

Lifelong learning through knowledge-sharing & digital collaboration

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Abstract. Today, in the age of digital transformation, knowledge management is essential to keep an overview of the endlessly available information. Universities by nature must be leading in generating, sharing, using and managing relevant knowledge and information to equip people to obtain viable employment. It means that the basic assumption is that universities mainly work as the source of knowledge and information. However, in contemporary times knowledge sources are wider spread in society. In a case study, we analysed the current knowledge management initiatives of the University of Amsterdam (UvA). We found that these initiatives insufficiently facilitate the knowledge-sharing behaviour of partners and are too focused on a one-way flow of knowledge to external partners. Consequently, opportunities to learn from knowledge in society, identify societal needs and challenges, and tailor curricula to educate talent with knowledge and skills are not optimally leveraged. This paper suggests a possible way to enhance two-way knowledge sharing in the form of a digital collaboration platform. We based our proposed platform on a thorough scientific literature review on partners, ecosystems, knowledge sharing, incentives, and constructing and maintaining cohesive teams. Such a platform will ultimately facilitate lifelong learning. People can participate in the platform during their lives and bridge the gap between universities and organisations by enabling a constant two-way knowledge-sharing process. Our research mainly focused on identifying the requirements to establish cohesiveness and stimulate knowledge-sharing of the partners and teams of such a platform.

Keywords. Ecosystem, university, knowledge-sharing, lifelong learning, digital collaboration, platform thinking, resilience

1. Introduction

Our current era is characterised by increasingly rapid and dynamic changes. Organizations need to become more resilient to survive and ultimately, thrive. Universities currently face the challenge of bridging the gap between education and the job market. Practice has shown that our educational system provides the job market with graduates whose skills do not sufficiently meet contemporary demands. Abcouwer and Takács (2018), suggest a platform for digital collaboration and lifelong learning (LLL) as a potential remedy to bridge this gap.

To facilitate lifelong learning, one should look at the valorisation task of universities, which is imposed on universities by Dutch law. The definition of valorisation by the Cambridge Dictionary is “the act of making something valuable or useful from an existing substance” (Cambridge University Press, n.d.). This ‘existing substance’ is the knowledge for a university gained from research. In other words, the university has the task to make the gathered knowledge useful for society.

UvA has multiple, ongoing initiatives to fulfil its valorisation task. Innovation Exchange Amsterdam (IXA), UvA ventures holding, MatrixIC, Amsterdam Science Park (ASP) are a couple of examples. IXA aspires to transform academic and practice-based research and knowledge into ground-breaking innovations and applications and assist external parties, such as companies, in navigating the academic landscape to find solutions and opportunities. UvA ventures holding makes scientific innovations and expertise from the UvA available to the market and society by setting up or participating in companies. MatrixIC develops and rents places “in the heart of research”. The goal is to offer an environment where research and companies can meet, and thereby facilitate cooperation and encounters on multiple different levels. UvA currently fulfils its valorisation task through getting their developed knowledge out into the world for the greater good. Valorisation for UvA is a one-way process from the university to society. This blocks the knowledge in society (e.g. in companies) to be valorised by UvA and rules out to learn the society’s needs and wants, and tailor research to this demand. Furthermore, this also likely hinders LLL.

We, therefore, identify a possibility for growth of improvement in the task of university valorisation. Our analysis resulted in the following problem statement:

Problem statement: *Current knowledge-sharing initiatives insufficiently facilitate the knowledge-sharing behaviour of all partners in the ecosystem of UvA and is too much focused on a one-way flow of knowledge from the university to external partners. Consequently, opportunities to learn from knowledge in society, identify*

societal needs and challenges, and tailor curricula to educate talent with knowledge and skills that accurately meet these societal needs are not optimally leveraged.

