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Contents

Editor's Letter

The current issue of the *Nordic Journal of Business* contains two peer-reviewed articles. The first article by Milla Sarja and Noora Piila focuses on the challenges associated with the adoption of circular economy practices in the Finnish construction sector and examines how these challenges affect the broader sustainability transition. In the second article, Tiina Leino, Laura Urrila, Omar Veledar, Margherita Volpe, Georg Macher, and Jane Morton investigate how formal leaders perceive and utilize informal leadership in technology-sector organizations across Europe.

I hope you enjoy reading the interesting articles featured in this issue of the *Nordic Journal of Business*.

Sami Vähämaa
Editor
Nordic Journal of Business

A Broken Wheel: Struggles of Organisational Innovation Adoption of the Circular Economy in the Construction Sector*

Milla Sarja and Noora Piila

Abstract

The construction industry has been criticised for being late to the sustainability transition and maintaining unsustainable linear practices. Given their vast material usage and emissions globally, their engagement in the transition is vital. To understand the construction organisations' tardiness, their strategies on circular economy and its influence on the sustainability transition were investigated via 20 interviews at large and medium-sized Finnish construction

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companies. Observing through the theoretical lenses of organisational innovation adoption, the findings demonstrate that fundamental challenges relating specifically to the innovation adoption of a phenomenon have hindered progress in the CE adoption process in Finland's construction sector. Uncertainty, a lack of collective understanding and systemic-level support are hindering the circular economy transition in construction. This study moves the understanding of innovation diffusion and organisational innovation adoption beyond their traditional emphasis on products and solutions by applying theory to the adoption of the complex phenomenon that is CE.

Keywords

circular economy, construction industry, organisational innovation adoption, circular transition

1. Introduction

We have witnessed corporate actions addressing sustainability topics already for decades. Still, these actions seem insignificant as the triple crisis of climate change, biodiversity loss and pollution continues to worsen. Corporations must engage in system-level change and actions in every industry must become more effective.

In numerous sectors, the eventual impossibility of continued production from scarce and non-regenerative raw materials is emerging as a critical business challenge and unsustainable (Ellen MacArthur Foundation, 2015; Geissdoerfer et al., 2017). The construction industry is a significant contributor to several global environmental challenges, including resource depletion, climate change and pollution (Leising et al., 2018; Van Bueren, 2012). The industry is characterised by an intense consumption of natural resources (Benachio et al., 2020; Leising et al., 2018) and the generation of vast amounts of waste (Benachio et al., 2020; Jones & Comfort, 2018), with only 20%–30% of construction materials used ultimately directed to reuse or recycling at the end of a building's life cycle (Ellen MacArthur Foundation, 2014). The construction sector also emits enormous amounts of greenhouse gases; it is the source of 37% of the world's energy-use-related emissions (United Nations Environment Programme, 2021) and approximately 35% of greenhouse gas emissions in Europe (Pero et al., 2017).

Governmental bodies emphasise the circular economy (CE) as a corporate solution to tackle unsustainable practices in the operating environment (Ministry of the Environment and Ministry of Economic Affairs and Employment, 2021). The transition to a CE, envisioned as a resilient economic system decoupling economic development from the consumption of finite resources (Ellen MacArthur Foundation, 2015), necessitates a paradigm shift in the way companies create, transfer and capture value (Urbinati et al., 2017). Thus, CE adoption in construction is crucial both in terms of global sustainability and for the future of an industry pushing the physical limits of the linear economy: resource depletion has already started to increase the cost of and difficulty with sourcing construction materials (Akhimien et al., 2021; Benton & Hazell, 2013).

Previous CE literature recognises various challenges stifling CE adoption in the construction industry, including a lack of economic incentives or clear business case for circularity, (Adams et al., 2017; Hossain et al., 2020), poor availability and quality of circular materials (Govin-

dan & Hasanagic, 2018; Hart et al., 2019) and other obstacles in making material selection and design choices that would support CE transition (Hossain et al., 2020). Further, CE adoption is prevented by the lack of necessary regulation and policy (Adams et al., 2017; Hossain et al., 2020), as well as fragmentation and lack of collaboration in the building supply chains (Adams et al., 2017; Schraven et al., 2019; Singh et al., 2024).

Meanwhile, the potential benefits of CE adoption for the construction industry include cost savings resulting from improved material efficiency and recovery (Christis et al., 2019; Hossain et al., 2020), and futureproofing through reduced dependency on the linear economy (Hossain et al., 2020; Lemaitre et al., 2019). CE adoption can also help companies avoid supply disruptions and shortages in raw material availability (Akhimien et al., 2021; Hossain et al., 2020; Singh et al., 2024), thus safeguarding business continuity. Further, critical stakeholder expectations drive CE adoption, with environmental factors emerging as a key consideration for real estate investors in Finland (Jutila et al., 2024).

It is widely acknowledged that the transition from a linear to a circular economic model relies heavily on innovation (e.g., Donner et al., 2020; Sehnem et al., 2022; Suchek et al., 2021) and the very concept of CE is considered inseparable from the concept of innovation (Suchek et al., 2021). While numerous obstacles (e.g., Adams et al., 2017; Govindan & Hasanagic, 2018; Hart et al., 2019) have been identified as stifling successful CE adoption in the construction industry, the lack of progress in the CE transition stems largely from the industry's notorious struggles with innovation creation and adoption (Jackson & Kaesehage, 2020; Kamal et al., 2016). The challenges in innovation adoption arise from the fundamental characteristics of the construction industry: buildings tend to be unique projects (Pomponi & Moncaster, 2017) with differing realities, often preventing replication and mainstreaming of innovations, even within a single company (Gambatese & Hallowell, 2011; Hossain et al., 2020). Innovation in construction is further hindered by, for example, the typical division between design and construction functions (Kong–Seng & Yusof, 2011) and the complexity entailed by the extensive supply chains involved in carrying out construction projects (Pomponi & Moncaster, 2017). It is thus no surprise that construction has been described as lacking in innovation (Kamal et al., 2016) and slow to implement it (Department for Business Innovation & Skills, 2013; Jackson & Kaesehage, 2020). This challenge is emphasised in Finland, where lack of sufficient investment in innovation (Berghäll, 2014) restricts adoption of novel approaches.

Most previous CE research has focused on short-lived products (Pomponi & Moncaster, 2017), and a better understanding of the realities and needs of long-lasting items like buildings from the perspective of CE adoption is therefore urgently needed. Moreover, the problematic circumstances of societal pressures to address sustainability combined with the challenges for innovation adoption create a paradoxical challenge, which underscores the importance of investigating CE-related innovation adoption in the construction industry.

The present study helps address this research gap by exploring the factors influencing innovation adoption as a process rather than a choice (Makkonen et al., 2016) and the related challenges in the context of CE adoption at Finnish building construction companies, examining the often-neglected behavioural aspects in CE adoption (Khalifa et al., 2022). In contrast to previous research efforts viewing CE as the desired outcome of innovation adoption activities, the present study applies organisational innovation adoption theory to explore the adoption of CE itself as "innovation" in the construction industry. While earlier studies have focused on the adoption of largely isolated individual products and solutions, the present study expands on the application and understanding of organisational innovation adoption by exploring the adoption of an all-encompassing phenomenon.

We conduct an empirical investigation into how construction companies in Finland view CE and sustainability and what they see as their position and responsibility in influencing the transition towards more sustainable practices in their sector. Based on this research aim, the guiding research questions are: What is the status of CE innovation adoption in the Finnish construction sector? And how can CE innovation adoption in the sector be further promoted?

The remainder of the article is structured as follows. Section 2 reviews existing research on CE innovations and organisational innovation adoption. Section 3 introduces the chosen methodological approach, while Section 4 presents the findings. Section 5 discusses the findings in the light of prior research and provides some theoretical and practical implications. Finally, the article is concluded with considerations of limitations and future research recommendations.

2. Theory

Considering CE innovation and organisational innovation adoption, an extensive body of research has explored innovation as a means of CE transition, with key findings from these works summarised in numerous systematic literature reviews (e.g., de Jesus et al., 2018; Pieroni et al., 2019; Suchek et al., 2021). The most exhaustive research efforts on CE and innovation have been dedicated to eco-innovation and business model innovation (Sehnem et al., 2022). While eco-innovations strive for cleaner production practices, building on aspects of increased eco-efficiency and productivity and decreased resource use and pollution (Sehnem et al., 2022), business model innovation aims to drive CE transition through the introduction of sustainable business model archetypes (e.g., Ritala et al., 2018; Ritala et al., 2023).

Due to its highly context-dependent nature, innovation adoption is not captured by any one unified theory but is rather described by myriad theoretical approaches and diverse terminology (Makkonen et al., 2016; van Oorschot et al., 2018). This study is based on an adoption of diffusion theory, which is able to comprehensively combine the external and internal aspects of the innovation process.

Diffusion theory, introduced in the 1960s by Everett Rogers, describes how an innovation spreads in a social system and emphasises that it involves communication among different actors that are focused on introducing and spreading a new idea or ideas. After enough time has passed, the innovation or idea has been diffused and change in the social system can take place (Rogers, 2003). Drawing on diffusion theory, organisational innovation adoption has been described as "the decision-making process of acquiring an innovation." (Makkonen, 2008, pp. 64–65). The key difference between the adoption and diffusion of an innovation is that adoption is about a decision to start using a given innovation, whereas diffusion is about the user base generated by a given innovation in the market (Rogers, 2003). Prior research on organisational innovation adoption has centred on the marketing and management fields, and it has traditionally aimed to increase understanding of sales of innovation solutions (Frambach & Schillewaert, 2002). While the micro-level organisational motivation for adopting CE as an innovation is often similarly economical (Piila et al., 2022), the macro-level objective behind CE diffusion is that of wider environmental and social benefit (Ellen MacArthur Foundation, 2015).

As the goal is to gain a broader and more nuanced understanding of the micro-level perspective of organisational innovation adoption of CE, a deeper look into the organisational innovation adoption process is needed. A suitable framework to describe that process was in-

troduced by Frambach and Schillewaert (2002); it studies the organisational innovation adoption process and evaluates different factors with significant influence on its different stages. It considers environmental influences, social networks, supplier marketing activities and adopter characteristics as relevant to the organisational innovation adoption process. Moreover, the framework examines aspects of individual acceptance in organisational innovation adoption: organisational facilitators and internal marketing, personal characteristics, social usage, attitudes towards innovation and personal dispositional innovativeness. Both organisational and individual factors contribute to the progress of innovation adoption through the stages of awareness, consideration, intention, adoption decision and, finally, continued use. While an innovation adoption decision is typically made at the organisational level, progress into the continued use of innovation cannot occur without adoption by the target users; that is, without individual acceptance. The contributing factors in the organisational adoption process are presented in Figure 1.

