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Effective Use of Enterprise Social Networks for Knowledge Sharing in Organizations

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ABSTRACT

While organizations are increasingly deploying enterprise social networks (ESNs) in workplaces, many employees are wary of using ESNs to share their knowledge as they fear that they may become less valuable to their organizations. Organizations are also concerned that ESNs can be used to send valuable information to unauthorized external parties. As a result, organizations have struggled to attain the outcomes they expected from deploying ESNs. This study used data from 11 in-depth interviews of employees from financial service organizations to find out how organizations can encourage the effective use of their ESN applications. Thematic analysis of the data showed that governance and intra-organizational trust are critical for increasing the effective use of ESNs.

1 | Introduction

In recent decades, the divide between work and personal information systems has become increasingly blurred (Waizenegger et al. 2020). A growing number of information systems are being used at home and work, with some beginning in the workplace and moving to homes (such as word processing, spreadsheets, and databases). Others were intended for personal use but transcended the boundaries and began being used for work purposes (such as online audio and video). While the former shift, often described as the "consumerization of technology" (Koch et al. 2019), has a sizeable literature, the latter issue has been less studied. The workplace of today's knowledge worker is shaped less by communication technologies (such as email) only; it is also molded by new forms of virtual interaction applications (such as social technology), making workplaces more flexible while also presenting challenges for workers about work schedule expectations and effective knowledge sharing.

Studying this changing pattern of information technology (IT) use is important as the work and home environments differ substantially in data confidentiality, the need for training, the embeddedness of legacy systems, and the levels of mandatory versus voluntary use. Thus, there is a qualitative difference in how the technology is used in different contexts, which differ across various dimensions. This study extends the concept of effective use (Burton-Jones and Grange 2013) to examine how the users of a technology achieve value from their use of it when it is used in a different context than the one for which it had originally been developed. Using the phenomenon of enterprise social networks (ESNs)[1] in the organizational context for knowledge sharing, we ask: *How can organizations encourage the effective use of ESNs for knowledge sharing?*

ESNs have been around for more than a decade, and their use has accelerated during the COVID-19 pandemic (Lal et al. 2023; Waizenegger et al. 2020). They originated in consumer-oriented

social networks established in the mid-2000s, such as Facebook, Twitter, MySpace, Friendster, and Tumblr. Their popularity was followed by the development of similar technologies for organizations called ESNs (Kauschinger et al. 2022; Deng et al. 2022; Aboelmaged 2018). Interest in ESNs is evidenced in the projections that global ESN sales will increase to US$30.19b by 2029 (Maximize Market Research 2020), with the major vendors being Microsoft Corporation, SocialText Inc., Google, IBM and Cisco. Within organizational contexts, ESNs are used for knowledge sharing (Aboelmaged 2018), learning (Oostervink et al. 2016) and decision-making purposes (Deng et al. 2022). Some researchers recommended implementing multiple ESNs within organizations as different platforms facilitate different functions (Qi and Chau 2018; Madsen 2017; Mäntymäki and Riemer 2016). It is also possible for employees to feel comfortable with one but not other platforms; thus, implementing more than one ESN provides some flexibility in use (Chin et al. 2020). ESNs facilitate employees' internal communication and knowledge sharing, enabling employees to create profiles, view, edit and reply to messages, and share other information on the network (Leonardi et al. 2013). ESNs with unique characteristics may provide distinct information-sharing capabilities, leading to better employee communication and shared knowledge (Aboelmaged 2018) compared to the use of public social media (Laitinen and Sivunen 2021).

The literature indicates that ESNs can produce a range of positive outcomes, including improved creativity and team coordination (Cao and Ali 2018). At the same time, social media content may also have negative consequences (Sanchez-Casado et al. 2015). For instance, on the one hand, social media could help users create new and strengthen existing relationships; on the other hand, users could post harmful and nasty comments to spread rumors and misinformation through social media (Bolisani et al. 2021; Sanchez-Casado et al. 2015). This duality of outcomes could be a reason why, although ESNs have been widely deployed, many employees have resisted using them (Wehner et al. 2017). They may be concerned about the potential adverse outcomes of ESN use, such as information overload or misinformation, which could hinder their productivity and trigger harmful behaviors, such as knowledge hiding (Arain et al. 2022). Other reasons for a lack of ESN use by employees include a fear of their views affecting their colleagues' perception of them, being monitored by their employers, having less time for their assigned tasks, and organizational hierarchies influencing the authenticity of the discussions. It is also possible that employees' experience may lead to distrust and a pause in information processing, thus creating further distrust between the knowledge hider and the knowledge seeker. If misleading information is being shared, dissension within workplaces may worsen (Bolisani and Cegarra-Navarro 2021). Therefore, to facilitate the use of social networks in organizations, there is a need to build strong relationships; these will make employees more willing to share their knowledge because good relationships can result in a favorable reception toward such actions.

The discussion above highlights the importance of studying the potential positive and negative effects of ESN use on valued outcomes, such as employee performance. Using qualitative data, this study found that the effective use of ESNs depends substantially on the presence and quality of formal and informal governance mechanisms. These help individuals modify the behaviors they learned while using consumer-facing social networks to enhance the quality of online interactions, avoid tension on the ESN from spilling over to the real-world workplace, and preserve their identity and value to the organization. These findings can be extrapolated into the broader field of consumer-originating technologies moving into enterprise contexts.

The paper continues by reviewing the literature (Section 2) on the effective use of ESN for knowledge sharing in relation to potential adverse outcomes. This is followed by a description of the research methodology (Section 3), and Sections 4 and 5 present the findings and analysis. The following section puts forward propositions based on the findings, while the last section outlines the paper's contributions and offers suggestions for future research.

2 | Literature Review

This section reviews prior literature on consumerized technology (CoIT), focusing on a particular technology—ESN, followed by the effective use of ESNs for knowledge sharing in organizations.

2.1 | Consumerized Technology and ESN

In addition to email, many workers also use blogs, social networks and other web 2.0 services in their workplaces. This phenomenon is part of the broader trend known as the consumerization of IT (Sadiku et al. 2018). The consumerization of IT (CoIT) refers to the use of "IT resources such as laptops, smartphones, social media or cloud storage for business purposes" (Sadiku et al. 2018, 71). The shift to "Bring-Your-Own-Device" (BYOD), where employees can use their devices, falls within this domain. This paper focuses on one example of the CoIT—social networking, which is widely regarded as being able to enhance collaboration and information sharing (Aboelmaged 2018). This section discusses how ESNs, which are social media used by organizations for internal purposes, can be effectively used.

