

Beyond Boundaries: Empowering Family SMEs' International Growth through Digital Platforms' Architecture and Governance

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Abstract

Exporting to multiple countries can help family SMEs achieve growth through economies of scale. However, they frequently encounter difficulties when exporting to multiple countries due to their lack of managerial expertise and international experience. Although forming relationships with partners in foreign markets can provide access to new knowledge that facilitates their international growth, they may avoid forming such relationships to protect their socio-emotional wealth (SEW). Therefore, it is crucial for family SMEs to establish network relationships that can support their international expansion while also safeguarding their SEW. While Digital Platforms have the potential to facilitate family SMEs' internationalization and preserve their SEW, there is limited research on which characteristics of digital platforms can effectively enable internationalization processes in family SMEs. Thus, we propose a research model that describes how digital platforms with effective modular architecture and governance mechanisms can act as strategic partners in facilitating family SMEs' internationalization process while also safeguarding their SEW.

Keywords: Social Emotional Wealth, Digital Platform's Governance, Modular Architecture

1. Introduction

Family small and medium-sized enterprises (Family SMEs) are vital to national growth and job creation in various local economies (D'Angelo, Majocchi, & Buck, 2016). Previous studies have highlighted the importance of international expansion,

particularly exporting to various countries, as a critical strategy that enables family SMEs to attain growth – by leveraging economies of scale (Aulakh et al. 2000) or risk diversification (Patel et al. 2018). However, engaging in export activities across various countries is challenging as it often demands the acquisition of significant new capabilities and resources (George et al. 2005). This is even more challenging for family SMEs since they often have less international experience and managerial expertise than their non-family counterparts (Banalieva et al. 2011). A survey by IBF (2016) revealed that a significant 88 percent of family-owned SMEs in the UK heavily rely on the domestic economy and have limited intentions to expand into markets beyond the UK.

The Uppsala internationalization theory (Johanson et al. 2009) suggests that firms can build network relationships in foreign markets to overcome the challenges of inadequate knowledge of international trade. By forming relationships with key players in local and international environments, such as business partners, stakeholders, and governmental institutions, firms can gain the knowledge and resources required for successful foreign market entry and international growth (Johanson et al. 2009).

However, family firms often hesitate to form network relationships with international and domestic partners. This hesitance stems from a desire to protect their socio-emotional wealth (SEW), which refers to non-financial endowments that meet the family's emotional needs, such as the reputation of the family firm and/or family control over the business (Berrone et al. 2012). The primary determinant guiding the strategic decision-making of family SMEs is the potential loss of SEW, rather than economic risk (Gómez-Mejía et al. 2007). Hence, although developing network

relationships is economically beneficial for their international expansion, family SMEs may be hesitant to do so due to concerns about losing their SEW. For instance, to address the lack of expertise in international markets, family SMEs may consider hiring non-family managers with international experience to manage operations across countries. However, family SMEs may resist forming relationships with such non-family managers due to concerns about relinquishing family control over management to those non-family managers (Hoang et al., 2020). Thus, it is vital for family SMEs to establish network relationships that support their international expansion while also safeguarding their SEW.

Existing literature has suggested that digital platforms (DP) can serve as virtual partners for family SMEs by supporting their international expansion while preserving their SEW (Hoang et al. 2020). These all-in-one platforms, such as the eBay platform, provide a range of capabilities necessary for successful exporting. These capabilities include managing supply chain distribution, handling post-sales customer service supporting marketing activities, and facilitating connections with network partners in international markets through electronic technologies (Gregory et al. 2019). Thus, digital platforms might effectively address international knowledge deficiencies among family SMEs by providing access to a global customer base, streamlined logistics, supply chains, and efficient search for trading partners (Gregory et al., 2019; Karavdic et al., 2005). Additionally, the available capabilities in digital platforms can alleviate fears of SEW loss (Hoang et al., 2020). For example, the concern about losing family control over management when hiring non-family managers can be mitigated as the task of recruiting and managing external managers across multiple foreign markets can now be delegated to the digital platform (Hoang et al., 2020).