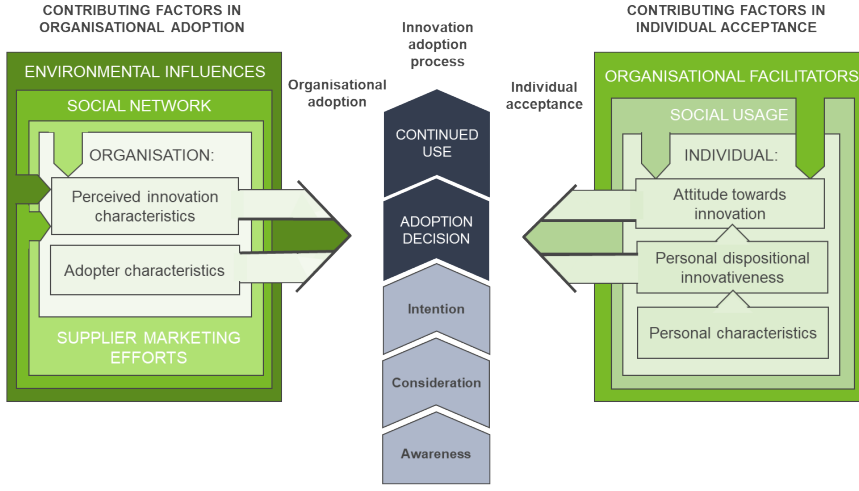

Figure 1: Framework of the innovation adoption process and factors contributing to organisational adoption and individual acceptance. Adapted from theoretical constructs in Frambach and Schillewaert (2002).

The *perceived innovation characteristic* involves an organisation's decision-makers and their perceptions of the innovation. The innovation is evaluated based on potential costs, the level of changes needed and the benefits gained (Khalifa et al., 2022). The chosen innovation should outperform alternatives, provide economic incentives and deliver an overall offer net benefit (Frambach & Schillewaert, 2002; Rogers, 2003; Smollan, 2006). Although adopting environmental solutions should bring environmental benefits to the organisation, the decision is still often based on business logic and transactional practice (Mazutis et al., 2021). This originates from the short-termism that is characteristic of business management, challenging a deeper environmental commitment (Slawinski et al., 2017). In addition, when evaluating the innovation's characteristics, they should be *compatible*, *observable* and *trialable*. Moreover, the levels of *complexity* and *uncertainty* also affect the perceptions of the innovation (Frambach & Schillewaert, 2002; Rogers, 2003).

The *adopter characteristics* consider the organisational environment in terms of *size*, *structure* and *innovativeness*. Size and organisational characteristics have been cited as affecting factors, with larger organisations recognised as having stronger motives to be more innovative to maintain their position in the market (Frambach & Schillewaert, 2002; Lines et al., 2015; Makkonen, 2008; Smollan, 2006). Whereas smaller or younger organisations are more agile and have certain advantages due to their size and flexibility, incumbent organisations have difficulties changing, due to the institutionalisation of routines and practices within the organisation (Ormiston, 2023). The innovativeness of an organisation, however, considers the level of receptiveness to new ideas and affects how likely the organisation is to adopt new products or innovations (Frambach & Schillewaert, 2002). Pérez-Valls et al. (2019) state that organisational structure does affect the ecological responsiveness of an organisation. The implementation of ecological practices is supported by structures that are decentralised and lower in complexity, as these types of organisations support better flow in information exchange and employee participation (Pérez-Valls et al., 2019).

Supplier marketing activity considers the suppliers' *targeting, communications* and *risk reduction* of the innovation. Supplier influence on the adoption of the solution can be significant (Frambach & Schillewaert, 2002). When introduced, sustainable innovations can create doubts and uncertainties among users due to a lack of knowledge and grasp of the functions, benefits and possibilities of that solution (Purtik & Arenas, 2019). Suppliers can facilitate perceptions, awareness and acceptance of the innovation. In addition, innovation adoption-associated risks, whether economic or operational, can be eased by suppliers (Frambach & Schillewaert, 2002).

The *social network* considers both industry-specific and informal networks, where companies can share information and experiences concerning a given innovation. The more an innovation is supported by network members, the more likely a company is to adopt it (Frambach & Schillewaert, 2002). Thus, it is not only supplier marketing efforts that are considered; for the innovation to be perceived more positively, it might need to attract wider attention. In the case of novel solutions, benefits from the experiences and valuation of other users or peers are often necessary and can lead to greater market acceptance (Purtik & Arenas, 2019).

The *environmental influence* considers an organisation's business environment. *Network externalities* and *competitive pressures* affect the way an organisation perceives innovation and its importance to the company. Companies may be motivated to adopt an innovation if they see other actors in the market implementing it. According to Carberry et al. (2019), managerial or decision-maker willingness to adopt a *contested practice* emerges only after early adopters have first tested the practice and thus given it legitimacy. Later adopters feel sector-level pressures to adopt the practice after its institutional complexities have been mitigated by early adopters (Carberry et al., 2019). Thus, it can be easier to adopt an innovation if there is a reasonably large user base already employing it. Similarly, companies may see that to keep up with their competition, they need to acquire certain innovations (Frambach & Schillewaert, 2002). In addition, external factors like changes in regulation or customer preferences may influence an organisation's adoption process (Shooshtarian et al., 2024).

The framework also considers individuals' adoption processes: that is, people's beliefs about and attitudes towards the innovation and the personal characteristics that impact how an individual views the innovation. In addition, the framework evaluates social influences that an individual might experience regarding the innovation through organisational facilitators. An innovation can be marketed internally in the organisation by someone, and a socially held

position can create favouring or opposing opinions towards the innovation. In general, employee involvement is important when implementing ecological practices within an organisation (Pérez-Valls et al., 2019); thus, the individual's adoption process is also relevant.

All the aforementioned contributing factors affect the *awareness, consideration* and *intention* of adopting the innovation, therefore influencing the *adoption decision* and *the continued use* of the innovation (Frambach & Schillewaert, 2002).

3. Methodology

3.1 Research Interviews and Their Analysis

This study applies a qualitative research approach. The empirical data is based on semi-structured interviews with representatives of 20 Finnish construction companies who were identified through purposeful sampling (Creswell, 2012). Finland was selected as the operating country of the companies due to the stark contrast between the rapid escalation of CE-related ambitions in Finland (Piila et al., 2022), including the country's target of becoming the global leader in CE (Government of Finland, 2019), and the inability of its construction industry to achieve the 70% reuse rate for construction and demolition waste to which Finland as an EU member state is committed (Ministry of the Environment, n.d.). The companies selected for the study are large and medium-sized organisations and cover all of Finland in terms of geographic scope. Within the industry, companies focusing predominantly on new building constructions were selected, as they have a significant environmental impact and potential for CE-related improvements, compared to the alternative operational focus areas of repair and renovation or demolition.

A total of 21 individuals were interviewed, as one company chose to have two individuals take part in its interview. Of the interviewed individuals, one was a CEO and one a deputy CEO, while 12 were sustainability professionals, four were development professionals, and three were procurement professionals. To respect the anonymity of the researched companies and interviewed individuals, both companies and interviewees are presented under aliases. The interviews were conducted online between May 2022 and February 2023, ranged from 21 to 71 minutes and were transcribed verbatim. The interview details are presented in Appendix 1.

The conduct and analysis of the interviews were aligned with the contributing factors in organisational adoption, adapted from the theoretical constructs by Frambach and Schillewaert (2002) and presented in Figure 1. To the extent possible, contributing factors in individual acceptance were also considered in the interviews and their analysis.

3.2 Contributing Factors in Organisational Adoption

All interviewed individuals provided background information regarding their roles and companies. During analysis, this information was used to form an understanding regarding *adopter characteristics*.

The interview format also included questions regarding the external factors or actors that promote or prevent CE adoption at the interviewees' companies. During analysis, these answers provided insights into the external factors contributing to the innovation adoption process, namely the *environmental influences* and *social network* of the organisation. As the object of organisational innovation adoption in this study is a phenomenon (i.e., CE) rather than a

clearly defined product or solution offered by a single identifiable party, the third external factor of *supplier marketing activity* was considered in the analysis based on the interviewees' descriptions regarding their companies' relationships and collaborations with their supplier bases in relation to CE.

The interviewees were also asked to discuss the drivers and challenges they considered influential in their companies' CE adoption processes. During the analysis, these insights were used to reflect on the critical organisational innovation adoption aspect of *perceived innovation characteristics*; that is, relative advantage, compatibility, complexity, trialability, observability and uncertainty (Frambach & Schillewaert, 2002).

3.3 Contributing Factors in Individual Acceptance

Insights relating to individual acceptance were gained both through the direct input of the interviewed individuals and indirectly, through the interviewees' reflections regarding the awareness, attitudes, and actions of other employees at their companies. In the latter case, the interviewees were asked to describe the types of feelings and behaviours individual employees had displayed in relation to CE adoption plans and efforts. These descriptions were used in the analysis to evaluate the *attitudes towards innovation* among the individuals working at the examined companies. The answers to these questions also provided insights relating to the two other elements of individual acceptance: *social influences* within an organisation and *personal innovativeness*, which has been described as the tendency of individuals working at a company to accept innovation. The aspect of organisational facilitators who have significant influence on individual acceptance was approached by asking the interviewees to describe their organisations' ambitions and any potential changes implemented to promote CE adoption.

In the process of the qualitative content analysis described above, the data and transcripts were analysed by deductive coding (Miles et al., 2020), as the applied framework provided a structure for the coding. Initially, the authors familiarised themselves with the interview transcripts. Analysis in light of contributing factors in organisational adoption and individual acceptance was then carried out. The resulting categories were then further classified by colour coding the interviewees' views and remarks based on whether a given notion was presented as favouring or hindering CE adoption or CE practices. The way the interviewees described their operations, their views and industry-related solutions for CE resulted in richly descriptive thematic categories. The findings discovered based on the data are presented in the next section.

4. Findings

This section explores the insights that emerged from the interviews in accordance with the framework of contributing factors in organisational adoption and individual acceptance. The contributing factors in innovation adoption can either drive or hinder the progress of a company in the innovation adoption process, which typically evolves through stages from awareness to consideration, intention, and eventually through the adoption decision into continued use (Figure 1).

4.1 Contributing Factors in Organisational Adoption

Of the perceived innovation characteristics, the *relative advantage* associated with CE by the interviewees was described in terms of positive visibility and image-building opportunities, the

perceived untapped business potential in CE adoption and the cost efficiency of CE practices focusing on minimising waste. Indeed, as the antithesis of being wasteful, CE-aligned practices such as efficient resource use and circulation of materials between different construction sites were described by several interviewees as simply "making common sense". As one interviewee explained,

> *"There is an economic incentive to recycle waste. It makes a significant difference whether the waste is recycled into different fragments, or whether it ends up in landfill." (Company D)*

However, CE was also associated with economic disadvantages in comparison to existing, predominantly linear industry practices, as some interviewees noted that circular construction materials were more expensive than their virgin alternatives.

The *compatibility* of CE was approached by the interviewees from the angle of concrete challenges experienced in trying to integrate CE practices into existing operations and infrastructures. A frequently raised point involved the challenges in directing certain materials into circulation, discussed predominantly in the context of timber and the absence of operators to enable its circulation in Finland. Another practical compatibility issue related to the size of construction plots: particularly in city centres plots were considered too small to hold the number of recycling containers required for sorting all the various waste grades or storing any leftover material that could potentially be directed elsewhere. The compatibility of CE was also questioned for the limited availability of local CE solutions and sometimes long transport distances undermining the environmental rationale of directing material into circulation.

In addition to the highly pragmatic compatibility aspects, considerations were raised relating to the compatibility of CE in terms of corporate values, aspirations, future visions and predicted developments. Some interviewees described CE as an organic continuation of their company's commitment to environmental sustainability or good corporate citizenship. It was also noted that sustainability or CE advanced the environmental responsibility of organisations and was thus a driver for applying principles of CE.