ESNs are usually cloud-based applications and can be deployed either as generic tools, such as wikis or blogs, or by using tools sold by vendors, such as Yammer, SharePoint, Slack, Chatter, IBM Connection, Jira, and Workplace by Facebook. ESNs are relevant for knowledge management because they help integrate knowledge (Meske et al. 2019; Aboelmaged 2018; Wehner et al. 2017) and support intra-organizational knowledge sharing (Kalra and Baral 2019; Stock and Gross 2016). The use of social media within organizations is known by various terms (Table 1). These terms were introduced at different times but generally refer to internal communication by employees (Wehner et al. 2017; Leonardi et al. 2013).

Consumer-oriented social media, such as Facebook and Twitter, are mainly for public social relationships. In contrast, ESNs are internal to the organization and used for work-related matters, such as Yammer and SharePoint. ESNs are digital platforms that allow employees to interact and communicate (Leonardi et al. 2013), facilitating their job performance

TABLE 1 | Terms used to describe the internal use of social media.

Term	References
Enterprise 2.0	Lin et al. 2010; Corso et al. 2008
Internal social media	Madsen 2017; Sarigianni et al. 2015
Organizational social media	Treem and Leonardi 2012
Enterprise social software	Dittes and Smolnik 2017; Antonius et al. 2016
Enterprise social media (ESM)	Sun et al. 2020; Kane 2015; Leonardi 2014
Enterprise social network (ESN)[a]	Xiong and Sun 2023; Chatterjee et al. 2023; Kalra and Baral 2019; Aboelmaged 2018, Wehner et al. 2017; Stock and Gross 2016; Mäntymäki and Riemer 2016

[a]ESN is used in this study.

(Chen et al. 2020; Deng et al. 2021) and improving productivity (Kane 2015). It is worth mentioning here that since many ESN platforms are similar to public social media, employees' public social media experience could influence the engagement of ESNs in sharing and accessing information and social interaction (Liu and Bakici 2019). For example, the publicly accessible Wikipedia has the same interface as a corporate wiki, and public social media, such as Facebook, looks similar to the ESN Workplace by Meta.

Social media platforms provide an environment where individuals can communicate and build relationships with people with similar and/or diverging beliefs and values (Olan et al. 2024). Diverging beliefs and values could be influenced by access to inappropriate or incorrect information, called counter-knowledge (Tumasjan 2024). Examples of counter-knowledge include "unverified news and the process through which users catch up" (Sanchez-Casado et al. 2015, 182). When information is received on social media, people tend to assume it is reliable, especially because they lack the time to verify it by consulting other sources, which may result in inappropriate interpretations and establishment of false beliefs (Bolisani et al. 2021). The dissemination of rumors, misconceptions, exaggerations, fake news, gossip, and inappropriate or false information via ESN may be a source of entertainment for users, but has also become a challenge due to potential harassment and invasion of privacy issues (Tumasjan 2024). The underlying motivations for spreading counter-knowledge could range from entertainment and social integration (i.e., good intentions), but could also be due to negative intentions, such as scams and manipulations, leading to misunderstandings and poor decisions (Bolisani et al. 2021).

Bolisani et al. (2021) investigated three sources of counter-knowledge: official sources (such as press conferences, academic journals, etc.), unofficial sources (such as online and offline communities including friends and relatives share their experiences), and self-learning (individuals sharing their own interpretations of information from official sources). Most counter-knowledge leading to misinformation targets a specific population segment, promoting and stimulating strong beliefs in them (Olan et al. 2024). Climate change and politics are the most common domains where misinformation is promoted on social media, along with COVID-19 during the pandemic (Aïmeur et al. 2023). Since misinformation is associated with higher levels of negative emotions and greater engagement on social media platforms (Weismueller et al. 2024), platform owners and operators should reduce the potential risks of misinformation and build trust and confidence by putting in place fact-checking to manage content (Olan et al. 2024).

In the ESN context, counter-knowledge can be as damaging. It is quite likely that, while using ESN, employees from different backgrounds or roles may understand shared information differently, which may result in misinterpretation (Bolisani and Cegarra-Navarro 2021), hence influencing the level of trust among co-workers. The deliberate creation and diffusion of counter-knowledge can inform social media users about individuals who are prone to spreading gossip but also strengthen teamwork and bonds between co-workers (Sanchez-Casado et al. 2015). Given these contrasting effects, an effective trust-based mechanism is crucial while using social networks (Masood et al. 2023). While sharing knowledge, it may be appropriate to be open and avoid potential conflict to build a trustworthy environment (Bolisani and Cegarra-Navarro 2021).

In this study, we focus on the effective use of ESN for knowledge sharing and the opportunities and challenges that arise with ESN use. The following section further elaborates on what is referred to as the effective use of ESN for knowledge sharing in the organizational context.

2.2 | The Effective Use of ESN for Knowledge Sharing

Effective use has been defined as "using a system in a way that helps attain the goals for using the system" (Burton-Jones and Grange 2013, 633). Effective use is mainly concerned with outcomes and goal attainment which, when aggregated with the actions of other users, may, in the aggregate, benefit an organization. Effective use is thus context-specific, and for this study's purposes, effectively using an ESN means taking advantage of capabilities that enhance individual coordination and communication and decision-making, leading to better overall job performance (Deng et al. 2022). For instance, wikis and blogs could assist product launches and strengthen customer engagement (Muninger et al. 2019). Additionally, work-related social media

(such as Yammer, Slack, Jira, and IBM Connections) and public-facing social media (such as WeChat, WhatsApp, Facebook and Twitter) are complementary and generate positive synergy (Song et al. 2019). Therefore, the effective use of ESNs is not only about using the application, but about using such an application to achieve the goals of the user (Lepore et al. 2021).

To understand how organizations could encourage the effective use of ESN, one needs to understand the adverse outcomes of their use. First, the emergence of ESNs has made knowledge sharing more open, continuous, and communicative (Meske et al. 2019; Wehner et al. 2017). This has consequently led to users being concerned about the risk of becoming less valuable in the organization (Gibbs et al. 2013). This can cause them to lose their roles because their value is tied to the knowledge they possess. Other reasons for an unwillingness to use ESN could be feelings of discomfort or insecurity (Stock and Gross 2016), a lack of interest (Bala et al. 2015), resistance (Buettner 2015), or reluctance to put in the time and effort required to learn how to use the ESN platform (Vuori and Okkonen 2012).

While ESNs can effectively connect individuals (Lepore et al. 2021), their value is related, to a large degree, to employee acceptance, which is associated with the overall level of trust in the organization (Bieńkowska et al. 2018). The social aspect of ESN means that knowledge sharing in an organization is strongly influenced by the broader levels of connectedness (Majchrzak et al. 2013), as opposed to being driven solely by individual concerns. Likewise, employees who trust their colleagues and managers will be more likely to use ESNs to share knowledge because the high level of trust reduces their fear of being redundant after sharing. Once trust is built, "trusting partners are more aware of their knowledge duties and more motivated to transfer their knowledge" (Zhang and Zhou 2013, 786).

