

Knowledge Sharing in Communities of Interest for Better Self-Confidence

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Abstract: Sharing knowledge in a community of interest creates additional value to the members of the community. The way to avoid hardly bearable problems and live a better life is to search for and belong to communities of interest. The previous research analyzes the environmental factors for playing a crucial role in shaping knowledge sharing behaviors within virtual communities (Cai and Shi, 2020). The success of open knowledge sharing community requires individuals to involve in and make continuous commitment to a community the one must be accepted by all the members of the community as equally and involved (Wu *et al.*, 2019). Multiple studies highlight the importance of trust in fostering knowledge sharing. For instance, (Lin and Huang, 2013) (Cien *et al.*, 2005) identified affective-based trust as a positive influence on knowledge sharing behavior, while (Lin, Hung and Chen, 2009) found that trust significantly influences knowledge sharing self-efficacy. The norm of reciprocity is frequently examined as an environmental factor for knowledge sharing (Cheung, Lee and Lee, 2013). Reciprocity is mentioned in the selected motherhood community members' answers. Communities share common goals and create a safe climate where individuals exchange ideas, experiences, and expertise. Such interactions contribute to both individual and group development by accelerating learning, refining skills, and fostering creative solutions to everyday challenges and are the subject to explore. The aim of the research is to identify the factors that contributes to knowledge sharing in communities of Interest for better self-confidence. The research method is case study of community of interest of mothers by conducting qualitative survey. The qualitative methodology was selected on purpose to gain personal reflections on knowledge sharing in communities of interest.

Keywords: Knowledge sharing, Communities of interest, Case of motherhood, Self-confidence

1. Introduction

According to social interactions many studies examine knowledge sharing in various fields: influencing factors of knowledge sharing willingness among virtual community members (Castaneda and Cuellar, 2020), trust plays a crucial role in fostering knowledge sharing (Cien *et al.*, 2005) and etc.

Although outcome expectations, both personal and community-related, play a significant role in self-confidence mechanisms: regarding personal outcome expectations it was found that personal outcome expectation significantly affects knowledge sharing (Zhou, 2008); while community-related outcome expectations were identified as a significant antecedent of knowledge sharing behavior (Kyung-Soo and Yong-Hwan, 2008) and interaction with self-efficacy observed that self-belief (conceptualized as individual and environmental factors) influences motivation, which in turn affects knowledge outcomes (C., Hui-Tzu and S., 2017). In the context of expectations should be considered emerging technologies that evolve a vision for advancing future internet governance within common understanding of blended reality, a convergence of physical and virtual worlds (*Shared Commitments in a Blended Reality: Advancing Governance in the Future Internet 2024*). The Fifth industrial revolution (5IR) within technology based rapidly evolving changes creates new challenges and demands to fulfill for individuals (Noble *et al.*, 2022). Studies using social cognitive theory, theory of planned behavior, and social exchange theory consistently show that community climate, trust, and reciprocity foster a supportive atmosphere for sharing although self-efficacy, outcome expectations, and attitudes drive individuals' willingness to contribute (Cai and Shi, 2020) which may be found as crucial. *The aim of the research* is to identify the factors that contributes to knowledge sharing in communities of Interest for better self-confidence. *The tasks of the research* are to analyze the theoretical framework of the activity system and other theories adapted to knowledge sharing, to analyze knowledge sharing process in communities of interest, to examine self-confidence concept according to knowledge sharing and to conduct the case study of community of interest of mothers in virtual environment. *The research method* includes scientific literature analysis and case study of community of interest of mothers by conducting qualitative survey. The qualitative methodology was selected on purpose to gain personal reflections on knowledge sharing in communities of interest.

The research might be a link for further investigation conducting broader surveys including more cases of communities of interest and other countries.

2. Literature Review

In the process of knowledge sharing the term of knowledge might have various definitions such as: knowledge as a resource, for example, framing sharing as the transfer or dissemination of valuable assets, while others specify it as a dynamic, interactive process involving mutual influence and exchange. Researchers using resource-based views (Chowdhury, 2005) as well as those applying process-oriented approaches (Desouza, Nissen and Sørensen, 2008) illustrate these two primary epistemological perspectives (Willem and Scarbrough, 2002). Key dimensions of these definitions include the level of analysis of individual factors (such as attitudes and willingness to share) versus organizational factors (including structure, culture, and interdepartmental boundaries). Also, there's importance of the nature of knowledge, which is distinguishing between explicit, codified knowledge and tacit, experience-based insights and before mentioned 5IR factors refer to contextual elements such as organizational design, social capital how sharing is conceptualized. Individual factors influencing knowledge sharing appear as attitudes, social influence, personal control (Chiri and Klobas, 2010) as well as willingness to share, perceived receipt of knowledge (Evans, Wensley and Frissen, 2015).

