




Exploring changes in banking workplaces because of digital technology implementation



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Orientation: The study was conducted in a banking organisation that was undergoing the implementation of digital technologies as part of the organisation's strategy.

Research purpose: The purpose of the study was to determine how work and work processes have changed because of the implementation of digital technologies in the banking workplace. The findings would allow the banking workplace to implement talent management practices that are aligned with the new digital environment.

Motivation for the study: The study was prompted by the implementation of digital technologies that is underway in the banking industry, which is precipitating an evolution of the human capital (HC) function, and talent management processes and practices. To appropriately respond to the Fourth Industrial Revolution (4IR), the new digital workplace of banking requires a novel approach to talent management.

Research approach/design and method: This study employed a qualitative approach, and 18 interviews were conducted with employees from the selected banking organisation.

Main findings: The present study found that the implementation of digital technologies influenced work and work processes, and thus the talent management value chain within the banking sector. The effective implementation of these technologies requires the transformation of talent management processes and practices. Furthermore, it was found that a reimagined HC function delivery is required. The study established that the HC function delivery must incorporate a digitalised HC function to improve the efficiencies of people-related work processes. Human capital must operate as a strategic business partner and must become a change management agent primed by the action of partnering with business leaders to lead digital transformations from a people perspective in the banking workplace.

Practical/managerial implications: Practical recommendations for the HC function, HC professionals, leaders and talent management in the world of banking are provided.

Contribution/ value-add: The study contributes to extant literature by exploring theory on the implementation of 4IR technologies and the resultant implications for talent management practices in the digital workplace.

Keywords: human capital in banking; human capital function; talent management; banking workplace; digital technologies; change management.

Introduction

The Fourth Industrial Revolution (4IR) is represented by technologies that have integrated the digital, physical and biological worlds (Philbeck & Davis, 2019). Technologies such as machine learning, robotic process automation (RPA) and artificial intelligence (AI) are changing the way in which work is structured and productivity is achieved. Such technologies are also forging new industries and experiences in the workplace (Skilton & Hovsepian, 2017). As technology progresses, the power of technological innovation will give rise to more opportunities for upskilling employees to prepare them for the jobs of tomorrow (World Economic Forum, 2020). To appropriately help employees navigate the digital era, organisations will need to assess and perhaps modify their employment policies and working conditions to enable digitalisation (Salento, 2018).

The study was contextualised in the financial services industry in South Africa. The study focussed on digitalisation in the workplace by exploring key aspects of how work and work processes have been affected by the implementation of digital technologies in the banking workplace. The study also explored the integration of 4IR technologies in the workplace, to understand how these

technologies affect the talent-management value chain. The study furthermore examined the shifts required in talent management, leadership, culture, digital skills and technology in the digital era.

A banking workplace is different from other work environments including retail or manufacturing workplaces because of the stringent and complex regulations and compliance requirements that govern the banking industry, the nature of customer interaction which is more personal and sensitive, the range of financial products and services, and a strong focus on risk management (Greuning & Iqbal, 2007; Jeucken & Bouma, 2017; Khrais, 2013). Most importantly, the banking industry has adopted technology and innovation to improve efficiency, security and customer experience (Sardana & Singhania, 2018). The banking industry is in the forefront of digital technology adoption when compared to other industries as they are utilising it to improve security and to improve customer experiences (Lamarre et al., 2023).

Digital technologies in the banking environment include the use of electronic systems, digital devices, software and platforms to deliver financial products and services to customers, facilitate transactions, manage and optimise internal operations and enhance decision making (Deloitte, 2022). Digital technologies encompass a wide range of technologies, including online banking portals, mobile banking apps, electronic payment systems and clearance services, automated teller machines (ATMs) and electronic fund transfers (Sardana & Singhania, 2017). All these technologies are enabled by blockchain technology, AI and data analytics (Gopal et al., 2022).

The implementation of digital technologies in the banking workplace has implications for the talent management value chain. The talent management value chain strategically outlines the interconnected processes associated with attracting, developing and retaining talent within an organisation (Sparrow & Makram, 2015). Talent planning and acquisition, onboarding and integration, performance management, learning and development, career development, and employee engagement and retention are all key components of the talent management value chain (Cappelli, 2008). While these components need to be explored in line with the implementation of digital technologies, the objective of this study in particular was to determine how work and work processes have changed because of the implementation of digital banking technologies in the banking workplace. Exploring such changes in work and work processes can then guide further research on how the talent management value chain is impacted because of digital technology implementation.

Literature review

Digital workplace transformation in banking

The digital era has transformed the business landscape, giving rise to flexibility and transformation of work across the globe (Neufeind et al., 2018). Technologies such as AI and

robotics are transforming the banking landscape by shifting banking processes from traditional to digital banking and, accordingly, changing the workplace and employee roles (Skilton & Hovsepian, 2018). Banks will need to take employees through the digital journey and educate them to enhance the acceptance and integration of technology in the workplace (Diener & Spacek, 2021). The challenge for banks will be to define future skills and behavioural competencies and quantify the implications digital banking technologies have on business process innovation (Brown et al., 2019).

