

# Exploring Onboarding Processes for IT Professionals: The Role of Knowledge Management

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**Abstract:** A robust knowledge management (KM) strategy is essential for effective onboarding of new employees. Organizational knowledge plays a crucial role in helping new employees learn their work tasks and should be readily available for training purposes. This study examines how a public organization in Norway implements its onboarding process and facilitates knowledge sharing with new employees. We investigated various KM initiatives established in the organization and explored how knowledge is transferred to benefit new employees. Additionally, we examined how organizational culture influences knowledge sharing performance. The empirical data comprises 20 interviews conducted in the information technology department of the organization. The findings reveal that new employees should first receive training on specific work tasks related to their roles in the organization. Early productivity was considered significant during the onboarding process, while an overload of general knowledge about the organization was perceived as overwhelming. The public organization under study is known for its strong job security, which has fostered a collaborative environment among employees with low competitiveness. This openness encourages knowledge sharing and willingness to collaborate, as employees are not worried about losing their positions. This also results in a low threshold for seeking assistance from experienced colleagues during the onboarding process. The evidence suggests that much of the knowledge gained by employees during their employment period is acquired through informal settings, where experienced employees share knowledge with newcomers through direct communication.

Based on the findings, this study proposes practical recommendations for improving the onboarding process. Effective practices such as mentorships, new employee gatherings, and the existing technical graduate program should be maintained. Suggestions for further enhancing the onboarding process include: (1) designing a networking initiative that integrates new employees outside the graduate program; (2) tailoring the competence plan to the role of each employee; (3) improving the content of the intranet with information about role descriptions and responsibilities, making it easier to identify "who knows what" in the organization; and (4) defining the reasons for using collaboration tools more extensively. Implications for KM in onboarding processes are outlined.

**Keywords:** knowledge sharing, Onboarding, IT employees, Learning, Case study, Knowledge management

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## 1. Introduction

The increased emphasis on digitalization in organizations and society as a whole has resulted in a higher demand for candidates with advanced education in information technology (IT) and related fields (Bensberg et al., 2019). As a result, there is fierce competition among private and public sectors to recruit the best graduates with digitalization competencies.

To attract and retain top talent, companies and public institutions must provide attractive working environments that offer opportunities for new employees to engage in creative and innovative work tasks to enhance their skills and knowledge further (Borowski et al., 2020). The onboarding process plays a crucial role for newcomers as they begin their new positions. Therefore, it is essential for new employees to feel welcomed and supported by their employers during this period, to receive the necessary training and support to excel in their new roles.

However, the onboarding process can be challenging for employers who aim to retain new hires for as long as possible. This period should be well-designed for knowledge sharing and competence building, ensuring that new employees are satisfied with their choice of employer and motivated to continue their employment (Kirchner & Stull, 2022). Overall, the onboarding process is critical and should be prioritized by employers by developing a robust competence development plan with appropriate training to facilitate new employees and their upcoming tasks.

During the onboarding process, new employees need to acclimate to the organization, including understanding their new role within the larger context and feeling accepted by their new coworkers. In this sense, onboarding is a form of organizational socialization that enhances adjustment through learning (Gardner et al., 2022).

Consequently, the first aim in our study is to examine prevalent practices and obstacles in onboarding processes within an organizational setting: (1) *How do organizations typically approach the onboarding process, and what are the key challenges frequently encountered in this context?*

Effective knowledge management (KM) initiatives are essential during this process to ensure that knowledge flow and retrieval occur in an efficient manner (Alavi & Leidner, 2001; Newell, 2015). However, there is limited understanding in existing research on how employers can achieve an effective onboarding process, and few studies have explored onboarding from a KM perspective. For example, it is crucial to understand how KM can play a significant role in successfully transferring relevant knowledge to new employees.

Accordingly, this study applies a knowledge management perspective to gain a comprehensive understanding of onboarding, and it explores the role of knowledge management initiatives to optimize learning outcomes:

(2) *How can knowledge management initiatives be utilized to enhance the learning outcomes for employees during the onboarding process?*

The paper is organized as follows: First, previous research is outlined. Second, the research site and method are presented. Third, the main results are outlined. Fourth, the discussion is provided. Finally, concluding remarks and implications are made.

## **2. Previous Research on KM in Public Sector**

Organizations in the public sector operate differently than those in the private sector, as they do not prioritize profit as a business objective. This can create a distinct organizational culture characterized by less competition and more collaboration among employees (Choudhury & Das, 2021). In public institutions, job security may be higher, leading to a willingness to share knowledge with colleagues. This reduced internal competition can result in less fear of job loss and a more collaborative work environment (ibid.).

Implementing KM practices in the public sector can lead to improved working methods and processes, especially when challenges are localized (Edge, 2005). KM solutions can help organizations achieve efficiency and gain a clear overview of the knowledge available within the organization and the employees who possess different forms of knowledge. While the focus is not on gaining a competitive advantage, KM can still enhance resource utilization by localizing existing knowledge (Alavi, 2000), and avoiding unnecessary hiring of external consultants. Easy access to knowledge by employees can result in resource savings in terms of time. The competitive advantage has shifted from purely financial savings to a greater emphasis on competence, where the application of internal knowledge within organizations adds value in terms of savings, organizational development, and learning (Sambamurthy & Subramani, 2005).

