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# **Tensions to Digital Transformation in Family Businesses: A Paradox Perspective**

*Short Paper*

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## **Abstract**

*Organizations are undergoing digital transformation in an increasingly more technological world, pushing traditional businesses, more specifically family businesses, to adopt advanced technologies to remain competitive. Digital transformation is one of the key challenges faced by many family businesses today, however, there is little research around this topic. To address this gap in literature, this study asks: How do the paradoxical tensions of a family business influence its digital transformation? We report on an ongoing historical case study at one of the oldest family businesses in the building and construction industry. In our preliminary analysis, we identify three paradoxical tensions that influence the digital transformation initiatives in a family business. Our next step is to further investigate the approaches that the family businesses have taken to revolve these tensions. We contribute to research and practice by understanding the tensions to digital transformation in family businesses.*

**Keywords:** Digital transformation, family business, paradox theory, case study

## **Introduction**

Organizations are undergoing digital transformation in an increasingly more technological world, pushing traditional businesses, more specifically family businesses, to adopt advanced technologies to remain competitive (Soluk and Kammerlander 2021; Vial 2019). These businesses are vital to the global economy. In the United States, family businesses account for 90 percent of all businesses, contribute 64 percent of the national gross domestic product (GDP), and employ 62 percent of the workforce (Van Der Vliet 2021). In Australia, they represent 67 percent of all businesses, contribute more than 50 percent of the national GDP, and provide 55 percent of employment (KPMG 2021). Likewise, more than 60% of all companies across Europe are family businesses (Ballini 2020). Digital transformation is one of the key challenges faced by many, in particular, traditional family businesses today (Dias et al. 2020; Soluk and Kammerlander 2021).

For family businesses, digital transformation presents more challenges than other businesses because of their unique tensions (Agarwal et al. 2022; Ciriello et al. 2019; Diaz-Moriana et al. Forthcoming). Family businesses are defined as organizations where the majority of the top management team consists of family members (Chua et al. 1999). They are also often traditional (Erdogan et al. 2020) and multi-generational

(Soares 1997). These characteristics of family businesses increase the complexity of digital transformation by adding a new layer of tensions. For example, tensions between different generations of family or between family and non-family managers may affect the decisions made for acquiring new technologies (Kammerlander et al. 2015). Non-family managers may have more expertise and knowledge about new technologies, whereas family managers may have more control and experience in the business (Barnes and Hershon 1976; Steier et al. 2015). Ultimately, these tensions in family businesses can influence its digital transformation.

A handful of studies in information systems (IS) research have explored digital transformation in family businesses (Agarwal et al. 2022; Malik and Nicholson 2020; Soluk and Kammerlander 2021). Soluk and Kammerlander (2021) found a set of barriers and enablers to digital transformation and suggest the ways in which dynamic capabilities are used in family businesses. Malik and Nicholson (2020), in their study of global information technology (IT) outsourcing, identify the institutional logics relating to family, community, and profession and discuss how the managers of global organizations respond to these logics. However, there is still a lack of theoretical and empirical knowledge about how family businesses approach their digital transformation and the tensions associated with it. In this study, we adopt a paradox perspective to understand the tensions to digital transformation in family businesses. A paradox theory can help us investigate organizational tensions and how they can be managed (Agarwal et al. 2022). Therefore, we ask: *How do the paradoxical tensions of a family business influence its digital transformation?*

To answer our research question, we are conducting an interpretive case study (Klein and Myers 1999) informed by organizational history research (Kipping and Lamberg 2017). An interpretive approach is most suitable for this research due to different perspectives that family and non-family members may have on the same issue that led to tensions in the organization. A historical narrativist approach is complementary because it can help us understand the long term and generational tensions that persist in the family businesses. We selected a traditional family business in the Australian building and construction industry as our case organization. Through this study, we found that the tensions to digital transformation in a family business could cause paradoxes of ability-willingness, collaboration-control, and risk averse-risk taking in different temporal points. In this short paper, we present our initial findings focusing on these paradoxes; and, as the next step, we plan to further investigate them to identify the potential approaches that the case organization have taken to resolve the tensions in achieving successful digital transformation.

The remainder of this short paper is structured as follows: In Section 2, we review the literature on contextual and theoretical backgrounds. In Section 3, we describe the research method. In Section 4, we present our initial findings of this study before the conclusion including potential contributions.