Second, another adverse outcome could be employees violating either type of trust and misusing ESN applications. For example, since ESN sites can extend beyond a firm's boundaries, ESN may make it easier for employees to leak firm-sensitive information to external parties (Sarigianni et al. 2015), either deliberately or accidentally (Leonardi et al. 2013). They could also engage in hurtful behavior online on ESNs, such as harassment, bullying, or claiming others' ideas as their own. Likewise, inappropriate interpretations of information could also lead to misunderstanding and incorrect decisions (Bolisani et al. 2021). Such actions could detract from the outcomes desired by organizations (Molok et al. 2010) because they could lead to a loss of competitiveness or an unsupportive organizational climate that dampens employee involvement in productivity.

Research suggests that when organizations have knowledge-sharing policies, employees find it easier to share knowledge, ultimately minimizing undesirable knowledge (Serenko and Bontis 2016). Therefore, ESNs can be managed by using appropriate governance mechanisms (Stohl et al. 2017), both formal and informal, to enhance employees' knowledge-sharing practices (Linke and Zerfass 2013; Foss et al. 2010). In this study, governance refers to formal and informal mechanisms for ensuring that knowledge is shared in the preferred direction (i.e., to support innovation) when ESN is used (Stohl et al. 2017; Linke and Zerfass 2013). Knowledge-sharing governance is the "choice, combination, and deployment of formal and informal organizational mechanisms to influence individual knowledge-sharing behavior in organizations so that organizational knowledge-based goals can be achieved" (Foss et al. 2010, 459). Formal governance involves organizational structures, routines, and practices. It stipulates how knowledge is shared, acquired, and used to accomplish collective goals, whereas informal governance refers to networks and cultural practices, such as rituals (Zhang and Zhou 2013; Linke and Zerfass 2013). Using codified procedures for operational guidance and open networks of communication reduces the risk of knowledge leaking out of organizations and encourages a long-term orientation (Zhang and Zhou 2013).

Thus, understanding how organizations can effectively use ESNs requires examining ESNs' acceptance by employees and how ESNs can be supported to address adverse outcomes within organizations. The following section lays out the methodology of this research.

3 | Research Methodology

An exploratory qualitative methodology based on case studies was used in this project (Yin 2018) to acquire rich information from an individual's point of view in the organizational context. Since a single case study is often considered difficult to generalize, we adopted a multi-case approach with 11 participants to enhance the rigor of our investigation (Cegarra-Sánchez et al. 2023). We use multiple cases for two reasons to address the research question: First, we need to know how much is known about the phenomenon after studying a case, and second, new information is likely to emerge from studying further cases (Eisenhardt 1989). Second, it was essential to look for similar information in all cases to develop themes from ideas repeatedly occurring in multiple contexts (Yin 2018). Therefore, a case study design systematically looked at each case, collected data, analyzed and reported the results, and sought in-depth answers to an exploratory research question.

The study was conducted in the financial services industry. This context was chosen for two reasons. First, financial services firms innovate intensely (Sarigianni et al. 2015) and increased competition has motivated financial firms to invest heavily in collaborative technologies like ESNs (Sarigianni et al. 2015). Therefore, it is likely that respondents from this industry will have experience using ESNs. Second, this industry deals with sensitive financial information and unauthorized access to information can potentially threaten the ability of financial firms to operate (Sarigianni et al. 2015). Thus, respondents will be familiar with approaches used to ensure that ESNs are used appropriately. It is worth noting that the financial sector is very complicated and information-intensive, with a large amount of deep internal knowledge required for effective collaboration.

To answer the research question, qualitative interviews were conducted with employees from the financial industry in New Zealand as the key informants. The organizations and participants were selected using a criterion sampling strategy (Yin 2018). Organizations were approached to participate in the study if they had:

a. More than one branch with at least 50 employees indicates that the firm has resources and is able to innovate and provide diverse products/services.

b. Core functions, such as marketing, customer service, finance, accounting, human resources, information technology, and legal services, were located internally to indicate that the firm provided ongoing customer support.

c. Employees across different functions use internal social media, i.e., ESN applications, to share knowledge on diverse products/services.

Following the application of these criteria, five firms were selected. They were given these pseudonyms: Alpha, Gamma, Beta, Delta, and Sigma (see Table 2). The first three firms are banks. Delta and Sigma are investment firms and are smaller than the banks. Although the services provided by the three banks and two investment companies were not entirely the same, the descriptions in Table 2 below show that the organizational structures of the three banks are similar, and the same applies to the two investment companies. All the firms use external social media and ESNs for internal collaboration. Yammer, SharePoint, and Slack are commonly used ESNs in these firms. Once the firms were chosen, participants from each firm were selected if they: (i) worked full-time as a product manager, product developer, or product owner (i.e., their work was related to service innovation); (ii) used ESN for sharing information; and (iii) had at least 1 year of experience in their current position.

We followed the six steps suggested by Creswell and Creswell (2018) to develop the interview protocol. First, the basic information about the interview was recorded in Microsoft Excel Spreadsheet, such as the interview date, location and mode of interview (i.e., face to face). Second, clear instructions were provided to interviewees before the interview, such as sending an email with a brief note on the purpose of the research and ensuring the confidentiality of acquired information. Interviewees were also provided with a participant information sheet and consent form. We provided a set of predefined questions to ensure we discussed the desired topic with each respondent. To reduce bias and enhance the quality of this research, we first created an interview protocol. The interview questions were designed to initially encourage interviewees to talk about general information and then gradually lead to identifying the main concepts (Cegarra-Sánchez et al. 2023). We provided the interviewees with precise definitions of the main concepts to reduce ambiguity, with separate interviews to consider participants' differing roles and experiences (Cegarra-Sánchez et al. 2023). Third, during the interview, we started asking open with typical "ice-breaker" questions, including: "What is your job/role in this company?." and "How long have you been working in this role?." Fourth, we asked content questions based on the phenomenon and related to the concepts of interest, such as innovation, knowledge sharing, and enterprise social networks. Sub-questions examined the main concepts and how they are related. Fifth, probes were used to ask for more information. For instance, "Tell me more about your role." (asking for more information), "Could you explain further about knowledge sharing?." (asking for an explanation), and "Could you explain how communication tools are used?." (asking for an explanation). Sixth, we followed with closing instructions for the interviewees, such as, "Would you like to add any further information on innovation, knowledge sharing, and enterprise social networking?." and "Is it okay to contact you if I need any further information?."

