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EXCELLENCE AND RENEWAL – DIGITAL TRANSFORMATION PATTERNS IN THE HUNGARIAN BUSINESS SERVICES SECTOR

KIVÁLÓSÁG ÉS MEGÚJULÁS – A DIGITÁLIS ÁTALAKULÁS MINTÁI A MAGYAR ÜZLETI SZOLGÁLTATÓSZEKTORBAN

In the past few years, there has been an explosion of scholarly interest in the field of digital transformation of companies. The extant literature mostly focuses on the manufacturing industry and fails to explain the causes and consequences of digital transformation in the business services sector. This paper examines what digitalization's primary purposes are and how management and organizational practices stimulate the digital transformation of business service centers. Four research case studies were developed and presented based on eighteen interviews with company experts and managers. The authors concluded that excellence in existing capabilities and organizational renewal are both key drivers of digital transformation projects in business service centers. They argue that rigorous top-down strategy formulation and implementation is not the only way and the building of organizational capabilities such as effective idea generation, small-scale developments, upscaling, and bricolage can also lead to successful digital innovations in the business services sector.

Keywords: business services, digital transformation, digitalization, process automation, robotization, digital strategy, exploration and exploitation, bricolage

Az elmúlt években jelentős tudományos érdeklődés irányult a vállalatok digitális átalakulására. A témában elérhető szakirodalom ugyanakkor elsősorban az iparvállalatok gyakorlatával foglalkozik, és kevéssé tér ki az üzleti szolgáltató szektor digitális átalakulásának okaira és következményeire. Jelen tanulmány célja annak vizsgálata, hogy melyek az üzleti szolgáltatóközpontok digitalizációjának elsődleges okai, illetve melyek azok a szervezeti és menedzsment gyakorlatok, amelyek e folyamatot támogatják. A szerzők négy üzleti esettanulmányt mutatnak be, 18 vállalati vezetővel és szakértővel készült interjú alapján. Arra a megállapításra jutnak, hogy az üzleti szolgáltatóközpontok digitális átalakulási projektjeinek két legfontosabb célja a meglévő szervezeti képességek fejlesztése és a szervezeti megújulás. Úgy találják, hogy az üzleti szolgáltatóközpontok digitális átalakulása nem feltétlenül szigorú, top-down stratégiai tervezés alapján valósul meg. Kulcsfontosságúak a hatékony ötletgenerálást, a kisléptékű kísérletezést, a jógyakorlatok gyors elterjesztését, illetve a stratégiai barkácsolást támogató szervezeti képességek.

KULCSSZAVAK: üzleti szolgáltatások, digitális átalakulás, digitalizáció, folyamatautomatizálás, robotizáció, digitális stratégia, felfedezés és kiaknázás, bricolage

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The technological trends of our digital age have been disrupting different sectors of the economy for many years. Since national manufacturing strategies such as the Industry 4.0 of Germany and the Advanced Manufac-

turing Partnership (AMP) of the USA were published in 2011, in response to the economic crisis, companies in all industries started to upgrade their structure, operations, and business models to gain a competitive edge (Horlach, Drews, & Schirmer, 2016; Kagermann, 2015; Ku, Chien, & Ma, 2020). These trends reach far beyond the manufacturing industry, reshaping entire supply chains (Manavalan & Jayakrishna, 2019) and the economy as a whole (Porter & Heppelmann, 2015). As technological advancement creates the premises of smart and connected ecosystems, value is created through the sharing of data and knowledge (Szász et al., 2020; Szász et al., 2019), as well as real-time interactions between actors of the supply network (Lee, Lapira, Bagheri, & Kao, 2013).

Digital transformation in the business services sector (BSS) is not intensively researched (Bryson & Gardner, 2020; Rehse, Hoffmann, & Kosanke, 2016). Nevertheless, new technologies strongly affect business services like finance and accounting, procurement, or HR operations (Edlich, Watson, & Whiteman, 2017). These services primarily employ white-collar workers formerly thought to be less exposed to robotization. Today's business service organizations, like business process outsourcing providers (BPO) or shared service centers (SSC), have started to exploit the benefits of technologies like chatbots, robotic process automation (RPA), intelligent automation, data and process mining, and blockchain (Chakraborty, Gupta, Himmelreich, & Tevelson, 2018; Melton, Carrigan, & Glusac, 2019). However, there is limited evidence in scientific discourse about how business service centers (BSCs) explore the technology enhancements, as well as for what purposes and how these technologies are integrated into their operations.

In this paper, the authors start by reviewing the literature on digital transformation with a particular emphasis on the purposes and levels of digital transformation. The authors focus their investigation on the business services sector in Hungary, the second most important driver of the Hungarian economy. They present the results of eighteen interviews at four companies, serving as the basis of four research case studies. In its effects, this paper investigates the purposes for which the BSCs use powerful new technologies and the management and organizational practices that stimulate the digital transformation of companies. In conclusion, the paper assesses the novelty and the implications of the new knowledge gained on digital transformation in the business services sector.