2.1 Review of Theories

Theoretical foundations and contextual considerations when studying knowledge sharing suggest that a unified theory of knowledge sharing may be a challenge to develop, given the varied contexts and perspectives involved.

Explicit Knowledge focus on knowledge exchange and explicitly distinguish between explicit and tacit knowledge sharing (Yao *et al.*, 2020). Particularly self-efficacy identified in self-confidence mechanisms as an important factor in understanding knowledge sharing behavior in virtual communities. These mechanisms are often conceptualized within the broader framework of social cognitive theory but are also examined through other theoretical frameworks (Figure 1).

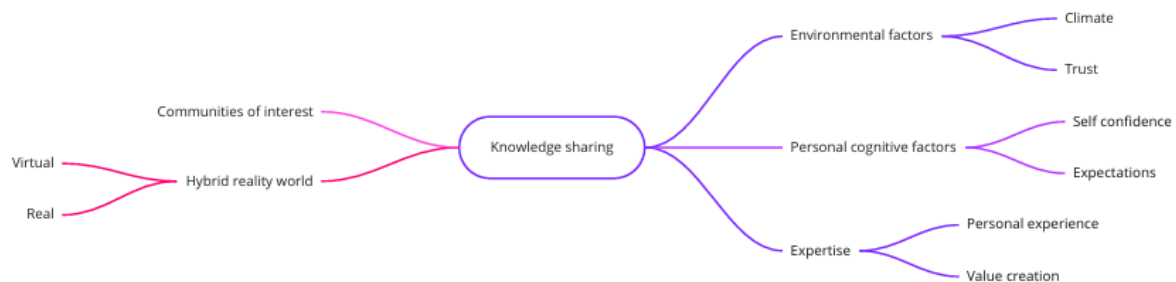


Figure 1: Developed by the author

The concept of shared activity system by (Engeström, 2015) as the triangular model of the interactive elements of activity system (Burner and Svendsen, 2020) is presented in Figure 2. The model consists of the subject (the actor in the system which in particular case is the member of the community), the object (the activity in the case is knowledge sharing), tools or mediating artefacts (includes instruments by which the action is able to proceed), rules (sets of conditions that help to determine how and why individuals may act), division of labor that effects relevant problem solving skills, appropriate acceptance of daily issues, trust in others and rising self-confidence (which provides for the distribution of actions and operations among a community) and community. The importance of the relationship between the subject and object being part of an activity is the mediation by a tool. While sharing valuable knowledge transforms the object into an outcome and the transformation requires various tools such as social media platforms. The relationship between the subject and the community is mediated by rules (Burner and Svendsen, 2020). Rules in this study consist of community agreement on knowledge sharing practices, respect for the members and active participation in community life.

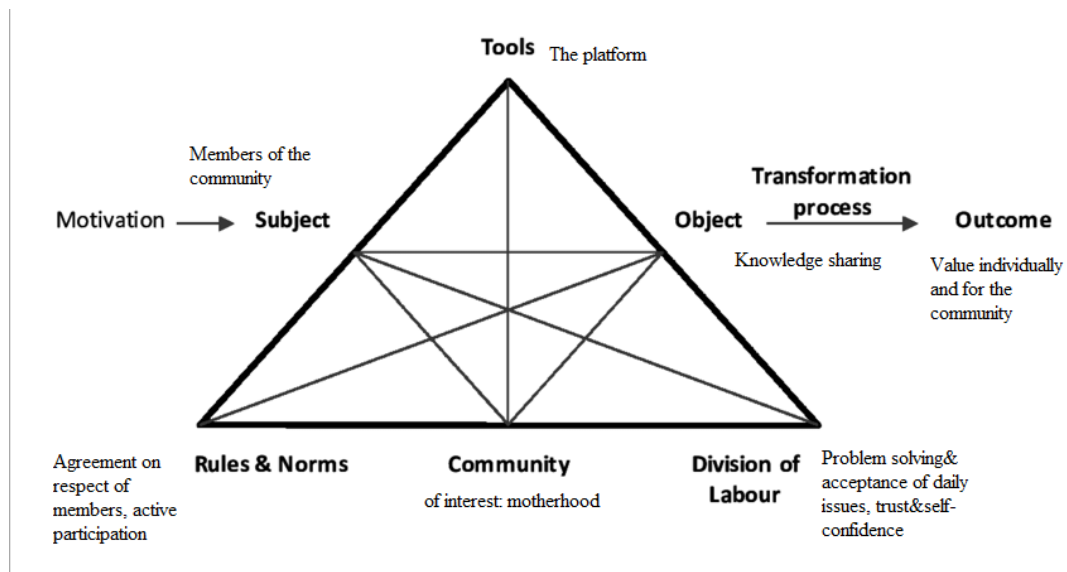


Figure 2: Adapted by the author according to (Karanasios *et al.*, 2013)

