



REIMAGINING THE VALUE CHAIN: PORTER'S LEGACY IN THE POST-2019 PARADIGM

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Abstract

Introduction: The Value Chain model, originally developed by Michael Porter (1985), has traditionally focused on linear production, cost efficiency, and competitive advantage. However, modern businesses are shifting toward dynamic, service-integrated ecosystems emphasising digital transformation, sustainability, and customer-driven innovation. **Aim:** This study examines the continuing relevance and evolution of Porter's Value Chain model in the context of contemporary organisational needs. It explores how the traditional framework has been adapted or expanded in response to technological, environmental, and strategic shifts. **Method:** A systematic literature review and comparative analysis were conducted on peer-reviewed academic publications that featured the term "value chain" in their titles and referenced Porter in their abstracts, limited to articles published after 2019. This approach enabled the study to trace theoretical developments and practical applications of the model in recent years. **Findings:** Twelve articles met the inclusion criteria. The analysis reveals that Porter's Value Chain remains a foundational framework, but its relevance today lies in how it has evolved. Contemporary adaptations emphasise interconnectivity, digital integration, and service differentiation. Technological tools such as AI, automation, and data analytics have repositioned technology as a central activity rather than a support function, while sustainability has emerged as a strategic imperative in value chain design and execution. **Contribution:** This study affirms that Porter's Value Chain model is still highly relevant but must be applied in updated, flexible forms to remain impactful. By mapping its transformation, the study bridges traditional theory with current organisational realities, highlighting how foundational concepts endure when aligned with emerging strategic priorities.

Keywords

Value Chain, Porter, Literature Review, Adaptation, Competition, Sustainability

Introduction

This article is structured as follows. The literature review introduces Michael Porter's Value Chain model, highlighting its strategic significance and the rationale for examining its application in the post-2019 context. This leads to the formulation of the research question. The methodology section outlines the systematic literature review (SLR) approach, including database selection, inclusion and exclusion criteria, and analytical procedures. The discussion synthesises the findings, examines practical implications for contemporary business, and evaluates the evolution of Porter's model in addressing modern challenges. Finally, the conclusion summarises key insights, reaffirms the model's relevance, and proposes directions for future research.

Literature review

Michael Porter's Value Chain model, introduced in 1985, remains a foundational tool in strategic management for analysing internal business processes and identifying opportunities for value creation (Anastasiu et al., 2020; Isabelle, 2020; Porter, 1985). Beyond its function in uncovering strategic advantages, the model offers a structured framework for disaggregating a firm's operations into discrete value-generating activities. These are categorised into primary activities - such as inbound logistics, operations, outbound logistics, marketing and sales, and service - and support activities, including infrastructure, human resource management, technology development, and procurement (Boediman et al., 2024; Ong et al., 2024). Each activity is assessed for its contribution to competitive advantage, whether through cost reduction or differentiation (Porter, 1985).

The model enables value mapping, now commonly applied in digital and service-based sectors to address inefficiencies and foster innovation (Ceil, 2019; Isabelle, 2020). Its sustained relevance is evident across diverse industries - from agriculture to the creative economy - where it continues to serve as a diagnostic tool for enhancing operational efficiency and strategic positioning (Ong et al., 2024a). Figure 1 illustrates the original Value Chain model, underscoring the interconnectedness of its activities and their collective role in shaping competitive advantage.

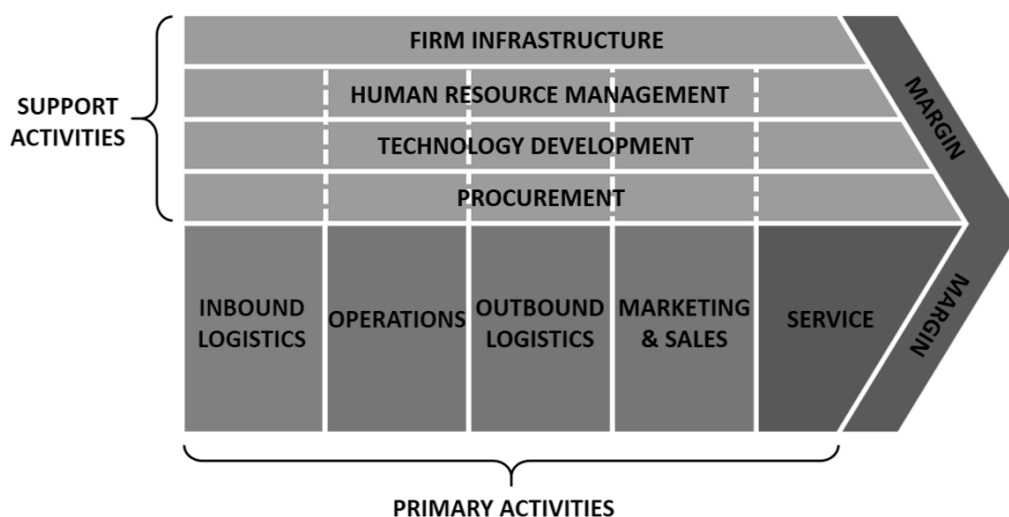


Figure 1: Michael Porter's Value Chain Framework

The Value Chain model is used to determine the value added at each stage of a product or service's lifecycle - from conceptualisation, through production and distribution, to end use and eventual disposal (Ong et al., 2024; Ruan, 2020). Over the years, it has been widely implemented to help organisations gain and sustain competitive advantage (Boediman et al., 2024; Di Vita et al., 2023; Ong et al., 2024; Ruan, 2020).

In addition to the internal analysis offered by the value chain, Porter also introduced the Five Forces framework, which enables firms to assess external competitive pressures within their industry (Anastasiu et al., 2020; Bruijl, 2018; Ceil, 2019; Isabelle, 2020; Zeng et al., 2023). While the value chain focuses on how firms create value internally, the Five Forces model addresses the external environment where that value may be enhanced or diminished (Boediman et al., 2024a; Di Vita et al., 2023a). The five forces include: (1) competition among existing rivals; (2) the threat of new entrants; (3) the bargaining power of suppliers; (4) the bargaining power of customers; and (5) the threat of substitute products or services ((Bruijl, 2018; Ong et al., 2024).

Figure 2 provides a visual representation of Porter's Five Forces framework, illustrating the key external factors shaping industry competition and profitability. The model has been applied across sectors to help businesses optimise operations and improve value delivery (Alshurideh et al., 2021, 2022; Mohammadi & Sakhteh, 2023; Ong et al., 2024; Ruan, 2020). Understanding these external dynamics supports strategic positioning and enhances the relevance of internal value chain activities in navigating market challenges (Zamora, 2016).



Figure 2: Michael Porter's Five Forces framework

Together, these two models form a complementary strategic toolkit. The Five Forces framework diagnoses the external conditions shaping competitive intensity, while the Value Chain model provides a response mechanism - an internal lens to identify how firms can align their processes, reduce costs, and innovate to remain competitive (Isabelle, 2020). When used together, they offer a holistic view of strategic positioning: one begins with understanding the market terrain, and the other determines how best to navigate it from within.

Porter's Value Chain model was groundbreaking in that it positioned competitive advantage not only as the result of external market conditions, but equally as the outcome of internal business processes and the efficiency with which they are executed (Mohammadi & Sakhteh, 2023; Ruan, 2020).

