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Visual Representation of the Process of Scientific Production in the Field of Value Co-creation in Fintech Startups

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ABSTRACT

Objective: Fintech startups have revolutionized consumer behavior by introducing innovative business models. The concept of value co-creation has emerged as a collaborative effort involving companies, suppliers, employees, and customers. This article aims to examine the scientific production trend in the field of value co-creation within fintech startups from 1997 to 2023.

Methodology: The research was carried out using the interpretive paradigm and a systematic review approach, employing specific search terms in the Scopus database to analyze 122 articles (utilizing VOS viewer 1.6.19 software). The application of scientometrics in the marketing field represents a fresh approach that highlights the intellectual paradigm guiding the co-creation of value in international managerial research.

Findings: A thorough examination of the articles revealed that the majority of research conducted on the topic was centered in the United States. The findings from the research analysis indicated that various aspects including entrepreneurship, innovation, investment, financial services, and stakeholders have been extensively studied in relation to value co-creation in fintech startups. **Conclusion:** The research on fintech startups is currently in its early stages of development. This study represents a groundbreaking endeavor to examine the existing literature on value co-creation and establish a framework that focuses on enhancing marketing performance.

Keywords: Value Co-Creation, Fintech Startups, Marketing and Management, Systematic Review, Scientometrics.

1 Introduction

alue co-creation is commonly perceived as a collaborative process wherein the provider acts as a facilitator of value while the customer actively participates

as a co-creator of value. The concept of value co-creation emerged in the early 2000s (Prahalad & Ramaswamy, 2000; Vargo & Lusch, 2004), The notion of value co-creation has gained widespread recognition in the field of management.

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Marketing involves the strategic process through which a company generates value for its customers and fosters enduring relationships with them, leading to reciprocal value exchanges (Akbari, Foroudi, Zaman Fashami, et al., 2022). Value co-creation refers to the collaborative development of products, services, and experiences by companies and their stakeholders, leading to the emergence of a vast realm of value (Ramaswamy, 2009). One of the crucial objectives for organizations is the conversion of potential customers into actual customers and subsequently maintaining their loyalty (Hussain et al., 2023). Enabling effective value co-creation through well-suited value propositions is of utmost importance. (Bonamigo et al., 2022). These propositions should encompass insights into customer preferences, capabilities, and expectations, which can be obtained through engaging in value co-creation activities (Hussain et al., 2023). In essence, value co-creation involves implementing policies and operational methods that enhance the competitive strength of a company (Rahmanseresht & Sheikhi, 2020). Simultaneously, it also aims to improve the economic and social conditions within the society in which the company operates (Kojouri et al., 2021).

The researcher embarked on this study due to the concern among fintech startup managers regarding effective stakeholder communication and value sharing. One of the reasons for startup failures is the insufficient focus on marketing products and services alongside innovative technologies. Consequently, marketers in fintech startups should place greater emphasis on the concept of value cocreation. In the present-day landscape, value can only be created through the interaction of customers, organization, suppliers, and all stakeholders and shareholders involved. This forms the core principle of value co-creation. Marketers need to prioritize value co-creation to create value, while customers should actively engage in cocreating value and participate in the company's activities to achieve mutual goals. The changing financial markets have spurred the emergence of fintech startups, and their growth in this market has always been a significant concern. To address this challenge, fintech startups engage in value cocreation to enhance their marketing performance in these domains. The present study aims to address the following inquiries: What is the current status of scientific publications listed in the Scopus citation database concerning value cocreation? How many articles have been published, and what is the number of citations available in the most productive countries? To what extent has there been scientific collaboration between countries in the realm of value cocreation? What are the most commonly used words and their patterns of co-occurrence?

According to Ehrental (2012), value co-creation, unlike traditional marketing approaches, places significant emphasis on viewing the customer as an integral part of the company during the interaction process. Through these relationships and interactions, value co-creation goes beyond the mere consumption of goods and services and aims to create additional value for the customer. This approach acknowledges the active involvement of customers in shaping their experiences and recognizes their contributions to the overall value creation process (Prahalad & Ramaswamy, 2004). According to Jiang, Luo, and Liu (2022), the evolution mechanism of online opinions in the context of value co-creation, arising from the interactions between diverse consumers and merchants, is not well understood. The dynamics and processes through which online opinions form and evolve as a result of value cocreation activities require further investigation and clarification. This highlights the need for research to better comprehend how the interactions between heterogeneous consumers and merchants shape and influence the development of online opinions in the context of value cocreation (Jiang et al., 2022). The research conducted by Nadeem, Alimamy, and Ashraf (2023) revealed that ethical marketing has a significant impact on value co-creation, the connection consumers have with a brand, and their willingness to pay. Their study demonstrated that when companies engage in ethical marketing practices, such as transparent communication, fair treatment of stakeholders, and socially responsible behavior, it positively influences the co-creation of value between the company and consumers. Furthermore, ethical marketing fosters a stronger emotional connection between consumers and the brand, leading to increased consumer loyalty and a greater willingness to pay for products or services. These findings emphasize the importance of ethical considerations in marketing strategies, as they can have a profound impact on value co-creation and consumer behavior. (Nadeem et al., 2023).

