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EXISTE DEFINIÇÃO PARA CRIAÇÃO DE VALOR NO BANCO DIGITAL? UMA REVISÃO SISTEMÁTICA DE LITERATURA.

DOES DEFINITION FOR VALUE CREATION IN DIGITAL BANK EXIST? A SYSTEMATIC LITERATURE REVIEW

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EXISTE DEFINIÇÃO PARA CRIAÇÃO DE VALOR NO BANCO DIGITAL? UMA REVISÃO SISTEMÁTICA DE LITERATURA.

Objetivo do estudo
Realização de uma revisão sistemática da literatura para checar se existe consenso entre autores sobre criação de valor em bancos digitais e caso tenha como ocorre.

Relevância/originalidade
Não constam nas bases de dados da Web Of Science e Scopus a realização de uma revisão sistemática sobre criação de valor em bancos digitais. A temática é importante, pois de forma genérica não há consenso em criação de valor.

Metodologia/abordagem
Na revisão foi utilizado o protocolo Prisma. Existe tanto um abordagem quantitativa sobre os principais dados dos artigos, como uma abordagem qualitativa sobre os conceitos estudados pelos autores.

Principais resultados
Não há um consenso entre os autores sobre criação de valor em bancos digitais. Nos resultados é abordado por alguns autores sobre co-criação de valor. Apresentamos os aspectos dos resultados dos autores sobre criação de valor em bancos digitais.

Contribuições teóricas/metodológicas
A revisão apresenta elementos interessantes sobre alguns aspectos que não levam ao consenso de criação de valor, em especial de bancos digitais. Isso contribui para uma análise e percepção de caminhos para possíveis definições sobre criação de valor.

Contribuições sociais/para a gestão
Apresentam aspectos interessantes para uma olhar multifacetado em criação e cocriação de valor em bancos digitais, podendo ser aplicados em outras áreas de gestão.

Palavras-chave: Criação de Valor, Bancos Digitais, Revisão Sistemática da Literatura

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Study purpose
Carrying out a systematic review of the literature to check whether there is consensus among authors on value creation in digital banks and, if so, how it occurs.

Relevance / originality
The Web Of Science and Scopus databases do not contain a systematic review on value creation in digital banks. The theme is important, as there is generally no consensus on value creation.

Methodology / approach
The Prisma protocol was used in the review. There is both a quantitative approach on the main data of the articles, and a qualitative approach on the concepts studied by the authors.

Main results
There is no consensus among authors about value creation in digital banks. In the results, some authors approach value co-creation. We present aspects of the authors' results on value creation in digital banks.

Theoretical / methodological contributions
The review presents interesting elements about some aspects that do not lead to a consensus on value creation, especially regarding digital banks. This contributes to an analysis and perception of paths for possible definitions of value creation.

Social / management contributions
They present interesting aspects for a multifaceted look at creation and co-creation of value in digital banks, and can be applied in other areas of management.

Keywords: Value Creation, Digital Bank, Systematic Literature Review

DOES DEFINITION FOR VALUE CREATION IN DIGITAL BANK EXIST? A SYSTEMATIC LITERATURE REVIEW

1 INTRODUCTION

This study aims to conduct a systematic review of the existing literature concerning value creation in the realm of digital banking. The lack of robust theoretical development in value creation within digital financial activities has resulted in this field being inundated with seemingly unrelated research, leading to inquiries about its maturity and long-term sustainability. As such, we believe that a systematic review will endeavor to scrutinize the fundamental structure of the field, pinpoint its shortcomings, and delineate potential future research directions.

In light of the digital disruption backdrop (as highlighted by Christensen & Bower, 1995, and Skog et al., 2018) in banking services following the 2008 financial crisis, wherein customers encountered difficulties accessing traditional financial services (Barbu et al., 2021), particularly with credit limit restrictions, the growth of fintechs has been catalyzed. Both technology-mediated financial companies, fintechs, and the traditional financial sector, comprising banks, brokerages, and insurance companies, offer innovative digital financial activities to enhance services provided to their customers (Romanova, I.; Kudinska, 2016).

With the onset of the Covid-19 pandemic, the pace of digital transformation in financial services has accelerated. Due to lockdowns and restrictions imposed globally to combat the pandemic, customers have increasingly utilized banking and fintech applications on smartphones to access financial services, including making payments or transferring funds, in tandem with practicing essential social distancing (Seetharaman, 2020; Naeem and Ozuem, 2021) (Amanda et al, 2020; Giovanis et al., 2018; Mu & Lee, 2022).