To address this problem, this paper describes our vision on a solution. We aim to build further upon the platform for digital collaboration and lifelong learning by Abcouwer & Takacs (2018) to bridge the gap between universities and organizations through enabling a constant two-way knowledge-sharing process. Our research particularly focused on identifying the requirements to establish cohesiveness and stimulate knowledge-sharing of the partners and teams of the platform. Furthermore, suggestions will be made for its eventual implementation.

2. Related work

2.1 Partners & Ecosystems

Galan-Muros and Davey (2019) developed a comprehensive framework for establishing university-business cooperation (UBC). The framework describes inputs, activities, outcomes, outputs, impacts, supporting mechanisms, circumstances and context which occur in the UBC ecosystem. The authors emphasize that all participants in the ecosystem can take the mediating, providing or receiving role in the knowledge sharing process.

Financial and physical resources can come from any of the three actors within the triple helix (government, business & higher education), such as government subsidies, industry endowments or other financial or material incentives. The authors also describe barriers and drivers for UBC.

As important barriers, they highlight the limited opportunities for interaction between partners. There is not enough awareness of each other's existence and what they offer. Furthermore, lack of funding, having different goals and time horizons, the need for confidentiality are factors that limit university and business cooperation. In contrast, the opportunity to establish a competitive advantage through shared use of resources, access to the best graduates & scientists, and cutting-edge research are important drivers for cooperation. For universities the opportunity to commercialize research and consulting are relevant reasons to participate in such an ecosystem.

To become a successful platform provider, Berman et al. (2018) defined three steps to take. Firstly, develop a conceptualization and pilot of the virtual or physical platform, and formulate appealing incentives for organizations or partners who might want to participate in it. Secondly, increase the scale and scope of the platform through acquiring users, retaining these users, monetizing interactions, and harvest reputation. Lastly, discover new opportunities during processes and activities. The steps to take are *assessing, innovating, evaluating, creating, and realizing*.

2.2 Knowledge-sharing

Establishing an ecosystem in which all partners feel invited to share information requires a solid understanding of the factors that drive knowledge-sharing. Some important factors affecting positively or negatively knowledge-sharing behaviours are outlined below.

2.2.1 Organizational context

Studies identify the effects of organizational culture and climate. According to De Long and Fahey (2000), organizational values that support knowledge sharing are essential to effect on technology infrastructure. When these values are not supportive, the benefits of a strong architecture are limited. Furthermore, the research found that emphasizing *trust* helps to reduce the perceived costs of knowledge-sharing. Organizational culture with individual competition decreases the chance to share by participants. Whereas a culture that is experienced as cooperative helps to establish trust, which positively influences knowledge-sharing (Schepers & Van den Berg, 2007). Taylor and Wright (2004), also state that the cultural aspect of supporting learning from failure, and sharing new ideas positively affects knowledge sharing behaviours.

Considering management and teams, Lee et al. (2006) identified that both the quality and level of knowledge-sharing increase when top management demonstrates support, positive attitudes, and influences employee commitment. Whereas a lack of incentives forms a barrier (Yao, Kam, & Chan, 2007). Previous research concluded that *incentives* such as recognition and rewards are recommended to facilitate knowledge-sharing,

and promote supportive culture (Liebowitz, 2003). However, research from Fullwood & Rowley (2017) suggests that in the academic context, incentives other than money should be the primary way of stimulating knowledge-sharing behaviour. In a study searching for alternative rewards positively affecting knowledge-sharing, Ferrin and Dirks (2003), say that a cooperative reward system positively, and a competitive system negatively contribute to knowledge share.

Research on the impacts of organizational structure demonstrates that interactions between employees from different departments, with different ranks, positions in the organizational hierarchy should be stimulated, and hierarchy de-emphasized to foster knowledge-sharing (Wang & Noe, 2010).

2.2.2 Social and cultural characteristics

The relationships between individuals, communities of practice or social networks in general, positively influence the amount and quality of knowledge shared (Cross & Cummings, 2004). Web-based platforms seem to play an important role in this matter. According to Chen (2007), an individual expects that improving relationships on a social level through frequently participating in a web-based community positively affects the motivation to continue participating in that network. The overall conclusion is that it is likely that present network connections enhance knowledge-sharing within a particular community of practice (Wang & Noe, 2010).