The research holds significant practical importance and plays a crucial role in advancing knowledge within the realm of fintech startups. These startups have the potential to contribute to the development of resources and financial management for both the country and its people. Value cocreation is a critical aspect for the survival and growth of fintech startups, as it directly impacts their marketing performance. Given the novelty of fintech startups and their



role in connecting individuals and businesses, industry experts and researchers, particularly marketers, emphasize the importance of value co-creation for managers in this field. Maintaining effective communication with customers is essential in the current marketing landscape to foster customer loyalty. To stay competitive, fintech startups must engage in continuous communication with their customers and ensure their satisfaction. The research focuses on formulating a framework for value co-creation elements that cater to the specific needs of fintech startups, with the goal of enhancing their marketing performance. Despite the growing importance of this topic, the existing literature on startups has paid limited attention to gaining a deep understanding of the value co-creation processes. Hence, this research aims to bridge that gap and provide valuable insights for the fintech startup ecosystem (Re & Magnani, 2023).

Indeed, the existing body of research on the value cocreation process is relatively limited in several aspects. Firstly, there is a dearth of studies that comprehensively explore the components and stages of the value creation process. It remains unclear when this process begins, how it evolves, and when it concludes. A deeper understanding of these temporal aspects would provide valuable insights into the dynamics and duration of value co-creation. Secondly, the involvement of stakeholders beyond the firm and customers in the value co-creation process is an area that requires further exploration. While customers are recognized as important co-creators of value, there are other stakeholders, such as suppliers, employees, and partners, who can significantly contribute to value creation. Addressing these research gaps would contribute to a more comprehensive understanding of the value co-creation process, its participants, and the dynamics involved, leading to enhanced strategies for fostering value creation in diverse contexts.

2 Methods and Materials

The present research follows an interpretative paradigm, which is grounded in the principles of positivism. Positivism assumes that reality can be experienced through the senses. The primary objective of this research is to explore the intellectual paradigm of international researchers in the field of indicators and dimensions of value co-creation in fintech startups. The research approach employed is inductive,

which aligns with an empirical philosophy. Inductive thinking involves deriving general conclusions from partial information and establishing connections between them. Additionally, this research adopts a single-sectional design, focusing on collecting data about one or more attributes at a specific point in time. Single-sectional studies are commonly used for exploratory research examining a specific phenomenon within a defined timeframe. The research is conducted within a library setting.

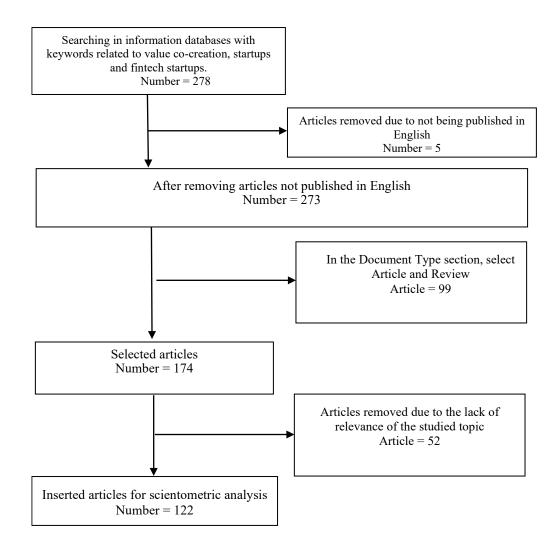
Bibliometric analysis encompasses several approaches, including citation analysis (CA), keyword co-occurrence analysis, co-citation analysis (CCA), and co-authorship analysis. These methods employ quantitative techniques to elucidate, assess, and evaluate existing scholarly papers (Akbari, Foroudi, Khodayari, et al., 2022). Selecting the appropriate databases is a crucial aspect that should be taken into consideration to ensure access to the right resources (Kamalipoor et al., 2023). To conduct their research and achieve their desired goals, the researchers undertook a systematic examination of all published research articles pertaining to value co-creation in fintech startups from 1997 to 2023. The data analysis was conducted using VOS viewer version 1.6.19 software, which also facilitated the exploration of relationships between authors, organizations, and countries within the field of study. To search for and retrieve relevant research articles published in the Scopus database, particularly in the areas of marketing and consumer behavior related to value co-creation, the researchers employed a search strategy aimed at maximizing sensitivity (to obtain the most relevant evidence) and minimizing irrelevance (to obtain the least irrelevant evidence), thereby enhancing the validity of the research. The Scopus database is a widely recognized and reputable source of scientific literature and research publications. It is maintained by Elsevier, a leading publisher of scholarly journals. Researchers, academics, and institutions often consider Scopus as a valuable resource for accessing highquality scientific articles and citation data. This search strategy involved the use of the AND and OR operators as follows:

