

Digital Organisational Culture: Capturing Local Banking in Digital Transformation

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ABSTRACT

Transformasi digital dalam perbankan adalah suatu keharusan dan terkait dengan budaya dalam suatu organisasi untuk melayani pelanggan menggunakan teknologi digital untuk mengubah proses internal bisnis. Oleh karena itu, tujuan dari penelitian ini adalah untuk menganalisis proses transformasi digital dan peran budaya organisasi digital dalam transformasi digital di perbankan lokal. Sampel penelitian ini adalah karyawan yang bekerja di Bank Bengkulu (Bank of Bengkulu) yang merupakan bank milik pemerintah daerah. Penelitian dilakukan dengan pendekatan kualitatif dengan menggunakan pertanyaan terbuka dengan metode kuesioner esurvey. Data yang dikumpulkan dianalisis dengan menggunakan teknik analisis tematik. Temuan penelitian menunjukkan bahwa tema mikro dari transformasi digital, seperti outside-in, kolaborasi lintas kerja, kreativitas kerja, dan kepemimpinan agile, masih belum berkembang secara signifikan di Bank Bengkulu. Selain itu, perilaku budaya, kemampuan digitalisasi, keterampilan digitalisasi, infrastruktur TI, dan proses bisnis juga masih lemah. Beberapa program teknologi masih dalam tahap pengembangan awal dan kemajuannya lambat. Dalam kesimpulannya, penelitian ini menggambarkan bahwa transformasi digital dan budaya organisasi digital masih belum berkembang secara signifikan di Bank Bengkulu. Kendala-kendala seperti keterampilan sumber daya manusia yang tidak memadai, infrastruktur TI yang lemah, dan kurangnya responsivitas dalam menghadapi perubahan perlu diperhatikan. Implikasi dari hasil penelitian ini adalah pentingnya perhatian terhadap pengembangan keterampilan digital, perbaikan infrastruktur TI, dan perubahan budaya organisasi untuk mencapai transformasi digital yang sukses di Bank Bengkulu.

Digital transformation in banking is a must and related to the culture in an organization to serve customers using digital technology to transform the internal processes of the business. Therefore, the purpose of this study is to analyze the process of digital transformation and the role of digital organizational culture in digital transformation in local banking. The sample of this study is employees who work at Bank Bengkulu (Bank of Bengkulu) which is a local government-owned bank. The research was conducted with a qualitative approach using open-ended questions with the e-survey questionnaire method. The collected data are analyzed using thematic analysis techniques. Research findings show that micro themes of digital transformation, such as outside-in, cross-work collaboration, work creativity, and agile leadership, are still not significantly developed at Bank Bengkulu. In addition, cultural behavior, digitalization capabilities, digitization skills, IT infrastructure, and business processes are also still weak. Some technology programs are still in the early stages of development and progress is slow. In conclusion, this study illustrates that digital transformation and digital organizational culture are still not significantly developed at Bank Bengkulu. Constraints such as inadequate human resource skills, weak IT infrastructure, and lack of responsiveness in the face of change need to be considered. The implication of the results of this study is the importance of attention to digital skills development, IT infrastructure improvement, and organizational culture change to achieve successful digital transformation at Bank Bengkulu.

1. INTRODUCTION

For any business entities, digital transformation means the modernization of its organizational culture and the integration of digital technology and communications. This allows companies to expand opportunities and create an ecosystem in the development of their organizations (Clarysse et al., 2014; Gawer & Cusumano, 2014; Spigel, 2017). Previous study found that there is 45-55% positive growth and development for organizations when it uses digital transformation and increasing company productivity (Kopalle et al., 2020; Volberda et al., 2021). Another example is the SABIC (Saudi Basic Industries Corporation) company which has developed digital culture and digital marketing in multinational chemical manufacturing in the last 10 years. The company's investment increased from US\$20 billion in 2007 to US\$70 billion in 2020. From a financial perspective, profits increased by 6% between 2010-2019 and ranked fourth in the world.

Apart from the importance of digital transformation in the banking industry, a new challenge for the banking industry today is the emergence of fintech companies, big techs, multinationals and other sectors that start to provide financial services, tightening competition in the digital financial industry. These companies have a more agile character and provide more flexibility and alternatives to customers. Beside the emergence of company scale, the COVID-19 pandemic which began at the end of 2019, also changed the behaviour of consumers and service providers in banking transactions from conventional to digital (Amankwah-Amoah et al., 2021; Kudyba, 2020).

