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Enhancing collaboration and knowledge sharing through intra-organizational platforms: a design science research study

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Abstract

Platforms have revolutionized value creation by enabling efficient matchmaking between customer groups. While traditionally associated with external value exchange, platform thinking represents the mechanism that, through matchmaking, supports established firms to innovate by orchestrating available resources. While platforms are known in the literature for creating value by efficiently connecting external customer groups, their potential to support efficient collaboration among internal units in established organizations remains underexplored. How to adopt platform thinking to promote intra-organizational collaboration is also a problem faced by the manager of Confcooperative Lombardia, a business association supporting cooperatives in value creation, seeking to improve internal collaboration. By adopting a Design Science Research, which included physical and digital workshops involving the entire organization, this study developed an artifact that illustrates how platforms can serve as a framework for redesigning collaboration and knowledge sharing between internal units. Matchmaking becomes a ritual that employees can flexibly adopt to ask for support and share best practices. This research reframes platforms as tools for guiding collaboration within organizations, extending beyond their digital functionality. Since the platform operates as an intra-organizational process rather than a digital system, its functioning depends on empowering individuals, who collectively act as the algorithm that drives matchmaking and knowledge exchange. Employees are guided by agile and platform thinking as cultural frameworks that sustain collaboration, presenting platforms as processes that can be scaled across the organization. By leveraging this process, organizations can better utilize resources distributed across various units. Managers, in turn, can adopt platform thinking into organizational culture to create a scalable process that guides internal collaboration and knowledge sharing.

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JEL classification M10 · O30 · O31

1 Introduction

Platform business models radically reshape how organizations create value by orchestrating resources beyond traditional boundaries (Kenney and Zysman 2016; Nagy et al. 2025). Platforms act as matchmakers (Evans and Schmalensee 2016), connecting two customer groups, one seeking something and the other offering it. As networks grow, platforms generate increasing opportunities for value creation through network externalities (Katz and Shapiro 1985). Their mechanisms rely on orchestrating customers, easing connections (Evans and Schmalensee 2016), and repurposing idle assets (Trabucchi et al. 2021a, b). Platforms achieve effective and efficient value creation by reducing existing barriers in customer interactions (Hagiu and Wright 2015), while data and digital infrastructures further spread and scale their value (de Reuver et al. 2018).

Although platforms are often associated with tech start-ups (Gawer, 2014; Jabeen et al. 2025), research has begun to examine their adoption in established organizations (Pundziene et al. 2022) to generate innovation opportunities (Teece et al. 2022) and question how platform dynamics could be adopted internally to achieve efficiency with employees as platform sides (Rohn et al. 2021). The pursuit of collaboration focuses on fostering knowledge sharing (Choo 1996) to create innovation opportunities and achieve competitive advantage (Fanousse et al. 2025). Platforms are seen as enablers of such collaboration by designing intra-organizational platforms to collect and share knowledge (Mady et al. 2025; Vuori and Okkonen 2012; Zhang et al. 2023). Platform mechanisms can nurture internal collaboration by facilitating knowledge exchange (Cennamo et al. 2022), repurposing resources to expand product offerings (Mody et al. 2020; Teece et al. 2022), and reducing innovation uncertainty (Fanousse et al. 2025). Yet, organizations seek how to maintain efficiency in internal processes and employee connections (Wirtz and Zeithaml 2018) for sustaining long-term value creation.

Knowledge sharing, however, is a socially constructed process shaped by the organizational culture (Garud et al. 2010) and influenced by the space (both physical and virtual) where individuals interact (Nonaka et al. 2000). Intra-organizational collaborations are designed to facilitate effective knowledge flow, highlighting the need to understand how their interactions should be designed (Zhang et al. 2023). Current explorations of platforms in non-digital settings provide helpful perspectives on how platforms can promote intra-organizational collaboration by framing them as promoters of collaborations (Perez Mengual et al. 2023), where matchmaking drives value creation (Kopplin 2021) and innovation through platform thinking (Trabucchi and Buganza 2022). Yet most studies on intra-organizational platforms still focus on digital mediation, whether to ease asynchronous connections (Mady et al. 2025) or

to integrate external knowledge in an open-innovation manner (Rho et al. 2020). The literature thus overlooks how platforms can ease collaboration as a human-centered, socially constructed process, aimed at knowledge sharing and organizational efficiency. Indeed, this study aims to understand: "*How can platform thinking enhance collaboration and knowledge sharing in established organizations?*"

A similar pursuit of internal collaboration efficiency is shared by the manager of Confcooperative Lombardia, an Italian business association that supports cooperatives (their customers) located in one region in their growth and access to valuable resources. The organization is internally structured into locally based units dedicated to diverse services that address cooperatives' needs and are governed by a managerial board. The association's structure duplicates activities in diverse locations, disperses resources, and hinders internal efficiency. Confcooperative Lombardia, to date, attempts to unify these localized efforts through periodic alignment meetings but continues to face challenges in effectively utilizing local resources and designing a cohesive collaboration system. The manager, understanding the concept of platform thinking, envisions several opportunities in its adoption within Confcooperative Lombardia, acknowledging similarities and their potential to enhance performance and resource efficiency. However, the lack of theoretical knowledge on how to apply platforms to intra-organizational collaborations creates uncertainties about implementation and potential outcomes.

To address the theoretical and managerial problem, this study employs a qualitative methodology based on Design Science Research (DSR) (Hevner et al. 2004), which designs and tests an artifact with Confcooperative Lombardia to promote collaborations through intra-organizational platforms. DSR is particularly suited to contexts with limited understanding of the literature and complex problem scopes (Vom Brocke et al. 2020), as it generates insights through ongoing interactions among the project scope, literature framing, and organizational settings (Hevner 2007). Unlike other qualitative approaches, DSR systematically integrates social, theoretical, and organizational contexts (Dimov et al. 2022). Through iterative phases that clarify the project's scope and outcomes, DSR addresses calls for more adaptive research methods that accommodate fluid research scopes (Spanjol et al. 2024). At its core, DSR involves designing artifacts that bridge theory and practice (Blanka et al. 2022; Gregor et al. 2013), benefiting both practitioners and academic understanding (Akoka et al. 2023). In this research, the artifact is an intangible representation of Confcooperative Lombardia's internal structure as a platform, which supports collaboration by sharing locally distributed knowledge and creating efficient connections. Diverging from traditional DSR studies in information systems (Hevner 2007) or operations (Öhman et al. 2021), which often yield technology-based solutions, this research explores DSR's potential in managerial and entrepreneurial contexts (Iivari 2015; Blanka et al. 2022).

This research conceptualizes platforms as mechanisms that foster intra-organizational collaboration and enhance efficiency through knowledge sharing. Platforms act as tools for redesigning organizational interactions where employees gain the dual role of being the platform's customers (Rho et al. 2020) and the promoters of a distributed platform governance (Reypens et al. 2021). Intra-organizational platforms offer a concrete solution to promote collaboration within organizations (Fanousse et

al. 2025; Zhang et al. 2023), identifying a process in which iterative knowledge sharing practices (Nonaka et al. 2000) can be attained, relying on individual sensemaking (Choo 1996) to understand the value of available connections. Agile practices guide user engagement, fostering a culture that unites the platform's customers (Magistretti and Trabucchi 2024; Nagy et al. 2025) and grants autonomy in their connection. This study conceptualizes platforms as human-centered processes, relying on employees' understanding of platform principles and their role in generating organizational value. This perspective broadens the conventional view of platforms, extending beyond traditional business models or digital infrastructure adoption (Gawer 2014; McIntyre et al. 2021), serving as mechanisms for efficient collaboration.

Instead, intra-organizational platforms facilitate internal connections by enabling employees to seek support, respond quickly to external demands, and share knowledge that benefits the organization as a whole, using collaboration as a way to overcome resource (information) scarcity (Di Domenico et al. 2010). Matchmaking takes on a new meaning: as a moment for alignment in which best practices and knowledge are shared. Internal adoption becomes possible as employees embody the platform-thinking mindset (Trabucchi and Buganza 2022), thereby driving superior value creation through innovative organizational dynamics.

The characteristics of intra-organizational platforms first support the exploration of platform mechanisms in adjacent overlooked fields, such as the non-digital ones (Kopplin 2021; Perez Mengual et al. 2023), presenting value co-creation (Latinovic and Chatterjee 2024) happening in a face-to-face manner. Second, findings contribute to the ongoing conversation regarding network scalability, discarding the need to search for quantity (Karhu et al. 2024), prioritizing heterogeneity. This also increases established organizations' awareness of their opportunity to rely on existing resources (Mody et al. 2020), moving away from launching new projects (Teece et al. 2022) and instead fostering organizational collaboration, thus expanding current search for nurturing collaboration in various organizational setting, such as coworking spaces (Bouncken et al. 2018; Kopplin 2021; Orel et al. 2022).

From a managerial perspective, adopting platforms as processes enables organizations to address resource orchestration challenges. When designed as intra-organizational practices, platforms foster a collaborative culture that spreads through matchmaking as an organizational ritual. The DSR provides managers with a framework to nurture knowledge sharing internally, offering a step-by-step approach that identifies how to implement it, without investing in digital infrastructures.

2 Theoretical background

The theoretical background of this study is based on two main aspects. First, platform characteristics are presented, along with their adoption in established organizations. Second, knowledge sharing and its role in intra-organizational platforms are discussed, presenting the characteristics of non-digital platforms.

2.1 The platform characteristics

Platforms, exemplified by companies like Uber or Airbnb, deviate from linear value chains through structural characteristics to secure value creation (Hagiu and Wright 2015). Despite platforms promoting connection between two distinct customer groups (Cennamo et al. 2022), the literature highlights different configurations based on the role of the central platform towards its customers. For example, innovation platforms represent a shared infrastructure on which customers innovate (Cusumano et al. 2019), a configuration that this study acknowledges but excludes due to a lack of suitability. This study is based on transactional platforms that are rooted in economic research on two-sided markets (Rochet and Tirole 2003) and rest on three platform pillars (Evans 2003). (1) They must onboard two distinct customer groups (*sides*): a demand side seeking certain assets and a supply side willing to provide them. (2) Both sides are subjected to cross-side network externalities: as the number of users on the other side increases, each group becomes better off (Katz and Shapiro 1985), and (3) the central platform internalizes the externalities, facilitating side interactions.