The sampling of the interviewees was non-probabilistic and purposive, using snowballing technique (Yin 2018). Based on the principle of theoretical saturation, data collection was discontinued when no new information was generated (Yin 2018). On that basis, 11 employees of the five firms (PtCode1—PtCode11) agreed to participate in the study, see Table 3. A semi-structured interviews were conducted with all participants. Each interview lasted for approximately 60 min. All interviews were audio-recorded and transcribed for subsequent data analysis, yielding approximately 143 pages of single-spaced transcribed documents. After the interviews, we sent the summarized interview data to the interviewees for clarification and approval. Finally, interviews were coded using NVivo. We re-read the coded transcripts several times to ensure the coding results align with the transcripts. While conducting the interviews, additional notes were taken to supplement the data obtained from the interviews. The interviewees were asked whether they were active or moderate users of ESNs, describing them as interacting or collaborating with others on the ESNs. Eight interviewees saw themselves engaging with each other using ESNs (i.e., active users), while the other three were not (i.e., moderate users). Other demographic attributes, such as job tenure and gender, do not influence ESN usage, except for organization size, as seen in the last two participants, from firms with 50 to 100 employees.

3.1 | Data Analysis

To improve confidence in the data and method utilized, we considered the credibility, transferability, dependability, and confirmability (Bhattacherjee 2012) of our study. Credibility was achieved by triangulation: multiple individuals from different organizations were interviewed. Moreover, data collection and analysis were conducted according to methodological guidelines. Transferability indicates the ability to replicate the results in other contexts. Rather than restricting data collection to one organization, data from multiple organizations were collected, demonstrating that the phenomenon can be replicated in other studies. Dependability emphasizes the importance of methodological rigor; since we have provided detailed information on data collection and findings, our study could be repeated. Confirmability focuses on reducing subjective interpretation. In this respect, interviewees were asked to review and comment on the interview transcripts. Considering the nascent knowledge of how organizations can encourage the effective use of ESNs to enhance innovation, an inductive approach was adopted to explore the phenomenon. Inductive thematic analysis was conducted (Braun and Clarke 2006) using NVivo 12 using the following steps:

a. The first step of thematic analysis is to familiarize oneself with the data. The interviews were conducted by one of the authors, who was familiar with the data and rechecked by others to confirm the validity of the data. The interviews were transcribed for further analysis, and the authors read the transcripts several times before coding. Extra notes (i.e., memos) taken during the interviews helped capture

TABLE 2 | Background information on the five firms.

Firm	Number of branches	Services offered	Use of ESNs	Policies relevant to ESNs use
Alpha	More than 200	Retail banking (i.e., savings and investments, home loans, credit cards, personal loans and insurance); business banking (i.e., transactional bank accounts, investments, loans and finance, and international banking services); institutional banking (i.e., wholesale banking, financial institutions and government entities); and private banking (i.e., wealth planning, investment expertise and global solution).	Both external social media such as Twitter and LinkedIn and internal social media applications, such as Yammer, Slack, blogs, wikis, SharePoint, and Microsoft Teams are used. Slack is used for quick updates with a trial run of a new product; Yammer for testing and the offering new products, and SharePoint for locating important documents so that they are shared and accessed by team members.	Code of practice sets out the principles of good banking practice
Gamma	More than 200	Personal (includes home loans, credit cards, personal loans, insurance, investments, and managing money); Business (service includes business credit cards, finance growth, payment solutions, international business, business insurance, economic updates); and Agribusiness (farm finance and credit cards, Agribusiness insurance, Agri specialists and Agri information and resources).	Apart from external social media such as LinkedIn and Twitter, Gamma uses various internal social media applications, such as SharePoint, Yammer, Confluence, and Slack. Confluence is used for risk assessment and Slack for idea generation. Communication with different functional units is conducted via email, instant messaging, or video conferencing.	Governance of product management is in place to provide support for routine operation of the banking service
Beta	More than 200	Personal (including personal and home loans, insurance, retirement accounts, wealth management, migrants and travel); business (small-medium business, commercial business, accounts, borrowing); Institutional (relationship management, trade and supply, finance and marketing); Rural (investments, borrowing, investments, international business)	Uses both public (i.e., LinkedIn & Twitter) and internal social media. (i.e., Yammer, Slack, Confluence, Jira and Skype). Yammer is used across the whole company and Slack is used extensively and has become standard practice, along with Skype for video conferencing	Employees follow a standard framework and code of practice to do their routine work
Sigma	More than 100	Provides investment funds to its clients; financial advice on retirement planning including investments, expenditure, portfolio management, risk and growth	Communication among team members is conducted via email, skype and video conferencing. Yammer, SharePoint and Wikis are recent developments and used by selected members.	Product developers need to follow the Product Disclosure Statements and Statement of Investment Principles and Objectives information
Delta	More than 100	Providing investment advice to its clients, such as retirement planning, and is based on a recurring revenue business model; portfolio management, financial advice, risk, growth and training of clients on product and services.	Most of Delta's internal communication is conducted via email and Skype video calls. Delta has recently started to use SharePoint and Slack for group meetings on retirement planning and investments.	Employees follow the firm's code of conduct and Statement of Investment Policy which is renewed every 5 years

TABLE 3 | Background information on respondents.

Respondent	Firm	Firm Size (Number of employees)	Sector	Product/service responsible for	Job tenure (Years)	Gender	Age (Years)	ESNs use[a]
PtCode1	Alpha	> 1000	Bank	Investments	> 5	M	30–40	A
PtCode2				Wealth management	> 5	M	> 40	A
PtCode3				Brand identity advertising	1–5	F	> 40	A
PtCode4				Wealth business	> 5	F	> 40	A
PtCode5				Investment scheme	> 5	M	> 40	M
PtCode6	Beta	> 1000	Bank	Home loans	1–5	F	< 30	A
PtCode7				Retail/online banking	1–5	F	> 40	A
PtCode8	Gamma	500–1000	Bank	Term deposit/funds	> 5	M	30–40	A
PtCode9				Product investments	1–5	F	> 40	A
PtCode10	Delta	50–100	Investment	Retirement planning	1–5	M	30–40	M
PtCode11	Sigma	50–100	Investment	Funds approval scheme	1–5	F	30–40	M

[a]ESNs use: A, Active; M, moderate.

the reflections during the data collection and were read when the data was analyzed.

b. The second step consisted of generating initial codes in NVivo, converting the raw data into usable data by identifying themes and concepts ensuring they are connected, leading to propositions. Thirty-five initial codes from the entire data set were identified. Examples include, but are not limited to: "products", "services", "collaboration", "communication", "interaction", "information", "decision", "knowledge sharing", "networking", "shared documents", "social media", "new ideas", "willing to share", "culture", and "guidelines."

c. The third step is searching for themes and identifying relationships using the concept of the parent–child relationship in NVivo. In this respect, the codes were arranged, re-arranged and grouped into meaningful, clear, and transparent themes. For example, the theme "knowledge sharing" was identified as a parent node, with child nodes such as "meetings" and "sharing documents". Other useful themes included "innovation" with child nodes such as "products" and "services", "policy" with a child node "guideline", and "communication" with child nodes such as "face-to-face" and "online".

d. The fourth step is to review the themes several times, going back and forth and repeating steps one to three for clarity. This stage also allowed the integration of nodes into themes, renaming nodes for clarity, and discarding duplicate nodes. During the interview, the researcher asked additional questions to understand concepts better. For instance, while asking, "What is your perception of innovation?" the intention was to relate this to questions such as "Who initiated this new idea or innovative idea?" "Whom do you talk with about this new idea?" "Who is involved in talking about this idea?" or "How often do you meet to discuss this idea, or how do you share ideas?"

