



DEPARTMENT OF INFORMATICS

TECHNISCHE UNIVERSITÄT MÜNCHEN

Bachelor's Thesis in Information Systems

**Evaluation of a Taxonomy for Communities of
Practice in Large-Scaled Agile Software
Development by Practitioners**

Lilian Irvin





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**Evaluierung einer Taxonomie für Communities
of Practice in der groß angelegten agilen
Softwareentwicklung durch Praktiker*innen**

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Introduction

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Munich, 14.04.2025

Lilian Irvin

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Abstract

Agile Methods such as the SCRUM or the Scaled Agile Framework (SAFe) are becoming more popular due to their ability to quickly adapt to new or changing requirements and environments. Transitioning from a traditional approach of software development to agile methods, such as SAFe, presents many challenges. Especially larger organizations face many challenges with incorporating agile methods into their organization's structures and handling the resulting organizational changes. To support the transition in larger organizations, Communities of Practice (CoP) are recommended.

As CoPs are complex constructs, a structured analysis and classification of CoPs with their characteristics and dimensions provides structure and organization and combines research results in one place. A taxonomy gives researchers a clearer understanding of CoPs and their relationships and provides practitioners with a clear overview of CoPs. Tobisch et al. [1] has created such a taxonomy about CoPs in the context of large-scaled agile software development (LSAD). Their goal was to offer a comprehensive and practical framework that captures the key factors relevant to the establishment and cultivation of CoPs in complex agile environments. Even though the taxonomy is based on insights from literature and expert interview, a thorough evaluation of the final taxonomy hasn't been done yet. The aim of this thesis is to evaluate how well the taxonomy captures the essential dimensions and characteristics of CoPs in LSAD, and how effectively it supports practitioners in applying it within real organizational contexts. To achieve this, we conducted a combination of expert interviews and a survey with practitioners. This mixed-method approach allows us to gather in-depth feedback despite time and resource constraints. Within the interviews and survey, we collected feedback on the completeness and conciseness of the dimensions and characteristics as well as insights regarding the taxonomy's understandability, applicability, extensibility, and usefulness.

The outcomes of the expert interviews and surveys provided insight into the strengths and weaknesses, and identify areas for improvement of the taxonomy. Overall the taxonomy was found useful by the practitioners. Also the taxonomy was perceived as easily applicable, extensible, and overall understandable. Though for the understandability there were diverse answers. The overall completeness and conciseness was perceived positively as well, though leaving some room for improvements, for example within the dimensions *Purpose*, *Size*, and *Location*.

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1. Introduction

1.1. Problem Statement and Motivation

Today's software development environment is very competitive and dynamic [2]. In order to remain viable in this environment, it is crucial to be able to quickly create and deliver software, as well as to quickly adapt to changing customer demands [3]. Agile frameworks help software development teams to better and faster address changing customer needs and ensure faster time to bring the solution to the market [3]. The use of agile methods, such as SCRUM or Extreme Programming (XP), have become very popular in software development [4].

Agile methods were built for smaller co-located teams, as they heavily rely on direct collaboration [5]. Scaling these methods within larger organizations introduces challenges. There are not only the challenges of scaling the frameworks itself, but also the challenge of incorporating it into the organizations structure and processes [3]. In larger organizations, software development solutions are not isolated within one team, but several teams across the organization are involved in some way. This creates a much more difficult communication environment within these agile settings [6]. Furthermore, these teams are often geographically separated, making this communication barrier even larger [6]. Especially within agile settings, face-to-face communication is seen as important [7], although within (geographically) dispersed teams, this is often not possible. This communication barrier must be addressed [6].

One advised solution to help address these challenges are Communities of Practice (CoPs) [8]. CoPs are a group of people with a shared topic of interest who exchange knowledge on that topic on an ongoing basis [9]. This construct has been widely used in the context of LSAD and in other contexts [8]. CoPs can support organizations with the mentioned communication barriers, as they support communication across teams and even with geographically dispersed teams and individuals [8]. CoPs also provide support for sharing best practices, helping with challenges, and knowledge sharing [8].

While there is already research on CoPs in LSAD, more research is required in this area [8][10]. Also the research entails a lot of individual studies, such as the Ericson case [11], which studied the introduction of CoPs for the organizations transition to agile methods, or a study regarding knowledge sharing and the functioning of CoPs across international boundaries [12]. However, an overview of the insights is required [1]. Therefore, Tobisch et al. [1] created a structured overview, a taxonomy of CoPs in LSAD. This taxonomy gives a structured

overview of the dimensions and characteristics of CoPs in the context of LSAD and aims to support practitioners in establishing and cultivating CoPs. Tobisch et al. [1] created the taxonomy with three iterations, including expert interviews and a review of the literature. The resulting and final taxonomy has nine dimensions: *Purpose*, *Organizational Context*, *Formation*, *Lifespan*, *Scope*, *Participation*, *Steering*, *Decision-making Power*, and *Maturity* [1]. Even though the objective and subjective quality criteria stated in the taxonomy development guide by Nickerson et al. [13], are stated to be fulfilled, there has not been done a post-evaluation for the final taxonomy [1]. Therefore, the goal of this thesis is to evaluate how well the taxonomy captures the essential dimensions and characteristics of CoPs in LSAD, and how effectively it supports practitioners in applying it within real organizational contexts.

1.2. Research Questions and Approach

The overall objective of this research is to conduct a comprehensive evaluation of the taxonomy proposed by Tobisch et al. [1] with insights from practitioners that have knowledge and experience in CoPs and LSAD.

To achieve this objective, this thesis addresses three key research questions (RQ1 - RQ3). These questions help structure the evaluation process by identifying a suitable evaluation concept, gathering practitioners' insights, and analyzing how well the taxonomy performs in practice.

RQ1: How can the taxonomy of CoPs in LSAD be evaluated in practice?

The first research question aims to develop an evaluation concept for the taxonomy. The evaluation concept that we used was developed through a structured literature review. We searched for relevant literature in the areas of CoPs and information systems, or software engineering, and identified papers that contained taxonomy evaluation methods or quality criteria for the evaluation. Building on the information gathered with the structured literature review, we developed an evaluation concept that included the evaluation method, as well as six quality criteria. The evaluation was conducted starting with expert interviews, which included the practical application of the taxonomy to real-life objects, and was followed by a survey. These evaluation rounds were conducted with practitioners who have experience with CoPs and LSAD.

RQ 2: How well does the existing taxonomy fulfill the quality criteria?

After the development of the evaluation concept (RQ 1), we focused on the practical execution of the evaluation concept. With this process, we identified the strengths and weaknesses of the taxonomy in practice. The expert interviews, the practical application of the taxonomy on real-life CoPs in LSAD, and the survey gave us many insights on how well the taxonomy can be used by practitioners.

RQ 3: How can the existing taxonomy of CoPs in LSAD be improved?

Finally, the last research question focuses on the improvement of the taxonomy. With the insights gathered through the execution of the evaluation concept, we were able to provide recommendations on how to adjust the taxonomy to better support practitioners and to better represent CoPs in LSAD in practice.

1.3. Thesis Structure

This thesis is structured into seven chapters. After we have introduced this thesis topic and our research motivation and approach in this first chapter, we will continue with the background in the next chapter. Chapter 2 explains important background knowledge and fundamental concepts: LSAD, CoPs, and Taxonomies. Following the research background, important related work is provided in Chapter 3. Our research methodology is explained in detail in Chapter 4. This chapter is split into the structured literature research we conducted to develop the evaluation concept, the expert interview approach including the interview coding, and the survey that was conducted and analyzed. The results we gathered in the expert interviews, the practical application of the taxonomy in real-life CoPs in LSAD, and the survey are provided in Chapter 5. Finally, we discuss and conclude the research results in Chapters 6 and 7. The research discussion includes key findings and a proposal for improvements as well as research limitations. The last chapter, the conclusion, gives a summary of the research and its findings and gives an outlook for future work.

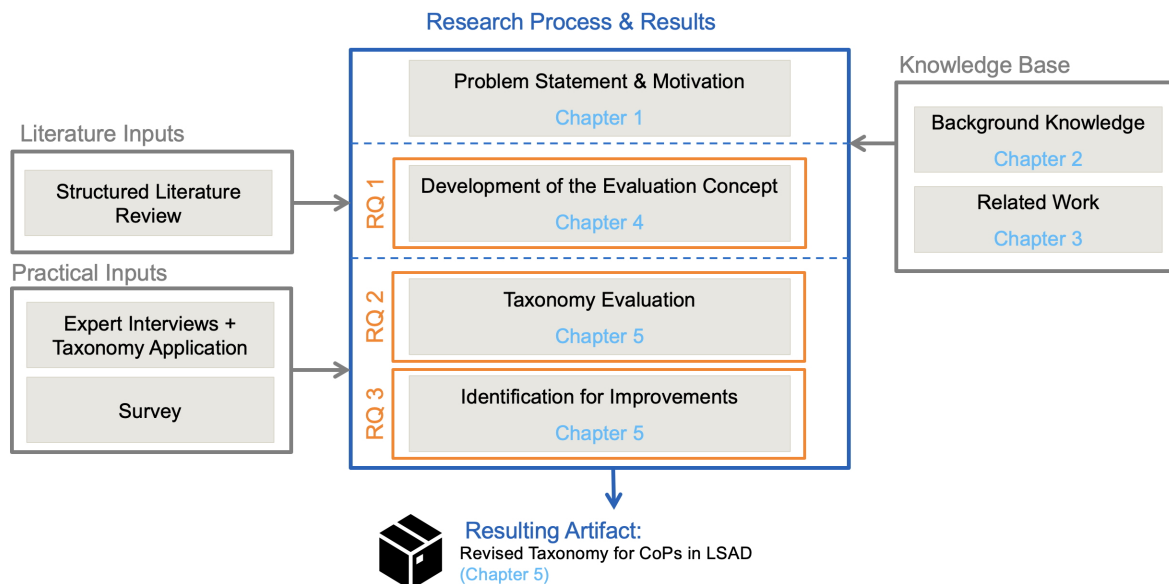


Figure 1.1.: Chapter and Thesis Research Overview

2. Background

This chapter provides an overview of the fundamental concepts necessary to understand this thesis' research. It introduces agile software development, discusses the challenges of scaling agile in large organizations, and explains the role of CoPs in LSAD. It also gives a definition and short overview of taxonomies in information systems.

2.1. Large Scaled Agile Software Development (LSAD)

2.1.1. Agile Software Development

Software development methodologies are divided into heavy- and light- weight approaches. Heavy weight refers to more traditional approaches, such as the waterfall method [14]. The software development methods that belong to this category focus on a clear understanding of requirements, inclusive planning, and detailed documentation [15]. Instead of detailed documentations and comprehensive plans, light-weight methods prioritize face-to-face communication and use their time to create working software [14]. The goal of light-weight software development methods is to provide software more quickly and with better response to changing customer needs [14]. Agile methods, as a subset of light-weight approaches, build on these principles and focus on iterative development and collaboration [14].

The foundation and principals for these agile methods were laid in the Agile Manifesto which was signed by 17 well-known individuals [7], for example the creators of the SCRUM method Ken Schwaber and Jeff Sutherland [15]. Within the Manifesto, it is recognized that documentation, customer contracts, plans, processes, and tools are important, though all 17 signers agree that working software through iterative development cycles, customer collaboration through regular feedback rounds, openness for customer changes, and a focus on individuals and interactions is more important. The work highlights that the best way to share information is through face-to-face communication. Regular self-reflection on the teams' work efficiency and areas for improvement are mentioned as important activities as well [7]. The most well-known agile methods are Scrum and Extreme Programming (XP) [16] [5] [15].

Scrum is a framework that builds on iterative cycles with a strict duration, called sprints. The Scrum life-cycle begins with a list of requirements, in which, for each iteration, specific requirements are picked from and planned for the upcoming sprint. There are daily meetings during each sprint to ensure team alignment. After each iteration, there is a retrospective sprint meeting [17] [15].

XP also creates software codes in iterative cycles by letting the customer select the most

valuable features and having each developer responsible for a task. During each iteration, programmers use opportunities to improve the code. Another practice of XP is pair programming, in which two developers work together on the same code, at the same time, and on a shared device [18].

2.1.2. Scaling Agile

SCRUM, XP and other agile methods were built for small and co-located teams to ensure effective team communication [5]. However, larger organizations, which have several teams working on a shared project at the same time, also use agile approaches, as it reduces risks and fosters innovation [19]. Larger organizations are facing an increased complexity in their coordination due to their larger team structures and inter-team dependencies [19]. Communication barriers, hierarchical decision-making and standardized processes are some challenges that larger organizations are usually facing [19]. These agile frameworks are not built for these larger and more complex organizations. Therefore, these larger organizations need to adjust the agile methods to better fit their organization [20] [5] [21]. This is called large-scale agile software development. There are different frameworks, such as Scaled Agile Framework (SAFe), Large-Scale Scrum (LeSS), Disciplined Agile Delivery (DAD), and Spotify that scale agile methods [19].

In the SAFe framework, several teams that are working on a shared object are grouped into one Agile Release Train (ART), which is also called a *team of teams*. There are three different levels: portfolio, program and team. The team level works with traditional agile methods and additional structures, such as *release planning* meeting, which occurs every fifth iteration and helps in inter-team alignment [22]. A program consist of five to twelve teams and ensures alignment between trains. At the portfolio level, the alignment of the portfolio against strategic goals and funding is managed [23].

DAD is another large scale agile framework. It combines the SCRUM method with other agile practices, such as Kanban, Lean, XP, and Agile Modeling. In DAD there are three main phases: inception, construction, and transition phase. Within the inception phase, the main goal is to create a scope and vision for the first product release. During the construction phase, the teams are working on the solution using SCRUM and other agile methods, as mentioned above. Finally the transition phase is for testing, data migration and for submitting the product to the client [23].

2.1.3. Challenges of LSAD

Introducing agile methods into larger organizations creates challenges - the larger the organization, the more challenging it is [21]. As mentioned earlier, agile methods were created for small teams. Therefore, the increased number of involved people from various teams are a challenge. Ensuring the alignment and coordination between teams and individuals is much more difficult. Efficient decision making as well as alignment with the customer and all other stakeholders is much more challenging in large organizations as well [19]. Challenges

include, misunderstanding of agile concepts, difficulties adjusting the incremental delivery pace or product launch activities or difficulties integrating non-development functions [21]. The Agile Manifesto [7] also highlight the importance of face-to-face communication over documentation, and reacting to changes instead of following a strict project plan as foundational values. Though, larger organizations with inter-team coordination and management, will not always be able to follow these principles. As larger organizations usually operate on strict processes and rely on a long-term planning, it is much more difficult to implement iterative and short-planning software development cycles [21].

Although there are many challenges when scaling agile methods, it is still a widely adapted concept [19]. One proposed solution to overcoming these challenges are CoPs [24] [12].

2.2. Communities of Practice (CoPs)

A CoP is a group of individuals who share a common interest, concern, or challenge in a specific area and improve their knowledge and skills through regular interaction and collaboration [25]. This social structure is not a modern invention but has been part of the civilization of centuries, e.g. when hunters gathered to share expertise and strategies or Roman or Chinese tradesmen or craftsmen exchanged knowledge to protect and advance their special skills [25][26].

Lave and Wenger [27] laid the foundation for the concept of CoPs in their work on legitimate peripheral participation (LPP). Their work highlights the importance of learning in a social setting by engaging in the community's practice [27].

Based on this foundational work, Wenger [28] defined three characteristics of CoPs: mutual engagement, joint enterprise, and shared repertoire.

Building on that, Wenger et al. [25] identified domain, community, and practice as three shared core characteristics of all CoPs. The domain defines the topic of interest that is shared among the CoP's participants. This allows members of the CoP to decide how to contribute and what information and knowledge to share. The collaborative learning experience through interactions, relationships, and a sense of belonging is described as community. The practice represents the collective knowledge and shared resources, such as tools, processes, frameworks, and best practices, that evolved over time through interactions and collaboration of the CoP's members [25].

CoPs do not follow a single, uniform structure. Instead, many forms of CoPs exist [25]. They differ not only in terms of size or lifespan, but also across numerous other dimensions such as geographic dispersion of members, degree of homogeneity or spontaneity, organizational scope (from single teams to cross-organizational), and the level of recognition they receive within their organization [25]. Tobisch et al. [1] identified even more differences of CoPs, such as the initiation (top-down vs bottom-up), target group, theme, openness, organizational acceptance, decision-making power, organizational support, steering, and participation.

2.3. Reasons for Introducing CoPs

Due to their social learning structure, CoPs are recognized as valuable in various contexts, e.g. organizational knowledge management [12].

Knowledge management is essential for companies to remain competitive in today's fast-paced and globalized world. It plays a crucial role in driving innovation and creativity, especially as organizations face challenges such as globalization, employee turnover, and decentralization of the workforce, increasing the risk of losing valuable knowledge [29]. Hildreth et al. [12] differentiate between hard knowledge, which is easily documented and shared, and soft knowledge, which includes experience, implicit understandings, and embedded habits. Although soft knowledge is much more difficult to communicate and share, it is equally important for organizational success [12]. According to Hildreth et al. [12], CoPs provide an effective solution to share soft knowledge by fostering collaboration, mutual engagement, and the gradual integration of newcomers. Cristal and Reis [24] also recommend the use of CoPs, emphasizing their role in sharing lessons learned and encouraging collaboration on questions and challenges. According to them, CoPs not only improve teamwork and communication within individual teams, but also strengthen collaboration between geographically distributed teams. By creating an open environment for knowledge sharing, CoPs bridge physical and organizational gaps, allowing teams to work more effectively in local and global contexts [24]. In addition to their theoretical advantages, CoPs demonstrate benefits in real-world applications too, e.g. in fostering academic-practice partnerships. Padilla and Kreider [30] illustrate this through the use of a CoP framework to establish a collaborative connection between a nursing school and a community health clinic. This initiative improved coordination among faculty, preceptors, and students, closing organizational divides, and significantly improving clinical education [30]. Their example underscores the ability of CoPs to promote participation, facilitate knowledge sharing, and effectively address complex challenges.

2.4. Reasons for Introducing CoPs in Large Scaled Agile Software Development

As agile practices are becoming more widely used and challenges arise especially for scaling these methods in large organizations, the use of CoPs are recommended to help overcome these hurdles [8].

Due to the CoP's ability to foster knowledge sharing and collaboration even across geographically dislocated teams, they are seen as valuable tools in fostering communication between teams. E.g. Scrum Masters of several Scrum teams support and learn from each other [8]. Large-scale agile frameworks such as LeSS, Spotify model, or DAD foster the use of CoPs [19]. Paasivaara et al. [11] conducted an experimental study at the software development organization Ericsson, where they introduced large-scale agile methods. To support work across teams, CoPs were introduced. During the transition, Ericsson encountered several challenges, e.g. having no common agile framework across the organization. To mitigate this issue, a coaching CoP was established [11]. In another 3-year interview study of a large

global telecommunication company, CoPs were found to be the most important tool for inter-team coordination, knowledge sharing, and learning, and were therefore viewed as a very valuable instrument in the organizations large-scale agile implementation [8]. On top of these practical examples, Tobisch et al. [10] identified 13 reasons for introducing CoPs in large scale agile context based on an interview study. The reasons stated by the interviewees for using CoPs included information distribution, fostering alignment across the organization, fostering networking, empowerment, people development, and supporting agile transformation. The most common reason, that all organizations mentioned, was sharing knowledge and experiences with each other [10].

2.5. Taxonomies

A taxonomy is a type of classification or grouping of an object of interest into dimensions and characteristics [13]. It is a well-known concept in information systems and is valuable for understanding and analyzing complex objects, and for understanding object relations [13]. Taxonomies are important for evolving and structuring knowledge in several fields, such as software engineering research or artificial intelligence [31]. Researchers and practitioners use taxonomies for various reasons, such as solving software engineering problems, classifying diseases, and solving other real-life problems [31].

The classification of certain objects supports researchers and practitioners in understanding and analyzing complex domains [13]. This structured information helps researchers identify and hypothesize relationships between concepts. Organizing knowledge into a taxonomy also helps identify differences in previous research [13].

3. Related Work

This chapter outlines some of the existing literature that are related to this thesis and their contributions to the different aspects of the topic.

Dikert et al. [21]

Dikert et al. [21] published a paper discussing different challenges in the large-scale agile transformation. From 52 primary studies within 42 different software companies, a total 35 challenges were identified and clustered into nine challenges. The most reported challenge, with 48% was general difficulty to introduce agile, as for example the literature reported misunderstandings of the agile concepts or not enough guidance through literature. With 43% the integration of non-development functions was listed. Barriers with adjusting the incremental delivery pace or product launch activities were only two of the identified challenges in this area [18]. The other challenge categories identified include the general resistance to change (38%), requirements engineering challenges (38%), hierarchical management and organizational boundaries (33%), coordination challenges in multi-team environment (31%), a lack of investment (31%), different approaches emerge in a multi-team environment (21%), and the quality assurance challenges (14%). Dikert et al. [21] also identified 29 success factors for the large-scale agile transition, that were clustered into 11 categories. The most identified success factor is the selection and customization of the agile approach (48%). The social factor, the people's mindset and alignment to be concise has been identified as a large success factor as well (40%). The next success factor categories are the management support (38%) as well as the individuals training and coaching (36%). The other success factor categories include piloting (33%), team autonomy (24%), requirements management (24%), communication and transparency (17%), commitment to change (17%), leadership (17%), and engaging people (12%). While this study provides a comprehensive overview of common challenges and success factors in LSAD, it does not provide concrete structures or measures to address them. CoPs are a potential mechanism that are further explored through the evaluation of a taxonomy of CoPs in LSAD in this thesis.

Wenger et al. [25]

Wenger et al. [25] studied CoPs, including their value to organizations, structural elements, as well as different stages of CoPs (e.g. establishment and growth). the authors describe that CoPs are important for knowledge sharing within organizations, especially if the organizations are restructuring. Benefits of CoPs for organizations and employees are structured into short-term and long-term. Short-term values for the organization entails coordination, standardization,

and synergies across units, environment for problem solving, and quick answers to questions, and more. The short-term values for employees include the help with challenges, access to expertise, a sense of belonging, easier contribution to team, confidence in problem approach, meaningful participation, and fun with being with colleagues. Part of the long-term values for either the organization or employees include the forum for improving skills and expertise, ability to execute strategic plans, and several other values. Wenger et al. [25] also describes different characteristics of CoPs. CoPs differ in size, while some CoPs have only few members, others have thousand members. Also the lifespan of CoPs are different. While some CoPs are rather short-lived, others are long-lived and in some cases even exist over several centuries. The CoP members can be all in one location and meet regularly face to face, or especially in CoPs with a larger size, members are often geographically divided and therefore might only meet online. Also the CoP might only be within a business unit, or several units, but it could also be spanning across organizations. The members background can differ between being homogeneous or heterogeneous. The start of a CoP can be bottom-up, e.g. through employees, or top-down by a assignment through management. As a last characteristics, CoPs might be more or less recognized within a organization, ranging from unrecognized to institutionalized.

Tobisch et al. [10] - Interview Study

Tobisch et al. [10] conducted an interview study for exploring reasons for introducing CoPs in LSAD as well as for identifying how CoPs look in LSAD. The following reasons were identified for using CoPs in LSAD: promoting knowledge sharing and collaboration, fostering people development, networking, and empowerment, improving efficiency, alignment across the organization, distributing information, supporting agile transformation, and more. Within the study, several characteristics of CoPs in LSAD were identified as well. The CoPs initiation, either top-down or bottom-up was one of the characteristics. The target group, themes, openness, organizational acceptance, decision-making power, organizational support, steering, participation, scope, and size were other identified characteristics.

Paasivaara & Lassenius [8]

Paasivaara & Lassenius [8] conducted a case study at Ericsson, exploring how CoPs can be used within a large and distributed agile software development environment for their the organizations transition towards lean and agile methods. Over a period of two years the transformation of over 20 sites were observed and 52 interviews of two sites were conducted. The CoPs used meet regularly or on demand and had different purposes, such as knowledge sharing, learning, coordination, etc. In this study, CoPs were a key success factor behind the success of the large-scale agile transformation. In the study, CoPs helped overcome several problems of the agile transformation. Also CoP success factors were identified, such as passionate leaders, or proper agendas. However the authors describe a lack of guidance and more in-depth research regarding how to use CoPs in practice.

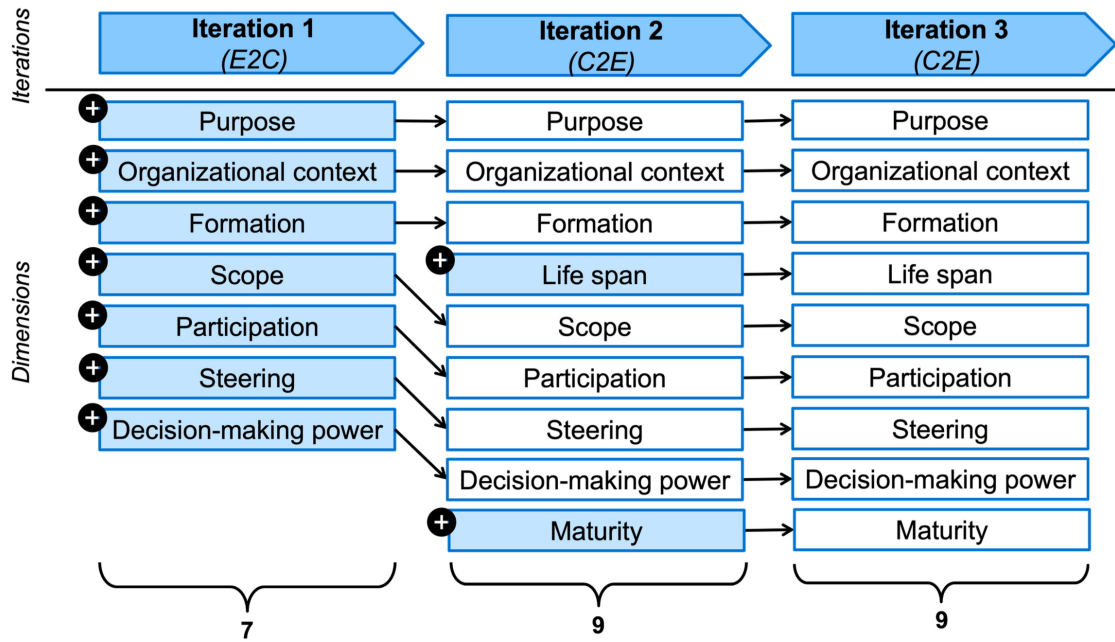


Figure 3.1.: Taxonomy Creation Iterations - Visualization from [1]

Tobisch et al. [1] - Taxonomy Development

Tobisch et al. [1] created a taxonomy about CoP's in the context of LSAD to give a clear and structured overview of important factors to consider when establishing or cultivating CoPs. Therefore, a taxonomy with several dimensions and characteristics, describing how CoPs in this context can look like, was created.

To create this structured overview, Tobisch et al. [1] used an iterative approach with one empirical-to-conceptual and two conceptual-to-empirical iterations. The first iteration was executed conducting and analyzing 39 interviews with experts from 18 different organizations in the area of large-scale agile. The initially derived dimensions and characteristics were revised in two more cycles: a literature review of related work that study characteristics of CoPs in general and in the context of scaled agile.

The final taxonomy derived from these three iterations has nine dimensions, with three of them having sub-dimensions. The dimensions and sub-dimensions include *Purpose*, *Organizational Context* (*Overall Organizational Culture and Mindset*, *Organizational Support*), *Formation*, *Life Span*, *Scope* (*Target Group*, *Location*, *Organization*, *Size*), *Participation* (*Enrollment*, *Selection*), *Steering*, *Decision-Making Power*, and *Maturity* [1].

Purpose: In the first dimension the reason for using a specific CoP is defined. There are nine characteristics to choose from and to combine as many as necessary. The *Distribution of information* described the activity of sharing news or changes within an organization, while *Knowledge Sharing* describes sharing experiences with each other. *Knowledge creation* focuses

3. Related Work

Dimensions		Characteristics									
	Purpose	Distribution of information	Knowledge creation	Knowledge sharing	Support	Definition of best practices or standards	Improvement	Creation of solutions	Innovation		
Organizational context	Overall organizational culture and mindset	Hindering			Neutral			Supporting			
	Organizational support	No awareness but implicit approval		Awareness and approval		Active support		Sponsorship		Dedicated budget	
Formation		Bottom-up initiation & set-up			Top-down initiation & set-up by employees			Top-down initiation & set-up by management			
Scope	Life span	Long term				Short term					
	Target group	Role-based				Topic-based					
	Location	Local			Single time zone			Multiple time zones			
	Organization	Single team of teams		Multiple teams of teams		Teams of teams' representatives		Whole development organization		Whole organization	Cross-organizational
	Size	< 10		> 10 < 50		> 50 < 100		> 100 < 1000		> 1000	
Participation	Enrollment	Voluntary			Expected			Mandatory			
	Selection	Open				Closed					
Steering		Self-organizing			Reporting		Active steering		Management led		
Decision-making power		No decision-making power			Influence		Informal decision-making power		Formal decision-making power		
Maturity		Initiating			Growing		Established		Transforming		

Figure 3.2.: Taxonomy of CoPs in LSAD - Visualization from [1]

on training, for example of new hires or employees in new roles. *Support*, as in mutual help for problems or concerns, or the *Definition of best practices and standards* can be reasons for a CoP as well. Solving common problems and working towards the *Creation of solutions*, the *Improvement* of e.g. Software, or working on trends, new technology, and other *Innovation* are further purposes that were defined for CoPs in the context of LSAD.

Overall Organizational Culture and Mindset: Following the CoP's purpose, it is also important to examine the overall organizational culture and mindset. Within this dimension it is determined whether the organizations' employees have a positive and *Supporting*, *Neutral*, or negative and *Hindering* attitude towards the agile way of working, adapting changes, learning and CoPs.