The presence of the three pillars shapes platform dynamics and the value they generate, considering platforms for their unique business models (Gawer and Cusumano 2014; Nagy et al. 2025). First, platforms must simultaneously attract and onboard both demand and supply, solving the "chicken and egg" paradox (Caillaud and Jullien 2003). Securing a critical mass of both groups hinges on selecting appropriate customer segments (Stummer et al. 2018) and crafting appealing value propositions (Muzellec et al. 2015). Any misalignment between sides can undermine the longevity of the entire system (Yoffie et al. 2019). Once the paradox is overcome, platforms often scale through subsidizing one side for network expansion (Parker and Van Alstyne 2005). The digital layer further supports this growth by enabling scalability and capillarity (Täuscher and Laudien 2018). Platforms act as matchmakers, relying on a large network scale to secure suitable customer matches (Evans and Schmalensee 2016). By harnessing data, platforms can identify highly suitable matches (Amit and Han 2017) and share information that boosts transparency and trust (Trabucchi et al. 2021a, b). Through matchmaking, platforms give order to a complex system (Jacobides et al. 2024), exploiting resources beyond the platform's organizational boundaries (Helfat and Raubitschek 2018). By facilitating interactions that reduce search and transaction costs, platforms are recognized as efficient mechanisms for resource orchestration (Evans and Schmalensee 2016). Platforms can outperform traditional businesses (McIntyre et al. 2021), accelerate innovation (Teece et al. 2022), and scale into new markets (Varga et al. 2023) by repurposing current idle resources, like empty rooms on Airbnb, to find new market value (Trabucchi et al. 2021a, b).

Although transactional platforms have often been identified as business models that redefine the overall organizational structure (McIntyre et al. 2021; Jabeen et al. 2025), current research has begun to broaden this view by examining platforms through the lens of their mechanisms of value creation. Platform thinking (Trabucchi and Buganza 2022) frames platform mechanisms as a mindset that promotes innovation by revitalizing idle assets and connecting interested customers. Building on

the understanding of platforms as business models, platform thinking designs value-creation paths within established organizations by promoting resource sharing and redefining the role and interaction of resources (Behrami et al. 2025).

In this view, established organizations are increasingly interested in adopting platforms to achieve similar competitive advantages as platform-native organizations to cope with growing market pressures (Kenney et al. 2021). Research highlights how platforms can support innovation in established firms by extending existing product offerings (Teece et al. 2022) or by engaging with new customer groups (Dell'Era et al. 2021). The availability of resources and customers already connected to the organizational ecosystem offers a competitive advantage for established organizations, accelerating the adoption of platform mechanisms (Mody et al. 2020). However, there remains considerable ambiguity regarding the opportunities offered by platforms. Many cases integrate them as digital solutions (Cennamo et al. 2022), while others see platforms as mechanisms to improve collaboration among diverse stakeholders within the organizational ecosystem (Springer et al. 2025; Behrami et al. 2025). Platforms also create infrastructures that enable access to distributed knowledge sources (Rho et al. 2020) and could become a way to solve organizational problems by redesigning internal processes (Trabucchi and Buganza 2025). Indeed, platforms can also inspire mechanisms within organizations (Rohn et al. 2021), looking at collaboration and knowledge sharing (Vuori and Okkonen 2012), an area that has received limited attention.

2.2 Intra-organizational collaboration & knowledge sharing

Knowledge sharing is crucial for the long-term survival of organizations (Choo 1996) and calls for internal efficiency (Schiuma and Santarsiero 2023). The knowledge management literature has identified intra-organizational dynamics as mechanisms to foster innovation and asset sharing, created in different organizational areas (Fanousse et al. 2025; Paniccia et al. 2024).

The suitability of examining knowledge sharing through intra-organizational collaboration (Fanousse et al. 2025) lies in its dynamic nature, where individual agency plays a central role in extracting and maximizing value (Garud et al. 2010). Supporting this view, Nonaka and Takeuchi (1995) conceptualize knowledge management as a social and iterative process that creates value through continuous interactions among individuals. This process develops in a spiral of four phases, moving from tacit knowledge, held by individuals, to explicit knowledge, formalized in documents. These practices are crucial for innovation and value creation (Lin et al. 2015) as they strengthen organizational learning and opportunities for development (Paniccia et al. 2024). Intra-organizational collaboration facilitates collective problem solving (Fanousse et al. 2025) by combining diverse knowledge sources both within a specific field and across diverse organizational areas (Zhang et al. 2023).

Managing knowledge sharing within an organization is a complex orchestration process (Orel et al. 2022), as it must account for both individual characteristics (Choo 1996), such as the sensemaking of shared knowledge, and contextual factors, including the influence of physical or virtual spaces that shape how knowledge is captured and perceived (Nonaka et al. 2000; Wegner et al. 2023). Due to its dynamic nature,

promoting effective knowledge sharing involves challenges in achieving efficiency and motivating participation (Dyer and Nobeoka 2000). For this reason, the literature emphasizes the need for empirical research to explore how such connections can be effectively nurtured (Fanousse et al. 2025).

Platforms can respond to the call of understanding how knowledge sharing is nurtured effectively in organizations; however, the literature presents a limited understanding. Current research focuses on efficient knowledge adoption in new product development (Trabucchi and Magistretti 2020) and on digital tools to support reciprocal knowledge through intra-organizational platforms (Vuori and Okkonen 2012). These platforms foster innovation by enabling collaboration among dispersed employees (Morgan et al. 2021; Wegner et al. 2023), enabling the possibility to tap into collective intelligence and encourage co-creation (Vargo et al. 2008), which is crucial for value capturing mechanisms (Latinovic and Chatterjee 2024; Mady et al. 2025).

Although the platform literature offers a narrow perspective on intra-organizational platforms, insights from adjacent fields can broaden the academic understanding of these mechanisms, particularly through the lens of socially constructed processes of knowledge sharing and collaboration. A complementary view comes from studies on non-digital platforms (Perez Mengual et al. 2023), which focus on how the two customer sides interact when spatial proximity is involved. In this sense, non-digital platforms can help interpret interactions within organizational spaces (Bouncken et al. 2018) while raising questions about how to nurture network connections to give value to the organization's unique resources (Bibeau et al. 2024). Yet, considering the role of intra-organizational platforms in supporting employees' actions without burdening their schedules, it is essential to understand how to sustain user adoption (Vuori and Okkonen 2012).

Current research often frames platforms as catalysts for co-creation and idea generation (Mady et al. 2025). However, being mediated by digital tools (Morgan et al. 2021), they overlook the collaborative, socially constructed nature of knowledge sharing. As established firms face increasing pressure to refine internal processes and enhance collaboration (Wirtz and Zeithaml 2018), platforms can play a key role by improving resource-sharing efficiency (McIntyre et al. 2021) and orchestrating available assets (Trabucchi et al. 2021a, b). Since knowledge sharing is inherently social and dynamically shaped by space and resources (Nonaka et al. 2000), exploring how intra-organizational platforms operate without digital tools can provide preliminary insights into adopting platforms with employees as customers (Rohn et al. 2021) and reveal how platform mechanisms function in non-digital contexts. When the digital dimension becomes less central, understanding the organizational roles that sustain platform mechanisms becomes particularly important. This includes how managers can support such transitions (Fehrer et al. 2018) and how employees can shift their mindset to maintain value creation (Pundziene et al. 2022).

3 Methodology

3.1 The design science research process

This study employs Design Science Research (DSR) (Dimov et al. 2022; Gregor et al. 2013; Hevner et al. 2004) to investigate an underexplored area that has attracted real-world and theoretical interest. DSR is a qualitative methodology suited for ill-defined problems that neither the organization nor academia can comprehend (Holmström et al. 2009). Its value lies in offering a comprehensive understanding of a phenomenon through sequential and iterative activities, which gather data from the social, organizational, and theoretical realms (Dimov et al. 2022). Knowledge accumulates at each stage of the project, providing different perspectives on the role of the solution towards the organization and how participants perceive its value (Akoka et al. 2023; Blanka et al. 2022). Data collection can draw on methods such as interviews, workshops, and surveys to assess the designed solution. A key component of DSR is the artifact, a tangible or intangible solution that addresses organizational needs and through which knowledge emerges (Vom Brocke et al. 2020). The artifact's design crystallizes theoretical and practical input (Romme and Holmström 2023), creating value for the company and the literature.

While DSR's roots in information systems and operations literature (e.g., Hevner 2007; Öhman et al. 2021) often focus on tangible artifacts (e.g., a web interface), recent work highlights DSR's ability to design non-tangible organizational solutions (Blanka et al. 2022; Iivari 2015), thereby reshaping organizational dynamics (Dimov et al. 2022). By adopting the artifact to study human interaction alongside its technical and functional dimensions, DSR is particularly effective in uncovering tensions in organizational and entrepreneurial domains (Romme and Dimov 2021). As presented in the introduction, this research addresses a practical problem, enhancing Confcooperative Lombardia's internal efficiency through platform thinking, and a theoretical gap in internal platform adoption. DSR aligns with the exploratory nature of this study (Dimov et al. 2022) by offering a systematic process to tackle a complex project with blurred boundaries, requiring individual and organizational transformation (Gregor et al. 2013). This complexity spans organizational, individual, and technological dimensions, making DSR, founded on emerging and rich project data, preferable to traditional methodologies based on historical data (Spanjol et al. 2024).

3.2 The company involved

This research was conducted with Confcooperative Lombardia, a business association operating in one Italian region to support cooperatives. It is internally divided into eight local unions offering specialized services (e.g., credit and finance, legal, administrative), and six sectoral federations (e.g., social, agri-food, housing) that aggregate tailored needs and expertise. Local and chairman councils ensure alignment across these distributed units. These units are scattered across the Lombardy region and provide services to their sole customers—cooperatives—which number over 2,000. Although Confcooperative Lombardia operates in the social field along-

side cooperatives, it is not itself a cooperative and, internally, it functions as an established organization divided into units and coordinated by a managerial board.