Relating to perceived *complexities*, a majority of interviewees described low-carbon or carbon-neutral ambitions as a higher sustainability priority than CE adoption in Finland's construction industry. While most considered the two topics as complementary or even synonymous, the complexity brought about by the trade-offs that can occur between emission optimisation and circular solutions was noted by a few interviewees. In addition, some described how they delivered CE by the energy efficiency of buildings and by recycling waste generated on-site. Confusion in some of the companies was caused by CE terminology, which was perceived by some as an unnecessary rebranding of age-old practices.

The poor *trialability* of CE solutions was a significant challenge faced by the construction companies. The construction sector in Finland is heavily regulated, and circular materials or products must meet strictly legislative safety and quality requirements. Lack of information regarding the material standards or quality aspects of existing building components prevents the reuse of old construction materials in new buildings, making material reuse difficult for commercial operators. Further, the frequently inferior technical performance of reused materials in comparison to their virgin alternatives was discussed by some interviewees as an obstacle to material reuse.

One interviewee also noted that agile trialling of new and innovative materials is largely hindered by the longevity of buildings: any new material needs to verifiably function for dec-

ades in its intended purpose before it can be safely adopted in construction projects. A failed experiment would likely have costly and even fatal consequences, necessitating partial or even complete deconstruction of a building. The risk and liability associated with using insufficiently tested or potentially noncompliant material are too daunting for construction companies to face, meaning that research and development are needed to ensure that circular solutions are fit for their purpose.

The aspect of *observability* of an adopted innovation was mentioned very rarely by interviewees, with notions only about monitoring and reporting waste generation and recycling rates and related challenges.

Nearly all interviewees described *uncertainties* influencing CE adoption at their companies. As the decisions made in the project planning and design phases largely define the CE-related opportunities throughout the entire lifecycle of a building, the interviewees underscored the limited CE adoption potential for construction companies in customer-ordered projects, where design aspects are typically predetermined. Further uncertainty was identified relating to material reuse, as the absence of a universal process and authoritative operator for quality assurance was regarded as hindering adoption activities: One interviewee said,

> *"Nobody has what it takes to assume the risk, to try to generate the business, when the rules of the game are still unclear." (Company G)*

The most prominent notions raised by the interviewees in relation to *adopter characteristics* concerned insufficient awareness regarding CE among employees at their companies. However, *organisational innovativeness* and *strategic posture* offered some insights into the topic. In general, the interviewees estimated that the overall understanding and CE-related knowledge were not very high at their organisations. Some mentioned that knowledge was concentrated in one or a few individuals, and others revealed that their firms address specific issues by hiring an outside consultant. It was also evident that while some of the companies were more proactive and motivated by the possibilities offered by the CE transition, other companies were more reactive, responding only in the face of the regulatory push to implement such practices.

Company size and its influence on CE adoption were also considered by the interviewees. It was primarily interviewees from smaller construction companies who considered company size an enabler for CE adoption due to their relative agility and speed in communication. One interviewee said,

> *"I feel like because of our company size, it's really easy to take new things forward and implement them at construction sites as well. We're agile in change and want to promote new things." (Company K)*

The smaller companies also viewed their less hierarchical structure and consequent shared accountability for CE adoption as an advantage. Beyond this notion, company structure was not described as an influential factor in CE adoption by the interviewees. An advantage in CE adoption relating to large company size, as some interviewees noted, is the resources and potential synergies brought about by the sheer scale of their operations, such as large companies' influence over suppliers and decision-makers and acting as trailblazers for both suppliers and competitors in the market.

Regarding *supplier marketing activities*, the interviewees nearly unanimously highlighted suppliers' pivotal role in terms of a construction company's ability to realise CE through ma-

terial and product choices. Several interviewees described their companies' collaboration with suppliers in developing, testing and improving products or product packaging. However, suppliers' CE initiatives were perceived as rare, with only a few interviewees reporting that their suppliers offered CE products or engaged in CE-related awareness raising among customers. A desire for such initiatives was expressed by several interviewees, who hoped their suppliers would become more active in developing and communicating CE solutions. The lack of suppliers and availability of reliable CE solutions was evident throughout the interviews.

Considering *interconnectedness and social network* participation, the interviewees underscored the importance of and need for overarching industry organisations bringing relevant network-building operators to promote CE adoption. Moreover, to address the uncertainty of CE-related practices, one interviewee mentioned how the industry's interest group or an official confederation could help shape a unified standard for CE usage in the industry and thus give all actors the same information and guidelines:

> *"Of course, it's understandable to want to make sure that nothing is used that could, for example, end up causing health issues.… But that same fear practically prevents the reuse of materials." (Company G)*

Network externalities were frequently referred to by the interviewees in both positive and negative contexts. One of the key challenges hindering CE adoption in the construction industry is the absence of the critical value chain partners that are needed to establish closed-loop systems. Without the right operators to form a functioning CE ecosystem, attempts at holistic CE adoption remain akin to a broken wheel rather than a closed loop. One interviewee put it this way:

> *"The biggest challenge is to create a network that would provide that critical mass, so that we get the material circulating." (Company C)*

Numerous interviewees identified either legislation or customers as the main drivers in pursuing CE or sustainability. However, while several interviewees cited customers as the key reason for offering CE solutions in the first place, others provided a contrary view, suggesting their clients were neither demanding circularity nor willing to pay a premium for circular solutions. Many participants described having realised that legislation promoting CE is becoming stricter and that anticipatory compliance will therefore eventually benefit their organisations. Some even predicted gaining a competitive advantage by being proactive in trying to understand evolving regulation and develop their business accordingly.

Meanwhile, the other aspect of environmental influences, *competitive pressures*, did not appear to significantly contribute towards CE adoption in the Finnish construction industry: beyond one isolated notion regarding the historical competitiveness characteristic of the industry hindering the sharing of innovations and information and two remarks on the need to keep an eye on competitors' CE openings, competitive pressures were not discussed as a topic influencing CE adoption.

4.2 Contributing Factors in Individual Acceptance

Regarding the *individual innovation adoption process*, there were only limited contributing factors mentioned in the interviews. While *organisational facilitators* in *social pressures* or *social*

usage and *personal dispositional innovativeness* were less obvious in the interviews, facilitators such as *training, organisational support* and interviewees' *personal characteristics* and *individual acceptance* were a little more explicit.

The issue of *training* arose on many occasions when interviewees described either internal or on-site training of employees in terms of sustainability matters or the importance of careful recycling. A central need in recycling on-site waste was educating and engaging employees to recycle different fragments and planning the actual collecting and sorting of waste while it was still on the building site.

The factor of *organisational support* differed in the descriptions offered by the interviewees. On one hand, it was about the internal resources advancing the CE or sustainability agenda within a firm. It noted that resources in terms of expertise were scarce, making advancing the agenda difficult. On the other hand, it was about evaluating the differing levels of importance given to sustainability issues by employees. It became clear that individuals saw CE and sustainability differently, meaning that individuals assigned unequal weight to the topics. The question of organisational support was also raised when interviewees mentioned that sustainability or CE activities were sometimes carried out by a single active or motivated individual, with a more systematic, organisation-led agenda missing. Moreover, most interviewees mentioned that their organisations did not have internal requirements or demands for CE integrated into their processes, with the exception in some cases of internal recycling rate targets. This can create ambiguities or even conflicts between a sustainability-driven individual's ambitions to advance CE without clear organisational support through set targets.

Still, the fact that many of the interviewees were rather new to the position of sustainability professional at their companies may demonstrate that firms now understand the need to pursue sustainability at the corporate level and gain more knowledge about the vast topic of sustainability. In addition, many interviewees noted that either overall corporate strategy or sustainability and responsibility strategies were being revised or were recently updated. This shows that the topic of sustainability is relevant, if constantly changing. Most sustainability professionals projected knowledgeable and driven attitudes about the topics in the interviews.

The *personal characteristics* and *individual acceptance* in this particular data comprised largely of sustainability professionals. It can be expected that their individual awareness and acceptance of CE was much greater than other employees, as was their positive outlook on sustainability initiatives. Due to the early stage of adoption processes at the sample companies, insights relating to individual acceptance of CE adoption were scarce on the organisational level.

5. Discussion

5.1 Reflection

In the context of Finland's construction industry, the present study explored organisational innovation adoption of CE and the internal and external contributing factors in the CE adoption processes.

In ter ms of *awareness, consideration* and *intention,* the findings provided diverse assessments of the level of CE awareness among companies. While many of the companies had focused on gaining CE awareness and had considered adopting CE, the adoption processes had still generally not progressed beyond the infancy stage, supporting prior research on construction (Adams et al., 2017; Leising et al., 2018) and Finnish innovation investment (Berghäll, 2014). Many

of the companies had recently invested in gaining relevant competencies by organising and commissioning training sessions and establishing new sustainability-related roles to promote CE, relevant to knowledge and capability building (Miller, Patala & Ovaska, 2025). In line with prior research findings, the intention to adopt CE was discussed in terms of stakeholder expectations (Jutila et al., 2024), evolving regulation, and corporate values (García-Quevedo et al., 2020). It was evident that motivation in general was reactive and regulation-driven, which does not support the adoption of a complex phenomenon such as CE: While regulatory mandate may be effective in driving the adoption and diffusion of individual products or technologies, it is inadequate in capturing the vastness and complexity of CE as a whole.

CE was realised through design activities, by reducing material use (Akhimien et al., 2021; Benachio et al., 2020), circulation of materials between construction sites, and waste reduction (e.g., Akhimien et al., 2021; Benachio et al., 2020; Leising et al., 2018). Practices familiar from prior research like the use or reuse of secondary materials, and the development and use of resource passports enabling material traceability were not mentioned.

The many challenges associated with CE adoption by the interviewees reflected those of prior research: uncertainty and insecurity towards the unknown that CE represents by its very novelty. Similarly, a lack of clarity in legislation and regulations (Shooshtarian et al., 2024), the uncertain nature of any economic benefits and the economic burden of testing and piloting processes (Shooshtarian et al., 2024, which may be considered even more relevant among long-term consumables like buildings compared to short-lived goods. In addition, challenges in materials or operations have created doubts about what the CE offers the business case (Miller et al., 2025). There were also practical issues with assuring quality and safety and the lack of volume needed for buying in bulk. Based on the findings, other challenges that hinder companies in the innovation adoption process stages preceding the adoption decision include a lack of economic viability and incentives, as has been documented in previous research (e.g., Adams et al., 2017).

Further, the present study shows that the fundamental challenges related to adopting a holistic phenomenon can slow or even stop the progression of the organisational innovation adoption process in its early stages of awareness and consideration. The relation of such challenges specifically to the adoption of a phenomenon (CE) rather than a product or solution provides some of this study's most striking and valuable insights. The need to establish and collaborate with active CE networks has been acknowledged in CE literature (e.g. Hossain et al., 2020; Singh et al., 2024; Miller et al., 2025), and our data underscored the significant absence of such collaboration. This can be assumed to influence the difficulty in advancing and scaling CE solutions in the sector.

It appears that the more systemic and interdependent the innovation being adopted, the more extensive the market diffusion required to enable an organisation's adoption behaviour and innovation adoption progress. These aspects of market-level diffusion and organisational behaviour have previously been considered differing philosophical approaches to organisational innovation adoption (Makkonen, 2008), but in the case of CE adoption in Finland's construction industry, both approaches appear not only applicable but inextricably connected: CE adoption requires organisational behaviour, but isolated organisational behaviour will not achieve meaningful CE impact without a functioning CE ecosystem in the form of market-level diffusion.