## **Literature Review**

### ***Contextual Background: Tensions to Digital Transformation in Family Businesses***

Digital transformation undoubtedly causes tensions in organizations, and this is even more prominent in family businesses (Baiyere et al. 2020; Mills 2018). Vial (2019) defines digital transformation as “a process that aims to improve an entity by triggering significant changes to its properties through combinations of information, computing, communication, and connectivity technologies” (p. 118). Unique to family business is that both the family and non-family members may experience tensions when a disruptive technology is changing the organizational processes because of their family-led structures (Soluk and Kammerlander 2021) as well as their economic and non-economic goals (Diaz-Moriana et al. Forthcoming). Due to the interconnectedness of family and business, it presents wide range of disagreements such as, struggles to separate work and family needs (Memili et al. 2013), rivalries among family members (Levinson 1971), and marital disagreements (Kammerlander and Ganter 2015). The nature of tensions can vary depending on the family business and their interest in technology (Kammerlander and Ganter 2015). Family businesses that have been around for generations may experience generation conflict where there is a discrepancy between the ‘old’ and the ‘new’ (Alderson 2015). Due to favoritism by the founder towards particular family members can invoke power struggles in others (Glover 2014). The interconnectedness of always seeing family at work and at home can trigger business and family tensions (Danes 2006; Danes and Lee 2004). There can also be relationship conflicts due to sibling rivalry (Levinson 1971) or interpersonal conflicts between family members (Ensley and Pearson 2005).

The tensions can arise because of the emotion that comes with supporting non-economic goals of family businesses and affects the process of digital transformation (De Massis and Rondi 2020). When managers and employees have a strong bond to an organization, it can lead to a desire to preserve the status quo and resist changes (Broekaert et al. 2016). Adding on, family businesses also have trouble acquiring knowledge from external sources as they fear the loss of control (Chrisman et al. 2015b; Lambrechts et al. 2017). Family businesses struggle to pursue digital transformation as they are seen to be more cautious and risk averse than non-family businesses, due to their propensity to promote socioemotional wealth (Diaz-Moriana et al. Forthcoming).

The combination of family and business makes it more difficult to manage the tensions of digital transformation (Barrett and Moores 2020). For instance, one of the most important components of digital transformation is people. This can pertain to the upskilling of individuals to facilitate the digital transformation or the hiring of employees to help implement the change (Wessel et al. 2021). Particularly in family businesses, the hiring of external employees can cause tensions as this is often seen as a loss of control of the firm and their identity (Kammerlander and Ganter 2015). Similarly, the introduction of new processes can lead to tensions within family businesses. Family members may be emotionally attached with the old ways of working (Dyer Jr. 1988) such as printing reports to their manager and refuse to send the same message via email. In sum, a major challenge that these businesses face is managing non-economic goals concerning socioemotional bonds as opposed to operations of the business (De Massis et al. 2015). By identifying and managing the tensions between socioemotional bonds and business operations will allow family businesses to appreciate both sides of the contradiction and produce a competitive advantage (Barrett and Moores 2020; Kotlar et al. 2013).

### ***Theoretical Background: Paradox Theory***

Paradoxes are defined as “persistent contradictions between interdependent elements” (Schad et al. 2016, p. 10). Once used in philosophical and psychological foundations, paradoxes have since been used by academics as a lens or perspective for comprehending and managing organizational tensions (Lewis 2000; Poole and van de Ven 1989). Previous research has suggested that management of organizations can raise multiple paradoxes such as exploration-exploitation (Smith and Tushman 2005), collaboration-control (Sundaramurthy and Lewis 2003), automation-augmentation (Raisch and Krakowski 2021), ability-willingness (Chrisman et al. 2015a), and risk aversion-risk taking (Poole and van de Ven 1989). A paradox perspective can help us understand antithetical tensions in family businesses (Erdogan et al. 2020).

While most of those paradoxes are generally applicable to any business, there are several that is particularly interesting to understand the tensions in family businesses and one that concerns technology. For example, in the exploration-exploitation paradox, exploration engages individuals and organizations in search, experimentation, and variation, whereas exploitation enhances efficiency and productivity through choice, execution, and variance reduction (Smith and Tushman 2005). The emerging paradox is that exploration and exploitation are contradictory activities, yet an organization cannot achieve desirable performance objectives without engaging in both. In the technology management domain, when considering the automation-augmentation paradox, automation implies that machines take over a human task, whereas augmentation means that humans collaborate closely with machines to perform a task. Using a more comprehensive paradox theory perspective, Raisch and Krakowski (2021) argue that, augmentation cannot be neatly separated from automation when organizing. However, if organizations adopt a broader perspective comprising both automation and augmentation, they could deal with the tension and achieve complementarities that benefit business and society.