While a regional presence allows timely responses to cooperative needs, the structure leads to high operational costs and service duplication. Multiple touchpoints may cause misaligned objectives across offices and delays in service delivery. Furthermore, the organization lacks a unified infrastructure for employee connections, and local variations hinder collaboration and complicate resource orchestration. Despite these challenges, Confcooperative Lombardia's broad local presence ensures deep familiarity with cooperative needs. The organization seeks greater internal efficiency by fostering collaboration and asset sharing. Recognizing similarities between its structure and platform pillars and envisioning the potential of platform mechanisms to enhance resource collaboration, the organization questions whether such mechanisms can address its inefficiencies. Currently, as cooperatives' needs continuously evolve and must comply with bureaucratic requirements, local service units would benefit from stronger internal collaboration to improve service quality and respond more quickly to cooperatives' requests. The organization's key challenge is nurturing intra-organizational efficiency by promoting collaboration and reducing internal complexity.

3.3 The five steps of a design science research process

To ensure rigor and trustworthiness in a DSR, scholars propose a tailored process encompassing artifact production, testing, and evaluation (Hevner et al. 2004). This iterative path keeps the project grounded in real-world and academic insights (Dimov et al. 2022), ensuring relevance, rigor, and an artifact design that supports the findings' generalizability and reliability (Hevner 2007). Relevance refers to the utility of Confcooperative Lombardia; rigor involves adhering to the DSR framework and drawing from literature to contextualize findings, while artifact design creates and deploys a solution tailored to the organization.

This study follows Peffers et al.'s (2007) six-step process: (1) problem identification, (2) definition of solution objectives, (3) design and development, (4) demonstration, (5) evaluation, and (6) communication. The first step involves identifying organizational needs, followed by defining boundaries and objectives. Once these are set, the artifact is designed and tested through an instantiation specific to the organization (one of many possible solutions). The process concludes with the artifact evaluation. The sixth step - scientific dissemination - is excluded from this study, as done in previous research (e.g., Blanka et al. 2022), resulting in a "five-step" process.

The process linearity collides with real-world complexity, which often necessitates iterations within and across phases to incorporate intermediate validations for solution relevance (Sonnenberg and Vom Brocke 2012). Recent DSR applications in entrepreneurship and management (Blanka et al. 2022) highlight the importance of customizing these steps to accommodate such complexities (Sonnenberg and Vom Brocke 2012; Tuunanen et al. 2024).

3.4 The five steps adopted within confcooperative Lombardia

Aligned with Peffers et al. (2007), this study employs the five main steps, integrating recent criticisms (e.g., Sonnenberg and Vom Brocke 2012; Tuunanen et al. 2024) to allow for multiple iterations and intermediate evaluations. Figure 1 illustrates the adopted process, and Table 1 summarizes each phase. The findings section will detail the steps adopted at length regarding the most relevant phases (#3 and #4), while a synthesis of the phases is presented hereafter for research clarity.

The problem identification started with the manager's awareness of the opportunities offered by platform thinking and the similarities between Confcooperative Lombardia and platform models. The need to support internal collaboration through platforms was first framed in a series of one-on-one digital meetings between the manager and the research team, which provided deeper insights into the organizational structure and needs. To define the solution objectives, additional digital meetings were held with employee representatives, senior employees from local units who would carry on the adoption of the solution, and project stakeholders, namely top-level managers, who sponsored the project and were committed to ensuring its success. The solution design and testing took place through a mix of digital and physical workshops and meetings. These activities set the boundaries of the artifact, co-designed its main features, and enabled initial testing, relying on moments of collective and individual reflection. To enhance relevance and generalizability, participants were divided into two pilot projects, each focusing on different areas. The pilot testing phase lasted four weeks and involved a broader number of employees (the platform customers) to recreate a real work setting, even if they did not participate in the workshops. The DSR concluded with a pilot-project-specific evaluation that ensured alignment for future adoption, and a formal evaluation workshop where the organization discussed the artifact's value and potential future applications. Digital providers were also involved in exploring the design of complementary digital support.

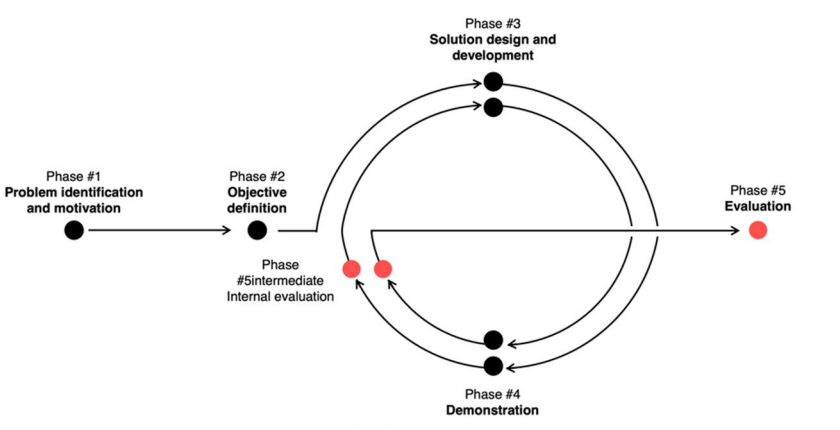


Fig. 1 The design science research path conducted, representing how Peffers et al.'s (2007) five steps approach has been modified

Table 1 Summary of the phases and key activities conducted during the design science research path

Phase	Goal of the phase	Main activities	Main participants	Details about the activities		
				Quantity	Duration	Participants
#1 Problem identification and motivation	Define the organization's need and problem boundaries	Digital meetings to frame the problem and the organizational needs	The manager The research team	3	30 min	2
		Literature review about intra-organizational platform adoption	The research team			
#2 Objective definition	Define the key requirements for the solution and relevance for the organization	Meetings to highlight the project requirements and boundaries	The manager The research team Representatives of employees	2	110 min	12
		Summary and definition of the main objectives of the solution and problem boundaries	The manager The research team	1	60 min	5
		Meeting to understand digital constraints and opportunities	The manager The research team Digital providers	1	60 min	6

Table 1 (continued)

Phase	Goal of the phase	Main activities	Main participants	Details about the activities		
				Quantity	Duration	Participants
#3 & #4 Solution design, development, & demonstration	Synthetize the core aspects of the solution and test them in the real organizational environment	Physical workshop to start the solution design divided in two pilot projects	The manager The research team Project stakeholders All employees of each pilot project	1	420 min	27
		Digital workshops to finalize the solution requirements	The manager The research team All employees of each pilot project	4	120 min	16
		Physical meeting to evaluate the artifact design with the project's stakeholders	The manager The research team Representatives of employees Project stakeholders	1	180 min	15
		Digital kick-offs to launch the test of the pilot projects	Employees of each pilot project The manager The research team	3	90 min	16
		Closing session to evaluate the benefits of the pilot projects	Employees of each pilot project The manager The research team	3	180 min	16
		Physical meeting to evaluate the artifact design with the project's stakeholders	The manager The research team Representatives of employees Project stakeholders	1	180 min	15
#5 Evaluation	Assess the value of the artifact and define future adoption	Physical workshop to evaluate the pilot projects and envision future opportunities	The manager The research team Project stakeholders All employees of each pilot project	1	420 min	25
		Digital meeting to define strengths and weaknesses of the artifact proposed	The manager The research team Digital providers	1	120 min	8

At the end of the DSR, the organization chose to carry on the project by leveraging the artifact to diffuse it in other units. The research team supported the organization in the following months in implementing the artifact and informing the development of the digital dimension.

Data collection relies mainly on primary sources by attending meetings and workshops. Ethnographic methods are used to record and transcribe sessions, supplemented by field notes and analysis of the material on the digital boards. The meeting happens in a dialogical manner, without a pre-defined set of questions, rather as co-creating moments with some slides to activate the discussion. All the collected materials have been analyzed using an open coding procedure (Grodal et al. 2021; Yin 2018), grouping the relevant insights in chronological order and grouping them by phases. Platform and managerial literature have been adopted to evaluate the data. Because employees spoke Italian, all materials were collected in Italian and translated for dissemination.

4 Findings

The whole project begins with the manager of Confcooperative Lombardia recognizing the potential of platform thinking to foster intra-organizational collaboration and sensing the need to reduce structural complexity. A series of digital meetings with the research team helps narrow the problem area. In parallel, a literature review in the platform field provided an overview of platform adoption within organizations, current knowledge about intra-organizational platforms, and insights into supporting knowledge sharing. This confirmed the project's novelty and framed its problem statement. The problem objectives (phase 2) were also defined by integrating key employee representatives' perspectives and input from external digital suppliers who might develop any needed infrastructure.

The rest of the findings section will report the other phases of the DSR (phases 3, 4, and 5: solution design and testing, and evaluation) as they facilitate comprehension of the design and adoption of intra-organizational platforms. The findings are presented through three main milestones in these phases: the initial design of the artifact, its translation into a specific instantiation, and its testing and evaluation. Each milestone is divided into three parts: the process adopted, the results of the activities, and lessons learned. Figure 2 illustrates the overall process in detail, while Fig. 3 outlines the main tools used in each phase, providing a comprehensive overview of the adopted process.

4.1 The first physical workshop: Tithe draft design of the artifact

4.1.1 The process adopted

The first step in designing the artifact was a physical workshop with the manager, the key project stakeholders, and the employees. Table 2 summarizes the main findings of this phase.