The roadmap for banking development in Indonesia was immediately released by the Financial Services Authority (OJK) in 2020-2021. The Financial Services Authority released initially for the problems arising from the Covid-19 pandemic banking rules, then expanded to become economic and social problems rules. As a result, many digital businesses have emerged on e-market platforms. Along with the rapid development of the digital economy, banks need to accelerate the digitalization of their products and services to meet customers' expectations (Kaur et al., 2021; Naimi-Sadigh et al., 2021). Digitalization of banking services is not an option, but has become an inevitability. The future development of digital banking will not only focus on collecting and distributing funds but also includes encouraging technological innovation to support digitalization and open banking. This change creates banking into a digital organizational culture. Digital transformation is now the center of attention for previous researchers. However, previous research focuses on banking on a national scale and the financial sector, such as financial technology (fintech). There is still not much research conducted on banking in the regions, especially in Bengkulu.

Digital transformation at Bank Bengkulu is considered slow to become a digital organizational culture when is compared to other regional banks. For example, BPD DIY (Regional Development Bank Yogyakarta Special Region) or Bank Sumut (North Sumatra Regional Development Bank) have implemented digital transformation by optimizing the mobile banking and QRIS platforms the https://www.banksumut.co.id/umum/peresmian-pasar-(https://www.bpddiy.co.id/berita442.html; digitalisasi-berbasis-qris-di-pasar-pangururan/). At Bank Bengkulu, mobile banking services still use the Short Message Service (SMS) system. SMS services, apart from being hampered by slow networks, only operate during working hours and depend on employee busyness. Urgent transactions cannot be carried out outside of Bank Bengkulu's operational hours. Then, the company has not used a corporate email (corporate electronic mail) for the principle of effectiveness and efficiency purposes. The company still relies a conventional system, like memos or internal circulars using paper. Corporate email functions, for instance is useful to prevent leaks of bank confidentiality data, simplifies the flow of information distribution, and is more environmentally friendly than using letter paper. Bank Bengkulu is not yet independent in the Quick Response Code Indonesian Standard (QRIS) and is still joining with Telkomsel in the T-money product where Telkomsel is the digital wallet provider for many companies and is the QRIS payment gateway provider. Until the paper is written, Bank Bengkulu has not had a call centre-based customer service where the call centre functions can serve customers 24 hours non-stop via telephone with the general terminology '24/7 service'.

It will change the way companies create and sell products and services and interact with customers. Many companies are looking for ways to collect, analyze, and process digital data generated by the use of their own and other organizations' products and services (Cascio & Montealegre, 2016; Mariani & Wamba, 2020). Digital transformation refers to the process by which organizations continuously engage in digital innovation to develop or improve products, services, and business models (Fernandez-Vidal et al., 2022; Nadkarni & Prügl, 2021; Saarikko et al., 2020). Companies need to change their organizational structures to support new ways of creating value and leveraging digital transformation. In addition to products, services, and organizational structures, new types of value creation enabled by digital technologies may require organizations to question and change their purpose, culture, and identity (Furr et al., 2022; Gobble, 2018; Schneider & Kokshagina, 2021). Digital transformation is an investment in the development of new