While digital platforms have the potential to greatly facilitate the internationalization of family SMEs, not all digital platforms are created equal in their ability to effectively support Family SMEs' internationalization, as it depends on how the digital platform is governed or structured. Since family SMEs have unique requirements in terms of preserving their SEW, these requirements need to be taken into account by digital platform owners features (Hoang et al., 2020) when designing or developing governance mechanisms among network participants. Understanding which specific features or governance mechanisms of digital platforms can effectively protect family SMEs' SEW to facilitate their international expansion is a crucial issue – as it can guide policymakers, digital platform owners, and academics in developing suitable strategies to support the growth and sustainability of these firms.

Given the significant role that family SMEs play in most local economies (D'Angelo, Majocchi, & Buck, 2016), supporting their growth and sustainability can ultimately contribute to the overall strength of the global economy. Despite the importance of this issue, there is limited research on which characteristics of digital platforms can effectively enable internationalization processes in family SMEs. Thus, our study aims to address the following research question:

“How do different features of digital platforms affect the internationalization process of family SMEs, given their desire to preserve socio-emotional wealth?”

To address this, we conducted a systematic literature review (described in section 2) that integrated theoretical works from three research areas: socio-emotional wealth in family firms (Berrone et al., 2012), the Uppsala internationalization model (Johanson et al., 2009; Hoang et al., 2020), and digital platforms (Cavallo 2022) – to develop an initial theoretical framework of family businesses' internationalization process enabled by digital platform (section 3). Based on this initial theoretical framework, we proposed a research model that describes how a digital platform with effective modular architecture and governance mechanisms can act as a strategic partner to facilitate the internationalization process in family SMEs while preserving their SEW (section 4). Theoretical and practical implications are discussed in section 5.

Overall, our study augments current scholarly discussion at the intersection between digital platforms, internationalization, and family business research by highlighting the specific digital platforms' features that can promote family SMEs' internationalization despite their desire to preserve social-emotional wealth. Specifically, our study underscores the importance of efficient governance mechanisms and architecture on digital platforms in preventing potential challenges associated with the desire to preserve SEW, thus facilitating family SMEs' internationalization process. Moreover, the findings from this study also have practical implications as they can offer actionable guidance to policymakers and digital platform owners when shaping their governance structures and architecture to support the internationalization efforts of family SMEs participating in their platforms.

2. Methodology

This study aims to develop a new conceptual research model that describes how different features of digital platforms can influence family SMEs' internationalization process. We conducted a qualitative literature review (Boell et al. 2014; Schryen 2015) to enrich our understanding of existing literature concerning the internationalization of family SMEs

facilitated by digital platforms. Our review encompassed distinct sets of literature: internationalization theory, family firm research, and digital platforms literature. We first explored the influence of family-related attributes on the process of internationalization in family business. To achieve this, we conducted searches in databases such as Business Source Premier, employing a combination of keyword synonyms related to internationalization (e.g., "global", "international," etc.) and family businesses (e.g., "family firm," "family business," etc.) The list of keyword synonyms was obtained from similar literature review studies on family firms' internationalization (Pukall 2014). Based on recommendations from Boell and Cecez-Kecmanovic (2014), we focused on established frameworks in family business research and internationalization, such as the Socio-Emotional Wealth in family firms (Berrone et al. 2012) and Uppsala internationalization theory (Johanson and Vahlne 2009) – to analyze how family business characteristics shape our understanding of the internationalization process. Our analysis revealed that SEW has a distinct effect on the internationalization process in family businesses compared to their non-family counterparts (Gomez-Mejia et al., 2011; Gomez-Mejia, Makri, & Kintana, 2010; Pukall 2014). Specifically, building network relationships in foreign markets might be beneficial for firms in acquiring the knowledge and resources required for successful internationalization. However, compared to their non-family counterparts, family businesses might be more hesitant to form such relationships due to their concerns about losing their family's social-emotional wealth. For instance, forming relationships with foreign investors to secure additional funding might result in a reduction of the family's ownership stake. Thus, it is vital for family SMEs to establish network relationships that support their international expansion while also safeguarding their SEW.

