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Research Paper

Generational perspectives in the digital era: Predecessor - successor attitudes towards digitalisation and AI in Hungarian family businesses

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Abstract: In the context of accelerating technological change, family business succession increasingly depends not only on ownership and management transfer but also on intergenerational negotiation of attitudes toward digitalisation, artificial intelligence (AI), and technological innovation. This study explores how differing perspectives between successors and predecessors influence the succession process within Hungarian family firms undergoing intra-family transition. Building on two in-depth case studies, the research adopts a qualitative approach using semi-structured interviews with both predecessors and successors in each firm exploring how different perspectives can foster change in management takeover. Findings reveal generational tension between successors' openness and innovative orientation toward digital transformation and predecessors' moderate, often cautious, stance shaped by tradition, proven practices, and perceived risks of rapid technological adoption. Despite these divergences, the study identifies mechanisms of reconciliation, such as innovation, shared learning, and mutual trust, which enable smoother digital improvement during succession. The analysis contributes to the understanding of how family firms can balance continuity and renewal by integrating differing digitalisation mindsets across generations. The study offers theoretical and practical insights into the interplay between technological attitudes and succession dynamics, emphasising the need for intergenerational dialogue and adaptive leadership to ensure long-term competitiveness in the era of digital transformation challenges.

Keywords: family business succession, digitalisation, artificial intelligence, intergenerational attitudes, qualitative research, Hungary

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1. Introduction

Digitalisation and artificial intelligence (AI) have become defining forces in the contemporary business environment, fundamentally transforming how organisations operate, compete, and create value. Digitalisation involves substantial technological change that reshapes organisational processes, business models, and strategic priorities, requiring firms to continuously adapt in order to improve efficiency, innovation, and sustainability (Porfírio et al., 2024). In the era of the Fourth Industrial Revolution, characterised by rapid technological advancement and increased integration of digital technologies, businesses must respond proactively to remain competitive and resilient (Xu et al., 2018). Technological innovation and digital transformation are therefore widely recognised as strategic priorities, as they enable faster, more flexible and more efficient operations while fostering long-term organisational sustainability. However, the adoption and acceptance of digital technologies are not uniform across organisations or individuals. Significant differences can be observed between population groups, particularly between younger and older generations. These differences are often rooted in variations in technological exposure, digital competencies, openness to change, and perceived usefulness of new technologies (Calvo-Porral et al., 2020).

Older generations, including business founders and senior leaders, may demonstrate more cautious attitudes towards digitalisation due to concerns about complexity, risks, or disruption of established practices. In contrast, younger generations, who have grown up in a

digitally enriched environment, tend to show greater openness and confidence in adopting emerging technologies such as artificial intelligence and advanced digital tools (Baki et al., 2025). These generational differences in technological attitudes have profound implications for organisations, especially family businesses, where multiple generations coexist and share ownership and leadership responsibilities.

As digital technologies increasingly permeate economic and social life, the ability to understand and adopt such technologies becomes essential not only for organisational success but also for maintaining social inclusion and economic participation. Older individuals may face barriers in adopting digital solutions due to lower levels of digital literacy, limited exposure to emerging technologies, or resistance to change (Şoitu et al., 2026). These challenges are particularly evident in family businesses, where senior generations often retain leadership roles while younger successors advocate for technological innovation. Consequently, digital transformation in family businesses is not solely a technological process but also a social and intergenerational phenomenon shaped by differing values, experiences, and attitudes towards technological change.

Family businesses represent a unique and highly relevant context for examining generational differences in attitudes towards digitalisation. Family firms constitute a significant proportion of the Hungarian small and medium-sized enterprise (SME) sector and play a vital role in economic stability, employment, and value creation (Huszák et al., 2021; Csákné, 2012). Their long-term survival depends not only on successful ownership and leadership succession but also on their ability to adapt to technological developments and integrate digital solutions into their operations (Sharma et al., 1997). Despite their economic importance, family businesses have traditionally been perceived as conservative and less inclined to adopt innovation, often prioritising stability, continuity, and the preservation of family traditions (Galeone et al., 2023). This conservative orientation can create tensions when younger generations seek to introduce digital technologies and modernise organisational processes, highlighting the importance of understanding intergenerational attitudes towards technological change.

Recent research emphasises that digital transformation requires a holistic approach that includes process digitalisation, product digitalisation, and broader organisational transformation involving changes in business models and organisational identity (Heider et al., 2022). However, relatively few studies have examined how generational dynamics shape digitalisation processes within family firms. In particular, the attitudes, willingness, and capabilities of different generations play a critical role in determining the extent and success of digital transformation. Previous studies have demonstrated that digital transformation depends significantly on the willingness of family members to pursue and support technological change, as well as their ability to implement digital solutions effectively (Heider et al., 2022). These findings suggest that generational differences in attitudes towards technology can either facilitate or hinder digital transformation and organisational renewal.

In family businesses undergoing succession, digitalisation may serve both as a challenge and as an opportunity. On the one hand, differences in technological attitudes between predecessors and successors can create conflicts, misunderstandings, or resistance to change. On the other hand, digital transformation can also facilitate succession by providing successors with opportunities to demonstrate competence, introduce innovation, and contribute to the long-term sustainability of the firm. Recognition by both generations of the importance of digitalisation for maintaining competitiveness and ensuring organisational survival can foster cooperation, trust, and clearer role distribution between family members. In this sense, technological change not only transforms organisational processes but also influences intergenerational relationships and succession dynamics.

This research focuses specifically on Hungarian family businesses, where intergenerational succession and digital transformation are highly relevant and timely topics. The rapid expansion of digital technologies and artificial intelligence in the 21st century has increased the urgency for family businesses to adapt and develop digital resilience (Csákné et al., 2023; KPMG, 2025). At the same time, differences in technological attitudes between predecessors and successors may influence both the pace and success of digital transformation. By examining two Hungarian family businesses undergoing intra-family succession, this study explores how different generations perceive and respond to digitalisation and AI adoption. The research highlights how successors, often characterised by greater technological familiarity and openness to innovation, may act as drivers of digital

transformation, while predecessors may approach technological change more cautiously due to concerns about organisational stability, risk, and preservation of family traditions.