Theoretical framework

Defining digital transformation

Transformation means a top-down restructuring, accompanied by across-the-board cost-cutting, a technological reboot, and some reengineering to increase profit, seize opportunities, lead and dominate the industry, attract talent and enhance the social responsibility of the organization (Kent, Lancefield, & Reilly, 2018). As an early definition of INSEAD, transformation means *"a fundamental change in organizational logic, which resulted in or was caused by a fundamental shift in behaviors"* (Muzyka et al., 1995, p. 348). Kent et al. (2018) claim that any successful transformation follows these principles: (1) creates a strategic identity to focus all efforts on achieving its goal; (2) designs for trust to attract commitment; (3) tests new practices and implements them throughout the organization, and (4) treats legacy as an asset.

IT scholars have extended the concept of business transformation with the IT-enabled transformation that is a change caused by transformational information technology. The transformational power of IT can be understood through the following dimensions: processes, new organizations, relationships, user experience, markets, customers, and disruption (Lucas, Agarwal, Clemons, Sawy, & Weber, 2013). Digital transformation (DT) is an IT-enabled transformation with far-reaching effects, as this is one of the most significant managerial challenges in all industries recently.

Our literature review investigated digital transformation in multiple areas and from different perspectives such as societies, industries, economies, networks, companies, and individuals (Ismail, Khater, & Zaki, 2017). Scholars provide us with various definitions (Demeter & Losonci, 2020). Based on the analysis of fifty-three definitions, Morakanyane et al. (2017) identified common elements and differences. They found that most of the digital transformation definitions agree in that the changes are technology-driven and significantly affect organizational practice that disrupts and redefines preceding structures. However, some definitions focus on specific types and areas of transformation, while others emphasize a comprehensive renewal of organizational capabilities and value creation. According to Sebastian et al. (2017), digital strategy, the blueprint for digital transformation, is understood as *"a business strategy, inspired by the capabilities of powerful, readily accessible technologies, intent on delivering unique, integrated business capabilities in ways that are responsive to constantly changing market conditions"* (Sebastian, Ross, & Beath, 2017 p. 198).

Hess et al. (2016) define digital transformation as the sum of organizational changes that reform organizations' business models, products, processes, and structures using digital technologies. Ismail et al. (2017) explain it as *"the process through which companies converge multiple new digital technologies, enhanced with ubiquitous connectivity, with the intention of reaching superior performance and sustained competitive advantage, by transforming multiple business dimensions, including the business model, the customer experience (comprising digitally enabled products and services) and operations (comprising processes and decision-making), and simultaneously impacting people (including skills talent and culture) and networks (including the entire value system)"* (Ismail et al., 2017, p. 7). According to Westerman et al. (2014), digital transformation aims to improve the performance or reach of enterprises radically, and it is a necessary driver to adapt to changes in the external environment.

While some authors agree that digital transformation inherently refers to a fundamental and disruptive change, others contest this argument (Muzyka et al., 1995).

There is another dispute about what technologies are to be considered digital transformation technologies. Andriole (2017) argues that as business models are outdated in many industries, the transformational impact may be reached using already proven technologies. These easily accessible technologies have significant unexploited transformational potential that is comparable with the benefits of the riskier implementation of the latest disruptive technologies (Andriole, 2017).

Regarding the business services sector a four-level pyramid concept for digital transformation has been introduced by Marciniak et al. (2019). The higher levels of the pyramid represent higher added value in the digital transformation journey of the business service organization. The lowest level, labeled as *digitization,* refers to the process of converting analog streams of information to digital bits, while the second level, *digitalization,* refers to the use of digital technology and digitized information that alters existing business processes (Reis, Amorim, Melão, Cohen, & Rodrigues, 2020; Verhoef et al., 2019). At the third level, *automation* permits the decrease of human interactions required for process completion, even in the form of robotization that resembles and replicates human operations (Edlich et al., 2017; Schumacher, Sihn, & Erol, 2016; Syed et al., 2020). Marciniak et al. (2019) argue that the fourth level of the pyramid could be deployed with each level independently, as shown in Figure 1. *Cognitive technologies* can learn from previous decisions, which leads to a potential for self-improvement. By integrating cognitive tools, all three lower levels get smart feature enhancements.

The digital transformation technologies in the business services sector cover the standard digital technologies of other industries with a pattern specific to the sec-tor. A survey in Hungary (Marciniak & Ránki-Kovács, 2021) found that process technologies serving digitized and digital operations (e.g., enterprise resource planning, workflow, business intelligence) are pervasive. White-collar robotics solutions, especially robotic process automation (RPA) and chatbots, already have a strong presence, evolving rapidly towards cognitive solutions. Big data and advanced analytics solutions like data mining or process mining technologies are also well established in the sector. Business service centers are data centers, which manage and optimize large amounts of data, mainly through simulations and cloud solutions. Therefore, there is a natural need for further enhancement of advanced data security and cybersecurity technologies.

Digital transformation does not mean solving old problems with new technology. Instead, it may be understood as re-thinking old problems while considering novel possibilities (Hess, Matt, Benlian, & Wiesböck, 2016). Even though the technology is essential, a sustainable competitive advantage originates from organizational capabilities and how the company uses and combines them. Therefore, genuine digital transformation also means organizational renewal (Porter & Heppelmann, 2015).

Purposes of digital transformation

In their digital transformation framework, Matt et al. (2015) argue that digital transformation affects four dimensions of organizations. The (1) use of technology refers to the capability to explore and exploit novel technological solutions. These technologies generate (2) changes in value creation and (3) changes in structure and processes. The transformation also has (4) financial aspects: goals of efficiency and effectivity are reasons as well as expected outcomes of digital transformation projects.