Organizational Support: While the overall organizational culture and mindset focus on the employees and CoP members, the organizational support focuses on the organizations management. The organizations management might be aware of the CoP and gives explicit approval of it (*Awareness and approval*), they are not always aware of the existence of the CoP, but give implicit approval anyway (*No awareness but implicit approval*). Instead of only approving CoPs, management might even further foster it by *Active support*, e.g. promoting the CoP, *Sponsorship*, e.g. financing events and guest speakers, or even approving of *Dedicated budget*, e.g. funding for CoP lead function. This dimension is not mutually exclusive, meaning more than one characteristic can be selected.

Formation: Another interesting aspect to look at is the formation of a CoP. CoPs can either be initiated and set up by individual employees from bottom-up (*Bottom-up initiation & set up*), or initiated by management. In these top-down approaches, either the management can set up the CoP (*Top-down initiation & set-up by management*) or give this task to one or several employees (*Top-down initiation & set-up by employees*).

Life Span: In addition to the CoP's formation, the CoP's lifespan can also be described by two characteristics - *long term* and *short term*. While long term describes CoPs with a strategic character, short term CoPs rather have their focus on solving ad-hoc problems.

Target Group: You also shouldn't forget about the CoP's target group, that is either *role based* or *topic based*. If the members of a CoP belong to it because of their role, e.g. all organizations IT project leads are part of a CoP about how to manage IT projects, than this is called *role based*. A *topic based* CoP has members from different roles, e.g. IT project leads, IT team leads, IT architectures, etc. that all share a common topics, e.g. a specific project or task.

Location: Not only the CoP's target group, but also the CoP members' location can be determined. The location of the CoPs members differs in the amount of different places and the location of the places itself. There can be one site (*local*) for all CoP members, but also several sites across one single time (*single time zone*) zone or even multiple time zones (*multiple time zones*).

Organization: While looking at the target group and location of the CoP members, you should also look at the organization. All CoP members could be from one *single team of teams*, which includes several teams, but all being within the same ART, Solution, Train, Tribe, etc. If the teams do not belong to a single mentioned group, then the organization is characterized as *multiple team of teams*. Does each team only has one representative within a CoP, this is called *team of teams' representatives*. Of course the CoP members could also include the *whole development organization*, *whole organization*, or even be *cross-organizational*.

Size: The next dimension differentiates between different sizes of the CoP, measured by the amount of members: *under ten*, *over ten* <50, >50 < 100, >100 <1000, and >1000.

Enrollment: Building on the CoPs size, the enrollment dimension focuses on whether employees join the CoP on a *voluntary*, *expected*, or *mandatory basis*. For this dimension, several characteristics can be selected, as the participation of some employees and roles might differ others, e.g. agile masters could be expected to participate, while developers could join on a voluntary basis.

Selection: When looking at the participation, you should also consider the CoP members selection, which is either *open* or *closed*. A CoP with a closed selection has certain rules by which someone is allowed to join the CoP, while CoPs with an open selection will accept anyone join.

Steering: After discussing the participation, we now have a look at the steering of the CoP, which can be either self-organizing, management led or something in between. *Self-organizing* means the employees run the CoP themselves without any interference from management. In some cases this is the case, but with the addition of regular *reporting* about the CoP to the management. If the management interferes even more, e.g. through prescribing topics, this is called *active steering*. The most extreme interference from management to the CoP is then represented as *management led*.

Decision-Making Power: Not only looking at the involvement from the management into the CoP, but also the CoPs power of making decisions is important. The CoP could have *no decision-making power*, but also *inference*, e.g. through recommendations. Besides those two

characteristics, there is also *informal decision-making power* and *formal decision-making power*.

Maturity: And last but not least, within the dimension maturity, the CoPs phase is characterized. A CoP always starts within the *initiating* phase and focuses on set-up. After that the CoP enters the *growing* phase and someday reaches the most participation in the *established* phase. Once the CoPs activities decrease, the CoP is in the *transforming* phase and either has to change or even be stopped.

The study and developed taxonomy gives a structured overview of the different characteristics of CoPs in LSAD. Though the developed taxonomy has not had an evaluation phase with a feedback collection regarding the validity, completeness and usefulness of the taxonomy. This taxonomy by Tobisch et al. [1] serves as the foundation for this thesis, which aims at evaluating the taxonomy from a practitioner's perspective.

4. Evaluation Concept

After explaining the theoretical background and related work, we want to provide more details on the research methods in this chapter. This chapter is separated into three sub-chapters. The first sub-chapter answers RQ1 with a structured literature research. Sub-chapter two and three give more insights into the preparation, conduction and post-evaluation of the expert interviews and the expert survey.

4.1. Methodology

To establish a solid concept for evaluating the taxonomy of CoPs in context of LSAD by Tobisch et al. [1], we conducted a structured literature review. This review aimed to identify existing taxonomy evaluation strategies, as well as quality criteria that taxonomies in information system area are evaluated upon. These insights were used to create our own evaluation strategy and criteria, and therefore answer RQ 1: *How can the taxonomy of CoPs in large-scale agile software development be evaluated in practice?* A structured literature research allows us to review existing research in an organized, fair and less biased way and ensures that the review is complete [32]. Based on Webster and Watson [33] a structured literature review consists of three main tasks: selecting primary sources based on a clear and structured search, going backward and forward using the citations of the primary sources.

To identify the primary literature sources we searched for related literature in the online databases of IEEE (<https://ieeexplore.ieee.org/>), ACM (<https://dl.acm.org>), AIS (<https://aisel.aisnet.org>), Science Direct (<https://www.sciencedirect.com>), and Web of Science (<https://www-webofscience-com>). We searched for literature that contains the following words in either the title, abstract, or keywords:

"taxonomy" AND "evaluation" AND ("software engineering" OR "information systems")

We received 131 results with this search method. We then removed all duplicates, literature in any other language than english, as well as irrelevant results after reviewing the title and abstract. With this approach we were able to identify 15 literature results that give some insights into taxonomy evaluation. Three of those results gave general information about taxonomy evaluation, nine described the taxonomies evaluation by conducting interviews, which seven of them also applied the taxonomy.

Based on the identified literature, we conducted a forward and backward search as proposed by Webster and Watson [33]. With this additional search, we were able to identify five more literature results that discuss taxonomy evaluation methods or criteria in general.

4. Evaluation Concept

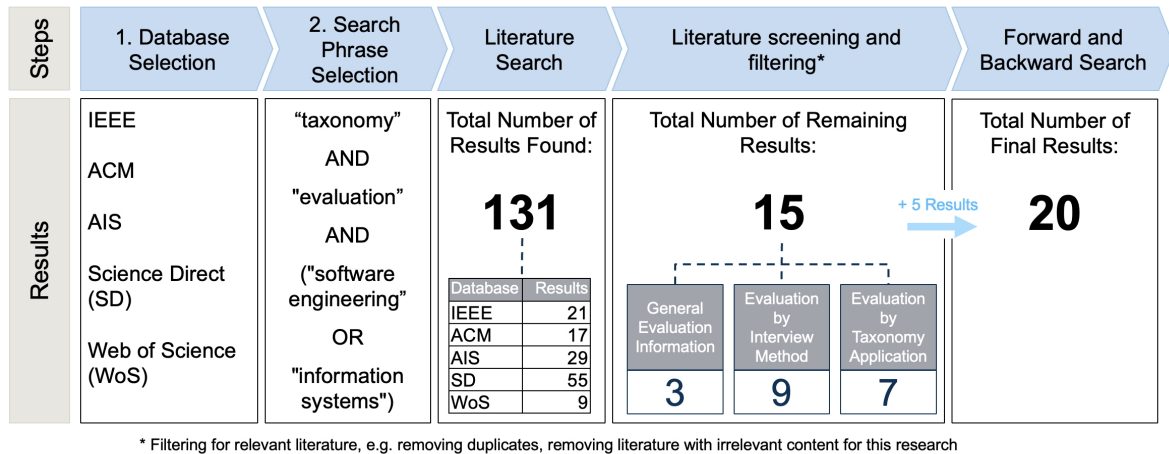


Figure 4.1.: Structured Literature Research Process

Topic	Literature References
Taxonomy evaluation in general	[13], [31], [34]–[39]
Taxonomy evaluation through interviews	[40]–[48]
Taxonomy evaluation through practical application	[40]–[46]
Taxonomy evaluation through surveys	[49]
Other	[50], [51]

Table 4.1.: Overview of literature results regarding taxonomy evaluation

Nickerson et al. [13] created a method for the development of taxonomies. The first step is to identify the purpose of the taxonomy and the resulting most important characteristic of the object, called the meta-characteristic. After that, the objective and subjective ending conditions are chosen. The objective ending conditions include the complete examination of all sample objects, no merge or split of objects, dimensions or characteristics within the last iteration, at least one sample object exists for every dimension and characteristics, and finally the uniqueness of all dimensions and characteristics. Conciseness, robustness, comprehensiveness, extensibility, and explanatory are listed under the subjective ending conditions. Once these first steps are completed, the iterative cycle can start and will only end if the chosen ending conditions are met. For each iteration, it is decided between an empirical-to-conceptual or conceptual-to-empirical approach [13]. This taxonomy building method by Nickerson et al. is the most used method in information system, but there is some negative feedback about it, e.g. challenges with the ending conditions in practical application, or the lack of a testing phase [35]. Kundisch et al. [35] therefore extended the foundational work done by Nickerson et al. [13], by adding to the taxonomy building guide and giving more guidance on the testing phase. The new, revised taxonomy building guide

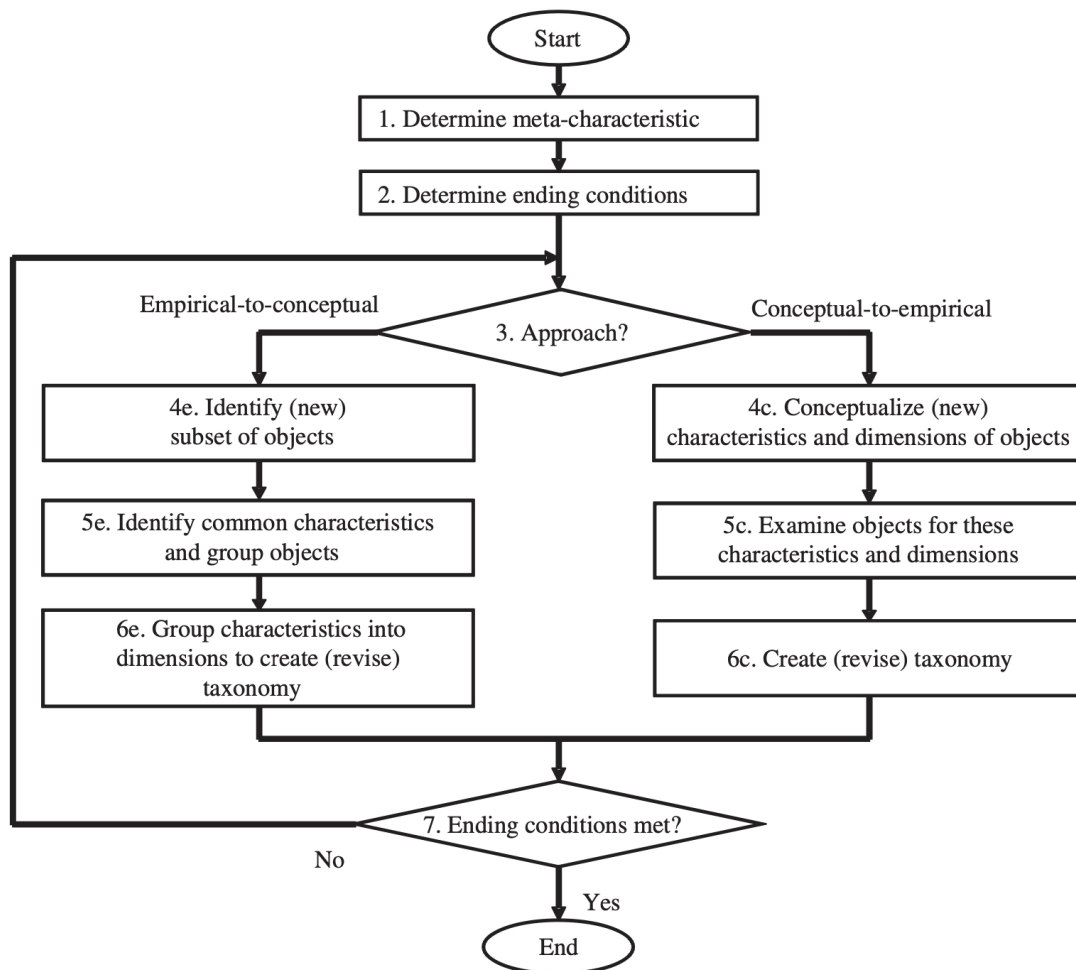


Figure 4.2.: Taxonomy Development Process by Nickerson et al. [13]

now includes three additional steps that should be completed before the meta-characteristic is chosen: specification of the observed phenomenon, target user group(s), and the intended user group. The previous step of selecting ending conditions now includes the selection of evaluation goals. The iterative cycle that follows was untouched, though some steps were added after the iterations: the creation or adaption of the taxonomy as well as the check for the objective ending conditions, followed by the check for the subjective ending conditions. Is either of them not successful, then another iteration is needed, otherwise it can be continued with the evaluation steps: evaluation settings, evaluation performance. Once all evaluation goals are met, the taxonomy is completed and can be published [35].

Szopinski et al. [37] differentiates between ex ante and ex post evaluation, with the difference being evaluation during (ante) or after (post) taxonomy development. For the ex ante taxonomy evaluation, Kundisch et al. [35] proposed to first check the objective ending conditions (all representative samples have been examined, no object split or merge into multiple objects in the last iteration, no addition of dimensions or characteristics in the last iteration, and no cell duplication) and continue with the subjective ending conditions (conciseness, robustness, comprehensiveness, extensibility, and explanatoryness). Once the subjective ending conditions are met, the evaluation can be configured and then performed [35].

4.1.1. Evaluation Method

There are several evaluation methods defined in our literature results, though it is agreed that taxonomies are rarely evaluated at all [35]–[37]. But for those taxonomies that were evaluated, Kundisch et al. [35] found ten evaluation methods with the most applied method (58%) being an illustrative scenario approach with real-world objects, which described the process of describing or classifying real-world objects with the use of the taxonomy. The second most used evaluation method (15%) was were illustrative scenarios with existing research. This method is followed by interviews (9%) and surveys (7%) [35]. Szopinski et al. [37] defined in total eleven evaluation methods and offered some more insights into each method. Expert interviews are described as a time- and resource-consuming method that deliver direct feedback via face-to-face conversations with either researchers or practitioners. Unstructured and semi-structured interviews with a duration of 30-45 minutes were observed. Expert interview evaluations with two to 21 experts were identified. On the other hand, conducting a survey was described as cost effective method that gathers insights through a standardized questionnaire.

To maximize evaluation feedback while staying within time and resource constraints, we decided to combine multiple evaluation methods for our research. This includes expert interviews, featuring an illustrative scenario with real-world objects, followed by a survey.

4.1.2. Evaluation Quality Criteria

Once the evaluation method has been determined, the evaluation quality criteria were selected. Kundisch et al. [35] presents 41 different evaluation criteria, with *usefulness* being

Quality Criteria	Literature References	Included in Evaluation	
		Yes	No
Usefulness / Explanatoryness	[13], [31], [35], [39]	X	
Completeness / Comprehensiveness	[13], [31], [35], [38], [39]	X	
Conciseness	[13], [31], [35], [39]	X	
Extensibility	[13], [31], [35]	X	
Applicability	[35], [38]	X	
Understandability	[35], [38]	X	
Robustness	[13], [31], [35], [38], [39]		X
Reliability	[31], [38], [39]		X

Table 4.2.: Overview of quality criteria and their inclusion in our research

most frequently mentioned criterion across the analyzed literature (59%). The next criteria mentioned align with the subjective ending conditions identified by Nickerson et al. [13]. Usman et al. [38] and Szopinski et al. [39] recommended quality criteria align very closely together and are also very similar to the criteria mentioned earlier. As presented in other literature, we also combined some mentioned quality criteria into one [31]. With this method we ended up with the following quality criteria: *usefulness / explanatoryness*, *completeness / comprehensiveness*, *conciseness*, *extensibility*, *applicability*, *understandability*, *robustness*, and *reliability*. Due to time and resource constraints, we decided to not include robustness and reliability into our evaluation.

4.2. Semi-structured Expert Interviews

In the next chapters, we will give more insights into the expert interviews. We will explain, how the interviews were prepared and conducted and how they were evaluated afterwards.

4.2.1. Interview Preparation and Execution

In order to evaluate the taxonomy of CoPs in context of LSAD, created by Tobisch et al. [1], we conducted expert interviews. This qualitative research method was used to gather more in-depth insights from experienced people, practitioners of the industry [52], as it allows us to get real insights into practice [53]. We targeted practitioners, e.g. Agile coaches, Scrum masters, developers, IT architects, technical leads, and others with expertise of CoPs and LSAD. To be able to compare the expert interviews, we conducted all interviews in the same way and used a semi-structured interview approach [52]. With the help of an interview guide we made sure that we ask the same questions at every interview, though as it is a semi-structured approach, there is no need to stick to the order of the interview questions, nor to not talk about topics that are not part of the guide [52], [53]. As mentioned earlier, the

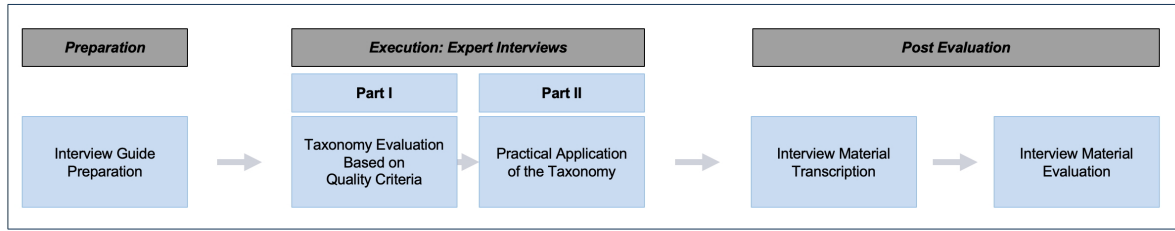


Figure 4.3.: Expert Interview Process

expert interviews included the application of the taxonomy to real-world CoPs. Therefore, the interviews were divided into two parts: *taxonomy evaluation based on quality criteria* and *practical application of the taxonomy*.

A total of three interviews were conducted, each lasting between 30 and 60 minutes. For this interview series, three practitioners from the LSAD environment that have experience with CoPs were interviewed via online video call. The interviews were audio recorded and anonymized. The first two interviews were held in German, while the third interview was conducted in English. The participants were not actively involved in the taxonomy's creation. The interviewees had different practical experiences:

- **Interviewee 1:** The first interview partner currently works as a Chapter Lead for Enterprise Architecture, covering various aspects of enterprise architecture, systems, and software engineering competencies. Their responsibilities include innovation support, strategy development, implementation planning, and guidance for new areas, particularly in software development and system design harmonization. Within this organization, architects no longer operate in a separate unit but are embedded in individual product teams and collaborate through a community structure. This interviewee has extensive experience with CoPs in both traditional IT and agile environments. In a traditional IT setting, they used CoPs to enhance project management, test and quality management, and security processes. Today, their organization applies the CoP approach in software development, marketing, and strategy to foster collaboration and reduce bureaucratic barriers between business and IT.
- **Interviewee 2:** The second interview partner works as an Enterprise Architect, specializing in modeling aspects such as data models, information models, and meta-models. Within the company, he is recognized as a “modeling guru”, responsible for structuring data into standardized schema to facilitate practical applications. In addition to his core responsibilities, he is involved in various committees and contributes to decision-making processes, both as a topic owner and as a consultant in other areas. Since 2017, the company has adopted SAFe as its agile framework, although it still maintains a dual structure where some business units, particularly in B2B, operate in a traditional line organization. The interviewee is formally listed as an Enterprise Architect within the SAFe organization and previously took on responsibilities as a System Architect in the early phases of SAFe implementation. Regarding CoPs, he has been actively engaged in

various CoPs within SAFe, covering all aspects identified in the presented taxonomy model. His experience spans different levels of involvement: he has participated in multiple CoPs, founded CoPs himself, and held leadership and responsibility roles within them. With over six years of hands-on experience in SAFe and CoPs, he has been directly involved in establishing, managing, and utilizing CoPs as a collaborative tool within a large-scale agile enterprise environment.

- **Interviewee 3:** The third interviewee holds a dual role as both an Agile Master and Chapter Lead. They lead one of the four defined chapters, specifically focusing on agile ways of working. Her responsibilities include supporting the organization in becoming more agile, identifying areas for improvement, and enhancing efficiency. The leadership approach within the chapter is highly collaborative and democratic, with decisions being discussed and agreed upon collectively by all Agile Masters. Unlike a traditional Scrum Master, their role does not focus solely on Scrum but instead integrates practices from various agile frameworks to determine the best fit for different product teams, domains, and the broader organization. Their support extends across three levels: individual teams, groups of product teams (domains), and the entire organization. The interviewee has previous experience participating in multiple CoPs as a Scrum Master in previous companies, where they observed how different communities functioned. Based on these experiences, they have integrated effective practices into their current CoP, shaping it into a working model tailored to its members. Now, they actively lead and shape their own community, ensuring that it functions optimally for all participants by continuously refining its structure and approach.

Interview Partner	Organizations' Industry	Job Role	CoP Engagement
1	Household Appliances	Chapter Lead for Enterprise Architecture	Organizing, Coordinating, Leading, Participating
2	Information and Communication Technology	Enterprise Architect	Founding, Leading, Participating
3	Household Appliances	Agile Master	Leading, Participating, Refining and improving

Table 4.3.: Overview of Interviewees' Roles in Their Organizations and Experiences with CoPs

We first contacted potential interview participants via email, and in some cases, we conducted a preliminary discussion via video call to introduce the study and clarify any questions and ensure the interviewees had enough experience with CoPs in LSAD.

Each of the three online interviews began with an introduction to our research, an explanation of the interview process, and a detailed review of the taxonomy. Before proceeding, we asked for permission to record the audio of the conversation. We started by discussing the

participant's job role and experience with CoPs to establish context. After that, the interview was divided into two parts. The first part included open and closed questions regarding the evaluation of the taxonomy based on several quality criteria. The second part included the practical application of the taxonomy on a real-life CoP example. The interview guide can be found in the appendix.

In the first part, based on your interview guide, we asked questions evaluating the taxonomy, focusing on specific quality criteria mentioned earlier, including completeness (whether the taxonomy fully covers the domain, dimensions, and characteristics) and conciseness (whether the dimensions and characteristics are well-defined without redundancy and are small enough to be handled comfortably). We also assessed the usefulness of the taxonomy in different use cases, such as serving as an inspiration, supporting in creating new CoPs, evaluating existing CoPs, and determining whether best practices based on the taxonomy would be beneficial. Additionally, participants were asked about the extensibility and adaptability of the taxonomy in the future and whether its dimensions and characteristics were easy to understand and apply. For each criteria or sub-criteria, participants were given a statements and asked to provided responses using a Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5), followed by an open-ended question to allow for more detailed feedback. In Part 2, we applied the taxonomy to a real-world CoP example chosen by the participant. Together, we went through each taxonomy dimension, selecting and defining the corresponding characteristics, while the participant documented their thought process and reasoning behind their choices. At the end of the interview, participants were given the opportunity to provide additional feedback.

4.2.2. Interview Analysis

Before the interviews are analyzed, the data is transcribed into a written format [54]. There are no generally accepted rules or process for transcribing interviews, but there are some recommended guidelines to follow [52] [54]. Kuckartz [54] defined seven transcription steps: *selection of transcription rules and process, execution of transcription, check and correction of transcript, anonymization of transcript, formation of the transcripts based on selected rules, archiving transcripts, and import of the transcripts into a QDA-software*. Following this process, we started by selecting the transcription rules, which decide how the audio is transformed into text. During this transformation, some information will always get lost, e.g. specific dialects, emphasis, and volume, through transcription rules we decide which losses we accept [54]. For our interviews, we chose the following transcription rules:

- The language remains in the original, either German or English (no dialects)
- The interviewer's passages are marked with "S1", the interviewee's responses with "S2", and interceptions from third parties as "S3"
- Each speaker's turn appears in a seperate paragraph
- Significant longer pauses are marked with (...)

- Slips of tongue or grammatical errors are corrected to make the interview content easier to understand and analyse, but no statements are omitted or changed in meaning
- Important contextual information and gestures are added in () if necessary for understanding

We used an automatic transcription feature offered by MAXQDA and later checked the text for correctness. After that step we adjusted the transcripts based on the set rules and also anonymized the transcripts. After this step all transcripts were shared with the interview participants to give them the opportunity to correct statements or add information.

After the transcription we could continue with the data analysis. The central objective of content analysis is to analyze material derived from communication processes, in this case the interview transcripts, in a structured and rule-based manner [55]. Since there is no single standardized method for analyzing expert interviews, various approaches can be applied depending on the research objectives. For informational interviews, qualitative structured content analysis is particularly well-suited, as it provides a systematic and rule-based framework. Though analyzing methods are only a guideline and do have to be adjusted to fit all individual studies. A fundamental component of content analysis is coding, which is used to analytically reorganize data [53]. In this key aspect of content analysis, data is organized according to empirically and theoretically meaningful criteria. This classification provides a structured description of the material, allowing researchers to extract patterns and relationships from the data in a systematic and replicable way [55]. Rather than following the natural flow of conversation, coding sorts and categorizes the material based on logical and theoretical criteria [53].

Building on Mayring's [55] qualitative content analysis, Kuckartz [54] refines and expands the method by recommending a deductive-inductive approach, which combines deductive category selection and inductive category selection. Deductive categories are created before the material is analyzed, e.g. based on existing research. Whereas inductive categories are created based on the material itself. Following Kuckartz's [54] structured content analysis approach, the expert interviews in this study were evaluated using a deductive-inductive category formation process. Given that the research is focused on the evaluation of a taxonomy, the quality criteria defined in the expert interviews serve as the starting categories for the analysis. This structured yet flexible approach ensures that the analysis remains systematic and replicable while allowing for new insights to emerge from the data. The combination of deductive quality criteria and inductive refinement enables a comprehensive assessment of the taxonomy, ensuring that both predefined standards and emergent expert perspectives are incorporated into the evaluation [54].

We started this analyzing process of the expert interviews with the initial text processing, which involved an intensive reading of the material to gain a comprehensive understanding of the content. During this step, key passages were highlighted, and the text was structured into thematic sections. Additionally, short summaries and descriptions were created to capture preliminary insights and observations. Following this activity, the material was coded by using the main categories. The quality criteria of the taxonomy, completeness,

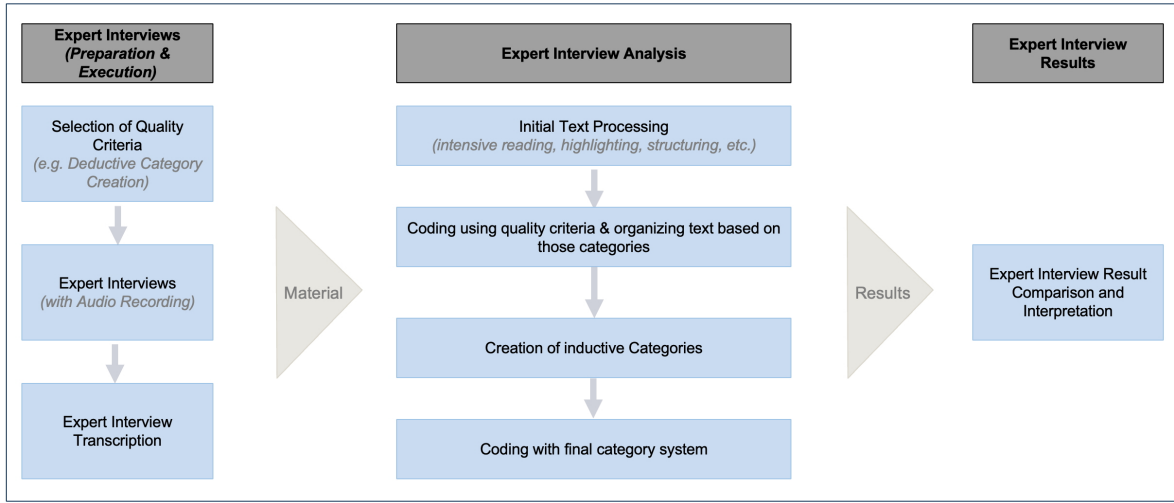


Figure 4.4.: Process Diagram of Expert Interview Analysis

conciseness, usefulness, applicability, extensibility, and understandability, served as initial deductive main categories. The material was split into several sections which were then split into the given categories. Then all text section within each categories were gathered. As the analysis progresses, additional inductive categories were emerged, based on the material content. Those additional categories allowed us to have a more comprehensive and detailed understanding of the data. Once the category system was fully established, the entire transcript materials were coded by assigning text passages to the predefined quality criteria. For the final step, the categories and sorted text sections were compared and interpreted. In total there are seven main categories with three of them having subcategories. Within all of those categories there are 57 text sections that have been identified. The first main category is the *Completeness* of the taxonomy. This main category is further distributed into *Classification of All CoPs in LSAD*, *Overall Completeness of Dimensions and Characteristics*, and *Missing Dimensions or Aspects*. With this separation into more detailed categories, we were able to differentiate between the completeness of the domain, meaning whether the taxonomy represents and therefore can classify all known CoPs in the context of LSAD, and the completeness of the dimensions and their respective characteristics. In total 13 text sections were identified for this main category. For the next main category *Conciseness*, 12 text sections were identified and further distinguished into seven sections for the subcategory *Overall Conciseness of the Taxonomy* and two other subcategories *Adjustment of Dimension Size* and *Adjustment of the Dimension Purpose*. For the main category *Usefulness* there are in total 17 text sections that were separated into the four identified use cases. The subcategory *Inspiration for CoPs in LSAD* describes the use case of the taxonomy being a source of inspiration for CoPs. *Establishment of CoPs in LSAD* is the second use case that specifically focuses on the taxonomy as a support tool for creating and establishing a CoP in the context of LSAD. The third use case *Evaluation of CoPs in LSAD* defines the use of the taxonomy for the evaluation of already existing CoPs in the context of LSAD. And last but not least, *Best Practices for CoPs in LSAD* defines whether

Main Category	Subcategory	Text Sections
Completeness		13
	Classification of All CoPs in LSAD	4
	Overall Completeness of Dimensions and Characteristics	7
	Missing Dimensions or Aspects	2
Conciseness		12
	Overall Conciseness of the Taxonomy	7
	Adjustment of Dimension Size	1
	Adjustment of Dimension Purpose	4
Usefulness		17
	Inspiration for CoPs in LSAD	4
	Establishment of CoPs in LSAD	3
	Evaluation of CoPs in LSAD	5
	Best Practices for CoPs in LSAD	5
extensibility		4
Understandability		5
Applicability		2
Definition of CoPs		4
Total		57

Table 4.4.: Overview of Interview Coding Categories and Subcategories

a best practice guide for CoPs in LSAD that is based on the taxonomy would be helpful to have. *extensibility* clusters all text sections that talk about the expansion or adjustment of the taxonomy in the future, e.g. is CoPs in LSAD have evolved and the taxonomy needs to be updated. For this category, four text sections were identified. Whether the taxonomies dimensions and characteristics are easily understood is represented with five text sections in the *Understandability* main category. How easy the taxonomy can be applied to different CoPs in LSAD is listed as the main category *Applicability* as consists of two text sections. The only inductive main category that has been created is *Definition of CoPs* and has identified four text sections.

