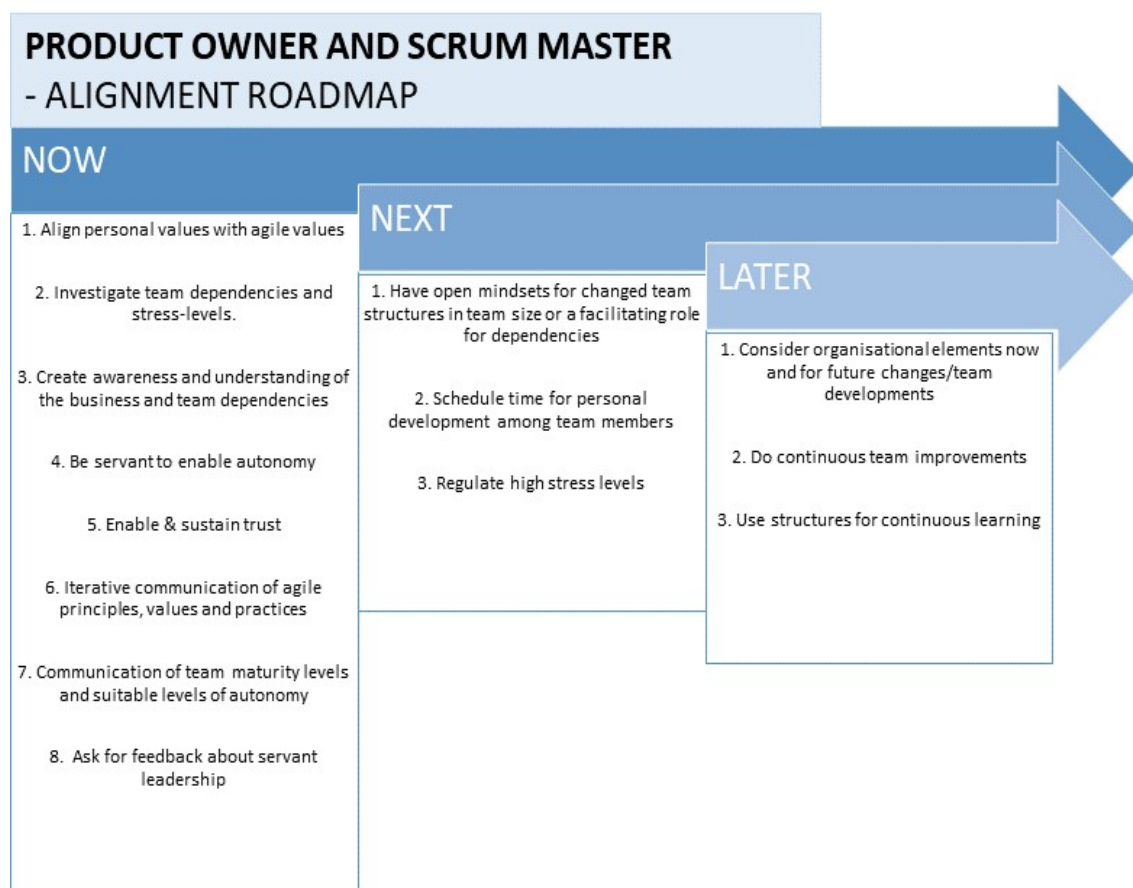


Figure 6.2: Illustration of the roadmap in Appendix A.2 with time-prioritised measures recommended for the product area teams' leaders (most often product owner and scrum master) to act on now, next, and later.