TITLE-ABS-KEY (("value co creation" OR "value creation" OR "co creation of value") AND (fintech OR "financial technology" OR startup OR "start up")) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (SUBJAREA , "BUSI"))



Figure 1

Articles selection chart



The article type section was set to "Article and Review," resulting in a retrieval of 122 articles from the Scopus database. These articles underwent a three-stage screening process, as illustrated in Figure 1, to determine their relevance for the final analysis.

3 Findings and Results

After conducting a thorough review and analysis of 278 articles obtained from the Scopus database search, a total of 122 articles relevant to the research objectives were identified during the screening process (see Figure 1). Subsequently, a final review was conducted on these 122 articles. In the subsequent sections, a comprehensive

scientific mapping analysis using VOS viewer software is presented, highlighting the key authors, countries, and frequently used keywords in the selected articles.

The analysis section of the Scopus database reveals interesting findings regarding the thematic classification of the search results, as presented in Table 1. The table demonstrates that approximately 49 percent, equivalent to around 122 articles, are focused on the subject of business, management, and accounting. The fact that this field occupies the top spot in terms of research articles signifies the considerable attention given by researchers to the concept of co-creation of value. This noteworthy scientific interest holds promising prospects for further advancements in this area.



 Table 1

 Top five thematic areas of research

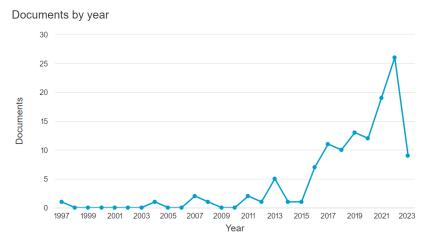
No	Subject area	Number of articles
1	Business, Management and Accounting	122
2	Economics, Econometrics and Finance	38
3	Social Sciences	37
4	Computer Science	29
5	Engineering	22

Figure 2 illustrates the results of the analysis conducted on the articles within the Scopus database, highlighting the trend of research and scientific output growth in the subject area from 1997 to 2023. The analysis reveals a consistent upward trajectory, with a significant surge in the number of

articles since 2016. Notably, the examination of the published research indicates that 2022 witnessed the highest number of articles (26 articles) compared to any other year, indicating a strong research interest among scientists in this particular topic.

Figure 2

Frequency of published articles on value co-creation in fintech startups



It is important to note that the search conducted in the Scopus database was performed in February 2023. Consequently, there is a possibility that articles published in 2023 may not have been registered and indexed in the database by that specific date. Therefore, the number of articles for the year 2023 may appear lower compared to

previous years due to this time lag in indexing. To provide a comprehensive overview, Table 2 and Figure 2 showcase the frequency of the highest number of articles in the respective years. This presentation helps to visualize the trend of research and highlights the years with the most significant volume of published articles in the field.

Table 2Frequency of published articles

Documents	year	Documents	year	Documents	year
1	2008	7	2016	9	2023
2	2007	1	2015	26	2022
0	2005-2006	1	2014	19	2021
1	2004	5	2013	12	2020
0	1998-2003	1	2012	13	2019
1	1997	2	2011	10	2018
		0	2009-2010	11	2017

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VOS viewer software was utilized to cluster topics in the realm of value co-creation within fintech startups. This clustering was based on keywords provided by the authors in their scientific articles. By setting a threshold of at least 2 occurrences for each keyword in the articles, we identified 91 keywords. The resulting graphical representation in

Figure 3 reveals variations in the size of circles representing different words. The size of these circles reflects the frequency of keyword usage in the articles. Notably, the term "Value co-creation" appears with a larger circle, indicating its prominent use among the keywords in the articles.