Post the 2008 crisis and during the Covid-19 pandemic, competition and the rivalry for customers between banks and fintechs have intensified in the realm of financial services, spanning applications, money transfers, payment methods, and credit cards. This escalation stems from deregulation that facilitated the entry of new market participants (Guo and Liang, 2016; Ng and Kwok, 2017; Romanova and Kudinska, 2016; Zhu and Zhou, 2016). Customers migrating to digital channels seek and prefer customized digital banking services tailored to their unique needs. The use of mobile banking applications on smartphones is reshaping the customer experiences, transitioning from the traditional face-to-face banking interactions at branch locations to centralizing financial transactions, now mediated by technology (Laukkanen, 2016; Baabdulliah et al., 2019).

Banks are no longer merely conduits for financial transactions, such as payment methods, but have evolved into active participants in addressing their customers' multifaceted needs. This evolution fosters an improved customer experience and the creation of innovative business models (Fitzgerald et al., 2014; Piccinini et al., 2015). Furthermore, organizations are enhancing their capabilities in employing digital technologies to adapt their business models, aligning with shifts in customer behavior and needs (Li et al., 2018).

Given this dynamic backdrop, our intention is to analyze, through a systematic literature review, whether there exists consensus among authors regarding the value creation process in digital banks or if it primarily constitutes an interchange of ideas. Such an investigation holds significant importance for academia, offering a perspective on analyzing the value creation process within the unique context of banks, which serve as places where financial values are both captured and lent (Muthaiyah et al., 2021; Peña-García et al., 2021; Zhai et al., 2023).

2 LITERATURE REVIEW

In this chapter we will briefly address the main contributions of the concepts of value creation, value co-creation and digital banks to relate to the articles selected in this systematic review.

2.1 Value creation

The concept of value holds a central position within a company's strategy, yet there exists limited consensus regarding its creation and definition (Bowman & Ambrosini, 2010; Lepak et al., 2007; Schneider & Sachs, 2017). Moreover, the concept of value is subjective, multifaceted, lacks singularity, and may be perceived differently by various stakeholders (Schneider & Sachs, 2017; Garrida, 2014; Bowman & Ambrosini, 2010). This multifaceted approach to the concept of value and value creation is found across multiple fields, including economics (classical and neoclassical economists), strategic management (resource theory and distinctive company activities), and marketing (market offerings and consumer behavior) (Pitelis Dr., 2009; Schneider & Sachs, 2017).

In the realm of classical economics, notable figures such as Ricardo (1817) and Marx (1867/1990) argued that the value of a good was determined by the amount of labor required for its production. Conversely, neoclassical economists like Jevons (1871) contested this idea, criticizing the labor-centric view and proposing that value was derived from utility, with that utility residing within an individual (Jevons, 1871). Within a contemporary context, Bowman & Ambrosini (2000) differentiate value into two categories: use value, reflecting a product's specific qualities perceived by customers in relation to their needs, and exchange value, which pertains to price, representing the monetary value assigned during a transaction at a specific point in time (Bowman & Ambrosini, 2000).

Within the domain of strategic management, value creation is often associated with the accumulation of resources. Organizations possessing rare, valuable, non-substitutable, and imperfectly imitable resources and capabilities are believed to generate more value than their competitors (Barney 1991). Other scholars argue that value creation is driven by the aggregation of resources and capabilities from stakeholders impacted by socio-economic issues (Sachs and Rühli 2011; Priem et al. 2013; Savage et al. 2010; Svendsen et al. 2001). According to Porter (1985, p. 3), the concept of value is characterized as "what buyers are willing to pay for what the firm offers them, i.e., each individual establishes the value of the product or service purchased as a function of the benefit added by this product or service."

The field of marketing contributes an extensive body of literature on the strategic approaches taken towards markets (Kohli and Jaworski, 1990; Slater and Narver, 1995), customers (Arnold et al., 2011), and interactions (Ramani and Kumar, 2008), elucidating the nature of marketing activities and their implications for value creation. Although marketing has predominantly focused on conceptualizing and categorizing customer value in terms of utility or benefit versus sacrifice (Zeithaml et al., 2020), the question arises: How does this process of value creation manifest within the financial sector, specifically in the realm of digital banking?