As a result of digital innovation, employees will be required to adapt to new roles in order to remain employable; employees' career experiences will be affected and organisations will be required to help them navigate through constant changes in the workplace (Hirschi, 2018). It will be vital for banks to rethink their current talent management practices as they respond to technology in the workplace. Strategies will be needed to recruit, retain, re-skill employees and redesign talent-management frameworks (Bersin, 2023).

Thus, the human capital (HC) function will be required to partner with business to determine the way in which digital technologies such as RPA affect roles and competencies and evolve jobs. It would be essential for HC to ensure that talent management processes are geared at developing employees' skills and attracting new talent with the required skills (Nesindande, 2020).

Effects of digital transformation on employees and work

The digital transformations underway require changes in work design and the integration of automated activities and employee jobs to transform the organisation through digitisation (Morton et al., 2020). These new ways of work include automation of tasks, new work processes, and integrating human and technology activities to enhance work. Thus, digital technologies require novel thinking about work since these technologies are likely to reinvent work and create new jobs in the workplace (Chaumon, 2021). These new jobs demand creating new capabilities and a new identity of work, adopting novel ways of thinking about work, combining new tasks and old ones (Baptista et al., 2020). Moreover, the new ways of work have shifted the workplace towards remote and flexible work practices. These arrangements affect employee performance, productivity, work-life balance, and the time they spend on commuting to the workplace (Barrero et al., 2021).

Change management

Digital transformations within the workplace will result in changes to its structure, operations, business processes and capabilities (Kraus et al., 2022). Thus, digital changes need the commitment of employees and the organisation, and proper change management processes are required in place to transition from traditional to digital workplaces (Harteis, 2018). Successful change management requires the involvement and support of senior management in the organisation, influencing employees to accept changes

through continuous communication and learning, involving employees in the digitalisation decisions of the workplace and communicating the vision and benefits of change (McKinsey & Company, 2018).

Change should be both top-down and bottom-up (Hartl, 2019). This suggests that senior managers in the workplace must spearhead and effectively communicate the vision for change, while simultaneously ensuring the engagement of all employees to secure their acceptance of workplace changes. Effective change management initiatives encourage the integration of digital technologies in the workplace, equip employees with digital proficiency through training, minimise disruptions to jobs, reduce digital fear and enhance factors that influence employee adoption of technologies (Chaumon, 2021). Therefore, there is a need for change management strategies and models that help employees navigate constant changes in the workplace (Reis & Melão, 2023).

In responding to digital transformational changes in the workplace, Kotter's 8-step change process that should be followed to accelerate change is suggested (Pulido & Taherdoost, 2023). The first and second steps of the process suggest that a sense of urgency regarding the need for change should be established, and that a powerful coalition of individuals that will drive the digital transformation strategy needs to be in place. Thirdly, a strategic vision and initiatives should be formed to make digital change a reality. Next, the change management team must get support through an army of volunteers who could be ambassadors of digital change in the workplace. The change management team must then move to action by removing barriers which include processes, policies and structures that inhibit digital transformation. The sixth step includes creating short-term wins to support benefits of digital transformation. Thereafter, acceleration should be sustained through creating a momentum for the change in the workplace. Finally, it is important to institutionalise digital change as the new norm and culture of how things are done in the workplace. Exploring if these steps are taken by banking workplaces to address digital technology implementation will help identify specific opportunities and challenges.

Culture

Culture is critical in driving the digital agenda and thus, banks will need to ensure that they have the right change cultures for digital success (Diener & Špaček, 2021). For banks to take advantage of digital tools, they will need to ensure that the right organisational culture is created to support technological changes, which in turn means that a clear digital strategy is required (Martínez-Caro et al., 2020). Thus, a fundamental shift in shared beliefs and assumptions is required in the organisation (Ketprapakorn & Kantabutra, 2022), with employees viewing the digital workplace as a catalyst for progress, benefitting both the organisation and the workforce. Instilling new beliefs, shared assumptions and a cohesive digital strategy can enable organisations to usher in a culture that embraces change, leverages digital tools and ultimately creates value and drives economic growth (Harteis, 2018).

The HC departments have a pivotal role in spearheading digital transformation within the banking sector. These departments need to lead by example, leveraging technology to create agile and flexible environments conducive to innovation (Williams, 2019). Furthermore, a positive organisational culture is essential for fostering innovation and enabling organisations to respond swiftly and adeptly to market changes (Naveed et al., 2022). By investing in their cultures and treating them as assets, banks can position themselves for success in the digital era, empowering their employees to lead digital transformations and adapt to the evolving demands of the market. It is, however, not clear whether banks are giving due consideration to culture when undergoing digital transformation.

Leadership

According to Alade and Windapo (2020), 4IR demands leaders to effectively lead the workplace in the digital era. The leaders themselves, their leadership style, their leadership traits and their leadership intelligence all have a positive effect on technological success. Leadership traits such as the ability to embrace digital disruption, agility, and focus on talent development to upskill staff are crucial for ensuring digital success. Leadership plays a vital role in the digital workplace as leaders define the strategy, communicate technology interventions and influence of technology adoption as well as the building of a skilled workforce that will lead the organisation into the future (Baker, 2011). Thus, banks must ensure that the right leadership and organisational culture are in place to support digital transformations in the workplace (Dittes et al., 2019).