Figure 3 Clustering of keywords used in articles (Co-Occurrence Keyword Analysis)

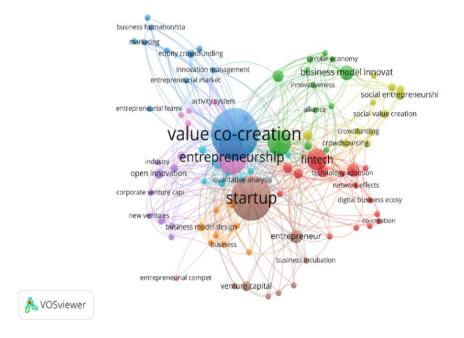


Table 3 presents the keywords employed in articles addressing the topic of value co-creation in fintech startups, along with their respective frequency of occurrence and the number of communication links. It is important to note that the keywords underwent a cleaning process to ensure consistency. For instance, variations such as "Startup,"

"Start-up," and "Startups" were merged and standardized as "Startup." Similarly, terms such as "Value Creation," "Value Co Creation," etc., were unified as "Value Co-Creation." Additionally, variations of the term "fintech," such as "financial technology," were consolidated as "fintech."

Table 3 Keywords used in articles on value co-creation in fintech startups

Link	Occurrences	Keyword		Link	Occurrences	Keyword	
22	6	Entrepreneur	7	110	41	Value Co-Creation	1
20	3	Corporate Venturing	8	88	33	Startup	2
20	6	Financial Service	9	57	15	Business Model	3
19	7	Business Model Innovation	10	52	22	Entrepreneurship	4
18	5	Blockchain	11	50	15	Innovation	5
18	4	Stakeholder	12	33	12	Fintech	6

In Figure 3's graphical map, the connections between certain words are depicted using thick lines, while others are represented by thin lines. This disparity in line thickness reflects the degree of association and co-occurrence between the words as observed in the articles. Words that are connected with thin lines indicate limited connections with IJIMOB

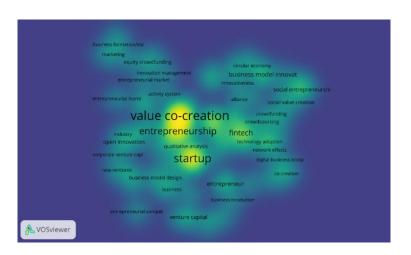
other words in the graphical map, suggesting that they have received comparatively less attention from researchers in the realm of value co-creation in fintech startups. Consequently, there is a research gap concerning these particular words. In light of this situation, it is crucial for researchers to direct their attention towards these words and explore their impact on the value co-creation process in fintech startups. Focusing future research efforts on these areas can help address the existing research gap.

Among the extracted keywords, "value co-creation," "startups," "business model," and "fintech" emerge as the most frequently occurring terms. Based on these findings, researchers seeking to maximize citations in their future research could consider incorporating these popular keywords. However, for those interested in exploring new topics within the research field, it is advisable to concentrate on less frequent words that have received limited attention from researchers in the domain of value co-creation. such words include "entrepreneurial Examples of competencies," "entrepreneurial learning," "social enterprise," and "strategy." Investigating these less explored

areas can contribute to expanding the knowledge base and addressing research gaps in the realm of value co-creation.

The figure reveals areas with lower density where words are sparsely distributed and located farther apart. This observation suggests a lack of coordination and references to other researchers' work in those areas. To address this issue, fostering increased collaboration among researchers can lead to the formation of a denser network within the field. Furthermore, the figure highlights several important keywords that are commonly used, such as "competition," "value co-creation process," "artificial intelligence," "sustainable entrepreneurship," and "digital transformation." These keywords indicate the need for greater attention and emphasis on these aspects in order to effectively co-create value. While authors have focused on frequently used keywords or topics related to value co-creation in scientific research, it is crucial for the professional community to also prioritize the value co-creation of these indicators. By doing more comprehensive understanding implementation of value co-creation can be achieved.

Figure 4 Keyword density map



The proximity index theory is relevant for analyzing the graphical networks generated from scientific texts. According to this theory, the closer social entities (keywords in this case) are to other entities in the network, the higher their proximity index, indicating their greater influence within the network. Moreover, entities represented by larger circles on the map, signifying their higher frequency of occurrence, can be considered as having more influence in the network. Consequently, it is advisable for researchers to focus their attention and research efforts on less-investigated fields. By doing so, these concepts can gain more prominence and establish a stronger presence within the network, ultimately contributing to a more comprehensive understanding of the subject matter.

Another important parameter that can be clearly seen in the graphic map is the non-connection of the entities in the network. Figure 4 illustrates this discontinuity well. The dispersion and fragmentation of entities in this map shows that there has been no coordination among researchers in the field of value co-creation in fintech startups. Also, countless

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entities (keywords) have appeared with small circles on the map, which can also be seen with very limited hotspots density map. The distance of some hotspots in the network

is significant and indicates the lack of coordination between researchers and the lack of targeted studies in this field.