Figure 1

Digital transformation technologies in the business services sector

Level 1 DIGITIZATION	Level 2 DIGITALIZATION	Level 3 AUTOMATION AND ROBOTIZATION
• Cloud computing, server virtualization • Core business applications (e.g., ERP, CRM, document management) • Optical character recognition • Smart/mobile devices • Internet of Things	• Ticketing and workflow systems • Self-service workflows • Blockchain • Process analytics and dashboards	• Macros, scripting, routing • Robotic process automation • Chatbot • Robotized software testing • Augmented reality

Level 4 USE OF COGNITIVE (ARTIFICIAL INTELLIGENCE) TECHNOLOGIES		
• Intelligent character recognition • Computer vision (face recognition, image classification, object detection, and tracking)	• Predictive analytics • Process and system simulation (digital twin) • Process mining • Cybersecurity	• Intelligent application scripting and debugging • Cognitive chatbot and intelligent process automation • Natural language processing (speech recognition, machine translation, text classification, document summarization) • Machine learning, artificial intelligence

Source: Based on Marciniak et al. (2019, p.116)

In an early survey regarding digital transformation, Kane et al. (2015) identified five key objectives. The majority of the companies addressed increasing efficiency and improving customer experience and engagement as primary aims of digital transformation. However, companies prominent in digital transformation intend to enhance decision-making and innovation (Csedő, Zavarkó, & Sára, 2019a) and transform their business model (Kane, Palmer, Phillips, Kiron, & Buckley, 2015). By analyzing 53 articles on digital transformation in the scholarly literature, Morakanyane et al. (2017) listed four core outcomes expected from digital transformation: operational efficiency, changes in value creation, improving relationships (e.g., with customers), and creating competitive advantage.

Sebastian et al. (2017) distinguished between two digital strategies. The customer engagement strategy *"seeks to build customer loyalty and trust by providing superior, innovative, personalized, and integrated customer experiences"* (Sebastian et al., 2017). The digitized solutions strategy *"aims to reformulate a company's value proposition by integrating a combination of products, services, and data"* (Sebastian et al., 2017). The authors conclude that digital technologies contribute to operational excellence on the one hand and enable rapid innovation.

Organizational practices that stimulate digital transformation

Based on a worldwide survey of 4,800 company executives, Kane et al. (2015) declared that instead of technology, strategy is the primary driver of digital transformation. While 81 percent of digitally mature companies followed a coherent digital strategy, only 15 percent of companies with a lower digital maturity reported so. According to companies in the "early" and "developing" stages on the digital maturity scale, one of the three main barriers to digital transformation is the lack of strategy. However, this study drew attention to the importance of other organizational practices as well, including digitally committed and skilled leaders, a risk-taking organizational culture that fosters digital initiatives, and ongoing efforts to fill the digital skill-gap of employees.

Fischer et al. (2020) argue that while digital transformation dominates the managerial and scientific discourse, many companies have no plan on how to approach it. Their paper presents three strategic archetypes: communication/learning, unification/optimization, and certification/automation. These type imply different patterns in governance and compliance, management support, employee interaction, scope and targets of education, supporting tools, as well as conventions and guidelines (Fischer et al., 2020). Chanias et al. (2019) argue that a realized digital transformation strategy evolves through the "episodes" of digital strategy making, while episodes interact with organizational context and digitalization practices. They found that digital transformation may have both top-down and bottom-up building blocks. The former refers to the conscious planning and execution of a digital roadmap, while the latter refers to an idea to the collection, selection, and realization of digitalization ideas (Chanias et al., 2019).

Tekic and Koroteev (2019) investigated the companies that do not have a coherent digital strategy and identified two approaches. One is to copy the digital initiatives of a successful reference company. Another approach is to experiment with novel solutions in the hope of finding a shortcut or other unforeseen advantage. Experimentation also requires a particular organizational culture and mindset, even at companies that have a formal digital strategy. This mindset is often called *digital orientation* in the literature and refers to traits like digital curiosity, alertness, openness, and innovative passion (Dantsoho et al., 2020).

Research also shows that a certain level of deviation from the official transformational roadmap and tools may be beneficial. When investigating the case of omnichannel transformation in retail, Do Vale et al. (2021) chose the term *bricolage* to describe a phenomenon when employees, whatever they had at hand, tried to make the most out of the tools and resources available. Through experimentation and bricolage, they often found new combinations of elements and features. Improvisation in organizational learning (Weick, 1998), bricolage based on experimentation (Barrett, 1998), and the embrace of ideas have a long tradition in strategic management theories (Baker, Miner, & Eesley, 2003). Contrary to the contingency approach, in the case of bricolage and experimentation, the alignment of the external environment, strategy, and organization is not deterministic (Ciborra, 1992). Do Vale et al. (2021) argue that, in digital transformation, bricolage at the operational level seizes the opportunity for finding new ways of digitalization. Middle-level managers are advised to pay attention to bricolage and emerging ideas to identify those that can be added to the official digitalization agenda.