Although the challenge of negative network externality, which is the lack of innovation adoption among interrelated organisations, has been well documented in previous research

(e.g., Frambach & Schillewaert, 2002), the need for a truly societal, multi-stakeholder diffusion to enable organisational adoption is likely unique to the adoption process of a phenomenon such as CE. As no single organisation can engage in comprehensive organisational adoption (behaviour) without the existence of a CE ecosystem (diffusion), collaboration at the industry and societal levels to build such a CE ecosystem from the ground up is crucial in enabling construction companies to make progress in CE adoption. Indeed, simultaneous adoption behaviour and diffusion are clearly required to address this "chicken-or-egg" paradox (Figure 2), which – while not exclusive to the construction industry – is likely exacerbated by the complexity and sheer magnitude of construction projects.

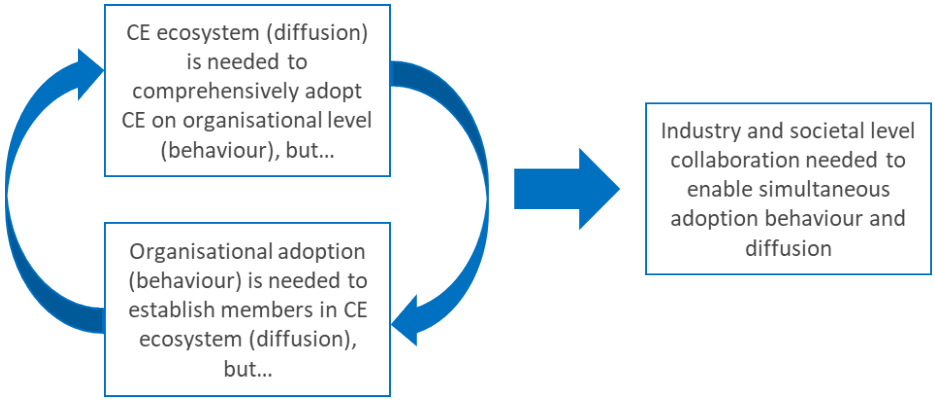

Figure 2: The paradoxical relationship between organisational behaviour and diffusion relating to CE adoption in the construction industry

5.2 Theoretical and practical implications

The theoretical contributions of the study relate to the valuable insights to CE adoption in the construction industry, but also from extending the prior understanding of organisational innovation adoption by exploring the adoption of a holistic phenomenon, rather than the adoption of a product or a solution, on which organisational innovation adoption theories typically focus (e.g., van Oorschot et al., 2018). By observing CE as the innovation, the complexity and the interconnectedness of the supply chain actors were given attention, and the relevance of CE adoption as a network was demonstrated. Moreover, the study examined non-frontrunner companies in the CE adoption, a perspective that is mostly lacking in CE research. To transition to a CE, we need more than the self-motivated CE frontrunners to participate. Thus, understanding the viewpoints of those who are slow to the transition is similarly important.

There are important similarities between the adoption of a single product or solution and the adoption of CE as a phenomenon, such as the mutual challenge of translating the customer or consumer 'hype' into realized adoption – i.e., the bridging of the notorious value – action gap. However, we also identified key differences between single product adoption and the adoption of CE as a phenomenon, which relate to the broader distribution of benefits, and to the higher level of complexity associated with CE adoption.

Specifically, while product adoption often benefits a single actor or a small number of actors, the positive effect of CE adoption is far more universal, expanding to society at large. In a single product adoption, a product serving the same purpose is typically adopted by all parties,

while corporate CE adoption necessitates the collaborative adoption of different but complementary functions and solutions by different value chain members. The required collaboration and alignment between chain members in order to establish a functioning CE ecosystem yields benefits beyond individual companies to the entire value chain.

This inevitable interconnectedness embedded in a functioning CE also creates complexity, as typically a significant pool of actors needs to be involved to establish functioning CE ecosystems. Driving the adoption of the complex phenomenon of CE requires deliberate coordination and facilitation carefully customized and localised to each specific context. This poses challenges to regulatory facilitation and policy formulation: Due to its context specificity and complexity, CE as a phenomenon cannot be banned or enforced the same way a single product or solution can. Accordingly, any regulatory restrictions or incentives can realistically target only specific parts, or certain aspects of CE.

The practical implications of the study relate to the nuanced understanding behind the challenges companies experience when trying to set business strategies for CE implementation. The innovation adoption process of a phenomenon was discovered to require significantly more extensive innovation diffusion among stakeholders than the adoption of a product or solution. Thus, individual companies need both internal readiness to adopt new practices but also strong support from the external operating environment. Companies should therefore seek different forms of collaboration that could advance their CE implementation as well as look for networks committed to advancing CE or sustainability-related knowledge. Finally, enabling CE adoption requires a considered and extensive policy response to support the organisational adoption and sectoral diffusion of CE. In addition to steering regulations in a direction that consistently promotes CE adoption, governmental support is needed to bring the diverse operators in the industry together and initiate the collaboration necessary for the establishment of a functioning CE ecosystem. Further, governmental efforts should be directed at fixing the broken wheel by finding, enabling and incentivising operators to assume the currently vacant positions of critical CE service providers for the construction industry. While universal approaches of government support may be effective in driving the adoption of single products and solutions, one size does not fit all in the adoption of the complex phenomenon of CE. Its complexity requires a diverse suite of different governmental support structures and instruments targeted at different industries, as well as differing corporate realities and circumstances within an industry (Piila et al., 2022).

5.3 Limitations and future research directions

This study has certain limitations. First, the project-based operating model of the construction sector creates sector-specific circumstances for innovation adoption that might not be applicable to all sectors. Second, the geographic focus of the study highlights some regional conditions and is not directly applicable to regions with differing climate, governance, or other conditions influencing the operations of the local construction industry. However, the most fundamental findings relating to the adoption of CE as a phenomenon and the level of diffusion it necessitates, as well as the related recommendations, are likely universally applicable to sectors around the world. Third, the interviews in the study were conducted with representatives of building construction companies and thus offer no first-hand understanding regarding the CE adoption views of other relevant actors, such as the parties responsible for designing, planning and financing buildings. Finally, as the construction companies examined

here were still in the relatively early stages of their CE-related innovation adoption processes, individual acceptance in terms of significant changes in employee attitudes or behaviours, had not yet been required. Accordingly, this study can offer only limited insights relating to individual acceptance and its contributing factors.

For future research recommendations, once a functioning CE ecosystem has been established in the construction industry and construction companies have been able to move to the stage of continued use in the innovation adoption process, further research efforts should be dedicated to the aspect of individual acceptance in CE adoption in construction, which currently remains unavoidably underrepresented. Similarly, a better understanding regarding the role of individual acceptance in the innovation adoption of a phenomenon could be gained by applying organisational innovation adoption theories to explore CE adoption in CE frontrunner industries or organisations, where timely individual acceptance would be essential.

In addition, beyond building construction companies, research efforts exploring the views of other crucial industry stakeholders are also encouraged to generate a more comprehensive understanding regarding CE adoption in the construction sector. However, perhaps the most crucial future research needs emerge from the fundamental differences this study identified in the innovation adoption of a holistic phenomenon compared to the adoption of a product or solution. Specifically, valuable understanding could be gained by further developing organisational innovation adoption theories to explain and predict the adoption process of a complex phenomenon and the nature of the diverse factors contributing to it.

6. Conclusions

The present study used an organisational innovation adoption framework to explore the circular economy adoption process and its contributing factors in the context of the Finnish construction industry. The findings add knowledge to the growing body of CE research by increasing our understanding of the aspects of CE in the construction industry context, in addition to organisational innovation adoption. Moreover, the study's findings provide valuable insights into the challenges construction companies experience in CE adoption: companies have limited possibilities to advance CE on their own, but being actively involved in the value chain, industry networks and/or ecosystem creates additional advantages both to the individual firm but also to the connected value chain.

Organisations are increasingly faced with demands to become more sustainable, which entails change. The present study's findings show that the conscious implementation of circular solutions in the construction sector is often driven by societal awareness, customer demand regarding sustainability issues, and the changing regulative arena. Still, companies approach CE from an economic perspective, it is applied only when financial benefits can be realised. Indeed, the findings demonstrate the growing pains of an industry on the road towards a more sustainable future.

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Appendix 1. Interview details

NO.	COMPANY (ALIAS)	INTERVIEW DATE	DURATION (MINUTES)	ROLE(S) OF THE INTERVIEWEE(S)
1	Company A	May 25, 2022	64	Sustainability professional
2	Company B	June 9, 2022	64	Sustainability professional
3	Company C	June 13, 2022	66	Sustainability professional
4	Company D	June 21, 2022	71	Development professional
5	Company E	June 22, 2022	50	Sustainability professional
6	Company F	June 23, 2022	47	Sustainability professional
7	Company G	June 23, 2022	59	Sustainability professional
8	Company H	June 3, 2022	49	Development professional
9	Company I	July 1, 2022	51	Sustainability professional
10	Company J	August 12, 2022	26	Sustainability professional
11	Company K	August 16, 2022	44	Development professional
12	Company L	August 31, 2022	29	Sustainability professional
13	Company M	September 12, 2022	21	CEO
14	Company N	September 19, 2022	47	Sustainability professional
15	Company O	September 20, 2022	53	Development professional and Deputy CEO
16	Company P	October 10, 2022	48	Sustainability professional
17	Company Q	December 9, 2022	53	Procurement professional
18	Company R	December 19, 2022	27	Sustainability professional
19	Company S	December 27, 2022	24	Procurement professional
20	Company T	February 2, 2023	37	Procurement professional

Reframing Leadership in Organizations: Formal Leaders' Perceptions and Utilization of Informal Leadership in the Technology Sector

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Abstract

This study examines how formal leaders perceive and utilize informal leadership in their daily work. It draws on qualitative content analysis of 22 semi-structured interviews with formal

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leaders in technology sector organizations across 11 European countries. The findings show how formal leaders view informal leadership to benefit both their own work and broader organizational functioning. Formal leaders often engage in co-leadership practices with informal leaders and consider informal leadership as a long-term, expertise-driven process enacted by individuals with deep subject-matter knowledge. We offer practical recommendations for recognizing and supporting informal leadership, and outline directions for future research. Overall, this study contributes to reframing organizational leadership by highlighting the influence of informal leadership on formal leadership and collective work practices.

Keywords

Informal leadership; Influence; Leadership; Management; Organization; Power

1. Introduction

Collective forms of leadership, i.e., the shared, distributed, pooled, and relational aspects of leadership, offer an alternative theoretical framing for understanding leadership in organizations (Ospina et al., 2020). In these, leadership is conceptualized as a collective practice rather than the responsibility of a single formally appointed leader or manager (Gjerald et al., 2025; Svensson, 2026). Formal and informal forms of leadership are understood to coexist in a "hybridized leadership configuration" (Gronn, 2009), and interact (White et al., 2016; Yammarino et al., 2012). Friedrich et al. (2009) define collective leadership as a dynamic process in which an appointed leader, or group of leaders, selectively utilizes the diverse skills, competences, and expertise of members within a network as needs arise in organizations. In contemporary organizations that enable collective leadership, employees are allowed and encouraged to take responsibility and influence the collective work, even without holding a formal leadership position, rather than merely expecting visions, strategies and direction to flow down the organizational hierarchy. As a specific area of interest within collective leadership for both researchers and practitioners, *informal leadership* (IL) — i.e., the influence and leadership status an individual employee exerts without a formally appointed leadership role (Chiu et al., 2021; Zhang et al., 2020) — has become a critical, yet understudied enabler of organizational functioning. Therefore, as informal leadership is a distinctive part of collective leadership and operates without hierarchical pressures, it can act as a vitalizing element in the collective leadership equation.