technologies and business models to add value to companies and consumers in an evolving digital economy (Cennamo et al., 2020; Van Veldhoven & Vanthienen, 2022). To achieve fundamental business changes, companies formulate digital transformation strategies, develop digital plans, and adopt information technology as a lifestyle (Tekic & Koroteev, 2019; Yeow et al., 2018). Therefore, digital transformation also involves the development of culture and the creation of business models. However, corporate digital transformation as a business model is still controversial because digital transformation affects other organizational areas such as culture, organizational structure, workplace, and even ethics. Previous research stated that digital transformation is important and effective in reducing distribution and backoffice costs in the banking sector (Kitsios et al., 2021; Soto-Acosta, 2020). Describe digital transformation in two main phases: (1) Industrial Age (previous) and internal (first vision of the company), forecasting and management (task-oriented, left-brain focus, tasks). and managerial leadership (hierarchical control, offering broad, linear paths); (2) the digital (future) or inside-out era (customer perspective first), collaboration and creativity (problem-based work), and agile leadership. In these turbulent times, customers play an important role in creating organizations that can adapt to change. Corporate organizational culture refers to assumptions that are invisible to the group that determine how to view, think, and react to environmental changes (Galpin et al., 2015; Piening et al., 2020). Similar research describe the relationship between organizational culture and digital innovation in four dimensions: culture, technology, management, and knowledge (Lam et al., 2021; Leal-Rodríguez et al., 2023). According to previous research, digital culture is a collection of values, beliefs, ideas, and symbols that become the way companies operate digital businesses through collaboration, invisibility, creativity, and innovation through digital strategy (Martínez-Caro et al., 2020; Rahmadyah & Aslami, 2022).

The purpose of this study is to analyze and gain a deep understanding of how digital organizational culture develops at Bank Bengkulu, a local bank in Indonesia. In this context, this study will explore how Bank Bengkulu adopts and integrates digital technology in its organizational culture, as well as identify factors that influence digital transformation in this bank. By conducting this research, it is hoped that valuable findings can be found about how digital organizational culture develops at Bank Bengkulu and how it affects digital transformation at this bank. The results of this study are expected to provide useful insights and recommendations for Bank Bengkulu and other local banks in facing digital transformation challenges.

2. METHODS

The study used a qualitative approach and employed a case study that was designed for Bank Bengkulu (Bank of Bengkulu). The banking company belongs to the local government, the Province of Bengkulu - Indonesia, as a regional-owned enterprise (Badan Usaha Milik Daerah abbreviated as BUMD). It used an open-ended question technique as part of a written interview so that respondents can feel free from pressure, and to get an independent opinion (Braun et al., 2022; Creswell & Creswell, 2017). This is because one of the authors is a top managerial position at Bank Bengkulu, and to consider the heavy traffic work flow at the workplace. By employing a purposive sampling technique the respondents were from two divisions of the product development and marketing, and the information system and development, and five sections of the marketing, the credit, the planning, the finance, and the priority customer service (Creswell & Creswell, 2017).

The targeted respondents were sent a link to fill out a set of the electronic questionnaires and the final responses were 154 questionnaires. Gender was slightly different in which males had 53.2%. Most of the samples, about 83.3%, graduated from the Bachelor's degree with various specialisation, such as accounting law, economics, management and information system (5.8% - 3.9%). The majority of the respondents were in the age range of 25 - 35 years, around 78.8%, and had significant experience in banking, that is between 5 and 10 years. Ninety nine percent of the employees were the local people.

This research used an open-ended questions technique. The questions consisted of three sections, namely questions for digital transformation, digital organizational culture section and participant demographic information. Digital transformation scale was consisted of 4 dimensions, each dimension consisted of 1 main question and 2 follow-up questions. The examples of the questions are "According to you, how important is digital transformation to the company? Why?"; What factors do support the digitalization? What are the roles of digital technology in digitalization transformation strategy to achieve the business plan of the company?"

Digital organizational culture consists of 5 dimensions, each dimension also consists of 1 main question and is also followed by 2 follow-up questions. Questions for these 5 dimensions were adapted from previous research and developed by the authors themselves (Goran et al., 2017). The examples of the questions are "How do the information system produce a real data in a value chain? Is the information got from the special machine or provided by data processing via knowledge management system? Are there

any levels of information traceability during the production process?" Finally, the third section concerns demographic factors, such as gender, education background, work experiences, and ages.

The author uses Thematic Analysis as an analytical tool for the qualitative research with a focus on the behavioral patterns to analyze data from the open-ended questions (Braun et al., 2022). The thematic analysis's steps follow similar researcher suggestions, namely by identifying themes when analyzing data content (Price et al., 2015). Then, the themes formed are classified into macro and micro themes referenced to the concept of the variables used. The first step is the authors understand the content of participants' responses. Second, the authors generalize the initial codes by referring to the concept of digital transformation and digital organizational culture. Third, the authors then look for themes that are relevant to the data, and groups them based on relevant micro themes. Fourth, the authors review the themes formed with reference to concepts that have been developed and previous research; If there is no theme that can be referenced, then the author makes the theme as a new theme finding.