2.2 Value co-creation

Much of the research focusing on the concept of value co-creation frequently references articles on the service-dominant logic proposed by Lusch et al. (2008). Within this framework, the service-dominant logic perspective considers both the firm and the customer as active collaborators in an ongoing, collaborative process of value generation during service delivery

(Lusch et al., 2008). This value creation process, often referred to as "value-in-use," involves customers consuming a product or service while exchanging intangible operational resources, such as skills, information, and knowledge, with the firm (Vargo and Lusch, 2004; Grönroos, 2006; Grönroos, 2008).

The proliferation and widespread adoption of mobile banking applications (MPAs) have placed consumers at the forefront, actively participating in the co-creation of value (Manser Payne et al., 2018). This active engagement is particularly relevant in the context of digital banking platforms, where artificial intelligence (AI) is playing a significant role in the co-creation process within AI service ecosystems. These ecosystems encompass multi-actor networks that integrate underlying resources, mechanisms, and systems, with consumers occupying a central position (Manser Payne et al., 2021).

In the realm of digital transformation, value-in-use is co-created when consumers access and interact with information technologies designed to bridge the gap between businesses and customers (Sandström et al., 2008; Souiden et al., 2019). Financial institutions are essential actors in this value co-creation process. They offer value propositions by understanding customer behaviors and providing resources in the form of applications and transactional capabilities (Vargo and Lusch, 2004; Sandström et al., 2008; Cambra-Fierro et al., 2017). This underscores the pivotal role of financial institutions in the dynamic landscape of value co-creation.

2.3 Digital bank

Banks are leading the way in innovating "self-service technologies," enabling individuals to access their accounts without the need for intervention from bank employees (Boonitt, 2015). These digital service channels encompass a range of devices, including computer systems, laptops, cell phones, tablets, and other devices, providing digital banking services for the convenience of customers anytime and anywhere (Jamshidi et al., 2016; Del Giudice et al., 2016). Digital banking encompasses both internet and mobile banking channels (Garzaro et al., 2020; Boonitt, 2015). Mobile banking (M-banking) leverages mobile devices for conducting banking transactions, while "APP" (Sahoo and Pillai, 2017), and E-banking offers access to the bank's web portal through computer systems (Pikkarainen et al., 2006).

Physical bank branches still retain their role in facilitating retail banking contact and transactions for customers. As technology advances, improved access and usage lead customers to shift in-person financial transactions towards digital means through enhanced digital banking services, providing a superior experience with new digital access products, services, and features (Gomber et al., 2018). Research suggests that banking is transitioning away from its traditional utilitarian role, evolving from being solely functional to becoming more engaging in other aspects of consumers' lives. Millennials, in particular, are drawn to challenger banks that offer engaging services and proactively provide personalized advice (Gomber et al., 2018).

To meet these evolving customer expectations, a new generation of incumbents, Fintechs, digitally mediated companies in the financial services sector, have emerged, demonstrating how existing technologies and products can be displaced by disruptive innovations (Bower and Christensen, 1995; Christensen et al., 2015). Fintechs have transformed business models, financial intermediation, and customer access. They provide consumer access outside traditional branch hours, offer heightened personalization through digital sensing and big data analytics, and are reshaping the landscape by replacing traditional banks and their services in novel ways (Gozman et al., 2018).

In this systematic review, our focus of analysis revolves around understanding digital banking as encompassing banks and Fintechs that provide services through the digital channels of M-banking or E-banking.

3. RESEARCH METHOD

There is no single method for developing a literature review (CRONIN, RYAN, COUGHLAN, 2008). We chose the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) recommendation for systematic reviews, which has been emerging as a contribution of research gaps and scientific evidence to new projects in the business area (MENDES-DA-SILVA, 2019). The PRISMA recommendation consists of a protocol with 27 items and a flowchart with three steps, being called identification, selection and inclusion (PAGE, Matthew J. et al, 2022). The item referring to previous studies was not met, since no systematic literature review was found with the same objective as the present study. The methodological approach adopted is illustrated in Figure 1. The question that guided this literature review was: is there a consensus for value creation in digital banking?

