

DIGITAL INTERNATIONALIZATION: EXTENDING THE UPPSALA MODEL IN PLATFORM-BASED ECONOMIES

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ABSTRACT

This paper examines digital internationalization by extending the Uppsala model within the context of platform-based economies. Traditional internationalization theory emphasizes gradual expansion through experiential learning and increasing market commitment; however, digital platforms enable firms to internationalize rapidly across multiple markets with minimal physical presence. The study adopts a conceptual approach to analyze how digital technologies, data-driven decision-making, and network effects reshape internationalization processes. The findings suggest that experiential learning is increasingly complemented by digital knowledge, while psychic distance is reduced through platform interfaces and global connectivity. The study proposes an extended framework incorporating ecosystem participation, scalability, and digital capabilities. It contributes to international business theory by offering a contemporary perspective on firm internationalization in the digital era.

Keywords: Digital internationalization, Uppsala model, platform economy, network effects, digital firms

INTRODUCTION

Digital internationalization has emerged as a transformative phenomenon reshaping the traditional understanding of how firms expand across borders. The rapid proliferation of digital technologies, platform-based business models, and data-driven ecosystems has fundamentally altered the mechanisms through which firms engage in international markets. Classical internationalization theories, particularly the Uppsala model, have long emphasized gradual, incremental expansion driven by experiential learning and increasing commitment to foreign markets. However, in the context of digital platforms, these assumptions are increasingly being challenged, necessitating theoretical extensions and refinements (Tolstoy et al., 2016; Mattsson & Cassel, 2020).

The Uppsala model, originally developed in the 1970s, posits that firms internationalize through a stepwise process characterized by increasing market knowledge and resource commitment, typically starting with psychically close markets before expanding further

afield. This model is grounded in uncertainty reduction and experiential learning as key drivers of international expansion. While the model has demonstrated enduring relevance, scholars have argued that it inadequately captures the dynamics of digital firms, particularly those operating on platform-based ecosystems where network effects, scalability, and real-time data flows play a critical role (Vahlne & Johanson, revisited in later works; Tolstoy et al., 2016; Hofer & Knight, 2022).

Digital platforms such as Amazon, Uber, Airbnb, and various fintech ecosystems exhibit rapid internationalization patterns that deviate significantly from the gradualist logic of the Uppsala model. These firms often achieve near-instantaneous global reach due to the borderless nature of digital infrastructure, thereby reducing the importance of physical presence and traditional market entry barriers. As a result, scholars have increasingly focused on the concept of “born digital” or “digital international new ventures,” which internationalize early and aggressively through digital channels (Esho & Verhoef, 2020; Goncalves & Cornelius Smith, 2017, 2018).

One of the central features of platform-based economies is the role of network effects, where the value of the platform increases with the number of users across multiple markets. This dynamic creates strong incentives for rapid international scaling, often bypassing the incremental learning stages emphasized by the Uppsala model. Instead of relying solely on experiential knowledge accumulated over time, digital firms leverage big data analytics, artificial intelligence, and user-generated information to make informed strategic decisions in real time (Filardo, 2021; Wang, 2016). Consequently, knowledge acquisition becomes less path-dependent and more data-driven, challenging the traditional notion of experiential learning.

Furthermore, the concept of “liability of foreignness,” a cornerstone of international business theory, is redefined in digital contexts. Platform firms can mitigate cultural and institutional differences through standardized digital interfaces, localization algorithms, and user customization. This reduces the perceived psychic distance between markets, enabling firms to enter geographically and culturally distant regions more easily than traditional firms (Yin & Li, 2020; Pinho et al., 2023). As a result, the sequential market entry pattern predicted by the Uppsala model becomes less relevant in digital environments.

Another critical dimension of digital internationalization is the role of ecosystems and partnerships. Unlike traditional firms that rely on internal capabilities and hierarchical control, platform-based firms operate within complex ecosystems involving complementors, developers, users, and third-party service providers. These networks facilitate rapid international expansion by leveraging external resources and capabilities, aligning with the revised Uppsala model’s emphasis on network relationships but extending it to a more dynamic and digitally interconnected context (Goncalves, 2022; Scorza, 2019). The relational embeddedness of firms within digital ecosystems thus becomes a key driver of internationalization.