This study contributes to the academic literature by providing both theoretical and empirical insights into the role of generational attitudes in shaping digital transformation in family businesses. It emphasises that digitalisation in family firms is not only a technological or organisational issue but also an intergenerational and social process influenced by differences in experience, identity, and values. Understanding these differences is essential for supporting successful succession, enhancing digital resilience, and ensuring the long-term sustainability of family businesses. The following section reviews the relevant literature on digitalisation, generational differences in technology adoption, and digital transformation in family businesses.

2. Literature Review

2.1. Conceptual framework

Digitalisation refers to the transformation of organisational processes, business models, and socio-economic activities through the implementation and integration of digital technologies (Brennen & Kreiss, 2016; Xu & Liu, 2024). Unlike digitisation, which focuses on converting analogue information into digital format, digitalisation encompasses broader structural and strategic changes that reshape organisational value creation and competitive positioning. Since the early 21st century, rapid advances in digital technologies have profoundly altered global economic systems, contributing to the emergence of the digital economy and facilitating productivity improvements, innovation, and new business models (Xu & Liu, 2024).

The Fourth Industrial Revolution, characterised by cyber-physical systems, big data, artificial intelligence, and interconnected technologies, has accelerated the pace of industrial transformation and organisational digitalisation (Xu & Liu, 2024). Digitalisation now extends beyond technological implementation to encompass the transformation of entire industries, organisational capabilities, and strategic decision-making processes (Batt et al., 2020; Galeone et al., 2023). As a result, firms must continuously adapt to evolving technological environments to maintain competitiveness and ensure long-term sustainability.

Despite its strategic importance, digitalisation presents significant challenges, particularly for family businesses, which often face structural, cultural, and emotional barriers to technological change (Ferraro & Cristiano, 2021; Heider et al., 2022). These barriers are frequently linked to risk aversion, limited resources, and the prioritisation of long-term stability and family continuity over rapid technological innovation (Batt et al., 2020). Nevertheless, digitalisation also creates opportunities for family firms to enhance efficiency, improve customer relationships, and strengthen their competitive position (Galeone et al., 2023).

Artificial Intelligence (AI) represents one of the most significant technological drivers of digital transformation. AI can be defined as the capability of systems to interpret external data, learn from it, and apply acquired knowledge to achieve specific objectives through adaptive and autonomous processes (Haenlein et al., 2019). Similarly, Russell and Norvig (2021) describe AI as intelligent systems capable of rational decision-making. AI is not a single technology but rather a combination of algorithms, systems, and computational tools that enable machines to perform complex cognitive tasks, including pattern recognition, prediction, and autonomous decision-making (Gbadegeshin et al., 2021). These technologies allow organisations to automate processes, improve decision-making accuracy, optimise operations, and enhance customer experiences (Abousaber & Abdalla, 2023).

The growing integration of AI into business processes represents a key element of digital transformation, enabling firms to create value through data-driven strategies and intelligent automation (Xu & Liu, 2024). However, the adoption of AI also presents challenges, including organisational resistance, lack of digital competencies, and uncertainty regarding implementation strategies (Roy, 2021). These challenges are particularly relevant in family firms, where technological adoption is often influenced by generational dynamics, organisational culture, and leadership attitudes toward innovation (Del Vecchio et al., 2025).

Family businesses constitute a fundamental pillar of economies across the globe, accounting for a substantial proportion of both global GDP and employment. Their distinctive

nature, like blending family ties with entrepreneurial drive creates a combination of unique strengths alongside intricate challenges. In the twenty-first century, the prominence of family-owned enterprises continues to expand, with conservative estimates suggesting that they comprise more than 70 percent of all businesses worldwide, and likely an even greater share among privately held firms (Csákné et al., 2023; KPMG, 2025). Furthermore, family businesses represent one of the most prevalent forms of business organisation and play a dominant role in European national economies, including Hungary (Csákné, 2012; Huszák et al., 2021). Family firms are typically defined as organisations in which ownership and management are controlled by one or more families, and leadership succession occurs within the family across generations (Kása et al., 2019; Mandl, 2008). These firms are characterised by a strong overlap between family and business systems, creating unique organisational dynamics shaped by family values, traditions, and long-term orientation (Tagiuri & Davis, 1996).

One of the defining characteristics of family firms is "familiness," which refers to the unique bundle of resources resulting from family involvement in ownership and management (Chrisman et al., 2005). Familiness can provide competitive advantages, such as strong organisational commitment, trust, and long-term strategic orientation. However, it may also create limitations, including resistance to change, risk aversion, and slower adoption of innovation (Ferraro & Cristiano, 2021). Succession represents a critical stage in the lifecycle of family businesses, influencing their long-term survival, strategic direction, and ability to adapt to technological change (Sharma et al., 1997; Gómez-Mejía et al., 2011). During succession, tensions may arise between predecessors, who prioritise stability and continuity, and successors, who often seek innovation and technological modernisation. This intergenerational dynamic plays a central role in shaping organisational attitudes toward digitalisation and AI adoption (Heider et al., 2022). Socioemotional wealth (SEW) refers to the non-financial value derived from family ownership, including identity, emotional attachment, and the desire to preserve family control (Gómez-Mejía et al., 2011). SEW theory provides an important theoretical perspective for understanding family firms' strategic behaviour, particularly their resistance to change and innovation (Gómez-Mejía et al., 2011). This perspective explains why family firms may prioritise continuity and family legacy over technological transformation, even when digitalisation offers potential competitive advantages.