Recently, Digital platforms (DP) have emerged as viable virtual partners that can provide family SMEs with access to necessary international network relationships while preserving their SEW (Hoang et al., 2020). However, not all digital platforms are equally effective in supporting these firms in entering new international markets – depending on how digital platforms are structured or governed. There is limited research on the characteristics of digital platforms that can enable internationalization processes in family firms. Thus, to address this, we thoroughly examined digital platform characteristics that significantly impact a firm's performance in various contexts, e.g., innovation and business growth strategy, and across multiple fields, e.g., marketing, computer science, and information systems. We used keyword synonyms of "digital platform" on conferences (e.g., AIS library) and

journals (e.g., Business Source Premier). By doing so, we synthesized knowledge from multiple disciplines to identify research opportunities for Digital platforms in the context of internationalization in family businesses. From there, we first developed an integrative theoretical framework of family firms' internationalization enabled by Digital platforms (as described in more detail in section 3). This framework formed the foundation for further developing a conceptual interaction model – that demonstrates how effective modular architecture and governance mechanisms of digital platforms could facilitate family SMEs' internationalization while preserving their SEW (section 4).

3. Conceptual Foundations

An integrated theoretical framework (Fig 1) for family firms' internationalization enabled by digital platforms was developed – based on an integration of socio-emotional wealth theory (accounting for unique features of family research), Uppsala internationalization model (accounting for the internationalization means) and network openness achieved from modular architecture and digital governance (accounting for digital platform's special characteristics).

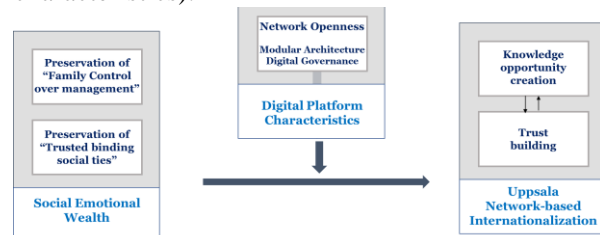


Figure 1. The integrative theoretical framework of family businesses' internationalization process enabled by digital platforms.

3.1. Socio-emotional wealth as the cornerstone in family business research

Socioeconomic wealth (SEW) is an established theoretical theory widely used in extant research to explain the diverse behaviors exhibited by family firms (Cennamo et al., 2012; Saeed et al., 2023). Drawing from behavioral agency theory (Wiseman et al. 1998), SEW is considered the most crucial element that distinguishes family firms from their non-family counterparts (Berrone et al. 2012). While both types of businesses share an economic goal, family firms prioritize achieving non-economic SEW goals that meet their affective needs, e.g., dynastic succession, family control and influence, preservation of family identity, and trusted binding social ties (Berrone et al. 2012). Preserving SEW is the top priority for family firms; they

are more concerned with protecting their SEW than avoiding economic losses (Pukall et al. 2014).

SEW is a multi-aspect construct that includes different forms of non-financial wealth. One such form is "Family Control over Management" wealth, which primarily concerns the preservation of control and influence of a *restricted* group of family members. When family business owners use "family control over management" as the main guiding principle in their decision-making, they typically opt for a conservative investment strategy that prioritizes preserving family control over risky investments, such as innovation and internationalization. Although these investments can potentially yield significant economic benefits, they may also incur potential losses, deprive the family's stable cash flows, and thus put the family control of business at risk (Berrone et al., 2012). Hence, while adopting this conservative approach may limit firm growth, it ensures the stability of their family control.

"Trusted binding social bonds" wealth is another form of SEW that involves maintaining external relationships *beyond* the family circle, e.g., with regulatory authorities, financiers, and the broader business community (Berrone et al. 2012). This SEW emphasizes the conservation of a strong social support network that can facilitate access to resources, experience, and expertise among network members. When prioritizing decision-making, family firms tend to prioritize building long-term, trustful, and committed relationships with partners (Berrone et al. 2012), even if it means sacrificing immediate economic gain. For example, a family business may choose to work with a more expensive supplier they already have a trusted relationship with instead of a cheaper alternative with no prior relationship. They place value on the trust and reliability that comes with trustful relationships, which can lead to greater benefits in the long term. This often results in family firms prioritizing the development of stable, long-term relationships with an extended time frame to pursue growth strategies (Pukall et al., 2014). By prioritizing trusted binding social bonds, family firms can ensure the continuity of their business across generations and sustain their competitive advantage.