When concerning family businesses, the paradoxes such as collaboration-control, ability-willingness, and risk aversion-risk taking are helpful to understand the unique tensions that are inherent to and common in family businesses. In the collaboration-control paradox, control advocates accentuate the challenges of individualism and the value of extrinsic motivation (Sundaramurthy and Lewis 2003) which maybe a characteristic of family managers. A collaborative approach, in contrast, stresses managers' tendencies to be collectively oriented and intrinsically motivated which might also be applicable in family orientation because of their inherent relationships. In the ability-willingness paradox, ability captures the latitude of deciding on an organization's goals to choose its strategic, structural, and tactical means (Hambrick and Finkelstein 1987). In contrast, willingness is defined as the involved family's disposition to engage in idiosyncratic behavior based on their goals, intentions, and motivations that drive the organization.

Leppäaho and Ritala (2022) incorporates temporal separation logic to recognize a behavioral paradox between risk-aversion and risk-taking. Family businesses are known for their propensity to promote their non-economic goals (Westhead and Howorth 2007) and given their long-term orientation, this leads them to be more cautious around their decision-making. However, in time of crisis, their behavior turns toward risk-taking in order to survive in the long term (Leppäaho and Ritala 2022).

In a sense, different concepts of the paradox theory can help us identify root causes and provide meaningful explanations to the tensions of family business digital transformation by describing conflicting demands, opposing perspectives, or seemingly illogical decisions (Lewis 2000). Paradoxes, once interpreted, may also help to develop potential solutions to resolve those tensions (De Massis et al. 2015). Therefore, the paradox theory can help us understand the unique tensions inherent to family businesses in digital transformation.

## **Research Method**

This ongoing study uses a history-informed qualitative case study research method to address our research questions, focusing on the organizational tensions that impede the digital transformation process of family businesses (Kipping and Üsdiken 2014; Walsham 1995). An interpretive approach is most suitable for this research due to different perspectives that family and non-family members may have on the same issue. Moreover, a case study method allows us to focus on one particular setting and attempt to gain a complete understanding on the complex processes that exist within the organization. Adopting this approach, we first collected data from documented and verbal historical sources to construct narrative sequences (Buckley 2016) related to our case context. We then used interpretive qualitative methods to analyze the narratives (Klein and Myers ; Pan and Tan 2011).

We chose a retail business in the building and construction industry, hereinafter: Builders' Land (BLand), as our case organization. All names used in this paper are pseudonyms to protect the confidentiality of the organization and the participants. BLand was a suitable candidate for this case study as it is a family business that has recently attempted digital transformation and has faced difficulty in the implementation of new digital technologies for numerous years. Coupled with the fact that BLand shows strong socioemotional wealth which is a major indicator of high family involvement in the business, BLand is a suitable case for understanding the tensions between business and family that answer our research question. We also identified four distinct generations and family/non-family staff during the study.

Documents and interviews were the two main sources of data that was collected. The documents consisted of internal and external archival material such as strategy documents, marketing presentations, IT reports, web pages, newspaper articles, and blogs. Overall, we collected and coded approximately 500 A4 size pages of text data. We used a semi-structured interview guide for the interviews. The questions were categorised into 7 categories, (1) background, (2) plans for acquiring new digital technologies, (3) consequences of not using digital technologies, (4) challenges to digital transformation, (5) how to cope with challenges, (6) business's ability to digital transformation, and (7) family's support to digital transformation. In total, 20 semi-structured interviews were conducted with staff including founder family, top-level management, middle-level managers, operational employees, and IT. As a result of different positions and knowledge in different domains, each interviewee was given different questions. For example, questions about the family's support to digital transformation would be asked to family member staff as opposed to non-family staff. A summary of our data collection is provided in Table 1, including key interviewees, their family/non-family status, relevant generation, and positions in the business.

We approached data analysis from an interpretive perspective (Klein and Myers 1999) using a historical narrativist approach (Kipping and Lamberg 2017). Our collective interpretations included the perspectives of the research team and feedback from our participations. Throughout the analysis, we held regular team meetings to discuss and adapt our individual ideas toward building a collective analysis of the data in several stages. We used open and axial coding techniques to interpret texts and organize them into three key categories – (1) tensions to digital transformation, (2) managerial attempts to overcome the tensions, and (3) the family's readiness to overcome the tensions. Based on the analysis, we found three paradoxical tensions between the family and the business aspects at BLand, as we elaborate in the next section.