A literature review by Massaro et al. (2015) presents the main contributions in the field of KM in the public sector. The article identifies enablers and barriers of KM, with enablers including leadership support, organizational culture, and technological infrastructure, and barriers including lack of incentives, resistance to change, and limited resources. The article provides insights into the factors that facilitate or hinder the implementation of KM initiatives in the public sector. Additionally, the article discusses different approaches and strategies for managing knowledge, such as communities of practice, knowledge portals, and knowledge sharing networks, and highlights the potential benefits of effective KM practices in terms of improved organizational performance, decision making, and innovation. The authors also discuss important future research directions in KM, such as the role of leadership in promoting knowledge sharing, challenges of managing tacit knowledge, and the impact of national and cultural factors on KM in the public sector.

Jain & Jeppesen (2013) focus on the role of leaders' cognitive styles in shaping KM practices. The paper reveals the relationship between leaders' cognitive styles and their KM practices, providing evidence that leaders with a higher tolerance for ambiguity are more likely to promote knowledge sharing and utilization, while those with a higher need for cognition are more inclined towards knowledge acquisition and documentation. The paper highlights the need for leaders to be aware of their cognitive styles and how this may impact their approach to KM. The authors suggest that organizations can leverage leaders' cognitive styles to design effective KM strategies and practices that align with their leaders' cognitive preferences.

A study conducted by Henttonen et al. (2016) provides insights on the relationship between knowledge sharing, social capital, and individual work performance in the context of a public sector organization. The findings inform public sector managers and policymakers on the importance of knowledge sharing and social capital in enhancing individual work performance. The study suggests that promoting knowledge sharing and fostering social capital may lead to improved work performance of employees in the public sector organization.

Choy Chong et al. (2011) focus on critical success factors for KM implementation in public sector accounting. The findings highlight the importance of leadership support, organizational culture, and employee participation in KM implementation efforts, and suggest strategies for overcoming challenges and maximizing the benefits of KM in this context.

In summary, these studies highlight the importance of leadership, organizational culture, and knowledge sharing in obtaining effective KM practices in the public sector. They also identify challenges and success factors in implementing KM initiatives in public sector organizations. The research gaps from these studies comprise KM's impact on organizational performance, factors that influence knowledge sharing among employees, the impact of knowledge sharing on individual work performance, and how organizational context and culture influence knowledge sharing behaviours in the public sector.

The abovementioned studies provide a foundation for understanding KM in the public sector. However, more research is needed to specifically study the impact of KM on onboarding processes, including knowledge transfer and organizational culture. Exploring the role of KM-supporting technologies is also important for understanding onboarding success. Additionally, investigating the social and cultural aspects of KM during onboarding, including tacit knowledge and socialization, is crucial. Our study aims to address these research gaps.

### **3. Research Site and Method**

The ABC organization (pseudonym) is a large public organization in Norway with around 7,500 employees spread across multiple regions and locations. Within the organization, there is an IT division with over 900 employees working in a distributed setting. The IT department is divided into five sub-departments, each with its own department CIO. One of the departments focuses on portfolio management, project management, and change management processes and routines. Two other departments are responsible for developing programs and systems related to the organization's core business. There is also a department that delivers IT services to employees, including IT solution agreements, IT security, and IT support. Lastly, there is a department that handles internal platforms, cloud solutions, and databases.

New employees are assigned a supervisor who provides academic and social support, and they are introduced to the organization through training videos and gatherings for new employees. The organization also has employee programs specifically designed for new graduates, which include networking opportunities and task rotation internally.

This study utilizes a qualitative case study method (Yin, 2003), and apply semi-structured interviews as the data collection technique. An interview guide was developed and tested to ensure valid and non-repetitive questions with an appropriate interview length. The aim of this approach is to gain in-depth insight into the onboarding process for new employees, focusing on details that may be overlooked in a macro-level approach. The expectation is that the interviewees will feel comfortable and open-minded, speaking freely in a relaxed setting. Cooperation with the organization allowed access to potential interview subjects through email contacts provided by group leaders who identified willing participants.

In total, 20 interviews were conducted with IT employees. Two of the interviewees held leadership positions at the case organization for the past 10 years, while the rest were new hires who had worked there for between five and 19 months. The interviews lasted between 40 to 60 minutes and were conducted online using Microsoft Teams, with audio recordings taken. All interviews were transcribed verbatim, and audio playback tools with slow-down functions were used for accuracy during transcription.

The interview guide was used to categorize and sort quotes, concepts, and themes. Following the approach suggested by Miles & Huberman (2018), the transcripts were read multiple times, notes were made, data was reduced, and visualized drawings were used to group the data into an organized overview of the most central topics. Leader interviews and employee interviews were separated as their interview guides slightly differed. In the results section, quotes are used to emphasize specific findings. Two of the authors were responsible for conducting the interviews, and both participated in all of them.