3.2. Uppsala theory: internationalization based on network relationship

Family firms are less concerned with economic losses and more focused on other behavioral aspects to preserve their SEW (Pukall et al. 2014). Thus, the Uppsala internationalization model (Johanson et al., 2009) is chosen as the theoretical framework for examining the internationalization process in family businesses as it is also developed based on behavioral research (Cyert et al., 1963). Other internationalization

models, e.g., internalization theory (Buckley et al., 2009), eclectic paradigm (Dunning 1980), and transaction cost theory (Hennart 1982) are more grounded in economic traditions and, hence, provide less space for successful integration of behavioral aspects of family SMEs. Indeed, existing research has mainly integrated the Uppsala model with family firms' behavioral aspects to understand how family business' SEW uniquely impacts the internationalization process compared to non-family firms (Hoang., 2020).

According to the Uppsala internationalization model, successful internationalization requires creating knowledge opportunities and establishing trust-building mechanisms with key players in the international network. "Knowledge opportunities creation" is the ability to create knowledge opportunities necessary for successful internationalization. This can be achieved by collaborating with key players in the international network who can provide potential business opportunities, networks of related firms in their foreign markets, and capabilities needed for internationalization (Johanson et al., 2009). Family firms often lack international market knowledge compared to non-family firms due to lower management skills and business experience (Banalieva et al., 2011). By forming relationships with key players in international markets, family firms can overcome this deficiency by acquiring necessary resources through these players.

"Trust-building" is another critical aspect of internationalization – as the speed, intensity, and efficiency of the knowledge-creation process depend on the effectiveness of trust-building mechanisms between the firm and its network partners (Johanson et al., 2009). In family SMEs, building a trustful relationship with network partners is even more crucial compared to non-family firms (Cooper et al. 2005). When trust increases, family firms become more confident in the knowledge transferred from their network partners, as they believe that it will not harm their SEW, e.g., their ability to maintain family control for their business. However, building trust takes time and effort (Madhok, 2006), which can be even more challenging when building with partners across multiple countries with significant cultural differences. These cultural differences across different norms, values, and beliefs, can lead to misunderstandings and, thus, affect trust-building efforts. This makes family SMEs often reluctant to build network relationships with partners in distant international markets (Hoang et al., 2020). Thus, it is vital for family SMEs to establish trusted network relationships that support their international expansion while also safeguarding their SEW. In the following section, we describe the digital platform's characteristics that might help to build a trustful

relationship with family SMEs during their internationalization process.

3.3. Digital platform characteristics

Digital platforms (DPs) connect different entities and facilitate interactions and transactions among them (Rochet et al., 2006), e.g., Alibaba, eBay, and Taobao. They facilitate cross-border connections and cross-sector partnerships, providing geographically dispersed entrepreneurs with access to international market knowledge, opportunities, technologies, and resources. Digital platforms enable novel ways of accessing and sharing resources (Ojala et al., 2018), which has significant implications for the Uppsala internationalization theory. By promoting efficient ways of "leveraging international resources" (Nambisan et al., 2011), such as reusing intellectual assets and infrastructure among ecosystem members required for successful internationalization, digital platforms can influence firms' decisions and actions related to the "knowledge opportunity creation" process in the Uppsala model in a more efficient manner. In particular, compared to traditional business network hubs, digital platforms are more scalable, accommodating a larger number of users and resources without incurring significant costs, thanks to cloud computing and distributed systems (Porter & Heppelmann, 2015; Yoo et al., 2010). Consequently, ecosystem members can leverage digital platforms' shared resources, leading to positive outcomes such as improved international output and reduced international costs.

DP owners can improve the extent of international resource leverage in their network through the design of network openness, comprising structural openness and decisional openness (Tiwana et al. 2013). Structural openness, which refers to a more open network boundary, allows for the entry of new and diverse types of members to join the network, such as different types of logistics providers catering to different customer needs across different foreign markets (Nambisan et al., 2011). Decisional openness pertains to how members can connect, influence, and shape decisions to ensure smooth international operations. Effective maintenance of both decisional and structural openness can increase the degree to which shared resources can be leveraged among members to conduct effective international operations (Nambisan et al. 2011).

Network openness can affect the "trust-building" mechanism, as discussed in the Uppsala model, among digital platform members. These two types of openness often run in opposite directions; an increase in structural openness (i.e., more open boundaries) may destroy network ties and impede cohesiveness in terms of shared goals, thus destroying the overall trust toward digital

platform openness. To regain trust, the digital platform needs to narrow the decision rights of shared resources down among core digital platform members (i.e., lower decisional openness) (Tiwana et al., 2013).