2.2.3 Motivational factors

Regarding the motivational factor of knowledge ownership, various studies suggest that when people percept that they own the knowledge or information, they are expected to demonstrate more knowledge sharing behaviour (Constant et al., 1994). Fullwood & Rowley (2017) suggest that personal beliefs are the primary motivation to share knowledge with others.

2.3 Incentives within the ecosystem

After the drivers of knowledge-sharing we now focus on the incentives for knowledge-sharing. In an ideal case, knowledge-sharing is an operation both parties can benefit from. To visualize the relation between incentives and knowledge-sharing the following model of Lyu, H., & Zhang, Z. J. (2017) is used, see Figure 1. This model indicates the importance of the incentive to knowledge-sharing.

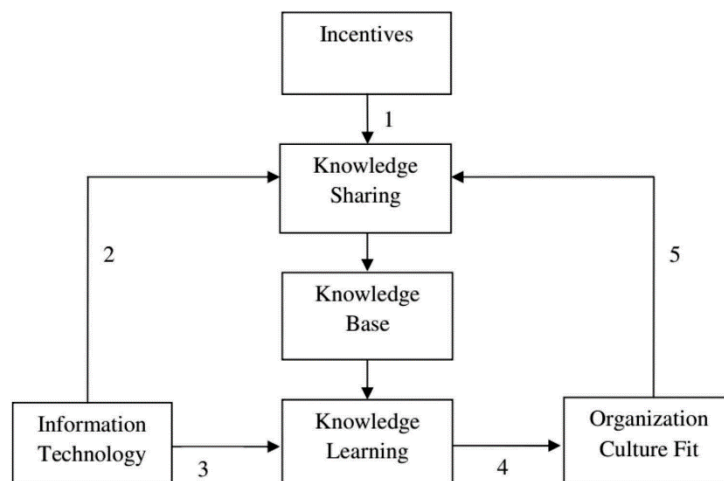


Figure 1: The relation between Incentives and Knowledge-sharing

Within the UvAs ecosystem, different roles have different incentives. The roles we identified in UvA *institutional plan* (2021) are universities, companies, students, teachers and researchers. To realize knowledge-sharing across these roles, we must consider their incentives as described by Koens, L. et al. (2018) and Galan-Muros, V. & Davey, T. (2019). Incentives are essential in developing a culture that favours knowledge-sharing activities, so the roles in the ecosystem need to design and provide incentives to induce them to actively participate in knowledge-sharing and learning. First, we identify the relevant incentives for all the roles, after that we explain the incentives for the specific ones.

2.3.1 Global incentives

The first incentive is *gaining knowledge and skills*. An important driver when no new knowledge or skills are learned. It offers the industry opportunity to gain knowledge from the university and vice versa.

The second incentive is *broadening the network*, with different organizations, researchers, universities etc.

The third one is *reflecting on or thinking about societal problems*. As this affects all the roles within and outside the ecosystem it can be of real benefit for accessing resources. For example, during the COVID-19 pandemic, different roles united to develop solutions for society. This case is a clear example of how beneficial knowledge-sharing can be.

The fourth incentive is to *strengthen your position in the labour market*. The ability to share knowledge around different roles in the ecosystem might bring new possibilities to the labour market. As some research that can be done within a company could be preceded by a student from a university for example.

Lastly, *self-enjoyment* is an important incentive for knowledge-sharing as an individual. It gives the joy to share your knowledge with others and realize one benefits from it.

2.3.2 Universities

For universities, there are different incentives for knowledge-sharing that can play a role. The incentive of *reflecting on our thinking about societal problems* is particularly of interest for universities to have valorisation from society to knowledge.

Higher-quality research is relevant since people outside the ecosystem receive access to knowledge that form the basis of new research. This could be relevant for organizations who want to gain knowledge from someone within the ecosystem.