3. RESULTS AND DISCUSSIONS

Results

In line with theory, two macro themes emerged, namely the digital transformation and the digital organizational culture. The micro themes for digital transformation are the outside-in, the cross-work collaboration, the work creativity, and the agile leadership. The micro themes for organizational culture are the cultural behavior, the digitalization capabilities, the digitalization skills, the information technology infrastructure, and the business processes. Based on the nine themes formed that reflects to the reference themes, the findings show that the themes formed based on research in the Western countries can also be applied in the Eastern region, especially in this case of Bank Bengkulu.

Bank Bengkulu's digital transformation is something that is very important for employees and the company. Employees consider that technology has a big impact on the company's sustainability. Apart from that, technology is able to create service applications in the form of user guides, SMS banking, mobile banking and websites, so that achieving company profits is easier to achieve, as the respondent said: "It is very important, considering that in this day and age, everything is digital and cashless, and other banks are competing in digital transformation, therefore Bengkulu banks must participate in carrying out digital transformation" (Respons 2). According to previous research, successful digital transformation can be achieved by companies embracing organizational structures and processes that will empower employees to experiment with new technologies and provide products and services that are directly integrated to consumers (Furr et al., 2022; Mugge et al., 2020). To make this happen, the right strategy is needed in implementing the digital transformation program. The same results were found in similar research which stated that the success of a company's Digital Transformation depends on how management drives Digital Transformation, establishes a clear strategy, and implements governance (Chanias et al., 2019; Mergel et al., 2019). The benefits of new digital technologies must be carefully considered when planning to implement them.

It can be said that digital transformation at Bank Bengkulu is less effective. Agile leadership reached 94% and outside-in reached 80.5%, which means that the ineffectiveness of digital transformation is influenced by the role of leaders and insufficient supporting factors in driving digital transformation. The company is also deemed unable to face business challenges, such as one-stop shopping services, providing online account opening, or using facial verification technology. In general, almost all banks have moved towards Neo Bank or Digital Bank, for example Allo Bank, Bank Jago and Bank BCA Digital. This Digital Bank phenomenon should have been part of the bank's big plan which was voiced by the Directors and Executives but it did not happen at PT Bank Bengkulu and seemed relaxed in responding to the challenges of the Industrial Revolution 4.0. Response 5 said: "The strategy that companies must implement is to actively participate in the development of digital transformation. Every time there is a new technology, companies must participate and find out about the new technology."

The results of the survey conducted related to digital transformation at Bank Bengkulu are as follows: (a) Outside-in A total of 124 respondents (80.5%) stated that digital transformation is very important, considering that everything is now digital and non-cash, and other banks compete in digital transformation. Bank Bengkulu needs to carry out a digital transformation process; (b) Cross-Work Collaboration A total of 36 respondents (23.37%) stated that technological developments and customer needs for services and products encourage cross-work collaboration; (c) Work Creativity A total of 47 respondents (30.51%) stated that the use of banking technology at Bank Bengkulu is still very limited compared to competitors, so banking services are relatively cumbersome, inefficient, and slow; (d) Agile Leadership A total of 146 respondents (94%) stated that the deployment of qualified personnel, especially

in the IT Division, is the right step to ensure that the right people are in the right place based on educational background and expertise.

The results of the survey conducted related to digital organizational culture at Bank Bengkulu are as follows: (a) Cultural Behavior As many as 130 respondents (84.41%) stated that cultural behavior is very important, because culture is the identity of the company. However, there are still plans that have not been realized; (b) Digitalization Capabilities A total of 84 respondents (54.54%) stated that digitalization capabilities are still not fully integrated, and not everyone is directly involved. Some human resources are also not actively involved. However, there are strategies to improve the integrity of the company; (c) Digitalization Skills A total of 128 respondents (83.11%) stated that Bank Bengkulu has not been responsive enough, is not ready to face changes, and is too focused on civil servant salaries and credit transactions. However, there are strategies to make decisions efficiently and support good data processing; (d) IT Infrastructure A total of 97 respondents (59.09%) stated that IT infrastructure is still in the process of development. Bank Bengkulu does not yet have a good security and data protection system. However, there is the development of cash management system products; (e) Business Process A total of 111 respondents (72.07%) stated that Bank Bengkulu does not yet have a core banking system. Information is obtained from the results of data processing through the system. Policy depends on top management. There is also knowledge management.