Globalisation, technological advancements, and sustainability imperatives have necessitated updates and adaptations to Porter's original model (Carneiro et al., 2024; Gölgeci et al., 2021; Pushp and Ahmed, 2024). Technology-driven transformation has shifted attention toward digital innovation throughout the value-creation process (Buonocore et al., 2024). In response, organisations now emphasise cross-functional collaboration and knowledge sharing, reinforcing that value is no longer created in isolated departments but through integrated processes (Ferreira et al., 2021). These developments compel businesses to rethink their implementation of the Value Chain model to remain competitive in digitally advanced industries.

This shift also raises a new research consideration: should technology-driven digital transformation now be reclassified as a primary activity within the value chain, rather than remaining a traditional support activity? Emerging technologies such as artificial intelligence (AI), automation, and data analytics have further challenged the model's original assumptions (Alshurideh et al., 2021). Scholars have increasingly explored how the Value Chain framework is being redefined to accommodate these changes (Eling et al., 2022; Wilczek et al., 2024), including its potential application in enhancing logistics, production, and service innovation (Oliveira et al., 2021).

Against this backdrop, the present study revisits the traditional Value Chain model to examine its relevance and adaptation in contemporary organisational contexts. By identifying how the model continues to appear in recent scholarship - and how it has been modified - this review aims to bridge traditional strategic thinking with emerging business realities.

The core research question guiding this investigation is:

What is the relevance of Porter's Value Chain in contemporary organisations?

To answer this question, the study adopts a Systematic Literature Review (SLR) methodology to collect, synthesise, and critically evaluate peer-reviewed journal articles published after 2019.

Methodology

This study adopts a Systematic Literature Review (SLR) methodology to explore contemporary perspectives on the understanding and evolution of Porter's traditional Value Chain model. The SLR is recognised for its structured, transparent, and reproducible approach to collecting, analysing, and synthesising research on a specific topic. It enables a deeper understanding of established knowledge while also identifying gaps in the literature (Paul & Barari, 2022). Given the broad and varied interpretations and applications of the Value Chain model across industries, the SLR is particularly well suited to this research. It allows for a comprehensive and credible synthesis of recent developments, highlighting contemporary modifications, applications, and challenges associated with Porter's framework.

The search strategy prioritised the precise selection of keywords to ensure the retrieval of high-quality, relevant literature. Using Summon, the University of South Africa's integrated discovery tool, the study targeted peer-reviewed journal articles that specifically addressed both the traditional Value Chain model and its modern adaptations. Keywords were chosen to include "value chain" in the title and "Porter" in either the abstract or subject headings, thereby narrowing the results to studies directly engaging with the model's theoretical foundations.

To implement this strategy, a Boolean search string was developed and applied via the Summon tool to enhance the search's precision and replicability. The search string used was:

("value chain" in Title) AND (Porter in Abstract OR Porter in Subject) AND ("strategic management" OR "digital transformation" OR sustainability) AND (PublicationDate:[2019 TO 2025]) AND (Language:English) AND (ContentType:Journal Article) AND (PeerReviewed:true).

This search ensured that only peer-reviewed journal articles published between 2019 and 2025 were included, with a clear conceptual link to Porter's model. Additional terms such as "strategic management," "digital transformation," and "sustainability" further refined the focus to studies relevant to current business challenges. This constituted the first stage of the review.

In the second stage, the retrieved articles were screened for full-text availability via the university's library system to ensure access to complete journal publications. Articles were then assessed against the study's inclusion criteria: English-language, peer-reviewed, and focused on either the traditional or adapted use of Porter's Value Chain model in business contexts. The screening process progressed through multiple stages: an initial filter based on language, publication date, and peer-review status, followed by an evaluation of titles, abstracts, and keywords for relevance to the research question. Articles were excluded if they lacked conceptual or applied discussion of the value chain, were limited to technical or logistics-based supply chain topics or focused on unrelated management areas. This process yielded 12 articles for full review and inclusion in the SLR.

To gain an overview of the main features of the selected literature, the articles were placed into a summary table and subjected to descriptive analysis, following the approach outlined by Coker (2022). Descriptive analysis enabled the identification of key characteristics, such as research themes, methodologies used, and the geographic or industry focus of each article.

More specifically, the summary table captured bibliographic and methodological details including author(s), year of publication, research design, journal source, and contextual focus. This structured overview made it possible to identify patterns, highlight trends, and note under-represented areas in the literature, thereby mapping the scope and distribution of contemporary scholarship on the Value Chain model.

Findings

This section presents the results of the systematic literature search, followed by a thematic synthesis of the selected articles. The findings are structured in two parts: (1) the outcome of the literature search, and (2) the content analysis of contemporary applications of Porter's Value Chain model.

1. Outcome of the Literature Search

The initial search using the Summon discovery tool returned 2,011 records. After applying the inclusion criteria - English language, peer-reviewed journal articles published between 2019 and 2025, and clear relevance to Porter's Value Chain model - the pool was reduced to 52 articles. Further screening of titles,

abstracts, and keywords narrowed the selection to 12 articles that met the final criteria. These articles specifically addressed either the traditional interpretation or modern adaptations of Porter's model, often in connection with themes such as digital transformation, strategic management, and sustainability. The final sample reflects a focused body of recent scholarship, capturing how the Value Chain model has evolved in both theory and application since 2019.

The selected articles align closely with the research question and reflect widely cited, influential contributions to current thinking on Porter's model.

1. Content of Contemporary Articles on the Value Chain

Following final selection, a two-stage analysis was conducted. First, a descriptive analysis was applied to summarise key features of the articles, including publication year, industry focus, geographic distribution, and research methodology, as suggested by Coker (2022). This provided a structured view of the scope and diversity across the studies. Second, a qualitative thematic synthesis was performed. Each article was analysed to identify recurring and significant themes, reflecting how the Value Chain model has been applied, adapted, or critiqued in recent years.

By combining descriptive and thematic analysis, the study offers both a structured overview and a deeper conceptual insight into the contemporary relevance of Porter's model.

Table 1 below presents a comparative overview of the 12 selected articles. It outlines key information including authorship, year of publication, research focus, methodology, sectoral application, and primary insights into the Value Chain model. This serves as a foundation for the analyses that follow.

#	Author(s)	Year	Title of Study	Focus area	Gaps Identified relating to the Value Chain Model	Summary of the Value Chain focus	Analysis of the Value Chain focus	Methodology used in the Study
1	Bennett, M., March, A., Greer, R., & Failler, P.	2025	Value Chain Opportunities for Pacific Coastal Resources	Sustainability Natural Resources	While the study uses Porter's Five Forces effectively to assess external competitiveness, it does not apply Porter's traditional Value Chain model (i.e., primary and support activities within a firm) to the fullest. As a result, internal operational linkages, cost structures, and firm-level value creation processes are underexplored. The analysis is sectoral and policy-oriented, lacking a micro-level breakdown of how individual enterprises within each chain create and capture value. Integrating the classic Value	This study identifies six high-potential coastal fisheries value chains in Pacific Island Countries (PICs) and analyses them using Porter's Five Forces framework. It aims to reduce reliance on tuna fisheries and enhance food security and economic resilience. Strategic repositioning and investment recommendations are provided for each	Porter's model is applied through the Five Forces framework, not the traditional value chain structure. Focus is on industry-level competitiveness and strategic segmentation, rather than firm-level operations. In the modern view of the study, Porter's Five Forces is still highly relevant for analysing external pressures and guiding investment in developing economies.	Uses a World Bank-developed methodology to identify high-priority value chains and investment support areas in PICs, incorporating fisheries data collection, habitat restoration, and market access facilitation.
				Coastal Resources				