4.3. Research Survey

In the following chapters we will provide more details on the survey that was conducted after the expert interviews. First we will give more insights into the general survey set-up and execution as well as the survey questions. After that we will explain how the survey was analyzed afterwards.

4.3.1. Survey Setup and Execution

For the survey we used the website SoSci Survey <https://www.soscisurvey.de/>. The survey was publicly available and open for everyone over a time span of 24 days, a little bit over 3 weeks. For the participants of the survey we targeted the same group of people as we did for the expert interviews: practitioners with expertise on CoPs in LSAD context, e.g. Agile coaches, Scrum masters, developers, IT architects, technical leads, and others. The survey was anonymous and therefore did not request any personal information. But to make sure the participants were suited for the survey, we did request information about their job role and the individual's experience with CoPs. To minimize any language barriers in participating in the survey, it was conducted in English. Following the guide from Szopinski et al. [37] on using surveys for the taxonomy evaluation, we created our survey with both, Likert-scale and qualitative questions, such as open text or multiple choice questions. The survey mostly contained questions with the Likert Scale, but to get more depth insights we also used some multiple choice or open text questions. The survey allowed participants to go back and forth as they liked but in order to go to the next questions the survey made sure the participants answered the Likert-Scale questions. All other types of questions were optional. The questions were based on the quality criteria and the results and insights of the expert interviews.

Right after the questions about the participants' job role and experience with CoPs were asked, the taxonomy was displayed and shortly introduced. Also the goal of the survey was shortly explained. To make sure the taxonomy with all its dimensions and their respective characteristics is fully understood by the participants, we introduced each dimension separately. For each dimension we created a separate survey page that each displayed the individual dimension and characteristics and an information box with some short explanations of each characteristic. At the bottom of each of those pages the participants ranked the characteristics' completeness and conciseness. For each of these a statement was given and then valued between one (*strongly disagree*) and five (*strongly agree*). For each statement the option *don't know* was given as well. Based on the insight we gathered through the expert interviews we added some more detailed questions to some dimensions. For the dimension *Purpose* we added a question about whether the dimension should be expanded by the characteristic "*Coordination*" to the statement of the Likert scale questions. For the sub-dimensions *Size* we gathered more insights to the characteristics' conciseness with the questions whether the characteristics should be reduced from five characteristics to three.

After all the questions about each dimension the taxonomy was evaluated as a whole based on all other quality criteria. For the completeness the Likert scale statements covered the taxonomies domain, meaning whether it could classify all known CoPs in the context of LSAD, as well as the completeness of the dimensions as well as the dimensions' conciseness. To gain some more details we offered an optional text field to leave some feedback on any missing dimensions, and a multiple choice selection about which dimensions might be unnecessary or redundant. Following the completeness and conciseness, we collected data on the taxonomies' usefulness regarding the former identified four use cases with the help of the Likert scale. For the quality criteria *extensibility* we differentiated within the Likert scale

statements between the dimensions and the characteristics and requested whether it would be easy to expanded or adjusted in the future. The *Understandability* and *Applicability* was rated also between one and five and in the case of any unclarity, the participants were able to select the specific dimensions that was not completely understandable. Before the end of the survey, all participants were given the chance to leave any additional feedback.

The practical taxonomy application which was part of the expert interviews, were coded within the process of coding the interviews. Though the results of the taxonomy application demonstrations will be represented separately.

4.3.2. Survey Results Analysis

After the survey ended, the data was exported into an excel spreadsheet and then analyzed regarding their validity. Survey entries that were not fully complete, e.g. participants that stopped the survey after only a few questions were removed. Also the data from test entries was removed as well.

To summarize the survey's responses, descriptive statistics such as the mean, standard deviation, and median were calculated for each Likert scale item. This provided an initial overview of how the taxonomy was rated by the participants based on the selected quality criteria [56].

In the end, the survey results were compared with the data that was collected through the expert interviews.

4. Evaluation Concept

Category	Survey Question or Statement	Type	Mandatory	Optional
General Questions	What is your current professional role and tasks that come with it?	Open Text	X	
	What experience do you have with Communities of Practices in the context of large scale agile software development?	Open Text	X	
Completeness / Conciseness (For each individual dimensions)	The characteristics of the dimension are complete.	Likert Scale (1-5)	X	
	There are NOT too many characteristics in this dimension.	Likert Scale (1-5)	X	
Completeness/Conciseness of the Dimension Purpose	The characteristic "Coordination" should be added in this dimension.	Likert Scale (1-5)	X	
Completeness/Conciseness of the Dimension Size	The characteristics should be combined to three characteristics in total (e.g. <10, 10-50, >50)	Likert Scale (1-5)	X	
Completeness / Conciseness (Overall Taxonomy)	The taxonomy can classify all known CoPs in the context of LSAD.	Likert Scale (1-5)	X	
	The dimensions of the taxonomy are complete.	Likert Scale (1-5)	X	
	There are NOT too many dimensions in the taxonomy.	Likert Scale (1-5)	X	
	In case of missing dimensions: Which dimension(s) should be added?	Open Text		X
	In case of unnecessary/redundant dimensions: Which dimension(s) would you remove?	Multiple Choice		X
Usefulness	The taxonomy is useful as a source of inspiration.	Likert Scale (1-5)	X	
	The taxonomy provides useful support in establishing new CoPs.	Likert Scale (1-5)	X	
	The taxonomy is useful for evaluating existing CoPs.	Likert Scale (1-5)	X	
	Best practices and CoP "classifications" based on this taxonomy would be useful.	Likert Scale (1-5)	X	
extensibility	The dimensions of the taxonomy can be easily expanded or adjusted in the future.	Likert Scale (1-5)	X	
	The characteristics within each dimension of the taxonomy can be easily expanded or adjusted in the future.	Likert Scale (1-5)	X	
Understandability / Applicability	The dimensions and characteristics of the taxonomy are easy to understand.	Likert Scale (1-5)	X	
	The taxonomy can be easily applied in practice (e.g. classifying real-life CoPs with the taxonomy).	Likert Scale (1-5)	X	
	In case of unclear dimensions/characteristics: Which dimension(s) are difficult to understand?	Multiple Choice		X
Additional Feedback	Place for any additional feedback about the taxonomy	Open Text		X

Table 4.5.: Survey Questions and Statements Categorized by Quality Criteria

5. Research Results

In this chapter the results of the expert interviews and the survey regarding the evaluation of the taxonomy of CoPs in the context of LSAD are explained. The results of the semi-structured expert interviews are split into two sections. First, the taxonomy specific questions regarding the quality criteria are described. After that the results of the taxonomy application are stated. At last, the survey results are mentioned.

5.1. Semi-structured Expert Interviews

5.1.1. Expert Interview Results based on Quality Criteria

This chapter presents the key findings from the expert interviews, focusing on the evaluation of the taxonomy regarding the selected quality criteria.

For the first quality criteria *Completeness*, we have coded three sub-categories: *Classification of All CoPs in LSAD*, *Overall Completeness of Dimensions and Characteristics* and *Missing Dimensions or Aspects*.

Completeness - Classification of All CoPs in LSAD: For the first sub-category all three expert interview participants (E1, E2, E3) agreed that the taxonomy can classify all CoPs in LSAD, for which the participants had knowledge about. Two out of the three experts agreed to the completeness of the taxonomy's domain with a maximum rating of five out of five points (strong agreement). The third expert (E3) rated a 4.5 out of five as they weren't sure about all communities world wide. Although E1 fully supports the completeness, they did note that CoPs with more than 100 members do not work properly as they are intended and therefore are not completely represented by the taxonomy.

Completeness - Overall Completeness of Dimensions and Characteristics: The next sub-category represents the overall completeness of the dimensions and the characteristics. The experts were asked to first rate the completeness of the domains and secondly the completeness of the characteristics separately. All participants gave the dimensions completeness a 4.5 (E2, E3) to five (E1) out of five (strong agreement), as in the moment they were not able to identify any missing dimension. Similar to the overall completeness of the dimensions, the overall completeness of the characteristics was rated between a four and five out of five points.

Completeness - Missing Dimensions or Aspects: Event though overall the completeness of the dimensions and characteristics were rated very highly, E1 and E3 did mention a dimension

or characteristics that could be added to the taxonomy. E1 noted that the distinction between single and multiple-time zones within the sub-dimension *Location* does not include any cultural differences that could become an important factor in the way of working together the next time. Within the third expert interview, the missing dimension *Content* was mentioned. This dimension should represent the content that is being discussed within the CoP. E3 recommends the following characteristics: *Technical Topic*, *Working Operation*, and *Ways of Working*.

The next category *Conciseness* has subcategories too. We differentiate between the *Overall Conciseness of the Taxonomy* and the *Adjustment of the Dimensions Size* as well as the *Adjustment of the Dimension Purpose*.

Conciseness - Overall Conciseness of the Taxonomy: E2 believes that the taxonomy isn't too big and rather prefers a bigger taxonomy that is complete. In contrast to that, E1 and E3 think that the taxonomy is overwhelming at first, but agree that the dimensions make sense and therefore should not be removed. E1 rates the conciseness with a five out of five, as it believes the taxonomy has the right size - not too large or small. E3 give the conciseness of the taxonomy a four out of five, as it is overwhelming at first and strongly highlights the opinion that the taxonomy shouldn't get any larger.

Conciseness - Adjustment of the Dimensions Size: The dimension *Size* refers to the number of CoP members and currently displays the characteristics *under ten*, *over ten* <50, >50 <100, >100 <1000, and >1000. E3 recommends reducing the number of characteristics from five down to three characteristics (*under ten*, *ten to 50*, *50 to 1000*) and explains that CoPs with more than 1000 members are not manageable.

Conciseness - Adjustment of the Dimension Purpose: There are some different opinions regarding the characteristics within the dimension *Purpose*. E3 first suggested combining *Knowledge creation* and *Creation of solution* into one shared characteristic *Value creation*, as well as combining *Improvements* with *Innovation* as in reality often when you improve something you are introducing innovation. *Knowledge sharing* and *Distribution of information* could be combined as well. Though later in the interview, E3 states, that the purpose is one of the most important dimensions that needs have a clear answer for every CoP right from the beginning. E1 agrees, that the dimension *Purpose* shouldn't become any larger and at first believed that the characteristics *Distribution of information* and *knowledge sharing* were redundant, but later understood and accepted the differentiation.

The main category *Usefulness* is split into four sub-categories following the four use cases that were represented to the interview participants: *Inspiration for CoPs in LSAD*, *Establishment of CoPs in LSAD*, *Evaluation of CoPs in LSAD*, and *Best Practices for CoPs in LSAD*.

Usefulness - Inspiration for CoPs in LSAD: This sub-category includes all statements regarding the usefulness of the taxonomy as a source of inspiration for the CoPs in LSAD. Though the expert opinions do not fully align at this point. E1 rates this use case with a

five out of five and E3 with a four out of five, so both see the use of a source of inspiration. Though E2 doesn't agree. Even though they admit thinking about specific characteristics of their CoPs only after looking at the taxonomy, they believe this is useful for the set-up of the CoP and not useful anymore once the CoP is set up and running. Therefore, this expert rated only two to three out of five possible points.

Usefulness - Establishment of CoPs in LSAD: For the next use case, the taxonomy's support for establishing a CoP in LSAD, the experts agree that it is useful. E1 and E2 both agree and E3 even strongly agrees. To increase the usefulness of this taxonomy's use case, E1 requests key metrics, e.g. a guide or metric on how someone can know whether their CoP is successful and members are motivated.

Usefulness - Evaluation of CoPs in LSAD: The use of the taxonomy for the evaluation of CoPs in LSAD was rated very similar to the prior use case. Two of the experts agreed, and E2 strongly agreed. E1 explains that the use of the taxonomy to identify possible misalignment or missing aspects, or for reviewing the CoP's purpose is given.

Usefulness - Best Practices for CoPs in LSAD: This last use case describes, whether some best practice guides based on this taxonomy would be helpful, e.g. providing different classification types with different combinations of characteristics. In this sub-category, E1 and E2 both believe that best practices would be helpful, though E1 refers back to their previously mentioned need of having key metrics. E3 rated this use case as neutral with a three of five, as the CoPs leaders know the CoP's "pain points". Overall though it was noticed that the use case of having best practices was difficult to understand for the participants.

The next categories are not split into sub-categories and all of them (*Expandability*, *Understandability*, and *Applicability*), except for one (*Definition of CoPs*) align with the taxonomy evaluation quality criteria.

Extensibility: For this next quality criteria *Extensibility*, the taxonomy's ability to be adjusted or expanded in the future is described. For this quality criteria, all interview experts agree that there are no problems with expanding or adjusting the taxonomy's dimensions or characteristics. E2 and E3 strongly agreed to this quality criteria.

Understandability: The understandability of the dimensions and characteristics were very easy to understand for all interview experts, if small definitions were given for each dimension or characteristic. Therefore there was strong agreement twice, and agreement once. E1 recommended providing a short one pager with all definitions. E3 generally believes the taxonomy is very easily understood, but did have some trouble understanding the dimension *Organization*, especially regarding the characteristics *Single team of teams* and *Multiple team of teams*, and recommended adjusting the wording.

Applicability: For the applicability, E1 and E3 strongly agree that the taxonomy can be easily applied in practice.

Definition of CoPs: This last category describes the missing clear definition of what a CoP is. In all of the three expert interviews, this topic was mentioned in some way. E2 explained that in their organization, the CoPs are not always called *Community of Practice*, but sometimes are called *Community of Work* or *Community of Information*. Although technically they could all classify as CoPs, in this organization the communities' purpose is made clear in their descriptive name.

In summary, the expert interviews rated all quality criteria and gave more insights if needed. For the first category *Completeness*, the experts mainly agreed that the taxonomy could classify all known CoPs and that its dimensions and characteristics are overall complete. Some minor changes, adding a dimensions *Content* and the cultural aspect to the dimensions *Location*, were mentioned as well. For the next category, the taxonomy's *Conciseness*, the experts rated the overall conciseness as good but did mention some overwhelming feeling when first looking at the taxonomy. Also some combinations of characteristics in the dimensions *Size* and *Purpose* were mentioned. The usefulness of the taxonomy was seen in the support for the establishment of CoPs in LSAD as well as the evaluation of existing CoPs in LSAD. For the use cases of a source of inspiration or the creation of best practices on the base of the taxonomy has some slightly different ratings but overall tended towards being useful. The taxonomy's *Expandability* and *Applicability* was evaluated as being good by all experts. The *Understandability* was generally rated well but did show a need for having short definitions for each dimensions or characteristic. The dimensions *Organization* was difficult to understand by one of the experts. For all interviews, the unclear definition of CoPs in LSAD was described.

5.1.2. Taxonomy Application Demonstration

As part of the expert interviews, all participants were asked to demonstrate the usage of the taxonomy based on their own example, e.g. a CoP in LSAD that they are leading or are members of. This application served as a practical validation of the taxonomy, assessing its completeness, conciseness, usefulness, applicability, understandability, and expandability.

Dimensions		Characteristics							
Purpose		Distribution of information	Knowledge creation	Knowledge sharing	Support	Definition of best practices or standards	Improvement	Creation of solutions	Innovation
Organizational context	Overall organizational culture and mindset	Hindering			Neutral			Supporting	
	Organizational support	No awareness but implicit approval		Awareness and approval		Active support		Sponsorship	Dedicated budget
Formation		Bottom-up initiation & set-up			Top-down initiation & set-up by employees			Top-down initiation & set-up by management	
Life span		Long term			Short term			Topic-based	
Scope	Target group	Role-based				Topic-based			
	Location	Local			Single time zone			Multiple time zones	
	Organization	Single team of teams		Multiple teams of teams		Teams of teams' representatives		Whole development organization	
	Size	< 10		> 10 < 50		> 50 < 100		> 100 < 1000	
Participation	Enrollment	Voluntary			Expected			Mandatory	
	Selection	Open				Closed			
Steering		Self-organizing			Reporting			Active steering	
Decision-making power		No decision-making power			Influence			Management led	
Maturity		Initiating			Growing			Established	
					Transforming				

Figure 5.1.: Taxonomy Application Interview 1 - Visualization adapted from Tobisch et al. [1]

The first interview participant selected a CoP within their organization focusing on software engineering and enterprise architecture. They mapped their CoP's characteristics to the taxonomy and often gave an explanation of why the respective characteristic applies. Overall the participant was able to apply the taxonomy very easily to his example CoP. For some

5. Research Results

dimensions or characteristics, e.g. the organizational support, a short definition was needed to select the correct characteristic. But with a short definition the the characteristics, the participant understood the dimension easily and was able to choose the correct characteristic.

Dimensions		Characteristics									
Purpose		Distribution of information		Knowledge creation	Knowledge sharing	Support	Definition of best practices or standards	Improvement	Creation of solutions	Innovation	
Organizational context	Overall organizational culture and mindset	Hindering			Neutral			Supporting			
	Organizational support	No awareness but implicit approval		Awareness and approval		Active support		Sponsorship		Dedicated budget	
Formation		Bottom-up initiation & set-up			Top-down initiation & set-up by employees			Top-down initiation & set-up by management			
Life span		Long term			Short term			Short term			
Scope	Target group	Role-based			Topic-based						
	Location	Local			Single time zone			Multiple time zones			
	Organization	Single team of teams		Multiple teams of teams		Teams of teams' representatives		Whole development organization		Whole organization	Cross-organizational
	Size	< 10		> 10 < 50		> 50 < 100		> 100 < 1000		> 1000	
Participation	Enrollment	Voluntary			Expected			Mandatory			
	Selection	Open			Closed						
Steering		Self-organizing			Reporting		Active steering		Management led		
Decision-making power		No decision-making power			Influence		Informal decision-making power		Formal decision-making power		
Maturity		Initiating			Growing		Established		Transforming		

Figure 5.2.: Taxonomy Application Interview 2 - Visualization adapted from Tobisch et al. [1]

For the second interview's practical application of the taxonomy, the participant chose their own CoP, their organizations *Data Community*. Right at the beginning, for the first dimension *Purpose*, the participant did not only apply the dimension to its CoP example, but automatically evaluated the CoP on this dimension. As the participant selected all purposes that were available, the participant noticed that the purpose of its CoP should be either reduced or the CoP should be split into two separate CoPs. For many of the dimensions and characteristics, the participant was given small definitions. With this information the participant was able to apply the taxonomy easily. For the dimension *Selection*, the participant highlighted some missing characteristics, as in its organization, there is distinction between read and write access: There are some CoPs that are completely closed and only available for some selected members, but there are other CoPs that let only specific people participate but allow everyone to read what is shared within the CoP.

Dimensions		Characteristics								
	Purpose	Distribution of information	Knowledge creation	Knowledge sharing	Support	Definition of best practices or standards	Improvement	Creation of solutions	Innovation	
Organizational context	Overall organizational culture and mindset	Hindering			Neutral			Supporting		
	Organizational support	No awareness but implicit approval		Awareness and approval		Active support		Sponsorship	Dedicated budget	
	Formation	Bottom-up initiation & set-up			Top-down initiation & set-up by employees			Top-down initiation & set-up by management		
	Life span	Long term			Short term					
Scope	Target group	Role-based					Topic-based			
	Location	Local			Single time zone			Multiple time zones		
	Organization	Single team of teams		Multiple teams of teams		Teams of teams' representatives		Whole development organization	Whole organization	Cross-organizational
	Size	< 10		> 10 < 50		> 50 < 100		> 100 < 1000		> 1000
Participation	Enrollment	Voluntary			Expected			Mandatory		
	Selection	Open				Closed				
	Steering	Self-organizing			Reporting		Active steering		Management led	
	Decision-making power	No decision-making power			Influence		Informal decision-making power		Formal decision-making power	
	Maturity	Initiation			Growing		Established		Transforming	

Figure 5.3.: Taxonomy Application Interview 3 - Visualization adapted from Tobisch et al. [1]

The third interview participant applied the taxonomy to their organization's agile chapter. Overall the taxonomy was applied very easily and fast. But there was an issue with understanding the dimension *Organization* and its characteristics. With a lot of support the participant was able to choose the correct characteristic. As the participant was filling out the dimension *Decision-making Power* it noticed a misalignment between what's "in paper" vs in reality. In this case the CoP officially has decision making power, but in reality its only

influence.

Overall all participants used CoPs with different characteristics for their practical taxonomy application. In all cases, in general the taxonomy was applied very easily, but short definitions for some dimensions were required. In two of the three applications the participants identified some areas of improvement, e.g. too many purposes or misalignment between formal setting and reality, for their CoPs.

5.2. Summary of Interview Results and Adaptions for the Survey

After the completion of the expert interview series, we were preparing the taxonomy evaluation survey, having the feedback gathered in the interviews in mind. Overall, we did not make any changes to the taxonomy proposed by Tobisch et al. [1] after the expert interviews. Though, we did adjust the evaluation questions regarding the evaluation of the taxonomy. The feedback we received through the expert interviews, including the taxonomy application, were within the quality criteria completeness, conciseness, and understandability. An overview of the feedback received is given in Table 5.1.

Within the first quality criteria, the taxonomy's completeness, we have categorized three feedbacks: The missing dimension *Content*, as well as some missing characteristics within the dimensions *Location* and *Selection*. Regarding the missing dimension *Content*, we did not make any changes to the taxonomy at this point, as this feedback was only mentioned by E3 and in general the completeness was rated well and it was mentioned that the taxonomy is already very large and overwhelming at first. But we did add an open text question to the survey for participants to enter any missing dimensions in order to gather insights from more than just three experts. For the dimension *Location*, E1 mentioned that there is no differentiation between cultural differences within the characteristics. And within the taxonomy application, E2 noted that within his organization there is a distinction between read and write CoP access that the taxonomy is not displaying. For both feedbacks, we did not make any changes to the taxonomy, as the taxonomy is already perceived as overwhelming due to its size. But to gather more feedback from more than three experts we did ask for the completeness for each dimensions characteristics separately within the survey.

Regarding the conciseness of the taxonomy we had feedback regarding the characteristics within the dimensions purpose and size. For both feedback, we did not make any adjustments to the taxonomy as there was not enough convincing evidence by the three experts. Though, to follow up on both feedbacks, we did included two additional questions to the survey to get more options. To get in general more insights into the conciseness, we let the survey participants evaluate the conciseness of each individual dimension individually and also included a multiple-choice questions asking for dimensions that should be removed or combined. For the dimension *Size* we did add a question to the survey, requesting feedback on the concise recommendation of E3 on reducing the characteristics.

For the quality criteria we identified three feedbacks: unclear definition of the dimensions,

Quality Criteria	Expert	Feedback	Response / Adjustment
Completeness	E3	A <i>Content</i> dimension is missing	Additional open text question requesting missing dimensions
	E1	The <i>Location</i> dimension does not account for cultural differences across locations	Completeness rating of the characteristics for each individual dimension
	E2	The <i>Selection</i> dimension lacks a distinction between read and write access	Completeness rating of the characteristics for each individual dimension
Conciseness	E1, E3	The characteristics in the “Purpose” dimension are too complex.	Conciseness rating of the characteristics for each individual dimension (+ multiple choice question for unnecessary dimensions)
	E3	The “Size” dimension could be simplified by reducing the number of options to three.	Conciseness rating of the characteristics for each individual dimension (+ multiple choice question for unnecessary dimensions) & additional question regarding reduced characteristics recommendation
Understandability	E1-E3	Unclear definition of certain dimensions	brief definition provided for every dimension
	E1-E3	The term “Best Practices” was unclear and difficult to understand.	Question was rephrased and contextualized more clearly within the dimension (info box).
	E3	Some dimensions and characteristics are hard to understand without context (e.g. “Organization”).	Additional multiple-choice question for not understandable dimensions.

Table 5.1.: Expert Interview Feedback categorized by quality criteria and corresponding responses

misunderstanding of best practices for a use case, and general difficulty understanding dimensions, e.g. *Organization*. To resolve this issue, we included a brief definition of each dimension or characteristics and introduced each dimension step by step to the participants. We also provided an information box about what is meant with best practices to the area of taxonomy's usefulness, to prohibit misunderstanding. Last but not least, we included a multiple-choice question which let the survey participants select dimensions that were not easy to understand (e.g. *Organization*).

5.3. Survey

This chapters main focus are presenting the survey results. We present the survey participants and their responses and highlights the key findings from the survey, focusing on the evaluation of the taxonomy with the focus on the selected quality criteria.

ID	Professional Role	CoP Experience	Leader	Participant	Coach/Support
P1	Agile Coach	Host and user of CoPs & supports them in Agile Coach role	X	X	X
P2	Operational Excellence Manager	Set-up cross-team CoPs in several areas & helping drive up engagement and facilitating discussions as Community Management Lead/-Coordinator	X		X
P3	Scrum Lead	Host of two CoPs for Scrum Masters	X		
P4	Freelance Agile Trainer	Member/founder of several CoPs in agile environments	X	X	
P5	Scrum Master	Participant of CoPs and also currently founding own CoP	X (starting)	X	
P6	Agile Consultant	Helps organizations build and improve CoPs in agile transformations			X
P7	Software Developer	Member of several CoPs		X	
P8	Agile Coach	Use of CoPs for knowledge-sharing		X	
P9	Agility Lead	Assigns CoP creation to team & active participant in CoPs		X	
P10	Chief Development Expert	Built and led diverse CoPs in various sizes and durations and contexts)	X		
P11	Head of EAM	Lead major CoP with >200 members, currently organizing the global EA CoP with >260 members	X		
P12	Senior Development Manager	Involved in global agile development with >400 members		X	
P13	Software Development Engineer	Member of employee-driven CoPs for tools, best practices, tech support		X	
P14	Business Agility Consultant	Introduced several CoPs member over several years & active member of two of them	X	X	
P15	Business Agility Consultant	Co-led Agile CoPs	X	X	

Table 5.2.: Survey Participants - Professional Roles and CoP Experiences

Overall there were 15 participants that completed the survey. The professional roles of the

participants were diverse and ranged from Agile Coaches to Business Agility Consultants to Software Development Engineers. All participants had experience with CoPs, either as an active CoP member, a CoP leader or founder, or a consultant for CoPs.

5.3.1. Completeness and Conciseness of each Dimensions' Characteristics

For the first two quality criteria, the *Completeness* and *Conciseness*, the responses were analyzed for each dimension separately. For each dimension, the survey participants were given a Likert scale from one (the characteristics of the dimension are not very complete / concise) to five (the characteristics of the dimension are very complete / concise). Figure 5.4 displays the median, mean and standard deviation of the responses for each dimension for completeness and conciseness of the dimensions' characteristics.

Questions A: "*The characteristics of the dimension are complete.*"

Questions B: "*There are NOT too many characteristics in this dimension.*"

Purpose: The completeness of the dimension *Purpose* received generally positive responses with a mean score of 4.21 with a standard deviation of 0.80. The same applies for conciseness - the average rating is 4.27 with a standard deviation of 1.03. Most participants gave ratings of four (agree) or five (strongly agree), indicating that the dimension was perceived as both comprehensive and appropriately focused. However, a respondent (P11) disagreed with the completeness and strongly disagreed with the conciseness of this dimension's characteristics. This shows a divergent perception, possibly due to missing characteristics or an overly detailed set of characteristics. As an additional Likert scale question, the participants were asked whether the characteristic *Coordination* should be added to the taxonomy. The responses varied widely, ranging from strong disagreement to strong agreement. The question was answered with a mean of 2.60, standard deviation of 1.55, and a median of 2.00. The median being lower than the mean indicates a right-skewed distribution, suggesting that most participants leaned toward disagreement, although a minority rated the item highly. This distribution implies a lack of common agreement and suggests that while some see support the idea of adding "Coordination", the majority did not consider it a necessary addition to the taxonomy. Regarding the addition of other characteristics, Participant P10 mentioned that there are even more purposes that are not part of the characteristics, such as feedback, contribution, serendipity, or establishing connections.