Discussion

The results of this research are in line with previous research which stated that although digital technologies for transformation are disruptive, leaders can adapt their styles, characteristics and traits to suit this new digital era, and to change their ways of working after being given a clear vision, commitment and support from the executives from inside-out to outside-in (Philip, 2021; Tekic & Koroteev, 2019). Two other micro themes, namely the work creativity, and the cross-work collaboration receives a percentage of less than 50%. This is because the use of banking technology at Bank Bengkulu is still very limited compared to other competing commercial banks, and tends to be slow, which results in collaboration across work team is not running as it should be. The cross-work collaboration can be created as a result of the integration of the conventional banking systems and technology, and digital technology strategy factors.

On the other hand, a digital behavioral culture has been embedded in the organisation and employees but it still tends to be weak (Flores et al., 2014; Serenko & Bontis, 2016). Bank Bengkulu has already built an organisational culture known as "SPIRIT" as a reference for cultural behavior but it has not been implemented significantly. It is just a slogan. A number of traditional methods, such as using stamps and pens and face-to-face for customer relationships purposes, are still dominant in the banking transaction and management process. This is exacerbated by weak the digital skills which still use ATMs instead of CRM which worsen the business processes. Bank Bengkulu's current digitalisation skills are changing the analogue platforms to the digital and are limited to platform changes only. Allegedly, it is due to the limited employees with an information technology background. Digital transformation can be seen as an unavoidable opportunity for company business development, not just a growing trend (Ben-Zvi & Luftman, 2022; Osei et al., 2023).

Business processes does not yet run in the real time. The current business process at Bank Bengkulu that can be observed is maintaining the existing services, then developing several potential products, preparing a digital platform which is marked as a new pressure as a form of customer demand that is in line with the Ouside-in theme. It is not surprising that the information technology infrastructure at Bank Bengkulu is considered lacking and weak. Previous research found that the main obstacles in developing digital culture was the underdevelopment of infrastructure and lack of specialists with the digitalisation skills and knowledge (Brunetti et al., 2020; Jamil, 2021). Previous research mentioned that digitalisation is driven and enabled by technologies, such as social media, mobile computing, analytics or big data, cloud computing, IoT, cyber-physical systems (CPS), cyber-human systems (CHS), and cyber security (Chauhan et al., 2022; Wang et al., 2022). Successful development of organisational culture is only possible in companies where leaders have promoted the formation of a distinct "digital culture", by reducing communication barriers between all departments, and establishing effective communication between divisions at different levels.

Micro themes of digital transformation, such as outside-in approach, cross-work collaboration, work creativity, and agile leadership, are still not significantly developed at Bank Bengkulu. This is in line with the findings of previous research showing that companies in the process of digital transformation often face challenges in adopting and implementing these themes (Brunetti et al., 2020; Jamil, 2021). Nonetheless, it is important to note that every organization has a unique context and challenges in their digital transformation.

Cultural behavior, digitalization capabilities, digitalization skills, information technology infrastructure, and business processes are also still weak at Bank Bengkulu. This is in line with previous research showing that the success of digital transformation does not only depend on technology, but also depends on organizational factors such as culture, capabilities, and processes (Konopik et al., 2022; Warner & Wäger, 2019). Therefore, Bank Bengkulu needs to make improvements in this regard to strengthen their digital transformation.

In the context of scientific logic, these findings show that Bank Bengkulu still has challenges in adopting and implementing important digital transformation themes. This can affect banks' ability to adapt to changing business environments that are increasingly digital. Therefore, greater efforts are needed in strengthening the culture, capabilities, and infrastructure of information technology at Bank Bengkulu to support a more effective digital transformation.

The implication of these findings is that Bank Bengkulu needs to make further efforts in adopting and implementing these themes to accelerate their digital transformation. In the context of the development of the scientific field studied, these findings provide a deeper understanding of the challenges and needs in facing digital transformation in the local banking sector. However, keep in mind that this study has limitations. One limitation is that the research focus is only on Bank Bengkulu, so the findings may not be directly applied to other banks or the banking sector in general.