Tacit knowledge represents a critical organisational resource in family businesses, consisting of experience-based, context-specific knowledge that is difficult to formalise or transfer through formal documentation. In family firms, tacit knowledge is often embedded in family relationships, shared experiences, and long-term involvement in the business. Tacit knowledge plays a particularly important role during succession, as predecessors transfer accumulated expertise, business practices, and organisational culture to successors through direct interaction and mentoring (Csizmadia et al., 2016). This knowledge transfer process is essential for ensuring continuity and preserving organisational capabilities across generations. Digitalisation can both support and challenge tacit knowledge transfer. While digital technologies facilitate the documentation and sharing of explicit knowledge, tacit knowledge transfer continues to rely heavily on personal interaction, trust, and shared experience (Talarico et al., 2024). As a result, family firms must balance traditional knowledge transfer mechanisms with modern digital tools.

To conclude this framework, the key operations terms are considered within the scope of this study. Knowledge transfer is a central process in family business succession, involving the transmission of skills, values, and organisational knowledge from predecessors to successors (Csizmadia et al., 2016). This process often begins at an early stage, as successors are gradually introduced to the business environment and participate in organisational activities (Heidrich et al., 2018; Tobak et al., 2018). Digitalisation plays an increasingly important role in knowledge transfer, enabling organisations to codify knowledge, facilitate communication, and enhance organisational learning processes (Talarico et al., 2024). However, family firms often rely heavily on traditional interpersonal knowledge transfer mechanisms, which may slow the adoption of digital technologies. The Technology Acceptance Model (TAM), developed by Davis (1989), provides a widely used theoretical framework for understanding technology adoption behaviour. TAM suggests that individuals' acceptance of technology is primarily determined by two key factors: perceived usefulness and perceived ease of use. TAM is particularly relevant in case of family businesses, where

generational differences may influence attitudes toward digitalisation and AI adoption. Successors, who are typically more familiar with digital technologies, may perceive higher usefulness and ease of use, while predecessors may exhibit greater resistance due to lower technological familiarity and higher perceived complexity. Finally, 'perceived usefulness' refers to the extent to which individuals believe that using a particular technology will enhance their performance, while perceived ease of use refers to the degree to which individuals believe that the technology will be easy to use (Davis, 1989). These perceptions influence individuals' attitudes toward technology, which in turn affect their behavioural intention to use it and ultimately their actual technology usage.

2.2. Innovation, digitalisation, and AI application in family businesses

Digital transformation represents a fundamental organisational shift involving the integration of digital technologies into all areas of business operations (Porfírio et al., 2024). Empirical research indicates that digital transformation enables firms to improve operational efficiency, enhance customer experiences, and develop innovative value propositions. Family firms face unique challenges in digital transformation due to governance structures, emotional attachment to tradition, and risk aversion (Ferraro & Cristiano, 2021; Worek et al., 2025). However, when family firms successfully implement structured digital transformation strategies, they can enhance competitiveness and ensure long-term sustainability (Ahmad et al., 2024).

Studies also highlight that digitalisation adoption depends not only on technological availability but also on organisational capabilities, leadership attitudes, and internal competencies (Roy, 2021). Research demonstrates that digital technologies can significantly enhance organisational performance, innovation capacity, and decision-making processes (Andersen et al., 2001; Kastelli et al., 2024; Abousaber & Abdalla, 2023). At the European level, empirical data shows that AI adoption is steadily increasing, with approximately 20% of EU enterprises using AI technologies, highlighting the growing relevance of AI in modern business environments (EUROSTAT, 2025). Digitalisation and AI adoption in family firms are influenced by organisational culture, leadership attitudes, and family dynamics (Heider et al., 2022). Family willingness and ability to adopt digital technologies play a crucial role in determining digital transformation outcomes.

Keeping up with modern technology provides significant opportunities for improving organisational performance, innovation, and competitiveness (Andersen et al., 2001; Kastelli et al., 2024; Abousaber & Abdalla, 2023). These technologies enable firms to automate processes, optimise operations, and enhance customer engagement. Digital technologies also enhance organisational resilience by improving decision-making, operational flexibility, and communication processes (Del Vecchio et al., 2025). Furthermore, digitalisation can facilitate knowledge transfer, improve organisational learning, and support succession processes (Talarico et al., 2024). However, family firms may face barriers such as limited digital competencies, resource constraints, and resistance to change (Ferraro & Cristiano, 2021). Empirical research also indicates that innovation and digitalisation significantly influence the export performance and competitiveness of Hungarian family firms (Csákné et al., 2023). However, family firms often face challenges in implementing digital transformation due to structural and cultural barriers (Ferraro & Cristiano, 2021).

Family firms differ from non-family firms in their approach to digitalisation and innovation. Research suggests that family firms may exhibit lower innovation levels due to risk aversion and the desire to preserve family control (Csákné et al., 2023). Socioemotional wealth theory provides a key explanation for this behaviour, as family firms prioritise family identity, legacy, and control over technological transformation (Gómez-Mejía et al., 2007). However, digitalisation also provides opportunities for family firms to enhance competitiveness while preserving family identity and organisational continuity (Galeone et al., 2023).

Intergenerational dynamics play a crucial role in shaping digitalisation attitudes in family businesses. Younger generations often act as key drivers of digital transformation, introducing new technological capabilities, innovative thinking, and digital competencies (Del Vecchio et al., 2025). Their involvement enhances organisational resilience, competitiveness, and innovation capacity. However, research also suggests that family firms may exhibit reluctance toward digital transformation due to concerns about uncertainty and the desire to preserve socioemotional wealth (Batt et al., 2020; Liu et al., 2023). This reluctance may lead family

firms to symbolically support digitalisation without fully implementing digital technologies (Liu et al., 2023). Empirical studies also show that generational involvement significantly influences digitalisation outcomes. While successors often promote digital transformation, their impact may vary depending on organisational structure, ownership concentration, and risk preferences (Xu et al., 2025).