Higher-quality education: the practitioners from companies could deliver knowledge that is applicable in the labour market and improve the quality of education and academics. It causes another incentive, *better preparation of students for the industry*, as it bridges the gap between education and the labour market. Another incentive is *the valorisation of knowledge*. Their well-valued knowledge is used which can be positive considering the university as it shows they are not creating useless knowledge. Furthermore, universities are obliged to include valorisation.

The last incentive is the *provision of sources of income and funding* as the university can turn the knowledge-sharing initiatives into funding and income for themselves. This can be of benefit for funding research and education.

2.3.3 Researchers/Teachers

Researchers and teachers have similar incentives; therefore, we formulate the incentives for both. Similar to universities, researchers and teachers can be incentivised through *being able to conduct high-quality research*. Particularly, since researchers and teachers need the ability to acquire the right knowledge.

The ability to *work in an environment with high quality and inspiring people*. The one that shares knowledge is most certainly inspired by the subject as this is where they have knowledge and want to share it. So, for their field of expertise, it is inspiring to share and for the receiver to gain.

The third incentive is *earning a good salary, fringe benefits and pension*. It is an incentive to receive money for work.

The ability to *uncover knowledge gaps* from working with researchers outside of the ecosystem could also lead to tailored knowledge gaps, beneficial for universities and companies.

It is stimulating to *discover the practical application of research results*. Researchers/teachers work on various topics however they cannot always apply them in practice.

The last one for the researcher is *building status, known as a respected researcher in the field*. As knowledge-sharing broadens your network it can be an incentive to use knowledge-sharing to receive more respect as a researcher.

2.3.4 Companies

To be more specific about the general incentive to gain knowledge and skills in a company, it is the staff who acquires new skills and knowledge.

Within companies, an incentive is to *add value to the business* since new knowledge can be brought into the organization from outside. This results in three sub incentives. Firstly, *accessing new knowledge discoveries* from people outside the organization can add value through knowledge-sharing. Secondly, the ability to gain *insights into emerging technologies* by making use of, for example, students that are aware of these emerging technologies and can share their knowledge with the company in question. Thirdly, *stimulating innovation* in relation to the previous can be of benefit to get someone from outside the organization to look at a product/problem from another perspective with their knowledge. The latter could in return lead to the stimulation of innovation.

Another incentive to share knowledge for companies and businesses is *money* since new knowledge could lead to new business value or competitive advantage and thereby lead to more revenue.

Next, another incentive is to *receive access to qualified graduates* which can be for the future of the company since acquiring new knowledge, skills and talent is always an ongoing process. Furthermore, it adds up *contributions to product and service development* when knowledge is acquired from outside your business and as stated earlier look at it from another perspective.

2.3.5 Students

For students, a wide variety of incentives are applicable, and these highly depend on the individual. One of the incentives for knowledge-sharing is to *work on your future*. This incentive contains sub incentives which are defined as the *increase of practical skills*, the *increase of soft skills* and the *increase of personal networks*.

Next to that, students receive the *opportunity to apply theoretical knowledge in the real world* which they acquired as a student. This hands-on experience is where the real benefit is gained as this prepares the individual for the labour market.

2.4 Cohesive teams

UvA needs to have (de)centralized teams to achieve its set goals with divisions with good understanding of their tasks. A study conducted by Guilfoyle et al. (2012) showed that universities often struggle with heavy workloads due to imbalanced teams or non-efficient use of resources. In this study, multiple universities were researched. Close to all universities experienced difficulties in facilitating knowledge-sharing (for international students). Creating and maintaining several teams to increase the effective use of UvA resources and make teams balanced is based on aspects of the dissertation from Shaw (2019). We also cover the building and maintaining teams along with the role of leaders to facilitate cohesive team collaboration.