Overall Organizational Culture and Mindset: This dimension had mostly positive responses (completeness mean = 4.07, conciseness mean = 4.53). Overall the participants seemed to agree to the completeness of the characteristics. There were only two participants (P3, P14) staying neutral and one participant (P11) disagreeing on the completeness of this dimension. The conciseness was rated even more positively with all participants agreeing or strongly agreeing, except for one participant (P4) staying neutral on the taxonomy's conciseness. In summary, overall the participants reacted positively to the completeness and conciseness of the dimension *Overall Organizational Culture and Mindset*.

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Figure 5.4.: Survey Results for the Completeness and Conciseness of the Characteristics per Taxonomy Dimension

Organizational Support: The participants mostly agreed or strongly agreed with the completeness and conciseness of this dimension. Scoring on average very positively with 4.33 and 4.53 on the completion and conciseness criteria and having a low standard deviation of 0.90 and 0.92, this dimension is generally seen as solid and participants mostly agreed. One respondent (P11) though disagreed with both statements. For both, the completeness and conciseness of the dimension, there was also one participant each (P3 for completeness, P9 for conciseness) that responded as neutral. Overall this still gives a positive overall feedback on the completeness and conciseness of the dimension Organizational support.

Formation: With high ratings (mean completeness = 4.67, mean conciseness = 4.80) and a low standard deviation of 0.62 for completeness and 0.41 for conciseness, *Formation* stands out as one of the more consistently positively evaluated dimensions. This indicates strong agreement on both completeness and conciseness, with no notable outliers.

Lifespan: This dimension's completeness had a mean of 4.21 but a relatively higher standard deviation of 0.97. While most responses agreed or strongly agreed with the completeness, there were two neutral responses (P3, P6) and even one disagreement (P11). Similar to the completeness there is also a outlier (strong disagreement) from one of the participants (P11) regarding the conciseness of the dimension's characteristics. Also the standard deviation shows a high value of 1.15. Still, the mean of 4.36 shows a generally positive feedback for the conciseness of the dimension *Lifespan*.

Target Group: With a mean of 4.40 and standard deviation of 0.91, this dimension's completeness was well received. So was the conciseness with a mean of 4.47 and standard deviation of 0.83. For both questions there were one outlier (P11) that disagreed with the conciseness and completeness of the dimension. Except of this outlier, all participants either agreed or strongly agreed with the conciseness of the dimension. For the completeness there was another participant (P14) staying neutral. For both the completeness and conciseness of the dimension, the median of five indicates a strong agreement.

Location: Having scored the lowest of all dimensions (mean = 3.79) regarding its completeness and having a relatively high standard deviation of 1.12, the dimension Location had the most divergent views regarding its completeness. The median score of 4.00 suggests that responses were generally favorable but unevenly distributed, with some participants perceiving gaps. For example, one participant (P3) noted that the characteristic "Hybrid" was missing. On the other side, the conciseness of the dimension was rated as one of the most concise dimensions with a mean of 4.93 (SD = 0.27). Therefore, the responses suggest that the characteristics in the dimension *Location* may not be fully complete but are definitely not too many to be handled comfortably.

Organization: This dimension had a median of 5.00 (strong agreement) for both the completeness and conciseness of the dimension. The mean of 4.33 and a standard deviation of 0.98 for the completeness, indicate also a general approval but some variation in perception too. Two respondents (P10, P14) stayed neutral and one participant (P11) disagreed, indicating missing

characteristics in the dimension. For the conciseness of this dimensions, all participants agreed or strongly agreed that the characteristics are not too many to be comfortably handled.

Size: With a mean of 4.38 and a median of 5.00, the Size dimension was positively viewed regarding its completeness. Though regarding its conciseness, the participants did not fully agree, but were rather spread apart with a standard deviation of 1.28 around the mean of 3.64. In total, five participants (P1, P4, P10, P12, P13) strongly agreed and three participants (P9, P11, P15) agreed to the conciseness of the dimension Size. Though four participants (P2, P5, P8, P14) disagreed to the conciseness and P6 and P7 stayed neutral. In another question, participants were asked whether the characteristics should be reduced to three instead of five. The participants had diverse answers ranging from strong disagreement to strong agreement. Overall the majority agreed with a median of 4.00. In summary, while the dimension Size was considered complete, its conciseness was viewed more critically and showed some mixed opinions. The participants leaned towards a reduction of the amount of characteristics.

Enrollment: This dimension was one of the highest rated dimensions regarding its completeness (mean = 4.87, SD = 0.35) and conciseness (mean = 4.93, SD = 0.26). The very low standard deviations indicate a high level of agreement. Nearly all responses rated a five (strong agreement), with only one or two fours (agreement), confirming the dimension is both complete and concise in its current form.

Selection: Similar to Enrollment, this dimension received the highest overall score (completeness: mean = 4.93, SD = 0.27; conciseness: mean = 4.73, SD = 0.80). No outliers were observed within the completeness, indicating that the characteristics are well defined. Within the conciseness, almost all participants strongly agreed. One participant (P8) agreed as well, but another participant (P11) disagreed regarding the conciseness. Still, over the conciseness is very highly rated and generally positively viewed.

Steering: Rated with a mean of 4.67 (SD = 0.62) for the completeness and 4.80 (SD = 0.56), Steering was viewed positively. For both quality criteria the median was 5.00, which means that more than half of the participants strongly agreed to both. This shows that the characters are well chosen.

Decision Making Power: Also rated at 4.67 (SD = 0.49) for both, completeness and conciseness, the dimension Decision-Making power was evaluated positively and consistently. All participants either agreed or strongly agreed to the completeness and conciseness of the characteristics. This shows that the characteristics are both clear and sufficient.

Maturity: This dimension received a mean score of 4.60 with a standard deviation of 0.51 for the completeness. Similar to that the conciseness is rated with a mean of 4.80 and standard deviation of 0.41. For both questions, the majority of participants strongly agreed and all other participants agreed. This reflects a well-chosen concept with only very little deviations. Respondents found the characteristics of this dimension to be both comprehensive and concise.

Overall the completeness of all characteristics has a positive feedback with an average of 4.44 (SD = 0.36). For the dimensions Selection, Enrollment, Steering, Decision-Making, Formation and Maturity, the overall results for the completeness of the characteristics was very well agreed on. Though, the dimension *Location* was rated the lowest. But also the dimensions *Overall Organizational Culture and Mindset* and *Purpose* were rated lower than the other dimensions.

The overall conciseness of the dimensions characteristics was also rated very well with a mean of 4.58 (SD = 0.33) with very high rating for the dimensions Location, Enrollment, Maturity, Steering and Formation. Especially the dimension Size, but also the dimension *Purpose* were not rated as well as the others but also showed higher spread of ratings through their increased standard deviations.

5.3.2. Taxonomy's Completeness and Conciseness

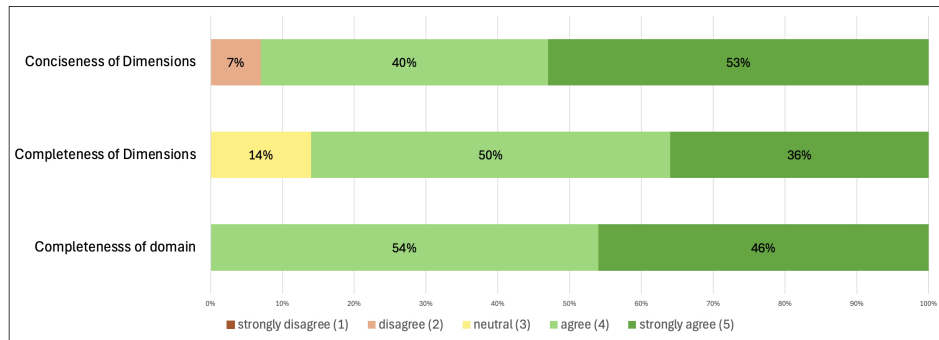


Figure 5.5.: Survey Data on the Taxonomy Dimensions Completeness and Conciseness

Not only the characteristics, but also the dimensions were evaluated upon their completeness and conciseness by the survey participants. In total there were three questions. The first question aimed to evaluate how well the taxonomy can classify all existing CoPs in the context of LSAD.

Questions A: *"The taxonomy can classify all existing CoPs in the large scale agile software development context."*

The responses were very positive and overall agreed (mean = 4.46, SD = 0.52). the majority, seven participants agreed to this statement and six participants strongly agreed to it. The other two participants (P5, P12) did not respond. This shows a generally agreement about the domains completeness of the taxonomy without any exceptions. The second question asked whether the dimensions are complete.

Questions B: *"The dimensions of the taxonomy are complete."*

Overall the participants rated this positive as well with a mean of 4.21 and standard deviation of 0.7. Similar to the domains completeness, the completeness of the dimensions also had a median of 4.00, though the responses showed more deviations. Five participants strongly agreed and seven agreed to the completeness. Though P3 and P9 did stay neutral regarding this statement and P12 did not respond at all. One feedback (P11) mentioned some missing dimensions: *Regular Participation* or *Reach for audience*. The conciseness of the dimensions was rated next.

Questions C: *"There are NOT too many dimensions in the taxonomy."*

Overall the dimensions conciseness was rated well with a mean of 4.40 (SD = 0.83) and a median of 5.00. This means the majority, in total eight participants, strongly agreed. Six of the participants agreed to the dimensions conciseness and only one participants (P11) disagreed. In addition to the Likert scale question, participants were able to select dimensions that should be removed or combined with others too. Overall the participants did select a few dimensions, though overall there was no dimension that had more than one vote. Overall the participants did not strongly indicate that a dimension should be removed or combined.

5.3.3. Usefulness of the Taxonomy in Practice

The usefulness of the taxonomy in practice was evaluated based on four chosen use cases: the use as a source of inspiration, as support for establishing new CoPs in LSAD, for the evaluation of existing CoPs in LSAD, and the usefulness of best practices that could be created based on this given taxonomy. Each use cases was rated individually by the participants using a Likert scale (one - strongly disagree to five - strongly agree).

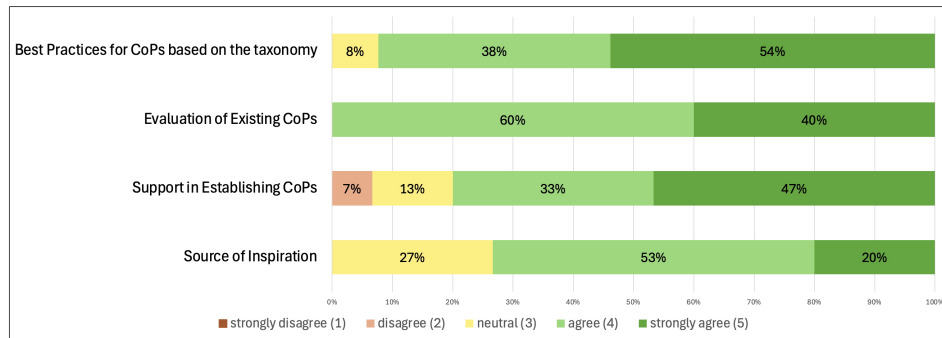


Figure 5.6.: Survey Data on the Usefulness of the Taxonomy

The first use case, using the taxonomy as a source of inspiration for CoPs in LSAD has been rated with an average response of 3.93 (SD = 0.70) with the participants responses being between three (neutral) as the minimum and five (strongly agree) as the maximum. The majority of participants, eight to be concise, agreed to this use case and three strongly agreed. Though four participants did stay neutral regarding the use as a source of inspiration. Overall

this use case has been rated the lowest of all four cases, but still shows a positive response overall.

The next use case, the taxonomy as support for establishing CoPs in LSAD, has been evaluated with a mean of 4.20 (SD = 0.94). For this use case, there was a outlier (P13), disagreeing with the usefulness for the support of establishing CoPs. All other responses were either neutral, agreed or strong agreed.

The use of the taxonomy for the evaluation of existing CoPs in LSAD was agreed on the strongest (SD = 0.51) by the participants. This use cases was rated with a minimum of four (agreement) and a maximum of five (strong agreement) by all participants. The mean is 4.40 and indicates a high usefulness.

The last use case is referring to best practices for CoPs in LSAD based on the taxonomy. In detail this means that one could provide a best practice guideline, e.g. CoP types with specific characteristic combinations that are often used or recommended. The participants rated the use of such information as very useful with the mean of the responses being 4.46 (SD = 0.66) and the highest of all four cases.

Overall the responses for all use cases were in the upper half of the scale, meaning that the taxonomy is generally perceived as useful by the participants. Though the usefulness of the taxonomy as a source of inspiration was the lowest. Whereas the use for the evaluation of existing CoPs in LSAD and the best practices for CoPs in LSAD were rated close together and as the highest of all use cases.

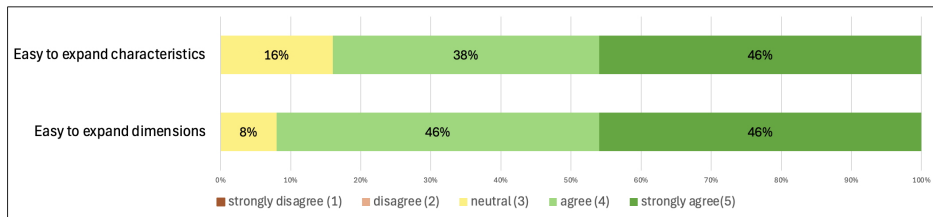


Figure 5.7.: Survey Data on the Expandability of the Taxonomy

5.3.4. Expandability of the Taxonomy

The expandability was evaluated through two Likert scale questions. The first question asked the survey participants how easy the dimensions of the taxonomy could be adjusted or expanded in the future, in case CoPs are evolving. The second question was similar to the first but referring to the characteristics instead of the dimensions.

Questions A: *"The dimensions of the taxonomy can be easily expanded or adjusted in the future."*

Questions B: *"The characteristics within each dimension of the taxonomy can be easily expanded or adjusted in the future."*

For both questions, the participants rated similar with a mean of 4.38 for the dimensions and 4.31 for the characteristics. Also for both questions the standard deviations were low (SD dimensions = 0.65, SD characteristics = 0.75). Except for neutral response (P3) for the dimensions expandability and two neutral responses (P3, P12) for the characteristics, all other responses were either agreement or strong agreement. This means that in general the participants perceived the expandability of the taxonomy as easy.

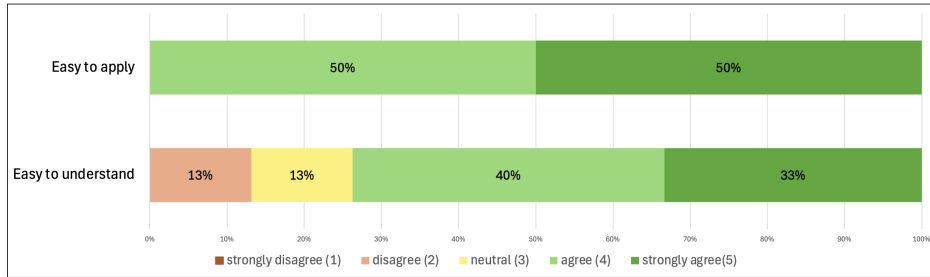


Figure 5.8.: Survey Data on the Understandability and Applicability of the Taxonomy

5.3.5. Understandability and Applicability of the Taxonomy

Questions A: *"The taxonomy can be easily applied in practice (e.g. classifying real-life CoPs with the taxonomy)"*

The applicability of the taxonomy was evaluated as very easy with a mean of 4.50. The very low standard deviation of 0.52 show that the participants gave similar answers. 50% of the participants strongly agreed and also the other 50% agreed. There was only one participant (P3) that did not respond. Therefore the application was perceived as very easy by the participants.

Questions A: *"The dimensions and characteristics of the taxonomy are easy to understand."*

For the understandability of the taxonomy, meaning how easy the dimensions and characteristics are understood, the participants did have different opinions. Overall the answers were still positive with a median of 4.00, but the standard deviation of 1.03 is high. The majority of the responses were either agreement (40%) or strong agreement (33%), but there were some participants that stayed neutral (P5, P7) (13%) or disagreed (P11, P13) (13%). In another multiple choice questions, participants were able to select dimensions that are difficult to understand. There was only one dimension, the *Formation*, that was selected by two participants (P11, P12). All other dimensions were selected only once or not at all. This does not give a lot of information regarding which dimensions are not easy to understand, though you could argue that the dimension *Formation* could use a clearer explanation. Overall there seems to be space for improvement regarding the understandability of the taxonomy.

5.3.6. Open Feedback

Before the end of the survey, the participants were given the option to leave any additional feedback. We received in total feedback from five participants, four of them stating that the taxonomy can be very useful in practice. P2 emphasized the practical value of the taxonomy: "Good work! I would really like to leverage the taxonomy for our team in order to categorize future CoPs or evaluate existing CoPs and have more clarity on each CoP's characteristics". P2 also noted that "it would then be great to have a set of recommendations on how to steer CoPs into an effective direction". P6 requested "some informaton about which combinations of characteristics exist and how well they are working" and suggested providing "community types or some combinations that are recommended". P4 commented on the taxonomy's value: "I think it is very useful, thank you for developing this" and noted that they "personally would not create best practices from this, but rather provide a description of the as-is situation of many CoPs in practice right now, along with trade-offs, caveats, risks, contexts and benefits of choosing different characteristics (which could turn into some form of recommendation but doesn't have to because every setup is so unique)". The other one noting the usefulness of the taxonomy was P14 stating that the taxonomy is a "Very interesting setup, and can be useful in the industry!". The last feedback we received was from P13, regarding the understandability of the taxonomy. It was stated, that the dimensions or characteristics of the taxonomy are not self-explanatory, but that a definitions are necessary in order to understand the taxonomy. Also P13 mentioned that it would be useful to have a short explanation on how to read the taxonomy graphic at the beginning.

5.4. Comparison of the Research Results

After conducting the expert interviews with the included taxonomy application and the survey, we are now comparing the research results in this chapter.

Completeness: The completeness of the taxonomy was evaluated separately for the dimensions and the characteristics of the dimension. Within the survey the characteristics were even evaluated for each dimension individually. Also within both evaluations, the domain completeness was evaluated, meaning whether the taxonomy can classify all existing CoPs in the context of LSAD.

For the domain's completeness, the interviews and the survey showed a clear positive response and agreement to strong agreement. Also during the practical taxonomy application, all participants were able to classify their CoP. Therefore there is no evidence indicating that the taxonomy's domain is not complete.

For the completeness of the dimensions, the survey showed general agreement, but with some slightly different opinions by a few individuals. One survey participant mentioned "Regular Participation" or "Reach for audience" as missing dimensions. Within the expert interviews, the dimensions completeness was perceived as very good, though the dimension "Content" was mentioned as missing. This shows a general agreement overall, but with some individual different opinions. Though all dimensions that were mentioned as missing were

noted by more than one participant.

The completeness of the characteristics was very well agreed on during the interviews. Only E3 mentioned the missing cultural differentiation within the dimension *Location*. Overall the participants were able to select the characteristics for their example CoP within all dimensions. There was only one participant, that identified a mismatch between our taxonomy characteristics and his practical knowledge. Within the dimensions *Selection* the participants organization differentiates between read and write access, whereas this was not specified or differentiated in the taxonomy. For the survey, the characteristics were also perceived as complete. Especially the characteristics of the dimensions *Selection*, *Enrollment*, *Steering*, *Decision-Making*, *Formation*, and *Maturity* were perceived positively. The dimensions *Location* and *Overall Organizational Culture and Mindset* and *Purpose* were rated the lowest of all dimensions, but still have on average an agreement regarding the completeness. In summary, the participants agreed to the completeness of the characteristics, but did show some different opinions as well. Especially the dimension *Location* was not fully perceived as complete and overall two characteristics were proposed: cultural differences and hybrid.

Conciseness: The opposite of the taxonomy's completeness, the conciseness was evaluated as well. As for the conciseness we differentiated between the dimensions and characteristics and within the survey even between each dimension's characteristics.

The conciseness of the taxonomy, dimensions and characteristics, was generally evaluated as concise by the interview experts. Though two out of three interviewees did say the taxonomy was overwhelming at first. One of the experts suggested reducing the number of characteristics within the dimension *Size*. Also the characteristics of the dimension *Purpose* was discussed but there was no common census on any recommended changes within the interviews. The survey showed similar results. Overall the taxonomy characteristics were perceived as concise, though the dimensions *Purpose* and *Size* had the lowest ratings. Even though there was not a strong agreement, overall the participants leaned towards a reduction of the amount of characteristics from five to three within the dimension *Size*. However, the survey participants overall still agreed that those two dimensions are concise. The survey participants also agreed to the conciseness of the dimensions and the results did not indicate any dimension that should be removed or combined with another dimension.

Usefulness: For both, the expert interviews and survey, there were the same four use cases that were evaluated regarding the taxonomy's usefulness in practice. The use of the taxonomy as a source of inspiration, for establishing CoPs in LSAD, for the evaluation of existing CoPs in LSAD, and whether providing best practices on the basis of the taxonomy would be useful. The first case described the use of the taxonomy as a source of inspiration for CoPs in LSAD. The three experts from the interviews did have different opinions. While two of the experts agreed and strongly agreed to the use of this case, the third expert disagreed as the use of it was only seen during the establishment of the CoP. A similar result was gathered through the survey. While the majority of participants agreed to the usefulness as a source of inspiration almost a third of the respondents kept neutral.

The next case is the support of the taxonomy for the establishment of CoPs in LSAD. The

interview experts mostly agreed and one of them strongly agreed to the usefulness for the establishment of CoPs. During the interviews one expert requested key metrics to even further support the practitioners in the CoP establishment. Also within the survey the majority of participants agreed to the usefulness of the taxonomy in the establishment of CoPs but there were also a few participants staying neutral or disagreeing with that use case.

The taxonomy was also evaluated upon their use for the evaluation of existing CoPs in LSAD. The experts of the interviews all agreed or strongly agreed to the use of the taxonomy for this use case. One of the experts even automatically evaluated their own CoP during the practical application of the taxonomy. Also the survey showed that all participants agree or strongly agree to this use case. There were no exceptions noted.

Providing best practices for CoPs in LSAD on the base of this taxonomy was the last use case. The interviews showed some mixed opinions on this use case. While two of the experts agreed, another expert did not agree and rather stayed neutral. The survey did show a strong agreement on the usefulness of best practices. Within the open feedback at the end of the survey about a third of the experts left a comment that the taxonomy is useful. Some of them noted specific requests that they think would be even more useful. One of the requests was to have a guide on how to steer CoPs towards effectiveness and another expert requested to have a set of CoP types or more details on CoPs types with a specific combination of characteristics. Having an as-is analysis of CoPs and more insights into trade offs, risks and benefits was mentioned as well. Including all information the experts overall showed the usefulness of having some kind of best practices. Though there were many different requests or suggestions on how to set up or in which format to provide some best practices.

Expandability: The taxonomy was also evaluated regarding its ability to be expanded or adjusted in the future, in case CoPs are evolving over time. During the interviews there the experts did not see any challenges with expanding or adjusting the taxonomy. Also the majority of the survey participants had a positive response, with only a few experts not agreeing. Overall this still shows a general positive feedback through the interviews and the survey.

Understandability: The understandability of the taxonomy with its dimensions and characteristics was evaluated next. The taxonomy was generally perceived as easy to understand by the interview experts. Though short definitions for the dimensions and characteristics were needed and one of the experts struggled with the understanding of the dimension Organization. The survey showed that the participants overall found the taxonomy easy to understand, but there was also a big variation in responses. Two out of 15 survey participants mentioned the dimension Formation as difficult to understand. Overall the taxonomy seems to be easy to understand, though there are some individual difficulties in understanding different dimensions or characteristics. It seems there is no common census on any specific dimension or characteristic though.

Applicability: The applicability of the taxonomy in practice was evaluated as well. The interview experts agreed that the taxonomy was easy to apply in practice and also all

interviewees were able to easily apply the taxonomy to one of their CoP examples. Also the survey showed only agreement or strong agreement. So in summary, there were no issues and participants perceived the taxonomy as very easy to apply.

5.5. Revised Taxonomy Proposal Based on Evaluation Results

Based on the results of the expert interviews, the practical taxonomy application, and the survey, we propose an adjustment of the taxonomy that is proposed by Tobisch et al. [1].

There was no strong indication that dimension should be added or removed. Even though some missing dimensions were mentioned, the taxonomy was stated as already overwhelming as first due to its size. With all results combined, there is no strong recommendation to adjust the taxonomy's dimensions.

The characteristics were evaluated individually within the survey, and with the feedback from the expert interviews, some areas for improvement were identified.

The dimension *Purpose* had diverse perceptions on not only the conciseness but also the completeness of the characteristics. For the completeness, some experts indicated missing characteristics, while other experts favored a reduction of the characteristics through the criteria conciseness. As both criteria are opposites of each other and both criteria were generally agreed on, we do not propose any adjustment.

Dimensions		Characteristics							
Purpose		Distribution of Information	Knowledge Creation	Knowledge Sharing	Support	Definition of Best Practices or Standards	Improvement	Creation of Solutions	Innovation
Organizational Context	Overall Organizational Culture & Mindset	Hindering			Neutral		Supporting		
	Organizational Support	No Awareness but Implicit Approval		Awareness and Approval		Active Support		Sponsorship	
Formation		Bottom-Up Initiation & Set-up			Top-Down Initiation & Set-up by Employees			Top-Down Initiation & Set-up by Management	
Life span		Long Term				Short Term			
Scope	Target Group	Role-based				Topic-based			
	Location	Local			Similar Time Zone			Different Time Zone	
	Organization	Single Team of Teams	Multiple Team of Teams		Teams of Teams' Representatives	Whole Development Organization		Whole Organization	Cross-Organizational
	Size	< 10		> 10 < 50		> 50 < 1000			> 1000
Participation	Enrollment	Voluntary			Expected			Mandatory	
	Selection	Open				Closed			
Steering		Self-Organizing		Reporting		Active Steering		Management Led	
Decision-Making Power		No Decision-Making Power		Influence		Information Decision-Making Power		Formal Decision-Making Power	
Maturity		Initiating		Growing		Established		Transforming	

Figure 5.9.: Revised Taxonomy of CoPs in LSAD - Adapted from Tobisch et al. [1]

The dimension *Location* was not fully agreed on regarding its completeness. Even though the majority agreed, other participants indicated some missing characteristics. The cultural aspect, as well as the characteristic "Hybrid" were mentioned as missing. Though overall there was not enough evidence to add or change the characteristics within the dimension. Therefore, we do not propose any changes at this time, as more data is required on this topic.

The dimension *Size* was not completely perceived as concise enough by one of the interview experts as well as within the survey. There was no strong agreement but still a trend towards the reduction of the characteristics within the dimension. Therefore we propose reducing the characteristics from five to the following four characteristics: *under ten*, *ten to 50*, *50 to 1000* and *over 1000*.

For the understandability, the participants agreed to an overall easy understanding of the taxonomy and its dimensions and characteristics. Though there were some minor difficulties for individuals to understand certain dimensions and characteristics. However, since there was no strong evidence for difficulties in understanding a specific characteristics or dimension, we do not propose any changes to the taxonomy.

For all other quality criteria, the usefulness, extensibility, and applicability of the taxonomy, the participants were satisfied with the proposed taxonomy of Tobisch et al. [1].

6. Discussion

This chapter summarizes key findings of this thesis and discusses them regarding the related literature work and critically reflects on potential limitations.

6.1. Key Findings and Proposal for Improvements

As outlined in Chapter 3 (Related Work), previous research such as Wenger et al. [25] and Tobisch et al. [10] have described different types of CoPs with different characteristics. Following this research, Tobisch et al. [1] has developed a taxonomy of CoPs in LSAD that provides a structured overview of the different CoP characteristics. The lack of an evaluation phase after the development of the taxonomy has been addressed in this thesis.

Participants across the study confirmed that the taxonomy is easily applicable and useful in real-world settings. It was seen as supportive for evaluation of existing CoPs, supportive in establishing new communities and also acknowledged as a source of inspiration. These findings align with the work of Paasivaara & Lassenius [8], who emphasized the importance of CoPs in facilitating knowledge sharing address the lack of guidance in how CoPs can be used in practice. The usefulness of best practices was also agreed on, as they provide even further guidance for practitioners.

The evaluation revealed several strengths of the taxonomy. Practitioners consistently noted that the taxonomy offered a comprehensive but also concise framework of the CoPs' dimensions and characteristics. Many of the dimensions, such as *Size*, *Organization*, *Location*, and *Lifespan* do align with the characteristics stated by Wenger et al. [25] and Tobisch et al. [10]. One recurring issue was the lack of clarity in certain dimensions. Practitioners found it difficult to understand some dimensions, such as *Organization*. The dimensions or characteristic names also were often not enough to correctly understand the dimensions or characteristics. Even though Tobisch et al. [1] provides explanations for all dimensions, the practitioners could benefit from a one-pager with short definitions.

The extensibility and applicability of the taxonomy were perceived as very easy.

In summary, while the taxonomy captures the key dimensions and characteristics of CoPs in LSAD very well, there are some areas for improvement or further research, e.g. reduction of the dimension *Size* or the support for the understandability of the taxonomy.

6.2. Limitations

This section outlines the limitations and potential threats to the validity of this thesis.

For this thesis we first conducted a literature search and with that input created a evaluation concept and quality criteria that we wanted the taxonomy to evaluate on. Though there were two quality criteria, that we did not include in the scope of this research. Due to our limited time and resource constraints we did not include the quality criteria robustness and reliability. The studies clearly focus only on the following quality criteria: completeness, conciseness, usefulness, extensibility, understandability and applicability. In general one of the key limitation was the restricted time frame of this thesis project. This impacted the depth of the data collection. While the taxonomy was evaluated through expert feedback, a validation over a longer period or the practical integration into real-world practices was not possible within the given time. This also impacted the interview and survey sizes. We only interviewed a small amount of experts regarding the taxonomy and also the survey size was very limited. Therefore the sample might not represent the entire population and therefore the results may limit the generalization of the findings. Some participants indicated that certain terms or dimensions within the taxonomy were difficult to understand without additional context. This may have influenced their ratings and feedback, especially in cases where definitions or examples were lacking. The interviews were evaluated though text transcription and interview coding. If a spoken conversation is translated into a written format, there is always information that will get lost, e.g. word pronunciations, dialects, gestures, etc. Also the interview coding was conducted by a single research. Both of these facts might have let to any unnoticed information of the expert interviews. And lastly, the survey study rely on data gathered through Likert-scale responses and open feedback. While this approach provided valuable insights, the interpretation of results is subject to individual perspectives and the researcher's analysis, which introduces an element of subjectivity despite the use of a structured coding framework. Also the information gathered through Likert scale questions did not provide any details on why the response was chosen. Despite these limitations, the results provide a solid foundation for understanding how the evaluated taxonomy is perceived by practitioners and where potential for refinement exists.