In summary, digital strategy is as much a blueprint for intended transformations as it is an emergent process based on intuition and experimenting (Zimmer, 2019). The latter assumes a certain level of cultural intelligence (CQ) and digital leadership (Rüth & Netzer, 2019, Ehmig-Klassen & Schallmo, 2021). Based on the research at a German multinational company from the automotive industry, Zimmer (2019) demonstrated how the digital transformation strategy emerges from the sequence of acts of organizational improvisation (OI). However, he also emphasized the importance of the underlying improvisational system (innovation culture), e.g., innovation events, or idea selection using a crowd-voting system.

Multinational companies with global processes and numerous subsidiaries face particular challenges in stimulating digital transformation (Szalavetz, 2019a, 2019b). As Ekman et al. (2020) highlighted, subsidiaries are externally embedded in their local environment (customers, suppliers etc.), while internally embedded based on their relations to the mother company and its other subsidiaries. These aspects are additions to the strategic, financial, and technological considerations of implementing digital transformation at subsidiaries. However, regarding the business services sector, there is a lack of empirical evidence on how subsidiaries develop their digital transformation agenda and what type of orientation and initiatives supports the digital transformation efforts.

Research design and methods

The authors of this paper identified research gaps in two areas. There is a need for empirical evidence on why companies of the business services sector initiate digitalization projects, and how management and organization promote the projects' success. The authors formulated two research questions as follows.

- What is the rationale behind digital transformation projects in the business services sector? For what purposes do they use powerful new technologies?
- What management and organizational practices stimulate successful digital transformation projects in the business services sector? What strategies and organizational capabilities seem to be the most advantageous?

The business services sector of Hungary was chosen as the field of research. In the mid-2000s, the business services sector set foot in Central and Eastern Europe (CEE) (Marciniak, 2014). Building on the benefit of being geographically and culturally close to the Western European companies' clients while offering a noticeable labor arbitrage compared to the more developed countries, the CEE region became a significant hub for global business services (Sass, Gál, & Juhász, 2018). Hungary is one of the key markets for shared services and business process outsourcing. Nearly 205 business service centers (BSCs) employ around 74,000 people, making this sector serving as the second-largest driver of Hungarian economic growth (Marciniak & Ránki-Kovács, 2021). Therefore, it serves as a promising empirical sample for answering our research questions.

The case study methodology was selected as a means of data analysis and empirical investigation. Case studies are generally used to capture complex phenomena and their organizational drivers in a meaningful yet conveyable way. In a multiple-case design, numerous instrumental, bounded cases are examined using multiple data collection methods. This research methodology is more powerful than single-case designs as it provides more extensive descriptions and explanations of the phenomenon or issue (Mills et al., 2010). As our research questions aim at a deeper investigation of contemporary phenomena that cannot be separated from its context, a multi-case approach was selected (Yin, 2014). Our sample included four case studies of companies active in the business services sector and thus sharing a common context. The number of cases in our sample is considered sufficient for empirical grounding and analytical generalization, as the common context enables some degree of comparison and contrast (Eisenhardt, 1989).

Case study candidates were chosen purposefully according to the following criteria: variance in location, the industry of parent company, the number of employees, and the technology adaptation strategy. To provide confidentiality to the companies involved, the four case studies are referred by letters A to D. Company A operates in the information technology and services industry. Its global parent company employs over 100,000 people. The Buda-pest-based subsidiary has 2,300 employees. Company B is another subsidiary of the same global parent company with a strong presence in Székesfehérvár, the ninth-largest city in Hungary. Approximately 2,400 employees of company B provide the internal and external clients of the parent company with IT operations and maintenance services. Company C operates in the manufacturing industry. Located in Székesfehérvár, it has about 500 employees. Its global parent company has a strong presence in Europe. Company D is also invested in information technology and services. It employs over 4,500 people at its Budapest headquarters and three other regional sites. Company D is a subsidiary of a German multinational company with a strong presence in Hungary.

The case study research was designed based on a data collection guide compiled with the help of fellow researchers who investigated similar phenomena in different industries. This guideline was followed to ensure validity and comparability between individual cases. The data collection guideline was developed based on Buchanan & Bryman (2011) and Byrne & Ragin (2013). Collection methods included semi-structured interviews and short supplementary survey questionnaires. The semi-structured interviews covered the subjects of industrial trends, general information about the company and its parent group. Interview questions related to digital transformation were peer-validated in the research group with the following topics.

- Position in supply chains/networks.
- General strategy and links to Service 4.0.
- External relations and Service 4.0.
- Access to capital in terms of Service 4.0.
- Participation of employees and employee representatives in Service 4.0 projects.
- Description of Service 4.0 projects within the company (drivers, implementation process, responsibilities, results, and assessment).
- Employment structure and trends.
- Governance of innovation processes within the company.

Researchers investigated public sources (company websites, press releases, interviews) beforehand and internal documents provided by the interviewees after the interviews. The authors contacted the senior managers of the four companies to schedule interviews with them and their peers in various positions like digitalization experts and project leaders. Seventeen people from the four companies in different positions were interviewed (Table 1), four of them multiple times. The interviews were carried out from Fall 2018 to Spring 2019.

