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Exploring the Influence of Hybrid Product-Service Offerings on Firm Internationalization Strategies: An International Perspective

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ABSTRACT:

Purpose: This paper aims to deepen the understanding of the interconnection between hybrid product-service offerings and firms' internationalization strategies, focusing on market entry, export performance, and subsidiary strategy development.

Design/Methodology/Approach: The approach involves reviewing and summarizing the existing body of research in the area. This is complemented by the analysis of the eleven published papers in the current issue.

Findings: We propose a value-chain synergetic approach that ensures the international competitiveness of hybrid offerings. Our conceptual framework encompasses four themes: (i) internal factors encompassing capabilities and governance, (ii) supply-side factors related to ecosystem formation, (iii) demand-side factors encompassing customization and co-creation, and (iv) enhancing factors such as assets digitization. Our analysis demonstrates how these synergistic value chain themes interrelate to empower hybrid offerings in the export market.

Research Implications/Limitations: While the conceptual development presented in this paper is not exhaustive, our model highlights important research avenues in the internationalization of product-service hybrid offerings that need exploration.

Originality: Our framework bridges the gap in international marketing literature by focusing on the interplay between hybrid product-service offerings and internationalization strategies, providing valuable insights into the factors driving servitization-led innovations in foreign markets.

Practical Implications: The proposed framework hold practical implications for firms aiming to enhance their competitiveness in the export market through the integration of hybrid product-service offerings.

Keywords: Hybrid offering; exports; international strategies; digitalization; ecosystem; co-creation.

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1. Introduction

The business model of hybrid offerings, incorporating innovative services on product platforms, holds significance for firms aiming to move beyond cost leadership strategies (Bustinza et al., 2017; Rabetino et al., 2018; Vendrell-Herrero et al., 2023). Despite extensive literature supporting the link between product innovation and exports (Azar & Ciabuschi, 2017), the association between hybrid product-service offers and firms' export choices and performance requires further investigation. The objective of this special issue is to stimulate theoretical and empirical work, contributing to scholarly discourse on product-service hybrid offerings. Our central aim is to deepen the understanding of the interconnection between hybrid offerings and firms' internationalization strategies, specifically focusing on market entry, export performance, and subsidiary strategy development.

While existing research on hybrid business models concentrates on understanding service strategy typologies and organizational shifts accompanying service adoption (Kowalkowski et al., 2017; Tukker, 2004), the international dimension remains largely neglected. Hybrid business offerings, along with their underlying digital capabilities, present unique avenues for competition in international contexts. Past research highlights that bi-exporters, firms exporting both products and services, constitute a smaller proportion of exporters (less than 10%) but account for a substantial part of export value (more than 30%) (e.g., Ariu, 2016). Additionally, research underscores the positive impact of combining products and services in the same offer on export performance (Aquilante & Vendrell-Herrero, 2021).

This special issue positions itself at the nexus of the relationship between product-service hybrid offerings and international marketing, aiming to deepen knowledge by delineating the factors propelling servitization-led innovations in foreign markets. The included collection of papers explores four strategy-level core themes: (i) internal factors encompassing capabilities and governance, (ii) supply-side factors related to ecosystem formation, (iii) demand-side factors encompassing customization and co-creation, and (iv) enhancing factors such as assets digitization.

The genesis of this journey dates back to 2020, driven by our academic curiosity regarding the analysis of hybrid product-service offer from diverse perspectives. The overwhelming support received from scholars in this field played an instrumental role.

Notably, our gratitude extends to Professor John Cadogan, the journal's Editor-in-Chief, whose unwavering support made this endeavour possible.

Through this editorial note, we delve into the four identified themes, offering an overview of the eleven papers featured in this special issue. Furthermore, we engage in a discussion regarding potential future research in this domain, addressing possible limitations of product-service hybrid offerings.