7. Conclusion

This final chapter summarizes this thesis based on its research objectives and gives an outlook into potential future work.

7.1. Summary

This thesis explored how CoPs in the context of LSAD can be systematically evaluated. The core contribution is the evaluation of the existing taxonomy presented by Tobisch et al [1] that aims to capture the key dimensions and characteristics of CoPs in such environments. For the evaluation, expert feedback was gathered through interviews and surveys. Building on these practitioner insights, this research provides an overview of how the taxonomy was perceived by the experts and highlights areas of improvement. The following section summarizes the results regarding the research questions that were introduced in Chapter 1.2.

RQ 1: How can the taxonomy of CoPs in LSAD be evaluated in practice?

With the structured literature search, different evaluation methods were identified, including illustrative scenarios with real-world objects, interviews and surveys. The most found quality criteria for taxonomy evaluations were the completeness and robustness, followed by the usefulness and conciseness of the taxonomy. The extensibility, applicability, understandability and reliability were identified as well.

RQ 2: How well does the existing taxonomy fulfill the quality criteria?

The taxonomy was evaluated against six quality criteria, the taxonomy's completeness, conciseness, usefulness, expandability, understandability, and applicability. Overall, the results indicate that the taxonomy performs well across all criteria, with some areas for refinement. The completeness of the taxonomy was largely confirmed, both in terms of domain coverage and individual dimensions and characteristics. Participants were able to classify their CoPs using the taxonomy, and while some suggestions for additional dimensions or characteristics were made (e.g. dimension "Content", characteristic "Hybrid" in dimension Location, etc.), these were isolated and did not indicate systemic gaps. Regarding conciseness, the taxonomy was generally seen as concise, though the experts perceived the taxonomy as initially overwhelming. The dimension Size in particular was seen as not concise enough by the experts. The taxonomy's usefulness was especially seen in its application for evaluating existing CoPs. It was also considered helpful for the establishment of new CoPs, but with

slightly more variation in responses. The idea of using the taxonomy as a source of inspiration yielded mixed results but generally still supported. The potential for deriving best practices based on the taxonomy was strongly supported by survey participants, who suggested additional guidance, templates, or CoP types. Expandability was also positively perceived, and both, the interview and survey respondents agreed that the taxonomy can be adapted in the future. For the understandability, most participants found the taxonomy clear, though some individual dimensions were noted as too difficult to understand. Finally, the taxonomy was perceived as very easy to apply in practice and the ease of use was confirmed through the practical application on real-life CoPs. In summary, the taxonomy fulfills all selected quality criteria.

RQ 3: How can the existing taxonomy of CoPs in LSAD be improved?

While the taxonomy was generally well perceived, several areas for improvement were identified from the evaluation results. The dimensions *Size* was perceived as not concise enough within the taxonomy. Therefore we propose adjusting the taxonomy proposed by Tobisch et al. [1], by reducing the characteristics. In addition, it was noticed that participants from both, the interviews and the survey, needed short definitions of each dimension and characteristic, as some dimensions were not immediately understandable.

7.2. Future Work

While this thesis provides insights into the evaluation of the taxonomy of CoPs in LSAD created by Tobisch et al. [1] and provides ideas for improvement, there are still some topics that remain open for future research and practical development. Due to the time constraint of this thesis, it was not possible to conduct another evaluation round about the revised version of the taxonomy. Following this thesis research next step would be to conduct a second evaluation round with the revised taxonomy to validate improvements and ensure that adjustments better align with practitioner needs. Specific dimensions, such as the Purpose, should be evaluated by practitioners in more depth, as there they had some different opinions were shown, but not enough evidence was collected. Moreover, this study focused on expert evaluation through interviews and a survey regarding certain quality criteria. As the interview and survey participants sizes were limited and not all quality criteria that were identified during the literature research, another broader evaluation could be useful. Incorporating even more quality criteria, such as the robustness or reliability and evaluating the taxonomy with a bigger sample over a longer period should give more detailed feedback. To further support practitioners, supportive materials and best practices based on the taxonomy could be developed. This could include best practices, real-world examples with an as-is analysis, different CoP types and with certain combinations of characteristics, recommended key metrics or actionable steps for steering CoPs into effectiveness. Together, these future directions offer valuable opportunities to further strengthen the taxonomy

and ensuring its real-world relevance and better support organizations in establishing and improving their CoPs in LSAD.

A. General Addenda

A.1. Interview Guide

General Question

- Could you please describe your current professional role, and the tasks associated with it?
- What experience do you have with Communities of Practice (CoPs) in context of large-scaled agile software development (LSAD)?

Taxonomy Specific Questions

- Completeness
 - Please rate between 1 (strongly disagree) and 5 (strongly agree): The existing Taxonomy can classify all CoPs in the context of LSAD.
 - Are there any CoPs in LSAD that can NOT be classified by the current taxonomy? If so, please provide a reason or an example. 1.3.
 - Please rate between 1 (strongly disagree) and 5 (strongly agree): The dimensions of the taxonomy cover all relevant aspects of CoP in LSAD.
 - Are there dimensions missing from the current taxonomy that could improve the ability to differentiate Communities of Practice (CoPs) in LSAD?
 - Please rate between 1 (strongly disagree) and 5 (strongly agree): The characteristics within each dimension of the taxonomy cover all variations of CoPs in LSAD.
 - Are there dimensions where specific characteristics are missing? If so, please provide a reason or an example.
- Conciseness
 - Please rate between 1 (strongly disagree) and 5 (strongly agree): The taxonomy does NOT have too many dimensions and therefore can be handled comfortably.
 - Are there any dimensions that appear unnecessary? If so, why?
 - Please rate between 1 (strongly disagree) and 5 (strongly agree): There are NOT too many characteristics within each dimension.
 - Are there characteristics that could be combined or completely removed? If so, which ones and why?

- Usefulness
 - Please rate between 1 (strongly disagree) and 5 (strongly agree): The taxonomy is useful in practice as a source of inspiration.
 - Please rate between 1 (strongly disagree) and 5 (strongly agree): The taxonomy provides useful support in establishing new CoPs.
 - Please rate between 1 (strongly disagree) and 5 (strongly agree): The taxonomy is useful for evaluating existing CoPs.
 - Please rate between 1 (strongly disagree) and 5 (strongly agree): The taxonomy is useful for sharing best practices.
 - Which dimensions are especially useful?
- Expandability
 - Please rate between 1 (strongly disagree) and 5 (strongly agree): The dimensions of the taxonomy can be expanded or adjusted in the future.
 - Are there potential issues in the structure of the taxonomy that could limit or hinder its extensibility in the future?
 - Please rate between 1 (strongly disagree) and 5 (strongly agree): The characteristics within each dimension of the taxonomy can be expanded or adjusted in the future.
 - Do you see any dimensions where it might be challenging to add new characteristics or adjust existing ones in the future?
- Understandability
 - Please rate between 1 (strongly disagree) and 5 (strongly agree): The dimensions and characteristics of the taxonomy are easy to understand.
 - Is there a dimension or characteristic that is difficult to understand?
- Applicability
 - Please rate between 1 (strongly disagree) and 5 (strongly agree): The taxonomy can be easily applied in practice.
 - Is there a specific dimension that seems difficult to apply in practice? If so, which challenges do you see?

Taxonomy Application

Please apply the taxonomy to an internal company CoP within the context of large-scale agile software development.

A.2. Interview Transcripts

A.2.1. Interview with Expert 1

- **Speaker 1:** Perfekt. Dann, wenn du bereit bist, würde ich gleich mal mit der ersten Frage anfangen. Und zwar würde ich dich hier bitten, dass du vielleicht kurz beschreibst, was deine berufliche Rolle ist und was verbundene Aufgaben damit sind. [0:00:21.9]
- **Speaker 2:** Meine aktuelle Rolle ist Chapter Lead für den Bereich Enterprise Architecture. Das beinhaltet, die unterschiedlichen Aspekte der Enterprise Architektur, bei uns allerdings auch das ganze Thema Systems und Software Engineering Kompetenz. Also von dem Thema Innovationsunterstützung, Strategie, Ausarbeitung, Implementierungsplanung, aber auch in der Form Unterstützung für neue Bereiche. Wie wollen wir Software entwickeln? Wie wollen wir in der Form das Thema System Design in der Form harmonisieren? Alles in diesem Kontext, praktisch die dazugehörigen Applications Portfoliomanagement, Technologieportfolios, Standardisierung -thematiken, alles das gehört praktisch zu meinem Aufgabengebiet. Wichtig ist dabei, dass ich keine eigene Organisation mehr habe. Das haben wir bei uns in der Organisation abgeschafft, unsere Architekten sitzen bei uns in den sogenannten Produkten und arbeiten über die Art der Community zusammen. Das heißt, dass, was wir vorher besprochen haben mit der Taxonomie, findet sich hier wieder. Man hat hier bewusst gesagt, keine eigene Unit, sondern in der Form durch die Chapter Lead Rolle praktisch den Management Support, Wissensteilung und die Entscheidung oder das Thema, wie so etwas mit angewendet werden soll, wird so weit wie möglich in die Developer Teams reingebracht. Vielleicht in dem Kontext, warum das ja auch noch mal gemacht worden ist. Agile Softwareentwicklung: Wir haben sogenannte Plattform Themen, das heißt wir bauen gerade bei uns eine interne Developer Plattform auf, auch für die bin ich zuständig, die in der Form Softwareentwickler helfen soll KI unterstützt aber auch KI Applikationen in der Form zu schreiben und das ganze Thema Software Engineering zu optimieren. Also auch das Thema Dokumentation, Code Repository. Wie mache ich was? Also praktisch eine Plattform, um unsere Entwickler möglichst autark, aber auch in der Form als Entwicklungsplattform nicht nur für Applikationen, sondern auch für sich selbst. Und deshalb passt das in dem Kontext. [0:03:17.6]
- **Speaker 1:** Dann hast du es ja eh schon so ein bisschen angesprochen. Die nächste Frage wäre nämlich gewesen, welche Erfahrungen du denn mit Communities of Practice eben in diesem Kontext gesammelt hast. Gibt es da vielleicht noch eine andere Erfahrung? [0:03:32.1]
- **Speaker 2:** (...) Wir hatten zwei Wege: Wir waren eine klassische IT Organisation. Dort haben wir das Thema Community of Practice ausprobiert, im Projektmanagement, um alle Projektmanager reinzubekommen oder um bestimmte Themen voranzutreiben oder in der Form etwas zu harmonisieren. Das war das ganze Thema Test und Quality Management, Projektmanagement. Wir hatten es im Security Umfeld, wo wir diesen

Community-Ansatz probiert haben. Das Wissen in der Form ein bisschen besser zu verteilen und auch die Ergebnisse entsprechend in der klassischen IT zu verbessern. Also von der Seite haben wir Community of Practice in einer klassischen IT-Organisation angewendet und auch unabhängig, ob es mit Softwareentwicklung war. Und wie gesagt, jetzt haben wir das so, dass wir diesen Community-Ansatz zum einen im Software, aber auch für Themen einsetzen, zum Beispiel bei uns das ganze Thema Marketing oder Strategieentwicklung, wo wir diese Ansätze auch mit aufnehmen. Das heißt, diese Community Ansätze sind für uns sehr wichtig, um die Bürokratie oder die Hierarchieebenen zwischen Business und IT aufzuheben. Deshalb gibt es da verschiedenen Kontexten im Bereich der Communities. [0:05:08.8]

- **Speaker 1:** Alles klar. Die folgenden Fragen, die gehen jetzt wirklich auf die Taxonomie ein und es ist eigentlich immer recht gleich strukturiert. Hier oben habe ich ein Statement und da hätte ich gern deine Meinung dazu: Stimmst du diesem Statement überhaupt nicht zu? Stimmst du dem Statement absolut zu 100% zu oder befindest du dich vielleicht irgendwo in der Mitte? Und dann habe ich immer noch einen zweiten Teil zur Frage und das ist dann immer noch ein bisschen offener formuliert, nochmal vielleicht gezielt weswegen vielleicht diese Wahl getroffen wurde oder was da so dahintersteckt. Und das erste Statement, da würde es eben drum gehen, dass unsere Taxonomie alle Communities of Practice im Kontext der großskalierten agilen Software klassifizieren kann. Das heißt, alle Arten, die dir jetzt irgendwie bekannt sind, kannst du die abbilden in dieser Taxonomie? [0:06:15.7]
- **Speaker 2:** Ja, würde ich eine fünf geben. [0:06:17.7]
- **Speaker 1:** Okay. Siehst du irgendwelche Arten von Communities of Practice, die vielleicht schwierig werden könnten, trotzdem, oder siehst du es überhaupt gar nicht problematisch? [0:06:42.9]
- **Speaker 2:** Ich sag mal so aufgrund der Erfahrung, wenn es um die Anwendung der Taxonomie geht: Ich sehe Communitys, die einen weit reichenden Bereich haben, hier in dem Bereich größer 100, als sehr schwierig zu managen. Also ob Communitys Sinn machen, in diesen größeren Aspekten glaube ich, dass sie so dann nicht richtig funktionieren, wie es eigentlich angedacht ist. Man hat wenige, die in der Form aktiv sind, man hat sehr viele, die eher in dieser, das steht auch bei euch, mehr dieser Art Voluntary oder in der Form, nice to know Prinzip dort haben. Das ist das einzige, was ich in der Form sagen kann, wenn ich die Taxonomie sehe, in welche Größenordnung sie geht. [0:07:42.0]
- **Speaker 1:** Okay, das heißt quasi jetzt noch mal kurz für mich Zusammengefasst in sehr großen Communities: Die würden dann eher aus diesem Raster, was wir quasi darstellen, rausfallen. [0:07:52.9]
- **Speaker 2:** Genau. [0:07:54.1]

- **Speaker 1:** Gut, dann würde ich jetzt gerne mal nur auf die Linke Seite, also auf die Dimensionen der Taxonomie eingehen. Und da würde es mich interessieren: das Statement das ist, dass die Dimensionen der Taxonomie alle relevanten Aspekte von Communities of Practice abbilden. Das heißt im Endeffekt, es geht hier darum, ist es vollständig? Fehlt dir vielleicht noch irgendwas? [0:08:24.1]
- **Speaker 2:** Nein. Deshalb würde ich auch hier eine fünf geben. [0:08:30.1]
- **Speaker 1:** Okay. (...) [0:08:34.7]
- **Speaker 2:** Für den anderen Punkt ist es in der Form, die offene Diskussion. Wir haben natürlich hier diese Community of Practice. Was wir haben ist noch mal eine Differenzierung der Art und Weise. Also wir sprechen bei uns von Communities of work, communities of practice und communities of information. Das habt ihr in der Form auch so ein bisschen hier abgedeckt. Also Community of Work zum Beispiel ist, wo wir wirklich an unterschiedlichsten Sachen arbeiten. Also bei uns zum Beispiel in der Produktion, da sind verschiedenste Sachen. Wir haben aber Experten, die Produktion kennen, von der Business-Seite sowie IT- und OT-Seite und die arbeiten eng zusammen. Unabhängig für ein spezielles Thema, sondern wenn etwas hochkommt, arbeitet diese Gruppe das immer aus. Deshalb also weil wir da nicht einen speziellen Topic haben, also keinen richtigen Scope definieren können, aber die Leute immer zusammenarbeiten in dieser flexiblen Art und Weise, haben wir da zum Beispiel so eine andere Bezeichnung benutzt. Und wir haben zum Beispiel bei uns, wenn wir in der IT sind, auch wieder da ein Beispiel: Nimm mal deinen Arbeitsplatz Modern Workplace. Wie soll der ausgestattet sein? Wir haben bei uns auch viele Local IT's. Wie sammelst du die Anforderungen ein in dem Bereich? Also das heißt ein spezieller Fokus zum Beispiel Infrastruktur, Services, Workplace, Netzwerk, was auch immer, was lokale IT-Organisation interessiert. Dort wollen wir unsere Standards kommunizieren, aber auch in der Form Sachen einsammeln. So, dadurch das dass mehr so einen Austauschcharakter hat, haben wir das Communities of Information genannt. Also da geht es mehr um Informationen beidseitig auszutauschen, und nicht um etwas zu entwickeln oder in der Form zu erneuern. Dann, das machen wir wirklich nur in dieser Community of Practice, wo wir wirklich Lösungen erarbeiten, unabhängig von Software oder generell IT- oder Business-Services. Die Taxonomie oder die Dimension kann man trotzdem auch darauf anwenden. Aber wir haben, um das ein bisschen besser darzustellen, diese Communities unterschiedlich benannt. Um die Rolle und den Scope etwas genauer oder einfacher zu definieren für jemanden, der nicht so in dieser Welt unterwegs ist. [0:11:27.4]
- **Speaker 1:** Würdest du behaupten, dass das eigentlich so ein bisschen der Purpose widerspiegelt? Also hier geht es ja auch zum Beispiel darum: Ist das Hauptziel, Informationen zu verteilen? [0:11:41.5]
- **Speaker 2:** Warum ich das so erwähnt habe ist, du hast jetzt in dieser Form Scaled Agile Software, hast immer eine bestimmte Domäne, in der du dich bewegst. Und auch

da kannst du zum Beispiel einen anderen Purpose haben, dass du nur Informationen verteilst, dass du in der vom Support liefern kannst usw. Das ist soweit alles okay. Mit dieser Klassifizierung, was wir hatten, war es wirklich, wenn du da noch mal übergreifender gehst, also wenn du mehrere Domänen abdecken musst, aber mit den gleichen Leuten, so dass du in der Form nicht ich sage mal 30 Communities hast, sondern eine aber in der Form, dass in der Form machst. Das kann man jetzt auch in der Form dann konkreter sagen: was ist wirklich der Scope? Also was soll diese Community bearbeiten? Aber um das wie gesagt, da noch mal zu haben, haben wir bei uns diese Unterteilung der Communitys noch mal gemacht. Aber grundsätzlich passt es in die Taxonomie in der Form rein. (..) Das war nur um in der Form unsere Erwartungshaltung mehr abzudecken. [0:12:46.9]

- **Speaker 1:** Ja, okay, verstehe. [0:12:49.9]
- **Speaker 2:** Ja. Oder mehr in die Richtung: Ist es eine offene Community? Ist es eine closed Community? Das heißt du kannst es alles da so widerspiegeln. Das heißt, alles was wir dort haben stimmt, ist auch wichtig. Wir haben es halt in der Form so dargestellt, dass du es direkt anhand der Bezeichnung der Community sehen kannst, was das in der Form für einen Fokus hat. [0:13:13.4]
- **Speaker 1:** Ja, ist absolut verständlich, auch von den Wörtern schon. (..) Okay, jetzt würde ich mal von der linken Seite auf die rechte Seite wandern von der Taxonomie. Jetzt geht es wirklich spezifisch darum: Bei den ganzen Dimensionen fehlt dir da eine verschiedene Ausprägung, vielleicht bei einer bestimmten Dimension. Also ist jetzt ein bisschen größer die Frage. Man kann es ja Schritt für Schritt so ein bisschen durchgehen, aber mich würde es interessieren, ob du sagst, da fehlt vielleicht irgendwo eine Ausprägung. [0:13:56.8]
- **Speaker 2:** Hm, also jetzt, wo wir jetzt mal da drüber gegangen sind im ersten Blick nein. Es wäre höchstens, in der Form mehr, zum Beispiel: Was ist short oder long term? Ja, was ist die Definition? Bei euch ist long term in der Form mehr als einen Monat, mehr als ein Jahr? Ja, mehr als drei Jahre? Fünf Jahre? Wie ist das geplant? Oder sprechen wir in Wochentag? Das wäre eventuell noch mal etwas, weil das wäre jetzt im ersten Blick glaube ich, eine sehr hohe Interpretation, kann aber auch unternehmensspezifisch sein. Bei jedem Unternehmen, wenn wir etwas schnell machen, hat das z.B. sechs Monate gedauert. Wenn ich das in einem Start-up mache, brauchen die dafür drei Wochen. Also bei meinem ersten Fall, wäre das short term, das wäre long term bei einem Start up. Von der Seite so ein bisschen. Was ist der Indikator ungefähr dafür? Also das müsste man ja wissen. Ich kenne die Definition nicht, aber bei der Definition, das wäre das einzige, wo es eventuell zu Themen kommen könnte. Aber ansonsten finde ich sie sehr umfänglich und vollständig. [0:15:23.9]
- **Speaker 1:** Zu deiner Frage also Langzeit und Kurzzeit ist jetzt hier nicht unbedingt eine Zeitspanne angegeben, sondern eher, dass man sagt Long term hat so einen strategischen Charakter, und short term bedeutet eher so ein bisschen mal was ad-hoc

da ist. Da kam jetzt mal was und jetzt machen wir mal eine Community. So ist das ein bisschen definiert. Ist das hilfreich? [0:15:46.9]

- **Speaker 2:** Das ist hilfreich. [0:15:47.6]
- **Speaker 1:** (...) Die Aussage, die hier zu bewerten ist, ist, dass die Charakteristiken innerhalb der Dimensionen alle verschiedenen Varianten, die es von Communities of Practice gibt, abdecken. Stimmt du zu oder eher nicht? [0:16:16.8]
- **Speaker 2:** Ich würde jetzt da aber erstmal eine vier nehmen, keine fünf. (..) Weil ich bin jetzt ein paar durchgegangen, aber ich bin mir nicht ganz so 100% sicher. (..) Die, die wir jetzt in der Form bei uns im Fokus haben, die könnte ich abdecken. (..) Wenn ich jetzt mal daran denke, ich müsste das mal gegenspiegeln, bei uns auch mit Themen, die wir eher mit Teams außerhalb machen, das weiß ich nicht. Deshalb erstmal eine vier, ich bin da unsicher. Also eher Richtung Tendenz zu fünf, aber ich würde hier erst mal eine vier geben. [0:17:01.4]
- **Speaker 1:** Okay, kein Problem. (..) Dann zur nächsten Frage. Also wir haben uns jetzt angeschaut, ob irgendwas fehlt in der Taxonomie, das sei ja jetzt schon ganz gut aus. Und jetzt wollen wir es aber so ein bisschen von der anderen Seite betrachten. Das heißt, wir wollen wissen, haben wir vielleicht zu viele Dimensionen mit aufgenommen, so dass es vielleicht schon wieder nicht so schön ist, damit zu arbeiten, weil es vielleicht erstmal einen erschlägt. Da darfst du auch gerne noch mal eine 1 bis 5 verteilen für das Statement, dass die Anzahl der Dimensionen gerade ausreichend klein ist. [0:17:41.8]
- **Speaker 2:** Ich glaube eher, sie ist nicht ausreichend klein, sondern ich würde sagen, es ist vollständig. Es ist also vollumfänglich und vollständig. Deshalb würde ich eine fünf geben. Wenn man es das erste Mal sieht, ist man ein bisschen erschrocken. Trotzdem kommt man schnell in die Thematik rein und durch diese einzelnen Dimensionen. Und wenn man dann rüber geht in die Charakteristik, kommt man schnell in die einzelnen Punkte, die man sowieso zu beantworten hat. Also von der Seite ist damit einfach zu arbeiten und ich finde, das ist nicht zu viel ist. Somit würde ich da eher eine fünf geben. [0:18:20.2]
- **Speaker 1:** Okay. (...) Ich würde trotzdem dich noch mal kurz bitten, noch mal dir die Dimensionen anzuschauen und dir zu überlegen, ob die hier irgendwelche Dimensionen auffallen, wo du sagst, die könnte man vielleicht doch irgendwie kombinieren oder ob du sagst: Nein, würde ich genau so getrennt auch wirklich lassen? (14) [0:18:54.3]
- **Speaker 2:** Ich kann nur sagen, was mich am Anfang etwas irritiert hat, das war das Thema Distribution of Information und Knowledge Sharing. (..) Das hatte ich am Anfang ein wenig, wo ich sagte: Ist das nicht das Gleiche? (...) Allerdings, wenn ich das in der Form bei mir widergespiegelt habe ist es so, dass ich, wie ich eben sagte, ich verteile Informationen, dass ich sage, du brauchst sie. Wohingegen ich aber auch viele Leute habe, die Wissen generieren, die das Wissen, ich gebe jetzt mal ein Beispiel: Bei

uns die Advisor, also die Leute, die Produkt A oder System B verkaufen, die müssen wir ja irgendwo trainieren oder wenn wir neue Sachen bekommen. Das heißt unsere Firma generiert die Inhalte. Wie bekommst du das dann aber gezielt an deine Advisor? Ja, weil je besser sie in der Form das Wissen haben oder wenn irgendwelche Fehler da sind: Du hast mal gehört, dass wenn man unter bestimmten Voraussetzungen Fehler A auftritt und man dann auf eine bestimmte Art damit umgehen soll. Wie kriege ich dieses Wissen, was wichtig ist, an meine bestimmten Leute? Das ist was anderes als Informationen. Also es ist auch Information, aber Information heißt du nimmst zur Kenntnis. Ja, es ist in der Form (unv.). Ja, während Knowledge Sharing in dem Kontext, wie ich es dann eben erklärt habe, ein wesentlicher und wichtiger Faktor ist genauso, wenn du als Kunde Produkt A kaufst. Du sollst wissen, wie du es richtig benutzt, weil das Ding ist nicht günstig, es ist ein Premiumprodukt und deshalb, ist die Gesamterfahrung wichtig. Und wie kriege ich dann das Wissen an den Kunden? Also von der Seite, in diesem Kontext habe ich mir das mal überlegt und sagt jetzt, für mich wäre das für mich jetzt verständlich, warum ich das Aufteile genauso. [0:20:51.9]

- **Speaker 1:** Distribution of Information. Dahinter steckt tatsächlich, dass man sagt, es gibt vielleicht irgendwelche Änderungen oder irgendwelche anderen wichtigen Neuigkeiten, die man mit den anderen teilen möchte. Das fällt hier quasi drunter. Und unter Knowledge Sharing geht es dann eher darum, dass man wirklich irgendwelche Erfahrungen vielleicht miteinander teilt. So ist das hier unterteilt. [0:21:15.3]
- **Speaker 2:** Also habe ich das für mich intern richtig interpretiert. [0:21:17.9]
- **Speaker 1:** Genau. Und so wie ich das jetzt rausgehört habe, findest du diese Unterteilung auch gut und wichtig?
- **Speaker 2:** Ja.
- **Speaker 1:** Okay. (...) Und sonst? Würdest du hier auf der linken Seite auch nichts zusammenfassen? [0:21:37.0]
- **Speaker 2:** Richtig. Ich würde es so lassen. (..) [0:21:41.4]
- **Speaker 1:** Alles klar, Dann haben wir eh schon so ein bisschen die, nächste Frage beantwortet. Und zwar ging es hier noch mal gezielt um die rechte Seite der Dimensionen. Da ist ja auch schon gemeint, dass du unter Purpose eben da so ein bisschen drüber gestolpert bist. Jetzt ist die Frage: Würdest du also welche Zahl würdest du dem Satz geben, dass die Anzahl der Charakteristiken, die in jeder Dimension angegeben sind, zu hoch ist, um sie effektiv zu nutzen, oder ob sie gerade richtig ist? (...) [0:22:14.2]
- **Speaker 2:** Also ich würde sagen, sie ist, weil es ja ein generisches Modell ist, in der Form genau richtig. Es hat nicht zu viel und nicht zu wenig. Von der Seite würde ich hier auch eine fünf geben, okay. (..) [0:22:32.3]

- **Speaker 1:** Sonst wenn du dir die Taxonomie angeschaut hast, sind dir keine Charakteristiken aufgefallen, die wo wir vielleicht noch drüber stolpert oder die noch zusammengefasst werden könnten? Oder hast du da noch was? [0:22:43.8]
- **Speaker 2:** Nein. (...) Ich glaube, die Frage nach der Größe. Also das Thema im Prinzip eigentlich uninteressant. Wenn du sagst, wenn du das kombinierst, ist die Community offen oder closed. (...) Aber sie wird häufig gestellt und es ist halt auch ein wichtiges Kriterium, Was kannst du da davon erwarten? Also wie die Effizienz einer Community (..) Geht, geht etwas verloren, je größer die Community wird, also von der Seite hast du immer die Frage der Größe. Aber grundsätzlich, wenn du die Community aufsetzt, ist es nicht der erste Punkt, über den du dir Gedanken machst. Deshalb war ich am Anfang am Überlegen: Braucht man das? Aber es ist in der Form sehr gut im zweiten Gang, damit ich sehen kann okay, welche Geschwindigkeit oder was habe ich zu erwarten in Bezug auf Kommunikation? Also die Community richtig zum Laufen zu kriegen. Wie kommuniziere ich? Wie häufig muss ich kommunizieren, dieser Kommunikationsgrad steigt, je mehr Personen eigentlich dabei sind? Deshalb ist die Größe auch wieder ein wichtiges Kriterium für den Erfolg. Das wäre aber das einzige gewesen wo ich gesagt habe kann man das, muss man das aber? Wir stellen das gerade fest in der Form, dass die Größe sehr, sehr wichtig ist. Von der Seite. Gut. [0:24:21.0]
- **Speaker 1:** Alles klar. Jetzt geht es ein bisschen darum, dass wir wissen möchten, ob die Taxonomie in der Praxis auch einen Nutzen bringt. Und das haben wir so ein bisschen unterteilt. Und zwar haben wir hier verschiedene Use Cases und würden da gerne auch jeweils ein Ranking haben von 1 bis 5, wie sehr die Taxonomie dabei helfen kann. Und der erste Use Case wäre direkt mal, dass die Taxonomie als Inspirationsquelle dienen kann. (...) [0:24:55.8]
- **Speaker 2:** Willst du alle vier Punkte bewertet haben, in einem? [0:25:00.5]
- **Speaker 1:** Also jedes einzeln, wenn es geht. [0:25:02.5]
- **Speaker 2:** Jedes einzeln, Okay. Also, ich finde sie für die Inspiration sehr gut. Deshalb würde ich da eine fünf geben. (..) Im zweiten Punkt Useful as Support in Etablierung würde ich dem eine vier geben. Warum? Weil was fehlt. Eine zweite Frage ist wie stelle ich sicher oder habe ich bestimmte Kennzahlen, Kennwerte, wie ich diese Community erfolgreich gestalte? Also das Set-up für die Community ist alles mit abgedeckt. Die Frage ist, wie erfolgreich bin ich damit und wie stelle ich das fest? Die Frage wird durch diese Taxonomie natürlich nicht beantwortet. Ja, also wie kann ich feststellen, dass ich meine Community Members motiviert habe? Wie stelle ich fest, dass die Community auch die Performance bringt, die ich erwarte. Da hilft sie überhaupt nicht. Für den Setup ja, aber für die nächsten Fragen: Wie könnte ich in der Form für mich als Community Leader schauen, dass die Community erfolgreich ist oder dass ich die richtigen Dinge dort mache? Da hilft sie mir nicht weiter. [0:26:29.2]