Table 4 Core Topic Recognized

Topic	Keywords	Clusters			
business ecosystem	business cycle, business development, co-creation, digital business ecosystem, ecosystems, e-commerce,	Cluster 1			
	emerging economies, financial service, fintech, information technology, network effects, service-dominant logic, stakeholder, technology adoption	15 items			
		Red color			
business innovation	Alliance, blockchain technology, business model innovation, circular economy, economic value creation,	Cluster 2			
	economics, entrepreneurial opportunities, innovation, innovativeness, sustainable development , sustainable entrepreneurship				
		Green color			
Entrepreneurship	business formation/startups, business model, business model canvas, entrepreneurial learning, entrepreneurial	Cluster 3			
	marketing, equity crowdfunding, innovation management, innovation performance, marketing, social enterprise , strategy, value co-creation	12 Items			
		Blue color			
value creation	artificial intelligence, cluster analysis, crowdfunding, crowdsourcing, digital start-up, finance, social	Cluster 4			
	entrepreneurship, social value, social value creation, value capture, value proposition				
		Yellow color			
investment	corporate venture capital, corporate venturing, investments, management, new venture, open innovation,	Cluster 5			
	resource-based view				
		Purple color			
digital technologies	competitive advantage, digital business model, digital technologies, digital transformation, digitalization, healthcare, mobile wallet,	Cluster 6 9 Items			
Sustainable business	Business, business model design, case study, competition, design, sustainability, technology, value creation	Cluster 7			
	process	8 items			
		Orange color			
venture capital	business incubation, entrepreneur, matching, networks, new venture creation, social capital, startup, venture	Cluster 8			
	capital	8 items			
		Brown color			
governance	activity system, entrepreneurship, governance, platforms, unicorns				
		5 items			
		Pink color			
entrepreneurial	entrepreneurial competencies	Cluster 10			
competencies		1 items			
		Creamy orange color			

Cluster 1: business ecosystem

The term "business ecosystem" was assigned to this cluster based on the key concepts identified, including business cycle, business development, digital business ecosystem, ecosystems, and information technology. It refers to a network of various entities such as customers, suppliers, prominent manufacturers, shareholders, trade associations, labor unions, government and semigovernment organizations, and other stakeholders. This interconnected system of organizations operates on the principle of mutual support, where the actions of each

member affect the overall fate of the entire business ecosystem. In essence, the entrance or departure of any member has repercussions on the performance of other members.

Cluster 2: business innovation

Based on the keywords identified, the second cluster is labeled as "business innovation." This cluster encompasses concepts such as business model innovation, entrepreneurial opportunities, innovation, innovativeness, and sustainable development. Business innovation pertains to the exploration of different approaches to the traditional

business model, aiming to provide customers and users with previously unavailable products or services. The development of these novel alternatives is known as business model innovation.

Cluster 3: Entrepreneurship

The third cluster was named "Entrepreneurship" given the identified keywords: business model, business model canvas, entrepreneurial learning, entrepreneurial marketing, social enterprise, value co-creation. In the process of entrepreneurship, a business is launched and new business models are created using creative and innovative ideas.

Cluster 4: value creation

The following words were seen in the fourth cluster: social entrepreneurship, social value, social value creation, value capture, value proposition. Thus, the cluster was named "value creation." Value creation is one of the key words and one of the basic components of entrepreneurship, and it means that the production of goods or services leads to the creation or increase of value for the customer. Value is what the customer wants and is willing to spend money for.

Cluster 5: investment

The fifth cluster was named "investment" because of the existence of the following words in this cluster: corporate venture capital, corporate venturing, industry, investments, new venture, and resource-based view. Investment is one of the main topics in fintech startups.

Cluster 6: digital technologies

This cluster was named "digital technologies" given the identified keywords: digital business model, digital technologies, digital transformation, digitalization, mobile wallet, and platform.

Cluster 7: Sustainable business

Given the following identified keywords, the cluster was named "Sustainable business": Business, business model design, competition, sustainability, and value creation process. Cluster 8: venture capital

This cluster was named "venture capital" given the identified keywords: business incubation, entrepreneur, new venture creation, social capital, startup, venture capital. Venture capital, which is also known as "bold investment" or "entrepreneurial investment", is the provision of necessary capital for start-up and entrepreneurial companies and businesses that are prone to jump and growth in value, and of course, it has a lot of risk.