3. Methods

3.1. Research objective

The research objective was to explore the different attitudes of generations towards digitalisation and AI in Hungarian family businesses. This main topic was analysed not only to define and contextualise the current stance of digitalisation in FBs, but also to assess the impact of generational differences. Therefore, the paper aimed to discover how different generations perceive the usefulness and ease of use of modern technology and how they intend to adopt digitalisation and apply AI within the family business. Furthermore, the study examined possible generational patterns to explore the relationship dynamics within family firms and the effect of different attitudes towards modern technology on not just everyday operations and strategic decision-making, but also the changing aspects of generations. This is important because it helps reveal the role of different factors in business decisions. For instance, in case of FBs even emotional factors can have a long-term impact on firms' performance (Berrone et al., 2012; Gómez-Mejía et al., 2007; Mosolygó et al., 2022).

3.2. Research design

This study employed a qualitative research design within a cross-sectional time horizon, grounded in an interpretivist epistemology that emphasises subjectivity, context, and the socially constructed nature of organisational reality. This approach was considered appropriate because the research seeks to explore how different generations within family businesses perceive and interpret digitalisation and artificial intelligence (AI), and how these attitudes influence succession dynamics and intergenerational cooperation. Exploratory research was conducted, allowing patterns and themes to emerge from participants' lived experiences rather than testing predefined hypotheses. Narrative inquiry through semi-structured interviews was used as the primary data collection method to gain an in-depth understanding of generational perspectives, attitudes towards technological change, and their implications for succession and organisational continuity.

The research was conducted using a multiple case study design involving two Hungarian family-owned small and medium-sized enterprises (SMEs). This approach enabled an in-depth, context-sensitive examination of intergenerational dynamics within real-life organisational settings. By analysing two family firms undergoing intra-family succession, the research aims to capture both the tensions and potential synergies between predecessors' and successors' perspectives on digital transformation.

3.3 Sample selection

The minimum requirement of selection was for firms to be considered family businesses if they met the criteria defined by Kása et al. (2019) and were larger than micro-enterprises. The selected sample was required to demonstrate a transgenerational orientation, characterised by the intentional transfer of control from one generation to the next within the family, with managerial succession occurring across generations. Accordingly, only those firms were included in which the succession process was actively underway, operationalised as the transfer of the CEO position, with or without a concurrent transfer of ownership, and the firms had to be located in Hungary.

The sample size is limited to the two chosen companies, representing, on the one hand, the typical Hungarian family businesses in terms of the current life cycle of the successor and of the firm; on the other hand, family members involved in the firm and the decision-making (Wieszt & Drótos, 2018). The sample size was limited to just two companies because they

best illustrated the different paths of the next-generation's integration into companies. Although limited in number, this sample size is methodologically justified within the interpretivist qualitative research tradition, where the emphasis lies on depth, contextual richness, and theoretical insight rather than statistical representativeness.

First, qualitative research is explicitly concerned with understanding meanings, processes, and lived experiences, rather than estimating population parameters. Consequently, sample size adequacy is not determined by statistical power but by the extent to which the data provide sufficient conceptual depth to address the research question (Creswell & Poth, 2018; Boddy, 2016). As such, small, purposively selected samples are widely accepted, particularly in studies aiming for exploratory or theory-building contributions.

Second, the determination of sample size in qualitative research is fundamentally guided by the principle of data saturation, defined as the point at which additional data no longer generate new themes or insights (Guest et al., 2006). Empirical research demonstrates that a substantial proportion of thematic codes often emerge within the early stages of data collection, with diminishing analytical returns thereafter. More recent scholarship further refines this perspective by introducing the concept of information power, which posits that the more relevant information a sample holds for the study aim, the fewer participants are required (Malterud et al., 2016; Roberts et al., 2026). Although other companies were examined in this present study, it became apparent that the saturation point had been reached after the initial two cases, as no new themes emerged from the other cases of the original sample pool.

Third, qualitative methodological literature consistently emphasises that there is no universal minimum sample size, and that adequacy must be evaluated in relation to the study design, research questions, and analytical strategy (Wutich, et al., 2024). Importantly, studies employing approaches such as phenomenology, interpretative analysis, or case study designs frequently rely on very small samples (e.g. 3–10 participants), precisely to facilitate intensive, fine-grained analysis of each individual case. Within such designs, each interview constitutes a rich "case" rather than a simple data point.

Fourth, the present study adopts a purposive sampling strategy, targeting participants with specific expertise and direct experience relevant to the research phenomenon. In such contexts, sample size is less critical than sample relevance and analytical depth, as the aim is to maximise informational richness rather than represent population variance. This is consistent with methodological arguments that qualitative research prioritises appropriateness and depth over numerical adequacy (Subedi, 2021; Ravitch & Carl, 2021).

Finally, the decision to rely on four interviews is further justified by the focused and homogeneous nature of the sample, combined with the exploratory scope of the study. As recent methodological advances argue, saturation should be understood not as a fixed numerical threshold but as a function of the study's analytical sufficiency and explanatory power.

3.4 Data collection

Data were collected through semi-structured interviews with key organisational actors from both case companies. The sample included one predecessor and one successor from each firm, resulting in a total of four interviews. This dual perspective enhanced the findings by incorporating multiple viewpoints within the same organisational context. The interviews were conducted between August and September 2025 and were carried out via video conferencing platform (Microsoft Teams) at the participants' workplaces, while one interview was conducted via telephone due to geographical constraints. Each interview lasted approximately one hour. All interviews were conducted in Hungarian, the native language of the participants, and were audio-recorded with their explicit consent. The recordings were transcribed verbatim by the author in Hungarian and then translated into English to ensure accuracy while preserving the original meanings and nuances expressed by participants.

3.5 Data analysis

Data analysis was conducted using the Gioia Method (Gioia et al., 2013), a systematic, inductive qualitative research approach to explore themes by organising raw data into a structured framework, which enabled the identification and interpretation of recurring patterns, meanings, and themes within participants' narratives. This analytical approach was

particularly suitable for capturing the subjective experiences and interpretations of individuals involved in digital transformation processes. The analysis focused on participants' perceptions of digitalisation and AI, generational differences in technological attitudes, succession-related dynamics, and the implications of these factors for organisational adaptation and continuity. Special attention was given to how differences in technological openness, digital competence, and willingness to adopt innovation influenced intergenerational relationships, role transitions, and organisational decision-making.