4. CONCLUSION

The results show that the four micro themes of the digital transformation and the five themes of the digital organizational culture are inherent in Bank Bengkulu's employees but it is still weak in the agile leadership theme. The employees think that if leaders play an active role in driving digital transformation, it will directly influence employees' work systems. It will also make it easier to achieve business goals, such as increasing company profits and being able to compete with competing banks. In this case, Bank Bengkulu needs to review the readiness of its human resources and leadership system in implementing digital transformation and carrying out cadre formation. Not only it carries out regeneration, but it can also add Professional Hire (pro-hire) employees who have quality, experience and exposure in certain areas as a quick win solution for the digital transformation. The outside-in implies that services are provided based on customer needs by offering various transaction conveniences, such as mobile/internet banking, online account opening, chatbot on messaging platforms, QRIS, and wealth management. Owning server with big data and a data analytic system can speed up the decision-making process. Besides, implementing human capital information system can represent the digital leadership.

5. REFERENCES

- Amankwah-Amoah, J., Khan, Z., Wood, G., & Knight, G. (2021). COVID-19 and digitalization: The great acceleration. *Journal of Business Research*, *136*, 602–611. https://doi.org/10.1016/j.jbusres.2021.08.011.
- Ben-Zvi, T., & Luftman, J. (2022). Post-pandemic IT: digital transformation and sustainability. *Sustainability*, 14(22). https://doi.org/10.3390/su142215275.
- Braun, V., Clarke, V., & Hayfield, N. (2022). 'A starting point for your journey, not a map': Nikki Hayfield in conversation with Virginia Braun and Victoria Clarke about thematic analysis. *Qualitative Research in Psychology*, *19*(2), 424–445. https://doi.org/10.1080/14780887.2019.1670765.
- Brunetti, F., Matt, D. T., Bonfanti, A., De Longhi, A., Pedrini, G., & Orzes, G. (2020). Digital transformation challenges: strategies emerging from a multi-stakeholder approach. *The TQM Journal*, *32*(4), 697–724. https://doi.org/10.1108/TQM-12-2019-0309.
- Cascio, W. F., & Montealegre, R. (2016). How technology is changing work and organizations. *Annual Review* of Organizational Psychology and Organizational Behavior, 3, 349–375. https://doi.org/10.1146/annurev-orgpsych-041015-062352.
- Cennamo, C., Dagnino, G. B., Di Minin, A., & Lanzolla, G. (2020). Managing Digital Transformation: Scope of Transformation and Modalities of Value Co-Generation and Delivery. *California Management Review*, 62(4), 5–16. https://doi.org/10.1177/0008125620942136.
- Chanias, S., Myers, M. D., & Hess, T. (2019). Digital transformation strategy making in pre-digital organizations: The case of a financial services provider. *The Journal of Strategic Information Systems*, *28*(1), 17–33. https://doi.org/10.1016/j.jsis.2018.11.003.
- Chauhan, C., Parida, V., & Dhir, A. (2022). Linking circular economy and digitalisation technologies: A systematic literature review of past achievements and future promises. *Technological Forecasting and Social Change*, 177. https://doi.org/10.1016/j.techfore.2022.121508.