Cluster 9: governance

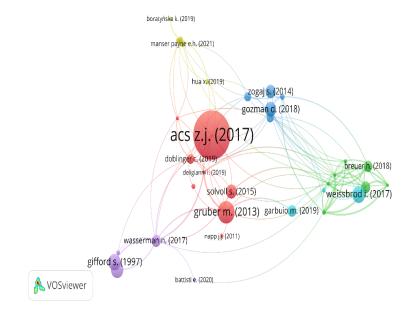
Given the following identified keywords, the second cluster was named "governance": activity system, governance, platforms. Governments play an essential role in the growth of startups. Therefore, the importance of the Haber government's role is not hidden from anyone.

Cluster 10: entrepreneurial competencies

The last cluster is entrepreneurial competencies. Being innovative and creative is important, but competence is critical to the growth of any business. These things can be obtained through training, learning new skills, attitudes, personal communication, initiative, information seeking and other things to achieve entrepreneurial goals.

One of the factors that influence a researcher in his field of expertise is the way he interacts with other researchers (Truex et al., 2009). Figure 5 reveals the significance of certain authors in the field of value co-creation in fintech startups, based on a minimum citation threshold of 4 for each article. Notably, Zoltan Acs (2017) stands out with 433 citations, followed by Todeschini (2017) with 209 citations, Gruber (2012) with 170 citations, Weissbrod (2017) with 121 citations, and Gifford (1997) with 119 citations. These authors have garnered substantial attention and are frequently referenced in articles within this specialized field. Additionally, Guo (2020) demonstrates the highest rate of co-authorship, indicating that other authors collaborated extensively with them and incorporated their works into their own articles.

Figure 5 The graphic map of the authors' co-authorship network



The cited documents for the last ten years (2013-2023) are shown in Figure 6.

Figure 6 Cited documents

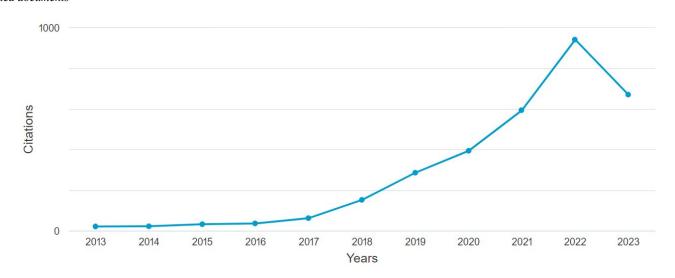


Table 5 shows the number of citations of 10 articles, which shows the most cited articles.



Table 5 Core Topic Recognized

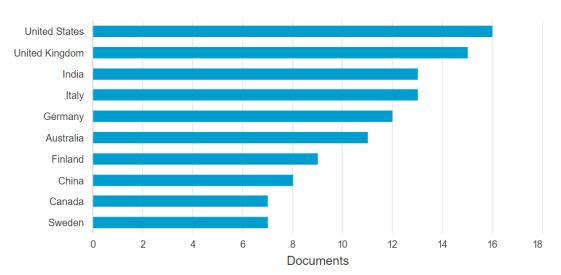
Documents									
	Citations	<2019	2019	2020	2021	2022	2023	Subtotal	Total
Total		457	286	394	594	924	670	2886	3343
1. The lineages of entrepreneurial ecosystem	2017	18	65	78	107	126	80	456	478
2.Innovative and sustainable business models	2017	11	15	35	56	75	47	228	239
3. Escaping the prior knowledge corridor	2013	54	24	32	26	34	14	130	184
4. Developing sustainable business	2017	18	24	23	24	27	16	114	132
5. Limited attention and the role of the venture	1997	103	2	4	6	3	2	17	120
6. The effect of capital market characteristics	2004	93	8	5	6	4	2	25	118
7. The Innovation Mechanisms of Fintech	2018	5	14	18	26	30	18	106	111
8. Tourism Entrepreneurship – Review and	2015	12	16	23	27	16	13	95	107
9. Artificial intelligence as a growth	2019		4	17	23	34	26	104	104
10 Managing crowdsourced software testing	2014	55	10	7	8	10	4	39	94

Figure 7 and Table 6 provide insights into the distribution of articles in the field of value co-creation in fintech startups across different countries. A total of 41 countries have contributed articles, with notable contributions from the United States (16 articles), United Kingdom (15 articles), Italy and India (13 articles each). These countries are recognized as significant players in the field of value cocreation in fintech startups, as evidenced by their higher publication rates. Among the 16 articles published in the United States, 5 articles specifically focus on the Business field, highlighting its importance in the context of value cocreation in fintech startups. This emphasizes the prominence and relevance of the Business field within this research area. Additionally, our country has also made a modest contribution with 2 articles in this field.