The analytical process proceeded with initial (open) coding, during which each transcript was examined line-by-line to identify meaningful units of text, allowing first order concepts to emerge inductively from participants' accounts without imposing preconceived categories. These preliminary codes were then subjected to refinement and categorisation, whereby similar or conceptually related concepts were grouped together, and a structured coding framework was developed to ensure consistency and clarity across the dataset. Building on this organised scheme, the analysis advanced to theme development, in which categories were systematically clustered into higher-order themes that captured broader patterns of meaning relevant to the research questions, ensuring that each theme demonstrated internal coherence while remaining analytically distinct from others.

Overall, this methodological approach enabled a nuanced and contextually grounded exploration of digital transformation and succession within family businesses. By integrating multiple generational perspectives, the study provides insight into how technological change is interpreted, negotiated, and implemented within family firms, and how these processes shape both organisational development and transgenerational continuity.

3.6. Case study background

The methodology includes two case studies that illustrate the effects of the differing viewpoints of generations towards digitalisation and modern technology such as AI. The aim was also to comprehend how it affects succession and the desire to preserve the family legacy. Two Hungarian FBs (operating in Hungary with Hungarian ownership) from different industries were selected from a larger sample pool using purposeful sampling. For participants to be included in the sample, companies had to meet some basic requirements. Each is represented by a predecessor and a successor. The firms met the criteria of a family business according to Kása et al.'s (2019) definition and exceeded the size of a micro enterprise. Sample firms needed to be characterised by a transgenerational approach, with control deliberately handed down from one generation to another within the family (Chua et al., 1999; Zellweger, 2012) as the transfer of the management should take place within the family, between different generations. This sampling strategy followed the principles of purposive sampling, which aimed to capture different perspectives within a clearly defined subgroup of Hungarian family firms with ongoing intra-family succession. Although company size and industry were not formal selection criteria, relevant contextual information related to these characteristics was also collected. The main attributes of the sample companies are presented in Table 1.

Table 1. Characteristics of case companies. Source: *author's own*

	Case 1	Case 2
Company profile	Manufacturer and (importer) distributor of building materials	(Importer) Distributor and service provider of technological machinery for wood industry
Firm size	SME	SME
Market	national	national
Year founded	1992 (regime change)	2010 (originally founded during regime change approx. 30 years ago)
Family ownership	100%	100%
Revenue (2024)	approx. 1 620 million HUF	approx. 755 million HUF
No. of employees	9	9
Generations actively involved	2	2
Children involved	1	1
Management among generations	shared	shared

Ownership among generations	shared	shared
Decision making among generations	shared	shared
Industry	Medium-Low-Technology Industry	Medium-High-Technology Industry
Market	Multinational competitors Customers don't require advanced technology	Multinational competitors Customers need latest technology products Both sales and service activity require the usage of modern technology in machinery
Product	Building material (e.g. filler, compound, plaster) No R&D, only distribution of exported product	Technological machinery for (mainly) wood industry Imported technology, own service and maintenance, requires technological knowledge
Technology usage & level of digitalisation at company	Basic level of technology usage User-level office applications and automated order processing Only first steps taken in packaging automating	Medium level of technology usage User-level office applications, automatic e-mail sending system, CRM, provision of online knowledge base and training materials for partners, automated order processing, design and servicing of custom machines using modern technology, internal training platforms
Future plans for digitalisation and modernisation	Own product R&D, more automated processes Many opportunities and spaces for further modernisation and technology improvement with plans and dedication from the side of the next generation manager	Improve the level of providing integrated service for customers with the help of AI Opportunities for further development with closer collaboration of the import supplier (producer company) Intention of the next generation manager to find foreign partner company for further expansion

The two companies operating in the national market in different segments served as models for the research. Both of them were established in the early nineties and the origins of the business can be traced across three generations to the present. The interviewees from the different generations are close in age, share the same position in the FBs and have the same level of higher education attainment. In both cases, intra-family successors were appointed, even though the successors followed different paths into the family business. The following sections present the case background in detail.

Case study 1

The company is operating in the national market as a building material producer, importer and distributor. In this company, the family business appointed a successor based on long-term collaboration and demonstrated capability. The company was originally established by the predecessor in the early nineties after the regime change in Hungary with professional support from the grandfather. The father developed the FB with his brother-in-law for two decades with competence and passion. He was the CEO and he made the decision about the successor after several years of working together with his son. The successor is now representing the third generation, consciously prepared himself from the very beginning for work in the family business and for making a personal contribution to the family legacy. Both his studies and his ideas fit the company's profile and expectations. He started his career at the family business from the very beginning. He was a summer trainee as a student then intentionally "went along step-by-step on the career ladder." By now he successfully managed innovative projects such as modernisation of production.

The technological advancement of Case Study 1 can be characterised as relatively low, both at the organisational and industry level, with gradual modernisation initiated primarily by the successor. The company operates in the building materials sector, which is classified as a medium-low-technology industry. The firm's activities focus mainly on the production, import, and distribution of building materials such as fillers, compounds, and plaster. The business

model does not involve significant research and development, and its core operations historically relied on conventional processes with minimal technological integration. Furthermore, customers in this market segment do not require advanced technological solutions, which has contributed to the slower adoption of digital and automated systems.

At the company level, the overall digitalisation and technology usage can be described as basic. The firm uses user-level office applications and automated order processing systems, while the automation of packaging processes has only recently begun. Prior to the successor's involvement, modern technological solutions were largely absent. The predecessor primarily relied on traditional management and operational practices, reflecting a basic level of technological engagement. His technological usage was limited to essential office tools necessary for administrative and operational functions.