Reflecting a broader shift in leadership research from formal, heroic and hierarchical models towards relational and collective leadership approaches (see e.g., Boira Lopez & Connelly, 2025; Eva et al., 2021; Gjerald et al, 2025), growing attention is being directed towards non-designated, informal leaders within organizations. Although leadership research has traditionally mainly focused on formal power-positioned leadership (Banks et al., 2022; Liden et al., 2025), the current shift in leadership thinking toward relational, multi-level, and interactional perspectives (Gjerald et al., 2026) highlights the need to advance theory and practice on informal leadership. This reframing involves an intentional reassessment of roles, responsibilities, and power structures to support relevant forms of leadership to address the increasingly complex, abrupt and persisting challenges facing work in contemporary organizations across all levels. In this development, the traditional siloed practices and hierarchical leadership structures are

no longer sufficient for maintaining organizational competitiveness (Day et al., 2021). Consequently, organizations must integrate the competencies of all members to advance their strategic aims (Eva et al., 2021).

Informal leadership is a key component of this non-traditional, relational and collective way of organizing and leading, as it facilitates organizational functioning by fostering positive team interactions and collaborative work practices (Badura et al., 2022; Liu et al., 2025). At the same time, while it is acknowledged that formal leaders play a significant role in supporting or suppressing informal leadership actions (Nouman & Luria, 2025; Van De Mieroop et al., 2020; White et al., 2016) their voice is largely absent from existing research (Svensson, 2026; Qiu et al., 2026). Given the growing call for more inclusive leadership development that integrates formal and informal leadership to understand how leadership occurs both individually and collectively (Boira Lopez & Connelly, 2025; Chiu et al., 2021; Day et al., 2021; Qiu et al., 2026), how informal leadership influences formal leadership remains largely unexplored.

Moreover, surprisingly little attention has been paid to how supervisors perceive and respond to informal leadership (Qiu et al., 2026). Hence, the co-existence of formal and informal leadership highlights the need for an empirical investigation that focuses specifically on formal leaders. In this co-existence, a central issue of power sharing also warrants investigation (Boira Lopez & Connelly, 2025; Svensson et al., 2025), as it inevitably affects the development and extent of collective leadership.

Using collective leadership as a theoretical lens (Ospina et al., 2020) and building on the premise that leadership and related influencing reside in both hierarchical and collective settings as hybridized leadership configurations (Gronn, 2009), we conduct an inductive qualitative inquiry and examine the following research question: *how formal leaders perceive and utilize informal leadership within their organizations*. We present findings from interviews conducted in 2022–2023 with 22 formal leaders working in technology sector organizations. In this study, we use the term "formal leader" in reference to our informants; i.e. formal leaders who hold higher-level formal positions in their organizations with responsibilities such as strategic decision-making, oversight of functions or units, and organizational performance. Technology sector organizations provide a particularly suitable context for examining informal leadership, because organizations in this industry employ experts whose working is driven by competence rather than formal authority (Larsson et al., 2011). Moreover, the flat organizations and distributed team arrangements that are typical for expert-driven tech companies require individual employees to take initiative and influence others beyond formal leadership roles. Our findings unveil how participants understand and utilize informal leadership, while simultaneously uncovering the lack of recognition and the taken-for-granted nature of this constructive form of behaviour in organizations.

Our study contributes to the collective and informal leadership literature by suggesting that formal leadership benefits from informal leadership under conditions that support collaboration. First, this research extends understanding of the role of informal leadership in collective leadership (e.g., Day et al., 2021; Ospina et al., 2020). We provide a thematic framework (Figure 1) that illustrates how formal and informal leadership interact, and how informal leadership behaviours influence formal leadership and collective work. Second, we debate power-sharing in collective leadership (e.g., Boira Lopez & Connelly, 2025) and argue that hierarchical power-sharing is often taken for granted despite co-leadership or a delegation of leadership work. Third, we propose that informal leadership does not predict individuals' willingness to assume formal leadership positions, because in essence, informal leadership is

primarily a competence-based phenomenon, and informal leadership capacity is directly connected to this expertise (e.g., Briker et al., 2021; Chiu et al, 2021; Eva et al., 2021).

2. Theoretical background

2.1 Influence and power as key elements in collective leadership

Leadership is often associated with formal leadership positions (see e.g., Banks et al., 2022), even if it exists in both formal and informal forms. Antonakis and Day (2018, p. 5) define leadership as "a formal or informal contextually rooted and goal-influencing process that occurs between a leader and a follower, groups of followers, or institutions". Hence, the specific distinction of the two styles of leadership – formal and informal – might be incorrectly understood to consist of the same ingredients. However, when we look at the fundamental elements of these forms of leadership contributing to collective leadership, it is evident that they are significantly different when considering the issues of influence and power they are associated with.

Informal leadership is a naturally occurring form of leadership in organizations and emerges at all levels (Denis et al., 2012; White et al., 2016) that takes place in interactions in formal structures, informal networks, and relationships between people (Badura et al., 2022; Yammarino et al., 2012). Informal leadership arises as perceived social status which displays the amount of a leadership role granted by peers without formal authority (Chiu et al., 2021). The granted leadership role refers to how informal leaders emerge through the intricate processes of role taking and peer perceptions that determine who becomes leader, resulting in influence over others (Badura et al., 2022; Neubert & Taggar, 2004). Hence, informal leadership status cannot be claimed, but is given by others. Consequently, occupying a formal leadership position does not automatically guarantee influence, but it is earned through social interaction. Usually, informal leadership is defined as being only lateral (see e.g., Chiu et al., 2021; Hanna et al., 2021; Neubert & Taggar 2004), although some leave room for vertical influence (see e.g., Zhang et al., 2020). Through this influence, informal leadership affects individuals and teams – i.e. close or remote colleagues or superiors (Chiu et al., 2021; Zhang et al., 2012). This difference in basis for influencing sets these two roles in fundamentally different positions. Accordingly, the level of collaboration and mutual understanding between informal and formal leaders is significant.

Organizational power structures in collectivistic organizational settings are often bypassed and understudied (Boira Lopez & Connelly, 2025; Yammarino et al., 2012). This promotes the importance of collaboration between informal and formal leaders, and as organizational power is placed in positions of formal leadership and hierarchical structures, informal leadership needs access to formal leadership through influence in order to have access to e.g., organizational resources or decision-making. The moments when informal leadership emerges are critical inflection points, where the response of formal authority either facilitates or obstructs the transition toward collective leadership (see e.g., Chiu et al., 2021; Larsson et al., 2025; van Baarle et al., 2024). In this, positional power is decisive.

Differing from informal leaders who hold only personal power, formal leaders by default possess positional power tied to their socially created responsibility and their rights to move and change organizational issues (Liden et al., 2025; Wilson, 2023). This positional authority grants formal leaders 'power-over' others, which they can then transform into 'power-to-act' for their teams. This transition is achieved through enabling power, the strategic use of lan-

guage to shape action, the cultivation of community, and the fostering of safety and trust (van Baarle et al., 2024). Furthermore, with regard to the use of and orientation to power, socialized leaders with a collective power orientation display higher levels of collective leadership behaviours than personalized leaders, who have self-serving power orientations, further resulting in a resistance to power sharing and supporting informal leadership (Boira Lopez & Connelly, 2025). Thus, the operating principles of formal and informal leadership vary due to power issues, and it is therefore essential to recognize formal leaders' approaches to both power sharing and being influenced, which impact organizational leadership.

2.2 Co-existence of informal and formal leadership

Informal leadership and formal leadership are both components of collective leadership, in which "multiple individuals interact, through a variety of formal and informal structures, broadly defined, and take on a variety of leadership roles, both formally and informally, over time" (Yammarino et al., 2012, p. 384; see also e.g., Badura et al., 2022; Eva et al., 2021; White et al., 2016). Building on this, formal and informal leadership not only co-exist, but may also co-function at all levels of an organization, either operating independently or interacting with one another, intentionally or unintentionally. How this co-existence evolves is guided by a complex process of interaction (see e.g., Briker et al., 2021; Friedrich et al., 2009; Holm & Fairhurst, 2018; Van de Mieroop et al., 2020).

Informal leadership is enacted by its foundations of competence – knowledge, skills, and ability (Briker et al., 2021; He et al., 2021; Stincelli & Baghurst, 2014). To complement their deep subject matter knowledge, informal leaders possess considerable knowledge of the issues affecting the organization (see e.g., Johannessen et al., 2015; Larsson et al., 2011; Nouman & Luria, 2025) which are conveyed through shared visions (Pan et al., 2018; Zhang et al., 2012). Overall, informal leaders can be considered as drivers of change who engage in creating innovative approaches to address unmet needs, stimulating cultural and knowledge exchanges, and creating partnerships and systems to enable organizational procedures and increase participation (Nouman & Luria, 2025). Informal leadership manifests in volunteering to lead, and elementally informal leaders are keen to exercise leadership (Briker et al., 2021; Marion et al., 2016; Muijs et al., 2013), despite the interpersonal risks of taking charge (Liu et al., 2025; Zhang et al., 2020) and being abandoned due to a lack of formal leadership support (Chiu et al., 2021). This proactive approach generates development ideas that impact the collective, and form a practice where collaboration with formal leaders becomes meaningful.

In collective leadership, the turning points unfold in the everyday flows of invitation, exploration, and affirmation, creating the co-action in leadership (Sklaveniti, 2020). In these moments of leadership, new understandings of arising situations are negotiated by the participants themselves (Larsson et al., 2025), leading to a continuous negotiation of informal and formal leadership in creating the collective leadership, where formal leaders' perceptions and their responses to informal leadership lead the way (Qiu et al., 2026). Doing leadership between formal and informal leaders is shared and negotiated through various subtle forms of communication (Van De Mieroop et al., 2020), where both time and timing are essential (Holm & Fairhurst, 2018; Kalish & Luria, 2021). This communication unravels over time in social interaction, and the formal leaders either allow or deny informal leadership attempts (Van De Mieroop et al., 2020). When allowed, informal leaders may also convey strategic values and priorities in various arenas of the organization by leveraging informality, information-based

authority and information brokering, while contributing to task structuring through sense-making and with formal leaders contributing to structure and expectations (Larsson et al., 2011). Here, the competence and knowledge of the informal leader is allowed to advance the work at hand, while the formal leader focuses on the guidelines of the work in a collaboration. However, in cases of disruptive events beyond the formal leader's capability, competent informal leaders may emerge to lead – or take over – without any explicit delegation of power (Johannessen et al., 2015). Here, the informal leader's competence sort of brushes aside the formal leader who lacks the specific skills to resolve the situation.