Theoretical frameworks for digital-workplace transformation

Theoretical frameworks were used to understand the effects of digital transformation in the workplace, understand employee adoption of technology and organisational readiness in the digital workplace. The theories discussed include the diffusion of innovation theory and a multi-level theoretical framework.

Diffusion of innovation theory

Rogers' (2003) Diffusion of Innovation Theory outlines the roadmap and steps for managing employees when it comes to the diffusion of innovation in the workplace. Deliberate actions must be taken to increase the chances of the positive workplace perception of a new technology that is adopted and implemented. Four main elements must be considered around diffusing technology, namely innovation, communication channels, time, and the social system (Rogers, 2003).

Multi-level theoretical framework

This framework indicates that digital transformation takes place at multiple levels, including, as indicated, those of the individual, the group and the organisation. The multi-level theoretical framework links to the present study with regard to its exploration of digital transformation in the workplace. This

framework was a lens through which the elements described on the three levels, namely technology acceptance and adoption, skills and training, team communication and collaboration leadership, human resources and the organisational culture and climate were explored (Trenerly et al., 2021).

Literature summary and outcomes

In exploring digital transformation within the banking sector, the critical role of organisational culture and HC is delved into, in order to drive successful adaptation to technological advancements. Banks must cultivate a culture that embraces digital initiatives, fosters collaboration and empowers employees to innovate in order to thrive in the digital era. Drawing upon insights from scholars such as Ketprapakorn and Kantabutra (2022) and Diener and Špaček (2021), the research underscores the need for banks to align their digital strategies with organisational culture, ensuring that shared beliefs and assumptions support technological change. Furthermore, the pivotal role of HC departments in leading digital transformation efforts, emphasising the importance of leveraging technology to create agile and flexible environments that facilitate innovation were also explored.

As a result of the comprehensive analysis, several key outcomes emerge. Firstly, organisational culture plays a crucial role in shaping the success of digital transformation initiatives within the banking sector. Banks that foster a culture of openness, collaboration and adaptability are better equipped to navigate the complexities of the digital landscape and drive innovation. Secondly, the significance of HC in driving digital transformation is highlighted, emphasising the need for HC departments to play a proactive role in leading organisational change. By investing in employee training, talent development and creating an environment conducive to technological innovation, banks can position themselves for success in an increasingly digital world. Thus, literature suggests that there are several aspects that must be given attention to, to ensure the effective implementation of digital strategies.

Research design

Research approach

The study followed a qualitative approach to seek a comprehensive understanding of the social phenomenon studied and reasons for the concomitant human behaviour (Kothari, 2004). The qualitative process seeks an understanding of people's experiences in their natural setting (Bailey, 2018). Furthermore, this process dealt with the intricacies of participants' thoughts and behaviours (Roller & Lavrakas, 2015). The qualitative techniques employed offered lenses for focussing on knowledge in terms of people's experiences (Bhangu et al., 2023).

Research strategy

The present study utilised a case study strategy to explore the social phenomena at hand (Jahja et al., 2021). A case study focusses on a single context with the aim of understanding the imminent topic in similar multiple contexts. Case studies are

ideal for exploration (Gerring, 2004). According to Hammond and Wellington (2013), a case study binds the research in a certain context and appreciates in-depth engagements in the social context. Additionally, a case study allows researchers to gain a meaningful understanding of the real-life social context and enables him or her to answer 'what' and 'how' questions related to the phenomenon under examination (Kohlbacher, 2006).

Research method

The study followed a qualitative research methodology to develop the researchers' assumptions regarding the social phenomenon examined and the creation of knowledge about it (Bailey, 2018). The qualitative techniques employed allowed the researchers to examine participants' lived experiences, gain a rich understanding of the way in which they perceived their reality, while ensuring the discovery of knowledge that did not already exist (Bhangu et al., 2023).

The research paradigm adopted in the present study was constructivism, and social constructivism in particular (Goldkuhl, 2012). In this approach, multiple realities exist and knowledge is constructed in terms of individuals' experiences in relation to their social world (Bibi et al., 2022). The researchers studied the phenomenon in its natural setting and interpreted the meanings that participants gave to the social phenomenon studied (Brinkmann, 2018). As constructivists, the researchers played the role of passionate participants who are able to understand the setting of the social context authentically (Sparkes & Smith, 2014).

Research setting

The banking organisation chosen for the study was on a digital journey during the period of this study. It was transforming its operations by moving to digital channels to service clients, multiskilling its employees and transforming its HC practices, with the intention of being a digital bank of the future. Thus, the choice of institution suited a study of the phenomenon at hand. The situation made the findings of the study more insightful and beneficial for the greater South African banking sector, as the sector overall is transitioning to greater levels of digitalisation.

Entrée and establishing researcher roles

The present researchers were aware of personal biases while conducting the research. One of the three researchers, who also conducted all the interviews, played an insider's role as an employee of the selected bank. While the advantage of this role was that the researcher was able to gain insights regarding the study to a greater degree, the disadvantage was that the researcher had to constantly check own biases to ensure the findings and the subsequent analysis would remain objective (Sparkes & Smith, 2014). Moreover, the researcher had to manage dynamics of power represented by the position of the researcher in the bank. This was managed

by ensuring that none of the participants reported to the researcher and no dynamics of power existed over the participants in the study (Marczyk et al., 2005).