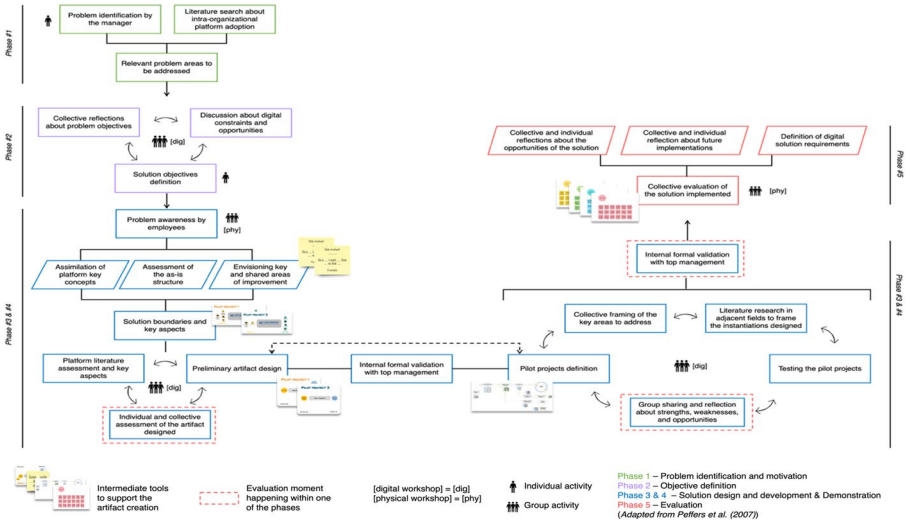


Fig. 2 Chronological representation of tools and activities performed during the design science research

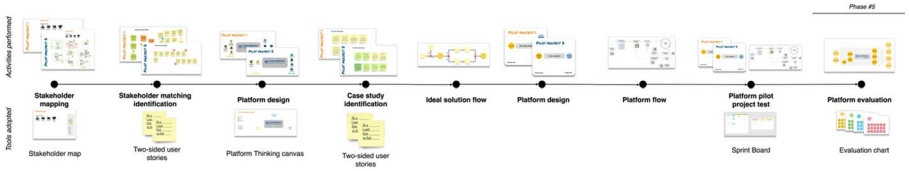
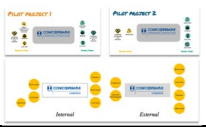


Fig. 3 The design science process adopted with confcooperative lombardia following the five steps adapted from Peffers et al. (2007)

Table 2 The summary of the activities performed during the physical workshop

DSR phase	**Main activities and scope**
#3 & #4 Solution design, Development, & Demonstration Physical workshop	• Awareness about platform thinking meaning and values that platforms provide • Comprehensive identification of the actors influenced by the platform-based collaboration • Identification of the contribution these actors can provide, which knowledge sources they offer, and their needs • Distribution of actors in the two platform sides and their identification as customers • Draft design of the platform through the platform thinking canvas
DSR phase objective	
• Draft the first artifact • Design its characteristics • Create awareness in participants about platform values and dynamics.	
Tools adopted	**Outcome of the activities**
 • Stakeholder map • Two-sided user stories • Platform thinking canvas *Digitalized on a collaborative board (Miro)*	 • The first representation of the solution draft for each pilot project • The first generalized representation for the whole organization through platforms

The aim was to collectively define solution requirements and explore how platform mechanisms could enhance resource sharing, fostering alignment, commitment, and accountability across the organization. Participants were split into two Pilot Projects, each targeting different organizational areas but following identical steps. Pilot Project 1, *Knowledge Sharing*, focused on identifying and disseminating relevant knowledge within and outside Confcooperative Lombardia, while Pilot Project 2, *Labor Regulation*, aimed to co-create legal and service solutions leveraging existing knowledge to meet external cooperative requests. Each group had a representative coordinating with the other participants. The workshop began with a briefing on platform thinking and value creation, establishing a shared understanding of the topic. Participants then mapped the main stakeholders through group discussions and individual reflections, gaining a comprehensive view of all actors involved. Using user stories, they identified assets and resources from each stakeholder and clarified roles and interconnections. These user stories were analyzed to address Confcooperative Lombardia's as-is structure and sorted to create a two-sided platform structure. Consequently, each pilot project developed a draft solution design, sorting key stakeholders into the demand and supply sides, becoming the platform customers, and illustrating how platform mechanisms could strategically coordinate internal assets.

4.1.2 The results of the activities performed

The stakeholder mapping and user-story analysis revealed a complex structure that requires leveraging knowledge and best practices. In Pilot Project 1, the demand side comprised internal units and external cooperatives seeking updates on new topics, leveraging the organizational network to find appropriate knowledge sources. "*As a cooperative and operator in Confcooperative Lombardia*, *I want to have a prospective analysis of the services developed to understand positioning and help grow and meet the challenges*" (User story from Pilot project 1) with the platform operating as a promoter of innovation. In Pilot Project 2, solutions addressed external requests using best practices from other units, service centers operate both on the demand and supply side, with the latter supported by external entities (like labor units, public administrations, etc.). Both pilot projects involve similar networks of internal units (e.g., local Support Services) and rely on external entities beyond cooperatives (e.g., research centers and affiliated firms), highlighting Confcooperative Lombardia's orchestration role in the local territory. "*As a service center*, *I want to build a shared practice with other service centers to probe unspoken questions and needs from the cooperative*" (User story from Pilot Project 2). User stories highlight the search to exploit organizational needs to increase the value offered "*As a worker within Confcooperative Lombardia*, *I want to know if we are dealing with that issue where I have a request from others (associates*, *territorial unions*, *etc.) to propose that request as a new service.*" (User story from Pilot Project 1).

Each pilot project uses the Platform thinking canvas to delineate interactions between internal and external actors, as represented in Fig. 4, specifying which customers initiate matchmaking and the types of interactions the platform should facilitate.

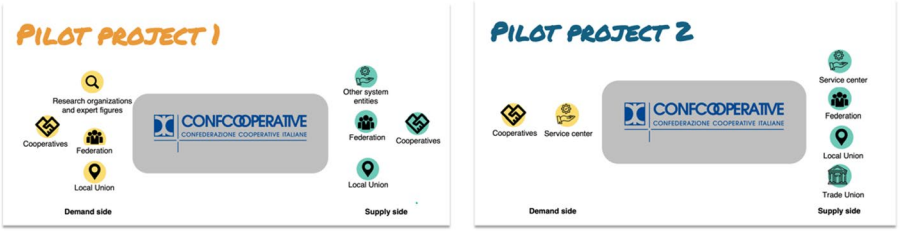


Fig. 4 Representation of the draft design of the Pilot Project platform

Table 3 Key characteristics of the two pilot projects

		Main characteristics of the platform-based pilot project	
		Pilot project 1—Knowledge sharing	Pilot project 2—Labor regulation
Macro area of the pilot project		Information and data management	Tasks sharing and response alignment
Platform side	Demand	Local union, federation, cooperatives	Local service center
	Supply	Federation, Local union, other entities (e.g., municipality)	Local union, federation, local service center, other entities (e.g., labor unions)
Scope of the pilot project		Create visibility of local knowledge Collect best practices to create new services for external cooperatives Share a rapid response for the emerging problems of cooperatives	Co-create best practices for faster response to external requests Share locally generated knowledge Increase the efficiency in resource sharing with less resource duplication

Both pilot projects illustrated innovation and responsiveness through transactions between internal units and external cooperatives, embodying two-sided platforms with diverse actor types. Employees harness organizational interdependencies across distributed units to accelerate response times, reduce duplicate work, and increase the visibility of internal processes. "*As a service center*, *I want to improve or automate ordinary processes through other service centers or from other external entities so as to improve both performance and speed of response*." (User story from Pilot Project 2). Table 3 summarizes each pilot project's key features.

4.1.3 Lessons learned

The draft pilot projects revealed strong dependencies among internal and external customers, aligned with the initial similarities envisioned by the manager. Although both projects aim to foster collaboration among internal units, they prioritize establishing an efficient connection with the external cooperative over this internal collaboration. The two pilot projects guide the design of an artifact composed of two distinct platforms, as shown in Fig. 5. One guides resource sharing among internal units operating to exploit local knowledge. The other operates to match external cooperatives with suitable business units to provide an efficient service.

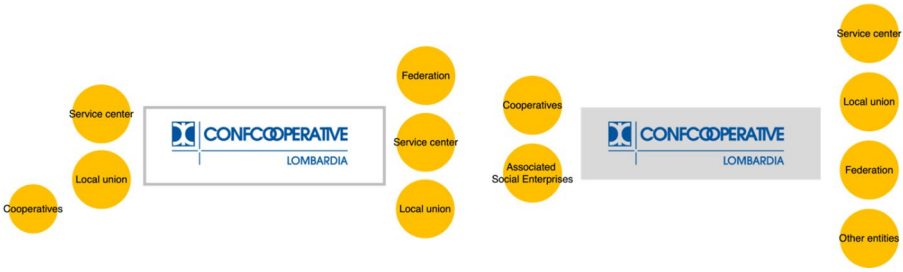


Fig. 5 First representation of the artifact with two separated platforms

Table 4 The summary of the activities performed during digital workshops

DSR phase	**Main activities and scope**
#3 & #4 Solution design, Development, & Demonstration Digital workshops	• Creation of detailed user stories to identify a use case • Selection of a use case to reflect upon a concrete solution design • Definition of a detailed ideal flow of activities to envision side interactions and value achieved • Evaluation from the top management about the value of each pilot project • Formalize the flow of activities in an agile to support flexible customer collaboration
DSR phase objective	
• Definition of a final artifact • Identification of the flow of the activities that create value in platform-based interactions • Define an instantiation through which the organization can test the solution and comprehend its value	
Tools adopted	**Outcome of the activities**
 • Detailed two-sided user stories • Flowchart *Digitalized on a collaborative board (Miro)*	 • Consolidated solution design for each pilot project • Identification of the instantiation for testing the solution testing

4.2 Digital workshop sessions: finalizing the pilot projects and their instantiation

4.2.1 The process adopted

Each pilot project conducts a series of digital workshops independently, in which participants refine the artifact's architecture and activities through individual and collective reflection, aiming to finalize the scope. First, a new set of detailed user stories serves to identify a specific use case for the final solution design. Second, once the use case was selected, the ideal activity flows were defined, serving as preliminary tests and evaluations before the solution implementation. The solution reframing involves reflecting on platform characteristics and values. Third, a physical meeting with key stakeholders validates the refined artifacts for organizational alignment by reviewing their strengths and potential challenges, leading to official approval of the Pilot Project design. Finally, to test the artifact, employees demonstrate how the search for collaboration requires an infrastructure that guides their interactions while maintaining flexibility and timeliness in adopting platform dynamics into their activities. Drawing on literature about flexible collaboration, an Agile methodology with sprint execution is adopted to facilitate platform customer interactions. Table 4 summarizes these findings.