In contrast, the successor demonstrates a stronger orientation toward technological modernisation. Although his technological competence is currently at a basic level, he has already contributed to tangible improvements, such as introducing modern packaging machinery and supporting the automation of certain production processes. His managerial approach reflects a forward-looking perspective, with strategic intentions to expand digitalisation, increase process automation, and potentially initiate product-related research and development. This indicates a generational shift toward greater technological openness and innovation, even though the company remains in the early stages of digital transformation.

Overall, Case Study 1 represents a family business operating in a low-technology environment, where technological advancement is emerging gradually through the influence and initiative of the successor rather than being historically embedded in the organisational structure.

Case study 2

The second company is also an SME operating in the national market as an importer and distributor, service and spare parts provider of wood and aluminium industry technology machines. The company is helped by an external consultant for ages. The consultant is also specialised to family business succession he contributed to the appointment of the successor and succession planning. The female successor, the daughter of the predecessor parents did not choose her field of study, nor professional knowledge to fit the family business profile. She had her own career with different professional orientation and joined the family business only after she was appointed for successor candidate with a five-year plan with clear expectations and milestones. First, she established her own web design agency and did not consciously prepare to take over the company. Despite not starting her career in the family business, she gained the necessary experience during the succession period to take over the company and to implement technological change and innovative ideas within the firm.

Case Study 2 demonstrates a significantly higher level of technological advancement compared to Case Study 1, both at the firm and industry level. The company operates in the technological machinery distribution and servicing sector, primarily providing imported machinery and maintenance services for the wood and aluminium industries. This industry is classified as medium-high-technology, and customers require technologically advanced products and continuous service support. Consequently, both sales and service activities necessitate advanced technical knowledge, digital tools, and continuous technological adaptation.

At the organisational level, the firm has already implemented a range of modern digital and technological solutions. These include customer relationship management (CRM) systems, automated e-mail communication, automated order processing, and the provision of online knowledge bases and training platforms for business partners. In addition, the company engages in the design and servicing of custom machines, which requires advanced technological competence and specialised technical expertise. These features indicate a medium level of digitalisation, with several structured digital systems embedded into daily operations.

The predecessor possesses basic technological competence in terms of general digital usage, primarily utilising standard office applications. However, due to the nature of the business, he has maintained a higher level of technological engagement in relation to the machinery itself, reflecting industry-specific technological familiarity rather than general digitalisation competence.

The successor, in contrast, demonstrates a more advanced level of technological engagement and plays a key role in the company's digital development. Despite having a professional background unrelated to the industry and initially pursuing an independent entrepreneurial career, she successfully acquired the necessary competencies during the succession process. She introduced significant technological improvements, including the modernisation of business communication systems, implementation of CRM platforms, and development of online training and knowledge-sharing platforms for partners. Her leadership reflects a strong commitment to innovation and digital transformation. Future plans further emphasise technological advancement, including improving integrated customer service with the support of artificial intelligence and exploring opportunities for international expansion through foreign partnerships.

Overall, Case Study 2 represents a technologically more advanced family business operating in a higher-technology industry, where digitalisation and technological innovation are essential components of competitiveness. The successor plays a central role in accelerating technological modernisation and integrating advanced digital solutions into the company's strategic and operational framework.

In summary, the two firms also differ significantly in their present level of digitalisation, and their technological starting points were also markedly different at the time the successors joined the family businesses. In Case 1, the company operated with minimal technological integration prior to the successor's involvement. Consequently, the successor entered an organisational environment with very low digital maturity, where even incremental technological improvements represented substantial progress. In contrast, Case 2 already operated in a more technologically advanced environment due to the nature of its industry, which involves the distribution and servicing of complex technological machinery requiring specialised technical knowledge and digital support systems. Although the predecessor's personal digital competence remained at a basic level, the company had already integrated certain modern technological tools into its operations. This meant that the successor in Case 2 joined a business with an established technological foundation and greater exposure to digital processes. As a result, while the successor in Case 1 primarily initiated the introduction of modern technologies and digital practices, the successor in Case 2 was able to build upon and further develop existing technological systems, accelerating digitalisation and contributing to more advanced technological integration within the company.

4. Findings

The main aim of the research was to reveal the viewpoint of the different generations towards digitalisation, then to investigate the differences by comparing the attitudes. Furthermore, to see if the research allows exploring whether this difference in approach towards the new technologies has any impact on the succession process and the inter-generational dynamics. The characteristics of the interviewees in this study are presented in Table 2.

Table 2. Characteristics of interviewees. Source: *author's own*

	Case 1	Case 2
Predecessor	male over 65, CEO founder of current company related professional background started his career as entrepreneur in related company before this FB Basic level of technology usage, User-level office applications	male over 65, CEO founder of current company related professional background Started his career as entrepreneur in this FB Basic level of technology usage in general, but higher level of applied technology in case of sold machinery, User-level office applications

Successor	male over 30, CEO second son of predecessor related professional background started his career in this FB joined the company in 2016 basic level technology usage and digitalisation committed to modernize the company and improve inner processes with the help of modern technology already improved packaging by introducing modern machinery	female over 30, CEO second daughter of predecessor not-related professional background started her career as entrepreneur, not in FB joined the company in 2016 medium-level technology usage and digitalisation already modernised business communication system with business partners and CRM system, made online platform for online knowledge base and training materials for partners

The GIOIA method analysis revealed clear generational differences in how predecessors and successors perceive and respond to digitalisation and technological change, while also highlighting their complementary roles in enabling technological transformation during succession. The results of the analysis are presented in Table 3. The first-order concepts are highlighted through illustrative extracts from interviews.