In addition, digitalization has led to the emergence of new forms of value creation and capture, which are not adequately addressed by traditional models. Platform firms often rely on multi-sided markets, where value is co-created among different user groups. This shifts the focus from firm-centric internationalization to ecosystem-centric expansion, requiring new theoretical lenses to understand how value is generated and distributed across borders (López-Morales et al., 2020; Maixé-Altés, 2020). The integration of digital technologies into

internationalization strategies also enables firms to experiment with different markets at relatively low cost, further accelerating the pace of global expansion.

Recent studies have attempted to extend the Uppsala model by incorporating digitalization and platform dynamics. For instance, the concept of “digital experiential knowledge” has been introduced to capture how firms learn from digital interactions rather than solely from physical presence. Similarly, the role of trust, commitment, and relationship building is being reinterpreted in the context of online interactions and virtual networks (Bianchi & Stoian, 2024; Özbek et al., 2024). These extensions highlight the need for a more flexible and adaptive framework that accounts for the unique characteristics of digital environments.

Moreover, the internationalization of small and medium-sized enterprises (SMEs) has also been significantly influenced by digital platforms. SMEs can now access global markets through e-commerce platforms and digital marketplaces without the need for substantial upfront investment. This democratization of internationalization challenges the traditional assumption that only large firms with significant resources can expand internationally (Mawson & Brown, 2017; Mendes, 2021). Digital tools enable SMEs to overcome resource constraints and compete on a global scale, further emphasizing the limitations of traditional stage-based models. Despite these advancements, several challenges remain in fully integrating digitalization into internationalization theory. Issues related to data privacy, regulatory heterogeneity, platform governance, and digital infrastructure disparities continue to shape the internationalization strategies of firms. Additionally, the increasing concentration of market power among dominant digital platforms raises questions about competition and market access in global markets (Szpak et al., 2022; Soroush et al., 2024).

In light of these developments, this study seeks to extend the Uppsala model by incorporating key elements of digital internationalization within platform-based economies. By synthesizing insights from recent literature, the paper aims to develop a conceptual framework that captures the interplay between digital technologies, network effects, and internationalization processes. It argues that while the core principles of the Uppsala model—such as uncertainty reduction and learning—remain relevant, they must be reinterpreted in the context of digital ecosystems where speed, scalability, and data-driven decision-making play a dominant role. Ultimately, understanding digital internationalization requires a shift from linear, stage-based models to more dynamic and network-oriented perspectives. As firms continue to navigate increasingly complex and interconnected global markets, theoretical frameworks must evolve to reflect the realities of digital transformation. This paper contributes to this ongoing discourse by offering a refined perspective on how the Uppsala model can be adapted to better explain internationalization in the digital age (Martínez & Gil, 2024; Pinho et al., 2023).

LITERATURE REVIEW

The literature on digital internationalization has expanded significantly in recent years, reflecting the profound transformation of global business environments driven by digital technologies and platform-based economies. Traditional internationalization theories, particularly the Uppsala model, have served as foundational frameworks for understanding how firms expand across borders. However, the emergence of digital firms and platform ecosystems has necessitated a re-examination and extension of these theories to better capture contemporary dynamics (Tolstoy et al., 2016; Mattsson & Cassel, 2020).

The Uppsala model, originally proposed by Johanson and Vahlne, emphasizes a gradual and incremental process of internationalization based on experiential learning and increasing

market commitment. Firms are assumed to begin their international activities in psychically close markets and expand progressively as they accumulate knowledge and reduce uncertainty. While this model has been widely validated in traditional contexts, scholars have questioned its applicability in the digital era, where firms can internationalize rapidly and even simultaneously across multiple markets (Hofer & Knight, 2022; Varma et al., 2016). Digital firms, particularly those operating on platform-based models, often bypass the sequential stages outlined in the Uppsala model, indicating a need for theoretical adaptation. One of the key developments in the literature is the concept of digital internationalization, which refers to the use of digital technologies to facilitate and accelerate cross-border business activities. Digital platforms such as e-commerce marketplaces, social media networks, and sharing economy platforms enable firms to reach global audiences with minimal physical presence. This has led to the emergence of “born global” and “born digital” firms that internationalize rapidly from inception (Esho & Verhoef, 2020; Goncalves & Cornelius Smith, 2017, 2018). These firms leverage digital infrastructure to overcome traditional barriers to entry, such as high costs and lack of local market knowledge.