- **Speaker 1:** Würdest du sagen, dass die Taxonomie so eine Art Bewertungssystem, vielleicht von Communities of Practice ist oder sein kann? [0:26:48.2]
- **Speaker 2:** Bewertung? (..) Ich glaube, sie hilft noch mal in einer Schärfung. Das heißt, wenn ich eine Community habe und ich möchte gerne wissen, habe ich sie jetzt in der Form richtig? Gibt es dort irgendwelche Unstimmigkeiten oder gibt es irgendwas, was ich vergessen habe? Kann ich sie natürlich nehmen. Würde ich auch und da kann sie auch hilfreich sein. Also um einfach den Purpose der Community nochmal zu reviewen und zu schärfen, kann man diese Charakteristiken der einzelnen Dimensionen sehr gut nutzen und somit auch für die Evaluierung. (...) [0:27:45.0]
- **Speaker 1:** Was für eine Zahl würdest du dem dann geben? (9) [0:27:56.8]
- **Speaker 2:** Auch eine vier. [0:27:58.0]
- **Speaker 1:** (..) Gut und der letzte Use Case wäre dann noch speziell der Nutzen von der Taxonomy, was das Teilen von Best Practices angeht. Also das heißt quasi, dass die Taxonomie so eine Art Best Practice auch irgendwie darstellt. [0:28:21.6]
- **Speaker 2:** Für sowas zu definieren? [0:28:23.0]
- **Speaker 1:** Ja, genau. [0:28:29.8]
- **Speaker 2:** Wie gesagt, ich bleibe auch hier bei einer vier, weil für mich in der Form, wenn es Best Practice Sharing ist, mir auch das Thema Kennzahlen fehlt. Wie erkenne ich, dass eine Community effizient ist? Was muss ich dagegen tun oder was? Wie möchte ich das gerne tun? Gerade wenn man sie eventuell auch noch mal in bestimmten Formationen nimmt. Also wenn die Community auch ein hohes Maß an Entscheidungsgewalt hat, wenn sie in der Form maßgeblich auch Funktionen in der Organisation wahrnehmen muss. Dann, wie gesagt, sind für mich bestimmte Kriterien oder Messpunkte in der Form sehr wichtig. In der Form, wie man so etwas darstellen kann und wie kriegt man das in der Form als Community Lead oder als Teil des Managements in der Form besser mit? Ja, weil ich kann ja nicht sagen, ist das jetzt eine Selbsthilfegruppe geworden oder liefert sie wirklich das, was in der Form dort ist und ist die Selbstmotivation in der Community groß genug, weil ich ihnen genügend Entscheidungsgewalt gebe, weil ich ihnen genügend Freiheiten gebe? Das kann ich natürlich aus dieser Taxonomie nicht herauslesen, aber das wäre für mich ein wichtiger Punkt für Best Practices. Deshalb die vier. [0:30:02.0]
- **Speaker 1:** Okay. Gibt es für dich spezielle Dimensionen, die du als besonders hilfreich erachtest? [0:30:17.9]
- **Speaker 2:** (..) Hilfreich nicht, aber spannend ist die Diskussion über Rollen und themenbasiert, also sprich die Target Group. Das ist auch hier wieder kontextspezifisch und auch wieder: Was bedeutet das wirklich in Bezug auf die Selbstständigkeit bzw. auch die Erwartungshaltung. Was soll dort in der Form herauskommen? Und da gibt

es die größten Diskussionen drüber, das haben wir gerade auch im Zusammenhang dann mit dem Thema: Ist es eine offene oder eine geschlossene Community? Target Group und in der Form die Selection sind Themen, die bei uns eine wesentliche Rolle spielen, wenn wir eine Community bewerten oder auch aufsetzen. (..) Wir haben also wenn wir neue Funktionalitäten entwickelt: Das muss eine geschlossene Community sein und es war in der Form sehr spannend, weil es aus der Art kommt: Wen dürfen wir überhaupt da mit reinnehmen? Also auch da wieder die Target Group. Das sind sehr interessante Entscheidungen. Also je kritischer das in dem Bereich des Faktors Innovation geht, wird es interessanter in bestimmten Kombinationen. Und deshalb fand ich jetzt die Selektion und in der Form Target Group Dimension oder Charakteristik für mich sehr spannend, wie das hier drauf steht. Und ich glaube das ist auch etwas, was man speziell betrachten muss. [0:32:28.3]

- **Speaker 1:** Okay. (...) Dann geht es darum. Also so eine Taxonomie, die kann man jetzt erstellen und dann hofft man natürlich, dass es die aktuellen Arten, zum Beispiel, die es von Communities of Practice gibt, auch darstellt. Jetzt ist es aber ja so, dass es vielleicht in zehn Jahren ganz anders aussieht, dass diese Taxonomie also nicht mehr unbedingt alles darstellen kann. Und daher ist es relativ wichtig, dass man solche Taxonomien in Zukunft auch anpassen kann, dass man zum Beispiel in Dimensionen noch mal hinzufügt oder auch gewisse Charakteristiken hinzufügt. Und darauf wäre jetzt hier eben die Frage, ob du der Meinung bist, dass man diese Taxonomie zukünftig gut erweitern und anpassen kann. Das heißt hier noch mal zwischen eins und fünf: Wie sehr siehst du das? Und dann wäre es natürlich interessant, ob du vielleicht auch direkt Probleme siehst, was dabei sein könnte. [0:33:33.3]
- **Speaker 2:** Ja. (..) Also ich glaube, dass man sie erweitern kann. (..) Ja, ich gebe jetzt mal ein Beispiel: Wenn du sagst, du hast Location und Organisation, da kann man sich eventuell auch noch mal überlegen: Was sind denn solche kulturellen Themen? Also wie arbeite ich mit einem Rumänen zusammen? Wie arbeitet der Italiener mit dem Deutschen zusammen? Wie der Franzose mit dem Italiener? Da gibt es ja auch noch Varianten aus diesem kulturellen Bereich, der eventuell auch noch mal spannend sein kann. Das kann man ein bisschen abdecken hier mit Multiple Time Zones. Aber ich kann halt als Deutscher in Amerika sitzen oder in Indien habe aber. Also dieses, dieser kulturelle Aspekt wie arbeiten oder wie wird so etwas akzeptiert könnte auch noch mal vielleicht eine ein Faktor sein. (..)Aber ich kann es mir vorstellen, gerade was wir jetzt gerade sehen, die starke Abschottung oder der starke US Bereich. Wir sehen das Thema mit Russland China, also wir sehen ja eine Vierteilung. Praktisch auch dieser Verständnisse des das Business. Ich glaube, das könnte etwas sein, was man zukünftig auch in Communities besser mit betrachten muss. Aber das würde hier gut mit reinpassen. [0:35:03.7]
- **Speaker 1:** Und rein von der Struktur her, wie diese Taxonomie aufgebaut ist. Siehst du da ein Problem, dass man zum Beispiel so eine Dimension mit reinnimmt? [0:35:12.6]

- **Speaker 2:** Nein. Also man könnte das wie gesagt hier unter Scope als weitere Dimension in der Form super mit reinpassen. Wir sind offen in der Form mit der Anzahl. Ich glaube, es sollte nicht größer werden, wenn ich jetzt den Purpose sehe. Das sollte jetzt nicht noch mehr werden, sondern sonst wird es zu feingranular. Aber in der Form. Ich sehe keine Schwierigkeiten in der Form, dass ich diese Taxonomie in der Form erweitern oder ich sage jetzt mal adaptieren könnte in den nächsten Jahren. [0:35:44.7]
- **Speaker 1:** (...) Und jetzt geht es darum, ob die Taxonomie und vor allem aber auch die Dimensionen und einzelnen Charakteristiken verständlich sind. Es wäre mir schon ein paar Sachen besprochen und da hätte ich eben auch gerne ein Rating. Wie verständlich siehst du das Ganze? [0:36:11.9]
- **Speaker 2:** Die Frage jetzt, bevor ich die die Bewertung mache. Also gehst du davon aus, dass du diese Tabelle gibst? Nur die Tabelle ohne irgendwelche Zusatzinfo und sagst die muss selbsterklärend sein. Oder sagst du, da ist halt immer ein kleiner Beipackzettel drin, dass ich halt jede Dimension oder jedes Charakteristik kurz beschreibe. Also ich könnte sagen, was ist zum Beispiel jetzt mit dem Organizational Support gemeint und würde praktisch über die einzelnen Charakteristiken einen Zweizeiler mit packen. [0:36:46.1]
- **Speaker 1:** Genau, also ein Zweizeiler ist schon mit dabei. Wir hatten ja auch zum Beispiel vorhin short short term versus long term. Genau, also das ist schon mit dabei, aber es ist jetzt nicht irgendwie ist jetzt keine DIN A4 Seite, die das im Detail, erklärt. Nein. [0:37:03.5]
- **Speaker 2:** Okay. Mir ging es nur wirklich, ein kleiner, ein kleines Wrap up. Also ich sage immer ein kleiner Beipackzettel, keine einzelne Bachelorarbeit. Aber wenn ich jetzt eine DIN A4 Seite dahinter hätte mit den Beschreibungen, dann würde ich sagen ist sie einfach zu verstehen, dann würde ich da eine fünf geben. [0:37:20.3]
- **Speaker 1:** Okay. Wir hatten ja eh schon auch so ein, zwei Dimensionen oder Charakteristiken vorher, wo man vielleicht drüber stolpern könnte. Siehst du außerhalb davon noch irgendwas, wo man drüber stolpern könnte? [0:37:38.5]
- **Speaker 2:** Nein. [0:37:39.1]
- **Speaker 1:** Okay. (...) Gut. Und dann? Das ist jetzt schon die letzte Frage. Ich würde gerne wissen, ob du der Meinung bist, dass man diese Taxonomie recht einfach in der Praxis auch tatsächlich anwenden kann. [0:37:58.0]
- **Speaker 2:** Ja. Also ich habe jetzt in unserem Gespräch, deshalb war ich vielleicht auch mal ein bisschen holprig, wenn ich jetzt meine ein, zwei Communitys hier durchgegangen und habe sie probiert, hier einzustufen. Also das war relativ einfach und das ging sehr gut. Also würde ich da eher eine fünf geben. Also für jemanden, der sich dafür interessiert. Also wenn jemand wirklich eine Community aufbauen möchte und in der

Form auch solche strukturierten Ansätze liebt, dann würde ich sagen. Fünf Wenn du jetzt jemanden unstrukturierten Menschen hast, der mehr auf Chaostheorien setzt, dann würde ich sagen, damit tust du ihm keinen großen Gefallen. (..) [0:38:41.7]

- **Speaker 1:** Wenn du das jetzt so im Kopf schon durchgegangen bist, gab es dann vielleicht irgendwie eine bestimmte Dimension, wo du vielleicht öfter kurz noch mal mehr drüber nachdenken musstest oder wo du ein bisschen gegangen bist? Oder ging das alles relativ simpel? [0:39:03.0]
- **Speaker 2:** Es ging eigentlich relativ simpel. Was in der Form in die Tabelle gebracht hat, ist Du überlegst noch mal zweimal, wo du gesagt hast, Darüber habe ich mir am Anfang keine Gedanken gemacht. Ja. (...) Das war jetzt zum Beispiel jetzt hier mit long oder short Term oder in der Form. Das war jetzt so erstmal jetzt sage ich mal wo ich jetzt. (..) Hätte ich jetzt nicht ohne diese Taxonomie bei mir auf eine Beschreibung gesetzt, wie die Community aufgebaut ist, aber Von der Seite. Wenn ich da durch gehe, findet man die richtigen Sachen. War einfach. [0:39:47.6]
- **Speaker 1:** Okay. Ja, sehr gut. Dann würde ich nämlich jetzt schon weitergehen. Dass wir es auch in der Praxis tatsächlich jetzt einmal gemeinsam ausfüllen können. (..) Also wenn du magst, Du kannst dich jetzt einfach mal für ein Beispiel bei euch, was ihr an Communities of Practice nutzt, in dem Bereich einfach mal entscheiden und dann können wir das hier einfach mal gemeinsam ausfüllen. Ich habe die hier drei Dimensionen mit einem Sternchen markiert und das sind die einzigen Dimensionen, wo du verschiedene Ausprägungen wählen kannst. Das heißt, du kannst mehrere auf einmal wählen. Bei allen anderen müsstest du dich jetzt für eins entscheiden. Okay. [0:40:29.0]
- **Speaker 2:** Ich würde bei mir einfach weil es auch dem Lehrstuhl nahe ist, auch in Softwareentwicklung ist, würde ich aber trotzdem das Thema Enterprise Architektur nehmen, also unser Chapter of Practice Enterprise Architecture. (..) Und da ist der Purpose in der Form Knowledge Creation, knowledge sharing, Support, definition of practices and standards und Creation of Solutions. Also im Prinzip fast alles, bis auf das erste: Informationsaustausch. [0:41:07.6]
- **Speaker 1:** (...) Gut. [0:41:34.5]
- **Speaker 2:** So, jetzt haben wir das Thema von der Organisation her und dem Mindset, wo wir jetzt unsere neue Organisation aufgebaut haben und unser neuer CEO müssten wir eigentlich, das Thema Supporting nehmen. Aber dadurch dass wir uns noch in diesem Change Prozess befinden und die Leute erstmal dieses neue Thema und diese Verantwortung lernen müssen, würde ich hier erstmal in das Richtung neutral gehen. Normalerweise ein bisschen in Richtung Hinderling, aber wie gesagt, unsere Organisation ist richtig aufgestellt, aber sie ist noch nicht richtig adaptiert von den ganzen Bereichen. So, deshalb gibt es in der Form auch wenn ich sage, Organizational Support ist für mich jetzt eine Sichtweise. Ich glaube in Kombination oder. (..) Organizational

Support verstehe ich, dass die das Management in der Form diese Art und Weise in der Form gerne möchte. Und deshalb sehe ich auch, dass ich bei uns einen aktiven Support, wenn nicht sogar Sponsorship, dafür bekomme. (..) [0:42:56.5]

- **Speaker 1:** Genau. Wir können hier auch gerne noch mal kurz auf die Details eingehen. (..) Also es kommt ja auf jeden Fall die Awareness vor. Das bedeutet, wenn das Management davon weiß, dann hätten wir die auf jeden Fall schon. Das heißt, das erste würde rausfliegen. Genau so, wie ich es verstanden habe, findet das Management das auch gut. Das heißt, wir werden auch schon mal im Approval Bereich mal mindestens. [0:43:18.3]
- **Speaker 2:** Es fordert es ein. [0:43:19.8]
- **Speaker 1:** Oder es fordert sogar ein. Okay. [0:43:22.0]
- **Speaker 2:** Also deshalb würde ich sogar sagen eher in Richtung Active Support und Sponsorship. [0:43:26.9]
- **Speaker 1:** Ja. [0:43:27.5]
- **Speaker 2:** Also Sie haben. Sie haben entschieden, dass Sie gerade bei uns in diesem Chapter. Also es gibt bei uns drei große Chapter, wo Sie gesagt haben, Das ist für mich strategisch ganz wichtig. Und auch die Chapter Leads sind Teil des erweiterten Führungskreises. Also jetzt, wenn es in dem klassischen Thema siehst, ich bin zum Beispiel ein Senior Vice President in der Rolle. Ja, auch wenn ich keine Abteilung oder Leute mehr habe. Aber wir haben das getrennt. Wir haben funktional dadurch. Aber weil das Thema Enterprise Architektur in der Gesamtheit sehr wichtig ist, strategisch wie operativ. Haben sie das halt als Chapter genommen und deshalb gibt es einen Active Support. Beziehungsweise aus meiner Sicht sogar ein Sponsorship, dass Sie sagen, das ist für mich wichtig, damit meine Produktorientierte in der Organisation und auch die Verknüpfung von Business und IT überhaupt funktioniert. (..) [0:44:29.7]
- **Speaker 1:** Wird denn diese Community of Practice, Also ich habe verstanden, dass sie, dass sie nicht nur supportet, sondern eben auch eingefordert wird. Unter Sponsorship versteht man aber jetzt hier in der Taxonomie schon darunter, dass auch tatsächlich Geld zur Verfügung gestellt wird. Also Unterschied dann zwischen dedicated Budget und Sponsorship wäre in dem Sinne, dass hier zum Beispiel darunter fällt, dass irgendwie mal ein Gastvortrag oder sonstiges Event vielleicht einfach mal finanziert wird. Und dieses dedicated Budget. Da geht es eher darum, dass man zum Beispiel sagt, es gibt einen Kollegen, der aktiv die Rolle als was weiß ich in dieser Community einnimmt. Also wirklich, wo man sagt da, der ist fest eingeplant für diese Tätigkeiten in der Community. (..) Trifft das hier auch zu? [0:45:20.9]
- **Speaker 2:** Dann würde ich dedicated Budget nehmen. [0:45:22.9]
- **Speaker 1:** Okay. (...) Okay. [0:45:28.2]

- **Speaker 2:** Ja, sogar Sponsorship auch weil ich gebe jetzt mal so wir haben. Die Community läuft nicht so wie geplant. Also die Teilnahme, die Performance ist noch nicht so da und das hat man in der Form gesagt. Okay, wir lassen jetzt noch mal die Leute, die den Organisation Change mit uns geplant haben, die haben sich jetzt noch mal die Communities angeguckt, machen jetzt noch mal so einen Community Day und schauen praktisch, dass die Community aktiver wird. Die haben gesagt, die Inhalte sind alle richtig, die Struktur ist da. Also alles das, was ich in der Taxonomie finde. Super. Haken dran. Warum funktioniert es nicht? Da hat man jetzt in der Form extra Externe für eingekauft, die jetzt dort mit draufgucken und das bewusst als Externer durchführen, so dass der Chapter Lead seine neutrale Rolle behalten kann. Also deshalb würde ich sagen, das wäre im speziellen Sponsorship. Und dadurch, weil wir Chapters haben, die in der Form auch ein eigenes Budget haben, gilt das in der Form die drei okay passt. Somit wären wir dann bei dem nächsten Formation, dann auch bei Top Down Initiation, weil es kam von ganz oben und Setup by Management okay. Im Prinzip long term. Target Group ist jetzt relativ schwierig. Beziehungsweise es ist rollenbasiert. Wir haben nur unterschiedliche Rollen drin. Also wir haben alle Rollen da drin, die entweder was mit Architektur zu tun haben, Lead Developer, Softwareentwickler in der Form alles oder drin, das heißt basierend auf ihrer Rolle werden sie der Community zugewiesen? [0:47:37.0]
- **Speaker 1:** Ja, verstehe. [0:47:38.7]
- **Speaker 2:** Deshalb würde ich das sagen. [0:47:39.7]
- **Speaker 1:** Rollenbasiert heißt es dann auch automatisch Leute, die diese Rolle haben, werden automatisch hinzugefügt. [0:47:48.8]
- **Speaker 2:** Sie werden in der Form mit eingeladen. (..) Wir haben das so, dass wir in der Form die Community noch mal unterteilt haben in. Also wir erwarten, dass bestimmte Personen mit einer Rollenbeschreibung an der Community teilnehmen. Wir haben aber in der Form auch Personenkreise, wie zum Beispiel jetzt Architekten. Da ist es mandatory und da ist auch in der Form erwartet, dass sie eine große Contribution liefern. Während gegenüber ich sag mal, wir haben drei, drei Gruppen, also wir haben Core Team Extended und dann noch mal eine erweiterte Extended Team, also Local IT, wo wir nicht erwarten, dass sie mir zuarbeiten, aber sie könnten es. Also es geht da um die Erwartungshaltung. Deshalb wir schreiben sie alle an, aber die Teilnahme ist wie gesagt bis auf den Kern, also alle, die einen Architekturtitel tragen, für die ist es Mandatory, für die ist es Pflicht. Alle anderen in der Form ist optional, aber gewünscht. [0:49:00.8]
- **Speaker 1:** Okay, dann können wir eigentlich kurz mal hier runter springen. Das wäre ja dann im Endeffekt eigentlich schon bei Enrollment mit dabei, oder? Genau, dass man sagt Mandatory würdest du dann sagen, wir haken mal alle drei an? [0:49:16.4]

- **Speaker 2:** Würde alle drei nehmen, weil ich ja auch gesagt habe, wir haben drei, weil das eine ist zum Beispiel jetzt für jeder Es gibt jemanden, der arbeitet in dem Bereich, Aber es wird nicht erwartet, dass er vielleicht einen neuen Standard mit ausarbeitet, sondern sich vielleicht nur die Informationen darüber holt oder einfach nur zuhört oder einfach interessehalber dabei ist. Wie gesagt, dann gibt es Expected. Bei uns sind das die sogenannten Technology Leads oder Tech Leads und und Lead Developers, die da wird erwartet, dass sie teilnehmen, damit sie unsere Standards usw. kennen. Und sie können da auch natürlich den Support mit einfordern. Und dann Mandatory. Wie gesagt, hängt es von der Rolle des Architekten, dass ein Kernteam von ungefähr zehn Leuten aktuell. Für die ist es Mandatory. [0:50:03.5]
- **Speaker 1:** Okay. [0:50:05.4]
- **Speaker 2:** Da haben wir das auch so gemacht, dass zum Beispiel wenn du weiter dich weiterentwickeln möchtest, als Architekt bei uns dann zählt. Die Teilnahme an der Community ist ein wesentlicher Faktor für die Bewertung deiner Rolle und deiner Performance. Also je mehr du teilnimmst, je mehr du auch cross-funktional teilnimmst. Also ich sag jetzt mal, wenn du mir hilfst, die Policy zu schreiben, ja anstatt immer nur ein Lösungsdesign, dann bekommst du in der Form ein höheres Ranking, was dazu führt, dass du in der Form, im Endeffekt die Karriereleiter nach vorne gehen kannst. Wir haben einen Karrierpfad für die Experten und der, der sagt halt aus Je aktiver du in dieser Community bist, desto wahrscheinlicher ist es, dass du die nächste Stufe erreichen kannst. [0:50:56.6]
- **Speaker 1:** Ja. (..) [0:50:59.1]
- **Speaker 2:** Das bildet jetzt die Taxonomie nicht ab, aber das ist etwas, wo wir sagen Somit kriegen wir die Motivation in der Form in die Community. [0:51:08.0]
- **Speaker 1:** Ja, verstehe. (..) [0:51:10.9]
- **Speaker 2:** Somit würde ich sagen, diese Community ist auch open. Wenn wir da in der Form dann sehen, weil ich erst mal grundsätzlich jeden zulasse. Ja. Wir haben auch, wir haben auch closed man, die sind dann eher in dem Bereich Innovation, wo wir das klein halten wollen. Die Größenordnung liegen wir zwischen 10 bis 50. So die Organisation, würde ich jetzt sogar sagen, ist auch cross-organizational. Warum Cross organizational? Weil wir haben bei uns natürlich auch Outsourcing-partner, externe Firmen, die teilweise die Architektur Rollen übernehmen. Und die sind auch explizit mit in diese Community mit eingeladen. Also jeder, der eine Architekturrolle hat, ob intern oder extern, muss mit in diese Community und muss die Sachen mit vorstellen. [0:52:06.7]
- **Speaker 1:** Okay. (..) [0:52:09.1]
- **Speaker 2:** Und wir sind in verschiedenen Zeitzonen unterwegs. (..) [0:52:14.5]

- **Speaker 1:** Ja. (..) [0:52:20.1]
- **Speaker 2:** So, jetzt kommt der Steering. Hier würde ich eigentlich inaktive Steering nehmen, das heißt ich habe entweder wir, haben das so, dass ich grundsätzlich die Steuerung der Community übernehme ich dieses aber, delegiere immer monatsweise an einen der co-architekten. Ja, aber wenn der nicht da ist, übernehme ich die Rolle. Aber wir haben das so geregelt, dass es immer durch einen Architekten aktiv gesteuert wird. Wenn wir unsere Community Meetings haben, wenn wir die Themen haben, wie wir das Aufarbeiten. Das ist so ein rotierendes, praktisch Konzept, damit sich jeder mal in diese Situation reinsetzen kann, so eine Community zu moderieren und zu steuern. (..) Sie hat eine Formel Das ist Power. [0:53:15.3]
- **Speaker 1:** Ja. Darf ich einmal kurz noch zurückspringen? Und zwar geht es vor allem beim Steering auch sehr darum, wie sehr das Management mit eingreift. Also hält sich das komplett raus oder gibt es vielleicht gewisse Themen sogar vor? Das würde dann zum Beispiel unter aktive Steering fallen. [0:53:38.3]
- **Speaker 2:** Also für mich ist es ja, das ist jetzt schwierig zu sagen, weil ich eben sagte, ich gehöre zum erweiterten Führungskreis. Somit bin ich, sage ich jetzt mal, eigentlich eine Führungskraft, die das aktiv mit steuert. [0:53:50.8]
- **Speaker 1:** Ja. [0:53:51.3]
- **Speaker 2:** Also theoretisch in meiner Rolle in meiner Position müsste ich sogar sagen Management lead. Das wäre aber in der Form, schwer zu verstehen. Wie gesagt, in unserer Organisation würde ich eher sagen aktive Steering. Ich habe immer die Option, dort mit einzugreifen und meine Rolle als Chapter Lead für diese Community ist halt für viele schon Management Style. Ja, und zwar deshalb, weil wir halt auch eine formalen Entscheidung (unv.). Die Entscheidungen für jede Solution Architektur Technologie haben wir zwei drei Stufen, aber wird in der Community geführt. Ja, es gibt nur noch ein Gremium darüber, was aber auch wieder aus den Co-Architekten ist die Ausnahme Themen behandeln können oder produktübergreifende Themen. Oder wenn bestimmte Sachen da sind, wo wir übergreifende Themen sogar bei uns organisationsweit haben von der Seite. Aber alles andere bleibt in der Community und die Community hat das Mandat in der Form, die Entscheidungen entsprechend zu treffen. [0:55:12.2]
- **Speaker 1:** Okay. [0:55:18.2]
- **Speaker 2:** Okay. Maturity. (..) Weil ich ja eben sagte in der Form. Wir sehen da noch ein paar Schwierigkeiten. Gerade weil wir uns in diesem Organisations-Change befinden, würde ich eher sagen, wir sind noch in der Initiationsphase. Ja, weil wir haben zwar die ganzen Rahmenbedingungen belegt, wir leben diese Community auch, aber wir sehen, dass noch nicht alle und vor allem auch bei uns, und der Rest der Organisation noch nicht genau verstanden hat, welche Verantwortlichkeiten in diesen Communities oder in dieser Community liegt. Na ja, also da sind wir in der Form, noch ein bisschen auf

Hilfe angewiesen. Ich gebe dir ein Beispiel Wir haben bei uns die IT Product Owner, die haben die Gesamtverantwortung für einen bestimmten Service. (..) Nimm es mal als Mini CIO. So, ja, er hat die Budgetverantwortung, die Zielvereinbarung und darunter arbeitet jetzt ein Architekt. So, jetzt haben wir, wenn ich jetzt sage, die Community hat die formale Entscheidungsmacht, zu sagen, ich nehme Technologie A, jetzt sagt der Product Owner Ich will aber B Jetzt ist der Architekt in diesem Konflikt. Ja, er arbeitet für den. Wenn er jetzt sagt: Nö, machen wir nicht, hat er ein Thema. Und diese Akzeptanz, dass ein Product Owner akzeptiert, dass die Entscheidung in der Community gefallen ist und es entsprechend dann auch unterstützt und durchführt, das ist noch nicht sehr ausgeprägt. Und deshalb würde ich sagen Initiationsphase okay. (...) [0:57:11.1]

- **Speaker 1:** Alles klar. Gut, dann hätten wir das schon fertig ausgefüllt. Hast du denn noch irgendwelche letzten Fragen oder Anmerkungen? Auch jetzt mal allgemein auf diese Taxonomie? [0:57:26.2]
- **Speaker 2:** Nein. [0:57:27.4]
- **Speaker 1:** Okay. Alles klar. Dann würde ich mich noch mal herzlich bei dir bedanken. [0:57:56.6]