2. The contributions of this special issue to the literature on hybrid product-service offering

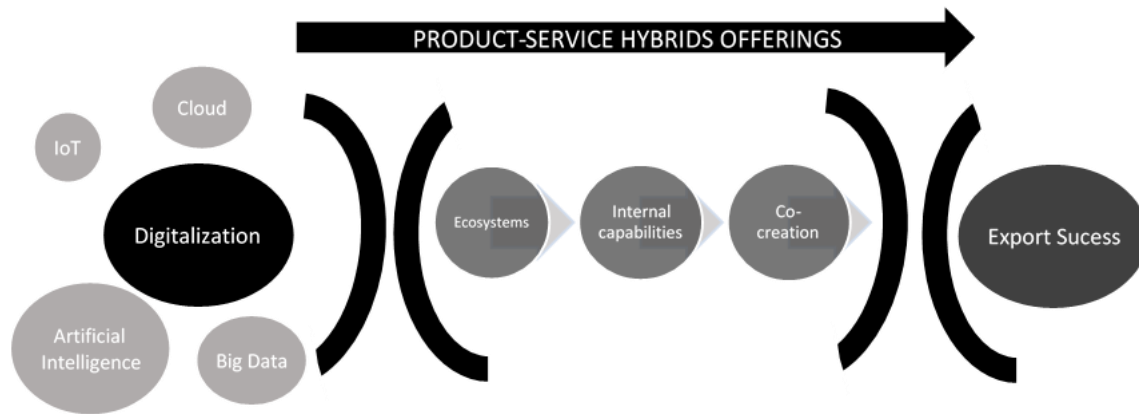
Following a comprehensive peer review process, this special issue encompasses eleven articles that significantly advance the analysis of the relationship between hybrid product-service offerings and firm internationalization strategies. These papers, along with a brief summary and description of their respective data and methods, are listed in Table 1.

Upon scrutinizing the approaches adopted by these selected papers, it becomes apparent that research on hybrid product-service offerings can be approached from diverse angles. The unit of analysis varies, encompassing manufacturing firms (4 studies), technology-intensive service firms (2 studies), industry experts (2 studies), previously published papers (2 studies), and commercial transactions from a single multinational company (1 study). Notably, the value of the papers in this special issue lies in their ability to amalgamate theoretical foundations from various domains, including knowledge management, ecosystems, and open innovation.

The richness of these papers is further evident in their methodological diversity, spanning from literature reviews (2 studies) and qualitative case study approaches (2 studies) to quantitative studies employing different estimation methods (7 studies). Additionally, the geographic diversity of the analyzed settings is noteworthy, encompassing various European countries (e.g., Italy, Poland, Finland), Asian nations (e.g., India, China), and Middle Eastern countries (e.g., UAE). Leveraging multiple analytical methods, the selected papers significantly contribute to identifying four distinct themes in exploring the relationship between hybrid product-service offerings and internationalization strategies, each of which will be meticulously analyzed in the subsequent discussion. In Figure 1, we present a framework where all these themes are interconnected, contributing to competitiveness in the export market. We propose that internal capabilities (theme 1), co-creation (theme 2), and ecosystems (theme 3) form a value chain-like synergistic value that empowers hybrid firms to

effectively access the export market. Additionally, we consider digitalization (theme 4) and all elements related to connectivity and data availability to enhance this relationship.

Figure 1. Theoretical structure derived from the identified themes (Source: authors' own creation)



2.1 Theme 1: Governance structures and internal capabilities

Hong et al. (2023), and Zahoor et al. (2023), delve into the governance structures of firms engaged in the sale of hybrid offers, while Jafari-Sadeghi et al. (2023) conducts a comprehensive analysis of the internal capabilities facilitating this phenomenon. In turn, we briefly summarize and integrate the results of these papers in light with current debates on the topic.