The keywords (value creation) and (bank*) and (digital) were used to identify the studies. The search took place in the following databases: Web of Science and Scopus, in March 2023, without establishing a time frame. A total of 216 articles were identified, however, we performed a first selection filter of the type of document, being in the Web of Science limited to article, early access and review article and in Scopus limited to article, 93 articles were excluded. Soon after, duplicity between the bases was verified, resulting in the exclusion of 18 articles. With the result of 105 articles, we applied a new filter by reading the abstracts, in which we defined as entry into the studies the abstracts that addressed the following themes: i. digital banks; ii. value creation (digital banks) and iii. value co-creation (digital banks). 58 articles did not meet the previous prerequisite and were excluded, as they were outside the theme proposed in this review, since they addressed value creation in the area of medicine, engineering or even smart cities. There were 47 articles left to read the full text, but it was not possible to find an article because it did not locate its reading file and the authors did not return with their availability of the text. Thus, 46 full-text readings were made to verify if they presented: i. value creation approach in digital banks; ii. value co-creation approach and iii. if the target audience of the study were end-consumer customers. 34 articles were excluded because they did not present the assumptions of this review, since they dealt with digital platforms of telephone operators, other texts were about companies that provided some financial services, but were not banks. In the end, 22 articles were elected for the analysis of this systematic review and its contributions.

The complete reading of each of the 22 articles subsidized a quantitative and qualitative evaluation, presented in topic 04 (presentation and discussion of results). The quantitative approach resulted in descriptive statistics data on the following variables: (a) Scientific production per year, (b) Publication journals, (c) Research method (d) Map of scientific production and (e) Analysis method. The qualitative analysis was developed following the proposal of Bardin (2011) and, therefore, followed the stages of pre-analysis, exploration of the material and treatment of the results. For the exploration of the material, the recommendations of Saldaña (2015) were considered in a complementary way. Dialogues were also maintained between the authors researched during this review.