## **4. Results**

### **4.1 The Onboarding Process for new Employees and KM Initiatives**

During onboarding, various formal and informal KM initiatives are established in ABC to transfer knowledge to new employees. This process begins after the employee signs the contract and includes a dialogue with their manager about start-up tasks and expectations. The manager is responsible for ensuring the new employees

receive training and a good introduction to their tasks. On the first day, new employees are assigned a PC and have a dialogue with their manager. They are also introduced to the organization through meetings, training videos, and informal conversations with colleagues. Mentors are assigned to provide support and assistance. For multiple new hires, training is done in blocks, while for individuals, team members contribute to training. After a few months, new employees attend common gatherings focusing on organizational values, vision, and interactive group tasks. There are also specific gatherings for new IT employees, such as the Tech-Graduate program, which includes training and mentorship. The program has become popular for networking opportunities. Interviewees praised the program and suggested incorporating similar elements into the regular hiring process (Table 1).

**Table 1: The Onboarding Process for new Employees and KM initiatives – Sample Quotes**

<i>"The key is to establish connections across the organization through networking and professional/social meetings."</i>
<i>"Being part of the Tech-Graduate program provides an initial network from various parts of the organization, along with relevant training. It's a valuable program that could benefit new employees who are not part of it as well."</i>

#### *Digital tools for knowledge sharing*

The organization utilizes several tools for knowledge sharing (Table 2), and they have implemented both Atlassian and SharePoint products. In addition, Mattermost is used as instant messaging software, mainly for development environments.

**Table 2: Digital Tools Contributing to Knowledge-Sharing**

<b>Tool</b>	<b>Function</b>
Intranet	An internal webpage that provides an overview of the organization for employees and serves as a learning portal.
Confluence	An internal wiki used to document analyses of needs and IT solutions, as well as work performed and experiences
Jira	A project management tool used to document product backlog and task queues for development environments
OneDrive	A file hosting service used for sharing individual files in real time
Teams	A collaboration platform that includes virtual meetings, document sharing, and instant messaging.
Mattermost	Instant messaging software used for communication and collaboration in development environments

Software applications like Mattermost, Jira, and Confluence are popular solutions used by development communities. Confluence is used as an internal Wiki for documentation and KM. The organization has also introduced SharePoint as part of their Digital Workplace initiative, offering tools for home office, meeting activities, information sharing, and communication(see Table 3). However, the purpose of these tools is unclear, leading to informal solutions that vary among teams and potential overlaps in information. This can create silos and challenges for distributed employees. Improving information architecture and synergy between tools may be a possible solution, but it requires formalization to work effectively.

**Table 3: Digital Tools for Knowledge Sharing - Sample Quotes**

<i>"As far as I know, there isn't a specific purpose for it. It's not something we talk about; we just focus on documenting the knowledge we need and the knowledge we lack."</i>
<i>"It's not always easy to predict the direction things are heading. We have a project posted on SharePoint that may overlap with information on the Wiki."</i>
<i>"I think it can be challenging to locate information as it's spread out. Searching across the Wiki to find things is not an easy task."</i>
<i>"If we can improve our information architecture and have better synergy between the tools we use, the information across different locations will also be better organized."</i>

## **4.2 Challenges in the Onboarding Process**

### *Information overload and relevant/irrelevant knowledge*

The process of learning about the organization faced challenges in balancing relevant information at the right time versus information overload (see Table 4). Interviewees found the initial training overwhelming, with too much general information that was not always relevant. Some suggested that the information could have been presented in a more engaging way, and that training should be tailored and distributed over time. Many interviewees expressed a desire for a more customized learning approach, as some training events were not relevant for all participants. Informal learning through collaboration with colleagues and mentors during daily work was also highlighted as important, as there was no formal training process beyond mandatory content on the learning portal.

**Table 4: Information Overload, Relevant/Irrelevant Knowledge – Sample Quotes**

<i>"Making a new employee watch videos for an entire week doesn't seem to add much value."</i>
<i>"The mandatory learning portal requires going through lengthy courses on topics like organizational culture, corporate social responsibility, privacy issues, etc. It's quite boring. I work with online services and user experience, so the whole thing feels dreary. It's a long list of courses and I'm trying to learn other things too, so it gets monotonous."</i>
<i>"While it's not irrelevant for an employee to learn about laws and regulations in the organization, it could have been presented in a more engaging way. Perhaps by making it more exciting and spreading out the learning over time."</i>
<i>"As a new employee, you feel unproductive. Yes, it takes time to get up to speed, but new hires are eager to learn about their actual job responsibilities as soon as possible. General information can wait until later."</i>

#### *Who knows what and time dedicated for learning*

Interviewees suggested improvements in the training process and expressed difficulties in knowing who to contact for help (see Table 5). They mentioned challenges in finding employees with expertise and suggested having an overview of employees and their roles. Currently, finding information about competence and responsibility is not easy. Another challenge is the timing of gatherings, as new employees should participate after being employed for some months to fully benefit from them.

**Table 5: Who Knows What and Time for Learning – Sample Quotes**

<i>"There were a few instances where I had to ask multiple people and was forwarded several times."</i>
<i>"It would greatly benefit new employees to have the ability to easily look up and access brief overviews of different team members, including their roles, locations, and areas of expertise."</i>

### **4.3 The Culture of Knowledge-Sharing and Knowledge-Sharing Initiatives**

The organization values knowledge-sharing and encourages initiatives. Newcomers highlight the open culture that promotes sharing knowledge. Most interviewees believe colleagues do not withhold knowledge intentionally but may do so unconsciously. Managers are positive about knowledge-sharing and aim for a collaborative environment. However, sharing knowledge across departments and upwards in the hierarchy is challenging due to lack of communication and time constraints. Knowledge-sharing happens in meetings, professional groups (communities of practice), wikis, instant message channels, and customized initiatives.