2.2 Knowledge Sharing

Knowledge sharing as a form of activity refers to the task of helping others with knowledge (Cummings, 2004), and collaborating with others to solve problems, develop new ideas (Gaál *et al.*, 2015). Self-efficacy, defined as an individual's belief in their ability to perform a specific task, is consistently identified as a key predictor of knowledge sharing intention and behavior across multiple studies (Alajmi, 2012), for instance, identified knowledge sharing self-efficacy as the strongest predictor of both knowledge giving and receiving behaviors (Ergün and Avci, 2018). According to the statement there's trust and social responsibility of social exchange in knowledge sharing as a planned and intend activity.

The knowledge sharing self-efficacy moderates the relationship between trust in coworkers as persons and knowledge sharing behavior, with higher self-efficacy strengthening this relationship (Hao *et al.*, 2022). Trust emerges as another critical component of self-confidence mechanisms in communities of interest. Trust in different community types may appear that identification-trust influences the quality of explicit knowledge sharing in specific industry virtual community (Zeng, Guan and Chen, 2014), as well as it is observed that trust strongly affects self-efficacy, which in turn mediates the relationship between trust and both community-related and personal outcome expectations (Zhou, 2008) and also it was found that affective-based trust positively influences knowledge sharing behavior (Huang *et al.*, 2005). Outcome expectations, both personal and community-related, play a significant role in self-confidence mechanisms, confirmed by that personal outcome expectation significantly affects knowledge sharing (Zhou, 2008), while other study identified community-related outcome expectation as a significant antecedent of knowledge sharing behavior (Park and Lim, 2008). According to interaction with self-efficacy there was identified self-belief and conceptualized as individual and environmental factors as influencing motivation, which in turn affects knowledge outcomes (Hsu, Min and Chou, 2017).

As practical applications of knowledge sharing in communities of interest may vary aligning outcome expectations in studies there're emphasized that helping community members to understand the personal and community-wide benefits of knowledge sharing is crucially important (Cai and Shi, 2020). This could involve the impact of shared knowledge, implementation of recognition systems for valuable contributions demonstrating how shared knowledge contributes to community goals (Zhou, 2008). While extrinsic rewards can motivate participation, some studies suggested they should be carefully implemented to avoid undermining intrinsic motivation. Considerations include non-monetary recognition systems and balancing rewards to community values and goals (Zhang *et al.*, 2017). Fostering supportive climate studies of knowledge sharing suggests creating an environment that encourages knowledge sharing. This might include facilitating easy-to-use knowledge sharing platforms, encouraging constructive feedback and promoting a norm of reciprocity (Cai and Shi, 2020). Applying longitudinal perspective researchers suggest implementing strategies that consider the evolving nature of self-confidence mechanisms, community dynamics and dynamic capabilities over long-term time scale. This could involve regular assessment of community needs and motivations by considering strategies

based on changing member demographics or the long-term membership and community focus providing ongoing support and training for long-term members (Chang, Hsu and Lee, 2015).