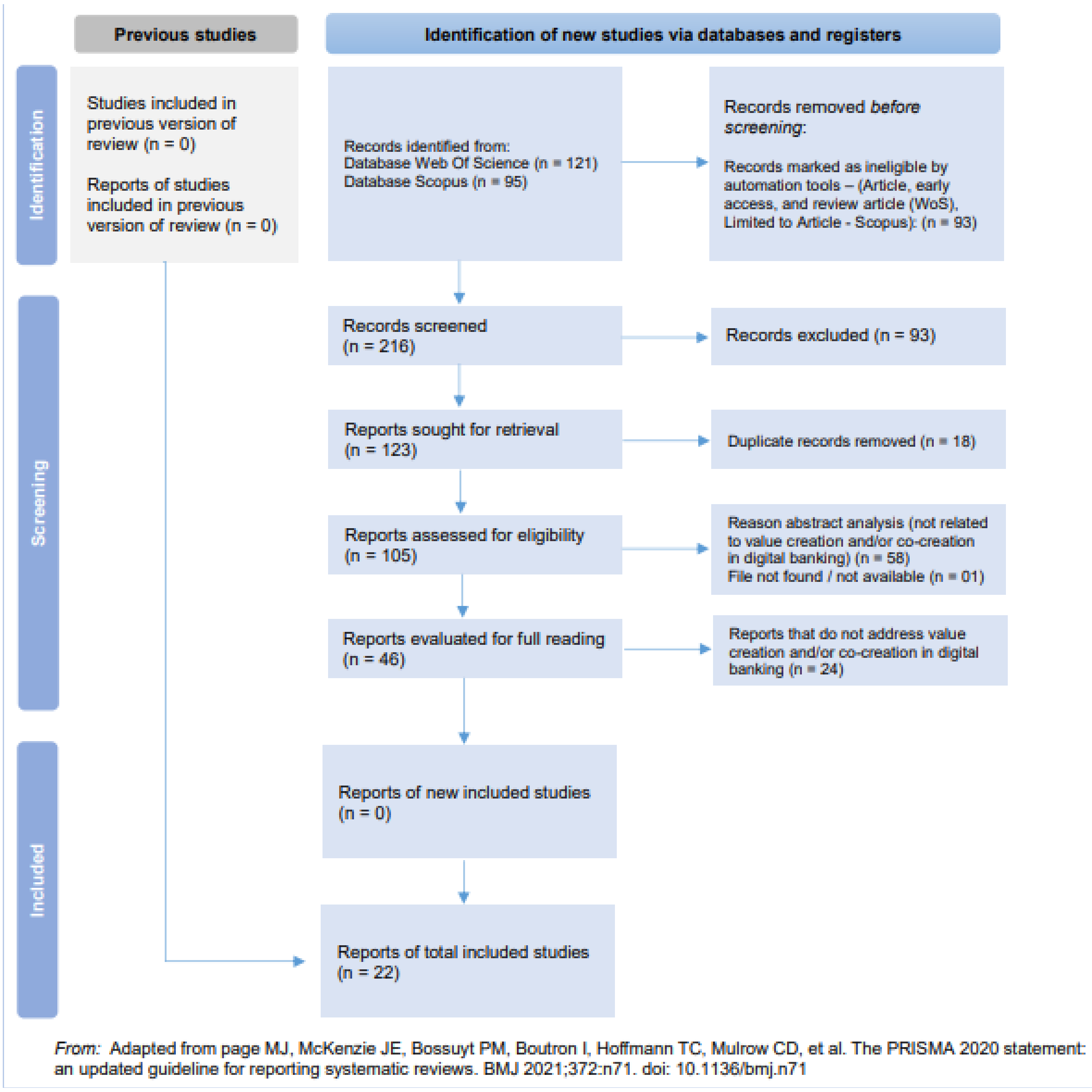

Figure 01 – Methodological course (PRISMA) - Source: Prepared by the authors

4. PRESENTATION AND DISCUSSION OF RESULTS

This section deals initially with descriptive statistics and then a qualitative analysis. The largest sample of article production is in the years 2021 (32%), 2022 (18%) and 2018 (18%), indicating a trend of increasing production of articles on the topic of value creation in digital banking. There is a higher publication in the International Journal of Bank Marketing (23%), due to its prestige and high impact factor. The Journal of Research in Interactive Marketing (9%) is the second most published. Many articles are in marketing journals, which explain one of the possibilities of the value creation approach, where 42% of the total selected articles are in this theme. The predominant research methodology in the articles was theoretical-empirical, with quantitative approach in 56% of the articles, qualitative approach in 38% of the articles and mixed method in 06%. This shows a search by the authors to better understand consumer behavior in the digital banking environment.

European countries such as Finland and Spain dominate the share (14% each), followed by countries in the Americas and Asia. In all, there are 15 study countries from different regions with developed and emerging countries, contributing to a better perception of the impact of value creation and co-creation in digital banking. The presence of populous countries such as the United States, Brazil, China and India stands out. In Figure 02, in the analysis method, even by a larger sample of quantitative articles, structural equation modeling represented 32% of the articles, followed by the conceptual article (23%) and the semi-structured interview (14%). The research presents a diversification of analysis methods by the authors, which contribute to a more critical look at the study of the field of value creation.

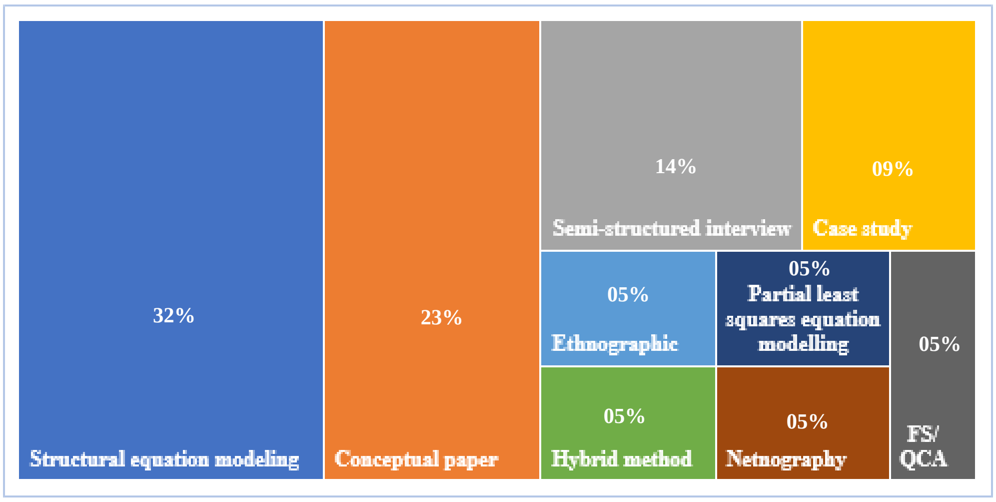

Figure 02 - Analysis Method - Source: Research data (2023)

Next, we started the content analysis of the selected articles, in which in the separation of the theme we realized the approach of two main concepts: value creation and value co-creation. In this way. we exemplify in two tables separated by the two concepts, which theories were used and their research objectives, in addition to the description of their results.