Type of Data	Key Interviewee/Data Source	Position/Description
Interviews (one hour × 20 interviews)	Interviewee A	Founder (family, first-generation)
	Interviewee B	Managing director (family, second-generation)
	Interviewee C	Marketing director (family, second generation)
	Interviewee D	IT manager (family, third-generation)
	Interviewee E	Operations manager (non-family, fourth-generation)
	Interviewee F	Finance manager (non-family, fourth-generation)
	Interviewee G	Human resource (HR) manager (non-family, fourth-generation)
	Other family interviewees (3)	HR director and accountants
	Other non-family interviewees (10)	Store managers, company secretary, accounting assistants, HR assistants, and store assistants
Archival material (about 500 pages)	Internal archival material	A timeline of BLand history, strategy documents, and marketing documents
	External archival material	News articles, websites, blog posts, industry publications
<b>Table 1. Summary of the Data Collection</b>		

## Preliminary Findings

The preliminary findings of our study reveal a plethora of different tensions ranging from strategic decisions to sibling rivalries to emotional attachments between the old and the new IS. We also saw short-term tensions such as choosing and implementing digital transformations with the lack of IT expertise in the upper management as well as long-term tensions that affect the business' strategic goals where technology will impact the overall direction and focus of the business. In particular, we identified three paradoxical tensions for digital transformation at BLand. In the remainder of this section, we elaborate on these paradoxical tensions by providing empirical evidence and our interpretations on how they influence digital transformation in the family business.

### ***Paradox 1 - Family Businesses Are Less Willing to Digitally Transform Despite Having the Ability to Do More***

During our analysis, many interviewees felt that a lack of IT knowledge hindered BLand's ability to implement and fully use the digital solutions, and thus, developed an avoidance in the technology, as Interviewee D identified,

*“One way we're using Open Office, which was free. So, there was all he saw was an expense, because he didn't appreciate the potential that office 365 will bring to the business. All he saw was licensed costs. And, you know, he meant, yeah, he just saw as a monthly cost that we weren't paying for now.”*  
(Interviewee D)

Without proper comprehension of the solution from the senior management, it would be exceedingly difficult to justify the cost of investments that a digital solution can bring. Especially if you lack the IT awareness, the understanding of the use case, and its benefit to the organization, it will present a major barrier to digital transformation.

Interviewee F brings another perspective into the financial barriers which cause unwillingness to digitally transform,

*“It's about mindset that this is the first time in [BLand]'s life, they're actually implementing a cloud-hosted solution. So going from, okay, upfront, we pay for physical servers that they put in their racks*

*and paying that upfront cost, it's now getting more around us to this idea that we're going to be getting billed monthly for something.”* (Interviewee F)

As a result of Bland being new to the investments of digital transformation, it is difficult for them to wrap their heads around the concept of subscription-based models as well as the high cost involved. This inevitably leads to a disconnect with the solution as they are unable to justify the cost and the benefit that it will bring. However, as Interviewee G notes *“they’re mindset is slowly starting to change to accepting of digital transformation”*.

Whilst there is this unwillingness for Bland to pursue digital transformation, our findings reveal that they do have the ability, more specifically financial ability, to pursue these initiatives. Having strong financial ability is a strong determinant into the success of digital transformation as it provides you with the resources to not only invest in the technology itself but also allows organizations to hire the right expertise that can greatly increase the success of the project, as Interviewee E explains,

*“I believe that we do have the financial resources available to invest and to fast track, whether that be by bringing in individuals who have the necessary experience, to help us but also to invest in digital platforms.”* (Interviewee E)

Therefore, drawing on the ability-willingness paradox, we derive the first paradoxical tension as family businesses are less willing to digitally transform despite having the ability to do more.

### ***Paradox 2 – Leading Family Members Exert Control over Decision-making for Digital Transformation Despite Their Collaborations with Non-family Managers***

The lack of IT knowledge can cause major tensions within any organization when pursuing digital transformation. Uniquely to family businesses, tensions go beyond delayed timelines and bringing in the wrong people for the job but also sibling rivalry between those in the upper management. For instance, a family member without formal IT education proposed for a Master Data Management System (MDMS) without the adequate analysis of its benefits, costs, implementation strategy, and usage. Despite this, it was approved, and the solution was purchased for tens of thousands of dollars with no plan on how it should be implemented, as Interviewee G explains,

*“At the moment we are, the board is particularly, look nervous, because their previous investment is not working. There’s been a lot of time, effort, money invested in our first major digital transformation being [MDMS]. And it has not come to fruition, not because of the time or effort, it’s because it was, to be very blunt, we should never have got it. It was not the right solution.”* (Interviewee G)