A central theme in the literature is the role of network effects in platform-based economies. Network effects occur when the value of a platform increases as more users join, creating strong incentives for rapid international expansion. Unlike traditional firms that rely on incremental learning, platform firms prioritize speed and scale to capture market share and establish dominant positions. This shift challenges the Uppsala model’s emphasis on gradual commitment and highlights the importance of digital capabilities and strategic agility (Filardo, 2021; Wang, 2016). Moreover, platform firms often operate in multi-sided markets, where interactions between different user groups create additional complexities in internationalization strategies.

Another important strand of research focuses on knowledge acquisition and learning processes in digital contexts. In the traditional Uppsala model, experiential learning is a key mechanism through which firms reduce uncertainty. However, digital technologies enable firms to access vast amounts of data and analytics, allowing for real-time decision-making and reducing reliance on experiential knowledge. This has led to the concept of “data-driven internationalization,” where firms use digital insights to identify opportunities and manage risks in foreign markets (Yin & Li, 2020; Pinho et al., 2023). Consequently, the learning process becomes less sequential and more dynamic, challenging the core assumptions of the Uppsala model.

The literature also highlights the changing nature of psychic distance in the digital age. Psychic distance, defined as the perceived differences between home and foreign markets, has traditionally influenced the sequence of market entry. However, digital platforms can mitigate these differences through standardized interfaces, localization technologies, and user-generated content. This reduces the barriers associated with cultural and institutional differences, enabling firms to enter distant markets more easily (López-Morales et al., 2020; Maixé-Altés, 2020). As a result, the importance of geographic proximity and incremental expansion is diminished in digital internationalization.

In addition to reducing barriers, digital platforms facilitate new forms of collaboration and ecosystem participation. Firms increasingly operate within interconnected networks of partners, complementors, and users, forming digital ecosystems that support international expansion. These ecosystems allow firms to leverage external resources and capabilities, reducing the need for internal investment and accelerating growth. The revised Uppsala model has incorporated the role of networks, but digital ecosystems represent a more

complex and dynamic form of relational embeddedness (Goncalves, 2022; Scorza, 2019). The success of platform firms often depends on their ability to orchestrate and manage these ecosystems effectively.

Small and medium-sized enterprises (SMEs) have particularly benefited from digital internationalization. Traditionally, SMEs faced significant challenges in entering international markets due to limited resources and capabilities. However, digital platforms provide SMEs with access to global markets, enabling them to compete with larger firms. Studies have shown that SMEs can leverage e-commerce platforms, digital marketing, and online payment systems to internationalize rapidly and cost-effectively (Mawson & Brown, 2017; Mendes, 2021). This democratization of internationalization underscores the transformative impact of digital technologies on global business.

Despite these advantages, the literature also identifies several challenges associated with digital internationalization. Issues such as data privacy, cybersecurity, regulatory compliance, and platform governance pose significant risks for firms operating across borders. Different countries have varying regulations regarding data protection and digital services, creating complexities for international expansion (Szpak et al., 2022; Soroush et al., 2024). Additionally, the dominance of major digital platforms raises concerns about market concentration and competition, potentially limiting opportunities for smaller firms. Recent studies have attempted to extend the Uppsala model by integrating digitalization and platform dynamics. For example, scholars have introduced the concept of “digital experiential knowledge,” which emphasizes learning through digital interactions rather than physical presence. Similarly, trust and commitment, which are central to the Uppsala model, are being redefined in the context of online relationships and virtual networks (Bianchi & Stoian, 2024; Özbek et al., 2024). These extensions suggest that while the core principles of the Uppsala model remain relevant, they must be adapted to reflect the realities of digital environments.

The literature emphasizes the importance of strategic capabilities in digital internationalization. Firms must develop digital competencies, such as data analytics, platform management, and cybersecurity, to succeed in global markets. The ability to innovate and adapt to changing technological and market conditions is also critical. This aligns with the resource-based view, which highlights the role of firm-specific capabilities in achieving competitive advantage (Li & Cheong, 2017; Kaltenecker Retto de Queiroz, 2021). Digital capabilities thus become a key determinant of international success. Another emerging area of research is the role of institutional and policy factors in shaping digital internationalization. Governments play a crucial role in providing digital infrastructure, regulating digital markets, and promoting innovation. Differences in institutional environments can influence the strategies and performance of firms in international markets (Martínez & Gil, 2024; Pinho et al., 2023). Understanding these factors is essential for developing comprehensive theoretical frameworks that account for both firm-level and macro-level influences.