Digital Platforms can moderate the relationship between structural and decisional openness through a carefully crafted digital platform architecture and digital platform governance to manage international resource leverage more effectively (Cavallo et al., 2022; Casprini et al., 2020). DP architecture is the "conceptual blueprint that describes how the ecosystem is partitioned into a relatively stable digital platform and a complementary set of modules that are encouraged to vary, and the design rules integrating both" (Tiwana et al., 2010). The mechanism of partition and integration is called modularization, which reduces structural complexity in an ecosystem (Heimburg et al., 2023). A modular digital platform that is fluid in its resource recombination and deployment could promote novel business models and entrepreneurial initiatives. While modular architecture can reduce ecosystems' structural complexity through modularity, it cannot reduce their behavioral complexity. The DP owner could control digital platform members' behaviors through governance mechanisms, referring to the mechanisms or rules through which the DP owner exerts influence over DP members (Heimburg et al., 2023).

4. Proposition development

Building on the integrative theoretical framework developed earlier, we present a research model (Figure 2) illustrating that family SMEs might overcome international knowledge deficiencies by establishing trusted partner networks to facilitate their export scope expansion (**P1**), as argued by the Uppsala model. However, the desire to maintain SEW may impede this process, as noted by the SEW perspective (**P2a**, **P2b**). A collaboration with a digital platform partner that features effective modular architecture and governance mechanisms, however, can alleviate the negative impact as suggested by the network openness perspective in digital platform literature (**P3a**, **P3b**). We first discuss the relationship between forming trusted partner networks and expanding export scope.

4.1. Forming trusted partner network positively affects export scope expansion

Expanding the export scope to multiple international markets is a crucial long-term growth strategy for family SMEs. Such a strategy can create value through economies of scale by targeting similar customer segments across multiple countries (Aulakh et al., 2000). This is especially beneficial for family SMEs which often follow niche strategies that target smaller

markets with unique customer needs as the main strategy to compete with larger counterparts (Chen et al., 1995). Since niche segments in a single country can quickly become saturated, family SMEs can address this issue by targeting similar segments in different countries, i.e. expanding export scope to ensure stable growth (Aulakh et al., 2000).

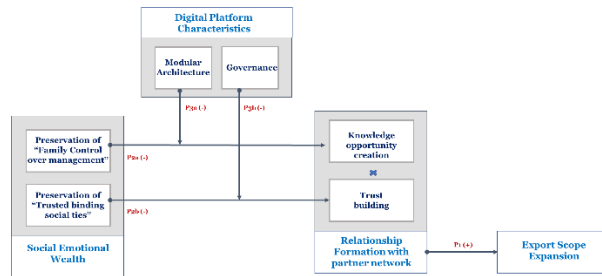


Figure 2. Research Model

However, expanding the export scope requires the coordination of activities spread across different geographic locations, such as marketing, sales, and supply chain distribution, which often require specialized competencies to cater to diverse local market needs (Kumar, 2009). Compared to larger organizations, Family SMEs face more significant challenges due to their limited competencies and resources, particularly when operating in unfamiliar cultural and business environments. Consistent with the Upsala theory, we propose that Family SMEs can overcome these challenges by establishing relationships with international partner networks, who can assist in the "knowledge opportunities creation" process. Implementing this process with network partners can help Family SMEs gain access to crucial resources such as local market information, cultural awareness, regulatory information, and expertise in supply chain management for each local market. These partner networks can assist Family SMEs in customizing their services to meet specific local market needs while simultaneously expanding their reach across markets.