- Clarysse, B., Wright, M., Bruneel, J., & Mahajan, A. (2014). Creating value in ecosystems: Crossing the chasm between knowledge and business ecosystems. *Research Policy*, *43*(7), 1164–1176. https://doi.org/10.1016/j.respol.2014.04.014.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Fernandez-Vidal, J., Perotti, F. A., Gonzalez, R., & Gasco, J. (2022). Managing digital transformation: The view from the top. *Journal of Business Research*, 152, 29–41. https://doi.org/10.1016/j.jbusres.2022.07.020.
- Flores, W. R., Antonsen, E., & Ekstedt, M. (2014). Information security knowledge sharing in organizations: Investigating the effect of behavioral information security governance and national culture. *Computers & Security*, 43, 90–110. https://doi.org/10.1016/j.cose.2014.03.004.
- Furr, N., Ozcan, P., & Eisenhardt, K. M. (2022). What is digital transformation? Core tensions facing established companies on the global stage. *Global Strategy Journal*, 12(4), 595–618. https://doi.org/10.1002/gsj.1442.
- Galpin, T., Whitttington, J. L., & Bell, G. (2015). Is your sustainability strategy sustainable? Creating a culture of sustainability. *Corporate Governance*, *15*(1), 1–17. https://doi.org/10.1108/CG-01-2013-0004.
- Gawer, A., & Cusumano, M. A. (2014). Industry platforms and ecosystem innovation. *Journal of Product Innovation Management*, *31*(3), 417–433. https://doi.org/10.1111/jpim.12105.
- Gobble, M. M. (2018). Digital strategy and digital transformation. *Research-Technology Management*, 61(5), 66–71. https://doi.org/10.1080/08956308.2018.1495969.
- Goran, J., LaBerge, L., & Srinivasan, R. (2017). Culture for a digital age. *McKinsey Quarterly*, *3*(1), 56–67. https://lediag.net/wp-content/uploads/2018/05/0-Culture-for-a-digital-age.pdf.
- Jamil, S. (2021). From digital divide to digital inclusion: Challenges for wide-ranging digitalization in Pakistan. *Telecommunications Policy*, 45(8). https://doi.org/10.1016/j.telpol.2021.102206.
- Kaur, S. J., Ali, L., Hassan, M. K., & Al-Emran, M. (2021). Adoption of digital banking channels in an emerging economy: exploring the role of in-branch efforts. *Journal of Financial Services Marketing*, 26, 107– 121. https://doi.org/10.1057/s41264-020-00082-w.
- Kitsios, F., Giatsidis, I., & Kamariotou, M. (2021). Digital Transformation and Strategy in the Banking Sector: Evaluating the Acceptance Rate of E-Services. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(3), 204. https://doi.org/10.3390/joitmc7030204.
- Konopik, J., Jahn, C., Schuster, T., Hoßbach, N., & Pflaum, A. (2022). Mastering the digital transformation through organizational capabilities: A conceptual framework. *Digital Business*, 2(2). https://doi.org/10.1016/j.digbus.2021.100019.
- Kopalle, P. K., Kumar, V., & Subramaniam, M. (2020). How legacy firms can embrace the digital ecosystem via digital customer orientation. *Journal of the Academy of Marketing Science*, 48, 114–131. https://doi.org/10.1007/s11747-019-00694-2.
- Kudyba, S. (2020). COVID-19 and the Acceleration of Digital Transformation and the Future of Work. *Information Systems Management*, 37(4), 284–287. https://doi.org/10.1080/10580530.2020.1818903.
- Lam, L., Nguyen, P., Le, N., & Tran, K. (2021). The relation among organizational culture, knowledge management, and innovation capability: Its implication for open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 66. https://doi.org/10.3390/joitmc7010066.
- Leal-Rodríguez, A. L., Sanchís-Pedregosa, C., Moreno-Moreno, A. M., & Leal-Millán, A. G. (2023). Digitalization beyond technology: Proposing an explanatory and predictive model for digital culture in organizations. *Journal of Innovation & Knowledge*, 8(3). https://doi.org/10.1016/j.jik.2023.100409.
- Mariani, M. M., & Wamba, S. F. (2020). Exploring how consumer goods companies innovate in the digital age: The role of big data analytics companies. *Journal of Business Research*, *121*, 338–352. https://doi.org/10.1016/j.jbusres.2020.09.012.
- Martínez-Caro, E., Cegarra-Navarro, J. G., & Alfonso-Ruiz, F. J. (2020). Digital technologies and firm performance: The role of digital organisational culture. *Technological Forecasting and Social Change*, 154. https://doi.org/10.1016/j.techfore.2020.119962.
- Mergel, I., Edelmann, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, *36*(4). https://doi.org/10.1016/j.giq.2019.06.002.
- Mugge, P., Abbu, H., Michaelis, T. L., Kwiatkowski, A., & Gudergan, G. (2020). Patterns of digitization: A practical guide to digital transformation. *Research-Technology Management*, 63(2), 27–35. https://doi.org/10.1080/08956308.2020.1707003.
- Nadkarni, S., & Prügl, R. (2021). Digital transformation: a review, synthesis and opportunities for future research. *Management Review Quarterly*, *71*, 233–341. https://doi.org/10.1007/s11301-020-

00185-7.