As informal leadership is beneficial for teams and organizational productivity (see e.g., He et al., 2021; Marion et al., 2016), it should generally be valued by formal leaders (Qiu et al., 2026). Informal leadership can be seen positively by formal leaders (Muijs et al., 2013; Nouman & Luria, 2025; Zhang et al., 2012), but this is not always the case. Qiu et al. (2026) suggest that a highly competent informal leader may arouse supervisor downward jealousy due to them seeing informal leaders as rivals due to their position in the group and the guidance, validation, and decision-making they offer to others. This causes the formal leader to fear losing relationships with other subordinates and create "feelings of insecurity, worry, loss of control and diminished influence" (Qiu et al., 2026, p. 5), leading to jealousy. While peers may be more receptive to informal leadership (White et al., 2016), they may also see competence as a threat, which can lead them to refrain from helping the informal leader (Liu et al., 2024). Hence (and paradoxically), when seen as the core of informal leadership, superior knowledge and competence may be a source of both positive and negative consequences. To be receptive to informal leadership, one therefore needs to welcome the knowledge and competence of others. When welcomed, informal leadership affects teams and mutually is heavily impacted by formal leadership. This co-existence and interaction of informal and formal leadership in organizations will increase its importance in the contemporary working life with deepening competencies and complexity, which subsequently necessitates reframing leadership in organizations to unchain progress at the locations of knowledge.

3. Methods

3.1 Research design

We conducted a qualitative study comprising semi-structured interviews to investigate formal leaders' perceptions and utilization of informal leadership in organizations. This study complements the predominant prior research on informal leadership that has relied on quantitative methods (e.g., Briker et al., 2021; Chiu et al., 2021; Qiu et al., 2026; White et al., 2016). The qualitative lens enables a nuanced understanding of the influence of informal leadership in organizations, as viewed through the experiences of formal leaders. This approach provides rich empirical evidence on how formal leaders perceive and respond to informal leadership (Qiu et al., 2026), and how they utilize it in their everyday leadership work.

3.2 Participants

The participants of this study comprised 22 formal leaders in 11 European countries, across different technology sector organizations, including energy (6), automotive (4), consultancy (4), and other (8). We use the term "formal leader" to refer to our informants, as they held

formal leadership positions in their organizations. On average, they had 20 years of work experience, of which 11 years had been spent in management positions. Seven interviewees were board members, ten were one hierarchy level below the board, and five were two levels below the board. At the time of the interviews, the participants had an average of 16 subordinates. Twelve interviewees worked in large multinational companies with thousands of employees, and ten of the interviewees worked in organizations with fewer than 450 employees. The interviewees represented different European nationalities: Austria (5), Finland (5), Germany (3), Croatia (2), Belgium (1), Czech Republic (1), France (1), Hungary (1), Italy (1), Romania (1), and the U.K. (1). Thirteen participants were male, and nine were female.

To obtain our sample, we first identified suitable candidates within the researchers' networks, and then recruited additional participants using a snowballing technique based on recommendations. We contacted the candidates via email or telephone. Most of the individuals we invited to participate in the informal leadership study agreed to be interviewed. We obtained informed consent from all participants prior to data collection.

3.3 Data collection

The interviews were conducted between October 2022 and March 2023. They were designed to explore the everyday interactions and patterns of influence between the participants and informal leadership actors, and a prior understanding of informal leadership was not expected. At the beginning of each interview, participants were asked background questions about their work, position, and tenure. The concept of informal leadership was introduced by inviting interviewees to reflect on whether they had observed employees taking initiative in coordinating joint tasks or leading colleagues informally. Informal leadership was explained as leadership influence that is exercised without a formal leadership position, and often demonstrated through voluntary extra-role behaviours, taking responsibility, and organizing collective work. This introduction was important, as it framed the remainder of the interview and influenced how participants made sense of the concept and the stories they shared with the researchers.

The subsequent questions aimed to explore participants' general perceptions of informal leadership, their views on what triggers informal leadership behaviours, and their reflections on how such actions influence both the group's work and their own. In addition, we inquired about issues of trust, focusing on the role that trust plays in informal leadership, and the ways in which it develops between formal and informal leaders, as well as between colleagues and informal leaders. The final questions focused on issues of conflict, where we asked how managers addressed disagreements or obstacles that arose in their interactions with informal leaders. In addition, we asked about the boundaries of power and how managers handled unwanted informal leadership behaviour. Finally, we addressed the issue of managerial not-knowing by inquiring how managers handle instances in which informal leadership is tied to expertise that the manager themselves may not possess.

The semi-structured format allowed for follow-up questions, clarifications, and examples beyond the interview guide. The interviews were conducted both online and in-person, and their average duration was 34 minutes (range: 19-60 minutes). Altogether, the interviews provided rich data about the participants' understandings of informal leadership. While all of the interviewees shared their views on informal leadership, the content of the interviews varied in depth (Braun & Clarke, 2006). The participants differed in how articulately and deeply they spoke about their experiences (Hill & Knox, 2021, p. 9), and while some interviewees were

more familiar with the theoretical concept and the natural occurrence of informal leadership in organizations, some had experienced it more personally than others, which might have influenced how extensively they discussed it in the interviews.

3.4 Data analysis

The interviews were recorded, transcribed, and anonymized to identify patterns across the transcripts. We used qualitative content analysis (e.g., Elo & Kyngäs, 2008; Graneheim et al., 2017; Kuckartz & Rädiker, 2023) to systematically organize and interpret the data. The analysis process led by the lead author was iterative, moving from an initial review of the data to the development of dominant thematic categories. Research memoranda were used to document emerging insights throughout the preparation, interviewing, organising, and analysis phases. Each interview provided an initial understanding of the topic, which was then further developed through close reading of the interview transcripts. The transcripts were imported into the Nvivo qualitative data analysis software platform which was used to support the coding process. Each interview transcript was coded individually. After coding all of the 22 transcripts, the resulting codes were reviewed. Finally, the findings were organized into three main themes. The aim was to develop themes that represented the informants' accounts and views of informal leadership. To effectively present our findings, we followed the guidelines established by Gioia et al. (2013). Figure 1 shows a thematic framework of the analysis, presenting the different levels of analysis, codes closely tied to the data, and themes and sub-themes reflecting our interpretation of the dominant patterns in the data (see Bengtsson, 2016; Gioia et al., 2013).

It is noteworthy that although the interview questions focused on informal leadership as a concept, the formal leaders' responses addressed both the phenomenon of informal leadership and the individuals enacting it. This observation is, however, unsurprising, as once the formal leaders began to reflect on specific situations, their accounts naturally shifted from an abstract, conceptual level to the practical level of discussing particular informal leaders.

4. Findings

Our analysis of the interviews detected three main themes: *Informal leadership supporting formal leaders* (with subthemes of Benefiting the formal leader and Benefiting the collective work), *Informal leadership as a work approach of specific individuals* (with subthemes of Leading by doing and Leading the collective work), and *Informal leadership fostered through openness and a shallow hierarchy* (with subthemes of Being open to influencing and Low resourcing to power and hierarchy).

The formal leaders saw informal leadership as benefiting them and supporting their work. They also viewed informal leadership behaviour as supportive of other organizational stakeholders such as peers and customers. Notably, the formal leaders were even willing to co-lead with informal leaders in situations characterized by shared competence and mutual trust. Here, informal leaders were permitted and motivated to lead groups, but leadership was preferably exercised under some form of supervision by formal leaders, whether due to budgetary concerns, customer requirements, or by oversight of the 'big picture'. Despite this, there was a desire to give space to the expert knowledge of informal leaders, for example in managing the work of others. However, granting free rein or a delegation of power was not explicitly addressed, even when issues related to power were mentioned. In discussions of power, over-

stepping responsibility boundaries was evaluated negatively, despite the absence of specific definitions of such boundaries, as these leaders' comments reflect:

> "There are some people who want more power, and then they overstep their authority in certain matters. This has come up a few times, and I've had to point out who is in charge of finances and so on. But this hasn't happened very often, it's only when someone wants to take on too much leadership that we have to rein them in." (Formal leader 3)

> "Ultimately, the decision might be such that you have to try to soften [the overstepping], on both sides. So that we can move forward and it's just one issue among others, so that we can somehow salvage the cooperative spirit in that situation and keep moving forward. These things happen every now and then. It is a kind of small-scale dictatorship where things are just done a certain way." (Formal leader 9)

However, informal leadership was mainly viewed as positive, and its benefits for initiative-taking and problem solving were seen to outweigh its potential drawbacks, as illustrated by the following example:

> "People are thinking more on their own, outside of the box, and are solution driven." (Formal leader 16)

Interestingly, the occasional overstep did not prevent formal leaders from delegating responsibilities such as leading a group to informal leaders, even though such tasks also lay outside established responsibility boundaries. Hence, overstepping was accepted at some points, while at others it was not. Overall, formal leaders did not perceive that they handed too much responsibility or work to informal leaders, although they admitted that they did delegate, and specifically to those 'who can handle it'. However, the interviewees did not seem to perceive any contradictions in their own accounts, nor did they seem to regard this form of delegating to specific individuals as unfair or biased.

On the introduction of the concept of informal leadership in the interviews, the participants' initial comments and associations of informal leadership intertwine three aspects: informal leadership as a naturally occurring approach in some individuals, supporting personality without specific details being mentioned, and professional experience accumulated as expertise. Overall, the participants recognized the occurrence of informal leadership in their organizations, and stated that these individuals are easily identifiable and included in planning. Yet, it was articulated that the question was difficult, and that the issue had not been discussed within the organization. This is how the formal leaders described informal leadership:

> "You can tell from each person whether they can do it [informal leadership] or not. [...] There are some guys who are naturally capable of it. In fact, I can say about every guy that I have, who can do it and who can't. Let's just say that I've noticed. It's a pretty difficult question." (Formal leader 3)

> "Absolutely, yes, there are individuals who perhaps naturally take on that kind of role, sometimes for good and sometimes for bad." (Formal leader 5)

> "I don't think it has been talked about in those terms, but the managers definitely know those people. They are the ones who are always contacted or who you want to be involved when thinking about the goals for the next year. They are the people who you grab into groups, in which all levels of the organization are represented. So, they are sort of recognized, but they are not talked about like that or in those terms." (Formal leader 8)

> "Yes, yes, there are people like that, perhaps not in my current organization, but I've come across some along the way – it's maybe a personality thing, that some people want to take a little more and others a little less [informal leadership responsibilities]." (Formal leader 9)

Notably, most of the interviewed formal leaders admitted that they had not previously considered informal leadership in a structured way. Their responses indicate an immediate recognition of informal leadership in practice, albeit with a limited ability to conceptualize or verbalize it. This suggests that informal leadership has not been explicitly addressed within their organizations. Moreover, it reflects a continuing emphasis on hierarchical leadership and a neglect of collective forms of leadership, which would necessitate rethinking established roles and power structures.

4.1 Informal leadership supporting formal leaders

Formal leaders consistently described informal leadership as alleviating their individual managerial workload, while contributing to collective work at both group and organizational levels.