A.2.2. Interview with Expert 2

- **Speaker 1:** Gut. dann würde ich schon in die allgemeinen Fragen reinkommen und würde dich einfach kurz bitten, dass du vielleicht kurz erklärst, was so deine berufliche Rolle ist und was für Aufgaben damit einhergehen. [0:00:17.0]
- **Speaker 2:** Ich bin Enterprise Architekt. Mein Hauptthema sind jegliche Modellierungen, sprich Datenmodell oder Information-modell, und auch das Metamodel. Und ich bin bei uns in der Firma so der Modellierungsguru, der versucht Sachen in ein Schema zu pressen, um das dann anzuwenden zu können. Wir sind bei uns intern in verschiedenen Teams organisiert. Ein Team nennt sich Enterprise Architektur und hat drei Sub-teams - Da bin ich nicht mehr drin, da war ich vorher drin. Jetzt ist dann eben ein Daten Architekturteam entstanden, das auf gleicher Stufe wie Enterprise Architektur ist, was eigentlich ein Teilgebiet der Architektur ist. Aber das hat man rausgenommen und ich bin in dem Team jetzt aktiv und tätig. Vorher war ich in dem anderen Team. Ja, Entscheidungskompetenzen (...) Also wie strukturieren wir definieren? Also ich persönlich definiere das Ganze Modellierung das standardisierte Datenmodell (..) Was gibt's sonst noch? Und ich bin natürlich in verschiedenen Gremien mit involviert und habe mit Mitentscheiden in verschiedenen anderen Themen auch, wo ich eigentlich nicht der Owner bin. Also ich habe Owner-Themen und ich habe Themen, wo ich Consulting gebe. [0:01:48.7]
- **Speaker 1:** Könntest du vielleicht auch kurz erläutern, was du vielleicht schon für Erfahrungen mit Communities of Practice im Kontext der großskalierten agilen Softwareentwicklung finden konntest. [0:01:59.9]
- **Speaker 2:** Okay, also wir sind seit Ende 2017 agil organisiert, nach SAFe aber wir fahren so ein doppelspuriges System. Sprich, alles was geht, wird mit SAFe gemacht. Aber wir haben auch noch Linienorganisation, also B2B bei uns arbeitet hauptsächlich in Linie, hat aber hier und da auch schon SAFe-Konstrukte aktiv. Ich bin innerhalb der SAFe Organisation als Enterprise Architekt aufgelistet. In der Vergangenheit oder in der Anfangsphase von SAFe war ich auch Systemarchitekt unterwegs. Mittlerweile bin ich nur noch Enterprise Architekt. Da hatten wir zwei Rollen – da hatten wir eigentlich eine Systemarchitektur oder Solution Architektenrolle und gleichzeitig einen Enterprise Architektenrolle - Das war also eine gemischte Verantwortung, die wir hatten, was aber Konflikte verursacht hat, dass man eigentlich sich selber überwachen musste, also Governance auf sich selber durchführen musste. Also das war ist teilweise immer noch so, aber man versucht das jetzt stärker zu trennen, so dass ich jetzt nur noch Enterprise bin und wir sind in einem Gesamt Governance Organisation integriert. (..) Ja, was soll ich noch sagen? Mit SAFe Community Praxis haben wir verschiedene in Umlauf gebracht. Kann ich noch detaillierter eingehen. Wir haben eigentlich alle Optionen, die ich da auf dem Bild (Die Taxonomy) gesehen habe von dem Modell. Wir sind uns eigentlich im Einsatz und ich bin in allen. Also jetzt bin ich schon seit 17 in diesem Modell mit drin und da habe ich eigentlich schon alle Konzepte, alle Modelle selbst

involviert gewesen. Entweder habe ich selbst Communities gestartet oder ich war Teil einer Community. (..) Oder hatte Teilverantwortung innerhalb einer Community und habe eigentlich alle Optionen bis dato vorhanden. [0:04:12.4]

- **Speaker 1:** Okay, hört sich ja schon mal gut an. (..) [0:04:16.7]
- **Speaker 2:** Ist aber ein bisschen chaotisch manchmal. (..) [0:04:20.3]
- **Speaker 1:** Ja, das glaube ich. (...) Genau da würde ich jetzt eben in die in die Fragen einsteigen, die jetzt gezielt auf diese Taxonomie gehen. [0:04:40.9]
- **Speaker 2:** (...) Also bis dato habe ich da keinen Fehler oder große Lücken gesehen. Also bis dato kann ich nur sagen ja, also ich würde eher 5 sagen (Volle Zustimmung zur Aussage, dass die Taxonomy alle möglichen CoPs in LSAD abbilden kann). [0:05:02.6]
- **Speaker 1:** Also das heißt, dass du alle deine Communities, die du so kennst, konntest du damit quasi abbilden. (..) [0:05:11.7]
- **Speaker 2:** Ja, das einzigste wo ich noch bisschen mehr sagen (unv.) Challenge, ich weiß nicht, bei uns ist das nicht so klar und sauber getrennt. Was ist eine Community und was ist ein Vorhaben oder ein Projekt? Das geht so fließend über. Manchmal heißt es Community of Practice ist aber mehr ein Projekt. Manchmal wird es als Projekt bezeichnet, aber es müsste eigentlich eine Community Practice sein. Diese Abgrenzung wird bei uns nicht so sauber gelebt. [0:05:43.5]
- **Speaker 1:** (...) Wenn du dir mal nur die linke Seite von der Taxonomie angeschaut hast, also die Dimensionen davon. Ist dir da irgendwie aufgefallen, dass vielleicht eine Dimension fehlt? [0:06:03.1]
- **Speaker 2:** So spontan nicht. Ihr habt nicht übermäßig viel Zeit investiert, ich habe das Paar mal durchgelesen und gesagt: Ja, haben wir, haben wir, haben wir. Haben wir uns jetzt nicht spontan aufgefallen: Oh, da fehlt was. Das ist mir jetzt noch nicht ins Auge gekommen, aber vielleicht kommt das ja noch mal, wenn es mir mal auffallen sollte, dann melde ich mich. [0:06:23.1]
- **Speaker 1:** Ja, sehr gut. Was für eine Zahl von 1 bis 5 würdest du denn dann für die Vollständigkeit von dieser linken Seite vergeben? [0:06:32.4]
- **Speaker 2:** 4 bis 5. Also wenn ich nicht weiß, was noch fehlt, dann müsste ich fünfte. [0:06:38.0]
- **Speaker 1:** Okay. Ja, wir können ja mal schauen. Vielleicht kommt ja noch irgendwas hoch. Gar kein Problem. Wäre dir denn auf der rechten Seite bei den Charakteristiken aufgefallen, dass da vielleicht irgendwie eine Ausprägung fehlt? [0:06:52.3]
- **Speaker 2:** Nein, ist genau das Gleiche. Ich konnte eigentlich jedes, was ich hatte, bis jetzt einsortieren oder was mir in den Kopf geschossen ist. Einige davon haben wir

nicht, aber das ist ja nicht, dass das schlecht ist. Das ist dann halt bei uns nicht. (..) Aber so dass ich irgendwas gesehen hätte und gesagt habe, da haben wir noch mehr. Da ist mir jetzt nicht spontan nichts, nichts aufgefallen. [0:07:16.8]

- **Speaker 1:** (..) Jetzt schauen wir uns im Endeffekt die Taxonomie nochmal von der Gegenseite an, das heißt, jetzt geht es nicht mehr darum, ob irgendwas fehlt, sondern mich würde jetzt interessieren, ob vielleicht irgendwie was zu viel ist. Gibt es vielleicht zum Beispiel hier auf der linken Seite Dimensionen, die man zusammenfassen könnte? [0:07:49.1]
- **Speaker 2:** (..) Ich sehe da jetzt spontan nichts, was man zusammenlegen sollte. Könnte, sollte. [0:08:19.2]
- **Speaker 1:** Wäre dir da bei den Charakteristiken was aufgefallen, was vielleicht verknüpft werden könnte oder was einfach zu viel ist deiner Meinung nach. [0:08:32.6]
- **Speaker 2:** (...) Also genau in der Organisation Support. Das heißt ja nur, das hatte ich überlesen als Support, dass es auch Communities gibt, wo das Management überhaupt gar nicht kennt und auch nie zugestimmt hat, sondern dass die Mitarbeiter das einfach für sich entschieden haben und kein Manager irgendwas mitgeredet. (..) Das würde unter den ersten Punkt passen. [0:09:37.5]
- **Speaker 1:** Genau. Genau das wird genau hier reinfallen. (8) [0:09:47.8]
- **Speaker 2:** Genau. Wir haben zusätzlich noch eine einzelne Zeitzone. Das ist halt für unsere Firma. (...) Aber so sehe ich da spontan nichts. [0:10:19.6]
- **Speaker 1:** (...) Was für eine Zahl würdest du dann dem geben, dass es quasi nicht zu viel ist, was wir hier präsentieren? [0:10:33.5]
- **Speaker 2:** Zu viel ist es nicht nein. Ja, das kann man natürlich dann für die einzelnen Anwendungen zusammenstreichen und sagen okay, das und das und das haben wir nicht. Dann ist das okay. Also lieber mehr als zu wenig. [0:10:45.7]
- **Speaker 1:** Okay. Gut, dann geht's jetzt darum, wie man vielleicht diese Taxonomie in der Praxis tatsächlich benutzen und anwenden könnte. Also wofür ist es vielleicht hilfreich, dass man das hat? Und da habe ich jetzt so verschiedene Use Cases mal rausgeschrieben und die würde ich gerne jetzt eins zu eins mit dir durchgehen. Und zwar wäre der erste Use Case gleich mal, dass man die Taxonomie so ein bisschen als Inspirationsquelle vielleicht verwendet für seine eigenen Communities. Siehst du da drin einen Nutzen? [0:11:30.0]
- **Speaker 2:** (...) Dass man eine neue Community startet und da rein kommt und sagt: Okay, ich glaube, die Inspiration kommt nicht durch so ein Modell, sondern durch den Bedarf. (..) Ich habe da immer wieder Abstimmungsbedarf. Und dann, wenn man den Bedarf klären würde, da würde diese Taxonomie helfen zu sagen: Ja, wo stehe ich

überhaupt? Kann ich das? Also beispielsweise, dass man sich bewusst ist, was man selber gestaltet hat, dass man gar kein Backup vom Management hat oder dass man genau weiß okay, ich bin nur in einer Zeitzone. Okay, fällt das weg? Also man könnte ja hinter jeder dieser Taxonomie eine firmen-interne Regel legen und dann würde das ja helfen, beim Set-up zu sagen, ich bin jetzt eine Community genau von diesem Typ. Das ganze typisieren. (..) Dann würde ich beim ersten (Use Case 1: Die Taxonomie als Inspirationsquelle) noch ein Fragezeichen machen. Also ich wüsste jetzt nicht, wie mich das inspirieren sollte. [0:12:46.2]

- **Speaker 1:** Genau. Also das, was du gerade gemeint hast mit es könnte vielleicht bei der Erstellung von so einer Community of Practice unterstützen. Das wäre mein zweiter Punkt gewesen. Bei der Inspirationsquelle geht es dann doch eher, glaube ich auf Communities of Practice, die vielleicht schon bestehen, dass man vielleicht sagt, man hat irgendwas noch nicht bedacht. (..) Oder hat nochmal einen neuen Anreiz vielleicht. [0:13:10.6]
- **Speaker 2:** Oder man erkennt, dass man das in zwei Communities machen sollte, weil das eine ist Typ A und das zweite ist Typ B. [0:13:23.5]
- **Speaker 1:** Wie viele Punkte, also 1 bis 5, würdest du dann dem Nutzen als Inspirationsquelle aktuell geben? [0:13:32.2]
- **Speaker 2:** 2 bis 3. [0:13:33.4]
- **Speaker 1:** Und dass es unterstützt beim Erstellen von so einer Community of Practice? [0:13:41.4]
- **Speaker 2:** Vier. [0:13:46.3]
- **Speaker 1:** Gibt es da was Spezielles? Zum Beispiel gerade beim Erstellen von so einer Community of Practice, was vielleicht noch helfen könnte? Also worin könnte vielleicht die Taxonomie noch gezielter unterstützen? [0:14:05.8]
- **Speaker 2:** Dass man vielleicht noch Typen hat. Also jetzt hat man ja alle Optionen, dass man aus diesen Optionen noch Klassen bildet und sagt okay, es gibt diese Kombination, es gibt diese Kombination am häufigsten und die Kreuzung gibt es gar nicht in der Firma. Vielleicht muss man da so typisieren könnte von den Communities: Ich starte jetzt eine Community vom Typ B und das hat deckt diese Kombination in der Taxonomie ab. Das wäre eine Idee. [0:14:45.7]
- **Speaker 1:** Ja. Verstehe. (..) Gut, dann der dritte Use Case wäre, dass die Taxonomy bestehende Communities of Practice bewertet. Siehst du da einen Nutzen? [0:15:01.0]
- **Speaker 2:** Ja, weil man sofort sieht: Was ist die Community? Das wäre vielleicht sinnvoll, sowas auf der Startseite von Community zu setzen, dass jeder, der da beiträgt oder mitmachen will oder überhaupt die Information ist, sofort sieht okay, das ist

etwas von Top Management gestartet ist. Oder es ist etwas, was irgendein unwichtiger Mitarbeiter selbst gestartet hat. Und da kann man auch erkennen, welche Bedeutung hat die Community oder wie ist sie verankert in der Firma? Welche Spielregeln gibt es da? Das finde ich auf jeden Fall wichtig. (...) [0:15:43.4]

- **Speaker 1:** Okay. Wäre das dann eine Fünf? [0:15:48.8]
- **Speaker 2:** Ja genau. [0:15:50.7]
- **Speaker 1:** Und dann noch der letzte Use Case wäre, dass die Taxonomie so ein bisschen dabei unterstützt, also so eine Art Best Practice darstellt für Communities of Practice. Siehst du das? Oder eher nicht? (..) [0:16:07.8]
- **Speaker 2:** Ja, doch. Dass man sich bewusst wird, wenn man eine startet. Was mache ich da eigentlich? Dass das eine Hilfestellung. Okay, ich bin jetzt hier, ich mache jetzt das. Okay, weil viele der Punkte, die da sind, habe ich mir auch erst bewusst geworden, wo ich das gelesen habe. Ah ja, stimmt, das machen wir so, das machen wir nicht so, das fehlt uns noch. [0:16:34.8]
- **Speaker 1:** Okay. Was für eine Zahl würdest du da geben? (..) [0:16:40.5]
- **Speaker 2:** Zwischen vier und fünf irgendwas. [0:16:42.9]
- **Speaker 1:** Okay. [0:16:45.0]
- **Speaker 3:** Dürfte ich vielleicht ganz kurz? (. .) Genau. Ich hätte eine kleine Frage hierzu. Und zwar, wenn du dir vorstellst, dass es zum Beispiel Best Practices gibt für Communities, die ähnliche Eigenschaften haben wie jetzt zum Beispiel deine Community, basierend auf so einer Einordnung über die Taxonomie. Könntest du dir sowas vorstellen? [0:17:12.1]
- **Speaker 2:** Ja. Du meintest, dass man sozusagen einen Gleichgesinnten hat, der eine ähnliche Community aufgebaut hat. Dann kann man sich mit denen austauschen. Ja, du hast auch kein Management Unterstützung. Können wir uns da mal zusammensetzen, wie du damit umgehst? [0:17:29.7]
- **Speaker 3:** Ja. [0:17:31.0]
- **Speaker 2:** Das könnte helfen. Oder du bist in einer anderen Zeitzone. Gut, das fällt jetzt weg. Wir haben die gleiche Zeitzone. Welche Probleme hast du da mit deinen Mitarbeitern? Sind die dann (..) Ganz woanders? Wie machst du die Meetings usw. Also auf jeden Fall. Ja. [0:17:47.3]
- **Speaker 3:** Danke. [0:17:49.1]
- **Speaker 1:** (...) Jetzt ist es ja so bei so einer Taxonomie, dass das ja im Endeffekt den aktuellen Stand repräsentiert. Aber es kann ja sein, dass sich Communities of Practice nochmal in der Zukunft ganz anders entwickeln und man vielleicht diese Taxonomie

anpassen oder erweitern müsste. Und da wäre es jetzt interessant, ob du der Meinung bist, dass man diese Taxonomie, wie sie gerade erstellt wurde, ob man die gut erweitern oder anpassen könnte oder ob du vielleicht in der Struktur irgendwelche Probleme dabei siehst. [0:18:28.2]

- **Speaker 2:** Man könnte da einfach eine Linie einziehen. Also von der Struktur sollte es passen. Das ist ziemlich offen gehalten. Dann kann man ja eine zusätzliche Linie machen. Mir fehlt eine Dimension. (...) Das sollte eigentlich kein Problem sein. Und bei uns kenne ich, also unsere Firma, da schafft man gerne neue Dimensionen. Jegliche Art von jeglichen Themen. Das heißt, das wäre für uns wichtig, dass man das erweitern kann. Aber ich sehe keine Challenge, dass man es nicht könnte. [0:18:58.3]
- **Speaker 1:** Siehst du bei den Charakteristiken Probleme, wo man das vielleicht nicht erweitern könnte? [0:19:07.1]
- **Speaker 2:** Da kann man es jetzt noch unterteilen, wenn man noch was hat. Also wenn eine Charakteristik fehlt, genau das gleiche könnte man ja auch einfach nur dazufügen, zusätzliche Spalte einfügen. (..) Also sehe ich da kein Challenge, dass man das nicht erweitern könnte. [0:19:29.7]
- **Speaker 1:** Okay. Was für Zahlen würdest du dann hier vergeben? (...) [0:19:38.0]
- **Speaker 2:** Ja. Maximum eine fünf um es leicht zu machen. [0:19:48.8]
- **Speaker 1:** Im letzten Teil geht es noch darum, ob diese Taxonomie einfach verständlich ist, oder ob es vielleicht spezielle Dimensionen oder Charakteristiken gibt, die jetzt noch nicht verständlich sind. [0:20:08.5]
- **Speaker 2:** Ja, gut, vom Namen her. Also wenn man die Charakteristik selber liest, dann ist sofort klar. Formation ist nicht ganz klar, was da gemeint war. Aber wenn man sieht okay. Long term, short term, dann ist es klar. Also für mich reicht es aber ich kenne bei uns in der Firma, da wird, sobald die kleinste Unklarheit oder Doppeldeutigkeit ist, dann kommen sofort irgendwelche Manager und sagen: Ja, das verstehe ich nicht. Das ist bei uns eine Krankheit. Und dann muss man immer alles doppelt und dreifach absichern, dass es auf keinen Fall missverständlich wird. [0:20:56.5]
- **Speaker 1:** Wenn man jetzt sagt, man hat hier eine kurze Erklärung, also ganz jetzt nicht ins Detail rein, aber, sondern wirklich grob einfach pro sage ich Charakteristik oder Dimension. Einfach eine ganz kurze Erklärung. Würdest du behaupten, dass es dann eindeutig wäre und verständlich wäre? [0:21:19.7]
- **Speaker 2:** Wenn, dann würde ich also die Kurznamen hier, Dimension usw. finde ich gut, aber dass man irgendwo ein Mouseover oder irgendwie irgendwas keine Besteuerung hat. Eine ganz kurze. Das wäre sinnvoll. [0:21:38.3]
- **Speaker 1:** Ja. Was für eine Zahl würdest du dann der Verständlichkeit geben? [0:21:43.3]

- **Speaker 2:** Ja. Vier. [0:21:46.8]
- **Speaker 1:** Dann sind wir jetzt schon angelangt beim zweiten Teil von dem Interview. Und jetzt würde ich dich eben darum bitten, dass du dir ein Beispiel aussuchst von einer internen Community of Practice, die ihr so habt und mal diese Taxonomie drauf anwendest, vielleicht kurz deine Gedanken irgendwie teilst, weswegen du was auswählst und vielleicht wieso? [0:22:18.2]
- **Speaker 2:** (...) Okay. Also am besten nehme ich meine eigene Community of Practice, das ist die Data Community. (...) Das ist Knowledge Sharing. Hauptsächlich, aber. Ja, genau. Jetzt ist es doppelt. Es gibt mehr. Also es ist ja nicht nur ein Punkt. Das kann man nicht. Oder Es ist gedacht, dass es nur eins gibt? [0:22:58.7]
- **Speaker 1:** Guter Punkt. Ich habe hier so Sternchen dran gemacht. Das ist einmal bei Purpose, Organizational Support und Enrollment. Hier darf man tatsächlich mehrere Sachen auswählen. Bei den anderen muss man sich auf eins festlegen. [0:23:14.5]
- **Speaker 2:** Ich habe auch Knowledge Creation, Support, Distribution of Information eigentlich auch. Definition of best practices eigentlich auch. Improvement auch. (..) Das ist schon zu viel für die Community. (..) Creation of solution - Nein. Innovation in gewisser Weise auch ein bisschen. Aber er ist nicht im Vordergrund. (...) [0:23:55.9]
- **Speaker 1:** Okay. [0:23:57.8]
- **Speaker 2:** Das ist schon wieder viel. Das ist auch eine gute Erkenntnis. Ist das vielleicht ein bisschen kleiner halten? [0:24:05.7]
- **Speaker 1:** Okay. (..) Kleiner halten im Sinne von ihr in der Community of Practice oder wir in der Taxonomie ihr persönlich. [0:24:16.2]
- **Speaker 2:** Also man sieht, okay, wir haben fast alle purposes, das sollte vielleicht nicht sein, dann müssten wir da vielleicht zwei Communitys draus machen. [0:24:25.8]
- **Speaker 1:** Mhm. Okay. [0:24:27.9]
- **Speaker 2:** Eine die vielleicht eher Operation macht, und eine die eher den Innovationsdrang macht. [0:24:35.1]
- **Speaker 1:** Ja. [0:24:36.4]
- **Speaker 2:** Genau das ist das Overall Organisation Culture und Mindset. Das ist hauptsächlich das Supporting. Wenn es die Community nicht gibt, passiert nichts in der Firma. Dann ist halt vielleicht einige Leute mehr Arbeit und Informationen zu finden. (...) [0:25:01.2]
- **Speaker 1:** Hier in der Dimension geht es so ein bisschen darum, wie die Teilnehmer auf so eine Community zum Beispiel reagieren oder auch grundsätzlich auf zum Beispiel agiles Arbeiten. Sind die da vielleicht sehr skeptisch gegenüber eingestellt oder finden

sie das eigentlich eine tolle Sache und sind da eben dann in dem Sinne quasi supportive, Das steckt hier so ein bisschen dahinter. [0:25:24.6]

- **Speaker 2:** Okay, dann muss ich auf neutral setzen. Es gibt schon Leute, die die, die das dann sagen: Ich glaube nicht daran, dass das zum Fliegen kommt. (...) Organizational Support – Awareness and approved würde ich sagen. [0:25:51.5]
- **Speaker 1:** Hier dürftest du auch mehrere auswählen, falls es zutrifft. Okay. [0:25:57.6]
- **Speaker 2:** Hier hätte ich jetzt gedacht, dass es entweder oder ist. (...) Okay, Sponsorship? (..) Vereinzelte Manager sponsern das aber allgemein nicht. [0:26:13.7]
- **Speaker 1:** Sponsorship zieht so ein bisschen darauf ab, dass zum Beispiel wenn mal jemand eingeladen wird oder mal ein Event organisiert wird, dass das vielleicht dann finanziert wird und dedicated Budget wäre jetzt zum Beispiel, dass es ja vielleicht eine bestimmte Positionen gibt oder einen bestimmten Mitarbeiter, der dafür bezahlt wird, dass er zum Beispiel diese Community irgendwie vorantreibt. (...) [0:26:40.8]
- **Speaker 2:** Haben wir nicht, Also nicht. Gibt es aber in der Firma diverse, wo dann vom Topmanagement auch organisiert werden und die geben Geld wird. (..) Aber in meinem Fall nicht. Ich habe da kein Geld. aktiv supported? Also unser Support, das heißt genau, vielleicht habe ich es beim ersten Mal lesen nicht ganz verstanden. Das heißt also wie? (..) Ob das Management supportet, sondern wie die Teilnehmer es supporten. [0:27:18.9]
- **Speaker 1:** (...) Organizational Support. Hier geht es schon darum, ob das Management zum Beispiel durch irgendwie Werbung oder zum Beispiel jetzt aktiv diese Community unterstützt. Awareness and Approval wäre jetzt eher so Sie wissen darüber Bescheid, finden es gut, aber bringen sich quasi selber nicht mit ein. [0:27:39.2]
- **Speaker 2:** Naja, das passt, das ist so. [0:27:41.7]
- **Speaker 1:** Gut, dann passt also du musst auch nicht mehrere auswählen, es steht nur zur Verfügung, falls es gebraucht wird. [0:27:48.2]
- **Speaker 2:** (Formation:) Bottom up ist die erste, die andere haben wir aber auch. Aber jetzt haben wir eigentlich alle Optionen im Haus. Es ist Long term. Ja, also es läuft schon seit vier oder fünf Jahren. (...) Target Group – Role based? Topic based? Also Topic based sind dann Leute, die mit dem Thema was zu tun haben, aber nicht zwingend eine Rolle haben. [0:28:30.1]
- **Speaker 1:** Ganz genau. Ja. [0:28:35.9]
- **Speaker 2:** Aber es gibt natürlich auch Leute, die dann diese Rolle haben. Aber das ist dann trotzdem, nehme ich mal an, also die Mehrheit hat natürlich eine Rolle in dem Thema, aber nicht alle. [0:28:47.1]

- **Speaker 1:** Genau. Also es geht hier im Endeffekt darum Role-based wäre zum Beispiel alle Teamleads haben jetzt eine Community, weil sie Teamleads sind, nicht weil sie mit einem bestimmten Thema hier zu tun haben. Und dann sind noch irgendwie Entwickler vielleicht noch mit dabei. Also das wäre dann topic based. (..) [0:29:07.2]
- **Speaker 2:** Ja, das passt dann auch für meinen Fall schon. (Location:) Das habe ich natürlich auch. Ja, das ist bei uns Firmen gegeben. Wir haben immer lokal, wir haben immer eine Zeitzone. [0:29:21.6]
- **Speaker 1:** Ja. Okay. (8) [0:29:31.3]
- **Speaker 2:** (...) Single Zone. Was ist der Unterschied zwischen Single Time Zone und Local? [0:29:52.5]
- **Speaker 1:** Ähm, also es könnte ja zum Beispiel sein Lokal, das man sagt, man hat nur einen Standort in, sagen wir München. Dann wäre das Lokal. Wenn man jetzt sagt, man hat einen Standort in München und in Berlin und in Hamburg, dann wäre das zwar immer noch eine Zeitzone, aber es wäre nicht ein Standort. [0:30:09.2]
- **Speaker 2:** Dann müsste das Single Zeitzone bei mir sein, weil wir sagen, wir haben schon verschiedene Standorte. (...) (Organization:) Also das Teams von der Community, also das virtuelle Team der Community? [0:30:36.8]
- **Speaker 1:** Ja, also quasi die Teilnehmer. [0:30:39.7]
- **Speaker 2:** Genau. Die Teilnehmer kommen natürlich aus verschiedenen Teams, das ist klar. (..) Aber es gibt nur eine Community Organisation. Also ich habe nichts aufgeteilt in zwei Gruppen oder so, sondern es ist ein einziges Team, das aus verschiedenen Teams kommt. [0:30:59.9]
- **Speaker 1:** Genau. Und bei der Größe geht es jetzt auch darum, wie viele Teilnehmer ungefähr Teil der Community sind. [0:31:13.7]
- **Speaker 2:** Schon mehr als zehn. Zwischen zehn und 50? Ja. [0:31:16.9]
- **Speaker 1:** Und diese Teilnehmer, sind die freiwillig in dieser Community? Würde es vielleicht erwartet oder ist es sogar verpflichtend, dass sie Teil davon sind? [0:31:33.6]
- **Speaker 2:** Bei meiner ist freiwillig, aber es ist natürlich eine gewisse Erwartungshaltung schon dahinter, aber es ist keiner genötigt teilzunehmen. [0:31:47.0]
- **Speaker 1:** Hier dürftest du tatsächlich auch wieder mehrere Sachen auswählen. Möchtest du Voluntary und expected oder siehst du es mehr wirklich bei Voluntary? [0:31:58.5]
- **Speaker 2:** Also expected ist es von ein paar Teams, wo ich sage Okay, ihr seid Architekten, ihr müsst mitmachen. Also ich erwarte es, dass ihr aktiv mitmachen. Darüber hinaus gibt es Mitglieder, da sagt man Ja, ist gut, wenn ihr dabei seid, das wäre sinnvoll. (..) Mandatory ist in meinem Fall nicht der Fall. Gibt es aber auch. [0:32:25.0]