Research participants and sampling methods

Purposeful sampling was used, and participants were selected based on the different roles they held in the bank. Purposive sampling allows the researchers to choose the sample based on features that are relevant to the study (Silverman, 2014). According to Kothari (2004), it involves the deliberate selection of particular units of the population so as to find a sample that represents the population. Furthermore, purposive sampling is ideal when certain characteristics must be studied intensely. In-depth semi-structured interviews were conducted with 18 participants, including 3 heads in business departments, 5 business managers, and 10 HC professionals. Purposive sampling was deliberately used with specific objectives in mind (Ngulube, 2020).

Data collection methods

Qualitative research approaches facilitate numerous data collection methods, centred on among others, focus groups; observations; surveys and interviews. To appropriately achieve the research objective, an interview approach was selected for data collection (Marczyk et al., 2005). In-depth semi-structured interviews were utilised to this end. Data saturation was carefully considered during data collection (Ando et al., 2014). The selected data collection method was used to bring the researchers closer to the phenomenon, to understand the beliefs held by participants, gain direct access to their thoughts, and to examine what they did in reality (Lieber, 2009; Silverman, 2014).

Strategies employed to ensure data quality and integrity

Necessary steps were taken to ensure credibility, analysability and transparency of findings. The total-quality framework was applied in the study in accordance with the work of Roller and Lavrakas (2015). Firstly, credibility was achieved by ensuring accuracy in data gathering. An interview guide was utilised so that the same questions were asked to all participants. Secondly, analysability of data was ensured by being accurate in the processing and verification of data. All interviews were recorded and transcribed, as indicated. Thirdly, transparency was ensured by ensuring that the study can be fully evaluated and that all the findings are clearly reported.

Data analysis

In the data analysis stage of the study, the researchers undertook the process of immersing in the data collected by transcribing the interviews that had been conducted and managing the data (Sparkes & Smith, 2014). Each interview was transcribed manually by listening to each recording, transcribing that which each participant said during the interview process verbatim, making summaries of the data, and preparing the data by plotting information in an

Excel worksheet for the coding process to bring about the trustworthiness of the findings (Hammond & Wellington, 2013). The researchers used thematic analysis to analyse the data obtained from the in-depth semi-structured interviews (Lieber, 2009). The researchers undertook an inductive approach to generate codes and themes for the purpose of analysing the data (Hammond & Wellington, 2013).

Ethical considerations

Ethical considerations were important in the present study, as the primary researcher was engaging with participants and handling confidential information (Brinkmann, 2018). Ethical approval to conduct this study was obtained from the Research Ethics Committee of the Department of Industrial Psychology and People Management (IPPM) at the University of Johannesburg (ethical clearance reference number: IPPM-2022-694[D]). Principles of informed consent, confidentiality and academic integrity were strictly adhered to. Participants were treated ethically by building a trusting relationship with them from the onset (Roller & Lavrakas, 2015). The researchers disclosed the purpose of the study to participants and ensured that they had volunteered to be part of the study (Flick, 2020). Participants were required to sign consent forms to be part of the research. They were made aware that their views would be kept confidential and that the sessions would be recorded for transcribing purposes. The privacy and anonymity of participants were upheld throughout the study. The relevant information was reported honestly and maintained safely in electronic mediums that are password-protected (Creswell, 2014). The researcher made participants aware of recording and asked their permission for this, while making sure of the safety of the recordings by using encrypted passwords for online information. The validity of the research findings was ensured by debriefing participants after they had participated (Ngulube, 2020).

Results

The objective of the study was to determine how work and work processes have changed because of digital technologies being implemented in the banking workplace. The findings of the present study are discussed under four main themes and their respective sub-themes. The main themes include new ways of work, change management, the role of leadership, and culture. The themes and sub-themes are presented in Table 1.

Themes and sub-themes

Theme 1: New ways of work

Participants agreed that digital technologies have affected the workplace of banking in various ways. These technologies brought about new aspects to the way in which employees do their jobs. Digital technologies have automated certain processes and affected the interaction with the customer. When discussing new ways of work, one must consider the automation of processes, focus on customer, and emphasise on analysis of work and flexible work.