Governance structures within organizations entail critical mechanisms and systems inherent to the organization itself, dictating and overseeing its operations (Xing, Liu & Davies, 2023). These encompass hierarchies, protocols, and procedures crucial for decision-making, performance monitoring, and resource management. Key constituents of governance structures for hybrid organizations involve defining the firm's boundaries, often referred to as the "make or buy" decision (Bustinza, Lafuente, et al., 2019), and ensuring effective collaboration between product and service divisions. Accomplishing this necessitates a thorough examination of internal capabilities. Pertaining to organizational boundaries, internal capabilities must revolve around efficient innovation management, heightened logistics capacity, collaborative facilitation, and agile responsiveness to customer demands and environmental dynamics. Regarding the amalgamation of product and service divisions, essential internal capabilities encompass proficient human capital management, maintenance of financial strength, and ensuring organizational efficiency, especially concerning inter-

departmental exchange of information and collaboration. The integration of these multifaceted capabilities constitutes a comprehensive framework pivotal for organizational triumph in internationally expanding a hybrid product-service offer within a dynamic business environment.

2.2. Theme 2: Customer involvement, co-creation and distribution channels

In Agnihotri et al. (2022), the focus is on assessing the influence of customer management on the potential for international sales. Chatterjee et al. (2023) emphasizes the indispensability of product support and customer support services within hybrid offerings. Shleha et al. (2023) investigates the significance of customer proximity through service affiliates in diverse markets. Additionally, Behl et al. (2023) and Abu Farha et al. (2022) delve into the enhancement of hybrid offerings' value in international markets through customer co-creation. We proceed to offer an integrative analysis of these papers in the light of current debates.

It is widely accepted that services constitute a differentiating element concerning customer engagement (Sampson & Spring, 2012). A deeper understanding of consumer needs allows for a more tailored offering (Christofi et al., 2020). On some occasions, this close relationship with the customer may involve co-creation processes (Abu Farha et al., 2022). This is particularly essential in industrial environments where corporate clients have very specific needs that may necessitate specific investments and strong, long-term commitments, such as green supply chain management (Xing & Liu, 2023). As for end consumers, co-creation is highly linked to automated online processes, where consumers finalize the customization of highly standardized products with few alterable features. There is a less conspicuous yet equally important aspect of the service, such as consumer and product support. To provide these services, many companies face a significant decision regarding their service units (Alghisi & Sacconi, 2015). It is well-known that services require proximity (Sivakumar et al., 2014), raising a critical question of when it is necessary to establish a service unit upon entering a new market through exportation. Many consumers, especially in an industrial context, will demand a subsidiary capable of providing proximity service, entailing a substantial investment. Other alternatives include outsourcing, remote services, or traveling in when the service is required. All these possibilities present their challenges and must be analyzed on a case-by-case basis.

2.3. Theme 3: Ecosystem, Networks and open innovation

Khan et al. (2023) scrutinizes the strategies of alliances, acquisitions, and subcontracting adopted by firms engaged in the sale of hybrid offerings. Davies et al. (2022) conducts a comprehensive literature review on how the coordination of hybrid offerings occurs through ecosystems rather than being internally developed by a single firm. In contrast, Abu Farha et al. (2022) empirically evaluates the role of open innovation in implementing bundles of products and services within a single offer. Additionally, Magni et al. (2023) delves into the role of Knowledge Intensive Business Service (KIBS) firms in sharing and disseminating knowledge within the local manufacturing business fabric. Subsequently, we succinctly summarize and integrate the findings from these papers within the context of ongoing discussions surrounding the subject.

Companies often lack all the necessary capabilities to innovate and remain competitive. Hence, there is an increasing trend towards outsourcing and offshoring various activities. This trend amplifies when integrating products and services into a single offering. Such business models necessitate a multitude of technological capabilities. Typically, this knowledge is concentrated in specialized service companies focused on technological development, known as KIBS.

KIBS play a crucial role in the development of the manufacturing sector, as these companies often lack the knowledge to systematize processes and platforms to ensure an enhanced customer experience (Liu et al., 2019). The relationships between manufacturers and KIBS can range from mere subcontracting to long-term strategic alliances, which, along with other essential providers, structure what we can refer to as product-service business ecosystems (Lafuente et al., 2023). All of this is intricately linked to open innovation. The larger the business ecosystem, the more imperative it becomes to share information and seek complementary assets that enable the development of new innovations, especially those facilitating the seamless integration of products and services. Nevertheless, the complexity of ecosystem is an important aspect that needs to be contextually understood and examined, in order to achieve the better performance of hybrid business offerings.