					Chain model could enhance understanding of internal efficiencies and bottlenecks.	value chain.	The emphasis is on macro-level policy, sustainability, and community-based management, extending Porter's model to include social and environmental dimensions. The study suggest that value chain development must be aligned with global trends and local governance capacity.	
2	Boediman, A.S., Pujawan, N., & Baihaqi, I.	2023	Value Chain Analysis in the Film Industry: A Literature Review	Technological Advancement Competitiveness Digitisation (Film Industry)	The study synthesises existing literature rather than applying the Value Chain model empirically. It lacks original data or case studies to validate the theoretical insights. While it effectively maps thematic developments, it does not quantify value creation or analyse cost structures. The integration of Porter's model with digital transformation and value networks is conceptual, and the feedback mechanisms between stages of the value chain are not explored in depth.	The article investigates AI implementation in journalism and its implications for audience engagement and advertising effectiveness. AI adoption is seen to enhance operational efficiency and data use in the value chain. Focuses on how digital transformation enhances efficiency and optimises logistics, production, and customer interactions.	The value chain is positioned as a complementary analytical tool. It is never used in isolation - AI's impact on journalism is assessed alongside frameworks such as competitiveness and digital transformation. This suggests Porter's model is still valuable but is now part of a multi-framework approach.	Qualitative framework by applying a literature review of twenty-three articles.
3	Di Vita, G., Spina, D., De Cianni, R., Carbone, R., D'Amico,	2023	Enhancing the Extended Value Chain of the Aromatic Plant Sector in Italy:	Natural Resources Competitiveness Innovation	While the study applies Porter's Value Chain comprehensively and innovatively extends it using MCA, it remains largely qualitative, and perception	Uses a survey- based approach in four phases: (1) focus group creation, (2)	Porter's model is explicitly applied and extended to include the full supply chain (not just firm-level	Uses a survey-based approach in four phases: (1) focus group creation, (2)

	M., & Zanchini, R.		A Multiple Correspondence Analysis Based on Stakeholder's Opinions	(Aromatic Industry)	based. It does not quantify the actual value added at each stage or assess cost structures and margins. The model also lacks integration with performance metrics or feedback loops that could link stakeholder perceptions to measurable outcomes. Additionally, consumer perspectives and post-retail stages (e.g., disposal, reuse) are excluded, limiting the scope of the "extended" value chain.	identification of actors and experts, (3) data collection, and (4) data analysis using descriptive statistics and Multiple Correspondence Analysis (MCA).	activities). Primary and support activities are evaluated separately for each stakeholder group. Porter's model is still relevant but requires stakeholder-specific adaptation and integration with qualitative tools like MCA. The article emphasises horizontal integration, training, and digital innovation - elements not central in Porter's original model. The study further shows that value creation is distributed, and collaboration is essential for competitiveness.	identification of actors and experts, (3) data collection, and (4) data analysis using descriptive statistics and Multiple Correspondence Analysis (MCA).
4	Eling, M., Nuessle, D., & Staubli, J.	2022	The Impact of Artificial Intelligence along the Insurance Value Chain and on the Insurability of Risks	Artificial Intelligence (Insurance Industry)	While the study applies Porter's Value Chain model effectively, it focuses more on mapping AI use cases than on quantifying value creation or cost savings. The model is descriptive and lacks integration with performance metrics or feedback loops. Additionally, the analysis of support activities is limited, and the dynamic interplay between AI- driven innovation and traditional insurance	This article analyses 91 academic papers and 22 industry studies to assess how AI affects the insurance value chain. It uses Porter's model (adapted for insurance) and Berner's insurability criteria. AI is shown to enhance efficiency, automate processes, and enable new	Porter's model is adapted to the insurance industry and used to map AI's impact across all value chain stages. AI enhances efficiency, personalisation, and customer experience, aligning with Porter's focus on value creation. Porter's model is still useful,	The study follows a three- step approach: identifying AI applications in insurance, analysing their impact along the insurance value chain, and deducing consequences for insurability of risks.

					processes is not deeply explored. The insurability framework adds depth but could benefit from empirical validation.	products. However, it also introduces new risks (e.g., systemic failures in autonomous vehicles) that challenge traditional insurability.	but must be combined with risk frameworks (e.g., Berner's criteria) to address technological disruption. The article highlights a shift from loss compensation to loss prediction/prevention, suggesting a paradigm shift in value delivery. It further emphasises ecosystem thinking and data ethics, which go beyond Porter's original scope.	
5	Huo, H., Ionita, D., Onisor, L., & Stancu, A.	2024	Digital Empowerment: How Small B-to-B Companies Remodel the Value Chain through Digital Platforms	Digitisation (Small and Medium Enterprises (SME))	Although the study applies Porter's model to map digital platform usage across value chain activities, it lacks quantitative analysis of value creation or return on investments (ROI). The model is used primarily for classification rather than performance evaluation. The integration between adoption drivers and value chain outcomes is not fully developed, and the study does not explore how digital platforms influence interdependencies between primary and support activities.	This study examines how small business-to-business (B2B) firms in Romania use digital platforms to digitise and optimise their value chain activities. Based on survey data and case examples, the authors categorize firms into four digital adoption profiles - such as "Digital Pathfinders" and "Basic Techies" - based on their extent of platform integration. Activities such as	Porter's Value Chain model is explicitly referenced but treated as a baseline rather than a comprehensive solution. The article uses it to categorise traditional business functions but overlays digital transformation theory to account for how these functions are being modified. Unlike Porter's static, linear model, the authors describe a more fluid and uneven digitalisation process across firms, where internal and	Survey-based study with quota sampling and clustering analysis of SMEs using digital platforms.

						customer relationship management, logistics, marketing, and service delivery are shown to be selectively digitised, depending on resource availability and digital maturity. The study maps these activities against a modified version of Porter's value chain to reveal which parts of the chain are most affected by digital technologies.	external value creation activities blur. The study highlights that in modern small enterprises, digital platforms - external to the firm - play a crucial role in value creation, challenging Porter's firm-centric assumption. Moreover, the analysis reveals that few firms digitalise their entire value chain evenly, instead prioritising high- impact areas, which shows a selective and strategic reinterpretation of the model. This supports calls in recent literature to revise or extend Porter's framework to better account for digital ecosystems, platform reliance, and agile business models.	
6	Mohammadi, N., & Sakhteh, S.	2022	Start-up Accelerator Value Chain: A Systematic Literature Review	Accelerators Entrepreneurial Ecosystems	The article successfully adapts Porter's value chain to the accelerator context, but it focuses primarily on service delivery and program structure rather than on measuring value creation outcomes (e.g., startup success rates, ROI, innovation output).	This article systematically reviews 51 high- quality studies on startup accelerators and synthesises them into a conceptual model using Porter's value chain. It	Porter's Value Chain model is explicitly used to structure the accelerator ecosystem into primary (program stages) and support activities (services). The model is adapted to non- traditional	Systematic literature review of fifty-one studies on accelerators to synthesise their processes, services, investment frameworks, and success/risk factors.