Most interviewees emphasized that meetings were the most important arena for knowledge sharing. Wiki and professional groups (communities of practice) were also considered effective for knowledge sharing. However, the effectiveness of knowledge sharing also depends on employees' initiative. Some employees mentioned other IT subject forums and arenas within the organization where knowledge could be shared. Some departments have their own schemes for knowledge sharing, aiming to help employees acquire knowledge from their colleagues. Some managers encourage employees to attend courses to acquire necessary knowledge, which can then be shared further.

Managers highlighted the importance of exchanging experiences during conversations, where informal learning often takes place. The extent of employee learning depends on their initiative. Good documentation routines were also seen as important for knowledge sharing.

There were different opinions about what works and what doesn't in knowledge sharing. Some participants believe they are good at sharing knowledge and actively offer expertise, while others share mostly when asked. Some mentioned that newcomers may have less knowledge to share, and some feel that documentation is not being used effectively. Time constraints and project assignments also impact knowledge sharing.

The flow of information and communication within the IT department was described as both positive and negative. While it was seen as informal and efficient, the size of the organization was highlighted as a challenge, making it difficult to keep track of projects and personnel. Transparency and security-related requirements were also mentioned as challenges in knowledge sharing.

Instant messaging channels, such as Mattermost and Teams, were considered important for knowledge sharing, but some challenges arose due to the use of multiple channels (see Table 6). The decision to phase out Mattermost or not was pending.

**Table 6: The Culture of Knowledge Sharing and Knowledge Sharing Initiatives – Sample Quotes**

<i>"I believe people are interested in creating a positive work environment where knowledge sharing is encouraged. There is no competition or danger in sharing knowledge as it leads to a better working environment."</i>
<i>"We are highly focused on knowledge sharing and expertise dissemination. We aim to avoid creating specialists and encourage everyone to have a diverse skill set."</i>
<i>"Unfortunately, knowledge sharing is not happening enough between teams and groups, leading to silos and lack of communication. Some express a desire to prioritize sharing, but face challenges due to time constraints and the presence of many people."</i>
<i>"There are forums and arenas within the organization where IT subjects and other topics are presented for sharing and collaboration."</i>
<i>"I recently encouraged two of my team members to work together and improve their skills in a specific area. Formal documentation alone cannot solve this issue."</i>
<i>"My employer has supported and encouraged my attendance in relevant courses."</i>
<i>"We have a culture of verbal exchange of experiences and learning from each other in various settings."</i>
<i>"Sometimes I proactively share important knowledge, while other times people approach me with questions."</i>
<i>"In everyday situations, it's often easier for others to come and ask for expertise rather than proactively offering it."</i>
<i>"I avoid creating lengthy documents and routine descriptions as they are time-consuming and not widely sought after."</i>
<i>"I think overall it's positive, but managing communication with a large number of people can be challenging to ensure consistent messaging."</i>
<i>"As a large organization with frequent changes in personnel and projects, it can be difficult to keep track of responsibilities and roles, leading to occasional messiness."</i>
<i>"One strategy may not fit all situations and departments within the organization."</i>
<i>"While there is a transparency principle in the organization, there are also security-related requirements that limit information dissemination. Balancing these two principles can be challenging."</i>

## 5. Discussion

The public sector was praised by interviewees for its positive characteristics, particularly job security, which fosters a cooperative culture by reducing competition and protecting positions (Choudhury & Das, 2021). Unlike the private sector, the public sector focuses on aspects beyond profit, such as competence building, which can provide a competitive advantage by nurturing informed, cooperative, and competent employees. This emphasis on employee well-being, motivation, and competence building aligns with the ABC's culture, particularly during onboarding where cooperation and organizational merits are valued.

Clarity on information channels and access to licenses is essential for employees, and management may need to formalize changes in channel structure and usage, such as sharing information from Mattermost in other channels for wider access. Addressing employees' concerns and leveraging their knowledge can help minimize resistance to changes and facilitate smooth knowledge sharing (Corfield & Paton, 2016).

Interviewees expressed positive attitudes towards knowledge sharing among managers and colleagues, mentioning accessible leadership and willingness to help (Choudhury & Das, 2021). However, challenges in sharing knowledge across departments and hierarchical levels, as well as time constraints in large gatherings, exist. Encouraging managers to facilitate implicit knowledge sharing in smaller settings can help employees build their competence. Overall, interviewees were satisfied with the current attitudes towards sharing, but acknowledged room for improvement.