TABLE 1: Themes and sub-themes obtained.

| Themes | Sub-themes |
|---------------------------|--|
| 1. New ways of work | 1.1. Automation of processes 1.2. Focus on customer 1.3. Focus on analysis of work 1.4. Flexible work |
| 2. Change management | 2.1. Communication and awareness 2.2. Mindset change 2.3. Dedicated change management team |
| 3. Leadership roles | 3.1. Communicating the reasons 3.2. Role model 3.3. Flexibility |
| 4. Organisational culture | 4.1. Innovation 4.2. Flexibility 4.3. Everyday practices |

Participants agreed that they had observed shifts regarding processes. Processes have changed to align to the digital technologies implemented in the bank. Some participants noted that the new processes created efficiencies for customers in particular, since applying for bank products took less time than before:

‘Automation has forced us to go back and relook our current processes, relook how we were deploying system upgrades and developing software. We now have an additional need to meet of ensuring process and technology enhancements are a must.’ (Participant 1, business head, 6 years of experience in the bank)

Participants agreed that through technology, the interaction with the customer had improved, and they had shifted towards the use of digital platforms for their banking. Employees had rich conversations with clients convincing them to use digital platforms for their banking:

‘Digital initiatives provide a seamless experience for the customer as well as the people and processes. The bank’s digital platform has brought in a new perspective and understanding.’ (Participant 4, business manager, 8 years of experience in the bank)

Participants indicated that technology had shifted the way in which employees did their work. Particularly, it had shifted to a situation in which employees were performing value adding work to a greater degree, including the analysis of information to drive data decisions:

‘Technology has shifted employee roles, [as] people now spend more time analysing the data rather than manually preparing the data.’ (Participant 2, business manager, 4 years of experience in the bank)

Several participants outlined that the bank adopted flexible work arrangements in response to the coronavirus disease 2019 (COVID-19) pandemic and the advance of general digital technologies. Some participants indicated that it was important to equip managers with the skills required to lead teams that would work virtually, while not being physically present at work:

‘We adopted a hybrid flexible model and no longer had people physically present. We had to navigate how leaders use technology to then manage employees and be productive.’ (Participant 5, HC professional, 7 years of experience in the bank)

Theme 2: Change management

Change management emerged as an important theme in the analysis. The change management process undertaken by the bank for implementing digital technologies engendered three sub-themes including communication and awareness, mindset change, and dedicated change management team.

Participants highlighted that the bank followed specific steps to ensure that employees were communicated about the change, made aware of what was coming, and were educated on what change meant for them. More rollout and communication plans were required to ensure that all stakeholders were included in the communications. Moreover, managers were required to play an active role during change by supporting employees.

Employees who were willing to change their mindset regarding work and work processes were identified by several participants to be successful. The role of leadership role around influencing employees to alter their mindset towards change and leave the old ways behind was also emphasised by several participants. This was in fact viewed as a key component of the process:

‘Change management was introduced to get buy-in and awareness from employees. The employees that resisted change were carried along until they changed their minds.’ (Participant 2, business manager, 4 years of experience in the bank)

Additionally, participants noted that proper change management was required to ensure that all employees were involved in change. A dedicated change management team was imperative for the successful implementation of change across the bank:

‘You need trained change personnel to come in and understand the environment so that they can help both you and the employees. It’s important for managers and banks to make sure that they employ people with the right skills to implement or to take the organisation through change management.’ (Participant 1, business head, 6 years of experience in the bank)

Theme 3: Leadership roles

Participants noted that the leadership role was a key aspect of the success of digital transformation and change. Participants indicated that the leader’s role included various elements including articulating the reasons for digital transformation, being exemplary by walking the talk, leading through change, being flexible, trusting employees, showing employees the bigger picture and vision for change, engaging with them, and constantly communicating with them:

‘Leaders need to be flexible enough to be able to adapt to change, then bring people along through the change as well. As a leader, you must provide the necessary support to the team and equip them with the right skills to be able to manage the new ways of doing things.’ (Participant 4, business manager, 8 years of experience in the bank)

Theme 4: Organisational culture

The bank requires a culture of innovation, forward thinking, thinking out of the box and flexibility. This would be a culture in which employees are allowed to experiment and make mistakes without fearing consequences. Participants agreed that culture entails the organisation's everyday practices and how people behave, rather than that which is put on paper:

'Our culture has to definitely link in with our strategy, we must be forward thinking, have an entrepreneurial mindset and be innovative.' (Participant 7, HC professional, less than 2 years of experience in the bank)

Discussion

Summary of findings

Findings suggest that the digital technologies introduced by the bank have reshaped work and work processes. These technologies, exhibited through digital platforms, have brought about transformative changes across the institution, impacting both internal operations and interactions with customers. Specifically, participants noted that the adoption of new technology has facilitated real-time customer interactions, necessitating the development of novel approaches to tasks. Moreover, the utilisation of technology has enabled the enhancement of customer experiences, both internally and externally.

In response to these changes, participants stressed the importance of prioritising customer focus and conducting thorough analyses of work processes. Employees have had to adapt their communication styles when engaging with clients, educating them about digital platforms and applications. Additionally, the automation of processes has resulted in increased efficiency and reduced transaction times, benefitting both customers and employees alike. Furthermore, participants highlighted the evolving nature of employee roles, with a greater emphasis on value-adding tasks and a reduction in manual work. While acknowledging the transformative impact of technology, participants underscored the continued necessity of human input for certain tasks, emphasising the need for skill development to align with digital advancements.

Regarding work arrangements, participants noted the implementation of flexible policies in response to the pandemic and technological advancements. There was consensus on the importance of equipping managers with the skills needed to lead virtual teams effectively. Initiatives aimed at enhancing managerial capabilities for the 4IR were highlighted, with both formal and informal training approaches being emphasised. However, concerns were raised regarding the health implications of hybrid work models, necessitating closer examination and resolution. Additionally, participants recognised the agile nature of new work methodologies, designed to facilitate faster project delivery within the bank.