Figure 7 The most important countries

Documents by country or territory

Compare the document counts for up to 15 countries/territories.



As you can see, America has the most (16 articles) in this field. Table 6 shows the top twelve countries in the field of value co-creation research.

 Table 6

 The top research countries in the field of value co-creation

No	Country	Documents	No	Country	Documents
1	United States	16	7	Finland	9
2	United Kingdom	15	8	China	8
3	India	13	9	Canada	7
4	Italy	13	10	Sweden	7
5	Germany	12	11	Netherlands	6
6	Australia	11	12	Denmark	5

4 Discussion and Conclusion

The evolution of marketing has compelled startups to adapt and enhance their marketing performance. However, there is a research gap in the national context regarding the topic of value co-creation specifically in fintech startups. Effective communication with stakeholders, including decision-makers, is crucial, as the information created by stakeholders in the form of value plays a significant role in short-term and strategic decision-making. Among the variables influence that decision-making, stakeholders' information is often the most valuable and frequently utilized by managers. Customers now have a more prominent role in realizing ultimate value, and the traditional roles of firms and customers have become more complex and interconnected. As a result, actors must develop new collaborative capabilities to navigate these dynamics. Value co-creation has emerged as a management strategy, highlighting the importance of value creation for modern managers. Value is no longer solely provided by service providers, such as employees representing the organization, but also by customers who have utilized the service and are willing to participate in the organization's decisions and processes. Consequently, the discussion of value co-creation within organizations has become increasingly relevant and important.

Indeed, value can be subjective or objective, positive or negative, and encompass various dimensions such as economic, rational, and moral value. It is crucial to understand that value is determined from the customer's viewpoint in the market, considering their perception of what they pay and what they receive, rather than being solely based on the desires and assumptions of the supplier. The increasing focus on customers as intangible assets has led

organizations to embrace the concept of value co-creation. Unlike traditional marketing approaches, value co-creation recognizes stakeholders, including customers, as integral parts of the company during the interaction process. This approach fosters value-based relationships and interactions that go beyond mere consumption of goods and services. In value co-creation, organizations view customers as partners rather than external elements. This shift transforms the role of customers from being external entities to becoming internal contributors. By leveraging the abilities, skills, and knowledge of stakeholders within the value co-creation process, organizations can gain a competitive advantage and achieve high marketing performance. Value co-creation entails the design, production, and delivery of products and services with the active participation of all key stakeholders of the organization. It is a marketing strategy that emphasizes the continuous creation and recognition of shared values between the company and its customers. By engaging in value co-creation, organizations can build stronger relationships, enhance customer experiences, and achieve mutual value for long-term success.

The research findings indicate that in 2022, there was a significant upsurge in the number of articles published on the topic, with 26 articles identified. The United States emerged as the primary contributor to the research field, with 16 articles originating from the country. These results have been instrumental in helping researchers identify structural gaps within the studied area, enabling them to gain a competitive advantage by filling these gaps. Additionally, bridging these structural breaks facilitates connections between individuals who might not have otherwise had access to each other. Based on the investigations and the highlighted cases of important authors, countries, keywords, and research areas, it can be concluded that the paradigm governing value co-creation in the field of fintech startups is



influenced by several indicators. Some of the key indicators identified include entrepreneurship and entrepreneurs, innovation, corporate venturing, financial services, business, creativity, business model innovation, technology capability, competition and competitive advantage, adoption of innovations, business continuity, business development, customer value. business infrastructure, partnership capital, digital entrepreneurship, ecosystem, value creation dynamics, value creation mechanism, entrepreneurship, sustainable technology growth, sustainable value creation, sustainable business, and stakeholders. These indicators reflect the multifaceted nature of value co-creation in the fintech startup context and provide a comprehensive understanding of the factors that shape this field. By considering these indicators, researchers and practitioners can gain insights into the important dimensions and dynamics that drive value co-creation in the fintech startup ecosystem, leading to sustainable growth and the creation of value for all stakeholders involved.