The final step is to generate the findings of the thematic analysis, as discussed in the following section.

4 | Findings

Thematic analysis was conducted to transform the transcribed data into first-order evidence, second-order themes, and key themes, as explained in Table 4. First-order evidence was taken directly from interviewee quotes, and second-order themes were based on existing theoretical literature and grouped to form key themes aggregated to derive propositions (Eisenhardt 1989). Each theme is explained below:

i. The first theme, "*Experience in developing products/services*", aggregated interviewees' perceptions of product/service development. Examples of products/services that the interviewees had been involved with included the development of a wealth management product (Alpha: PtCode2), a home loan (Beta: PtCode6), a term deposit (Gamma: PtCode8), a retirement planning scheme (Delta: PtCode10), and a funds approval scheme (Sigma: PtCode11).These products/services were considered innovative because they were "*different from the competitors*" (Alpha),"*create(d) value … and (were) about customers*" (Gamma), and were "*the best way to serve clients*" (Delta).

TABLE 4 | Thematic analysis.

First-order evidence (selected quotations)	Second-order themes	Key themes
• "An idea that simplifies the product. Anything from new business lines, functionality and existing product" (Alpha: PtCode3) • "Process of creating value, whether that is creating a completely new product or adding value to something that already exists" (Gamma: PtCode9) • "An idea that is easy to understand and easy to manage" (Sigma: PtCode11)	Improving existing products, creating new products, and generating ideas.	Experience in developing products/services
• "Not only enable sharing knowledge but information received quicker, and feedback will be given faster" (Alpha: PtCode2) • "... people know the answer instantaneously" (Alpha: PtCode4) • "Communication between team members work out very well" (Beta: PtCode6) • "Communication is faster' (Delta: PtCode10)	Networking, instant response, collaborating, sharing	Experience using ESNs for knowledge sharing
• "You need to trust each other while sharing ideas" (Alpha: PtCode1) • "Most people are willing to share, they are willing to give suggestions" (Alpha: PtCode4) • "Staff are willing to share" (Gamma: PtCode7) • "We support and trust each other" (Delta: PtCode10) • "Difficult to bring right people for contribution" (Alpha: PtCode2) • "The reason for (the) unwilling(ness) to share is due to (a) lack of expertise to share" (Alpha: PtCode3) • "We are very transparent in terms of knowing each other and exchanging views on products and services, so everyone is willing to share" (Sigma: PtCode11) • "We always wanted to be recognized and being listened, and that feedback is heard" (Beta: PtCode7) • "Using these channels feel like no privacy to communicate" (Gamma: PtCode8) • "Learning different channels means spending additional time and people get frustrated" (Delta: PtCode10)	Trust in each other, willingness to share, supporting each other	Understanding the role of trust
• "(The) governance framework is very clear and precise about developing products" (Alpha: PtCode5) • "it's an open culture' (Alpha: PtCode1) • "(it's a) warm and communicative culture" (Alpha: PtCode2) • "You're not allowed to do anything that is deemed either illegal or disrespectful (of) anybody else (or) against the company's reputation" (Alpha: PtCode4) • "It's a highly controlled data environment, because obviously we hold very sensitive data" (Beta: PtCode7) • "We support each other at work, sharing knowledge helps in resolving key issues and there is a sense of engagement in sharing" (Beta: PtCode7) • "Policy around what to say and not to say while collaborating and communicating for work related matters" (Beta: PtCode7) • "The social media policy is included within the governance framework and comes more into our Code of Conduct – standard procedure, appropriate language and not bullying and that sort of thing" (Gamma: PtCode8) • "Policy and code of conduct are in place' (Gamma: PtCode8) • "The governance effectively oversights the templates and framework we use for product development" (Gamma: PtCode9)	Code of conduct, precise rules, open and communicative culture	Understanding the role of guidelines

These developments matched how the term "*generating ideas*" was viewed by the respondents. A few examples are given below:

- "Com(ing) up with new product and improved product" *(Alpha: PtCode2)*
- "Identify(ing) features that could benefit customers" *(Alpha: PtCode3)*
- "Improv(ing) customer experience" *(Alpha: PtCode4)*
- "(Establishing) new business lines/functionality" *(Alpha: PtCode5)*

The interviewees also confirmed that sharing knowledge between various functions is effective in developing innovative products/services. For instance, developing a wealth management product at Alpha requires financial advisors, legal advisors, risk advisors, and representatives from different parts of a distributor network "who could provide valuable information during the product development process" (Alpha: PtCode2). For online banking, the teams involved in creating new products/services are the technology team (Beta: PtCode7). For upgrading or modifying applications for products online, ICT and font-line staff play a crucial role (Gamma: PtCode9), and for retirement planning, product financial advisors, product developers, and legal advisors are important (Delta: PtCode10). These experiences highlighted that the development of products/services requires a diverse group of people to collaborate, share their knowledge, and generate ideas.

ii. The second theme aggregated the interviewees' perception of "*Experience using ESNs for knowledge sharing*". The common second-order theme appeared were "networking, instance response, collaborating and sharing". The interviewees explained that knowledge sharing meant learning from each other verbally, during discussions or meetings, or by sharing documents for information retrieval. They emphasized that sharing ideas with other departments was essential for "product development" (Alpha: PtCode2), "create cross-learning" (Alpha: PtCode1), and "exchange ideas" (Beta: PtCode7). Internal ESNs, such as SharePoint, Yammer, Slack, Jira, Confluence, and Teams, were also used to share knowledge for different purposes. For instance, SharePoint is used for a wider audience and for storing digital content, Slack is used for sharing ideas, Yammer is used for testing and offering products, and Jira and Confluence are standard engineering software for core engineering work and risk assessment. Although ESNs emphasize users' ability to provide instant responses, quick interaction and greater information visibility, the interviewees commented that the challenges of using ESNs are significant. For example, the enormous and unprecedented flow of information from ESNs led to difficulties in surfacing relevant information and sharing it with the right people ["(There's) too much information going around, and (it's) difficult to manage": Sigma: PtCode11]. This challenge is: "[(*since*) *social media is open, ideas can be stolen by competitors"*-Alpha: PtCode1] when they are shared, highlighting the fear of valuable information leaking out of the organization.