4.2.2 The results of the activities performed

The first pilot project, the Knowledge Sharing group, searches for a solution that enables the identification and proactive sharing of relevant information across the organization, integrating it with local knowledge to address user needs before formal requests arise. "*We have to make sure that Confcooperative Lombardia is the first to give this information and that it is not [the] cooperative to find it alone. Similarly*, *we must raise awareness within the organization that there is a synthesis and dissemination activity to capitalize on knowledge at the territorial level*" (Participant from Pilot Project 1). This proactive approach also strengthens organizational belonging, creating a proactive process that values local knowledge and ensures broad dissemination of insights. The second pilot project, the Labor Regulation group, underscores the need for a system that supports collaboratively designed solutions in response to cooperative requests. "*We need to understand how we can work together to best respond to external needs and what assets we have that might interest others*" (Participant in Pilot Project 2). The artifact helps individuals identify when and how to seek collaboration and share requests with other units to co-develop solutions. Matchmaking helps distribute acquired knowledge within the organization and connect suitable employees (demand and supply sides).

Across both pilot projects, common needs for flexibility and responsiveness to external requests emerged, alongside the importance of knowledge sharing to establish a shared understanding of each local unit's assets and expertise. Both pilot projects aimed to easily connect employees with locally distributed resources, where customers could fluidly operate on both the demand and supply sides based on their needs. This platform-based process overcomes the "*lack of stronger relationships and connections between parts of Confcooperative Lombardia*" (Participant in Pilot Project 2). Platforms "*become an internal coordination tool for information flow to overcome multiple non-integrated means of coordination*, *with the goal of helping to make informed decisions and share this information internally and with cooperatives*." (Participant in Pilot Project 1).

The process starts with a moment to share the need and discuss which resource might best address it. With a face-to-face matchmaking moment, the two employees collaborate to design the outcome. At a later stage, the outcome is presented to the entire platform and, if validated, shared with the organization. Structuring the process as such provides employees with the flexibility to participate according to their needs. The selection of the matchmaking happens in a shared moment with multiple customers, thus emphasizing how the collective selection of the two customer sides creates an "*identification of an owner of the response created*, *where today it is me*, *and tomorrow it will be others*" (Participant in Pilot Project 2). Despite the platform sides being on board, as they both find value in collaborating, the participants reflect on the risk of reduced collaboration due to time constraints and consider it an activity outside daily tasks. The flow definition in the digital workshops shifts the role of external cooperatives, becoming inputs for the demand side, activating the platform-based process. Figure 6 represents the final design, with only internal units as sides.

The flow envisioned by participants requires a structured yet flexible method to ensure individual participation, identified in the agile process to ensure accountabil-

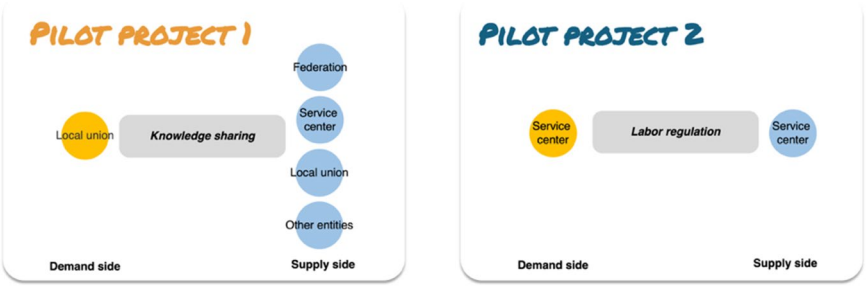


Fig. 6 Representation of the two pilot projects

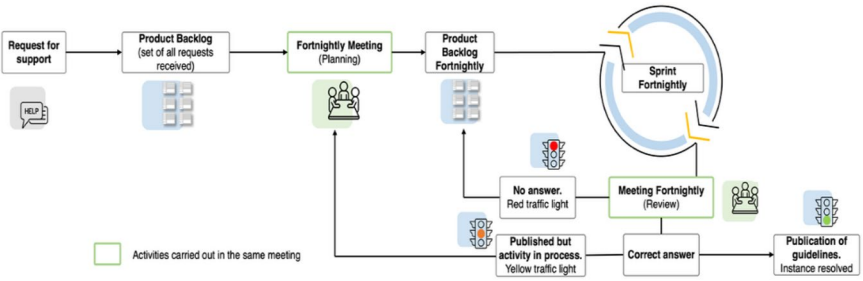


Fig. 7 Representation of the instantiation of the solution design based on an agile process

ity, collaboration, and adaptability, as represented in Fig. 7. Table 5 summarizes each pilot project's characteristics.

4.2.3 Lessons learned

The artifact illustrates how platform-based approaches can support flexible resource sharing by providing a structured way to connect internal organizational units. The platform-based process harnesses inter-organizational connections to resolve employees' requests. Although the two pilot projects differ in the granularity of their proposed flow, both stress the role of individuals in enabling platform dynamics, becoming the activators of the process, and voluntarily sharing acquired knowledge. In Pilot Project 2, participants clarify how employees can assume demand or supply roles, searching for collaboration among different organizational units. The artifact design allows the sharing of diverse content through a process that balances structure with autonomy in role selection and topic discussion. While flexible, it also avoids random interactions by relying on matchmaking to assign who will share knowledge. Agile ensures periodic encounters, clearly defined roles, and shared goals, enabling participants to co-create and disseminate knowledge. Embedding these practices in day-to-day routines helps the organization respond more efficiently to external demands.

Table 5 Key characteristics of the two pilot projects

		Main characteristics of the platform-based pilot project updated after digital workshops			
		Pilot project 1—Knowledge sharing		Pilot project 2—Labor regulation	
Macro area of the pilot project		Detect, collect, and organize relevant data to deliver timely information to organizational functions and external cooperatives		Identify and collaborate on resolving external requests to provide a cohesive response by reducing duplication of activities	
Platform side	Demand	Local union	Recognize relevant information to be shared and demands for support	Local service center	Receive a new request from cooperatives and demand for support in its definition
	Supply	Federation, local union, local service center	Share information and knowledge to be integrated	Local service center	Share knowledge to be integrated and craft the response
Unique aspects that emerged during this phase		Identify a set of activities that both the demand and supply side should perform during the matchmaking Getting a swift response for cooperatives requires internal collaborative change Overcome the limited collaboration to acquire information from other units		Identify a set of activities that both the demand and supply side should perform during the matchmaking Individual need is the real trigger for matchmaking, demanding the other's support Make people understand the value of investing time in this process for future benefit	

Even though participants recognize their individual responsibility in understanding and nurturing these platform-based connections, they equally require a guiding framework that supports and sustains such interactions, as represented in Fig. 7.

Overall, the pilot projects' activities hinge on human interaction-based matchmaking. Employees adopt platform thinking as a shared culture to comprehend their role and which resources they should exploit. Consequently, the internal use of platforms emerges largely as a cultural and analog alignment rather than a purely technological one. The identified activities for the two pilot projects serve as a practical blueprint, enabling testing in real-world scenarios rather than remaining a purely theoretical discussion.

4.3 The pilot testing: the adoption of platform mechanisms into daily activities

4.3.1 The process adopted

Each pilot project independently tested its artifact over four weeks, holding biweekly meetings attended by employees only. The testing phase began with a kickoff session to align participants and concluded with a closing session on benefits and issues

shared with the research team and the manager. Although a digital collaborative board was provided, its usage was minimal, with most discussions and updates occurring through synchronous, analog meetings. After testing, the findings were presented to the project's stakeholders to highlight the generated value and evaluate the artifact's strategic role. A subsequent physical workshop brought together the whole organization to assess outcomes, discuss opportunities, and plan the next steps. During this workshop, digital boards captured insights into process strengths. Finally, the testing data and workshop conclusions were compiled into guidelines for an external service provider to develop a digital repository for shared knowledge. Follow-up meetings then explored the deployment of this platform-based solution within the organization. Table 6 summarizes the key insights.

4.3.2 The results of the activities performed

Both pilot projects adopted an Agile-based structure. Although they cover different topics, participants behave similarly and gain comparable advantages. Pilot Project 1 focused on sharing information about a webinar attended by an employee, as the content was believed to benefit the whole organization. Periodic meetings assess the data's relevance and identify who could integrate similar themes. "*The goal [of the meeting was] of unbundling and making information more usable*" (Participant Pilot Project 1), by creating newsletters for internal and external dissemination. Pilot Project 2 aimed to design anti-corruption legislation regulations. The first meeting assigns ownership and collaboration tasks, also serving as a "*collective moment of understanding through the spontaneous sharing of methods adopted*" (Participant Pilot Project 2). Over four weeks, participants worked to finalize the initial request and generate new ones, repeating the process to activate local knowledge. One participant of Pilot Project 2 observed that "*the ability to close a topic gave organizational effectiveness and gave awareness concerning opportunities to carry out certain activities*," demonstrating the approach's flexibility and boundaryless adoption.

These testing experiences highlight that platform-driven value relies heavily on individual participation. One participant stated, "*We are the platform*," highlighting

Table 6 The summary of the activities performed during the pilot testing and evaluation phase

DSR phase	**Main activities and scope**
#3 & #4 Solution design, Development, & Demonstration Testing of the pilots and evaluation of the artifact #5 Evaluation Broader evaluation of the artifact and future reflections	• Kick-off of each pilot project and delivery of a digital board to keep track of the activities • Each pilot project tests the solution for four weeks • Collaborative reflection upon strengths and weaknesses of the solution • Formal evaluation with the key project stakeholders to assess the value of the solution implementation • Closing workshop with the entire organization to reflect upon opportunities and future directions
DSR phase objective	
• Test the solution and understand the value of platform-based interactions • Reflect upon the values that this process can offer in the long term • Evaluate the opportunities, benefits, and risks of the solution	
Tools adopted	**Outcome of the activities**
 • Digital board to take not of the testing activities • Evaluation chart *Digitalized on a collaborative board (Miro)*	 • Final artifact design • The role of employees in conducting platform-based collaboration • Identification of key areas to be adopted for the solution implementation

that the success of the collaboration relies on employees' ownership of the process, their understanding of their role, and opportunities to feel empowered to collaborate. As employees internalize platform dynamics, participants "*use the process to test and analyze new collaboration practices*, *sparking questions and engaging employees to develop valuable outputs together*" (Participant Pilot Project 2). The process facilitates the acquisition of previously unattainable resources, as evidenced by the support obtained in Pilot Project 2 from organizational units in other areas. The Agile process fosters flexibility in exploiting locally distributed resources to increase innovation opportunities and create a moment where each participant can request or offer support.