By contributing to the existing body of knowledge and providing practical implications, this research can foster advancements in marketing strategies, engagement, and value creation practices within the fintech startup sector. It has the potential to shape the thinking and practices of researchers, business professionals, and industry stakeholders, ultimately leading to the development of innovative approaches and improved performance in fintech startups and related ventures. The study has implications not only for sharing stakeholders within sharing organizations or platforms but also for state or city governments. Based on the research findings, scientific policymakers in each country can consider the advantages highlighted in terms of collaborating with other countries, academic centers, research institutions, and influential authors in the field of value co-creation in fintech startups. This collaboration can foster cooperation and strengthen the knowledge exchange among different entities. For managers of new businesses and fintech startups, it is recommended to pay attention to

the effective features of value co-creation mentioned in the research and strive to strengthen these characteristics within their own business operations. By focusing on these aspects, such as entrepreneurship, innovation, technology capability, customer value, and sustainable growth, managers can enhance their value co-creation practices and improve their overall business performance.

Authors' Contributions

All authors have contributed significantly to the research process and the development of the manuscript.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Ethical Considerations

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References

Akbari, M., Foroudi, P., Khodayari, M., Zaman Fashami, R., Shahabaldini parizi, Z., & Shahriari, E. (2022). Sharing Your Assets: A Holistic Review of Sharing Economy. Journal of Business Research, 140, 604-625. https://doi.org/10.1016/j.jbusres.2021.11.027

Akbari, M., Foroudi, P., Zaman Fashami, R., Mahavarpour, N., & Khodayari, M. (2022). Let us talk about something: The evolution of e-WOM from the past to the future. Journal of Business Research, 149, 663-689. https://doi.org/10.1016/j.jbusres.2022.05.061

Bonamigo, A., da Silva, A. A., da Silva, B. P., & Werner, S. M. (2022). Criteria for selecting actors for the value co-creation in startups. Journal of Business & Industrial Marketing, 37(11), 2332-2343. https://doi.org/10.1108/JBIM-02-2021-0083

Hussain, A., Abid, M. F., Shamim, A., Ting, D. H., & Toha, M. A. (2023). Videogames-as-a-service: How does in-game value co-creation enhance premium gaming co-creation experience for players? Journal of Retailing and Consumer Services, 70, 103128. https://doi.org/10.1016/j.jretconser.2022.103128

Jiang, G., Luo, T., & Liu, X. (2022). Opinion Evolution Model for Online Reviews from the Perspective of Value Co-creation. Information Fusion, 88, 41-58. https://doi.org/10.1016/j.inffus.2022.07.018

- Kamalipoor, M., Akbari, M., Hejazi, S. R., & Nazarian, A. (2023). The vulnerability of technology-based business during COVID-19: an indicator-based conceptual framework. Journal of Business & Industrial Marketing, 38(5), 983-999. https://doi.org/10.1108/JBIM-10-2020-0455
- Kojouri, H., Mirabi, V., & Safarzadeh, H. (2021). Designing and optimizing the value creation model for bank customers in the process of creating common brand value. Journal ofBusiness Management, 13(49). а https://scholar.google.com/scholar?lookup=0&q=Designing+and+optimizing+the+value+creation+model+for+bank+customers+in+th e+process+of+creating+a+common+brand+value&hl=en&as sdt=0,5
- Nadeem, W., Alimamy, S., & Ashraf, A. R. (2023). Navigating through difficult times with ethical marketing: Assessing consumers' willingness-to-pay in the sharing economy. Journal of Retailing and Consumer Services, https://doi.org/10.1016/j.jretconser.2022.103150
- Prahalad, C. K., & Ramaswamy, V. (2000). Co-opting customer competence. Harvard business review, 78(1), 79-90. https://www.academia.edu/download/62235001/032._prahalad-2000-co-opting_customer_competence_copy20200229-51700abhgpu.pdf
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. Journal of Interactive Marketing, 18(3), 5-14. https://doi.org/10.1002/dir.20015
- Rahmanseresht, H., & Sheikhi, N. (2020). Value-Co-creation in Iran Banking Industry: Analysis of Value Creation Elements and Relationships. Public Management Researches, 12(46), 95-122. http://jmr.usb.ac.ir/article_5259_en.html
- Ramaswamy, V. (2009). Co-creation of value towards an expanded paradigm of value creation. Marketing Review St. Gallen, 26(6), 11-17. https://doi.org/10.1007/s11621-009-0085-7
- Re, B., & Magnani, G. (2023). Value co-creation processes in the context of circular entrepreneurship: A quantitative study on born circular firms. Journal of Cleaner Production, 392, 135883. https://doi.org/10.1016/j.jclepro.2023.135883
- Truex, D., Cuellar, M., & Takeda, H. (2009). Assessing scholarly influence: Using the Hirsch indices to reframe the discourse. Journal of the Association for Information Systems, 10(7), 1. https://aisel.aisnet.org/jais/vol10/iss7/1/
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. Journal of Marketing, 68(1), 1-17. https://doi.org/10.1509/jmkg.68.1.1.24036