iii. The third theme aggregated the interviewees' perception of "understanding the role of trust". The common second-order appeared were "trust in each other, willingness to share and support each other. As the flow of information from ESNs can be enormous, the interviewees stated that the challenge is to get the correct information and share it with the right people. Therefore, low acceptance of ESN use has been seen as a challenge for employees. Low acceptance of ESN means low trust among organizations" employees, whereas high acceptance of ESN means employees are "[willing to share ideas" - Alpha: PtCode 1, PtCode 4 and PtCode 7]. The reason for sharing ideas is because "people who share information, there is a sense of trust" (Alpha: PtCode3), "acknowledgement" (PtCode 6), and "engagement in sharing" (Beta: PtCode 7). The lack of sharing was due to a "lack of trust and expertise to share" (PtCode 3). Apart from sharing among teams, interviewees also emphasized sharing ideas with other departments to "create cross learning" (Alpha: PtCode1) and "improve exchange ideas" (Alpha: PtCode2), and therefore, was important and effective for product/service development.

iv. The fourth theme aggregated the interviewees' perception of "understanding the role of guidance" with the second-order theme appeared as 'code of conduct, precise rules, open and communicative culture'. While discussing the role of governance, we used the term "guidance" to explore the processes and procedures used to develop/manage products/services, which also led us to understand the inappropriate use of ESNs. For instance, Interviewees commented that their organizations had "[formal codes of conduct and product development guidelines"—Alpha: PtCode1 & Gamma 8], and that "[You're not allowed to do anything that is deemed either illegal or disrespectful (of) anybody else (or) against the company's reputation" - Alpha: PtCode4]. These policies include requirements to use standardized processes, predefined centrally located templates, and reminders that employees should not transmit confidential internal information to unauthorized parties, especially external ones. At the same time, all 11 participants admitted that their workplace culture influences the level and nature of knowledge-sharing in their organizations.

In the following section, the findings are set against the literature to develop propositions.

5 | Discussion

Four major themes emerged from our findings: innovation experience, experience using ESNs for knowledge sharing, the role of trust, and governance. The four themes are further elaborated below, articulating them into three propositions.

5.1 | The Relationship Between the Effective Use of ESNs for Knowledge Sharing and Innovative Products/Services

The relationship between the effective use of ESNs for knowledge sharing to improve products/services is evident in the cases. The participants revealed that employees' knowledge

sharing and interaction is as crucial as customer interaction when developing new products and services (Muninger et al. 2019; Barrett et al. 2015; Lu and Tseng 2010). At Alpha, this interaction takes the form of "*getting people together, helping them to understand different points of view and eventually expecting the right outcomes*" (Alpha: PtCode2), as well as "*acquiring knowledge from different places*" (Alpha: PtCode5). As employees transfer knowledge, they possess it, which leads to better employee engagement and stimulates innovation (Deng et al. 2022). The participants' view of innovation was in line with the literature, where innovation is considered to be new ideas or improved ways of production and services (Lu and Tseng 2010). A few examples of products/services that interviewees consider innovative were a home loan, a term deposit and a wealth management product. Interviewees also mentioned that developing innovative products/services was a group effort and more effective when sharing knowledge using ESNs. A few examples are: "the legal team giving legal advice around the documentation and content" (Alpha: PtCode5) and "the HR team provide training to front-line staff once the product is developed" (Beta: PtCode7).

The participants' comments showed how ESNs could make knowledge sharing open, visible, and interactive (Majchrzak et al. 2013). Although personalized knowledge is difficult to capture because it resides in employees' minds (Kumar and Ganesh 2011), the features of ESNs help overcome this problem. For example, while sharing knowledge, individuals could obtain "*instant responses*" (Alpha: PtCode1) and "*faster communication*" (Delta: PtCode10), which can quickly clarify doubts or ambiguity when a colleague shares some knowledge. While personal profiles on ESNs help individuals identify co-workers who may be able to help them ["*talking to the right person, locating the expertise...*"-Alpha: PtCode4], the ensuing discussion can be captured and stored as a digital shared document for the benefit of others. The conversion of personalized to visible, codified knowledge enables other employees to infer where expertise lies in the organization (Treem and Leonardi 2012). The finding is that some organizations use a range of ESNs because they provide different functions to facilitate tasks and different levels of flexibility (Chin et al. 2020; Madsen 2017).

The outcomes of ESN use summarized above lead to less organizational knowledge stickiness (Leonardi and Meyer 2015), reduced knowledge duplication, and effective innovativeness (P. M. Leonardi 2014). Thus, we posit the following proposition:

Proposition 1. *There is a positive relationship between the effective use of ESN knowledge sharing and the development of innovative products/services.*

5.2 | The Relationship Between Trust and the Effective Use of ESN for Knowledge Sharing

Our findings support the importance of trust in sharing knowledge through ESNs. The study identified low acceptance of ESNs by employees. This could be due to a few reasons. Employees could be concerned that they lacked expertise or would lose value to their firm if they shared their knowledge (Stock and Gross 2016; Bala et al. 2015). This made them unwilling to share and thus not use the ESNs. Another reason could be the need to spend additional time and effort learning another platform (Vuori and Okkonen 2012). The participants mentioned these issues (see Table 3 theme: understanding the role of trust), confirming the relevance of these concerns.

Trust was mentioned several times during the interviews. For example, participants "trust each other while sharing ideas" (Alpha: PtCode1), and there is a "sense of trust to share information" (Alpha: PtCode3), which suggests that trust among employees promotes confidence because their ideas are recognized. Literature indicates that trust improves satisfaction among employees and, in turn, improves their productivity (Aboelmaged 2018), job satisfaction and innovative behavior (Wah et al. 2018). It may be appropriate to build a trustworthy environment through openness and transparency in decision-making (Bolisani and Cegarra-Navarro 2021). The effect of ESN use on employee performance and communication is guided by trust, motivation, and management support (Bieńkowska et al. 2018). With higher trust, employees communicate more quickly, collaborate more often (Lei et al. 2019), and are more willing to share knowledge (Chow and Chan 2008). In line with this, trust has facilitated the effective use of ESN for knowledge sharing. Therefore, we propose that:

Proposition 2. *Trust is positively related to the effective use of ESNs for knowledge sharing.*

5.3 | The Relationship Between Governance, the Effective Use of ESN for Knowledge Sharing and Innovative Products/Services

The challenges surrounding ESN use meant that the hoped-for outcomes were often not achieved. These challenges included information leaking to external parties (Alpha: PtCode1), difficulty in identifying relevant information from the mass of content on the ESNs (Sigma: PtCode11), and employees viewing social media as a communication tool for operational purposes (replacing telephone calls and email messages) rather than for knowledge sharing. Thus, the overall impression from the interviews was that these challenges meant ESNs needed to be fully utilized for knowledge sharing in the organizations studied.