To secure value creation with this process, the organization must overcome several challenges, starting from "*convincing those who work within Confcooperative Lombardia that what they are doing is valuable*" (Participant Pilot Project 1). The flexibility of the approach can complicate scheduling and collaboration on projects that do not directly pertain to employees' work sphere, discouraging participation. While synchronous meetings facilitate knowledge sharing, they can limit access to resources. "*We drew on the resources available at the time*, *creating a response based only on those resources; however*, *we could have opened up the network and drawn on other topics for a more robust solution*" (Participant Pilot Project 1). Managerial involvement is crucial to reduce potential reluctance and sustain long-term engagement since "*it is challenging to keep the process active since we are delegating to individuals the will to align and collaborate*" (Participant Pilot Project 2). Ensuring trust in shared information and transparency about how it is produced is also vital to sustaining active engagement. Here, they rely on the synchronous validation moment to increase trust formation and the one-to-one knowledge to ensure the data quality.

The testing phase also supports reflections on future opportunities as they "*need autonomy for those employees with relevant information in their hands so they can be quick to support cooperatives and internal units with updated content*" (Participant Pilot Project 1), creating a pull structure driven by employees' needs and awareness of their valuable assets. They also envision digital opportunities to expand the solution's impact, allowing the "*platform [to serve] as a data collector*, *to then be queried*" (Participant Pilot Project 2), thereby increasing "*business productivity and the perceived value*" (Participant Pilot Project 1). Table 7 summarizes each pilot project's characteristics.

4.3.3 Lessons learned

The testing and evaluation sessions illustrate that platform-based collaboration emerges only when participants actively embrace and launch platform values. Individuals become central, embedding and adopting platform dynamics and taking full ownership of the flow. Thus, platform mechanisms function as a human-driven process guided by a framework that fosters a demand and supply connection that generates a further moment of value co-creation rather than securing knowledge transactions. The platform serves as an internal alignment and knowledge-sharing tool, sustained by a shared culture among employees grounded in platform thinking and agile principles. The agile framework promotes ownership distribution and taps

Table 7 Key characteristics of the two pilot projects

		Main characteristics of the platform-based pilot project updated after the testing phase			
		Pilot project 1—Knowledge sharing		Pilot project 2—Labor regulation	
Macro area of the pilot project		Detect, collect, and organize relevant data to delivery timely information to organizational functions and external cooperatives		Identify and collaborate on resolving external requests to provide a cohesive response by reducing duplication of activities	
Platform side	Demand	Local union	Recognize relevant information to be shared and demands for support	Local service center	Receive a new request from cooperatives and demand for support in its definition
	Supply	Federation, local union, local service center	Share information and knowledge to be integrated	Local service center	Share knowledge to be integrated and craft the response
Unique aspects that emerged during this phase	Main benefits perceived	Organization and simplification of the data available Distribute knowledge relevant for the whole organization Rely on a process to share relevant information		Get access to best practices Opportunity to rely on a collaboration path for problem solving Efficacy and efficiency in alignment among dispersed business units	
	Main difficulties encountered	Cope with the meeting lengths to find the right content balance Comprehend the relevance of a piece of information for the overall organization		Cope with the meeting lengths to find the right content balance Too much complexity to handle at the beginning Unclear identification of the demand and supply side due to absence of predefined roles	
	Future opportunities	Overcome periodical meetings with push meeting based on customer needs Onboard cooperatives to expand the knowledge base		Define a repository to share the knowledge collected	

into scalable, easily reproducible dynamics, as illustrated in the two pilot projects. "*We are the platform*" suggests that fostering individual awareness of the opportunities they can create makes it possible to share local resources through intra-organizational collaborations. Digital tools may amplify this process, but remain ineffective without personal and managerial commitment. The artifact, designed and tested through this process, demonstrates how a platform-based structure can organize and exchange assets via collaboration. The pilot projects show their potential application to multiple organizational units, gradually reconfiguring internal procedures and influencing external relations. Figure 8 depicts a circular process that can scale across the organization.

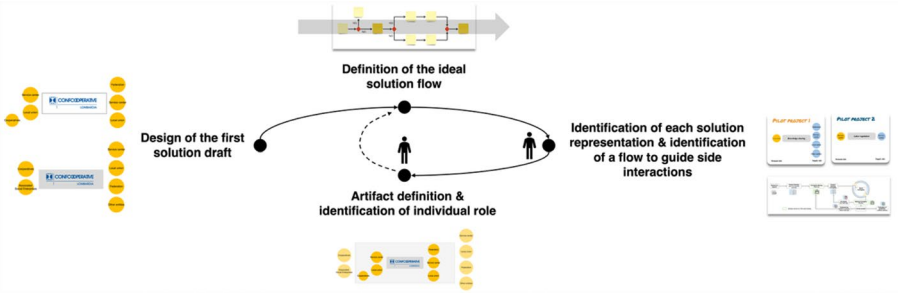


Fig. 8 Flow of the activities performed to reach the solution design and their circularity for spreading into the overall organization

Fig. 9 Final representation of the artifact showing how platform thinking can support intra-organizational collaboration

Where once there was a fragmented structure, a nested one now emerges, represented in Fig. 9. This internal platform fosters more efficient and effective collaboration, while also boosting external exchanges with cooperatives. The two initial platform-based artifacts conceived at the start ultimately become two ways to conceptualize Confcooperative Lombardia. Here, the intra-organizational platform operates as a process that guides interactions with the internal units without generating organizational redesign. Employees become the drivers of these internal processes, enabling the reconfiguration to drive timely external responses through collective effort and knowledge sharing.

5 Discussion

The research, through the design and testing of the artifact, presents how platform mechanisms enhance intra-organizational collaboration through a two-sided structure governed by a human-centric approach. The findings advance current platform literature in three areas: the organizational implications of intra-organizational plat-

form adoption, the processes enabling platform efficiency and collaboration, and the role of individuals in facilitating these processes.

5.1 Platform as an instrument to support internal processes

The DSR shows how platforms can be employed within organizations to facilitate collaboration, responding to current calls for intra-organizational knowledge sharing (Fanousse et al. 2025; Zhang et al. 2023). In this setting, users are divided into a demand and a supply side, engaging in a co-created practice that enables iterative knowledge exchange.

This process accounts for both individual factors, such as readiness to participate, and contextual influences that shape the value of the knowledge shared and received (Nonaka et al. 2000). Collaboration emerges when employees operate in two diverse roles: one side seeks support (demand) and the other offers resources (supply), and follows a process that eases matchmaking, nurturing collective resource exchange (Erikson and Larsson 2020). Like two- (or multi-) sided platforms, roles are not fixed by formal hierarchies but adapt according to their needs (Muzellec et al. 2015). Belonging to a specific organizational unit does not confine employees to one side; their contributions determine their role in each discussion in a flexible and voluntary way.

Unlike digital platforms (e.g., Uber, Deliveroo) that depend on algorithmic matchmaking (Täuscher and Laudien 2018), internal platforms rely on analog tools (or intangible practices) for synchronous knowledge sharing and simple digital solutions for data storage. Platform thinking expands its scope (Trabucchi and Buganza 2022) by becoming embedded in organizational practices as a blueprint for collaboration, illustrating how it can nurture knowledge sharing to support innovation and serve as a governance mechanism. Rather than imposing rigid structures (Berdicchia et al. 2023), platforms create periodic opportunities to request support and share knowledge, enabling scalable and cross-functional collaboration. While platforms in external markets are often framed as meta-organizations orchestrating resources and users (Kretschmer et al. 2022), their intra-organizational role shifts toward an organizational process that streamlines connections, empowering individuals to share their knowledge.

As the DSR advanced, employees realized that responding to external demands did not necessarily require expanding cooperative product offerings, as often assumed in platform adoption (Teece et al. 2022) but rather establishing a process to identify and use internal resources effectively (Wirtz and Zeithaml 2018). Over time, the artifact's focus shifted from external interactions to fostering the spontaneous identification and sharing of knowledge within the organization. The DSR designed a process enabling employees to share idle resources (knowledge), emulating digital platforms (Trabucchi et al., 2021b) but relying on individual commitment and a structured yet flexible periodic flow to support diverse organizational needs. Matchmaking moments during the testing phase nurtured reciprocity among employees (Kopplin 2021; Rese et al. 2022), aligned them around value creation grounded in co-creation (Latinovic and Chatterjee 2024).

5.1.1 Literature twists

Intra-organizational platforms retain the core features of transactional platforms described by Evans (2003): two user sides, cross-side network externalities, and an intermediary role facilitating interactions. However, because the asset exchanged is knowledge and the scope of the transaction is collaboration, the conventional meaning of transactional platforms shifts, abandoning the creation of a service that eases asset ownership (Evans and Schmalensee 2016). In this context, platform orchestration (Jacobides et al. 2024) is not about carefully matching customers' needs (Amit and Han 2017) but about creating spaces where organizational learning can occur through collective knowledge sharing (Fanousse et al. 2025). Platforms thus become a tool for organizations to connect with locally distributed resources (Doloreux et al. 2024; Feser 2023), moving away from the business model redesigns that transform the organization (Kenney et al. 2021; McIntyre et al. 2021) or from reconfiguring existing assets to launch new services (Dell'Era et al. 2021). Intra-organizational platforms enable organizations to pursue knowledge sharing, both by transforming knowledge from tacit to explicit and by providing a safe, intangible space for knowledge sharing (Nonaka et al. 2000). Their collaborative value co-creation (Latinovic and Chatterjee 2024) emphasizes the development of a shared mindset that clarifies individual roles, rather than designing effective digital interfaces (Gawer, 2014). The central platform reduces frictions (Parker and Van Alstyne, 2005) by lowering the cost, here in terms of time and effort, of searching for suitable knowledge resources and platform governance shared among participants with rituals identifying the platform's boundaries. Individual awareness and commitment to collaboration replace the traditional digital infrastructure (Täuscher and Laudien 2018) and complement emerging research in the adoption of AI tools as a medium to foster intra-organizational collaboration (Trabucchi and Buganza 2025). Intra-organizational platforms answer the call to design efficient internal processes (Wirtz and Zeithaml 2018), with organizational units as participants (Rohn et al. 2021). Employees serve as enablers of matchmaking, creating seamless interactions to address external demands effectively. While external platforms build trust through information sharing (Müller et al. 2020; Trabucchi et al. 2021a) intra-organizational platforms rely on collective validation moments and shared processes to establish trust. Trust in the outcome also stems from the value attributed to matchmaking, becoming a third space (Oksanen and Ståhle 2013): a safe setting for knowledge sharing that relies on reciprocity among participants to co-create value (Rese et al. 2022). In Confcooperative Lombardia, the internal platforms did not launch new services (Teece et al. 2022) or create business units dedicated to exploiting the identified assets (Altman and Tuchman 2017). Instead, it reduced duplication of activities, aiming to promote network-level learning (Dyer and Nobeoka 2000). In this way, matchmaking moves beyond its traditional efficiency-driven and deterministic view (Evans and Schmalensee 2016), becoming a voluntary moment in which participants choose to engage.