While most interviewees claimed to document their work, some did so only occasionally or not extensively, citing prioritization of other tasks and preference for discussions with colleagues (Oliveira et al., 2015). However,

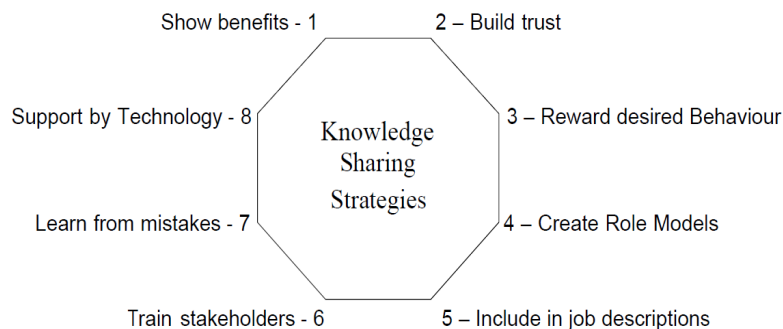
a strong culture of knowledge sharing is crucial. Despite some differences between groups, the ABC is generally perceived to have a positive culture, with an open environment that encourages asking for assistance and informal discussions.

Internal competition may hinder knowledge sharing, but at ABC, job security is prioritized over competition, fostering a culture of knowledge sharing. While some interviewees acknowledged that colleagues may inadvertently withhold knowledge due to personal traits, they demonstrated awareness of their own room for improvement in knowledge sharing (Bari et al., 2020; Halisah et al., 2021). Trust among colleagues and a positive working environment are considered crucial for effective knowledge sharing (Henttonen & Blomqvist, 2005).

The public sector can be perceived as bureaucratic, with slow processes and differing opinions, which may be viewed negatively. However, the ABC organization leverages this perception for improvement by promoting open dialogue and problem-solving during meetings and professional gatherings, which facilitate knowledge sharing and understanding of work tasks and the profession.

During onboarding, employees acquire knowledge in informal contexts through communication, indicating a positive culture of sharing implicit knowledge and an agile approach to KM (Zykov & Singh, 2020). To build on this, management can design a knowledge-sharing strategy that focuses on explicit and implicit knowledge. Interviews reveal that implicit knowledge sharing is more successful at ABC, with a low threshold for asking for help and frequent meetings for knowledge sharing. However, attitudes towards documentation vary, with limits on how much knowledge is documented and utilized.

Siakas & Georgiadou's (2006) model can guide the ABC's strategy for sharing knowledge, with steps 2, 4, and 6 being widespread, and steps 1 and 5 also showing positive signs (Figure 1). Step 8 varies among groups, and steps 3 and 6 could be improved. Measures to motivate employees to share knowledge, such as collaboration initiatives, can be introduced to enhance knowledge sharing (Corfield & Paton, 2016; Smith, 2001; Weng et al., 2020).



**Figure 1: Guide to Develop and Utilize a KM Strategy (Siakas & Georgiadou, 2006)**

Interviewees described the flow of information and communication in varying terms, ranging from positive to negative. The informal culture at ABC facilitated easy connection and communication, but also posed challenges in initiating communication when the right person was not easily accessible, especially for new employees lacking an established social network. Identifying the right people to solve a problem was often unclear and difficult, and some relied on mentors or team members for assistance. The IT division primarily used Microsoft Teams and Mattermost for communication, with Mattermost being less accessible due to license restrictions, resulting in missed information. Similar confusion existed regarding documentation channels such as Wiki, Jira, and SharePoint. To improve knowledge sharing, it is crucial to establish clear purposes for using these solutions and clarify what information and knowledge should be shared and where it should be documented (Scarso et al., 2016). Clarification among employees regarding relevant channels for specific information and assessing access to expensive licenses may require changes in channel structure and usage, while prioritizing employee understanding and reducing resistance to change (Corfield & Paton, 2016).

Participants displayed varying levels of willingness to share knowledge. Some shared willingly, while others preferred to share only when asked or when they perceived a need to improve their knowledge-sharing efforts, which is consistent with previous research (Hu & Randel, 2014). Even experienced employees were not necessarily better at documenting knowledge, as some mentioned that not everything seemed relevant to document, possibly due to motivation challenges. Additionally, interviewees had different perceptions of what it means to be proficient at knowledge sharing, with some who claimed to be good at it not necessarily being better than those who acknowledged room for improvement (Scarso et al., 2016; Shih & Farn, 2008).

Managers and colleagues generally exhibited a positive attitude towards knowledge sharing, with a willingness to help and an accessible and informal leadership style (Choudhury & Das, 2021). However, challenges arose in sharing knowledge across different departments and hierarchies, mainly due to time constraints and difficulties in sharing in large gatherings. Implicit knowledge sharing outside of meetings may enhance employee competence. While interviewees expressed satisfaction with prevailing attitudes towards sharing, they also acknowledged the need for further improvement. Most interviewees did not believe that employees intentionally withhold knowledge, but a competitive internal climate can negatively impact knowledge sharing (Halisah et al., 2021). At ABC, employees tended to feel job security rather than competition for positions, fostering a positive environment for knowledge sharing. However, some interviewees suggested that colleagues may unconsciously retain knowledge due to personal traits such as reservation, which can affect the amount of knowledge they share (Bari et al., 2020). Perceiving lack of knowledge sharing among colleagues can reduce trust and negatively impact the work environment (Kähkönen et al., 2021). However, interviewees also acknowledged that lack of knowledge sharing may not always be intentional and admitted to needing improvement in their own knowledge-sharing efforts and observing similar behaviour in colleagues.