The interviews usually took 1-1.5 hours and were face-to-face, in-depth, and semi-structured. The semi-structured format was selected to let the interviewees reveal factors, interpretations, and interdependencies that they consider to be the most relevant. In two cases, group interviews were conducted. Except two occasions, the interviews have been recorded and digitalized with a full transcript. Based on the transcripts, the researchers pre-

Corporate position and affiliation of interviewees

Nr	Corporate position	Company code	Nr	Corporate position	Company code
1	Managing Director	A	10	Head of Automation	B
2	HR Services (external)	A	11	Service Quality Specialist	B
3	Procurement	A	12	Automation Team Lead	C
4	Q2C (Sales Support)	A	13	Global Compliance Lead	C
5	Chief Information Officer	A	14	Security Lead	D
6	Indirect Tax	A	15	Expert Architect	D
7	Accounts Payable	A	16	IoT Portfolio Unit Lead	D
8	HR Transformation (internal)	A	17	Managing Director	D
9	Site executive	B			

Source: own compilation

pared and discussed the interview summaries, with tagged references to the original transcript (or notes).

Triangulation of the interview transcripts and the company or public documents was achieved by a short post-interview questionnaire. Fourteen out of the 17 interviewees assessed statements regarding the purposes and the implementation of digital transformation. This was to ensure that the researchers developed a proper understanding of the digital transformation situation of the company. The combination of different data sources, together with the strict data collection guide that framed the case study preparation process, contributed to the reliability and the validity of the research.

The empirical evidence synthesized by the four detailed case studies has been sent back to companies for verification and approval. After the case studies were completed, the research continued with research workshops. Interviewers and other members of the research team discussed, compared, and contrasted the case studies to identify common or differing characteristics. The original interview transcripts and summaries were used occasionally for further confirmation.

Results

Purposes of digital transformation

The management interviews conducted by the authors confirmed that operational efficiency is the principal target of the BSCs. This target is set by either the parent company, in the case of internal shared service centers (captive centers), or by business partners, in the case of companies that serve external clients. In both cases there are hard incentives to secure the achievements of the efficiency goals. The annual cost-saving target, for example, in the case of shared service centers, is usually determined by the parent company, as part of their annual budget. The service center is responsible for either decreasing the cost of operations or increasing the service output while maintaining the budget. A typical case was spoken about by a manager of Company C: *"The global headquarters assigns more and more tasks annually without allowing us an increase in headcount."*

The research interviews highlighted the strategic relevance of digitally enhanced operational efficiency. The customers of the BSCs are global companies that typically follow a multi-sourcing model that is continuously reassessed. The performance of captive centers is compared to each other's within the parent group and to external service providers operating on the market. This competition is a fundamental threat to captive centers that provide service exclusively to their parent company. The business processes performed by a captive center may be relocated to another country or outsourced (hiring an independent BSC from the market) when this proves to be better in terms of cost and quality. *"We are already launching automation projects as a preparation for next year's cost-saving challenges",* admitted a department head at Company A. Naturally, this can be a threat to a BSC with external clients as well, especially since global companies also consider insourcing (assigning the business project to an internal unit or a subsidiary within the global company) as an option.

The research case studies highlighted that changing customer needs also urge BSCs to advance in digital transformation. The research interviewees agreed that as these customers become accustomed to digital channels, the business services sector should follow this trend. BSCs operate on the business-to-business market, having either external (e.g., manufacturing companies) or internal (e.g., subsidiaries of its parent company) clients. In both cases, BSCs face increased customer expectations like shorter lead times, real-time fulfillment, zero errors, or simple, flexible, and personalized interactions. The case studies of the four companies confirmed that digitalization enables better customization of services. Proactive BSCs already initiate process transformation projects to be prepared for future customer needs and experiment with significantly enhanced services. *"Develop it today and excel with it tomorrow",* said an executive of Company D, a notion echoed by interviewees of Company A and B.

While both efficiency-driven automation and customer-driven digitalization results in less labor-intensive business processes in the BSCs, the research case studies revealed that employment arguments also prompt the au-

tomation of labor-intensive processes. As a manager from Company C highlighted, *"all BSCs are competing on the labor market, and the supply is lower than the demand. Automation may be a resolution for recruitment difficulties".* Almost all interviewees agreed that it could be challenging to retain the workforce performing monotonous, repetitive tasks in the long run. The research case studies showed that focusing on more value-added work makes it easier to attract talent to the company and also enables the BSCs to offer a more knowledge-intensive service portfolio and move up in the value chain. *"We want to deal with more complex work. To bring in such services from Germany, we must first automate the monotonous work,"* explained an interviewee from Company A.

Organizational practices that drive digital transformation

The analysis of the four case studies showed that there are common patterns in successful digitalization practices. These commonalities included (1) an organizational culture open to innovation, (2) an internal fund (at the BSC or corporate group level) to financially support promising digitalization projects, (3) available key resources (people and technologies) for development, and (4) managerial attention to digitalization projects and potential returns. The interviews also highlighted that these BSCs did not necessarily have a clear and coherent digitalization strategy, despite having implemented multiple successful digital transformation projects. Instead, they created an organizational setting that fosters innovative ideas and subsidizes projects. They experiment with different technologies and embrace those that seem promising. Based on the interviews, a set of strategic resources and capabilities appear to be the most essential when implementing digital transformation in the business services sector (see Figure 2).