The DSR creates a design principle that informs literature about how to adopt platforms internally, in the form of intra-organizational platforms, answering the call of Rohn et al. (2021). As platform mechanisms are extended to new fields, some features are adapted from their conventional framing. For instance, aligned with

B2B platforms (Springer et al. 2025), scalability, critical in many digital platforms (Parker and Van Alstyne 2005), is replaced by the quality of participants. Network externalities, aligned with recent studies (Karhu et al. 2024), rely on users' diverse backgrounds, which enhance innovation opportunities and diversity of perspectives, defining value even within a limited network spread. Launching an intra-organizational platform in an established organization also simplifies the "chicken-and-egg" paradox (Caillaud and Jullien 2003) since part of the assets and participants (the employees) are already present (Mody et al. 2020). However, the ease of onboarding customers is balanced by the effort to build awareness of the current and future value of participation for mutual help. This step is fundamental to ensuring that matchmaking remains grounded in socially constructed co-creation (Vargo et al. 2008; Mady et al. 2025), even when it occurs in physical rather than digital spaces.

5.2 Agile as a mindset to create efficiency

Intra-organizational platforms demonstrate how they can serve as tools for restructuring internal processes (Stoddard and Jarvenpaa 1995), thereby enhancing collaboration and knowledge sharing among employees. Intra-organizational platforms rely on the agile principles of autonomy and flexibility to secure value creation. Autonomy allows employees to take ownership of their roles in matchmaking processes, whether on the demand or supply side, based on their awareness of the role and willingness to contribute (Reypens et al. 2021), instead of following the platform's dynamics (Gawer and Cusumano, 2014). Autonomy is achieved without hierarchical pressure, guided by an iterative process that decentralizes participants' actions (Pundziene et al. 2022) and facilitates individual willingness to offer personal knowledge (Kopplin, 2021), engage in matchmaking, and decide which role to play. Flexibility enables intra-organizational platforms to address diverse topics and adapt to various organizational units (Shankar and Clausen, 2020).

Employees have the freedom to shift roles and topics discussed at each matchmaking session, requesting support or sharing knowledge as needed. Agile principles ensure that the process of intra-organizational platforms is adjusted accordingly to users' needs, such as to meet unplanned external requests, leveraging their shared culture (Magistretti and Trabucchi 2024) that aligns participants in their roles and responsibilities.

The DSR clarified the demand for agile functioning in two ways. First, artifact creation revealed that employees gradually recognized the principles of platform thinking, culminating in the awareness that "*we are the platform*," comprehending that without their commitment, no interactions were possible (Garud et al. 2010). Second, each pilot project highlights the need to flexibly adapt to unplanned requests of external cooperatives as well as the need to guide their interactions. Here, the agile ceremonies (e.g., meetings and validation moments) ensure the definition of temporary roles, flexible coordination, and alignment of knowledge shared.

5.2.1 Literature twist

The emphasis on flexibility, via autonomy, alignment, and iterative processes, extends and modifies traditional platform perspectives. Platforms have long been seen as scalable structures (Gawer and Cusumano 2014), reliant on digital infrastructure (de Reuver et al. 2018) and modular design to attract new sides (Trabucchi and Buganza 2020) to achieve their flexibility. Literature traditionally considers achieving this through the modularity of product platforms (Meyer and Lehnerd 1997), where reconfigurable components (Simpson et al. 2001) can adapt to market shifts. However, a modular product structure alone does not guarantee flexibility, requiring organizational capabilities to adapt swiftly to external shifts (Buganza and Verganti 2006).

In contrast, intra-organizational platforms enable platform flexibility by relying on a process guided by employees (Schiuma and Santarsiero 2023), who internalize agile principles, eliminating reliance on rigid digital infrastructures that constrain customer interactions. Intra-organizational platforms support this view by deploying at a cultural level the platform characteristics of modularity and efficiency (Gawer, 2014) to guide user interactions and create a common mindset. This approach requires organizational and individual commitment to this change (Berdicchia et al. 2023) as its effectiveness depends on employees' understanding of platform thinking (Trabucchi and Buganza 2022). Agile practices enable scalability (Kenney et al. 2021; Parker and Van Alstyne 2005) by spreading platform mechanisms across various units, limiting the network scale to the organizational boundaries, and becoming a tool for breaking down organizational silos.

Agile principles, emphasizing rapid decision-making, minimal friction, and continuous improvement (Cooper 2014), are adopted to guide platform dynamics and deploy these values at the organizational level. While digital tools may streamline specific interactions (Morgan et al. 2021), employees retain autonomy to determine how and when to use platform-based collaboration. Consequently, the platform-based mindset becomes the promoter of flexibility and autonomy in users, illustrating how platforms can shape organizational culture through agile principles (Magistretti and Trabucchi 2024) instead of focusing solely on product innovation. Intra-organizational platforms thus become a way to nurture platform empowerment (Nagy et al. 2025) within organizations, relying on an effective knowledge-sharing process that promotes innovation. A process driven by the individual understanding of scouting for idle assets (Trabucchi et al. 2021b) and collaborating to obtain further value from them. Agile ceremonies transform matchmaking (Evans and Schmalensee 2016) into a ritual (Wijngaarden 2023), enlarging its value with symbolic interpretations of individual empowerment that enrich knowledge sharing (Nonaka et al. 2000). These ceremonies serve as catalysts for dispersed resource exploitation (Schiuma and Santarsiero 2023), strengthening organizational belonging through shared principles of communality and collaboration (Bouncken et al. 2018). Specifically, the DSR presents a design principle that illustrates how agile practices promote customer matchmaking, divided into three phases. First, the revelation moment of the demand side of a request, comparable to the moment of product backlog creation and definition of process requirements. Second, the matchmaking moment occurs

when one supply side is assigned to solve the request, and matchmaking facilitates knowledge exchange and collaboration to craft the final answer. This is comparable to the agile moments of task ownership and role identification. Third, the validation moment when the entire platform network acknowledges the outcome is similar to the moment of collectively reviewing the work and marking it as "done."

5.3 The human-centered platform approach

In this internal application of platforms, individuals become the central force behind value creation. By adopting platform thinking (Trabucchi and Buganza 2022) and agile principles (Martín-Peña et al. 2024), employees orchestrate knowledge, foster collaboration, and boost efficiency. Instead of relying on algorithms, human decisions guide matchmaking, with individuals intentionally choosing to share knowledge and collaborate (Berdicchia et al. 2023). In this human-centric context, employees recognize themselves as key enablers of platform processes, embedding platform dynamics into their daily work. A human-centered platform means that platform dynamics are delegated to employees, through periodical meetings, who freely share their needs and offer their knowledge to cooperate. This contrasts with purely digital platforms (Gawer, 2014; McIntyre et al. 2021) by emphasizing a flexible mechanism, agile routines, that connect people within the organization. Nonetheless, managerial endorsement (Feher et al. 2018) remains crucial in believing in and encouraging this approach they can reinforce commitment among employees who may otherwise be uncertain.

During the DSR process, two critical insights highlighted the development of a human-centric platform. First, employees acknowledged their expertise as the organization's most valuable resource, requiring collaborative efforts for effective utilization rather than simple data storage. This realization underscores the importance of platform values and individual roles. Second, pilot projects emphasized individual participation as central to value generation, with employees internalizing the concept that "*we are the platform*." Each pilot project centered on individual accountability, encouraging participants to dedicate time to interactions and foster reciprocal roles (Rese et al. 2022). Helping colleagues today ensures mutual support for future needs and reinforces a culture of collaboration.

5.3.1 Literature twist

The human-based approach to promote intra-organization collaboration twists the traditional consideration of platforms in literature from several points. First, matchmaking shifts from the platform's central mechanism (Evans and Schmalensee 2016) to an employee-driven process. Instead of relying on data-driven or algorithmic matching (Amit and Han 2017; Jabeen et al. 2025), individuals proactively seek connections and value in the knowledge owned, feeling part of an organizational ritual. Under this human-centric model, matchmaking emerges as a cyclical and recursive alignment between users, rather than a one-time data-based transaction (McIntyre et al. 2021). The sides operate as knowledge brokers, considering the value of the local area (Feser 2023), proposing an organizational process that nurtures efficiency and

Table 8 Comparison between the adoption of platforms with customers internal and external to the organization

Scope of the platform	Intra-organizational platforms (employees as customers)	Transactional platforms (actors within the market as customers)
	To facilitate collaboration among internal units	To facilitate intermediation among two groups of customers
Purpose	To design a process that facilitates efficient resource exchange and employee collaboration To reduce friction in searching for and exploiting distributed knowledge in the organization	To design a system that connects difficult to find resources To design a system that solves customer needs with third-party assets To reduce friction in searching and exploiting idle resources
Interaction process	Agile process that guides customer interactions Matchmaking is a recurrent moment in which customers meet to share knowledge and co-create an output	Digital infrastructure that guides customer interactions Matchmaking is the moment of asset exchange
Governance of value creation	Employees govern the platform process Employees share a request and autonomously decide who is the suitable match	Algorithms govern the platform process Data collected informs the suitable match

scalability in such interactions. Efficiency arises from reaching previously inaccessible resources and relying on seamless connections, unlike the customized matches often associated with digital platforms (Täuscher and Laudien 2018).