One way to improve technology use is to implement a system of controls, such as processes and structures, to motivate preferred behaviors and disincentivize undesirable practices. Undesirable practices are also evident when users post fake news, gossip, and inappropriate or false information via SNS (Sanchez-Casado et al. 2015). The participants revealed that governance mechanisms existed regarding codes of practice, policies, and standards related to new product/service development and ESN use. They were the most relevant to our participants. For example, codes of conduct covered the use and transmission of sensitive financial data, especially when there were new regulations (as indicated by Alpha: PtCode5, Gamma: PtCode9). Thus, employees were not allowed to carry out any illegal activities or act in a way that would damage their firm's reputation. ESNs use policies and guidelines to educate employees on social media use (Linke and Zerfass 2013).

The participants viewed social media policies as an essential part of organizational governance because the policies were

based on specific attributes such as respect, integrity, and transparency. These addressed some of the challenges of ESN use and would thus help improve the outcomes organizations intended when they invested in ESNs. Therefore, we developed the following proposition:

Proposition 3a. *Governance (formal and informal) strengthens the relationship between the effective use of ESNs for knowledge sharing and the development of innovative products/services.*

The participants indicated that their workplaces had open and warm cultures, and sharing knowledge among co-workers and across departments was very important. Such interaction enhanced collaboration and social relationships among employees. The interviewees indicated that knowledge-sharing culture was essential for fostering innovation. The participants admitted that their workplaces' culture influenced the level and nature of knowledge-sharing in their organizations. Comments on this from the interviewees included:

- "Here the culture is to succeed as a team and not as an employee... knowledge sharing is important when you work in a close-knit team...here, people work in a non-structured way" *(Alpha: PtCode1).*
- "We have a very open, warm and communicative culture" *(Alpha: PtCode2).*
- "Everyone is welcome to hear what other people are talking about" *(Alpha: PtCode4).*
- "It isa very open space, a playful workspace to encourage, inspire and engage employees" *(Alpha: PtCode5).*
- "Very open space and collaborative environment... Just like Google has very open, playful workspace and encouraging and inspiring employees—we have a similar kind of philosophy" *(Sigma: PtCode11).*

Terms such as "close-knit teams", "work together with people", and "inspiring employees" indicate how co-workers work together in an open environment, creating close relationships and adding a personal touch to support each other. Participants perceive these terms as necessary for sharing knowledge in the workplace (Wasko and Faraj 2005). This point was notable because, in comparison, only a few interviewees were aware of social media policies or rules.

The contrast between governance and culture made us consider whether the two concepts were two ends of a continuum (with culture being closer to informal control and policies and standards being formal control). During the interviews, participants indicated the importance of trust and effectively using ESNs for knowledge sharing and the importance of an "open culture" for collaboration. The literature suggests that trust and informal control are complementary concepts in that managers can influence both (Wohlgemuth et al. 2019). As with "trust", managers can provide freedom to employees to work in the organization to achieve their desired goals. Additionally, with informal guidance, managers can guide employees through adaptative processes (Wohlgemuth et al. 2019). Likewise, we extend the concept of informal control to strengthen the relationship between trust and the use of ESNs for knowledge sharing and develop the following propositions:

Proposition 3b. *Governance (informal) strengthens the relationship between trust and the effective use of ESNs for knowledge sharing.*

6 | Contributions, Implications, Limitations and Future Direction

This study uses qualitative data to examine how organizations can encourage the use of ESNs effectively for knowledge sharing. We identified three related propositions that provide effective use of ESN for knowledge sharing. The theoretical and practical implications, along with the limitations of this study, are explained below.

6.1 | Contributions

From a theoretical perspective, the study provides the following contributions.

First, the study shows that ESN-enabled knowledge sharing has a substantive effect on innovation, an essential indicator of firm performance. This study reveals that employees use various ESN tools to share knowledge with their co-workers and complement their work. The reason for the variety of ESN tools used is that each tool has a different purpose. Although employees did not explicitly mention personalized and codified knowledge sharing, they provided evidence of sharing information and collaboration using ESN tools. Other studies have indicated that social media facilitates information flow and knowledge sharing within and across organizations, which improves firms' innovation processes (Aboelmaged 2018; Lam et al. 2016). Overall, we can conclude that ESNs can be used to share both personalized and codified knowledge, both of which are required to achieve the desired goal, i.e., improved products/services.

Second, this study improves our understanding of the social aspect of knowledge sharing using ESNs. The results show that a high level of intra-organizational trust can promote innovative products/services via ESNs used for knowledge sharing. This fits the concept of trust from social exchange theory (SET). SET posits that employees, while in social relationships, engage in interactions and create obligations from the exchange, thus creating positive behavior (Cropanzano et al. 2017). The concept of trust was chosen because the focus was on intra-organizational trust and the relationship between the superior and co-workers and between co-workers (Bieńkowska et al. 2018). SET argues that when there is a high level of trust, employees are more likely to use ESNs to share knowledge because it reduces their fear of being made redundant after sharing their knowledge (Bieńkowska et al. 2018; Cropanzano et al. 2017). Previous studies have indicated the importance of trust and knowledge sharing (Lei et al. 2019; Wah et al. 2018) but did not explicitly relate it to ESNs' use for improved products/services. For instance, Lei et al. (2019) support the argument that innovation can be fostered through knowledge sharing and trusting work

environments. However, scholars such as Lei et al. (2019) did not explicitly explain the importance of trust between co-workers and superiors. Wah et al. (2018) used the impact of affect-based trust (i.e., emotional-based trust) and cognition-based trust (i.e., rational-based trust) on innovation behavior via tacit knowledge sharing. However, scholars such as Wah et al. (2018) did not demonstrate how trust (interpersonal) impacts ESN-enabled knowledge sharing for innovation outcomes. While Masood et al. (2023) also used ESN to enhance knowledge sharing via affect-based and cognitive-based trust, they did not relate the adverse impacts of workplace ESN adoption on employee performance. Our study revealed that a high level of trust between co-workers and superiors and co-workers would increase knowledge sharing using ESNs and is more effective in developing product/service outcomes.

Third, the study provided strong evidence for governance's moderating role. Most previous studies on governance in this domain were conceptual arguments or literature reviews (Zhang and Zhou 2013; Foss et al. 2010). The few empirical studies conducted on the topic, such as Stohl et al. (2017) and Vaast and Kaganer 2013, did not directly relate to governance's role in supporting the use of ESN for knowledge sharing to enhance innovation (Huang et al. 2013). Previous research, such as Masood et al. (2023) suggested considering organizational variables, such as policies, to understand knowledge sharing in virtual workplace contexts. Research on social media governance mainly consisted of guidelines on social media usage in organizations (Stohl et al. 2017; Vaast and Kaganer 2013). These guidelines are based on employees' corporate social media responsibility (Stohl et al. 2017) and social media usage between people and information (Vaast and Kaganer 2013). Our study results show that employees were aware of formal and informal governance mechanisms for knowledge sharing and their role in influencing product/service development. Evidence from this study also revealed that there is increased awareness and recognition of organizational social media policies. While prior studies focus on the positive effects of ESN use in the organizational context (Mäntymäki and Riemer 2016), this study contributes to extant ESN research by indicating potential adverse effects such as lack of knowledge sharing through ESNs due to lack of trust and lack of governance mechanisms leading to reduced levels of innovation. Our findings demonstrate that ESN enables knowledge sharing to improve innovation outcomes by providing a trusted environment and using governance to strengthen these relationships.