Organizational culture seems to play an essential role in the generation of innovative ideas. Industry reports (Marciniak & Ránki-Kovács, 2021) show that numerous companies have introduced organizational cultures that support lean principles in the business services sector over the last decade. Our interviewees added that in the past few years, companies intended to become more agile – a process in which they also relied on an open and adaptive organizational culture. Due to the constant changes in the external environment and in the organization itself, employees must be open to novelties and transformation. At Company A, the management does not only accept, but expects employees to come up with ideas for simplification, standardization, and automation. As our interviewees put it, an innovative mindset is needed for every employee to *"constantly think of how to be more effective".* They have dedicated innovation events, brainstorming sessions, and hackathons. *"It is all about transformation, how we will be better",* one interviewee underlined. According to interviewees at Company B, besides the parent company's expectations for digital projects, the proactive attitude of BSC employees is also critical. According to Company D managers, innovation is rather a matter of mindset than something calculated in return. An organizational culture committed to efficiency and renewal, on the one hand, ensures and rewards employees for their openness to innovation. On the other hand, this culture involves idea-collection systems, rooted in lean philosophy, that ensure that ideas of employees and clients are channeled.

Figure 2

Corporate best practices at different implementation phases of digitalization projects

1. Idea generation	2. Small-scale implementation	3. Embracing and upscaling
• Openness and encouraging organizational culture • Systematic idea collection (top-down and bottom-up)	• Internal funds that subsidize early project costs • Available resources (employees and technology)	• Managerial attention to digitalization projects • Cost-benefit calculations, estimations on return

Source: own compilation

The case studies revealed the benefits of the early implementation of viable ideas. Financial support turned out to be important and is realized by creating internal funds to which project initiators can apply. BSCs also support initiatives by providing the staff and technologies needed for implementation. These two factors help innovative employees initiate projects at relatively low costs to reach early results.

At Company A, the parent company determines the top global digitalization projects annually. The central budget for these projects is used to finance license costs and special experts. Costs are ultimately passed on to the business areas. However, there is no central funding for in-house automation projects at the subsidiaries. Project initiators need to find resources for their plans: they can either use the savings of their own unit or the savings of the BSC. *"Developer capacity, those who can be made to focus on development, is scarce. You have to fight for resources.",* said one of our interviewees. It means that it is not enough to demonstrate the expected returns of a project; project initiators should also look for possible funding.

Company D operates an innovation fund that supports internally generated project ideas. They finance small-scale in-house developments and processes that do not require vast resources. Otherwise, it is mostly product ideas that can win funding from this source since, beyond saving costs, these can be sold to customers as value-added products later. In the case of efficiency improvements such as robotic process automation, savings may cover some central overhead costs. In some cases, however, the management decides to use these savings to support further digitalization projects.

At Company C, projects are primarily based on bottom-up initiatives with little or no budget. These are minor improvements at a certain part of the process and rarely end-to-end solutions. Company A is in a unique position as its parent company actively develops and markets digitalization technologies. Early phase digitalization projects

are entitled to access technologies, like artificial intelligence, free of charge. Projects of a larger scale are required to pay service fees, on a pay-per-use base, just like external clients. Beyond the free experimentation period, early-phase projects also benefit from easy access to in-house knowledge on new technologies.

All four companies have centralized units that support digitalization projects. These units accumulate developer capacities accessible for ongoing projects. At Company A and D, similarly to the common example of Google, employees are entitled to devote weekly work hours, determined by their supervisor, to experimental development projects of their choice. In this way, the highly motivated and knowledgeable workforce can be channeled into some of the flagship projects. This also provides participants with opportunities for professional development.

At Company D, each area is responsible for the developments they carry out. There is a dedicated process development team that supports, designs, and develops. Apart from this they strive to keep the innovative approach in the minds of all employees. All the employees of the company are encouraged to take part in the innovation project, and project initiators can later become managers in the implementation phase of the project. Interviewees claimed that many ideas are collected. It is relatively easy to encourage colleagues to come up with ideas, but it is challenging to persuade them to act upon and implement these ideas into workable solutions (Table 2).

According to the case studies examined, the third step of successful digital transformation is to embrace and upscale successfully applied technological solutions. Digitalization projects are at the center of managerial attention in all companies as they see the potential for efficiency gains, better services, and competitive advantage. Successful projects will be rolled out to other units or even upscaled globally within the parent company. Such a decision is likely to be based on the prediction and the measurement of savings related to the innovation.

Successful and upscaled projects that were initially focused on internal development are, in some cases, sold to external customers as well. This was the case, for instance, with Company A's software robots in the procurement field. We also see examples where, on the contrary, development projects based on the specific needs of clients become part of internal organizational practices or the company's standard service portfolio. For instance, the cybersecurity enhancements developed for a specific client of Company D resulted in such great success that the BSC has started to create a standalone solution based on this project.

Discussion

Purposes of digital transformation

Regarding the purposes of digital transformation, the research in the Hungarian business services sector confirms most of the previous knowledge from the scholarly literature. Operational excellence is a significant driver for digital transformation initiatives. Our research found that companies aim for efficiency (e.g., lower costs), speed, the elimination of errors, an improved scalability, and also for building the organizational capabilities that support the operational excellence. In addition to these purposes, digital transformation is a means to address challenges of the industry trends, the labor market, and client needs.