In conclusion, the literature on digital internationalization highlights the need to extend traditional theories such as the Uppsala model to better capture the dynamics of platform-based economies. Digital technologies have transformed the processes of international expansion, enabling rapid scaling, reducing barriers, and creating new opportunities for firms of all sizes. At the same time, they have introduced new challenges and complexities that require careful consideration. By integrating insights from various strands of research, scholars can develop more robust and relevant frameworks for understanding internationalization in the digital age. This evolving body of literature provides a strong

foundation for further research and theoretical development in this field (Tolstoy et al., 2016; Hofer & Knight, 2022; Bianchi & Stoian, 2024).

Table 1: Literature Review

Sr. No.	Author(s) & Year	Study Focus	Methodology	Key Findings	Research Gap
1	Tolstoy et al. (2016)	Digitalization in internationalization processes	Conceptual	Digital firms internationalize rapidly, challenging stage-based models	Limited empirical validation of digital Uppsala extensions
2	Esho & Verhoef (2020)	Platform-based international expansion	Empirical	Platforms enable fast global reach via network effects	Lack of focus on SME adaptation
3	Goncalves & Cornelius Smith (2017, 2018)	Born-digital firms	Case study	Firms internationalize early using digital infrastructure	Insufficient integration with traditional theories
4	Hofer & Knight (2022)	Internationalization of digital firms	Empirical	Digital firms bypass gradual expansion and scale globally	Need for revised theoretical frameworks
5	Filardo (2021)	Role of digital technologies in globalization	Conceptual	Data and AI reduce uncertainty in foreign markets	Limited discussion on platform governance
6	Wang (2016)	Network effects in digital economy	Analytical	Network externalities drive rapid international growth	Does not address institutional differences
7	Yin & Li (2020)	Knowledge and learning in digital internationalization	Empirical	Data-driven learning replaces experiential learning	Lack of longitudinal analysis
8	Pinho et al. (2023)	SME internationalization through digital platforms	Empirical	Digital tools reduce barriers for SMEs entering global markets	Limited focus on sustainability of growth
9	Mawson & Brown (2017)	SME digital internationalization	Case study	SMEs leverage e-commerce for rapid expansion	Lack of strategic capability

					analysis
10	Bianchi & Stoian (2024)	Extension of Uppsala model in digital context	Conceptual	Introduces digital experiential learning and network dynamics	Requires empirical testing in platform economies

METHODOLOGY

This study adopts a conceptual and theory-building methodology to extend the Uppsala model within the context of digital internationalization and platform-based economies. As a theoretical paper, it relies on an extensive and systematic review of existing literature rather than primary or secondary empirical data. The approach follows a narrative and integrative literature review design, synthesizing insights from international business theory, digital platform literature, and network-based perspectives to develop a refined conceptual framework (Tolstoy et al., 2016; Mattsson & Cassel, 2020).

The literature selection process focuses on peer-reviewed journal articles, conference proceedings, and scholarly books published in the domains of internationalization theory, digital transformation, and platform economies. Key databases and indexing sources such as Scopus, Web of Science, and Google Scholar are conceptually referred to in identifying relevant studies. Priority is given to recent contributions (post-2015) to capture the evolving nature of digital internationalization, while seminal works related to the Uppsala model are included to maintain theoretical grounding (Hofer & Knight, 2022; Bianchi & Stoian, 2024).

The study employs a thematic analysis technique to identify recurring constructs such as experiential learning, network relationships, digital capabilities, and platform-mediated interactions. These themes are critically examined to understand how digitalization alters traditional assumptions of gradual internationalization. The methodology also incorporates comparative theoretical analysis, contrasting the original and revised Uppsala models with emerging digital internationalization perspectives (Yin & Li, 2020; Pinho et al., 2023). Based on this synthesis, the paper develops a conceptual extension of the Uppsala model by integrating elements such as data-driven learning, reduced psychic distance, and ecosystem-based expansion. The framework is designed to offer theoretical propositions that can guide future empirical research. This method is consistent with prior conceptual studies aiming to refine international business theories in response to technological disruptions (Esho & Verhoef, 2020; Özbek et al., 2024).

DISCUSSION

The discussion of digital internationalization within platform-based economies highlights a fundamental shift in how firms expand across borders, challenging the traditional assumptions of the Uppsala model. While the original model emphasizes gradual, incremental internationalization driven by experiential learning and uncertainty reduction, the rise of digital platforms introduces a more dynamic, rapid, and data-driven process. This shift does not render the Uppsala model obsolete but rather calls for its extension and reinterpretation in light of technological advancements and changing market structures (Tolstoy et al., 2016; Hofer & Knight, 2022).