This perspective strengthens the theoretical understanding of platform thinking as a mindset (Trabucchi and Buganza 2022) and shows how organizations can use platforms to promote knowledge sharing and support organizational cohesion. This process outlines the enactment of intra-organizational collaboration aimed at knowledge sharing (Fanousse et al. 2025; Vuori and Okkonen 2012), incorporating a formative moment to clarify individual roles, process logic, and attainable opportunities. Orchestrating human-based platforms calls for a balance between voluntary participation and overarching guidance (Reypens et al. 2021), with a unifying culture facilitating the flow of knowledge among geographically scattered units (Pundziene et al. 2022). Managerial support (Altman and Tushman 2017; Fehrer et al. 2018) is key to encouraging employees to embrace platform-based practices and to recognize their strategic value. While digital tools can boost knowledge visibility (Morgan et al. 2021), individual initiative and cultural involvement ultimately shape the success of these platform dynamics, decentralizing the governance to the sides, with the digital technologies as an optional facilitator rather than a necessity.

Intra-organizational platforms thus offer a novel way for established organizations to leverage platform value creation. By treating employees as accountable participants in platform dynamics, these platforms operate as agile, process-driven tools that enhance collaboration and resource utilization. Table 8 summarizes how intra-organizational platforms differ from "traditional" external platforms, highlighting their role as internal organizational processes.

6 Conclusion

6.1 Theoretical contributions

This research investigates how platforms can help established organizations achieve efficiency in resource exploitation by promoting intra-organizational collaboration among internal units. While much of the platform literature examines large-scale, digitally enabled platforms such as Uber or Airbnb (Gawer, 2014) that create value by orchestrating market resources (McIntyre et al. 2021), this study complements this view by exploring how platforms can create value by matching internal units (Rohn et al. 2021). The DSR presents how to design an intra-organizational platform within established organizations, expanding platform adoption beyond product launches (Teece et al. 2022) or business model redesigns (Mody et al. 2020). Intra-organizational platforms design an informal, shared process in which platform customers are at the center, bearing efforts of matchmaking, detaching from purely digital infrastructures, facilitating customer transactions (Gawer, 2014; Täuscher and Laudien 2018). These platforms show how knowledge, often seen as an idle asset (Trabucchi et al., 2021b), can be shared and transformed from tacit to explicit (Nonaka et al. 2000) through socially constructed matchmaking. Platforms evolve into processes guided by agile principles that ensure flexibility in knowledge sharing and provide structured support for implementation. This internal process moves away from viewing platforms as meta-organizations that orchestrate resources (Gawer, 2014; Kretschmer et al. 2022) or as transformative business models (McIntyre et al. 2021), becoming instead a tool to support organizations internally by empowering geographically dispersed employees. Intra-organizational platforms serve as mechanisms to overcome resource scarcity by embedding the concept of social bricolage (Di Domenico et al. 2010), which relies on participation and the value of distributed resources.

The process-based and human-driven nature of intra-organizational platforms advances the understanding of transactional platforms (Evans and Schmalensee 2016; McIntyre et al. 2021). First, the absence of digital infrastructure and the empowerment of individuals reinforce the emerging concept of non-digital platforms (Perez Mengual et al. 2023), in which value is created through face-to-face knowledge sharing (Kopplin, 2021). Second, intra-organizational platforms contribute to discussions on platforms with limited-scale network externalities (Karhu et al. 2024), emphasizing the quality of interactions and extending this perspective to other contexts, such as B2B platforms (Springer et al. 2025). Third, as they move away from data-driven matchmaking (Amit and Han 2017), they redefine matchmaking as an organizational ritual that supports employee autonomy, local knowledge, and sensemaking, based on value co-creation (Vargo et al. 2008).

Agile principles (Beck et al. 2001) serve as the organizational backbone for intra-organizational platforms, providing the mindset needed to nurture flexibility and modularity (Buganza and Verganti 2006), which are crucial for collaboration. Agile and platform thinking (Trabucchi and Buganza 2022) show how organizations can nurture collaboration and network orchestration (Martín-Peña et al. 2024) while reacting to external changes, thereby transforming internal processes. Intra-organiza-

tional platforms illustrate how agile can operate as a culture, a mindset (Magistretti and Trabucchi 2024), shared in organizations beyond its use in product development. The centrality of individuals expands current understanding of intra-organizational platforms (Fanousse et al. 2025; Vuori and Okkonen 2012) by showing how they become proactive actors in such knowledge sharing, rather than participants in adopting a digital tool. This study highlights that platforms act as processes that encourage resource collaboration and the freedom to request support (Rese et al. 2022), thereby fostering continuous innovation (Pundziene et al. 2022). This view offers a concrete process in which platforms design a co-creation moment for value capture (Latinovic and Chatterjee 2024), thereby representing platforms as mechanisms that support the adoption of service-dominant logic to increase competitive advantage through knowledge sharing (Vargo et al. 2008).

However, opportunities offered by intra-organizational platforms can be realized only through the individual interiorization of platform characteristics. Thus, extending from the sole adoption of digital infrastructures (Morgan et al. 2021). Moreover, the human role highlights how platform thinking (Trabucchi and Buganza 2022) operates as both a value-creation mindset adopted by individuals and a shared culture that guides collaboration and innovation, thereby expanding opportunities for established organizations (Dell'Era et al. 2021; Teece et al. 2022). Platforms operate as guiding principles that empower individuals by promoting decentralized governance (Pundziene et al. 2022) through role identification and awareness. Broadly speaking, intra-organizational platforms extend the current literature on how matchmaking promotes collaboration and long-term value creation in defined organizational settings, such as coworking spaces (Kopplin, 2021; Bouncken et al. 2018). This also expands how platforms can support organizations in long-term value creation, without solely relying on data (Jabeen et al. 2025), while nurturing resilience and innovation through collaboration (Orel et al. 2022). This study advances the Design Science field by pursuing a process that relies on multiple iterations empirically integrating Peffer et al.'s (2007) criticisms (Sonnenberg and Vom Brocke 2012; Tuunanen et al. 2024). This study presents a process that iteratively shifts between empirical and theoretical work (Dimov et al. 2022) by providing a helpful framework also for future research operating in an organizational context with uncertain project scope.

6.2 Managerial contributions

The Design Science Research (DSR) approach and the artifact co-developed with Confcooperative Lombardia provide practical insights for managers aiming to design intra-organizational platforms and enhance collaboration. First, the process used to design and implement the solution offers a replicable framework for other organizations seeking similar outcomes. Second, the artifact itself serves as a valuable tool that can be adapted and deployed in organizations aiming to harness value from distributed resources and foster employee collaboration. Managers can leverage these insights to drive innovation while strengthening the value of local business units. Third, this study supports managers in expanding their knowledge of platforms and how they can contribute within organizations.

Overall, all the outcomes designed and adopted throughout this DSR aim to show the managerial board how to explore the power of platforms within their organizational boundaries as intra-organizational processes. These insights can be of great support to small and medium organizations willing to promote collaboration among employees without investing in digital infrastructure to improve efficiency. The framework emphasizes a cultural change rather than significant investment in technology, showcasing how platforms can boost employee engagement and reduce friction within organizational processes. Lastly, platforms as organizational tools offer managers a pathway to foster resource sharing, facilitate collaboration, and address inefficiencies while empowering employees and reducing reliance on hierarchical structures, becoming a valuable framework to achieve superior performance. Following the framework identified as a blueprint to launch an intra-organizational platform can also support managers in leveraging the platform as a tool for nurturing continuous innovation, supporting employees with a ritual in which they can ask for support and co-create solutions that fit market requests.

6.3 Limitations and future research

This study relies on a single case study (Siggelkow 2007), which has the risks of low generalizability of the findings. By utilizing diverse data sources and multiple pilot projects, this study tries to overcome this limitation and ensure a comprehensive understanding of internal platform dynamics. Furthermore, the activities of Confcooperative Lombardia are closely tied to supporting local customers and operating in a social context. This specificity may limit the transferability of findings to organizations that rely on collaboration for long-term projects with more stable market demands. Future research should understand how in these organizations intra-organizational platforms change their dynamics. Although the processes identified in Confcooperative Lombardia work independently by their social and local goal, exploring the platform's role in other fields might expand its adoption. Moreover, Confcooperative Lombardia relies on a relatively horizontal organizational structure and internal units with specific functions, but duplicated for different local areas. This characteristic might affect the typology of knowledge shared, supporting further research to explore how different units' backgrounds and organizational settings shape platform dynamics and outcomes. Comparing multiple areas of intra-organizational platform adoption can increase understanding of platform value, address barriers, and enhance the robustness and completeness of findings.

Future studies should also assess how geographic distribution influences platform adoption and effectiveness (Bouncken et al. 2018; Bibeau et al. 2024), to explore how local heritage and peculiarity influence employee collaboration and platform design. Additionally, future studies should investigate whether other factors, beyond geographical distribution and limited internal collaboration, influence intra-organizational platforms and the benefits they promote. Future research directions should also consider the role of intra-organizational platforms in supporting internal open innovation processes. The growing role of AI tools and their adoption to support efficiency in organizational processes offer another area to complement how organizations can nurture collaboration, understanding how digital tools enhance or

undermine employee collaboration. Another perspective comes by exploring how intra-organizational platforms can support fragile organizational units in disadvantaged areas, which can further illuminate the role of platforms as tools for social bricolage (Di Domenico et al. 2010) and sustainable operations.

This research highlights the role of managers in facilitating the shift towards internal collaboration and underscores the importance of supporting the organizational culture, although it does not provide a comprehensive understanding, as this falls outside the research's scope. Future studies should provide a more in-depth examination of the relationship between platform adoption, leadership practices, and cultural transformation. Overall, this research demonstrates the potential of internal platforms to drive efficiency, knowledge sharing, and innovation in established organizations through human-centric and agile processes. By offering a replicable DSR framework, this study provides a foundation for managers and researchers to explore, implement, and refine intra-organizational platform adoption, ultimately enhancing organizational performance and resource orchestration.

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Declarations

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