Shaw (2019) makes the distinction between two types of cohesion. Task-Oriented is about the degree to which teammates unite as a group to achieve a shared goal. Here every member is expected to carry out tasks within a group. The focus is on the task instead of relationships, bringing us to the Social-Oriented Cohesion. This type is about the bond within groups, members of this group thrive on social situations and are more relational oriented. In these groups, conflicts are reduced to a minimum (or extinct) and strong bonds are present. Now we discuss further the aspects of task-oriented and social-oriented cohesion methods as educational organizations consist of both perspectives.

2.4.1 Building teams

Universities should aim to create teams that can collaborate cohesively. It should look at several factors before any teams will get implemented in the first place. Constructing teams that will have a shared purpose is the first hurdle that UvA has to overcome. Goal setting is a mechanic that instructs team members on set goals (short and long-term), specific targets and timetables. The research conducted by Salas et al. (1999) provides a recommendation on how to approach this goal-setting procedure. It describes an *environment* where team

members need to be involved in the goal-setting procedure to get a better overview of how to achieve set goals. Having timely interventions where performance is assessed have been proven to work.

The second cornerstone of building cohesive teams lies in group size. For a group to be successful, a group size of five to seven members is preferred. However, depending on the type of group and goals, the group size has some freedom to differ from the set size. The reason why larger teams often fail to succeed can be explained due to members being overlooked. When there are tasks available to carry out, members with low confidence can more easily hide and walk away from their responsibilities. A common argument as to why members are neglecting their work is to avoid conflicts within the team. Thus, meaning that a member is acting conflict-avoidant to preserve team cohesion. In turn, the total team performance will be reduced drastically (Shaw, 2019). UvA, therefore, has to assess whether this phenomenon is occurring currently and decide if the current group size leads to optimal output.

2.4.2 Maintaining teams

Rigopoulou et al. (2012) describe that having a minimum clarity of roles will lead to negative results. To facilitate growth within a team, every individual member of the team must have a clear understanding of what their role is. According to Carbonell and Rodriguez-Escudero (2011) cohesion in teams can only be improved or maintained when every member of the team has a clear understanding of its tasks and responsibilities. To avoid members feeling undervalued it is important to pinpoint the rewards and outcome of a specific task for every member. To improve role clarity, there are several measures that an organization could undertake to improve the expectations of roles. Here, a continuous process of feedback is a possible way to improve clarity in tasks and responsibility (Nhundu, 1992).

2.4.3 Sense of belonging

The second way of maintaining teams is to give every member a sense of belonging. Members understand their strengths, weaknesses and believes and other teammates accept and adapt to the (lack of) competencies (von Treuer et al., 2013). It is necessary in the building phase of creating teams, that managers place people with non-clashing personalities together. However, sometimes it is impossible to have a clear understanding of the personality of every single person. Therefore, a manager could facilitate an *environment* that makes it easy for members to pay respect and gratitude for a team's variety and skills (von Treuer et al., 2013). A possible way to do this is to build trust or introduce feedback and clarity (Senécal et al., 2008).

2.4.4 Communication

The third part of maintaining a cohesive team is to improve cohesion. The leader must offer the resources necessary for communication. Enabling communication between members or manager to members will lead to better understanding. A better understanding will eventually lead to greater cohesion within teams or help with identifying possible issues early on. A way to improve communication is to meet. A team meeting will make communication between members more accessible and give every member the feeling of security (Smith et al., 2013).

2.4.5 Rewards

The last cornerstone of maintaining a cohesive team is rewards, to keep a team motivated. When a team achieves a result, the leader's responsible to award and thanks (Podsakoff et al., 1984), using intrinsic or extrinsic rewards.

3. Platform requirements

Since the platform for digital collaboration by Abcouwer and Takacs (2018) does not elaborate on the deeper system requirements necessary to establish team cohesiveness and knowledge sharing behaviour of all partners and teams within such a platform, this research focuses on bringing these to light. We aim that future work can build upon these suggestions, test them in practice, and validate their effectiveness.