4.1.1 Benefiting the formal leader

Giving responsibility to informal leaders was easier when individuals were seen as competent and proactive, and this practice was understood as a way to signal trust, make use of skills and provide autonomy, which made letting go of managerial control and allowing informal leadership easier, as reflected by one formal leader:

> "It makes my life easy! People use their brains. People simply take responsibility and ownership. So, I do not need to know the details of what they do, which is especially helpful if they are experts in something that I am not an expert in. They come up with brilliant suggestions." (Formal leader 6)

Generated trust was understood as an essential and relational element in the collaboration between formal and informal leaders. For such trust to emerge, there needed to be reciprocal understanding, a respect for the other's knowledge and skills, shared experiences, 'speaking the same language', and a shared direction concerning work. Formal leaders stated that trust formed the foundation of their collaboration with informal leaders, and that once established, trust made it easier to let go of managerial control. This was described as beneficial for formal leaders, allowing them to shift the focus of their work, as illustrated by the following example:

> "I get more time for strategic decision-making and focus on strategy development. I get to do more macro-effects and top-level relationship building, which I would otherwise not

> be able to do. Even if they do additional stuff, I know that they would do it carefully, so I do not need to control. My life is a lot easier, as a lot of time is saved." (Formal leader 15)

Open communication was seen as key to collaboration, facilitating the sharing of ideas and the addressing of problems. The ability to reciprocate and engage in dialogue was viewed to help attain a mutual understanding and shared goals. Secrecy or confidentiality were not mentioned in the interviews, suggesting that formal leaders may not have considered them to be relevant in relation to informal leadership. This further emphasizes that informal leadership is enabled through trust, openness, and shared competence rather than controlled access to information. Importantly, open communication was seen as fluent even in conflict, as this formal leader noted:

> "As there is a lot of familiarity between us [the interviewee and informal leader(s)], conflicts are easier to solve than those with the formal managers – it is done through communication." (Formal leader 10)

Formal leaders acknowledged that guiding work toward informal leaders required **allowing individual thinking and creativity**. Letting go of leadership control was associated with an acknowledgment by formal leaders of the need to allow freedom in developing solutions. Also, they clearly understood that their time and knowledge were not sufficient to solve issues concerning deep-knowledge levels, and hence, they allowed individual thinking and suggesting solutions outside of their own scope. In addition, they understood it as a way to steer their own work, and as one formal leader said:

> "I strive that not everything goes in my direction, so I give them the tasks and responsibility, so that tasks are solved on the level where they appear. I do not want to micromanage everything. The group solves the problem if they have one goal. Then they get good results without me interfering and telling them what to do. For me, it is good that someone takes initiative. If you are in a meeting and show tasks, it is so much more effective when people volunteer to do things. You don't want to tell them to do stuff and give them timelines. It is easier if they suggest and do it." (Formal leader 17)

4.1.2 Benefiting the collective work

Formal leaders understood informal leadership also as a willingness to improve work and achieve results, which they described as purpose-led. This **goal-orientation** became visible in utilizing the accumulated knowledge and skills, which led to expanded views in which goal-orientedness became part of the way of working. This ability for development can be counted as an 'expertise', as illustrated by the following account:

> "From what I've seen through experience, a lot of it comes down to how people grow over time, you know – it's the knowledge they build and their independent attitude and how they start leading somehow. Usually, the people who really understand the big picture [and] also the client or the purpose of the project are the ones who step into informal leadership roles. They tend to take initiative, but they also understand when they need support. So, they ask for help, they look for resources, and they try to bring others in to

> collaborate, all with the goal of turning that vision for the client or the project into something real." (Formal leader 21)

Formal leaders linked informal leadership to strong **customer-orientation**, grounded in the informal leaders' vast knowledge and experience. This enabled informal leaders to understand customer needs and contribute to solving them, often independently. Formal leaders valued this holistic contribution, as illustrated below:

> "In many cases, informal leaders bring good input to the table, they have good ideas about different ways the work could be carried out, like approaches that might work better or more efficiently. And quite often, they have a good understanding of the client and what they really need and how things might evolve, and then they have ideas that can be offered to the client." (Formal leader 20)

4.2 Informal leadership as a work approach of specific individuals

Formal leaders viewed informal leadership as a long-term, individual-level process and phenomenon involving specific individuals' continuous contribution to both personal and collective work. Rather than emerging in specific situations for short periods, informal leadership was understood as a more stable work approach.

4.2.1 Leading by doing

Participants perceived informal leadership in an intertwined manner **based on subject matter expertise and personality**. The knowledge that individuals possessed was seen as the foundation of informal leadership behaviour, with knowledge sharing between peers and leaders. Another, equally important and intertwined condition was personality. However, personality was not described in detail, but only as an innate tendency to lead and the ability to support a group, as formulated by one formal leader:

> "Yes, there are definitely people who... to whom the responsibility just naturally flows. We have a few people who are very capable and knowledgeable, and they naturally accrue more responsibilities and work." (Formal leader 2)

Participants reported that most informal leaders were **usually content in the informal role** and did not seek formal managerial positions, but instead wished to utilize their expertise through leadership in practice, although some were interested in advancing within the organizational hierarchy. Formal leaders recognized this tension between assuming broad informal leadership responsibilities and not aspiring to formal promotion, as exemplified in this quote:

> "Sure there are those who are ambitious and want to climb the organizational ladder. But then there are the experienced ones – they are not interested in organizational power, which you gain in the organizational chart positions, but are content in their expert positions." (Formal leader 4)

The views of formal leaders reflected that informal leadership was **taken for granted**, even though it was clearly valued. Accordingly, leaders did not pay attention to the informal leaders' workload as such, despite delegating work. Issues like compensation were not mentioned. Nonetheless, the formal leaders appreciated the informal leaders input and acknowledged delegating work, as formulated by one of the participants:

> "And it's precisely those who exercise that informal leadership who are competent, and I trust them and have partly delegated that responsibility to them. Perhaps unintentionally or accidentally, or because it's easier for me that way. I trust them completely, and I don't need to monitor or supervise them." (Formal leader 3)

4.2.2 Leading the collective work

Informal leadership in collaboration with the formal leader consisted of degrees of consulting, collaboration, delegating, or even co-leading. In this collaboration, informal leaders were given responsibilities of leading tasks and people in an informal manner. Correspondingly, as most formal leaders understood that informal leaders have certain knowledge they lack, in a trusting collaboration, even guiding the manager was accepted. In a collaborative setting, informal leaders focused on advancing the group's work related to content and targets, while also coordinating the overall effort. Meanwhile, the formal leader stepped back to focus on administrative matters. One formal leader explains this:

> "Initially, the decision making was mostly centralized to me and the informal leader was requested to propose options on how to proceed. As responsible for the team, I remain in charge of the decisions on the allocation of assignments and definition of the teams for each assignment, and the person in charge takes over the assignment even without a formal manager role." (Formal leader 19)

Informal leadership as independent role-taking was seen as benefiting formal leaders, as the individuals taking informal leadership roles initiated action, which grew to include and motivate others in the group and impact the work, even creating new solutions. This interaction was described by a formal leader:

> "Then there are people who feel that they can take on a bigger role than they have on paper or based on their title, and they want to move things forward and they are kind of promoters who get other employees on board. And of course it helps that they take on this kind of responsibility that is not actually assigned to them, but they take it on anyway." (Formal leader 5)

The formal leaders conveyed that **informal leadership was conducted willingly and voluntarily**. Formal leaders appreciated informal leadership that emerged, and utilized the knowledge informal leaders possessed to serve the purpose of the work and further development. This approach was also extended to include others, and is described by one formal leader:

> "Somehow, I see that often those guys due to their interests in issues may also be the kind of people who pull the group along, and they start thinking together, if something is bothering [them] or could be improved. I see that as useful for development." (Formal leader 8)

Guiding and leading others was seen as a foundation of informal leadership, established on an independent, proactive attitude combined with content-related knowledge. Such a combination allowed both the team and the formal leader to follow the informal leader more easily. Their influence involved supervising, guiding, and mentoring others (particularly younger colleagues), and occasionally extended to customers. While this group-oriented leading often emerged naturally, it was sometimes explicitly delegated by the formal authority, a dynamic described by one leader:

> "They are useful to me in a way because I can't guide the younger designers myself. But I have a few guys who can do it, and they are happy to take it on. Usually, they are the most experienced guys who know they can do it." (Formal leader 3)

4.3 Informal leadership fostered through openness and a shallow hierarchy

Formal leaders acknowledged the reciprocal relationship with informal leaders and their own role in supporting or suppressing informal leadership behaviour through accepting, influencing and generating openness.

4.3.1 Being open to influencing

Open to being influenced by informal leaders was an invitation for informal leaders to share their knowledge and perceptions, and gather information about work from various angles to bring forward relevant topics. In this dialogue, formal leaders put themselves on the same level as informal leaders, opened themselves to being influenced, and even asked for guidance on relevant issues. Through being open to influencing, formal leaders accepted others' views and gained relevant information for decision-making, as described in the following quote:

> "I have somebody to talk to and who can give me a good overview. Also, I can get guidance and I have someone to ask about the technical aspects and directions we should take." (Formal leader 2)

Recognizing, accepting and utilizing were the tools mentioned to promote informal leadership. Although leaders varied in how they recognized, accepted, and utilized informal leadership, the majority accepted informal leadership proactivity among their employees and utilized it to serve the goals and organization. This utilization was sometimes planned, as described by one formal leader:

> "We monitor who takes proactive actions, and when possible organize the newly formed entities around these informal leaders." (Formal leader 7)

Formal leaders acknowledged the need to **support and empower** informal leadership, especially if they collaborated with the informal leader, and steered the collective work towards goals with and through informal leadership. They further understood their formal role in making things possible through their positional power. One formal leader even saw this form of support as an opportunity for changing structures:

> "Aligning people and aligning information, getting consensus between different thinking models, different targets across the information – I think this is very much needed in the automotive industry because you usually work in the matrix." (Formal leader 13)

4.3.2 Low resourcing to power and hierarchy

Recognizing the boundaries of one's own knowledge was essential for allowing informal leadership to take place, as it simultaneously challenged the formal leaders' position and knowledge. Our participants said they accepted others' knowledge, and this willingness to recognize the limits of their own knowledge supported the utilization of informal leadership. As one formal leader observed:

> "They are experts in something that I am not an expert in." (Formal leader 6)

Informal leadership was utilized either intentionally or unintentionally by formal leaders to support their work, and they had done so for a long time, even if the concept was descriptively new to most of them. Use occurred intentionally, for example, via delegation, and unintentionally through a larger and more responsible workload – including aspects defining the collective work – than others. This was described by one formal leader, who said:

> "Maybe I also give them more workload because they can handle it better than others, who might get stress symptoms." (Formal leader 4)

Informal leadership was seen as **buffering organizational hierarchy** and mitigating silos. Also, being separate from the organizational hierarchy, informal leadership was seen to increase information flows in organizations and work across the silos at different levels of the organization. One formal leader described this in this way:

> "Informal leadership helps you to have an impact beyond the bounds of your area of responsibility. And I think this is very necessary to bridge over silos to create followers and so on. So, I see informal leadership as a superset of formal leadership." (Formal leader 14)

Overall, the findings of this study indicate that formal leaders find informal leadership to be beneficial to both them and to the collective work. Informal leadership was seen to be an approach to work undertaken by specific individuals with high knowledge levels, and formal leaders fall within its sphere of influence. To illustrate our findings, we provide a thematic framework (Figure 1) of informal leadership as perceived and utilized by the formal leaders in the technology sector organizations featured in this study.