2.4. Theme 4: Digitalization boosts hybrid offering capacity

Behl et al. (2023) delve into a major enabling factor for the coexistence of products and services: digitalization, and the necessity of digital assets to augment service offerings in product firms. There are various reasons why digital technologies can empower hybrid offers. First, they enhance connectivity and real-time communication across countries, thereby

improving customer support, service delivery, and relationship management on a global scale (Akter et al., 2023). Similarly, through the Internet of Things (IoT), firms can monitor equipment, analyze performance data, and offer proactive maintenance services to clients in different parts of the world (Mikalef et al., 2023). This predictive maintenance enhances customer satisfaction and operational efficiency. Second, automation and digital tools streamline service delivery processes (Vendrell-Herrero et al., 2021). Hybrid product-service firms can provide services more efficiently, ensuring timely and consistent delivery across international markets (Li et al., 2018). Digital platforms allow for standardized and scalable service offerings while maintaining quality and reliability. Third, digital tools provide robust data analytics capabilities, enabling servitized firms to analyze market trends, customer behavior, and preferences in various international markets (Vadana et al., 2020). This data-driven approach helps tailor services to meet specific market demands, enhancing the firm's competitiveness and relevance. Finally, digital technologies enable servitized firms to customize services based on individual customer needs and preferences (Vendrell-Herrero et al., 2017). Through data analytics and AI-driven insights, firms can tailor their offerings to different international markets, providing personalized experiences that resonate with local audiences (Mikalef et al., 2023). In essence, digital technologies optimize operations, enhance customer engagement, and provide valuable insights, allowing hybrid firms to navigate the complexities of international markets and position themselves for success. Table 1 enlists the articles from key dimensions to articulate the main findings, empirical approaches and methodological orientations.

---Insert Table 1 here ---

3. Future research avenues: on relativizing the value of hybridization

Despite the richness of the studies presented in this special issue, certain aspects remain inadequately explored, leaving intriguing dimensions for a deeper understanding of the relationship between hybrid product-service offerings and firms' competitiveness in international markets. This discussion will invariably involve delineating trade-offs or, in other words, identifying the counterpoints of integrating hybrid offerings vis-à-vis specialized offerings.

The profound impact of hybridization on Learning by Exporting (LBE) remains a facet requiring thorough investigation in future research. Previous research on the topic seems to indicate a negative relationship between internet penetration and the learning-by-exporting coefficient (Vendrell-Herrero et al., 2022), but we believe this needs to be analyzed in greater detail. We propose that the effect of adding services to the LBE outcome in hybrid offerings can be dual in nature, influenced by a multitude of factors. For example, a broader international market scope might amplify the LBE effect in hybrid firms. The proximity to customers facilitated by services can offer access to invaluable knowledge, innovation inputs, capabilities development, and innovation incentives that might not be attainable in the absence of a service component. Conversely, this service provision may come at a cost, potentially hindering the standardization of processes compared to product-only exporters and thereby limiting the potential for learning by doing and efficiency gains when increasing the scale of business. Hence, the influence of hybrid business models on the LBE effect is intricately tied to the extent of engagement in international markets and the imperative to leverage economies of scale.

In recent years, there has been a notable global emergence of firms hailing from emerging economies that maintain ownership ties to their respective state governments while developing their servitization strategies abroad (Xing et al., 2017). As these firms successfully navigate the constraints of their home countries and amass global resources (Li et al., 2018), they may face new challenges and opportunities in the age of global disruption and increasingly geo-political uncertainty. The literature on firms with state ownership suggests that primarily assumed unidirectional dependence (Cuervo-Cazurra et al., 2014), with the firm relying on the government but not vice versa. Nevertheless, recent studies as Rodrigues & Dieleman (2018) highlight that the internationalization of state hybrids is portrayed not merely as a unilateral effort to address a power imbalance but as a source of new power imbalances that may trigger governmental responses. In an industrial context, multinational state hybrids encounter additional dependencies, particularly when implementing a hybrid product-service strategy, which introduces new dependencies and vulnerabilities.