Our research led to findings of five key requirements which a platform for lifelong learning and digital collaboration should meet to establish knowledge sharing behaviour and cohesive teams. These requirements and their sub-requirements are processed in table 1. To clarify the nature of each requirement, they will be explained using the proposed implementation of the system.

Table 1: Requirements of the lifelong learning and digital collaboration platform

ID	System requirements	Literature
<i>R1</i>	Goal setting	
<i>R1a</i>	Partners can formulate and share challenges requiring new knowledge	Koens, L. et al., 2018 Galan-Muros, V. & Davey, T., 2019
<i>R1b</i>	Shared formulation of short- and long-term goals (targets and timetables)	Salas et al., 1999
<i>R1c</i>	Clear division of the roles and responsibilities of every team member	Rigopoulou et al., 2012 Carbonell & Rodriguez-Escudero, 2011
<i>R2</i>	Construct cohesive teams	
<i>R2a</i>	Teams can be composed based on individual profiles	von Treuer et al., 2013
<i>R2b</i>	Every team member has a clear understanding of their role, tasks, and responsibilities at any given moment	Rigopoulou et al., 2012 Carbonell & Rodriguez-Escudero, 2011
<i>R2c</i>	de-emphasize hierarchy	Wang & Noe, 2010
<i>R3</i>	Personal & group development	
<i>R3a</i>	Feedback between team members.	Nhundu, 1992
<i>R3b</i>	Share and gain knowledge between networks with varying access rights	Galan-Muros, V. & Davey, T., 2019
<i>R4</i>	Effective communication	
<i>R4a</i>	Facilitate an environment where team members can pay respect and gratitude for a team's variety	von Treuer et al., 2013
<i>R4b</i>	Facilitate resources for team members to communicate with each other	Senécal et al., 2008 Smith et al., 2013
<i>R4c</i>	Share new ideas and facilitate learning from failure to enhance knowledge sharing	Taylor and Wright, 2004
<i>R4d</i>	Establish relationships between individuals, practice communities or social networks	Cross & Cummings, 2004; Chen, 2007; Wang & Noe, 2010; Galan-Muros, V. & Davey, T., 2019)
<i>R5</i>	Honest value distribution	
<i>R5a</i>	Possibilities to reward team members in return for shared knowledge, project efforts, tailored to individual needs.	Podsakoff et al., 1984
<i>R5b</i>	Honest value distribution based on input while preventing a competitive climate	Carbonell & Rodriguez-Escudero, 2011 Schepers & Van den Berg, 2007; Ferrin and Dirks, 2003; Constant et al., 1994)

3.1 Suggested system

The system should allow any participant of the ecosystem to share challenges that require new knowledge. It should make these challenges become visible to other participants (R1a) and allow the person who adds the challenge to formulate the knowledge, skills and resources required (if these are known) so that others can estimate whether or not it suits their profile (R2).

Second, the system should allow other members of the ecosystem to browse easily through challenges, based on their interests (R2). If participants want to join a project, they apply through elaborating on their profiles (R2a). What motivates someone to join the project? What knowledge and skills they bring to the table? What strengths and weaknesses they have? Other team members can estimate their inputs and competencies, enabling the team to stay balanced. Furthermore, this will give the applicant the feeling others accept them and will adapt to their competencies, which is essential for establishing a sense of belonging and dedication to the project (R2).

Third, if the team is formed, the system should facilitate that all team members are involved in setting goals such as timetables and overall objectives on both team and personal levels (R1b). The system should allow members insight into their personal tasks and responsibilities (R2b). The latter establishes cohesion and motivation. Furthermore, it should de-emphasize hierarchy, and consider every team member equally important in the group process (R2c).