Simultaneously, establishing a "trust-building" mechanism between the firm and partner network is essential to create a supportive environment for an effective "knowledge opportunities creation" process. Trust building facilitates collaboration and coordination, which is particularly important when collaborating with network partners located in geographically dispersed locations. Without trust, network partners may be hesitant to share information or provide resources that are critical for the SME's internationalization efforts. Furthermore, without trust, Family SMEs may be reluctant to rely on network partners, thereby limiting the effectiveness of the "knowledge opportunities creation" process. Thus:

P1. *Successful relationship formation with partner networks, including the ability for "knowledge opportunity creation" and effective "trust building," has a positive interaction effect on export scope expansion.*

4.2. Social-emotional wealth negatively affects the formation of the partner network

According to the Uppsala model, support from network relationships can assist Family SMEs in entering a new market even when the market is geographically distant from their primary venture market. However, expanding to *multiple* international markets often involves considerable coordination efforts across multiple partners in different markets, posing significant managerial challenges for firms seeking to expand their export scope. These challenges are especially salient for family SMEs, which often lack managerial experience due to their unique focus on family-based human asset specificity (Gomez-Mejia et al., 2010). Indeed, "family leaders, who are quasi-automatically selected from a narrow pool of family members, often lack the expertise needed to address new challenges imposed by distant global environments" (Banalieva et al, 2011).

To address the lack of managerial expertise, family SMEs may consider hiring non-family managers with international experience to manage operations across diverse foreign institutional settings. However, while hiring non-family managers can alleviate the burden of information overload, it might lead to a loss of "family control over management" SEW for family SME owners, as they might have to give up their hold on authority, nepotism, or privacy to those non-family managers. As a result, family SMEs are often reluctant to hire non-family managers to assist in coordinating export activities across multiple international markets due to the fear of losing their SEW. Hence, the desire to preserve "family control over management" SEW can make family SMEs less likely to form relationships with partner networks across multiple countries, which ultimately reduces the effectiveness of the international knowledge opportunity creation process that often results from forming relationships with such partner networks. Thus, we propose that:

P2a. *The desire to preserve the family control over management negatively impacts the knowledge opportunity creation process which is required for successful export scope expansion.*

Furthermore, trust-building is a critical concern and is often considered the "organizing principle" in family firms (Arregle, 2017). Family SMEs often prioritize developing long-term and reliable business relationships through "trusted binding social ties" to protect their family business from potential harm by

external partners (Berrone et al., 2012). However, building trust takes time and effort (Madhok, 2006), which can be even more challenging when building with partners across multiple countries with significant cultural differences. These cultural differences across different norms, values, and beliefs can lead to misunderstandings and, thus, affect trust-building efforts. Hence, given their desire to develop "trusted binding social ties," family SMEs tend to establish relationships with geographically closer and culturally similar partners, as it is easier to establish a common understanding of how their partner's business is conducted, thus building trust more quickly. However, this preference can limit their ability to expand into new international markets, which often requires establishing ties with partners in multiple distant international markets (Aulakh et al., 2000). Thus:

P2b. *The desire to build trusted binding social ties makes Family SMEs less likely to develop trust-building process with partners in multiple distant export markets.*

4.3 Digital platform adoption lessens SEW loss fear in partner network formation

4.3.1. Modular architecture. According to P2a, family SMEs face significant coordination challenges when expanding to multiple export markets, as they often lack managerial experience due to unique desires for family-based human asset specificity. While hiring non-family managers with international experience can alleviate the burden of information overload, it may also lead to a loss of family management control, thus jeopardizing their SEW. Hence, family SMEs may be less willing to coordinate the relationship formation process with partner networks across multiple countries, making the process of international knowledge opportunity creation less effective. However, we argue that an effective modular architecture can alleviate the coordination challenge of building international market opportunities across countries. This reduces the need for hiring non-family managers to manage operations across different countries, enabling family SMEs to build international knowledge opportunities more effectively while also safeguarding their SEW.

On the one hand, an effective modular architecture design that supports DP's *structural openness* by strategically partitioning leverageable resources – can enhance the ease of accessing resources required for the internationalization process. These leverageable resources include common assets (e.g., technologies and digital infrastructure), complementary assets contributed by DP partners (e.g., supply chain providers and payment method providers), and exclusive access to different customer segments worldwide (Nambisan et al. 2011). Previous research has shown that strategic partitioning of modules can enable partners to join DP without negative impacts on performance, such as

reducing integration costs while allowing for evolution (Nambisan et al. 2011). By enabling lower integration costs, such effective modular architecture design can allow DPs to invite multiple external parties (such as customers, supply chain providers, payment method providers, etc.) to participate in the internationalization process, thereby enhancing the number of different types of leverageable resources that family SMEs can access to conduct their internationalization process.