					<p>Additionally, while the model includes external antecedents and consequences, it lacks a detailed analysis of cost drivers, margin analysis, or interdependencies between support activities. A more quantitative or performance-based application of the value chain could strengthen its utility for benchmarking and strategic decision-making.</p>	<p>identifies accelerator services, success factors, risks, and investment structures, and proposes a comprehensive accelerator Value Chain model. Examines how startup accelerators structure processes that foster innovation, using Porter's Value Chain to frame mentoring, funding, and market access. The study presents the accelerator value chain inspired by Porter's model, analysing how accelerators support start-ups through mentoring, funding, and networking. It highlights accelerators as crucial players in entrepreneurial ecosystems, impacting innovation and business growth.</p>	<p>sectors (startup support), showing its flexibility and relevance. Porter's value chain is a powerful tool for conceptualising service-based ecosystems, not just manufacturing. The study emphasises strategic planning, mentorship, funding, and networking as key value-adding activities. It further provides a visual framework for practitioners and researchers to assess and design accelerator programs.</p>	
7	Ong, W.J, Goh, G.G.G., Lim, W., & Yong, S.H.S.	2024	<p>A Winning Green Profile to Stay Ahead? Companies' Green Value Chain Profiles Based on Competitive</p>	<p>Sustainability Natural Resources Competitive Advantage</p> <p>Green Practices</p>	<p>Does not sufficiently address balancing profitability with sustainability.</p>	<p>Investigates green profiling and digital strategies in sustainable tourism. Highlights the role of sustainability in creating environmental and social value while</p>	<p>Porter's model is applied in the context of sustainability and digital value creation. It is combined with circular economy principles, showing that modern scholars</p>	<p>Qualitative framework using interviews and theoretical modelling.</p>

			Advantage Attainment			maintaining profitability. The Value Chain model is used to understand ecological and economic performance.	extend the model's scope to environmental and regional resilience.	
8	Pratiwi, A.A., Wessiani, N.A., Suwignjo, P. & Fadli, R.	2024	Industrial Cluster Desing using Value Chain Analysis and Diamond Porter's Model (case Study in Barik Trusmi Cirebon Centre)	Natural Resources (Small and Medium Enterprises (SME))	While the study applies Porter's Value Chain comprehensively at the cluster level, it lacks a detailed analysis of performance metrics (e.g., cost structures, margins, or productivity) within each activity. The model is descriptive rather than diagnostic, offering limited insight into how value is quantitatively created or lost. Additionally, the integration between the analytically linked -there is no clear feedback loop between internal activities and external competitiveness outcomes. Value Chain and Diamond Model is conceptual but not analytically linked -there is no clear feedback loop between internal activities and external competitiveness outcomes.	This study applies Porter's Value Chain and Diamond models to design an industrial cluster for Batik Trusmi in Indonesia. It maps stakeholders, analyses current and desired conditions, and outlines primary and secondary activities. The goal is to enhance competitiveness standardisation, and integrated systems. through demand distribution	Porter's model is explicitly applied to map both primary and support activities across stakeholders. This study combines Porter's Diamond model to assess internal and external competitiveness factors. Porter's model is still highly relevant for industrial development, especially in SME clusters. The study emphasises stakeholder integration, infrastructure, and strategic alignment - elements that extend Porter's original firm-level focus. The Value Chain model is used as a planning and coordination tool for regional economic development.	Mixed methods using the Value Chain and Porter's Diamond Model, and stakeholder analysis for industrial cluster design.
9	Rozaki, Z., Ariffin, A.S.,	2024	Optimising Coastal	Sustainability Natural	Although Porter's Value Chain is applied to map primary and	This study applies Porter's Value Chain	Porter's model is used not in isolation but	Quantitative using a survey with forty-

	Ramli, M.F. Nurrohma, El, Ramadhani, N.N., Setyoasih, W.I., & Senge M.		Management: A Comprehensive Value Chain Analysis Approach for Sustainable Economic Development in Java, Indonesia	Resources Coastal Areas	support activities, the model is used descriptively rather than analytically. There is limited integration between the value chain stages and broader systemic factors like policy, infrastructure, or environmental sustainability. The study also lacks a dynamic or iterative view of value creation over time and does not explore interdependencies between actors. While added value is quantified, the model could benefit from deeper analysis of cost drivers, risk factors, and digital transformation impacts.	to analyse fisheries and aquaculture products in Java. It combines Porter's model with Hayami's value- added analysis and marketing margin assessments. Analyses the value chain of fishery products, emphasising the role of added value and marketing margin in optimising coastal management.	alongside other tools like Hayami's method, R/C ratio, and marketing margin analysis. It shows that the value chain analysis is most effective when integrated with economic and social metrics. Porter's model is a foundational framework, but digitisation, branding, and stakeholder collaboration are essential for real-world application. The article emphasises small-medium enterprises and government roles, which Porter's original model underemphasised.	eight respondents
10	Ruan, S., & Phys, J.	2020	Research on Strategic Cost Management of Enterprises based on Porter's Value Chain model	Cost Management Competitiveness	While the study effectively applies Porter's model to strategic cost management, it remains largely conceptual and lacks empirical validation or quantitative analysis. The model is used to describe cost allocation and control strategies but does not integrate performance metrics or real-world case studies. Additionally, the interaction	The article explores how enterprises can use Porter's Value Chain model to manage strategic costs across the entire lifecycle - from research and development to customer service. It emphasises breaking away from traditional	There is a strong endorsement of Porter's original model as a strategic tool. It emphasises cost control across all value activities, aligning with Porter's idea of competitive advantage through internal efficiencies. Porter's model is still relevant	Mixed methods combining surveys and secondary data analysis.

					between primary and support activities is not deeply explored, and the feedback loop between strategic goals and operational execution could be more clearly defined.	cost management by integrating value chain. The Value Chain model is used to identify cost- saving opportunities across research and development, production, procurement, and processing. Strategic cost management integrates modern cost planning methods. Internal and external value chain activities are combined to optimise cost distribution and risk reduction.	but needs integration with activity-based costing and strategic planning. There is no mention of digital transformation or external network effects - suggesting a more traditional application.	
11	Wilczek, B., Haim, M., & Thurman, N.	2023	Transforming the Value Chain of Local Journalism with Artificial Intelligence	Artificial Intelligence (News Industry)	Although the article effectively adapts Porter's Value Chain to a service- based, digital context, it does not quantify the value added by AI at each stage. The model is conceptual and lacks empirical validation or performance benchmarks. Moreover, while the framework includes externalities and ethical considerations, it does not fully integrate these into the value chain's feedback mechanisms. A more dynamic or iterative model could better capture the evolving nature of AI's impact on journalism.	The article investigates how AI is transforming the local journalism industry, particularly in terms of content creation, audience engagement, and news distribution. The study focuses on how AI tools - such as automated news generation, data analytics, and personalised content delivery - are being integrated into journalism workflows. The study outlines a	Porter's original Value Chain model is not directly cited, but the article's structure clearly draws from its logic. However, the model is adapted significantly. AI is not positioned as a back-end support function (as per Porter's categorisation of technology development) but as a core enabler in the value-creating activities themselves such as editorial	Benchmarking analysis comparing local and national news organisations, along with qualitative case study analysis.

						restructured value chain for media organisations, in which AI is embedded into editorial and production activities. The authors provide case-based illustrations to demonstrate AI's role in boosting efficiency and responsiveness to audience preferences, especially in resource-constrained local newsrooms.	production and news dissemination. This redefinition challenges the traditional separation of primary and support activities and supports current arguments that digital technologies must be seen as embedded throughout the entire value chain. Moreover, the study indirectly critiques the sufficiency of Porter's model in explaining value creation in digital, service-heavy industries like journalism. The authors do not use the value chain as a standalone analytical framework but in combination with concepts from media innovation and digital ecosystems, reflecting a broader shift in how the model is used in contemporary research.	
12	Zeng, B., Fahad, S., Bai, D., Zhang, J., & Isik, C.	2023	Assessing the Sustainability of Natural Resources using the Five Forces and	Sustainability Natural Resources (Solar Energy Industry)	Although the study presents a comprehensive solar value chain, it does not quantify value creation or cost efficiency across stages. The integration of the Five Forces and Value	This article combines Porter's Five Forces and Value Chain models to assess the Indian solar industry. It includes interviews,	Porter's models are adapted and expanded to include policy, sustainability, and innovation. The Value Chain is used to map	Hybrid methodology with semi- structured interviews and policy analysis using Five Forces.