2.3 Self-Confidence

While sharing the knowledge self-confidence is defined through various forms of self-efficacy (knowledge sharing, Information and communication technologies (ICT) and social) and is theoretically grounded in five frameworks that focus on personal capability and motivation. Knowledge sharing self-efficacy is the confidence to share, codify, and create knowledge (Alajmi, 2012), although the concept might be extended to cover ICT self-efficacy and social confidence, which includes the willingness to seek knowledge or initiate knowledge requests (Andrews and Delahaye, 2000) which might be explored by adding personal experiences to knowledge sharing. Theoretical frameworks used to explain these definitions emphasize personal capability and motivational context: social cognitive theory declares that self-efficacy along outcome expectations and environmental factors, directly promotes knowledge sharing (Hsu *et al.*, 2007). Self-efficacy theory focuses on beliefs about one's ability to perform knowledge sharing tasks (Alajmi, 2012), While self-determination theory links perceived competence, autonomy, and relatedness to the capacity to share knowledge (Yoon and Rolland, 2012). The theory of planned behavior and the theory of reasoned action incorporate self-confidence as part of perceived behavioral control and intention (Ajzen, 1991), the assumption is that the greater the individual's perceived knowledge sharing self-efficacy, the stronger his/her intention to share knowledge with other community members (Alajmi, 2012). The capability for intentional and purposive action is rooted in symbolic activity (Bandura, 1991), that relates to activity theory model described earlier. Although the self-regulation model highlight internal motivation and social factors that support knowledge sharing which means that members of an online knowledge communities regulate his or her internal motivation, external demands, interpersonal relationships, help-seeking strategies, as well as confidence of capability in utilizing social resources and performing knowledge sharing task (Tseng and Kuo, 2010). The study integrates several theoretical frameworks of self-confidence which is social cognitive theory that indicates importance of environmental factors as well as outcome expectations and the theory of planned behavior where the capability to act intentionally but for purpose emerges activity of knowledge sharing.

Self-confidence was examined in previous research by eight dimensions which are to specify: web-specific, community-related, general, knowledge creation, enhanced knowledge, information security, self-image, and appearance-contingent self-esteem. Some of these types showed direct positive associations with knowledge sharing while one type (knowledge creation self-efficacy) produced inconsistent results, and one (appearance-contingent self-esteem) was linked to reduced sharing in health settings (Brown, Dennis and Gant, 2009). Self-confidence interacts with factors such as trust, reciprocity, and community identification to further promote sharing behavior. The relationship between self-confidence and knowledge sharing behavior emerges as complex and multifaceted across communities of interest. Many studies report a direct positive relationship between self-confidence, particularly knowledge sharing self-efficacy, and knowledge sharing behavior or intention (Alajmi, 2012), self-confidence often acts as a mediator between other factors and knowledge sharing behavior (Brooke, Mohd Rasdi and Abu Samah, 2017) for instance, knowledge-sharing self-efficacy mediates the relationship between community climate and knowledge-sharing intention (Cai and Shi, 2020) or knowledge self-efficacy mediates the relationship between perceived benefits and satisfaction with knowledge sharing (Jin *et al.*, 2013). Differential effects on contributing versus collecting knowledge: knowledge sharing self-efficacy might have different effects on knowledge contributing versus knowledge collecting behaviors (Chen and Hung, 2010).

3. Methodology

The aim of the conducted research was to analyze the knowledge sharing of community of interest uniting mothers in virtual environment for self-confidence.

The methodology used in the research is the case study with qualitative survey and qualitative content analysis methods and observational participation. The collected answers to the survey reached 9 informants and according to qualitative surveys sample requirements the repetition of the gathered information was reached. The tool for the survey was Microsoft 365 tool Microsoft forms and according to ethical principles answers were collected anonymously. The survey was conducted from June 18th to 25th of 2024. According to the social behavior theory, questions in the survey were divided into three dimensions: environmental factors, individual factors and behavior (also understood as an activity).

The community was selected regarding the characteristics of the specified criteria involved: 1. Community unites mothers of Lithuania, 2. Community is operating more than 5 years, 3. Community meets hybrid participation form: virtual collaboration and real events. The current community selected for the analysis is actively operating for more than 8 years, the same age as community members' kids and the community went through all various collaboration stages that today there're in depth discussions and affected transformation from open public community of interest for more than 100 members and through the time scale to private selected active 33 members agreed on settled the rules of the community. Community communication tool has changed several technological platforms and now since 2018 it is based on Facebook.

The research questions (RQ) come from the before discussed activity theory (Figure 2) and social cognitive theory models and were as follows:

RQ1: Why do members of the community of interest share their knowledge?

RQ2: What do they get for social exchange? And how does it affect their self-confidence?

4. Results

The findings of the study are organized into categories and subcategories according to the theories discussed earlier. Social cognitive theory was used for categorization and activity theory for building questions in dimensions.

- Subject, community group – the member of the community (Figure 2.)

Table 1: Q1 How did You notice the need to search for people of same interests in community networks and social media?