On the other hand, an effective modular architecture design that supports *decisional openness* can enhance the ease of combining such leverageable resources – to build smooth international operations across countries. Modularization design involves creating and defining access points to the resources that can be leveraged. These access points may take the form of standardized modular interfaces or specialized interpretation tools that can facilitate the effective utilization of leverageable resources across different contexts (Tiwana et al. 2013). Access points supporting decisional openness allow diverse parties to connect and influence other parties' shared assets in the digital internationalization network more efficiently. Thus, through such open interface access points, SMEs can recombine shared resources or mix and match different sides to build innovative business models that can adapt to diverse international markets more efficiently, thus effectively improving the "knowledge opportunity creation" process.

Based on previous arguments, we argue that an effective modular architecture is able to not only improve the "knowledge opportunity creation process" but also not jeopardize their SEW. Compared to collaboration with traditional business networks, as discussed in the Upsala model, a DP with an effective modular architecture design offers significant advantages over more effective coordination. By leveraging the structural openness of DPs, it becomes easier to access diverse types of partners (i.e., leverageable resources) across multiple countries. Additionally, effective decisional openness enables the process of combining/connecting such partners to ensure smooth international operations that can cater to specific needs for certain international markets, despite the challenges related to geographical distance, spatial considerations, and temporal constraints in cross-border transactions. Thus, coordination challenges related to how to access the partner network required for successful export scope expansion across countries and challenges related to effectively experimenting to find the best combination of partner resources are significantly reduced. This reduces the need for non-family managers, who are often hired due to their experience in finding appropriate partners and understanding how to combine such partners' resources

to achieve international expansion, thus helping family SMEs preserve their socioemotional wealth. Thus

P3a. *A modular architecture strategy, with effective structural & decisional openness, weakens the negative relationship between “family control over management” preservation and the ability for “knowledge opportunity creation.”*

4.3.2. Digital Governance. According to P2b, Family SMEs often prioritize building trustful relationships to protect their SEW, leading them to prefer partners who are closer geographically and culturally similar. This preference arises because forming connections with partners from distant locations can be more challenging, given the potential for misunderstandings caused by varying norms and beliefs due to cultural differences. This challenge is further amplified in online environments, where it can be difficult to assess the trustworthiness of business partners due to the absence of traditional social cues, such as body language on digital platforms (Gefen, 2003). For example, while family SMEs wish to leverage shared cross-border delivery services on digital platforms to expand their export scope, they might not trust the delivery service providers, as they have no prior interactions with those partners and thus lack clues to evaluate their trustworthiness. An untested delivery provider may conduct ineffective shipments of online orders, which could harm family SMEs' service reputation. Since reputation preservation is particularly important for family firms to ensure longevity and success (Berrone et al. 2012), it makes them less likely to develop trust-building processes with untested delivery partners on DP, thus limiting the expansion of the export scope.

We argue that an effective digital governance mechanism based on institution-based trusts, such as recommendations and guarantees from DP owners could help enhance family SMEs' trust in their online partners. Institution-based trust is critical in business environments where DP members have no prior interaction and may come from different cultural and social backgrounds (Li et al. 2023). This type of trust is particularly crucial in online markets where experience is not readily available. The third party, i.e., the DP's owner, can build the trust of the online partner network through high-quality governance mechanisms. An effective governance mechanism involves appropriate adjustment of structural openness, which pertains to who can join a DP, and decisional openness, which refers to who can interact with whom and in what way (Nambisan et al. 2011) – so as to enhance family SMEs' trust in online partners. For instance, DP may implement governance strategies that help identify and remove problematic online members (i.e., change of structural openness) or take legal action against fraudulent online partners on behalf of family SMEs (i.e., re-define the

decisional openness involving how partners and family SMEs should interact/mix-match in an appropriate way). Such strategies could incentivize online partners to behave more cooperatively, reducing potential trouble when family SMEs try to mix and match with other partners. With these governance rules in place, family SMEs may perceive less risk when conducting internationalization activities in such a DP, motivating them to continue participating in the trust-building process with international partners on DP.