- Naimi-Sadigh, A., Asgari, T., & Rabiei, M. (2021). Digital transformation in the value chain disruption of banking services. *Journal of the Knowledge Economy*, 13, 1212–1242. https://doi.org/10.1007/s13132-021-00759-0.
- Osei, L. K., Cherkasova, Y., & Oware, K. M. (2023). Unlocking the full potential of digital transformation in banking: a bibliometric review and emerging trend. *Future Business Journal*, 9(1), 30. https://doi.org/10.1186/s43093-023-00207-2.
- Philip, J. (2021). Viewing Digital Transformation through the Lens of Transformational Leadership. *Journal* of Organizational Computing and Electronic Commerce, 31(2), 114–129. https://doi.org/10.1080/10919392.2021.1911573.
- Piening, E. P., Salge, T. O., Antons, D., & Kreiner, G. E. (2020). Standing Together or Falling Apart? Understanding Employees' Responses to Organizational Identity Threats. *Academy of Management Review*, 45(2), 325–351. https://doi.org/10.5465/amr.2016.0457.
- Price, P. C., Jhangiani, R., & Chiang, I. C. A. (2015). Research methods in psychology. BCCampus.
- Rahmadyah, N., & Aslami, N. (2022). Strategi Manajemen perubahan perusahaan di era transformasi digital. *Ekonam: Jurnal Ekonomi, Akuntansi & Manajemen, 4*(2), 91–96. https://doi.org/10.37577/ekonam.v4i2.441.
- Saarikko, T., Westergren, U. H., & Blomquist, T. (2020). Digital transformation: Five recommendations for the digitally conscious firm. *Business Horizons*, 63(6), 825–839. https://doi.org/10.1016/j.bushor.2020.07.005.
- Schneider, S., & Kokshagina, O. (2021). Digital transformation: What we have learned (thus far) and what is next. *Creativity and Innovation Management*, 30(2), 384–411. https://doi.org/10.1111/caim.12414.
- Serenko, A., & Bontis, N. (2016). Understanding counterproductive knowledge behavior: antecedents and consequences of intra-organizational knowledge hiding. *Journal of Knowledge Management*, 20(6), 1199–1224. https://doi.org/10.1108/JKM-05-2016-0203.
- Soto-Acosta, P. (2020). COVID-19 Pandemic: Shifting Digital Transformation to a High-Speed Gear. *Information Systems Management*, 37(4), 260–266. https://doi.org/10.1080/10580530.2020.1814461.
- Spigel, B. (2017). The Relational Organization of Entrepreneurial Ecosystems. *Entrepreneurship Theory and Practice*, 41(1), 49–72. https://doi.org/10.1111/etap.12167.
- Tekic, Z., & Koroteev, D. (2019). From disruptively digital to proudly analog: A holistic typology of digital transformation strategies. *Business Horizons*, 62(6), 683–693. https://doi.org/10.1016/j.bushor.2019.07.002.
- Van Veldhoven, Z., & Vanthienen, J. (2022). Digital transformation as an interaction-driven perspective between business, society, and technology. *Electronic Markets*, 32(2), 629–644. https://doi.org/10.1007/s12525-021-00464-5.
- Volberda, H. W., Khanagha, S., Baden-Fuller, C., Mihalache, O. R., & Birkinshaw, J. (2021). Strategizing in a digital world: Overcoming cognitive barriers, reconfiguring routines and introducing new organizational forms. *Long Range Planning*, 54(5). https://doi.org/10.1016/j.lrp.2021.102110.
- Wang, B., Zheng, P., Yin, Y., Shih, A., & Wang, L. (2022). Toward human-centric smart manufacturing: A human-cyber-physical systems (HCPS) perspective. *Journal of Manufacturing Systems*, 63, 471–490. https://doi.org/10.1016/j.jmsy.2022.05.005.
- Warner, K. S., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*, 52(3), 326–349. https://doi.org/10.1016/j.lrp.2018.12.001.
- Yeow, A., Soh, C., & Hansen, R. (2018). Aligning with new digital strategy: A dynamic capabilities approach. *The Journal of Strategic Information Systems*, 27(1), 43–58. https://doi.org/10.1016/j.jsis.2017.09.001.