Fourth is agreeing on an honest value distribution. The system must facilitate and document an honest value distribution in return for any shared knowledge or project efforts (R5b). Rewards can take various forms but are essential to agree on upfront. Possibilities are receiving knowledge in return or asking for knowledge at another time, receiving money in return where the amount is based on the knowledge and the time consumed for the sharing of knowledge, receiving back credits to be used later for the gain of knowledge at peers, and a cooperative reward system based on team effort. A considerable challenge is that the system needs to find balance between rewarding participants relative to their efforts while preventing a competitive climate (R5b). Consequently, the system should include a reward functionality that allows balance between the team and individual rewards.

During the goal-setting phase, it is also essential to agree upon knowledge ownership. Those receiving knowledge should always handle it correctly. The system should prevent knowledge share with third parties without arrangement with the knowledge owner (R5b). The perception that one owns knowledge enhances the likeability participants also share knowledge. Knowledge ownership therefore is a primary facilitating feature. Everything that is agreed upon has to be documented by the system and monitored by all members.

Fifth, the system should stimulate the development of trust, and feelings of belonging through offering possibilities to pay gratitude and respect for certain accomplishments, a team's variety, or an individual's skills (R4a). Developing effective channels for communication (R4b), sharing ideas or knowledge (R4c), and building relationships in the ecosystem and sharing relevant knowledge with partners (R4d). Besides, team members could give each other feedback to help professional development (R3a).

Lastly, the system should allow all participants in the system to learn by doing research and sharing new knowledge (R3b). The developments around these challenges could potentially lead to new courses, services or products that accurately address relevant challenges in society. The role of the system in sharing this knowledge and fostering the development of relationships between partners and communities of knowledge can be considered in multiple ways. The system could be used as storage for all knowledge and register for all professional relationships. However, existing frameworks or architectures can also be used to provide these functionalities. In the latter case, the system would solely refer to the location of certain knowledge or information.

4. Limitations & future work

This research should be considered an exploratory study. Given the sheer size of the research domain, relevant concepts may have been overlooked. This could mean other focus areas apart from, knowledge-sharing incentives and constructing cohesive teams can lead to additional requirements for knowledge-sharing initiatives. Future research could focus on including more topics and encompassing them in a single framework.

Our presented results should be looked at as a basis, and framework with insights, suggestions and critical questions to consider when designing a knowledge-sharing ecosystem. This research proposes a possible way to encompass this in a knowledge-sharing platform, but other, more feasible ways might exist which are not considered in this paper. Future research could identify and test other ways of facilitating knowledge-sharing in a digital platform for collaboration and lifelong learning.

Furthermore, the research does not come with a final design of a platform but merely provides suggestions of what a possible platform could look like, this suggestion can function as the basis for future research and it should be tested to validate its effectiveness in light of lifelong learning.

5. Conclusion

This research focused on identifying incentives and requirements for potential partners in the UvA's ecosystem to participate in a platform for digital collaboration and lifelong learning. To provide an answer to the formulated problem statement, this research provides potential members, incentives of these members, identified system requirements, and suggestions for the development of such an ecosystem.

We advise the university to initiate the development of such an ecosystem or incorporate the presented insights and elements into existing initiatives. Furthermore, since previous literature highlighted the relevance of showing support, and encouraging staff to participate in knowledge sharing, and lifelong learning initiatives, we advise to stimulate employees to participate in such initiatives and include their insights into current curricula, or new courses. This would not only benefit the professional development of the employees, but it would also allow the institute to better fulfil its valorisation responsibility. Besides, the university would contribute to educating a workforce that is resilient, and adaptive to future developments in society.

Finally, this research raised some important questions that should be considered while developing a platform for digital collaboration and lifelong learning. First and foremost, consider the balance between dividing value based on effort, and the necessity to prevent creating a competitive climate. Second, how to ensure an honest value distribution in such an environment. Third, who owns the knowledge in a situation with varying efforts or input of resources. Fourth, where to keep knowledge and one gain access to the knowledge. Fifth, how to keep the platform alive and members engaged. We believe that to receive answer to these challenges, one first needs to accept that such a platform will never be perfect upfront. We encourage our university to accept it, start shaping a minimum viable product and perform iterations to come to the desired outcome.

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