			Value Chain Combined Models: The Influence of Solar Energy Development		Chain models is insightful but remains largely descriptive. The model lacks dynamic analysis of how policy changes or technological innovations affect value chain performance over time. Additionally, while the study identifies key players and activities, it does not explore interdependencies or feedback mechanisms between them in depth.	policy analysis, and a new solar Value Chain model. Examines sustainability of natural resources using a hybrid approach and empirical investigation, introducing a new Value Chain model in India's solar industry.	core and supporting activities, while Porter's Five Forces assess market competitiveness. Porter's models are still useful, but must be hybridised with stakeholder interviews, SWOT, and policy frameworks. The article emphasises government policy, research and development, and global collaboration, which go beyond Porter's original internal focus.	
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A descriptive analysis of the 12 selected studies was conducted to understand the distribution and methodological characteristics of the reviewed literature. Most articles were published between 2020 and 2024, confirming the recency and relevance of the sample. Sectorally, the studies span a diverse range of domains, including technology and innovation (n=3), natural resource and environmental management (n=4), and entrepreneurship or start-up ecosystems (n=2). The service industry - particularly tourism and insurance - was also a key focus (n=3). Qualitative case studies dominated the methodological approaches (n=6), followed by systematic literature reviews (n=3), with a smaller number employing mixed methods or quantitative designs. This suggests a research preference for exploratory and interpretive methods when applying or extending Porter's model in complex, rapidly evolving environments.

Thematic Analysis

To explore how Porter's Value Chain model is interpreted and applied in contemporary contexts, a thematic analysis was conducted based on the synthesis table. The last four columns - "Gaps Identified Relating to the Value Chain Model," "Summary of the Value Chain Focus," "Analysis of the Value Chain Focus," and "Methodology Used in the Study" - served as the foundation for theme development. These entries explicitly referenced Porter's model and provided insight into both its applications and limitations in modern settings.

Themes were developed inductively by identifying recurring concepts across the 12 articles. Particular attention was given to:

- how researchers engaged with Porter's original firm-level framework;

- whether it was applied in isolation or alongside other models;
- the contexts in which it was deployed (e.g., sectoral, technological, environmental); and
- where conceptual gaps emerged between traditional assumptions and current needs.

This process ensured that the resulting themes reflected both the enduring relevance and evolving reinterpretations of the Value Chain model. Six dominant themes emerged:

1. Endurance and Continued Reliance on Porter's Model (Carneiro et al., 2024; Huo et al., 2024)
2. Technology and Digital Transformation - focusing on AI, platforms, and digitisation as drivers of value (Boediman et al., 2024; Eling et al., 2022)
3. Strategic Cost Management and Competitiveness - maintaining Porter's emphasis on cost leadership while adapting to automation and digital service models (Mohammadi and Sakhteh, 2023; Ruan, 202a)
4. Industrial Clusters and Economic Development - applying value chain logic to regional innovation, beyond firm-level scope (Ong et al., 2024)
5. Entrepreneurial Ecosystems and Accelerators - extending value chain thinking to early-stage venture contexts (Mohammadi & Sakhteh, 2023)
6. External Effects and Sustainability Considerations - integrating policy, environmental, and social resilience dimensions (Bennett et al., 2025; Rozaki et al., 2024)

These themes are further elaborated below, offering evidence of how Porter's framework continues to shape strategic thinking, while also revealing the areas where scholars and practitioners are pushing its conceptual boundaries.

Endurance and Continued Reliance on Porter's Value Chain Model

Despite growing interest in digitalisation, sustainability, and regional development, many of the reviewed articles continue to rely on Porter's (1985) Value Chain model as a foundational or comparative framework. Its structure remains widely applicable and is frequently used to analyse internal efficiency, competitive strategy, and firm-level value creation.

For example, Mohammadi and Sakhteh (2023) apply the traditional value chain to start-up accelerators, aligning support functions like mentoring, networking, and funding with Porter's primary and support activities. Although accelerators operate outside the boundaries of the original firm-based model, the study adapts the value chain logic to these external but value-generating mechanisms. Similarly, Ruan (2020) uses Porter's model to perform strategic cost analysis across business functions, reinforcing the model's role in identifying inefficiencies and supporting competitive positioning - particularly in response to intense market rivalry.

Carneiro et al. (2024) also reaffirm the endurance of the framework by using it to evaluate strategic differentiation. While they acknowledge a need for adaptation considering digital transformation, they retain Porter's structural logic to assess how firms create and deliver value.

Collectively, these studies confirm that Porter's framework continues to inform strategic planning, even as the business environment evolves. It remains a widely accepted lens through which efficiency, alignment, and competitiveness are analysed.

Technology and Digital Transformation

Technology-driven transformation emerged as a dominant theme in the literature. Rather than replacing Porter's model, advances in artificial intelligence (AI), digital platforms, and automation are used to enhance its application. These tools are integrated into traditional value chain activities to improve efficiency, coordination, and customer responsiveness (Boediman et al., 2024; Huo et al., 2024; Wilczek et al., 2024).

For example, in journalism, AI is employed to improve content distribution and advertising strategies, although adoption is limited by resource constraints (Wilczek et al., 2024). Similarly, SMEs leverage digital platforms to optimise operations, though structural and financial barriers still hinder widespread use (Huo et al., 2024; Pratiwi et al., 2024). The entertainment sector demonstrates a clear shift from traditional to digital distribution, reshaping core value chain activities (Boediman et al., 2024). Eling et al. (2022) further show how digital systems improve coordination and information flow between value chain actors, particularly in insurance ecosystems.

These developments fall within Porter's original "technology development" support activity, yet

their strategic significance today arguably elevates them to primary roles in value creation. Still, most studies stop short of proposing a formal structural reconfiguration of the model, instead applying digital tools to reinforce existing components.

Strategic Cost Management and Competitiveness

Porter's Value Chain model continues to play a pivotal role in strategic cost management by promoting internal efficiency while enabling firms to respond effectively to external pressures - particularly industry rivalry, one of Porter's Five Forces. As competition intensifies across sectors, firms are compelled to optimise their cost structures to maintain strategic positioning (Ruan, 2020). Value chain-based cost analysis facilitates this by examining each business activity - such as procurement, production, research and development, and service delivery - to uncover cost-saving opportunities without sacrificing quality (Ruan, 2020). This approach is especially critical for SMEs and start-ups, where resource constraints necessitate deliberate cost control and focused resource allocation (Mohammadi & Sakhteh, 2023). By embedding value chain thinking into cost strategy, organisations enhance not only financial sustainability but also their resilience under competitive pressure. In this way, the model functions not only as an internal diagnostic tool but also as a strategic mechanism to navigate market dynamics.