## 6. Conclusion and Implications

We conducted a case study to explore the role of KM in onboarding processes. Our findings highlight the potential of KM initiatives to positively impact onboarding by fostering knowledge sharing and collaboration, facilitating learning and development, and enhancing organizational culture and performance. KM can promote a knowledge-sharing culture within the organization, which can effectively support onboarding of new employees. This can be facilitated through knowledge-sharing platforms, communities of practice, and social media tools that enable access and sharing of relevant information, expertise, and experiences (Henttonen et al., 2016; Kirchner & Stull, 2022). In addition, KM can support learning and development by providing new employees with access to training materials, resources, and best practices. Creating a learning organization that values continuous improvement and innovation can enhance the onboarding experience for new hires (Yang, 2007). Furthermore, KM can contribute to organizational performance by promoting knowledge reuse and leveraging expertise across the organization. This can help new employees quickly integrate into the organization and understand its core values, goals, and processes, thus enhancing individual and team performance (Massaro et al., 2015).

Based on our findings, we recommend that ABC continues its effective initiatives such as the mentorship scheme, new employee gatherings, and the Tech Graduate program. However, we also suggest designing additional initiatives to integrate new employees beyond the Tech Graduate program, allowing them to build a larger network early on. Tailoring the training plan to be more role-specific and disseminating general information broadly could also be beneficial in enhancing onboarding effectiveness.

Considering the challenges of locating relevant resources in a large organization like ABC, we propose enhancing the intranet page to include comprehensive role descriptions and responsibilities, facilitating easier access to resources for new employees. Additionally, establishing clear guidelines for the purposeful use of collaboration tools within the organization can enhance collaboration and productivity among employees. The recommendations are summarized in Table 7 and can also be valuable for onboarding processes in other organizations.

**Table 7: Practical Implications – Recommendation for Onboarding**

	<b>Recommendation for onboarding</b>
1	Continue implementing the mentorship scheme, new employee gatherings, and the Tech Graduate programme as part of the organizational strategy.
2	Ensure new employees are integrated into informal networks early on.
3	Provide tailored training that allows new hires to focus on learning their job duties at the beginning, so they feel productive from the start.
4	Extend the videos with general information about the organization throughout the employment period.
5	Enhance the intranet page with an overview of employees, including role descriptions and responsibilities, to make it easier to find resources.
6	Define clear purposes for using collaboration tools, so that new employees can easily understand when to use them.



Moreover, we propose targeted KM initiatives that can effectively facilitate the onboarding process and facilitate knowledge transfer. These recommendations are derived from our own research findings as well as existing literature and are generally regarded as beneficial for organizations in onboarding processes aiming to enhance their focus on KM (Table 8).

**Table 8: Suggested KM Initiatives Supporting Onboarding and Knowledge Flow**

KM initiative	Description
Knowledge sharing platform	Establish a centralized digital platform or intranet where employees can share and access knowledge resources such as best practices, guidelines, templates, and lessons learned (e.g., enterprise social media platform). This platform can facilitate collaboration and encourage knowledge exchange among employees (e.g., Rode, 2016).
Communities of practice	Cultivate the formation of communities of practice (CoPs) within the organization. CoPs bring together individuals with shared professional interests and expertise to foster knowledge sharing, problem-solving, learning and innovation (Brown & Duguid, 1991). These communities can be organized around specific topics and issues in the organization as well as in relation to ongoing projects (e.g., Hustad, 2017).
Knowledge capture and documentation	Implement processes and communication media tools to capture tacit knowledge from experienced employees before their retirement or departure from the organization. This can involve conducting exit interviews, creating knowledge transfer plans, and documenting critical expertise through written reports, videos, or audio recordings (e.g., Cox & Overbey, 2022).
Competence management	Learning and development programs including training programs, workshops, and seminars to develop employees' skills and knowledge. Focus on areas relevant to the organization's objectives and type of organization (private or public), such as leadership development, project management, technological advancements, and public service innovations (e.g., de Vasconcelos et al., 2016).
Mentoring and coaching	Establish mentoring or coaching programs where experienced employees can provide guidance, support, and knowledge transfer to junior or new staff members. This promotes knowledge sharing, skills development, and the transfer of institutional knowledge (e.g., Lave & Wenger, 1991).
Knowledge repositories	Develop an organizational "bible" or a knowledge reservoir (Hole et al., 2017): Develop repositories that contain relevant information, policies, procedures, and templates. Ensure these resources are easily accessible and regularly updated to allow access to valuable knowledge (e.g., Levallet & Chan, 2019).
Performance evaluation and recognition	Incorporate knowledge sharing and collaboration as performance evaluation criteria. Recognize and reward employees who actively contribute to knowledge management initiatives and demonstrate a commitment to sharing knowledge and expertise. Provide incentives for knowledge sharing (e.g., Kremer et al., 2019).
Collaboration technologies	Implement collaborative technologies such as project management software, shared document repositories, and virtual communication tools and platforms (e.g., Teams). These tools facilitate real-time collaboration, information sharing, and efficient teamwork, regardless of employees' physical locations (e.g., Dingsøy et al., 2018).
Organizational learning culture	Foster a culture of continuous learning and knowledge sharing within the organization. Encourage employees to seek new knowledge, participate in professional development opportunities, and share their expertise with others (e.g., Sorakraikitikul & Siengthai, 2014).
Leadership and KM	Be aware of leadership support involving clear communication, and ongoing evaluation to ensure successful KM initiatives (e.g., Von Krogh et al., 2012).