Moreover, participants observed a significant transformation in HC processes following the integration of technological solutions. Various HC functions underwent digital transformation, with talent management procedures shifting to online platforms and processes being automated for increased efficiency. The accelerated pace of digitisation, propelled by the COVID-19 pandemic, was evident in the transition to digital learning interventions.

Furthermore, participants identified talent management challenges within the bank, emphasising the need for a fresh approach. They advocated for a shift towards creativity and innovation, with a focus on employee-centric processes and practices. Additionally, the importance of aligning HC policies with the bank's digital strategy was emphasised to address the evolving needs of employees and the organisation. Furthermore, participants stressed the importance of developing a strategic partnership between the HC function and the business, ensuring alignment with organisational goals and fostering a proactive and digitally savvy HC community.

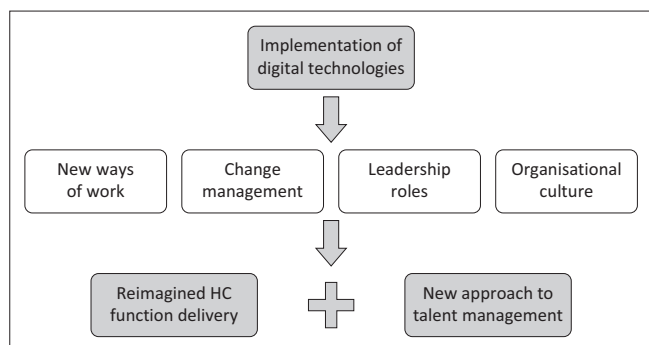
The findings highlight the imperative for organisations to adapt to the changing digital landscape, placing a greater emphasis on customer focus, skill development, flexible work arrangements and strategic partnership between HC and the business. This holistic approach is essential for driving innovation, enhancing employee experiences and ensuring organisational success in the digital era.

Interpretation of findings

The findings of the study are interpreted through an integrated framework incorporating the findings of this study as indicated in Figure 1. The integrated framework outlines the implications of digital technologies in the workplace of banking and considers the aspects of new ways of work, change management, leadership roles and organisational culture. Figure 1 also indicates that these implications of digital technologies in the banking workplace led to the need for a reimagined HC function delivery and a new approach to talent management.

Implementation of digital technologies

Findings highlight the transformative impact of digital technologies on the banking sector, influencing various aspects of operations and talent management processes. Participants noted that the adoption of digital platforms and technologies facilitated real-time interactions with customers, leading to enhanced customer experiences both internally and externally. This evolution aligns with the concept of the 4IR, which emphasises the disruptive potential of technology in reshaping traditional business models and processes (Schwab, 2015). Indeed, advancements in digital technologies have enabled banks to offer digitised solutions and transform their products and services, necessitating corresponding shifts in talent management approaches.



HC, Human capital.

FIGURE 1: An illustration of a framework linking talent management and human capital function delivery to the implementation of digital technologies in the banking workplace.

Furthermore, the integration of digital technologies has prompted banks to restructure their operations and optimise work processes (Machkour & Abriane, 2020; Umans et al., 2018). Participants observed a shift towards online systems for talent management processes, accelerated by the COVID-19 pandemic, which necessitated the adoption of hybrid learning approaches (Harteis, 2018). This underscores the need for organisations to adapt to the evolving digital landscape, investing in employee development, and reshaping talent management strategies (Deloitte Review, 2020). Overall, the findings suggest that the banking industry must embrace digital transformation, fostering a culture of innovation and equipping employees with the necessary skills to navigate the challenges and opportunities presented by 4IR technologies (Claus, 2019; Johnston, 2018).

New ways of work

The study participants highlighted significant shifts in employee roles, work processes and work environments because of the implementation of digital technologies within the banking sector. Automation of certain tasks liberated employees to focus on value-adding activities, necessitating changes in work redesign and the integration of automated processes into job roles (Baptista et al., 2020). Moreover, employees were tasked with educating customers on digital applications and adapting to new work practices facilitated by various digital tools (Hagel & Wooll, 2019). These changes underscore the need for organisations to redesign work processes and adopt agile methodologies to deliver timely results in the digital era (Da Silva et al., 2022).

While technology has automated certain tasks, participants and scholars agree that complete employee displacement by technology is unlikely. However, there is a consensus that automation will transform job roles, demanding highly skilled employees equipped with digital competencies (Schwab, 2015). This transformation presents both challenges and opportunities, with technology potentially displacing employees lacking digital skills while creating new opportunities for those proficient in creativity, analytics and decision-making (Harteis, 2018). Efficiencies resulting from process automation have improved customer experiences, with banking operations transitioning to more streamlined and efficient processes.

Moreover, the implementation of digital platforms has enabled real-time engagement with customers, further enhancing the overall customer experience (Schwertner, 2017). However, integrating digital tools into work processes is a technical endeavour that requires careful consideration to ensure success (Baptista et al., 2020; Maran et al., 2022). It is crucial for organisations to attract employees with high digital self-efficacy, openness to change, and agility to drive digital initiatives effectively (Maran et al., 2022). While digital technologies offer transformative benefits, their integration into workplace processes must be approached with caution to maximise their potential in the banking environment.