Table 3. Concepts, themes, and aggregate dimensions. Source: *author's own*

First-order concepts (extracts)	Second-order themes	Aggregate dimensions
"The market is changing so rapidly..."	Recognition of rapid change	Perceived Technological Disruption and Uncertainty
"World has accelerated exponentially..."	Perceived environmental turbulence	
"There will be huge transformations"	Expectation of technological disruption and uncertainty	
"it is impossible to say what kind of companies will be needed in a few years' time"		
"I no longer want AI to tell me what I think"	Reluctance toward AI adoption	Predecessor Caution and Controlled Withdrawal
"She knows how to use it (AI)"	Perceived generational gap	
"Adapting is no longer my problem"	Delegation of technological responsibility to successor	
"When I see something works better, I act"	Proactive improvement mindset	Successor Innovation Orientation and Agency
"I want to bring something new"	Innovation-oriented thinking	
"I want to create something new"	Desire to contribute to firm renewal and legacy	
"If we don't modernise …, then we won't remain competitive in the market"	Digitalisation as competitive necessity	Digitalisation as Strategic Tool for Competitiveness
"I would like to see the company grow … as a result of modernisation and optimisation"	Efficiency-driven digitalisation	
"I have opportunity to develop and improve"	Strategic growth orientation	
"She is better at handling the changes"	Trust in successor competence	Intergenerational Role Transition and Succession
"Next generation will be able to keep up with them, adapt to them"		
Expectation of next generation development	Intergenerational reliance	
Successor implementing modernisation	Gradual transfer of control	

The aggregate dimension of perceived technological disruption and uncertainty emerged strongly from predecessor statements, reflecting their awareness of rapid environmental change, technological acceleration, and uncertainty regarding the future role of artificial intelligence. Predecessors expressed caution toward adopting new technologies, particularly AI, and demonstrated a degree of hesitation rooted in their reliance on proven business practices and their long-term experience navigating earlier economic transitions. This was accompanied by a recognition of a generational competence gap, as predecessors acknowledged the successors' greater familiarity with digital tools and their ability to respond more effectively to technological developments. These findings suggest that predecessors do not resist digitalisation entirely, but rather adopt a measured and reflective stance, balancing

awareness of technological necessity with concerns about risk, uncertainty, and loss of control over familiar business processes.

In contrast, the successors' perspectives contributed to the aggregate dimensions of successor innovation orientation and agency, as well as digitalisation as a strategic tool for competitiveness, demonstrating a proactive and opportunity-driven approach toward technological change. Successors viewed digitalisation not as a threat but as a necessary and strategic instrument for improving operational efficiency, ensuring competitiveness, and enabling future growth. Their statements reflected a strong willingness to introduce improvements, modernise internal processes, and contribute actively to the renewal of the family business and the preservation of its legacy.

The interviews showed a generational divide in digitalisation acceptance. However, both generations recognised the necessity of digital transformation and its strategic importance for sustainability and continued success. Predecessors view the current environment more negatively. They demonstrated measured caution, shaped by reliance on long-proven business practices, concerns over implementation risks, and uncertainty about AI's implications. This is reflected in the following comments by the predecessor (Case 2): "The market is changing so rapidly that I am convinced she (the successor) is much better at handling it"; "I no longer want to use artificial intelligence to tell me what I think. I am sure of that. I can accept that it exists, but she (the successor) knows how to use it"; "What we see in the world today, and how we will adapt to both technological and social developments, is no longer my problem. … We managed a regime change, which I don't think was as big a change as what is coming now".

In a similar vein, the predecessor (Case 1) reflected on the digitising world: "I think that the world has accelerated to such an extent, exponentially over the last 15-20 years for sure, but also in the last few years, that compared to before, the world and the environment have become completely different. When it comes to artificial intelligence, it is impossible to say what kind of companies will be needed in a few years' time. It is certain that there will be huge transformations, necessarily huge transformations, and I dare not even predict how the next generation will be able to keep up with them, adapt to them, or contribute to them".

While successors are focusing on more of their personal opportunities to improve the business, successors, in contrast, expressed a sense of intent for modernising internal processes, enhancing productivity, and preparing the firm for future market challenges. As younger generation takes on the risk of changing established processes, it requires considerable acceptance and trust from the previous generation. However, the older generation also has certain expectations of the next generation in terms of innovation and further development of the organisation. This is reflected in the comments made by the successors themselves: "When I see that something else works better, then I tend to take action" and "Looking ahead to the coming years, I want to bring something new to the market. Not just to the market, but I want to create something new" (Successor, case 1). The successor of case 2 also expressed a similar sentiment: "Looking ahead to the future of the business, I would like to see the company grow not in terms of the number of employees, but in terms of operating a little more economically as a result of modernisation and optimisation"; "If we don't modernise, digitise, etc., etc., then we won't remain competitive in the market. So, I have every opportunity to develop a lot and really improve".

In sum, the findings support the aggregate dimension of succession as a mechanism of technological transformation, as predecessors increasingly delegated technological responsibility to successors and expressed trust in their capabilities. This indicates that succession represents not only a transfer of leadership but also a transfer of technological agency, where successors act as drivers of digital transformation. Overall, the Gioia analysis demonstrates that generational differences in technological attitudes create a dynamic interplay in which predecessor caution and successor innovation orientation jointly facilitate gradual, succession-driven digital transformation within family businesses.

5. Discussion

5.1. Intergenerational attitudes toward technology

As digital transformation accelerates, family businesses face the dual challenge of generational succession and technological adaptation. Research indicates that generations differ significantly in technology acceptance, risk tolerance, and digital mindset. These differences can either hinder collaboration or, as in the examined cases, become a catalyst for innovation when managed appropriately.

In line with previous literature on generational differences in acceptance of innovation and digitalisation (Baki et al., 2025; Şoitu et al., 2026), the study highlighted how successors displayed high openness to digitalisation, while predecessors approached technological change with caution, influenced by institutionalised routines, experiential knowledge, and a desire to safeguard stability within the firm. Although both generations realised the modern challenges and digital necessity, they perceived digitalisation and AI as essential for maintaining competitiveness and ensuring long-term sustainability. The findings illustrate that digital transformation is correlated with generational change, confirming the findings of previous research (Csákné et al., 2023). When approached collaboratively, differing attitudes can support sustainable renewal, enhance family cohesion, and foster innovation.