As a suggestion for future research, it is recommended to conduct similar studies within other large public organizations to account for potential organization-specific findings. Exploring different sectors, such as the municipal sector, could offer valuable insights due to the unique cultural dynamics influenced by local politics. Additionally, broadening the research scope to encompass large public organizations beyond Norway would provide a more comprehensive understanding of the impact of culture on the onboarding process. To further enrich the understanding of organizational culture and effective KM initiatives, incorporating qualitative data through interviews with long-term employees, as well as observations and group interviews to assess cultural dynamics, would be beneficial in future research endeavours.

Furthermore, to investigate the role of organizational context and individual differences in onboarding processes deserves additional exploration. With the rapid advancement of technology, organizations are increasingly adopting digital tools and platforms for KM purposes. Therefore, exploring the potential of advanced

technologies, such as artificial intelligence-driven knowledge repositories, in facilitating onboarding processes and enhancing knowledge transfer is worth investigating. Moreover, it is crucial for future research to investigate the long-term impacts of KM practices on fostering competence development, facilitating knowledge retention, and promoting continuous learning among employees.

## References

- Alavi, M. (2000). Managing organizational knowledge. In R. W. Zmud (Ed.), *Framing the Domains of IT Management. Projecting the Future...Through the Past* (pp. 15-28). Cincinnati, OH: Pinnaflex Educational Resources.
- Alavi, M., & Leidner, D. E. (2001). Review: Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues. *MIS Quarterly*, 25(1), 107-136. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=4386667&loginpage=login.asp&site=ehost-live>
- Bari, M. W., Ghaffar, M., & Ahmad, B. (2020). Knowledge-hiding behaviors and employees' silence: mediating role of psychological contract breach. *Journal of knowledge management*, 24(9), 2171-2194. doi:10.1108/JKM-02-2020-0149
- Bensberg, F., Buscher, G., & Czarnecki, C. (2019). Digital transformation and IT topics in the consulting industry: a labor market perspective. In V. Nissen (Ed.), *Advances in Consulting Research. Contributions to Management Science*. (pp. 341-357). Cham.: Springer.
- Borowski, E., Werz, J., Isenhardt, I., & IMA, R. (2020). *Bringing Knowledge to Life: Knowledge Management With Agile Learning Units*. Paper presented at the 17th International Conference on Intellectual Capital, Knowledge Management & Organisational Learning ICICKM 2020.
- Brown, J. S., & Duguid, P. (1991). Organizational Learning and Communities-of-Practice: Toward a Unified View of Working, Learning and Innovating. *Organization Science*, 2(1), 40-57. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=4433760&loginpage=login.asp&site=ehost-live>
- Choudhury, D., & Das, P. (2021). The influence of organisational climate on knowledge management: A literature review. *Institutions and Economics*, 127-143.
- Choy Chong, S., Salleh, K., Noh Syed Ahmad, S., & Syed Omar Sharifuddin, S. I. (2011). KM implementation in a public sector accounting organization: an empirical investigation. *Journal of knowledge management*, 15(3), 497-512. doi:10.1108/13673271111137457
- Corfield, A., & Paton, R. (2016). Investigating knowledge management: can KM really change organisational culture? *Journal of knowledge management*, 20(1), 88-103. doi:10.1108/JKM-12-2014-0502
- Cox, V., & Overbey, J. A. (2022). Generational knowledge transfer and retention strategies. *Development and Learning in Organizations: An International Journal, ahead-of-print*(ahead-of-print). doi:10.1108/DLO-03-2022-0055
- de Vasconcelos, J. B., Kimble, C., & Rocha, Á. (2016). A special issue on knowledge and competence management: Developing Enterprise solutions. *Information Systems Frontiers*, 18(6), 1035-1039. doi:10.1007/s10796-016-9717-z
- Dingsøy, T., Moe, N. B., & Seim, E. A. (2018). Coordinating knowledge work in multiteam programs: Findings from a large-scale agile development program. *Project Management Journal*, 49(6), 64-77.
- Edge, K. (2005). Powerful public sector knowledge management: a school district example. *Journal of knowledge management*, 9(6), 42-52. doi:10.1108/13673270510629954
- Gardner, D. G., Huang, G. H., Pierce, J. L., Niu, X., & Lee, C. (2022). Not just for newcomers: Organizational socialization, employee adjustment and experience, and growth in organization-based self-esteem. *Human Resource Development Quarterly*, 33(3), 297-319.
- Halisah, A., Jayasingam, S., Ramayah, T., & Popa, S. (2021). Social dilemmas in knowledge sharing: an examination of the interplay between knowledge sharing culture and performance climate. *Journal of knowledge management*, 25(7), 1708-1725. doi:10.1108/JKM-08-2020-0631
- Henttonen, K., & Blomqvist, K. (2005). Managing distance in a global virtual team: the evolution of trust through technology-mediated relational communication. *Strategic Change*, 14(2), 107-119.
- Henttonen, K., Kianto, A., & Ritala, P. (2016). Knowledge sharing and individual work performance: an empirical study of a public sector organisation. *Journal of knowledge management*, 20(4), 749-768. doi:10.1108/JKM-10-2015-0414
- Hole, Å. S., Haave, H., & Hermanrud, I. (2017). *Invisible Work, Making Visible Differences: Facilitating Transformative Learning Circles*. Paper presented at the ECKM 2017 18th European Conference on Knowledge Management.
- Hu, L., & Randel, A. E. (2014). Knowledge sharing in teams: Social capital, extrinsic incentives, and team innovation. *Group & Organization Management*, 39(2), 213-243.
- Hustad, E. (2017). Knowledge management in distributed work: Implications for boundary spanning and its design. *Journal of Integrated Design and Process Science*, 21(1), 25-41.
- Jain, A. K., & Jeppe Jeppesen, H. (2013). Knowledge management practices in a public sector organisation: the role of leaders' cognitive styles. *Journal of knowledge management*, 17(3), 347-362. doi:10.1108/JKM-11-2012-0358
- Kirchner, M., & Stull, F. (2022). Employee onboarding and satisfaction in US manufacturing companies. *Industrial and Commercial Training*, 54(2), 267-278.
- Kremer, H., Villamor, I., & Aguinis, H. (2019). Innovation leadership: Best-practice recommendations for promoting employee creativity, voice, and knowledge sharing. *Business horizons*, 62(1), 65-74. doi:<https://doi.org/10.1016/j.bushor.2018.08.010>