P3b. *The effectiveness of digital platform governance toward online partners' trustworthiness weakens the negative relationship between the desire to maintain “locally binding social ties” SEW and the necessity of building trust mechanisms with partners in distant export markets.*

5. Conclusion

Exporting to multiple countries can significantly contribute to the business growth of family SMEs as it allows them to leverage economies of scale (Aulakh et al. 2000). However, these family SMEs often encounter challenges when exporting to multiple countries due to their limited management skills and experience in dealing with multiple international markets (George et al. 2005). Although forming network relationships in foreign markets can offer family SMEs access to valuable knowledge and resources that can facilitate their global expansion (Johanson et al. 2009), they may avoid forming such relationships to protect their SEW (Pukall 2014). Therefore, it is crucial for family SMEs to establish network relationships that not only can support their international growth but also safeguard their SEW (Hoang et al., 2020).

Existing literature has suggested that digital platforms could potentially serve as virtual network partners for family SMEs by supporting the necessary resources for international expansion while preserving their SEW (Hoang et al. 2020). However, the effectiveness of different digital platforms in supporting these firms can vary depending on how the digital platforms are governed or structured. Given the unique needs of family SMEs concerning the preservation of their SEW (Berrone et al., 2012), digital platform owners should consider these special needs when designing and implementing their governance mechanisms and/or their digital platform features. Despite the importance of this issue, there is a scarcity of research that investigates which specific characteristics of digital platforms can effectively facilitate internationalization for family SMEs while safeguarding their SEW.

Our study, thus, contributes to the ongoing scholarly discussion that intersects between digital platforms, internationalization, and family business

research – by highlighting specific features of digital platforms that can facilitate family SMEs' internationalization despite their desire to preserve social-emotional wealth. In particular, we propose that the effective modular architecture of digital platforms can provide family SMEs with new ways of building international market knowledge, thus mitigating the potential negative effects resulting from the desire to maintain “family control over management” during the process of creating “knowledge opportunity”. By doing so, the effective modular architecture can potentially improve the process of creating new international knowledge which is crucial for successful internationalization among family SMEs.

Moreover, as outlined in the Uppsala model, the speed, depth, and effectiveness of the “knowledge opportunity creation” process hinge on how well trust is built between the company and its network partners (Johanson et al., 2009). Therefore, we propose that we can make the “knowledge opportunity creation” process even faster and more efficient for family SMEs by establishing effective governance mechanisms which involve appropriate adjustment of structural openness, and decisional openness. These effective governance mechanisms on digital platforms can make it easier for family SMEs to trust their digital platform partners, which would reduce their tendency to favor local partners over forming relationships with partners in distant foreign markets. This, in turn, would motivate them to collaborate more extensively with their digital platform partners, speeding up the sharing of international knowledge. Ultimately, this would enable family SMEs to expand into more international markets, create new business opportunities, and reduce reliance on a single market. Given the crucial role of family SMEs in the economy, supporting their growth can significantly contribute to the overall strength of the global economy.

Our study holds practical implications for digital platform owners and policymakers alike. Firstly, our research model provides actionable guidance for digital platform owners in implementing governance mechanisms and designing modular architecture that can effectively support the internationalization efforts of family-owned SMEs participating on their platforms. Secondly, policymakers can leverage our research model to formulate policies that support digital platform owners in offering effective governance structures and modular architectures that align with family SMEs' goals of preserving SEW. By incentivizing digital platform owners to maintain such effective features through policy initiatives, policymakers can motivate family SMEs to sustain their engagement on these digital platforms. This, in turn, can motivate them to expand into more international markets, create new

business opportunities, and continue to contribute to the local economy.

A limitation in our current study is the primarily theoretical nature of our research model, highlighting the need for its expansion to the empirical level. For follow-up research, a sequential multimethod study will be conducted with family SMEs to enhance the proposed research model. The qualitative study may expand on the current research model by exploring family SMEs' other perspectives on the usefulness and challenges of the digital platform's modular architecture. Additionally, it could investigate how digital platform owners can establish trustworthy relationships with family SMEs through more effective governance mechanisms. The subsequent quantitative study could focus on testing the expanded research model to validate how digital platforms affect the nature of the family SMEs' internationalization process.

Moving forward, we hope that our study will encourage further exploration of digital platforms' potential in the context of family firms' internationalization. By remaining attentive to these trends, the IS community can support the growth and success of family SMEs in the global marketplace and help them better prepare for the new digital age.

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