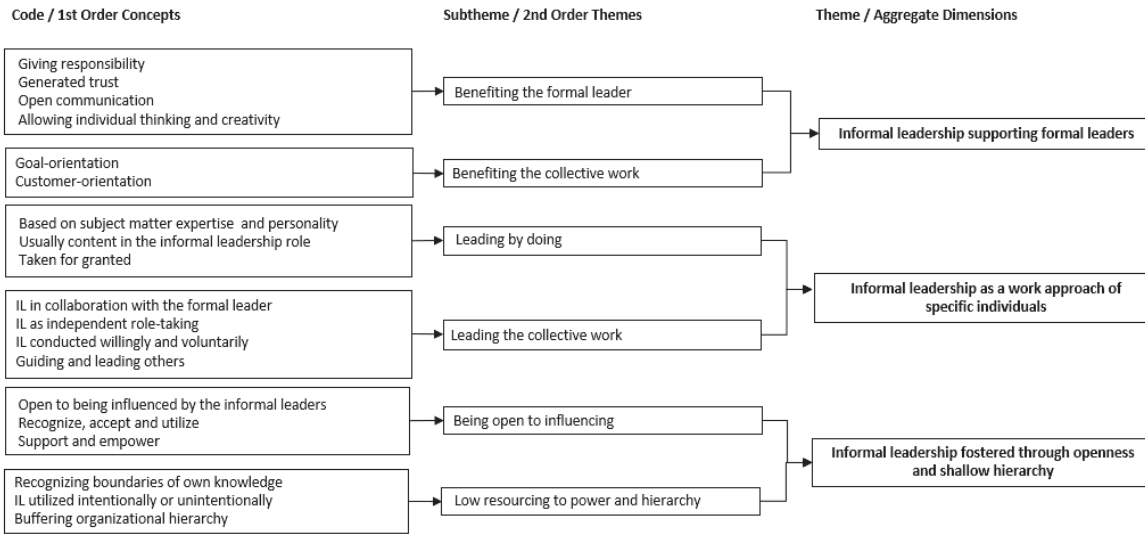

Figure 1. Thematic framework of informal leadership as perceived and utilized by formal leaders in technology sector organizations

5. Discussion

A lack of knowledge on the role of informal leadership in a hybridized leadership configuration (Gronn, 2009) led us to examine how informal leadership in contemporary organizations is experienced and utilized by formal leaders, which is a perspective largely absent from existing research (e.g., Nouman & Luria, 2025; Svensson, 2026; Qui et al., 2026). Drawing on 22 interviews with 22 formal leaders employed by technology sector organizations, this study demonstrates how informal leadership influences formal leadership and colleagues, group dynamics, customer interactions, and work outputs. The findings contribute to the notion that informal leadership is an influential component of leadership in organizations, and can have a role in reframing organizational leadership to ensure the utilization of deepening competencies and knowledge areas. Our analysis detected three main themes that demonstrate the ways in which formal and informal leadership interact in organizations: *Informal leadership supporting formal leaders; Informal leadership as a work approach of specific individuals; Informal leadership fostered through openness and shallow hierarchy.*

5.1 Theoretical contributions

This research advances the research on a collective form of leadership known as informal leadership. Its contribution to the research on informal leadership is threefold. First, by approaching the study of informal leadership through a collective leadership lens, our research extends the understanding of the role of informal leadership in collective leadership, in particular where and how informal leadership resides and develops (Day et al., 2021; Gronn, 2009; Ospina et al., 2020). Our findings provide insights into "why, how, and when formal leaders respond

to informal leadership" (Qiu et al., 2026, p. 20). Our study supports Larsson et al. (2011) by showing that informal leaders operate across organizations and in collaboration with formal leaders through informality, information-based authority, and information brokering. We add further nuance by illustrating how this cooperation works in everyday organizational interaction. Based on our empirical findings, we developed a thematic framework (Figure 1) that uniquely illustrates how formal and informal leadership interact in organizations, and how cumulating informal leadership behaviours influence both individuals in formal leadership positions and collective work. Our findings indicate that in the context of collective leadership (Gronn, 2009; Ospina et al., 2020), informal leadership is experienced as influencing formal leadership, and at times merging with it to the extent of co-leadership. Challenging predominant views on informal leadership influence as being solely horizontal or lateral and limited to peer or within-group dynamics (see e.g., Chiu et al., 2021; Hanna et al., 2021; Neubert & Taggar, 2004), our research thus extends existing theory by showing how informal leadership also operates vertically, enabled by informal leaders' deep subject matter expertise and a reciprocal relationship with formal leaders.

Second, our study contributes to debates on power-sharing in collective leadership, where hierarchical power-sharing is often taken for granted (Boira Lopez & Connelly, 2025; Qiu et al., 2026; Svensson et al., 2025). We advance current understanding by revealing how informal leadership often remains unrecognized and unarticulated in organizational discussions, despite its relevance to organizational power dynamics. Even though informal leadership is closely connected to practices such as delegation and co-leadership, our findings show that questions of positional power-sharing are rarely discussed in organizations. This pattern, where power-to-act is enabled but power-over is left unaddressed (van Baarle et al., 2024), points to the persistence of deeply embedded assumptions related to power in organizations.

Third, we advance the literature by proposing that informal leadership does not predict individuals' willingness to assume formal leadership positions. Informal leadership is primarily a competence-based and group-oriented phenomenon (see e.g., Briker et al., 2021; Chiu et al., 2021; Eva et al., 2021). That informal leadership capacity is directly connected to expertise may explain why informal leaders often feel satisfied in their expert roles and are not necessarily motivated to pursue formal leadership positions, as our findings demonstrate. Moreover, given that competence functions as a key criterion for the acceptance of informal leadership by both peers and formal leaders (Liu et al., 2024; Qiu et al., 2026), we further suggest that formal leaders' acceptance of informal leadership is also related to their own level of competence.

5.2 Limitations and future research

While this study has several strengths, it also has limitations that point to opportunities for further research. First, as the context of the present study is in technology sector organizations, future research could examine informal leadership in other sectors to assess the applicability of the findings more broadly. Second, while the qualitative analysis reached a saturation point and themes recurred across participants, future research could increase participant numbers and possibly broaden perspectives by using a wider range of participants and additional research methods. Although this study intentionally focused on formal leaders, future research could collect data from informal leaders or group members to mitigate potential self-source rating bias (De Haan et al., 2019). Self-reporting bias should also be considered, as the topic and research method may have encouraged formal leaders to provide socially and situation-

ally desirable responses on a sensitive issue, potentially leading to the underreporting of negative experiences and an overreporting of positive ones (Donaldson & Grant-Vallone, 2002). Observing informal leadership practices or using naturally occurring data could complement self-reported accounts and help mitigate potential self-source rating bias. Third, the long-term nature of informal leadership opens promising avenues for future research in collective and informal leadership research, particularly through longitudinal studies that can capture how the influence and impact of informal leadership evolve over time (Holm & Fairhurst, 2018). For instance, longitudinal research could examine how informal leadership is suppressed or utilized over time, offering insights into the evolving dynamics of collective leadership. Additionally, examining the issue of power motivation (Boira Lopez & Connelly, 2025) could provide deeper insights into the underlying drivers of informal leadership behaviour, helping to explain how and why such behaviours emerge.

5.3 Practical implications

This study offers several practical implications for organizations, HR professionals and leadership practice, and serves as guidance for formal leaders as well as experts who may act as, or become, informal leaders. From an organizational perspective, it is beneficial for all organizational employees to recognize informal leadership as embedded in everyday activities that support the collective use of expertise (Friedrich et al., 2009). Informal leadership offers a valuable lens for understanding everyday work dynamics and influence relationships within groups, particularly related to competence-based collaboration.

For formal leaders, informal leadership provides a way to make better use of group expertise in the complex realities of contemporary organizations (see e.g., He et al., 2021; Marion et al., 2016), and to ease their own workload. This requires accepting and supporting informal leadership and related expertise, even if it may exceed one's own expertise. By learning how to utilize informal leadership and accepting being influenced by it, it is possible to create collaborative and supportive interactions between formal and informal leadership that benefit all parties (Larsson et al., 2011; Nouman & Luria, 2025). Nevertheless, informal leadership remains outside formal organizational charts as it cannot be prescribed or controlled. However, it can be recognized, utilized, or dismissed by formal leaders. This calls for a broader understanding of leadership and its development that includes informal leadership: i.e. how it emerges, how it is enacted, and how it affects work. This is highly relevant as collective forms of leadership are increasingly needed to address the challenges of dispersed contemporary work that relies on diverse and specialized expertise (Day et al., 2021).

For informal leaders, it is important to notice that their influence on others is not defined by positional power, but can emerge anywhere through competence-based influence and group-oriented leadership behaviours (Eva et al., 2021; He et al., 2021). While taking the lead may come naturally to some, as reflected by our participants, the findings also highlight opportunities for individuals to make their expertise visible and to develop an understanding of the leadership influence that may emerge from it (Chiu et al., 2021; Hanna et al., 2021; Zhang et al., 2020). Yet, it is also important to acknowledge that informal leadership is granted by others (Badura et al., 2022; Neubert & Taggar, 2004), and therefore exploiting the gained influence is not advisable, as it may gradually diminish the granted influence.

5.4 Conclusion

We conducted a qualitative study to investigate how formal leaders perceive and utilize informal leadership. We identified three themes — *Informal leadership supporting formal leaders*, *Informal leadership as a work approach of specific individuals*, and *Informal leadership fostered through openness and shallow hierarchy* — revealing how informal leadership operates as a phenomenon that has influence and impact beyond formal power. Our findings show that formal leaders experience informal leadership as beneficial, are influenced by it in multiple ways, and perceive it as a long-term process that is enacted through the practices of specific individuals. This study demonstrates that informal leadership constitutes a significant component of collective leadership, and in turn contributes to reframing leadership in organizations as they move away from heroic, hierarchical models.

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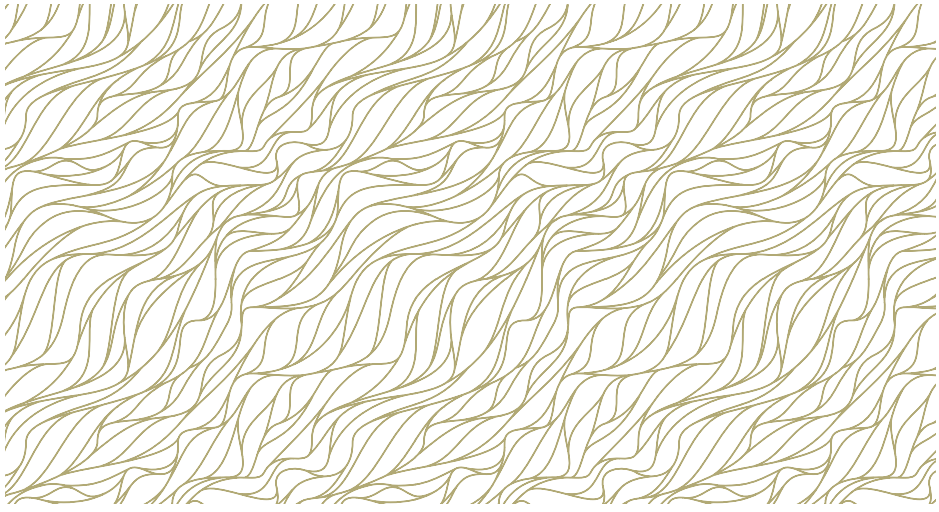

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