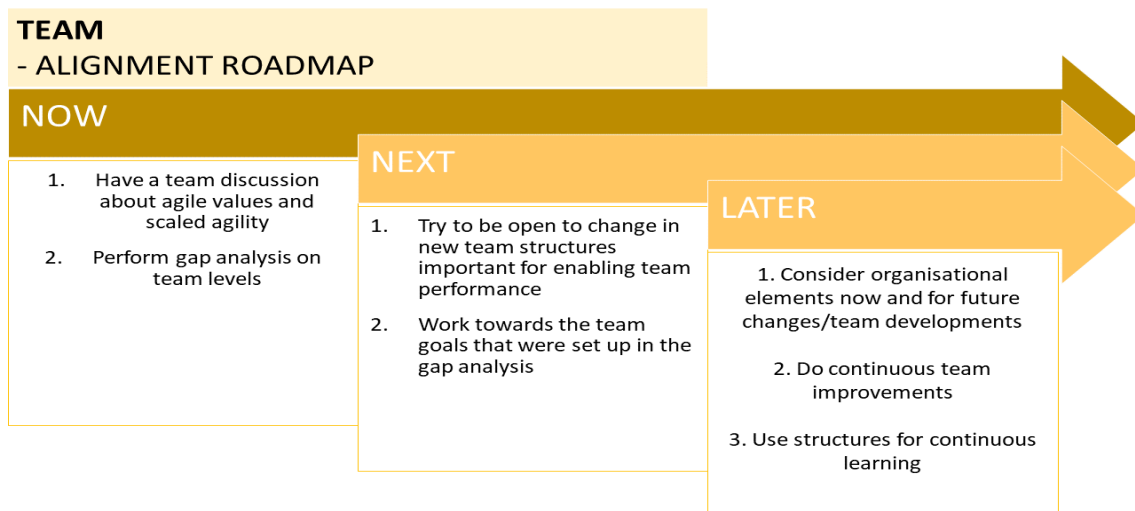


Figure 6.3: Illustration of roadmap in Appendix A.3 with time-prioritised measures recommended for the product area teams to act on now, next, and later.

6.2 Postcard From The Future

The company
The product area
Gothenburg, 2023

Hello teams within the product area!

We have been working with team alignment for over a year now and are finally in a position to say that we have great conditions for high performance, continuous learning, and self-organised teams. It was challenging and time-consuming to change our formal structures since we have so many dependencies between teams. This change demanded advanced collaboration with management above team level, but we are so glad today that we have made it happen. Can you believe that some teams were overloaded with work and continuously stressed out before? Now, as we have the right numbers of individuals within each team and new structures for facilitating team dependencies necessary for our product and value creation, the team cohesion, efficiency, and health have improved a lot! It is also great that we have tight collaborations between team management and management above team level since it has enabled individuals on all levels to have formal occasions and time set aside to work with self-development related to their personal career visions.

In the beginning, it was not obvious for us to directly change our personal values and preferences of how to work just because the company had decided to change direction in strategy and structure. These kinds of changes in mindsets and culture need to be given time to reflect upon. It has been important for each team to discuss its purpose and make time to consider their own gaps of performance enablers, so that each individual within the teams could intrinsically feel that our agile teams'

self-managing is beneficial for our value-creation. As every individual currently is aware that our goal is to "be agile" and not "do agile", our teams are more empowered than ever and our facilitators have flourished into true agile and servant leaders which support our needs to accomplish the team tasks.

The alignments achieved between the team task, individuals, formal organisation, and informal organisation has created trust that permeates (genomsyrar) the whole product area and its stakeholders. We have had some major struggles on the way, but once here, I think we can all agree that it was worth it. Marvellous!

Well done and keep up the good work with continuous improvements!

Yours sincerely,
A & J

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A

Appendix 1

A.1 ROADMAP FOR MANAGEMENT ABOVE TEAM LEVEL

Now

1. Leaders are encouraged to become agile by aligning their personal values and beliefs with the original agile values and the formal organisation constituting the strategy of scaled agility, speed, and responsiveness.
2. The management above team level can work on visualising the original agile values for the product area to promote an agile culture.
3. Collaborate with team leaders to understand where stress levels are continuously high, where more facilitation might be needed, and where team size is too large. Thereafter, start investigating how formal structures can be customised in size or facilitation towards more healthy agile teams.
4. Implement meetings for facilitating roles for them to share their experiences and discuss issues and challenges in the servant leadership styles. Accordingly, the facilitators should ask their team for feedback about how servant they are, which can also be discussed in this forum.
5. Identify individuals that are agile in their own personal values. To help the product area being agile over doing agile - use empowered individuals in the organisation to spread the agile culture throughout the product area.

Next

1. Change necessary formal structures. Reduce the number of members to a maximum of 8 people in one team to increase team cohesion, efficiency and productivity. If needed, add facilitating roles for product owners who are struggling with handling too many dependencies. When having many dependencies with other teams, it can be challenging for one product owner to have close collaborations with all. Therefore, a "superior" product owner can facilitate the dependencies and enable each product owner to just talk to them for coordination of these dependencies.
2. Talk about trust with teams and implement it as an organisational wide core value on the start page in CASAF.
3. The manager with responsibility for team members' wage setting and personal development should build strategies with the team members for their personal

vision and goals regarding their career. They should also collaborate with the team leaders (scrum master and product owner) to make sure that the individuals have time to work with personal development beyond the team task.