The case studies revealed that some digital transformation initiatives exceeded operational excellence and aimed to respond to the same challenges more proactively. In addition to the "excellence" pattern, this paper emphasizes the role of a "renewal" pattern of digital transformation. Instead of solely improving the existing processes and services that would result in incremental shifts in the business model, BSCs also aim to create new types of services and provide them through profoundly changed workflows (e.g., robotization) which results in business model innovation.

Table 2

Results across the four case companies

Digital transformation pattern	Company A	Company B	Company C	Company D
Purpose	Meeting cost-cutting requirements, strategic renewal (higher added value)	Meeting cost-cutting requirements, anticipating future customer needs	Increasing efficiency, handling labor shortage	Higher service levels, new products, attracting talent by intellectually challenging work
Dedicated organizational unit	Yes (central and functional)	Yes (central and functional)	Yes (central)	Yes (central)
Organizational culture	Customer-focused, lean, agile, innovation culture	Customer-focused, lean, agile, innovation culture	Lean culture	Customer-focused innovation culture
Source of funding	Subsidiary	Subsidiary	Subsidiary	Subsidiary and parent
Resources	In-house and purchased IT solutions, Centers of Excellence, human talents, international corporate network	In-house and purchased IT solutions, human talents, international corporate network	Human talents, international corporate network	In-house and purchased IT solutions, Centers of Excellence, human talents, international corporate network

Source: own compilation

Excellence and renewal as digital transformation patterns in the business services sector

"EXCELLENCE" PATTERN	TRIGGERS	"RENEWAL" PATTERN
Defending the strategic position by maintaining the competitive edge (e.g., competitive labor costs despite increasing salary levels)	**Responding to the industry changes**	Moving up to a new strategic position with higher added value (e.g., more complex, non-routine, knowledge-intensive services)
Improving the service level and the customer experience (e.g., meeting the increasing customer expectations)	**Responding to the needs of external or internal customers**	Offering new types of services (e.g., focusing on problem-solving and value creation in an advisory role)
Lowering the labor intensity in order to reduce exposure to labor supply difficulties (e.g., filling labor shortage with automation)	**Responding to the labor market**	Increasing the attractiveness of the company on the labor market (e.g., repetitive tasks replaced by intellectually challenging work)

Source: own compilation

We argue that the ultimate purpose of digital transformation can be classified by two patterns: excellence and renewal (Table 3). This observation has firm roots in management literature and reflects well on March's (1991) exploitation versus exploration concept (Csedő, Zavarkó, & Sára, 2019b; Taródy, Ferincz, & Kárpáti, 2021). The excellence pattern at digital transformation recalls exploitation (focus on execution and doing routine tasks better), while the renewal pattern is similar to exploration (experimentation with new things). This duality can be found in several studies in the literature: single-loop and double-loop learning in organizational learning (Argyris & Schön, 1978), evolution and revolution in change management (Tushman & O'Reilly, 1996), continuous improvement and reengineering in process management (Davenport, 1993), or conventional view and strategic perspective in information management (Wiseman, 1988). The excellence and renewal patterns offer further detail to the operational excellence and rapid innovation strategies mentioned by (Sebastian et al., 2017).

New digital technologies transform the fundamental structure of the business services sector. During the 1990s, technology-enabled global companies centralized and relocated or outsourced business processes to countries with lower labor costs. Technology remained the primary source of efficiency improvements in this sector for the next two decades. However, our inquiry found that BSCs are uncertain about how the latest digital technologies will affect their strategic position and the business services sector in the CEE region. On the one hand, BSCs reported that automation and robotization enable them to maintain their competitive position, despite the increasing labor costs that served as a source of their competitive advantage previously.

On the other hand, automation and robotization may result in losing the competitive advantage as the importance of both geographic location and labor costs will be significantly lower when processes are largely robotized. Instead of labor arbitrage, migration decisions will be determined by factors like the economical operation of servers or the access of talented IT workforce like automation experts. This paper revealed that proactive BSCs have already created digital competencies for delivering more complex, higher value-added services.

Excellence and renewal patterns were observed in the field of customer service, as well. Digitalization and automation technologies are deployed for meeting increasing expectations of customer. Without improving the service level, there is a threat of losing business, both in the case of external clients (outsourcing services) and internal clients (shared service). In the meantime, innovative BSCs experiment with new types of services and business models based on a unique value proposition. The authors found examples when an internal digitalization project evolved into a value-added service that became part of the service portfolio offered to external clients. The renewal pattern often focuses on problem-solving features and value creation in an advisory role, instead of purely executing a business process effectively.

Higher value-added jobs require a more specialized workforce, compared to previous practice, where many foreign-language graduates work without experience or in-depth knowledge. The dual challenge of excellence and renewal is also present in employment. The authors' case studies denoted that automation is a tool for handling the labor shortage in the CEE market. Lower labor intensity reduces the BSC's exposure to labor supply difficulties. It is an open question whether this type of automation would continue in case of a sudden change in the labor market (e.g., a jump in the unemployment rate). On the other hand, renewal aims to transform the BSC from a transaction-oriented to a knowledge-intensive service provider. BSCs hope that they will be able to attract more talent to their company when repetitive tasks are replaced by intellectually challenging work.