- Kähkönen, T., Blomqvist, K., Gillespie, N., & Vanhala, M. (2021). Employee trust repair: A systematic review of 20 years of empirical research and future research directions. *Journal of Business Research*, *130*, 98-109. doi:<https://doi.org/10.1016/j.jbusres.2021.03.019>
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Levallet, N., & Chan, Y. E. (2019). Organizational knowledge retention and knowledge loss. *Journal of knowledge management*, *23*(1), 176-199. doi:10.1108/JKM-08-2017-0358
- Massaro, M., Dumay, J., & Garlatti, A. (2015). Public sector knowledge management: a structured literature review. *Journal of knowledge management*, *19*(3), 530-558. doi:10.1108/JKM-11-2014-0466
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2018). *Qualitative data analysis: A methods sourcebook*: Sage publications.
- Newell, S. (2015). Managing knowledge and managing knowledge work: what we know and what the future holds. *Journal of Information Technology*, *30*(1), 1-17.
- Oliveira, M., Curado, C. M. M., Maçada, A. C. G., & Nodari, F. (2015). Using alternative scales to measure knowledge sharing behavior: Are there any differences? *Computers in Human Behavior*, *44*, 132-140. doi:<https://doi.org/10.1016/j.chb.2014.11.042>
- Rode, H. (2016). To share or not to share: the effects of extrinsic and intrinsic motivations on knowledge-sharing in enterprise social media platforms. *Journal of Information Technology*, *31*(2), 152-165.
- Sambamurthy, V., & Subramani, M. (2005). SPECIAL ISSUE ON INFORMATION TECHNOLOGIES AND KNOWLEDGE MANAGEMENT. *MIS Quarterly*, *29*(2), 193-195. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=17147448&loginpage=login.asp&site=ehost-live>
- Scarso, E., Bolisani, E., Chase, R., & Soto-Acosta, P. (2016). Factors affecting the use of wiki to manage knowledge in a small company. *Journal of knowledge management*, *20*(3), 423-443.
- Shih, J. C., & Farn, C. K. (2008, 2008//). *Behavior and Social Influence in Knowledge Sharing: Intention Formation and the Moderating Role of Knowledge Type*. Paper presented at the Practical Aspects of Knowledge Management, Berlin, Heidelberg.
- Siakas, K. V., & Georgiadou, E. (2006). *Knowledge sharing: cultural dynamics*. Paper presented at the Proceedings of 7th European Conference of Knowledge Management.
- Smith, E. A. (2001). The role of tacit and explicit knowledge in the workplace. *Journal of knowledge management*, *5*(4), 311-321.
- Sorakraikitikul, M., & Siengthai, S. (2014). Organizational learning culture and workplace spirituality. *The Learning Organization*, *21*(3), 175-192. doi:10.1108/TLO-08-2011-0046
- Von Krogh, G., Nonaka, I., & Rechsteiner, L. (2012). Leadership in organizational knowledge creation: A review and framework. *Journal of Management Studies*, *49*(1), 240-277.
- Weng, Q., Latif, K., Khan, A. K., Tariq, H., Butt, H. P., Obaid, A., & Sarwar, N. (2020). Loaded with knowledge, yet green with envy: leader-member exchange comparison and coworkers-directed knowledge hiding behavior. *Journal of knowledge management*, *24*(7), 1653-1680. doi:10.1108/JKM-10-2019-0534
- Yang, J. t. (2007). The impact of knowledge sharing on organizational learning and effectiveness. *Journal of knowledge management*, *11*(2), 83-90.
- Yin, R., K. (2003). *Case study research: Design and Methods*. Thousand Oaks, CA: Sage Publications.
- Zykov, S. V., & Singh, A. (2020) Agile Knowledge Management. In: *Vol. 175. Smart Innovation, Systems and Technologies* (pp. 37-53).