The adoption of a hybrid product-service strategy introduces its own set of paradoxes (Kohtamäki et al., 2020), notably in terms of the tension between the exploratory innovation necessary for developing novel hybrid product-service offerings and the exploitative innovation essential for product manufacturing (Bustinza et al., 2019). Hybrid product-

service offerings necessitates a profound reexamination of established paradigms pertaining to product-service concepts, business strategies, and customer value propositions (Kowalkowski et al., 2015). Additionally, companies must progressively enhance their manufacturing competences in term of engineering, product development, or overall production processes (Rabetino et al., 2018). Consequently, organizations grapple with the paradox of ambidextrous innovation (Christofi et al., 2021; Liu et al., 2022), where they must radically devise a new business model focused on servitized solutions while concurrently preserving their traditional product-centric business model (Kohtamäki et al., 2020). In international markets, the risk of falling into the "exploitation trap," which involves prioritizing short-term profits derived from exploitation at the expense of exploration (Sirén et al., 2012), becomes particularly pronounced. Consequently, exploring the hybrid product-service ambidexterity paradox represents a compelling avenue for future research in this domain.

In summary, we hope that our perspective and the articles assembled in this special issue can provide some revealing insights and useful food for thoughts regarding this important yet nascent field by juxtaposing the research streams of hybrid product-service offerings, servitization, international marketing and internationalization strategies from an international perspective. We invite scholars, practitioners, and policymakers to join the debates and to explore hybrid business offerings for the purpose of improving competitiveness and resilience for business and society.

Table 1. Summary of articles (Source: authors' own creation)

Authors	Title	Highlights	Sample / method	Keywords
Agnihotri et al. (2022)	Foreign market entry modes for servitization under diverse macroenvironmental conditions: taxonomy and propositions	This paper explores how firms' servitization strategies, focusing on digitalization and customer relationship management, influence their international market entry decisions. It also delves into how macroenvironmental factors, such as institutional environment and national culture, impact this relationship.	Data: Multi The paper primarily relies on scholarly literature. Method: Literature review and conceptual development.	Servitization, Customer relations, Digitalization, Entry mode, Macroenvironment
Chatterjee et al. (2023)	Business hybrid offerings by manufacturing SMEs: impact of servitization on internationalization of manufacturing SMEs.	This study examines how manufacturing SMEs can internationalize using product-service innovation (servitization) and how it impacts their performance. It emphasizes the importance of entrepreneurial orientation, risk-taking ability, and technology in this process. The research addresses a significant research gap in understanding these dynamics for SMEs in developing economies.	Data: 307 respondents from 32 Indian manufacturing SMEs. Method: Covariance-based structural equation modeling (CB-SEM)	Servitization, Internationalization, SME, Performance, Customers, Business hybrid offering.
Khan et al. (2023)	Hybrid market offering in the medical technology sector and the role of network configuration: an exploratory assessment in both developed and emerging markets.	The study emphasizes the strategic shift towards hybrid market offerings, integrating goods and services for enhanced competitiveness and profitability. It explores network configurations and dynamic capabilities crucial for high-tech manufacturing firms, shedding light on strategies for successful hybrid offerings in both emerging and developed markets.	Data: Three Finnish case firms in the technology-intensive sector. Method: The study adopts qualitative methods, employing multiple case studies	Developed markets, Emerging markets, High-tech firms, Hybrid market offering, Medical technology, Network configuration.
Hong et al. (2023)	Can customization promote product innovation in the global B2B market? Evidence from export manufacturing firms from emerging markets.	This paper examines the impact of customization on product innovation in global B2B markets for emerging market manufacturing firms. The paper finds that the way contracts are managed affects how customization influences product innovation. When it comes to customization, having good relationships and strong legal support can enhance the positive impact on creating new products.	Data: The paper utilizes a questionnaire-based study involving 2,248 Chinese equipment manufacturers Method: Regression analysis. Key variables extracted from existing measurement scales.	Global B2B market, Customization, Product innovation, Internal governance structure, External governance structure.
Davies et al. (2022)	Supply chains and ecosystems for servitization: a systematic review and future research agenda.	The paper explores the transition from product-centric to service-centric business models. It delves into the strategic shifts, product service systems, and inter-firm relationships vital for success. The review emphasizes fragmented research areas and identifies critical directions for studying supply chains and ecosystems in servitization.	Data: Sample of 34 papers. Method: systematic literature review (SLR) using an inter-organizational relations (IOR) lens.	Servitization, Supply chain, Ecosystem, Digital servitization, Systematic literature review

Table 1. Continued.