One of the most significant insights emerging from this study is the transformation of the learning process. In the traditional Uppsala framework, firms acquire market knowledge through direct experience, often requiring physical presence and time-intensive engagement in foreign markets. However, digital firms rely increasingly on data analytics, artificial intelligence, and real-time user feedback to inform their internationalization strategies. This “digital experiential learning” reduces the dependency on sequential market entry and allows firms to make informed decisions rapidly across multiple markets simultaneously (Yin & Li, 2020; Bianchi & Stoian, 2024). As a result, learning becomes continuous, scalable, and less constrained by geographic boundaries.

Another key dimension is the declining relevance of psychic distance. The Uppsala model posits that firms expand first into culturally and geographically proximate markets due to lower uncertainty. In contrast, digital platforms mitigate these barriers through standardized interfaces, localization technologies, and global digital infrastructures. Firms can now enter distant markets with relatively lower risk, as digital tools enable adaptation to local preferences without significant physical investment. This suggests that psychic distance, while still relevant, plays a diminished role in influencing market entry decisions in digital contexts (López-Morales et al., 2020; Pinho et al., 2023).

The role of networks, a core element in the revised Uppsala model, is further amplified in platform-based economies. Digital firms operate within complex ecosystems comprising users, complementors, developers, and third-party service providers. These ecosystems facilitate rapid international expansion by enabling firms to leverage external resources and capabilities. Unlike traditional network relationships, which often develop gradually, digital ecosystems are highly scalable and interconnected, allowing firms to establish global presence quickly. This reinforces the importance of relational embeddedness but extends it to a broader, more dynamic context (Goncalves, 2022; Scorza, 2019).

Network effects also emerge as a critical driver of digital internationalization. The value of a platform increases with the number of users, creating strong incentives for rapid global expansion. Firms prioritize speed and scale to achieve critical mass, often entering multiple markets simultaneously rather than sequentially. This behavior contrasts sharply with the incremental commitment logic of the Uppsala model and highlights the need to incorporate platform-specific dynamics into internationalization theory (Filardo, 2021; Wang, 2016). The emphasis shifts from risk minimization to opportunity maximization, where early entry and market dominance are key strategic objectives.

The discussion also underscores the democratization of internationalization through digital platforms. Small and medium-sized enterprises (SMEs), traditionally constrained by limited resources, can now access global markets through e-commerce platforms and digital tools. This reduces entry barriers and enables SMEs to compete with larger firms, challenging the assumption that internationalization is primarily the domain of resource-rich organizations (Mawson & Brown, 2017; Mendes, 2021). However, this increased accessibility also intensifies competition, requiring firms to develop strong digital capabilities to sustain their international presence.

Despite these advantages, digital internationalization introduces new challenges that must be considered in theoretical extensions. Regulatory heterogeneity, data privacy concerns, and platform governance issues create complexities for firms operating across borders. Unlike traditional barriers, these challenges are often less visible but equally impactful, influencing strategic decisions and market performance. The dominance of large digital platforms further

complicates the landscape, as smaller firms may become dependent on these platforms for market access, raising concerns about power asymmetry and competition (Szpak et al., 2022; Soroush et al., 2024).

Overall, the findings suggest that the core principles of the Uppsala model—such as learning, uncertainty reduction, and network relationships—remain relevant but must be reinterpreted within a digital context. The model's emphasis on gradualism and physical presence is increasingly replaced by speed, scalability, and data-driven decision-making. The integration of digital capabilities, platform dynamics, and ecosystem interactions provides a more comprehensive understanding of contemporary internationalization processes.

In conclusion, this discussion highlights the need for a hybrid theoretical framework that combines the foundational insights of the Uppsala model with the unique characteristics of digital platforms. Such a framework can better explain the behavior of modern firms operating in interconnected and rapidly evolving global markets. By addressing both the opportunities and challenges of digital internationalization, this study contributes to the ongoing development of international business theory and provides a basis for future empirical research.