Industrial Clusters and Economic Development

Although Porter's (1985) Value Chain model was initially designed for firm-level analysis, it did not explicitly account for spatial or regional dimensions of value creation. However, in his later work, *The Competitive Advantage of Nations*, Porter introduced the concept of industrial clusters - geographic concentrations of interconnected firms and institutions that collectively enhance productivity and innovation (Davies & Ellis, 2000). While conceptually related, the cluster framework remained distinct from the value chain model, which was not originally intended to analyse collective SME dynamics or regional economies.

Recent studies have begun bridging this gap by applying value chain thinking to regional and sectoral development. For example, the Batik Trusmi cluster in Indonesia demonstrates how coordinated SME integration within a shared value chain structure improves standardisation, competitiveness, and visibility (Pratiwi et al., 2024). Likewise, in the Pacific Islands, localised value chains are employed to promote economic resilience and diversify beyond single-resource dependency, such as tuna fisheries (Bennett et al., 2025; Rozaki et al., 2024). These examples illustrate an expanded interpretation of value chain logic, now encompassing regional growth, sustainability, and digital integration (Boediman et al., 2024; Eling et al., 2022; Ong et al., 2024).

This evolution suggests that while Porter's model did not fully anticipate regional dynamics, its foundational logic is adaptable to more complex, networked ecosystems - particularly in emerging economies. Future research could further investigate how value chain models support local innovation, policy-aligned development, and community-based resilience.

Entrepreneurial Ecosystems and Accelerators

Porter's (1985) Value Chain model provided a foundational lens for analysing internal processes, but it did not account for external innovation actors such as startup accelerators or broader entrepreneurial ecosystems. These actors - now central to venture development - were not part of Porter's firm-centric view. However, contemporary scholarship is extending value chain thinking into these innovation-driven environments.

For instance, Mohammadi and Sakhteh (2023) apply the value chain logic to examine how startup accelerators contribute to entrepreneurial success. Their findings suggest that services like mentorship, funding access, and market entry - core functions of accelerators - can be conceptualised as value-adding nodes in an extended entrepreneurial value chain. This reconceptualisation helps illuminate accelerator mechanisms, investment strategies, and success drivers through a structured analytical framework.

This shift marks an important evolution in the application of Porter's model. It recognises external, knowledge-intensive support services as integral to modern value creation - an element not originally captured in the traditional model (Wurth et al., 2022). Furthermore, the absence of a standardised framework for analysing accelerators underscores a gap in the literature. Future studies might expand on this to refine accelerator design and inform policy through strategically grounded value chain insights.

Sustainability, Green Economy, and External Factors

Several studies in the review highlight the growing relevance of value chains in driving environmental sustainability, particularly in areas such as green profiling, natural resource management, and circular economy integration (Bennett et al., 2025; Di Vita et al., 2023; Ong et al., 2024; Pratiwi et al., 2024; Rozaki et al., 2024; Zeng et al., 2023). While Porter's original model did not explicitly incorporate sustainability principles, its structured approach to identifying value-generating activities makes it well-suited for environmental analysis and resource optimisation.

These studies demonstrate that sustainability is becoming an integral consideration in value chain design and execution. For example, AI integration in journalism improves operational efficiency but also raises ethical issues around accessibility and media trust (Boediman et al., 2024; Wilczek et al., 2024). In the fisheries sector, Porter's model is adapted to identify priority value chains that enhance logistics, market access, and ecological sustainability - key to achieving food security and reducing reliance on volatile tuna markets in Pacific nations (Bennett et al., 2025; Rozaki et al., 2024).

Other studies embed circular economy principles into value chain frameworks by focusing on waste reduction, recycling, and eco-efficiency (Eling et al., 2022; Ong et al., 2024; Zeng et al., 2023). These efforts demonstrate how the value chain can guide businesses toward emissions reduction, resource conservation, and alignment with environmental regulations. When sustainability is strategically integrated, the value chain becomes a lever not only for environmental impact reduction but also for long-term competitiveness in eco-conscious markets.

Discussion

These observations lead to two critical insights. First, Porter's model remains foundational, especially for analysing firm-level strategy and internal operations. Second, its modern adaptations reflect the need to address broader systemic dynamics - including digitalisation and sustainability - which were not originally considered in the 1985 framework. Although the Value Chain remains a powerful strategic tool, its effective application depends on contextual factors such as resource availability, technological infrastructure, and market dynamics (Bennett et al., 2025).

The reviewed articles demonstrate that value chain analysis continues to offer actionable insights across a range of industries. Whether used to optimise enterprise cost structures, guide startup development, or enhance coastal resource management, the framework provides strategic clarity and operational direction. A notable strength across the studies is their broad industry coverage - from tourism and insurance to fisheries and media - highlighting the model's versatility. Furthermore, many studies integrate contemporary tools such as artificial intelligence (AI), sustainability frameworks, and digital platforms, showing a shift from purely operational analyses to innovation - and resilience-driven strategies. In sectors like fisheries and tourism, value chain studies also provide policy-relevant insights, highlighting the role of public interventions in strengthening value chain resilience (Bennett et al., 2025; Rozaki et al., 2024).

However, the literature is not without its limitations. One major shortcoming is the lack of longitudinal analysis; few studies assess the long-term impacts of value chain transformations post-2019 (Huo et al., 2024). Additionally, while the Value Chain model is often discussed, there is limited integration with the broader supply chain management literature - especially concerning global disruptions and risk mitigation. Some studies, particularly those focusing on sustainability and cost management, remain theoretical in nature and lack robust empirical application (Di Vita et al., 2023; Eling et al., 2022). Moreover, digital transformation research frequently emphasises benefits without fully addressing implementation challenges such as cybersecurity, data governance, and the digital divide (Eling et al., 2022; Huo et al., 2024).

Overall, this study contributes to the growing scholarly conversation by reaffirming the enduring relevance of Porter's Value Chain model while also exploring how it must evolve to meet modern business needs. Practically, it serves as a useful guide for organisations seeking to remain competitive in environments increasingly shaped by digital innovation and sustainability imperatives (Sagar, 2023).

Conclusion

Does the study effectively answer the research question? Yes. This SLR confirms that Porter's Value Chain model remains a relevant and valuable strategic framework in the post-2019 business landscape. It

demonstrates the model's adaptability to technological disruption, sustainability imperatives, and economic restructuring. Across diverse contexts, the literature shows how the model supports operational efficiency and informs digital transformation, sustainability integration, and cost management strategies.

However, gaps remain. Future research should more deeply investigate how global value chain disruptions reshape strategic priorities, how digital platforms alter traditional value creation processes, and how the Value Chain model performs in emerging versus developed economies (Boediman et al., 2024; Eling et al., 2022; Wilczek et al., 2024; Zeng et al., 2023). These are critical areas for understanding how the model can continue to evolve.

The literature reviewed affirms that while Porter's original framework remains foundational, it must adapt to remain useful. Shifts toward digital ecosystems, sustainability mandates, and customer-centric services are transforming the way value is generated and captured. Traditional value chains emphasised efficiency, cost reduction, and differentiation; however, as demonstrated by Huo et al. (2024), Pratiwi et al. (2024), and Ruan (2020), firms adopting servitisation strategies now focus on resilience, long-term customer engagement, and market agility. This reinforces the need for flexible, dynamic value chains.