Authors	Title	Highlights	Sample / method	Keywords
Zahoor et al. (2023)	International servitization of SMEs in emerging markets: antecedents and boundary conditions	This paper delves into the growing trend of servitization in manufacturing SMEs. It explores how integrating intangible services with tangible products boosts competitiveness through differentiation. The study emphasizes the significance of international human capital, inter-organizational marketing capability, and market complexity in this context.	Data: Survey sent to 211 UAE internationalized SMEs Method: Structural Equation Modelling (SEM)	International servitization, International human capital, Inter-organizational marketing capabilities, International market complexity, Dynamic capability, Emerging markets.
Shleha et al. (2023)	The link between advanced servitization, global distribution channels and the longitudinal performance of sales in international markets	The study affirms that advanced-servitized-products positively impact international sales performance. Global distribution channels, especially onsite presence, play a critical role in maximizing this impact, highlighting their significance for manufacturers aiming to enhance global competitiveness.	Data: 4,000 transactions across 74 foreign markets achieved by a single multinational. Method: Time fixed-effects regression analysis.	Servitization, Distribution channels, Service, Internationalization, Service-dominant logic
Behl et al. (2023)	Customer involvement and servitization in hybrid offerings: moderating role of digitalization and co-creation.	This paper explores customer involvement, technology strategy, and servitization in hybrid offerings, moderated by digitalization and co-creation. It identifies factors affecting product and service innovation performance, emphasizing the significance of hybrid offerings for organizational success.	Data: 438 marketing professionals. Method: Structural Equation Modelling.	Servitization, S-D logic, Hybrid offerings, Digitization, Co-creation, Innovation performance.
Abu Farha et al. (2022)	Enhancing servitization by international consumer integration: the influence of open innovation and co-creation.	The paper emphasizes the evolving consumer demands from products to integrated solutions, prompting manufacturers to integrate value-added services, shifting competition from cost to innovation. It addresses the critical roles of open innovation and consumer co-creation in successful servitization and highlights their impact on firm performance.	Data: Online survey to 148 Gulf countries manufacturing firms. Method: Partial Least Squares.	Servitization, Open innovation, Co-creation.

Table 1. Continued.

Authors	Title	Highlights	Sample / method	Keywords
Magni et al. (2023)	Internationalized knowledge-intensive business service (KIBS) for servitization: a microfoundation perspective.	The paper delves into the impact of servitization in the knowledge-intensive business service (KIBS) sector, showcasing its shift from products to services, driven by digital technologies. It highlights the significance of knowledge sharing in internationalized KIBS, demonstrating its positive effect on business hybrid models and international positioning, bolstered by strategic knowledge management practices.	Data: 326 employees from 30 international KIBS companies. Method: Multiple regression analysis with various scales.	International collaborative alliances, Servitization, Knowledge sharing, Knowledge transfer, Microfoundations.
Jafari-Sadeghi et al. (2023)	Hybrid business offerings in small internationalisers: A mixed-method analysis of internal capabilities through Hesitant Fuzzy Information.	The paper underscores how evolving international business landscapes necessitate firms to integrate innovative technologies and adapt their operations for enhanced competitiveness. It emphasizes the pivotal role of 'hybrid offerings'—a blend of goods and services—driving innovation, addressing customer needs, and amplifying competitive advantages.	Data: 15 industry experts. Method: Hesitant Fuzzy Delphi (HFD) and Hesitant Fuzzy Interpretative Structural Modelling (HFISM).	Servitisation, hybrid business offering, SMEs, mixed-method, Hesitant Fuzzy Information, Internationalisation.

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