Subject		
Category	Subcategory	Affirmative statement
<i>Individual</i>	<i>Specific needs</i>	"First child, new experiences , wanted to gain more knowledge ."; "When I started to lack like-minded people in my circle ."; "Due to the lack of communication on current topics "; "It was my first pregnancy and there were no pregnant women around, so <i>everything was interesting from the start. Who knows how everything is going.</i> "
<i>Environmental</i>	Expectations	"It was my <i>first time</i> expecting, <...>, so I started <i>looking for information on a forum</i> where all the expectant mothers with the same month's due dates gathered. <...>. We shared our troubles, feelings, and helped each other. It grew into our permanent community, now that the children are 7 years old.
<i>Behavior</i>	Value	"The need arose as soon as I got pregnant, I wanted to <i>share my impressions, find answers to my concerns, share my experiences, get advice and just general understanding, help, and good impressions</i> from other expectant mothers."

The answers present the motivation for searching for like-minded people raising kids of the same age and keeping on sharing the knowledge for more than 8 years. The expertise of the participants within the second child and beyond ensures trust, insights and collective intelligence for more informed decisions in various situations. Also, there's ability to share diverse perspectives on the same issue, enhance collaboration, creativity even by making live meetings and keeping friendship among moms and kids alive in years. Knowledge sharing creates the community culture and gives self-confidence and variety of solutions to each member when it's needed, and these solutions wouldn't be able to appear in isolation. The next question illustrates the importance of the ability to share experiences and the importance of a suitable community climate to all its members.

Table 2: Q2 What do You think you can give to the community members and what can you get from sharing knowledge and asking questions? What unites the members of this community?

Subject		
Category	Subcategory	Affirmative statement
<i>Individuals</i>	<i>Different background</i> <i>Sharing</i>	"To share our experiences <...>- to help. <...> <i>Women from various fields, with different views and experiences, have gathered here, and this provides a wider spectrum of knowledge.</i> " <...> they are all <...> from different fields, so <...> each of them shares their knowledge in their field. They <...> raise <i>more than one child</i> , so the <i>topics of conversation grow, <...></i> ."

Subject		
Category	Subcategory	Affirmative statement
	Trust	<p>"<...> my perspective on some of the issues that bother them. I get the same <...>. This community is united by the desire to share our knowledge."; "<...>" We share our experiences, exchange opinions, and that's what unites us, that we are not afraid to speak up and be criticized."</p> <p>Support, emotions, empathy. <...>"; "<...>. Most of the time, it's verified and honest"; "We share understanding, no judgment <...> in all situations. We share both good news and bad events. <...> differences of opinion, but everything is done very elegantly and intelligently."</p>

From individuals as a subject to the community as a placement of environment lead the following question:

Table 3: Q3 What do You think has led to the fact that the community of interests you belong to has existed for more than seven years?

Community		
Category	Subcategory	Affirmative statement
Environment	Tools Personal features	<p>"We have become closer, and <i>sharing information (and knowledge, author remark) is still relevant</i>."; "An active core of the group has formed not only online conversations, but also live meetings, shared views and the presence of only active members in the group"</p> <p>Openness, respect for each other; "Good sense of humor. Sincerity of members"</p> <p><...> "Sincerity and common interests."; "Community, friendliness, empathy"; "<...> friendship, advice and support in any situation." <...> "<...> usually have similar problems and share all kinds of insights."</p>

- Outcome, division of labor, value for the community (Figure 2.)

Social exchange ensures that the members of the community gains value from being part of the community, and the next question discusses the importance of feedback and interpersonal trust.

Table 4: Q4 How important is feedback and knowledge sharing in the community? What tools facilitate knowledge sharing?

Outcome		
Category	Subcategory	Affirmative statement
Behavior	Belonging Learning	<p>"Having a support team is very important, <i>not feeling alone</i>", "Without feedback, there is no desire to share. When you get a response, you know that the response was not in vain. <...>. We communicate both <i>in a group and in person</i>" <...>.</p> <p>It is important because others learn new things <...>. It is facilitated by <i>smooth communication</i> <...>.to see at situations from a different angle. Accessibility makes it easier; you get answers at any time." "Feedback is important because you are heard, understood, and believed." <...> "Simply question-answer."</p>

Table 5: Q5 What characteristics contribute to the development of interpersonal trust in a community?

Division of Labor		
Category	Subcategory	Affirmative statement
Behavior	Trust	<p>"Respect for each other, openness and sincerity", <...> "support when opinions do not necessarily coincide"; "<...> "don't laugh at stupid questions. You always feel safe", <...> "members are able to communicate ethically, without conflicts, and in a friendly manner on all topics" Self-criticism, empathy, friendliness, openness. "No condemnation, support and advice, friendship <...> "certainty <...> "friendliness <...>."</p>

Table 6: Q6 In what situations do you share knowledge? In what situations do you seek the community to share the knowledge they have?