In conclusion, this SLR offers a nuanced understanding of Porter's Value Chain model and its current relevance. The model is no longer static but evolving - reshaped by market demands, technological progress, and environmental imperatives (Boediman et al., 2024; Mohammadi & Sakhteh, 2023; Ong et al., 2024; Rozaki et al., 2024). Organisations must rethink their value chains not only for efficiency but also to foster innovation-driven, sustainable ecosystems. This review highlights key themes—including technology and digital transformation, cost competitiveness, industrial clusters, entrepreneurial ecosystems, and sustainability - while identifying conceptual and empirical gaps that invite further exploration.

Gaps in the research, future research, and real-world applications

The findings of this study present notable real-world applications across various sectors. From a strategic business perspective, organisations must reassess their internal processes by embedding digital transformation as a core value driver. Servitisation strategies offer competitive advantage through long-term, service-oriented revenue models (Mohammadi & Sakhteh, 2023; Ruan, 2020). In policy and governance, public institutions can adopt value chain models to improve service delivery efficiency. Policymakers are encouraged to incentivise circular economy practices that promote sustainable and resource-efficient operations (Zeng et al., 2023). Regarding industry-specific applications, manufacturing firms are urged to integrate artificial intelligence and automation to enhance logistics, streamline production, and enable predictive analytics. Financial institutions should align value chain governance with ESG (environmental, social, and governance) principles to drive responsible performance outcomes (Di Vita et al., 2023; Eling et al., 2022; Huo et al., 2024; Ruan, 2020).

Despite these contributions, the study identifies several research gaps. First, few studies conduct longitudinal analyses on the sustained impact of value chain transformations, particularly in the wake of global disruptions post-2019. Second, there is limited research on the integration between value chain and global supply chain literature, particularly concerning risk, resilience, and digital interconnectivity. Third, while digital transformation is a recurring theme, empirical work exploring implementation challenges - such as cybersecurity, infrastructure limitations, or workforce readiness - remains underdeveloped. Future research should address these areas, with particular focus on the intersection of value chain models and emerging technologies, sustainability frameworks, and entrepreneurship ecosystems.

Ethical Considerations

Although this study employed secondary data through a systematic literature review (SLR), it adhered to ethical principles to ensure research integrity and transparency. As outlined by Paul and Criado (2020), SLRs require accurate attribution of sources, avoidance of plagiarism, and clear documentation of the research process. All sources were rigorously cited, and plagiarism detection tools were used to verify the originality of the manuscript (Resnik, 2020).

Transparency was maintained by explicitly describing the databases used, search strategy, inclusion/exclusion criteria, and analysis methods (Paul & Barari, 2022). Objectivity was also prioritised in the selection and synthesis of literature, avoiding bias or selective reporting. Although no human participants were involved in this review, future extensions of the study - such as surveys or interviews - would require ethical clearance, including informed consent and compliance with data protection

regulations such as South Africa's Protection of Personal Information Act (POPIA).

In the event of future primary data collection, additional safeguards would be necessary to protect participant confidentiality and data privacy. Researchers must also ensure honest reporting of findings and refrain from manipulating data or overstating claims. Any personal, financial, or professional conflicts of interest must be disclosed (Paul & Criado, 2020). By upholding these ethical standards, the research maintains credibility and provides a reliable foundation for further inquiry in the evolving field of value chain studies.

References

- Alshurideh, M. T., Al Kurdi, B., Alzoubi, H. M., Obeidat, B., Hamadneh, S., & Ahmad, A. (2022). The influence of supply chain partners' integrations on organizational performance: The moderating role of trust. *Uncertain Supply Chain Management*, 10(4), 1191–1202. <https://doi.org/10.5267/j.uscm.2022.8.009>
- Alshurideh, M. T., Al Kurdi, B., Alzoubi, H. M., Obeidat, B., Hamadneh, S., Ahmad, A., Rupasinghe, H. D., Wijethilake, C., Liu, W., Wang, D., Long, S., Shen, X., Shi, V., Jain, S., Jain, N. K., Metri, B., Kamp Glenn Parry, B., Ding, J., Lee, E. S., ... Phillips, R. A. (2021). Strategic Management: Awareness, Analysis and Change. *Journal of Global Information Management*, 0(4), 135–151. <https://doi.org/10.7441/JOC.2021.02.08>
- Anastasiu, L., Gavriş, O., & Maier, D. (2020). Is human capital ready for change? A strategic approach adapting porter's five forces to human resources. *Sustainability (Switzerland)*, 12(6). <https://doi.org/10.3390/su12062300>
- Bennett, M., March, A., Greer, R., & Failler, P. (2025a). Value Chain Opportunities for Pacific Coastal Resources. *Sustainability (Switzerland)*, 17(3), 1–21. <https://doi.org/10.3390/su17031103>
- Bennett, M., March, A., Greer, R., & Failler, P. (2025b). Value Chain Opportunities for Pacific Coastal Resources. *Sustainability (Switzerland)*, 17(3), 1–21. <https://doi.org/10.3390/su17031103>
- Boediman, A. S., Pujawan, N., & Baihaqi, I. (2024a). *Value Chain Analysis in the Film Industry : A Literature Review*. 124–135. <https://doi.org/10.18502/kss.v9i32.17431>
- Boediman, A. S., Pujawan, N., & Baihaqi, I. (2024b). *Value Chain Analysis in the Film Industry : A Literature Review*. 124–135. <https://doi.org/10.18502/kss.v9i32.17431>
- Bruijl, G. H. Th. (2018). The Relevance of Porter's Five Forces in Today's Innovative and Changing Business Environment. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3192207>
- Buonocore, F., Annosi, M. C., de Gennaro, D., & Riemma, F. (2024). Digital transformation and social change: Leadership strategies for responsible innovation. *Journal of Engineering and Technology Management - JET-M*, 74. <https://doi.org/10.1016/j.jengtecman.2024.101843>
- Carneiro, S., Neves, P. C., Afonso, O., & Sochirca, E. (2024). Meta-analysis: global value chains and employment. *Applied Economics*, 56(19), 2295–2314. <https://doi.org/10.1080/00036846.2023.2186365>
- Ceal, C. (2019). *Michael Porter's Theory About Value Chain and Knowledge Management*. <https://doi.org/https://dx.doi.org/10.2139/ssrn.3521075>
- Coker, D. C. (2022). a Thematic Analysis of the Structure of Delimitations in the Dissertation. *International Journal of Doctoral Studies*, 17, 141–159. <https://doi.org/10.28945/4939>
- Di Vita, G., Spina, D., De Cianni, R., Carbone, R., D'Amico, M., & Zanchini, R. (2023a). Enhancing the extended value chain of the aromatic plant sector in Italy: a multiple correspondence analysis based on stakeholders' opinions. *Agricultural and Food Economics*, 11(1). <https://doi.org/10.1186/s40100-023-00257-8>
- Di Vita, G., Spina, D., De Cianni, R., Carbone, R., D'Amico, M., & Zanchini, R. (2023b). Enhancing the extended value chain of the aromatic plant sector in Italy: a multiple correspondence analysis based on stakeholders' opinions. *Agricultural and Food Economics*, 11(1). <https://doi.org/10.1186/s40100-023-00257-8>
- Eling, M., Nuessle, D., & Staubli, J. (2022a). The impact of artificial intelligence along the insurance value chain and on the insurability of risks. In *Geneva Papers on Risk and Insurance: Issues and Practice* (Vol. 47, Issue 2). Palgrave Macmillan UK. <https://doi.org/10.1057/s41288-020-00201-7>
- Eling, M., Nuessle, D., & Staubli, J. (2022b). The impact of artificial intelligence along the insurance value chain and on the insurability of risks. In *Geneva Papers on Risk and Insurance: Issues and Practice* (Vol. 47, Issue 2). Palgrave Macmillan UK. <https://doi.org/10.1057/s41288-020-00201-7>