- **Speaker 1:** Und dann hier bei der Selektion. Open oder closed? Geht es jetzt darum, Wenn jemand teilnehmen möchte, kann er einfach ohne weitere Anfrage quasi Teilnehmer werden. Oder bei Closed zum Beispiel - Er muss irgendwie erst wirklich anfragen und reingelassen werden oder sogar vielleicht irgendwie eingeladen werden, von einem Freund oder von dem Organisator. [0:32:51.8]
- **Speaker 2:** Wir haben beides. Jetzt bin ich überlegen, wie ich das aufgesetzt habe. Wir müssten das definieren, ob es open oder closed haben. (..) Nur habe ich das als closed aufgesetzt, glaube ich. Also Closed heißt nur teilzunehmen, einblicken. Wir haben noch mehr Einstellungsmöglichkeiten. Wir können die Community öffnen, die, wo sich jeder teilnehmen kann und auch jeder sehen kann. Aber es gibt welche, die sind nur auf Einladung. Und die gibt es dann sowohl als public ersichtlich oder auch nur für die Teilnehmer einsehbar. Also wo nur die Teilnehmer überhaupt irgendwas sehen an dem Ding. (..) Also in dem Sinne selbst einladen kann sich glaube ich keiner bei uns. Also ich kann einen Antrag stellen. Also dass fast bei allen Communities bei uns so. Also man stellt einen Antrag in der man sagt man möchte beitreten und dann muss einer aus dem Team sagen: ja, ich lass dich da. Aber ich glaube so komplett haben wir auch ein paar, die sind nicht automatisch durch. (..) [0:34:03.2]
- **Speaker 1:** Okay, aber deine jetzt speziell war eher geschlossener. Richtig? [0:34:07.1]
- **Speaker 2:** Genau. Okay. Da wird mir an der Stelle dann doch was fehlen. Und zwar sind die Ergebnisse oder das Ergebnis der Community für jedermann erkenntlich oder ersichtlich. Ist das also publik oder ist das für die Kunden nur für die Community? Das könnte man ja vielleicht noch ergänzen. Nur als Idee. Das haben wir bei uns, das haben wir bei uns So. Also das Du du machst eine Community auf zu einem Thema und sagst das wird nur innerhalb dieser Community diskutiert und keiner außerhalb der Community kann das einsehen was da passiert. (..) Und dann gibt es die, die sind offen für jeden. Jeder kann reinschauen und gucken, was macht die Community. Also die Unterscheidung haben wir auch noch bei uns. (...) [0:34:58.5]
- **Speaker 1:** Habe ich das richtig verstanden, dass das was wir im Endeffekt abfragen ist, wie man Teilnehmer wird? Also kann ich da einfach teilnehmen oder nicht? Und wovon du redest ist, dass man quasi auch wenn man kein Teilnehmer ist, ob man dann diese Community den Inhalt davon trotzdem sieht oder nicht sieht? [0:35:19.7]
- **Speaker 2:** Genau. Also wenn bei uns irgendwas was mit Daten machen und irgendwas neu erarbeiten kann, kann das schon jeder sehen, ob das jeder sehen und kann dann sofort sagen ja, ich habe auch vorher gesehen. Ihr diskutiert Thema und ich bin auch am Thema tätig. Wir müssen mal zusammen sitzen oder sonst irgendwie sowas. Okay, wenn man es geschlossen hat, sieht das keiner. Wenn es irgendwas secure Sachen sind, dann macht man das grundsätzlich für jeden geschlossen. Dann darf nur die Teilnehmer sehen das und es gibt auch Communities mit verschiedenen- (..) Wo die Teilnehmer unterschiedliche Rechte haben. Es gibt auch Communities, wo der Teilnehmer alles darf. Man darf jedes Dokument ändern. Man kann überall reinschreiben, was eigentlich Sinn

der Community ist. Aber es gibt dann auch solche Abstufungen, wo man sagt okay, das sind jetzt ein Bereich, dann darf nicht die gesamte Community editieren, sondern nur eine Teilmenge von Community. Und die dürfen zwar einsehen, aber nicht nichts ändern. Und da haben wir eine ganze Menge von, die so aufgesetzt sind. Das sind dann häufig so Projekte, wo dann die wichtigen Dokumente sind, wer ist verantwortlich usw. und das darf nur ein kleines Sub-team editieren? Ich weißt nicht, ob das irgendwo hineinpasst. Das ist eigentlich ein Berechtigungsthema. [0:36:58.0]

- **Speaker 1:** Ja, alles klar. (...) Genau dann, glaube ich, kann man auch schon weitermachen mit dem Steering. Ob das Ganze die Community selbstorganisiert ist oder inwiefern da das Management quasi mit reinspielt. [0:37:25.2]
- **Speaker 2:** Das ist noch self-organized. Meist haben wir bei uns sehr viel. Wir haben aber auch Sachen - Also das hat ein bisschen Zusammenhang mit dem oben, wer es organisiert hat. Also wenn es selbst organisiert ist, dann will muss man selber zu amputieren. Wenn es ein Auftrag ist, von wo anders, vom Chef, vom Management, dann ist häufig Reporting dabei. Und wenn es Projektmanagement Charakter annimmt, dann ist meistens auch das Steering dabei. Also jetzt habe ich auch was von Steering, das es da also ein Streaming Gruppe gibt. Für mein Fall ist das nur selbstorganisiert jetzt. [0:38:07.0]
- **Speaker 1:** Okay. (..) Alles klar. (6) [0:38:17.4]
- **Speaker 2:** Vielleicht noch zu dem Punkt. Noch was bei uns auch häufig ist, dass irgendwie hilfreich ist: Wir haben viele Sachen, wo wir es selbst organisiert haben, aber wir als Fachkräfte Governance Rolle spielen, das heißt, wir haben es zwar selbst organisiert, aber alle in der Firma müssen sich dran halten. Das heißt, so eine Community, wo ein auserwählter Kreis die Community treibt, aber die Community bekommt für andere eine Governance Rolle, also Governance Sache. Also es gibt Security Komitees, die was erarbeiten und das dann auf ihrer Community publizieren und sagen das ist jetzt bindend gültig. Das ist auch bei uns der Fall, wo wir dann aus der Community heraus Ergebnisse produzieren, die durch die Community publizieren. Also dass die Community praktisch eine Governance Rolle bekommt. (4) [0:39:24.7]
- **Speaker 1:** Ja, verstehe. Das ist, glaube ich, hier nicht dargestellt. [0:39:30.1]
- **Speaker 2:** Genau. Ich weiß nicht, ob das da irgendwo reinpasst, weil hier ist eigentlich nur die Community dem Management gegenüber offen. Das genau ist aber die Community auch der gesamten Belegschaft. Bei uns zumindest. Auch auf einige, nicht nur ein paar Auserwählte. [0:39:47.9]
- **Speaker 1:** Wo es vielleicht reinpassen könnte, ist in der nächsten Dimension bei der Decision-Making Power. [0:39:54.1]
- **Speaker 2:** Ah ja, das passt. [0:39:55.2]

- **Speaker 1:** Da würde ich es, glaube ich sehen. Ja, da müsste es passen. (..) [0:40:01.7]
- **Speaker 2:** Ja, gut. Jetzt meint die Community Sagen hat Influencing in dem Kontext. Informal Decision-making. Das wäre dann genau was bei uns häufig der Fall ist. [0:40:22.1]
- **Speaker 1:** Dass genau das eigentlich, was du gerade beschrieben hattest, oder? [0:40:26.1]
- **Speaker 2:** Ja genau, das passt schon. (Maturity:) Transforming - Was ist, wenn die Community schrumpft, wenn ich schon mal viel größer war und kleiner geworden ist? (..) Der erste Setup war, die ganze Welt macht mit von der Firma. Dann schnell gemerkt, dass die breite Masse eigentlich gar nichts beiträgt. Und dann haben wir gesagt okay, wir wollen jetzt nur noch die Architekten da haben, also die Architekten-ähnliche Aufgaben, Die sind nicht immer Architekten, aber die mehr so sich auch etwas in ihrem Umfeld bewegen und nicht jeder, der irgendwie irgendwas mit dem Thema interessiert hat. [0:41:38.6]
- **Speaker 1:** Also Initiating ist ja so dieses Anfangsphase, dieser Start der Community und dann wächst sie ja normal, dass eben mehr und mehr Teilnehmer kommen. Dann geht man davon aus vielleicht, dass sie ganz gut erstmal läuft und ab einem gewissen Punkt merkt man vielleicht okay: Jetzt irgendwie nimmt eben diese Teilnahme ab und das wäre dann hier so unter Transforming. Dass man dann sagt okay, gibt es vielleicht irgendwie doch einen anderen Use Case oder Purpose für diese Community of Practice. Oder in deinem Fall vielleicht, dass sie schrumpft. Das würde jetzt hier drunter fallen. [0:42:16.9]
- **Speaker 2:** Okay. (..) [0:42:20.2]
- **Speaker 1:** Gut, dann hätten wir das ausgefüllt. Ich denke, dass durch so eine Anwendung, dass man doch noch mal ein bisschen anders hier drauf schaut. Gibt es denn noch irgendwas, was dir jetzt hier aufgefallen ist, was du uns noch mitgeben möchtest? [0:42:38.4]
- **Speaker 2:** Also ich bin jetzt nochmal ein paar Use Cases durchgegagnen. Es ist bei uns nicht so ganz sauber zwischen: Was ist jetzt eine Community of Practice und was ist jetzt Vorhaben , Initiative, ein Projekt? Weil wir sind da gemischt unterwegs. Wir haben nicht alles nach SAFe organisiert. Das meiste schon, aber dann gibt es immer so Teams, die stehen außerhalb vom gesamten SAFe Konstrukt. Und wir als Enterprise Architekten, wir müssen ja alle bedienen. Das heißt, wir haben dann auch mal Projekte, oder Sachen, die ganz klar CoP sind und dann sind paar Sachen bei nicht nach SAFe arbeiten, haben aber trotzdem eine Community. Ich weiß nicht, wie man das hier abgrenzen könnte oder ob man das überhaupt abgrenzen muss und sagen ja jeweils wo hört das auf, und wo fängt eine andere Welt an? [0:43:41.6]
- **Speaker 1:** Ja, verstehe. (6) [0:43:51.1]

- **Speaker 2:** Es heißt dann bei uns Community of Practice, ist aber ein ganz klassisches Projekt. Das haben wir auch, lustigerweise häufig vom Management initiiert, die neuen Namen benutzen wollen, aber doch die alte Welt forcieren. Und umgekehrt, es gibt Sachen, die sich als Projekt schimpfen oder das ist eine Community. Also das bei uns wahrscheinlich auch ein bisschen chaotisch die Anwendung der ganzen neuen Bezeichnungen. (..) Ist weiß ich nicht, da. Müsste man mal durch gehen, durch unsere eigenen Communities gucken, was wirklich klassisch saubere Community ist und was nicht. Ist das Modell dann allgemein auf Communities anwendbar oder nur auf die SAFe organisierten oder überhaupt agilen organisierten Modelle? (..) [0:44:57.8]
- **Speaker 1:** Also erstellt wurde es hauptsächlich auf der Basis von Interviews mit Leuten aus der Praxis in diesem Scaled Agile Software Development Bereich. Also entstanden ist es daraus. Ich denke aber, dass einige Sachen auch eigentlich übertragbar sein müssten, aber entstanden ist es definitiv aus diesem Bereich heraus. [0:45:22.6]
- **Speaker 2:** Vielleicht hat das auch eine eigene Community. Da sind Leute aus dem SAFe Umfeld involviert. Aber es sind auch Leute aus B2B, die überhaupt nicht mit SAFe arbeiten involviert. Also auch wieder gemischt. Das macht es kompliziert, dass wir alles haben. Aber sonst guck ich mal drauf. Ich habe das mal versucht mit einem anderen zu machen. Und wenn mir da was auffällt, dann schicke ich dir das. (..) [0:46:03.2]
- **Speaker 1:** Sehr gerne. (..)Wenn du sonst kein Feedback mehr hast, würde ich mich herzlichen bedanken für die Zeit, die du jetzt hier investiert hast und für die Einblicke, die du uns gegeben hast. Genau. (...) [0:46:36.9]
- **Speaker 2:** Okay. Super Und euch viel Erfolg bei den ganzen Vorhaben und Forschung. [0:46:43.5]

A.2.3. Interview with Expert 3

- **Speaker 1:** Okay. All right, I'm all set. And if you don't mind, maybe you can talk a little bit about yourself. What I'm especially interested in what is your current professional role and what are the tasks that you're working on? [0:00:20.1]
- **Speaker 2:** Well, my current role is mixed. It's both agile master and chapter lead. From the four chapters we have defined at forward, I am leading one of them, which is the agile ways of working. So basically, they have defined like a cross-functional, (..) set of responsibilities, let's say, which is supporting the organization, become more agile, finding areas to improve, to make things more efficient, etc., and more agile, of course. And I am leading that. I'm trying to lead that community or that chapter, but always in collaboration with the rest of the Agile Masters. So not like I say something, and the rest accepted. But no, all the topics are always discussed in the communities and and they are agreed. We we take every point of view and then we vote. So it's quite democratic. So that is my current professional role. When I say agile master, it's not the typical scrum master. Because we don't want to just focus on scrum, which is only one of the many agile frameworks. We want to to know from all the different agile frameworks which techniques, which parts work best for each of our teams, the teams we are supporting and we are supporting product teams which are slightly different from the normal agile teams. We are also supporting domains which are like groups of product teams, and we are also supporting the whole organization. So we have initiatives in all those three layers. [0:01:58.0]
- **Speaker 1:** Okay, great. You already talked a little bit about your experience with communities of practice. Do you have any further experience of communities in the context of large-scale agile software development? [0:02:16.0]
- **Speaker 2:** In previous companies, when I was only a Scrum master, I was being part of several communities and see how that was working. So I have taken the things that felt useful for me in the past and made them as suggestions for our community to be to be the best working community for the members that are currently participating. So I have experience with communities led by other people. And now let's say that we are also leading our own community and defining how we make it work the best for us. [0:02:57.0]
- **Speaker 1:** Sounds great. Thank you. Then I have more topic specific questions for you, and I have several slides. They basically all look the same. And I always give a statement at the top. And I would like you to rank, between 1 and 5 how strongly you disagree or agree with that statement on top. And I also have a question down here that is that just goes a bit further into the topic. [0:03:31.0] (Statement 1: The existing Taxonomy can classify all CoPs in the context of LSAD.)
- **Speaker 2:** So the first one. I think if it's not a five it's a 4.5. So I don't know about all the communities of practice in the world. But the vast majority I say this taxonomy can

cover it from what I have experienced. [0:03:51.0]

- **Speaker 1:** Okay. So there is no community that you could think of that couldn't be (classified). [0:03:57.2]
- **Speaker 2:** No. Not so far, no. That was. At least I will not call it community of practice. [0:04:04.3]
- **Speaker 1:** Okay. Yeah, that's totally fine. I will skip right back to the taxonomy in a second. But the next question is only for the left side in here. I would like you to look at that and think about the completeness of these dimensions. So is there maybe a dimension that you're still missing or that could be added in here in this context? [0:04:32.2]
- **Speaker 2:** Maybe something about content discussed? I don't know, because I will see it maybe like content of the no content of the community. I can see it maybe under scope, but under scope I see target group location, organization, size. But there is nothing about what's being discussed. I don't know, like technical topics or working operation or ways of working or I don't know, maybe there is not. So there should be something about what kind of content is being discussed there. Other than that I don't see anything left. Anything missing. [0:05:20.7]
- **Speaker 1:** So what would you rate the completeness of these dimensions between 1 and 5. [0:05:29.4]
- **Speaker 2:** 5 or 4.5. [0:05:33.1]
- **Speaker 1:** And while we were going through this taxonomy (right before the interview), was there anything within that right side, so the characteristics, where you thought, maybe there's something missing here. [0:05:47.1]
- **Speaker 2:** No. [0:05:49.0]
- **Speaker 1:** Okay. So would you give that a 4.5 or 5 or 5 as well? [0:05:53.2]
- **Speaker 2:** A five. Five being is very complete. I'm not missing anything in the characteristics. [0:06:02.1]
- **Speaker 1:** Now we're looking at this from the other side. So now I don't want to know whether you're missing something, but I would like to know if we maybe have too much. So maybe we can start... [0:06:19.2]
- **Speaker 2:** Is a bit overwhelming when you first read it. Yes. [0:06:23.5]
- **Speaker 1:** So maybe we can decide between dimension and characteristics in here. Is that okay? So do you think there are too many dimension? Is that too overwhelming? [0:06:36.2]

- **Speaker 2:** It looks a bit like, too overwhelming, at least from the start. If you send me this slide. Okay, I read through this, it's like, oh (...). But when you go through that one by one, then all make sense. [0:06:52.4]
- **Speaker 1:** Is there still any dimension that you think is not really important and should be removed, or maybe even dimensions that you think could be combined? [0:07:05.4]
- **Speaker 2:** No not really. [0:07:07.1]
- **Speaker 1:** So what would you rate this between a one and a five. [0:07:13.3]
- **Speaker 2:** Four. I don't give it a five because for me it was the first impression was a bit overwhelming. But it is really good so far. [0:07:26.2]
- **Speaker 1:** Okay. What about the characteristics. [0:07:30.5]
- **Speaker 2:** The same impression. [0:07:34.7]
- **Speaker 1:** Do you see any characteristics within a dimension that you think could be or should be even combined. [0:07:44.0]
- **Speaker 2:** (...) I was thinking maybe in the first one knowledge creation or creation of solutions. Maybe they could be combined into something like value creation or something like this. So I was thinking, when you were explaining that. Oh maybe also improvements. Well not only necessarily are always innovation but they are usually hand in hand. When you're improving you're making things better and usually introducing bits of innovation but not necessarily. (...) Knowledge sharing and distribution of information also maybe can be combined like. Yes I am distributing information but I'm also getting some information from you. So probably knowledge sharing will also include distribution of information. Maybe those two could be combined. How about other Dimensions (...). No. Well, maybe the size. I have not been in many - So I think we could reduce those, like less than ten, ten and 50, then I don't know (...), 50 and 1000. But maybe there are not so many communities that are on those big, numbers because they become unmanageable. From what I have seen, when it's more than ten people, it's already not practical. Okay. You don't get things done, but that is my experience. So maybe you could try to find in size some other, ranges. And instead of having one, two, three, four, five ranges maybe limited to three. [0:09:44.2]
- **Speaker 1:** Are there any size ranges that you would recommend ? [0:09:50.8]
- **Speaker 2:** So ten or less. That would be perfect. Then maybe 10 to 50. And then 50 onwards or 50 to 1000. And then plus 1000. I have never seen any community like that. Well maybe on video games. Yes. But that is not really a community. That's a forum. So I don't know. And the other ones they look fine. [0:10:22.8]
- **Speaker 1:** So the next slide, it shows a bit a bit more questions honestly. So the purpose of this is that we want to know how useful you think the taxonomy is in practice. And I

have some different use cases that I would like to ask about. So the first question would be, do you think it's useful as a source of inspiration. [0:11:02.3]

- **Speaker 2:** When you are at the early stages of forming a community of practice? Yes. When you are already inside, maybe it can make you reflect on how your community is. It is, but not so useful anymore, it's just like occasional usefulness, let's say provides useful support in establishing a new totally in establishing new communities of practice is super useful. Okay. Evaluating existing communities? Yes. For sharing best practices? Not sure. [0:11:41.5]
- **Speaker 1:** So the last one maybe I have to explain it a little bit more. Franziska has created this taxonomy, but she's thinking about in the next step, creating some best practice guides based on this taxonomy. So maybe, it could give you different groups of communities of practice that say, hey, this combination is very common or is recommended. Or something more like this so that we give you, best practice or a guide, on how your communities of practice could look like. [0:12:28.3]
- **Speaker 2:** I see the use of that. When I don't know, the, for example, forward ask for and I don't know, an audit from an external provider. Hey, I want you to tell me more as you are experts on this, tell me how you will do this. Okay. I don't see so much this as okay. You are already inside an internal employee of the company that wants to establish a community of practice. You know, what are your pain points? You know what you want to achieve with the community of practice. So maybe the taxonomy or the best practices. Maybe not so useful in that sense. [0:13:09.2]
- **Speaker 1:** Okay. Would you mind going through those four use cases and giving me a number for each one of them between 1 and 5. [0:13:20.2]
- **Speaker 2:** For the first one (use as a source of inspiration) – four. For the second one (use when establishing a CoP) – Five. For the third one (use for evaluating existing CoPs) – four. For the fourth one depending on where. So, I would say neutral three. [0:13:42.4]
- **Speaker 1:** Is there a dimension or several dimension that you think are the most useful? [0:14:02.7]
- **Speaker 2:** Possibly the Purpose. (...) The decision-making power. Maybe these two are the main ones. When probably I'm talking from my experience what I have struggled with. So I can only say what I have lived. And for me having a clear idea what is the purpose of this community in particular. And if this community has the power to change things or just influence or not. Those were the things that I struggled the most when I didn't know. So for me personally, as a member of other communities of practice, those will be quite, key. They are all important. But these two, they need to be very, very clear from day one. [0:15:02.3]

- **Speaker 1:** Thank you for your insight. The next question is about the expansion of such a taxonomy. I know it's already quite big, but, maybe in the future, in a few years, this taxonomy doesn't really apply to the communities that exist then. Maybe things are changing until then. And that often or always happens. And that means that we might have to adjust this taxonomy. Do you see any issues in the dimension or the characteristics that could hinder us from adopting or expanding this taxonomy? [0:15:52.9]
- **Speaker 2:** No, no. (..) I am a big fan of inspecting and adapting. So actually in our own community, we keep inspecting. Is this still useful and relevant for us or should we change the format? So I live through that every day. [0:16:09.6]
- **Speaker 1:** So the expansion or adoption of this taxonomy would you rate that a five? [0:16:17.6]
- **Speaker 2:** Yes. The evolution of this taxonomy. Expansion maybe not because. So extending. So for me the evolution is okay. This dimension doesn't make sense. So I remove this one and I put this one. I replace it with this one instead. But having more dimensions might be too much. So yes, I introduce a new one or I change some of the characteristics or I just rephrase things slightly. Making it bigger. No I will not recommend that. But so as it is right now it's already big. So what do you want me to rate from 1 to 5. Making it bigger or evolving this. (..) If it's evolving is a five it's making it bigger: 1 or 2. [0:17:18.0]
- **Speaker 1:** Okay. And what about the characteristics. [0:17:23.2]
- **Speaker 2:** Same. Same answer. If it's evolving it like adapting it to the new, reality. Five. If it's extending more and more and more. Sorry. It will make it unusable. [0:17:39.5]
- **Speaker 1:** The next (question) is about how easy this taxonomy is to understand. [0:17:58.7]
- **Speaker 2:** Five. [0:17:59.2]
- **Speaker 1:** Do you see any dimensions or characteristics that are too difficult to understand? [0:18:09.4]
- **Speaker 2:** I made you a question in one of them because I didn't quite understand it. What was It? [0:18:14.0]
- **Speaker 1:** I think it was the single team of teams. [0:18:16.5]
- **Speaker 2:** Yes, yes. That one. Organization? But maybe you could rephrase that somehow, because it's not clear from just reading that. So you need to go and explain it a little bit further. The other ones are quite self-explanatory. This one - Not so much. [0:18:35.6]

- **Speaker 1:** Is the wording of those two. Fine. If you have the explanation that I gave you, or is it still a bit- [0:18:43.5]
- **Speaker 2:** It's still a bit confusing. [0:18:45.1]
- **Speaker 1:** Do you have any recommendation of what we could call that? [0:18:53.3]
- **Speaker 2:** Not at all. Not right now. I will have to sit and think about it. It's not easy. And I know that probably Franziska has also taken quite some time to phrase this in this particular way. So not immediately. No. I could not give you a different phrase. [0:19:11.3]
- **Speaker 1:** Totally fine. In the last question that I have is how easy do you think this taxonomy could be applied to a community of practice in real life? [0:19:32.0]
- **Speaker 2:** Five. I identified myself and my community. Straight away. So. And all the communities I have participated on. So I can tell you from each of the dimensions which of the characteristics my community is. So I is easy to understand and to read. I don't know, be reflected on. [0:19:55.7]
- **Speaker 1:** That sounds really good because that's the next step. I would like to ask you to choose one of the communities of practice that you're currently involved in in this large scale agile software development area. And I would like you to go through it step by step through this taxonomy with me and just let me know, how we classify it in here. [0:20:21.1]
- **Speaker 2:** Okay. So I can tell you about the agile chapter, which is the community. Chapter is just another word for the same. That I am leading here. So you want me to choose, right?
- **Speaker 1:** Yes.
- **Speaker 2:** From here. Okay. From each dimension. So the agile chapter in terms of purpose is all of them. In terms of organizational context. (..) Overall organizational culture. This one was how the the company is supporting us having this community or how the members of the community are feeling? [0:21:15.5]
- **Speaker 1:** How the members are feeling, if they are supporting. [0:21:19.2]
- **Speaker 2:** Supporting. (..) Organizational support. Okay (...) Sponsorship. [0:21:30.2]
- **Speaker 1:** And if you want you can choose more than one in here. Is there anything else or is it just sponsorship also. [0:21:37.8]
- **Speaker 2:** No. No just a sponsorship. Then Formation. (..) It was top down, setup by management originally. Well not set down. So they told me hey you need to form, you are the chapter leader. You need to form a chapter. Do it yourself. So it was a there was a mandate from the organization from top management. But the setup was done by us. [0:22:11.6]

- **Speaker 1:** Yes. So then it would be set up by (employees). [0:22:16.9]
- **Speaker 2:** Lifespan: Long term. Target group: Role based. [0:22:23.2]. It is all agile masters in here. Then location is: single time zone. Organization: I'm still struggling with this. So it is a community of agile masters. All the agile masters are assigned to one or more product teams. (..) [0:22:54.3]
- **Speaker 1:** And it's several people out of one team. Right? [0:23:00.3]
- **Speaker 2:** No, it's only one people from several teams or from one team or several teams. [0:23:05.9]
- **Speaker 1:** Could it then apply to teams representatives? [0:23:09.4]
- **Speaker 2:** Okay. [0:23:10.2]
- **Speaker 1:** So, is it that one out of each team is in the community and then he's reporting? [0:23:19.2]
- **Speaker 2:** Yes. [0:23:19.6]
- **Speaker 1:** Okay. Then I see it in here (teams representatives). [0:23:22.3]
- **Speaker 2:** But it's not one per team. Sometimes one agile master is supporting several teams. So is the representative of several teams. [0:23:30.0]
- **Speaker 1:** Okay. I think it mostly still applies in here. Okay. [0:23:36.0]
- **Speaker 2:** The size we are currently 11. (..). Enrollment is voluntarily but also expected. [0:23:52.3]
- **Speaker 1:** Okay. So is it specific on a role whether it's (voluntary or expected)? [0:23:59.8]
- **Speaker 2:** Yes. Tomorrow we are flying to Germany because on Friday we have a chapter day where they are explaining the other guys that the chapter is mandatory. Management is saying the chapter attendance contributions is mandatory. But in my chapter is voluntary and expected. Nobody had to tell us that it was mandatory. We already felt like that. That's why I chose the other two. Selection is closed. So we have key members and we have just defined that recently we have our key. Well no we did this from day one. But we have reflected on this that we limited this to only agile masters as key members. But then for particular topics we have like guests that also join us, occasionally for certain topics. But in general, the chapter members are, they are masters. So it's closed. [0:25:07.0]
- **Speaker 1:** Okay. [0:25:09.0]
- **Speaker 2:** Steering is self organizing. Sometimes occasionally it is also reporting. (..) [0:25:20.8]

- **Speaker 1:** Okay. [0:25:22.8]
- **Speaker 2:** Then. But very very few times decision making power. I'm struggling here because in paper it says that we have decision power. The reality is that we have influence and sometimes we don't even have any decision power. (..) So I will go with influence, maybe. In paper is formal decision-making power. The reality is that it's not always like this. [0:26:01.0]
- **Speaker 1:** Yes. I think it makes sense to, do the reality. Yeah. [0:26:06.3]
- **Speaker 2:** So, maturity we have run the community for now a little bit over a year. So, I was thinking I asked you specifically about establish and transforming. What were the differences. Because yes we started, we grow and now we are on a very stable, stable, but always inspecting and adapting, always transforming to make sure that the community is still relevant for us and how we make it or adapt it to make it relevant for us. So established. [0:26:40.9]
- **Speaker 1:** Okay. That really seemed quite easy. Thank you so much for your input. Do you have any questions or maybe even further feedback that you would like to let us know? [0:26:58.0]
- **Speaker 2:** No, this was really interesting to see all the things that you never reflect on put on paper. So thank you for sharing this with me. [0:27:08.2]

A.3. Interview Coding Guide

Table A.1.: Overview of Categories, Subcategories, and Examples of the Interview Coding

Category	Subcategory	Example
Completeness	Classification of all CoPs in LSAD	"S1: Und das erste Statement, da würde es eben drum gehen, dass unsere Taxonomie alle Communities of Practice im Kontext der großskalierten agilen Software klassifizieren kann. Das heißt, alle Arten, die dir jetzt irgendwie bekannt sind, kannst du die abbilden in dieser Taxonomie? S2: Ja, würde ich eine fünf geben."
Completeness	Overall completeness of dimensions and characteristics	"S1: Wenn du dir mal nur die linke Seite von der Taxonomie angeschaut hast [...] S2: 4 bis 5."
Completeness	Missing Dimensions or Aspects	"S2: Maybe something about content discussed? [...] So there should be something about what kind of content is being discussed there."
Conciseness	Overall conciseness of taxonomy	"S2: Is a bit overwhelming when you first read it. [...] I don't give it a five because for me it was the first impression was a bit overwhelming."
Conciseness	Adjustment of Dimension Purpose	"S2: Ich glaube, es sollte nicht größer werden, [...] sonst wird es zu feingranular."
Conciseness	Adjustment of Dimension Size	"S2: Well, maybe the size. [...] maybe limited to three."
Expandability		"S2: Ich sehe keine Schwierigkeiten in der Form, dass ich diese Taxonomie [...] adaptieren könnte in den nächsten Jahren."
Usefulness	Inspiration	"S2: Also, ich finde sie für die Inspiration sehr gut. Deshalb würde ich da eine fünf geben."
Usefulness	Establishing CoP	"S2: Im zweiten Punkt Useful as Support in Etablierung würde ich dem eine vier geben. Warum? Weil was fehlt. [...] Da hilft sie mir nicht weiter."
Usefulness	Evaluating CoPs	"S2: For the third one (use for evaluating existing CoPs) – four."
Usefulness	Best Practices	"S2: [...] So maybe the taxonomy or the best practices. Maybe not so useful in that sense."

Category	Subcategory	Example
Understandability		"S2: [...] Wenn ich jetzt eine DIN A4 Seite dahinter hätte mit den Beschreibungen, dann würde ich sagen ist sie einfach zu verstehen, dann würde ich da eine fünf geben."
Applicability		"S1: In the last question that I have is how easy do you think this taxonomy could be applied [...] S2: Five."
Unclear Definition of CoP		"S1: [...] Was ist eine Community und was ist ein Vorhaben oder ein Projekt? [...] Diese Abgrenzung wird bei uns nicht so sauber gelebt."

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