Object		
Category	Subcategory	Affirmative statement
Environment	Climate	<...> “share knowledge when I have the expertise to do so. <...> I always hope that the community will share their insights .” “<...>where I am confident in my knowledge and I can base on scientific articles, books I have read, and experience.”
	Problem solving	“When I have difficult, unsolvable questions, I want other people’s knowledge to be shared with me. I also share <...>.” “ Discovering something new . Noticing something that would be valuable both in everyday life and not. Community encompasses all areas and situations of life : from children, husbands, family members to vacation planning, house building.”
Personal factors	Self-confidence and expectations	“<...> when you already know people, you trust them , and because of some advice you confirm your opinion and automatically have more confidence in your choice . And here when you have been in the community for almost 8 years the same people add a positive remark to their own opinion or sometimes you see a different angle that you hadn’t thought about.”

Table 7: Q7 What value do you get as you belong to the community? What do you think are the chances of the community’s longevity and what factors could determine this?

Outcome		
Category	Subcategory	Affirmative statement
Environment	Active participation	“I appreciate our community and am proud to be a part of it . Active participation and meetings at least once a year”, “The value is <...> belonging to a community <...> “Since children grew up there’s opportunity to become more of a group of ”; “happy to be part of this community <...>.”
	Common interests	“Finding like-minded people, understanding, help, advice . The community has great prospects for long-term operation, over a long period of time only the most sociable, non-conflict, friendly women have remained here ” <...> “ Life experience and new knowledge. Motivation . Periodic meetings and availability at any time virtually stay in touch .”

Considering why do the members of the community of interest share their knowledge in the relevant environment there are of high importance common interests which gain motivation, ensure active participation and matches expectations. For social exchange individually members get better self-confidence in problem solving, sharing good practice and conducive climate creation in the community.

5. Discussion and Conclusion

Members of the community of interests have a common goal and interests, which provide active participation managing the complexity of emerging issues. The members should have relevant competencies and accumulated experience in a particular field. The assumption of common area of interest creates a common basis for activity and social actions, as well it inspires members to participate in this activity and support the sharing of knowledge as an expression of self-realization (Siudikienė and Jokūbauskienė, 2023) and as self-confidence, promotes the development of each individual and gives meaning to the actions of the members.

Concluding from the research the factors that contribute to knowledge sharing in the community of interest the case of mothers for better self-confidence were identified:

- According to social cognitive theory the environment, personal factors and behavior were selected to use to organize knowledge sharing in dimensions. It is obvious that self-confidence described in the theoretical framework may be managed by personal factors. Though activity theory the suggestion is to consider the common action, active participation, problem solving, expectations, value creation, trust, specific needs, common interest and climate as the means for united activities.

- Regarding trust issues at various levels and the aim of the research, the knowledge sharing process emerges as other critical component of self-confidence mechanisms in communities of interest. Trust in different community types may influence the quality of explicit knowledge sharing in specific interest virtual community (Zeng, Guan and Chen, 2014), and the affective-based trust positively influences knowledge sharing behavior (Huang et al., 2005). According to the statement, the following discussion resumes the future of knowledge-sharing depends on inclusive, accessible, and engaging environments where collaboration thrives, and personal behavior ensures trust.
- Theoretical frameworks define self-confidence in personal capability and motivational context: social cognitive theory determines that self-efficacy is related to self-confidence and the factors of outcome expectations and environmental context (Hsu et al., 2007). The context is interconnected by means of belonging, advisement in daily problems and socialization.
- The study explored the importance of knowledge sharing processes in communities of interest for better self-confidence in several dimensions: environmental, personal factors and behavior. These dimensions ensure self-confidence in collaboration, the appropriate climate of the community, value creation. Individual needs including respect, problem solving, expectations, belonging and trust create the platform for long-term sharing good practice and learning in various areas of interest: from specific small daily issues to solve the high demanding problems and support.

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Ethics declaration: The survey has confirmation of the members of the community to participate anonymously. The link to the survey in MS Forms
<https://forms.office.com/Pages/DesignPageV2.aspx?origin=NeoPortalPage&subpage=design&id=ghrFgo1UyK08-b9LfrHQEopfikm3gaxPmeZCzghrKX1UNVNNT1IDU0NQV1ROS1I0Sk1GRDRGUKRWTC4u&analysis=false>

AI declaration: The tool Elicit was used for the primary research resources for information gathering and systemizing while exploring the research.

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