Change management

The study findings underscore the comprehensive nature of the change management process adopted by the bank during the implementation of digital technologies. Participants highlighted the importance of constant communication, awareness and education regarding the impending changes, utilising various communication channels and adopting a two-way approach through avenues such as focus groups to facilitate employee engagement and feedback (Dearing & Cox, 2018; Rogers, 2003; Sahin, 2006). This approach aligns with Hartl's (2019) recommendation for a dual top-down and bottom-up change management strategy, emphasising the pivotal role of both senior management in driving change and employee involvement in ensuring its successful adoption.

Moreover, the testing phases of digital initiatives involved employee participation to pilot the system, enabling the identification and resolution of potential issues before full implementation. Participants emphasised the importance of inclusivity throughout the change journey, employing the ADKAR (awareness, desire, knowledge, ability and reinforcement) change management model to ensure phased implementation and garner acceptance from all employees (Reis & Melão, 2023). The necessity of a mindset shift among employees and leaders regarding digital transformation was also underscored, with leaders playing a crucial role in guiding employees through the change process and fostering trust (McKinsey & Company, 2018). Clear communication of the benefits and impacts of technology was identified as crucial in alleviating uncertainty among employees (Dearing & Cox, 2018; Rogers, 2003; Sahin, 2006).

Additionally, participants highlighted the effectiveness of having a dedicated change management team comprising trained personnel who actively engaged in the change process from its inception. This team collaborated with business leaders to lead the change efforts, employing phased approaches, and leveraging strategies such as focus groups and leadership engagement sessions (Pulido & Taherdoost, 2023). Literature concurs with these findings, advocating for robust change management initiatives to facilitate technology adoption, reduce resistance and enhance employee readiness for digital transformation (Chaumon, 2021). Overall, the study aligns with existing literature on the significance of effective change management strategies, emphasising the

critical role of leadership and dedicated change management teams in facilitating successful digital transitions in the workplace.

Leadership roles

The study findings underscored the pivotal role of leadership in the effective integration of digital technologies within the bank. Leaders were perceived as instrumental in formulating and communicating the digital strategy, ensuring alignment with organisational objectives, and fostering a collaborative and agile environment conducive to innovation (Durão et al., 2019). Mugge et al. (2020) emphasise the importance of leaders aligning resources to the digital strategy and cultivating an open communication culture throughout the organisation. Participants emphasised the role of leaders in nurturing a culture of innovation, encouraging experimentation, and soliciting input from all employees, thereby fostering an environment conducive to digital transformation.

Moreover, findings highlighted the necessity for leaders to serve as change agents, guiding teams through the change journey and equipping them with the requisite skills to adapt to evolving work practices (Alade & Windapo, 2020). Leadership traits such as embracing digital disruption, strategic foresight and data-driven decision-making were also identified as critical in navigating the digital landscape (Schwertner, 2017). Grover et al. (2022) stress the significance of leaders leveraging digital technologies to engage with employees, drive digital adoption, and foster a culture of continuous learning and adaptation.

The literature concurs with participants' perspectives, affirming the pivotal roles played by leadership in driving digital transformation within organisations. Leaders are tasked with articulating clear visions and strategies, facilitating change and leveraging technology to enhance communication and engagement. As organisations navigate the complexities of the digital era, effective leadership emerges as a cornerstone for success, with leaders serving as catalysts for organisational evolution and digital innovation.

Organisational culture

Dittes et al. (2019) suggest that to successfully create a digital workplace, the culture of the bank is required to shift to a more open and collaborative one. The traditional culture of command-and-control no longer has a place in the digital workplace, and employees are empowered to engage in open communication across teams. Leadership practices are required to be inclusive and flexible, and drive new digital cultures for success (Boskovic et al., 2019). Participants emphasised the role of leaders as custodians of culture in shaping the organisation's ethos and fostering an environment conducive to digital transformation. Ketprapakorn and Kantabutra (2022) emphasise the importance of cultivating a culture characterised by shared values and beliefs that facilitate organisational agility and innovation. Similarly, Naveed et al. (2022) highlight the positive impact of

organisational culture on effectiveness, stressing the need for a culture that embraces change and encourages innovation to thrive in the digital era.

Additionally, participants emphasised the importance of a culture that encourages experimentation and innovation, devoid of fear of failure, and empowers employees to contribute ideas at all levels of the organisation. Dittes et al. (2019) advocate for a shift towards a more open and collaborative culture to foster digital workplace success, emphasising the role of leaders in driving cultural transformation. Selimović et al. (2021) further highlight the significant impact of managerial leadership and organisational culture on organisational outcomes in the digital era.

Additionally, findings underscored the significance of daily organisational practices in shaping culture and influencing employee behaviour. The alignment between literature and participant views emphasises the critical role of a flexible, collaborative and innovative culture in driving digital transformation. Leaders must collaborate with employees, trust their capabilities, and adopt new behaviours conducive to innovation and customer-centricity. However, the findings also suggest the need for organisations to address undocumented daily practices that shape culture, highlighting the importance of investing in strategies to transform organisational culture at its core.