This project ended up being a failure without the correct resources to mold the system to suit the needs of the business and no change management plan on how it will be used by employees. With the project having been delayed for over three years, this caused tremendous tension between the family member and the rest of the management. This has not only severely slowed the decision-making process of future technologies but also ingrained fear of future technologies, as Interviewee G continues to explain,

*“We’ve got other platforms that will be really, really crucial for us. You know, we’ve got a pitch in for a HRIS which will take away a lot of manual processes. That’s been kind of six months in the making, because we’re fearful of making another wrong decision.”* (Interviewee G)

Whilst this is quite a normal and common reaction across all organizations, this tension is heightened by a sibling rivalry where one felt it was a personal attack against them when their ideas were not considered, as Interviewee C states,

*“I wouldn’t say I know the truth. But my gut feel tells me, the managing director, he’s my brother, tends to listen normally after another fifty people have told him what needs to be done, not when I say it.”* (Interviewee C)

The combination of these tensions that exist within the upper management reveals the second paradox. All family members in the upper management are required to approve or veto business decisions. If there is a disgruntled family member this will stifle decision-making. To prevent this from happening, all family members will need to be valued and respected by listening and getting their ideas approved. However, if

family members lack the appropriate IT knowledge, it is natural to seek expertise from the other managers, as done by the managing director at BLand. This could lead to collaborations with experts; however each family member could control the consensus in decision making despite the collaborations and the paradox continues. This situation echoes the control-collaboration paradox where higher control of all decisions from all family members will stifle the digital transformation of the business despite their collaborations with experts in the field.

### ***Paradox 3 – Family Businesses Are Risk Averse When Pursuing Digital Transformation Yet in Time of Crisis They Become Risk Taking***

The findings revealed that BLand was quite risk-averse in their digital transformation process because of the way computerization in the late 80's influenced their business, as Interviewee A states,

*“We weren't so worried about gross profit percentages. Our staff knew the parameters that could use to work their pricing within a range. But when the computer came in, it tells you on every invoice and every line how much profit and people got fixated with the numbers. But, of course, you can't chase high profit and get sales growth. Well, I think we lost our way a lot with changing from the old manual way into the computerization.”* (Interviewee A)

BLand saw technology as a threat to their business and its long-term orientation and thus avoided adding technology in their business goals, as Interviewee B adds,

*“I think there's a fear here and this is the hard part. So, what I've been thinking for a while and you know, I need to explain what the transformation is and why and if we don't transform, we become irrelevant, you know, we fall behind in the marketplace.”* (Interviewee B)

This risk-aversity seemed to change when coping with unexpected situations, as the IT manager explains,

*“There is no planning that goes on. It's very ad hoc and it's very reactive. And if there's one thing I can change or would like to change, it would be the fact that I like to prevent things from happening before having to drop everything and react to a situation that I'm not prepared for.”* (Interviewee D)

For example, BLand reacted fast once they caught wind of how far ahead their competitors were in terms of their digital capability which invoked a sense of dread and desperateness when comparing with their own. As Interviewee E says,

*“The thing is the competition are using technology and other practices against us to differentiate themselves and put a distance between us and them. And customers, the younger ones coming up will expect that. So, we've only got a short time to do it.”* (Interviewee E)

In the pursuit of remaining competitive, BLand switched to a risk-taking behavior and made their biggest technological purchase which was the MDMS. This was completed without much evaluation of its feasibility, and it was clear that it was a rushed decision. This placed BLand in a worse of position in terms of their long-term orientation but given its situation among its competitors, one that is necessary if they were to maintain their longevity. Similarly, they reacted fast when businesses moved to digital space when the COVID-19 pandemic began. Thus, these instances echo the risk aversion vs. risk taking paradox, where crisis situations demand, it can invoke vastly different reactions.

## **Conclusion**

In this ongoing study, we ask, *how do the paradoxical tensions of a family business influence its digital transformation?* Our findings revealed three paradoxical tensions as we explained in the potential findings. In sum, we have two main contributions to research. First, we contribute to IS literature by unpacking the tensions to digital transformation in family businesses. Second, by using the paradox perspective, we identified three specific paradoxical tensions that influence the process of digital transformation. Additionally, our case study at BLand provides implications for family and non-family managers in family businesses who are managing digital transformation initiatives. As next steps, we plan to continue our data analysis to identify the potential approaches that the case organization have taken to resolve the paradoxical tensions in achieving successful digital transformation.

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