Predecessors admitted their lack of willingness to adapt to modern technology, contrary to previous findings regarding the greater propensity for innovation among family businesses and confirming that generational transition influences this propensity for innovation (Csákné et al., 2023). In both cases, previous generation leaders perceived limited usefulness for the application of AI in their own strategic decision-making responsibilities. However, the integration of digital technologies is necessary in market competition (Xu et al., 2018).

Predecessors admitted a perceived generational gap in the usage of modern technology, as they acknowledged their lag in technological adaptation. Furthermore, their experience with AI was not promising, so they delegated related tasks to the incoming generation, while they remained reluctant towards AI adoption. Meanwhile, they expect the younger generation to innovate and to improve the organisation, even though previous research shows that the succession implies only minor change in the innovation orientation (Fletcher et al., 2012). On the other hand, successors have the knowledge to adopt, and do not fear modern technology. Moreover, the new generation has the intent to act, to digitalise and to modernise the companies with a proactive improvement mindset and innovation-oriented thinking combined with attention to legacy preservation.

5.2. Digitalisation as a driver of generational change

Digitalisation emerged not only as a technological process, confirming previous findings (Heider et al., 2022), but also as a mechanism influencing leadership transition. In both case firms, digital tasks were more easily delegated to successors, providing early opportunities for responsibility and decision-making, and establishing “safe spaces” to practice leadership and negotiate authority boundaries. This research finding is in line with Talarico et al. (2024) as digitalisation can support succession processes.

This transfer of responsibilities in connection with digitalisation facilitated smoother succession, reducing conflict and enabling predecessors to practice the difficult process of ‘passing of the baton’ in a project where the successor can easily demonstrate more knowledge and greater expertise to gather trust and experience.

Though attitudes differed, both predecessors and successors emphasised the importance of mutual respect and trust in navigating technological change. Although that family business may face limited digital competencies, even resistance to change (Ferraro & Cristiano, 2021), mechanisms such as shared learning, open communication, and joint evaluation of digital tools helped moderate intergenerational differences, enabling smoother transitions. Moreover, digitalisation influenced not only operational processes but also socioemotional wealth (Gómez-Mejía et al., 2007) by reinforcing a shared sense of responsibility for preserving the legacy, strengthening organisational identity through joint adaptation efforts, and fostering the sustainability of the family firm.

5.3. Theoretical contributions

The paper contributes to the literature on family business succession, intergenerational leadership, and digital transformation in the FB context. Building on previous studies that emphasise the role and the positive effect of the younger generation on digitalisation and innovation in FBs (Del Vecchio et al., 2025), this study complements existing scientific literature by demonstrating the dual effect of the differing attitudes of generations. On the one hand, successors facilitate digital transformation with an innovation mindset; on the other hand, the environmental turbulence and digital necessity assessed by predecessors combined with succession trust can have a significant impact on, and promote, strategic renewal and succession-driven transformation.

5.4. Practical Implications

The findings illustrate that digital transformation can coincide with generational change. While digitalisation introduces tensions, it also creates opportunities for structured involvement of successors. This supports earlier arguments that succession should be viewed not only as a transfer of power but also as an opportunity for modernisation and technological change.

Therefore, for practitioners, the study suggests successors should frame digitalisation as an opportunity for strategic renewal and a step toward acquiring comparative advantage, which helps the organisation's long-term survival (Andersen et al., 2001; Kastelli et al., 2024; Abousaber & Abdalla, 2023; Del Vecchio et al., 2025). Whereas predecessors can maintain foundational values while supporting incremental technological experimentation. Shared leadership during digital transitions may smooth succession, reduce conflict, and balance changes in organisational culture.

Furthermore, policymakers and the designers of government programs aimed at stimulating and developing the economy must also take these additional factors specific to family businesses into account and approach the issue of modernising family businesses and their digital development with an eye toward generational differences in order to overcome generational resistance so that Hungarian companies can regain their competitive edge.

6. Conclusion

This study examines how differing attitudes toward digitalisation and artificial intelligence (AI) among predecessors and successors shape intra-family generational change in Hungarian family businesses. Drawing on qualitative case studies and semi-structured interviews with stakeholders from two medium-sized family firms, the study analyses how openness to digital technologies, perceived risks, and intergenerational trust influence succession processes. Findings reveal that successors' proactive engagement with digitalisation contrasts with predecessors' cautious but tradition-based approach, creating a productive tension that can foster innovation when supported by clear role boundaries and collaborative decision-making. Simultaneously, successors experienced heightened pressure to modernise while protecting tradition, which can also be an emotional dynamic consistent with broader research on family business governance.

This paper contributes to the literature by conceptualising digitalisation and artificial intelligence adoption in family businesses not merely as technological or operational developments, but as intergenerational processes embedded in succession dynamics. The study integrates insights from family business succession research and digital transformation scholarship to demonstrate that the adoption of digital technologies is shaped by the interplay of generational attitudes, organisational continuity, and strategic renewal. More specifically, the findings show that predecessors and successors differ systematically in their perceptions of technological usefulness, risk, and organisational change: while predecessors tend to adopt a more cautious and stability-oriented stance grounded in experience and the preservation of established practices, successors display greater openness toward innovation and a stronger orientation toward digital transformation as a source of competitiveness and long-term development. In this regard, the paper extends existing scholarship by reframing succession as not only a transfer of ownership and managerial authority, but also a transfer of technological agency. At the same time, the study moves beyond a conflict-centred

interpretation of generational differences by showing that these divergent orientations may become complementary under conditions of trust, shared learning, and gradual role transition. Accordingly, the paper offers both a theoretical contribution, by linking succession and digital transformation within a common analytical framework, and an empirical contribution, by providing context-specific evidence from Hungarian family SMEs on how continuity and renewal can be balanced in the course of intergenerational transition.

The findings indicate a need for deeper exploration of digitalisation and AI in family firms, and a broader inclusion of stakeholder perspectives to capture long-term outcomes. Future research should expand the sample size, incorporate non-family employees of different generations, and examine longitudinal changes in AI adoption within FBs as stakeholders grow and adapt to the digitalisation challenges of family businesses.

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