Therefore, this study supports the argument that governance mechanisms can mitigate the inappropriate use of ESNs so that individuals can connect for knowledge sharing and promote products/services. Likewise, it extends the field of knowledge governance to both knowledge management and social media.

Fourth, the study explored the impact of using various ESN tools. Using a mix of ESNs (Qi and Chau 2018; Mäntymäki and Riemer 2016) is helpful because each tool provides different functionalities, thus facilitating different tasks (Chin et al. 2020; Madsen 2017). It is also possible for users to feel comfortable with one and not with other platforms, giving some level of flexibility in their use (Chin et al. 2020). Others have suggested that since social media is heterogeneous regarding technical features, work-related and personal-related social media have distinct effects on employees' performance (Song et al. 2019). Therefore, this study improves our understanding of the importance of using different ESN tools effectively for knowledge sharing in organizations.

Fifth, the paper highlights that informal governance complements trust and comprehensively analyses the two theoretical concepts. Informal governance has been studied in ESN research regarding its impact on cultural practices (Huang et al. 2013). However, this study explicitly examines the role of informal governance and trust in influencing the effective use of ESN for knowledge sharing to improve products/services. Future researchers could examine how trust and informal governance jointly and separately affect ESN use and outcomes. In this respect, one could ask: Does ESN use increase internal trust in an organization, or will ESN be limited because of the current low level of trust? Which informal governance mechanisms could help remedy this?

6.2 | Implications

The findings from the interviews have implications for managers and practitioners to understand how to make best use of ESN. First, firms must deploy one or a few ESN applications at workplaces and support employees to share their views and benefit from this interaction. One way to do this is to integrate ESNs into an organization's portal to encourage their effective use (Chin et al. 2020). Additionally, the results provide insights for ESN developers who wish to design functionalities that may create value for ESN users. For instance, providing visibility and improving interaction would increase cross-departmental communication and overcome knowledge boundaries (Neeley and Leonardi 2016).

Second, employees who share knowledge using ESNs need their leadership to promote a trusted environment for discussing product and service development. When employees are positive and trust each other, they are more likely to accept using ESNs, building on ESNs' ability to be a social lubricant (Leonardi and Meyer 2015). Our findings inform management that superiors can take a positive role and increase the effective use of ESNs for knowledge sharing by appreciating individuals who actively share knowledge using ESNs. The presence of trust will also minimize any restrictions on using ESNs and maximize the benefits. It is also advisable for organizations to encourage non-work-related discussions via ESNs to create a positive relationship between employees. Organizations should allow employees to share knowledge in an environment that nurtures their creativity and positively impacts innovation performance.

Third, to reduce the inappropriate use of ESNs, managers must create policies, guidelines, and informal norms for using ESNs (Vaast and Kaganer 2013). In this respect, managers can establish clear formal governance structures by identifying and allocating knowledge-sharing roles. They can also leverage informal leadership, such as supporting ESN influencers within the company and allowing employees to recognize and acknowledge the peer contributions on ESN platforms. Managers can create new governance structures to clarify how knowledge sharing

through ESN enhances organizational goals such as innovation. They also can implement analytical tools to track engagement and content quality on ESN.

Fourth, managers should build a strong culture to encourage and empower ESNs by establishing cross-functional teams that work effectively on knowledge-sharing and decision-making processes. Management should regularly update and inform employees about policy changes that may influence their work processes. Management should make efforts not only to combat misinformation but also to flag social media accounts that have the potential to misinform citizens. Furthermore, for a safer communication environment, social media organizations should consider proper resources to tackle misinformation spread by fake news (Olan et al. 2024).

6.3 | Limitation and Future Directions

Though the study makes several theoretical and practical contributions, it has a few limitations.

First, this study only uses internal social media, ESN, to understand their effective use in an organizational context. Future researchers may use public social networks (such as Facebook, Twitter and LinkedIn) as they may influence the findings of their use of internally directed ESNs (such as Yammer). For instance, using various public platforms could also improve productivity and achieve the goals of using such applications. Additionally, various public social networks, such as Twitter or Facebook, have become an ideal source of counter-knowledge to spread misleading information (Sanchez-Casado et al. 2015). The users of such platforms might act similarly on ESNs by sharing misleading information. As such, future research could explore how the use of public social networks influences the way in which ESNs are used.

Second, three out of the 11 participants used ESNs only moderately. Further research is needed to explore whether the level of ESN use is different across participants who are new users and those who are experienced users, as they may have differences in their willingness to share knowledge online. Third, the interviewees revealed that the use of ESNs changes over time and that individuals create value from ESNs in different ways to meet their personal goals, which may impact the outcomes. Future researchers can incorporate longitudinal data to obtain better insights into the phenomenon.

Fourth, choosing the finance industry as the research context may bias the results. For example, employees in this industry may be more private and less willing to share their knowledge because of strict rules against information sharing. Thus, future research may focus on other industries (e.g., manufacturing and education industry) to generalize the research findings.

Fifth, another area that future researchers could explore and compare with this study is the impact of ESN post-pandemic. Today, many firms are taking advantage of various CoITs, including internal use of social networks to communicate with co-workers and manage work remotely. Although this development might change the usage of IT consumerization, in the current hybrid work settings (i.e., a mixture of working in the office and at home), IT consumerization still plays an important role. Future research should explore how the context of hybrid work may affect IT consumerization and enable or inhibit innovation and productivity.

Lastly, in this study, we have only highlighted face-to-face and online sharing of knowledge without deepening into the emotional and rational capacities that enable sharing knowledge, which could lead to increased commitment and engagement. In this respect, we suggest that future research include spiritual, rational, and emotional aspects while discussing how people collaborate, feel comfortable, and get to know each other (Cegarra-Sánchez et al. 2023). As fake news and misinformation are shared via various social platforms, both public and private, policymakers should think about developing proper legislation to help combat such a phenomenon. Social media governance provides guidelines on social media usage in organizations (i.e., use of enterprise social networks), and most users avoid misinformation (i.e., counter knowledge) to improve products and services.

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Ethics Statement

The Ethics Committee of Auckland University of Technology (AUT), New Zealand approved the ethical statement of findings. Approval number: 18/292; letter of approval is available upon reasonable request.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available in the Auckland University of Technology (AUT), New Zealand, data repository. The data are not publicly available as the information could compromise the privacy of research participants.

Endnotes

[1] The large ESN vendors include Microsoft (*Teams* and *Viva Engage*), Meta (*Workplace*), Salesforce (*Slack*), Google (*Workspace*), Ignite Tech (*Jive*) and HCL (*Connections*).

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