Later

1. The roadmaps present how to work towards a harmonized and congruent team regarding culture, individual, task, and formal structure. This and all future team developments should consider that all changes made need to harmonize these elements to enable great conditions for team empowerment and high performance.
2. (Only on a team level) After having set up goals about team culture including how they want to collaborate and communicate to become aligned with the current agile structure, formal organisation and strategy; make sure to be agile and do continuous team improvements
3. Structures for learning are being used by teams and individuals to support continuous team development and structure development that support the team task, culture, and individuals.

A.2 ROADMAP FOR PRODUCT OWNER & SCRUM MASTER

Now

1. Leaders are encouraged to become agile by aligning their personal values and beliefs with the original agile values and the formal organisation constituting the strategy of scaled agility, speed, and responsiveness.
2. Team leaders should investigate two things: 1) the need for coordination of dependencies between teams, and 2) stress levels within their team. Thereafter, collaborate with management above team level how to change formal structures to align better with the task and individuals, such as new facilitation of product owners and team size.
3. Visualisation of internal documents and real-time data dashboards to maintain a sense of purpose in the workplace and to build an awareness regarding the business that makes team members understand organisational dependencies.
4. Autonomy is an essential dimension for attaining self-organising teams and making them feel empowered, which is why the structures for autonomy should be improved by leaders' communications and action on individuals' improvement suggestions.
5. Individuals with leading roles (PO&SM collaboration) within teams shall work with enabling trust, or sustaining trust when change happens in structure or task.
6. Create a sense of urgency around the need for change (change: be agile over doing agile) among teams. Set up iterative visionary meetings with the whole

team where agile principles, values and practices are discussed, followed up, and customised to fit the task and team needs.

7. To achieve higher levels of transparency, the product owners and the scrum masters should sit down together and plan for how to start communicating with the team members and the management above team level about maturity levels and how much autonomy is suitable for their teams. (PO and SM)
8. The facilitators should ask their team for feedback about how servant they are. This feedback can be discussed and analysed on the exchange meetings about servant leadership and how to develop servant abilities and skills.

Next

1. Be open about reorganisation of team size and facilitating roles.
2. The team leaders should plan for and make sure that there is time for team members to work with personal development. Beyond the work with the team task, personal development for individuals are important for their empowerment. The team leaders can also, as a suggestion, collaborate with the team members' line manager (the manager with wage setting and employee development responsibilities) to include team tasks that are aligned with the team members' career goals.
3. Regulate high stress levels by considering capacity utilisation.

Later

1. The roadmaps present how to work towards a harmonized and congruent team regarding culture, individual, task, and formal structure. This and all future team developments should consider that all changes made need to harmonize these elements to enable great conditions for team empowerment and high performance.
2. (Only on a team level) After having set up goals about team culture including how they want to collaborate and communicate to become aligned with the current agile structure, formal organisation and strategy; make sure to be agile and do continuous team improvements
3. Structures for learning are being used by teams and individuals to support continuous team development and structure development that support the team task, culture, and individuals.

A.3 ROADMAP FOR TEAM

Now

1. Have a team chat about the traditional agile values and help each other understand their meaning for the company strategy of scaled agility providing speed and responsiveness. This will help build a foundation for the changes that are about to happen in team size, structure, and facilitation.

2. Each team is recommended to perform a gap analysis that includes trust, transparency, being agile, culture, collaboration, and communication. The first step in the roadmap is to identify the current levels of these dimensions and create goals together for where the team want to get next.

Next

1. Be open about new team structures, facilitators, and collaborations to handle dependencies and create good team health and conditions for team performance.
2. After having determined the current state of the team and customised targets for the future, start working towards it within the team and towards relevant stakeholders.

Later

1. The roadmaps present how to work towards a harmonized and congruent team regarding culture, individual, task, and formal structure. This and all future team developments should consider that all changes made need to harmonize these elements to enable great conditions for team empowerment and high performance.
2. (Only on a team level) After having set up goals about team culture including how they want to collaborate and communicate to become aligned with the current agile structure, formal organisation and strategy; make sure to be agile and do continuous team improvements
3. Structures for learning are being used by teams and individuals to support continuous team development and structure development that support the team task, culture, and individuals.

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