CONCLUSION

The conclusion of this study reinforces the growing importance of reinterpreting classical internationalization theories in light of rapid digital transformation and the rise of platform-based economies. The Uppsala model, long regarded as a foundational framework in international business, has provided valuable insights into how firms gradually expand across borders through experiential learning and increasing commitment. However, the emergence of digital technologies, data-driven strategies, and global platform ecosystems has significantly altered the logic and pace of internationalization, necessitating a theoretical extension of the model (Tolstoy et al., 2016; Hofer & Knight, 2022).

This paper demonstrates that digital internationalization is fundamentally different from traditional international expansion. The presence of digital platforms enables firms to operate globally with minimal physical infrastructure, thereby reducing entry barriers and transaction costs. As a result, firms are no longer bound by the incremental and sequential processes emphasized in the Uppsala model. Instead, they can internationalize rapidly, often entering multiple markets simultaneously. This shift highlights the increasing relevance of speed, scalability, and strategic agility in international business operations (Esho & Verhoef, 2020; Goncalves & Cornelius Smith, 2017, 2018).

One of the key contributions of this study lies in emphasizing the transformation of the learning mechanism. While experiential learning remains central to internationalization, it is now increasingly supplemented—or even replaced—by digital experiential learning. Firms leverage big data analytics, artificial intelligence, and real-time customer insights to make informed decisions, reducing uncertainty without the need for prolonged physical presence in foreign markets. This evolution challenges the traditional notion of knowledge accumulation and suggests a more dynamic, data-driven learning process (Yin & Li, 2020; Bianchi & Stoian, 2024). Another important finding is the reduced significance of psychic distance in digital contexts. Digital platforms facilitate seamless communication, localization, and user engagement across geographically distant markets. Consequently, firms are less constrained by cultural and institutional differences, enabling them to expand into diverse markets more easily. While psychic distance still influences certain strategic decisions, its impact is

significantly mitigated by digital tools and technologies (López-Morales et al., 2020; Pinho et al., 2023).

The study also highlights the critical role of network effects and digital ecosystems in shaping internationalization strategies. Platform-based firms operate within interconnected networks of users, complementors, and partners, which enable rapid scaling and value co-creation. These ecosystems extend the network perspective of the revised Uppsala model by incorporating more complex and dynamic interactions. The ability to orchestrate and manage these ecosystems becomes a key determinant of international success (Goncalves, 2022; Scorza, 2019). Network effects further accelerate international expansion by increasing the value of platforms as their user base grows, encouraging firms to prioritize global reach over gradual market entry.

In addition, the democratization of internationalization through digital platforms represents a significant shift in the global business landscape. Small and medium-sized enterprises (SMEs) can now access international markets with relatively low investment, leveraging e-commerce platforms and digital marketing tools. This challenges traditional assumptions about resource requirements and highlights the inclusive nature of digital internationalization (Mawson & Brown, 2017; Mendes, 2021). However, it also introduces new competitive pressures, requiring firms to continuously innovate and develop digital capabilities. Despite these opportunities, the study acknowledges several challenges associated with digital internationalization. Regulatory differences, data privacy concerns, cybersecurity risks, and platform governance issues create complexities that firms must navigate. The increasing dominance of large digital platforms raises concerns about market concentration and dependency, particularly for smaller firms. These challenges underscore the need for a balanced approach that considers both the benefits and risks of digital expansion (Szpak et al., 2022; Soroush et al., 2024).

From a theoretical perspective, this study contributes to the ongoing evolution of international business literature by proposing an extended view of the Uppsala model that incorporates digital and platform-based dynamics. It suggests that while the core principles of uncertainty reduction, learning, and network relationships remain relevant, they must be adapted to reflect the realities of a digitalized global economy. The proposed conceptual extension emphasizes data-driven learning, reduced psychic distance, ecosystem participation, and rapid scalability as key elements of modern internationalization. In terms of implications, the study provides valuable insights for both researchers and practitioners. For scholars, it offers a foundation for further empirical research to test and refine the proposed theoretical extensions. For managers and policymakers, it highlights the importance of developing digital capabilities, fostering innovation, and addressing regulatory challenges to successfully navigate international markets.

In conclusion, digital internationalization represents a paradigm shift that requires a rethinking of traditional theories such as the Uppsala model. By integrating digital technologies, platform dynamics, and ecosystem perspectives, this study provides a more comprehensive understanding of how firms internationalize in the contemporary global environment. As digital transformation continues to evolve, future research must continue to refine and expand theoretical frameworks to keep pace with the changing nature of international business (Martínez & Gil, 2024; Pinho et al., 2023).

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