This paper found evidence that the renewal pattern is present in the Hungarian business services sector. However, it is still a question whether a quality change in the service portfolio can be achieved and how this affects the strategic position of these companies. We found that, at various BSCs, complex activities are being moved to Hungary from more expensive locations, while more straightforward, transactional activities are robotized or moved to even cheaper locations. As a result of this service migra-

tion, the number of employees in this sector is reducing in the more expensive locations, but for the time being, in the CEE region, only the nature of the work is changing. According to a previous report on the sector (Marciniak & Ránki-Kovács, 2021) even though transactional, lower value-added activities dominate 49 percent of the companies active in the Hungarian business services sector, 80 percent of the BSCs already focused on providing higher value-added services in their strategy.

Organizational practices that stimulate digital transformation

In our research, it appears that none of the four companies followed a clear, formal, and explicit digital strategy. Nevertheless, all four considered their steps in the digital transformation process successful. This is also supported by the fact that three of four companies have global ownership in a specific digitalization area within their corporate group. It is in part due to the success of their digitalization projects that they receive an increasing amount of higher value-added tasks from their parent companies and that they are represented in the global management of each corporate group. So, what is the reason for their success if it cannot be explained by the existence of a formal digital strategy?

All four companies have created conditions in their organization that encourage experimentation based on employee innovation. In other words, although less successful in conscious design, they are very successful in improvisational experimentation (bricolage). This approach can be useful in situations where the road is unknown, and it is not easy to plan, but learning through multiple iterations and experimentation is possible (Ciborra, 1992). Our results show that the most stimulating factor for successful digitalization projects is not necessarily the existence of an explicit, clear, and coherent digital strategy but rather the development of such organizational capabilities that increase the likelihood of innovative idea creation and the facilitation of their respective implementation.

In his article, Ciborra (1992) recommends corporate executives to (1) value bricolage strategically, (2) design tinkering, (3) establish systematic serendipity, and (4) thrive on gradual breakthroughs. The results of our research justified the same principles. Companies use organizational culture to drive specific practices for idea generation and collection. Then, they embrace promising ideas by allocating resources (money, people, and technology) to these on a case-by-case basis. Projects that look promising are extended to other parts of the organization, even to other subsidiaries of the mother company, or marketed towards clients. This confirms the findings of Do Vale et al. (2021), but in a broader range of digital initiatives and in a different sector.

Conclusions

In the past few years, the revolutionary advancement of technology brought the attention of academics and management practitioners to the digital transformation of companies and their strategic antecedents. This paper aimed to examine the different purposes and practices of digital transformation in the business services sector. To explore them, the authors conducted a multi-case analysis. It confirmed that operational efficiency is the principal target of the BSCs and the digital transformation projects also contribute to this main goal. The identified organizational practices included (1) an organizational culture open to innovation, (2) an internal fund to financially support promising digitalization projects, (3) available key resources (people and technologies) for development, and (4) managerial attention to digitalization projects and potential returns.

Although there has been a general agreement in the scientific discourse that strategy is an essential driver of digitalization and that a digitalization strategy should be clear and coherent, it has also been apparent that many companies do not have an explicit digitalization strategy. In this paper, the authors presented multiple cases where companies achieved remarkable success in digital transformation without having a coherent digital transformation strategy. Instead, these companies created organizational settings that foster idea generation and help managers recognize promising projects that can be embraced and upscaled. Implications of this finding are twofold. Theoretically, it draws upon the discourse on the role of improvisation and experimentation (also known as bricolage) in organizational learning and strategy and connects previous findings in this stream of digital transformation strategies. The authors' research results confirmed Ciborra's (1992) findings that both the generation of innovative ideas and the encouragement of conscious application can contribute to successful digital transformation projects. Practically, it suggests to management practitioners that bricolage in digital transformation can be done more consciously, and organizational capabilities that support experimentation can be established purposefully. Also, digital transformation in the business services sector, where the strategy is typically set by the parent company, can be successful in other ways.

The research results have limitations as data was collected only in the business services sector and analyzed four service delivery companies with expert sampling. However, the research findings point out that, in addition to several papers emphasizing the success of the rational design, successful transformation can be achieved through experimentation, provided that the right organizational capabilities exist. Further research is needed to establish precisely how these capabilities individually contribute to successful digital transformation, how they depend on the digital maturity of the company and how far these results can be extended to other sectors. Corporate executives in the business services sector are uncertain about how technological advancement will affect global sourcing decisions. The BSCs are continuously exposed to a complex challenge, as a notable increase in client expectations is coupled with significant cost pressure, while there is a shortage of knowledge workers in the labor market. Our research revealed that several BSCs started to use digital technologies to respond to the vari-

ous pressures they face. Some of the digital initiatives are somewhat coerced, while others are proactive steps aimed to prepare for the future or even to redefine it. The paper concludes that excellence in existing capabilities and organizational renewal are both important motivators of digital transformation projects in the business services sector. As opposed to some classic dichotomies of strategy or leadership, these two extremes contradict each other. Instead, successful companies, albeit in the business services sector with centers that have a regional or global scale, create stimulating internal circumstances for both types of initiatives. Indeed, because of rapidly changing and often expensive technologies, the implication for smaller companies has to be different.

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