Practical implications

The findings of the present study suggest that digital technologies implemented in the banking workplace have several implications for work and work processes in banking. These technologies have caused transformation in the workplace (Morton et al., 2020). Such developments may need changes in the way in which the workplace does things in terms of enhancing jobs, redesigning structures and align with the digital revolution underway in banking.

New ways of doing things in the banking workplace

The banking workplace must understand the aspects affected by technology including automation of work, automation of processes and evolution of technology. These aspects have clearly given rise to new ways of work. Should the present findings be applied, the automation of work may require changes in work design by integrating automated activities to employee jobs.

The new ways of work may require the creation of new jobs in the workplace of banking (Chaumon, 2021) and the adoption of digital methodologies. The digital workplace of banking is complex and requires digital tools, platforms, digital capabilities, constant innovation, the empowerment of employees, the habit of operating with flexibility, and retention and engagement of talent in the workplace (Shivakumar, 2020). Banks may also need to restructure operations to optimise work processes and adapt.

Change management

Findings suggest that organisations undergoing digital transformations should prioritise effective communication throughout the process, ensuring constant awareness and education about impending changes. The involvement of all the employees is crucial to successful digital implementation. Additionally, leaders play a critical role in guiding employees through the change management process, by fostering trust and facilitating mindset shifts.

Enhanced leadership and culture

The findings of the study advocate for a transformation in leadership and culture for the digital workplace to succeed in the digital era. The participants found leadership to be central to transformational change in the workplace of banking. Since leaders influence culture, they are viewed to be the custodians of culture and are accountable for driving the required digital culture in banking. Thus, leaders should craft and communicate a clear digital strategy aligned with organisational objectives. Leaders must also foster innovation, encourage experimentation and solicit input from all stakeholders. Serving as change agents will also help leaders to guide teams through the journey, equipping them with the skills required to adapt to evolving work practices.

An open, collaborative and innovative culture is required for organisations to thrive in the digital era. Thus, leadership practices should be inclusive, flexible and supportive of new digital cultures, taking into account daily practices that shape culture, ensuring alignment with aspirational culture values.

Reimagined HC function delivery

The banking workplace must integrate technological solutions to transform HC functions, including talent management processes and learning interventions, onto online platforms. Additionally, automation of HC processes can enhance efficiencies within the HC function, allowing for streamlined operations and reduced manual workload.

Organisations would need to adopt a fresh approach to talent management, focussing on creativity, innovation and employee-centric practices. Strategies will be required to recruit, retain, re-skill their employees and redesign talent-management frameworks (Bersin, 2023).

Additionally, HC policies and practices must be aligned with the overall organisational strategy. Strategic partnerships between the HC function and the business must be fostered, also developing a proactive and digitally savvy HC community.

Continuous learning and development of digital skills

With the integration of digital technologies, employee development must be invested in, reshaping talent management strategies to align with the evolving landscape. The present findings prompt that the workplace of banking may need to invest in continuous learning and development

of digital skills. Ongoing learning efforts may need to be driven by employees and the workplace through technology. Employees are required to stay relevant and navigate the new digital context (Vallo Hult & Byström, 2021).

Limitations

The study had some limitations. For instance, the study's embeddedness within the banking industry automatically excluded other industries. Studies that take a broader industry view can be generalised to multiple environments to a greater degree. The methodology that was utilised to explore the topic was qualitative and the collection of data was limited to interviews. The inclusion of other methodologies such as quantitative and mixed methods as well as observations and focus groups within the broader qualitative approach may have steered the findings of the study in a different direction.

Recommendations

Studies on the implications of digital technologies on the talent management value chain within banking are emergent. Similar studies in other fields and sectors may help identify opportunities and challenges specific to those areas. Certain aspects in the field of HC and technology call upon further examination. Future research could take a different methodological approach and investigate digital technologies and their implications on talent management by using a mixed method approach.

Conclusion

The objective of the present study was to explore how work and work processes were affected by the implementation of digital technologies in the banking workplace. The findings of the study will enable the workplace of banking to appropriately respond and implement talent management practices that are aligned to the new digital workplace as affected by digitalisation. Digital technologies have shifted the way in which work is done by introducing new ways of work through the automation of processes, focus on the customer, focus on the analysis of work and flexible work. Moreover, the findings revealed that, for digital technologies to be implemented effectively, change management was important to influence employees to adapt to digital transformations underway. Furthermore, leadership was critical for driving change and digital transformation in the workplace and, lastly, culture was identified as important for embedding digital transformations. Consideration of these factors suggests a reimagined HC function delivery and a new approach to talent management in the banking workplace. Thus, to appropriately respond to the 4IR, the talent management value chain must transform to enable the new ways of work underway in the workplace of banking.

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Authors' contributions

The research article emanates from the doctoral study of A.R.-M.N. who pioneered the study, while M.D.S and R.M.J. served as the main and co-supervisor respectively, guiding the overall research and providing specific insights to the research methodological structuring while also reviewing and editing the study throughout its execution.

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Data availability

The data that support the findings of this study are available on request from the corresponding author, R.M.J.

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