- Ferreira, J., Cardim, S., & Coelho, A. (2021). Dynamic Capabilities and Mediating Effects of Innovation on the Competitive Advantage and Firm's Performance: the Moderating Role of Organizational Learning Capability. *Journal of the Knowledge Economy*, 12(2), 620–644. <https://doi.org/10.1007/s13132-020-00655-z>
- Gölgeci, I., Gligor, D. M., Lacka, E., & Raja, J. Z. (2021). Understanding the influence of servitization on global value chains: a conceptual framework. *International Journal of Operations and Production Management*, 41(5), 645–667. <https://doi.org/10.1108/IJOPM-08-2020-0515>
- Huo, H., Ioniță, D., Onișor, L. F., & Stancu, A. (2024a). Digital Empowerment: How Small B to B Companies Remodel the Value Chain Through Digital Platforms. *Journal of Business-to-Business Marketing*, 31(4), 385–404. <https://doi.org/10.1080/1051712X.2024.2354708>
- Huo, H., Ioniță, D., Onișor, L. F., & Stancu, A. (2024b). Digital Empowerment: How Small B to B Companies Remodel the Value Chain Through Digital Platforms. *Journal of Business-to-Business Marketing*, 31(4), 385–404. <https://doi.org/10.1080/1051712X.2024.2354708>
- Isabelle. (2020). Is Porter's Five Forces Framework Still Relevant? *Technology Innovation Management Review*, 10(6), 28–41.
- Mohammadi, N., & Sakhteh, S. (2023a). Start-up accelerator value chain: a systematic literature review. In *Management review quarterly* (Vol. 73, Issue 2, pp. 661–694). Institute for Ionics. <https://doi.org/10.1007%2Fs11301-021-00257-2>
- Mohammadi, N., & Sakhteh, S. (2023b). Start-up accelerator value chain: a systematic literature review. In *Management review quarterly* (Vol. 73, Issue 2, pp. 661–694). Institute for Ionics. <https://doi.org/10.1007%2Fs11301-021-00257-2>
- Oliveira, L., Fleury, A., & Fleury, M. T. (2021). Digital power: Value chain upgrading in an age of digitization. *International Business Review*, 30(6), 101850. <https://doi.org/10.1016/j.ibusrev.2021.101850>
- Ong, J. W., Guan Gan Goh, G., Lim, W. L., & Yong, S. H. S. (2024a). A Winning Green Profile to Stay Ahead? Companies' Green Value Chain Profiles Based on Competitive Advantage Attainment. *SAGE Open*, 14(4), 1–13. <https://doi.org/10.1177/21582440241291264>
- Ong, J. W., Guan Gan Goh, G., Lim, W. L., & Yong, S. H. S. (2024b). A Winning Green Profile to Stay Ahead? Companies' Green Value Chain Profiles Based on Competitive Advantage Attainment. *SAGE Open*, 14(4), 1–13. <https://doi.org/10.1177/21582440241291264>
- Paul, J., & Barari, M. (2022a). Meta-analysis and traditional systematic literature reviews—What, why, when, where, and how? *Psychology and Marketing*, 39(6), 1099–1115. <https://doi.org/10.1002/mar.21657>
- Paul, J., & Barari, M. (2022b). Meta-analysis and traditional systematic literature reviews—What, why, when, where, and how? *Psychology and Marketing*, 39(6), 1099–1115. <https://doi.org/10.1002/mar.21657>
- Paul, J., & Criado, A. R. (2020). The art of writing literature review: What do we know and what do we need to know? *International Business Review*, 29(4). <https://doi.org/10.1016/j.ibusrev.2020.101717>
- Porter, M. E. (1985). *The Competitive Advantage: Creating and Sustaining Superior Performance*. NY: Free Press.
- Pratiwi, A. A., Wessiani, N. A., Suwignjo, P., & Fadli, R. (2024). Industrial Cluster Design using Value Chain Analysis and Diamond Porter's Model (Case Study in Batik Trusmi Cirebon Center). *E3S Web of Conferences*, 517. <https://doi.org/10.1051/e3sconf/202451705005>
- Pushp, P., & Ahmed, F. (2024). Toward a future discourse on global value chains. *Critical Perspectives on International Business*, 20(3), 378–407. <https://doi.org/10.1108/cpoib-08-2022-0086>
- Resnik, D. B. (2020, December 23). *What Is Ethics in Research and Why Is It Important?* National Institute of Environmental Health Sciences.
- Rozaki, Z., Ariffin, A. S., Ramli, M. F., Nurrohma, E., Ramadhani, N. N., Setyoasih, W. I., & Senge, M. (2024a). Optimizing Coastal Management : A Comprehensive Value Chain Analysis Approach for Sustainable Economic Development in Java, Indonesia. *JIPK*, 16(1), 165–179.
- Rozaki, Z., Ariffin, A. S., Ramli, M. F., Nurrohma, E., Ramadhani, N. N., Setyoasih, W. I., & Senge, M. (2024b). Optimizing Coastal Management : A Comprehensive Value Chain Analysis Approach for Sustainable Economic Development in Java, Indonesia. *JIPK*, 16(1), 165–179.
- Ruan, S. (2020a). Research on Strategic Cost Management of Enterprises Based on Porter's Value Chain Model. *Journal of Physics: Conference Series*, 1533(2). <https://doi.org/10.1088/1742-6596/1533/2/022056>

- Ruan, S. (2020b). Research on Strategic Cost Management of Enterprises Based on Porter's Value Chain Model. *Journal of Physics: Conference Series*, 1533(2). <https://doi.org/10.1088/1742-6596/1533/2/022056>
- Sagar, S. (2023). Innovation and Sustainability in Business: Navigating the Future Landscape. *Issue 12.Ser*, 25(January), 51–60. <https://doi.org/10.9790/487X-2512055160>
- Wilczek, B., Haim, M., & Thurman, N. (2024a). Transforming the value chain of local journalism with artificial intelligence. *AI Magazine*, 45(2), 200–211. <https://doi.org/10.1002/aaai.12174>
- Wilczek, B., Haim, M., & Thurman, N. (2024b). Transforming the value chain of local journalism with artificial intelligence. *AI Magazine*, 45(2), 200–211. <https://doi.org/10.1002/aaai.12174>
- Zamora, E. A. (2016). Value Chain Analysis: A Brief Review. *Asian Journal of Innovation and Policy*, 5(2), 116–128. <https://doi.org/10.7545/ajip.2016.5.2.116>
- Zeng, B., Fahad, S., Bai, D., Zhang, J., & Işık, C. (2023a). Assessing the sustainability of natural resources using the five forces and value chain combined models: The influence of solar energy development. *Resources Policy*, 86(September). <https://doi.org/10.1016/j.resourpol.2023.104079>
- Zeng, B., Fahad, S., Bai, D., Zhang, J., & Işık, C. (2023b). Assessing the sustainability of natural resources using the five forces and value chain combined models: The influence of solar energy development. *Resources Policy*, 86(September). <https://doi.org/10.1016/j.resourpol.2023.104079>