Table 01 - Summary table of the theory and objectives (Value Creation)

Authors	Theory\concept	Objective
Levy, S; Levy, Shalom;	Attachment theory, loyalty and psychological consumer engagement	Examine the dynamics of the emotional customer experience generated during digital banking and investigate the effect of psychological customer engagement with various types of digital platforms in creating banking brand loyalty.
dos Santos, AA; Ponchio, MC; dosSantos, Alexandre Alves; Ponchio,Mateus Canniatti;	Talke & Heidenreich (2014) showed that resistance to innovation results from functional and psychological barriers, also known as cognitive factors; So et al. (2015) and Castro, Zambaldi, & Ponchio (2020) indicate the need to incorporate the influence ofconsumer emotions into these models.	Examine the influence of functional, psychological, and emotional barriers that increase resistance to using digital banking services, as well as whether user experience contributes to decreased resistance.
Komulainen, H; Saraniemi, S; Ulkuniemi, P; Ylilehto, M; Komulainen, Hanna; Saraniemi, Saila; Ulkuniemi, Pauliina; Ylilehto, Marianne;	value in experience (Helkkula et al. 2012)	Verify how the customer value experience conveysthe restructuring of the service network in the banking sector.

Riikkinen, M; Saarijarvi, H; Sarlin, P; Lahteenmaki, I; Riikkinen, Mikko; Saarijarvi, Hannu; Sarlin, Peter; Lahteenmaki, Ilkka;	AI, service logic, and the reverseuse of customer data	Discover how insurance chatbots support value creation for customers on digital platforms.
Fall, NAM; Diop-Sall, F; Poncin, I; Fall, Ndeye Astou Manel; Diop-Sall, Fatou; Poncin, Ingrid;	Customer Experience, (McColl-Kennedy et al., 2015; De Keyseret al., 2020) and Value in Experience (Helkkula et al., 2012)	To verify the factors that drive the use of the telephone money transfer service in Senegal by analyzing the perspective of the individual and thelocal culture from the value of experience.
Visconti-Caparros, JM; Campos-Blazquez, JR; Maria Visconti-Caparros, Jose; Ramon Campos-Blazquez, Juan;	Modularity Theory	Understand the motivations, characteristics and main factors of a digital business ecosystem. Analyze the success of implementing a digital business ecosystem and what defensive strategies establishedcompanies have to lead mobile instant payment ecosystems in Spain.
Barbu, CM; Florea, DL; Dabija, DC; Barbu, MCR; Barbu, Catalin Mihail; Florea, Dorian Laurentiu; Dabija, Dan-Cristian; Barbu, Mihai Constantin Razvan;	The S-O-R model and customer experience	Analyse customer experience (CX) in the fintech sector
Clemente-Ricolfe, J.-S.;	consumer perceptions	Using netnography to verify how consumers perceivethe use of Internet banking transaction tools by traditional bank customers, by posting their opinions in forums or social networks.
Yang, X.; Yang, J.; Hou, Y.; Li, S.; Sun,S.;	Theory of Acceptance and Use of Technology (UTAUT2) and gamification	Examine the configurational effects of technology acceptance features and gamification design features on users' behavioral intention to constantlyengage with gamification in financial services.
Jain, R.;	value creation through BMI in e-business and LIS in emerging economies	Understand business model innovations using information and communication technology-based services in India. Identifies the dimensions of differences between developed countries and emerging economies with respect to (1) factors thatcontribute to business model based information andcommunication technology innovations for low- income segments and (2) the role of startups in thissituation.
Laukkanen, T.; Lauronen, J.;	perceived value	Explore three different mobile banking services, how customer value is created, and what kind of value customers perceive in each service. The services included in the study are mobile funds transfer, mobile account balance request, and mobile brokerage.

Source: Research data (2023)

These paragraphs provide a comprehensive view of the complex landscape surrounding value creation in digital banking, as studied by various authors. Let's connect these paragraphs to the theme of "value creation" in digital banks:

1. **Customer Loyalty and Value Creation**: The study by (Levy, 2022 et al.) emphasizes that customer loyalty isn't solely driven by digital activity or psychological engagement with the platform, but rather through interactions and long-term relationships with the bank. This highlights how creating value in these interactions can lead to customer loyalty, demonstrating the central role of value creation.
2. **Barriers and Value Perception**: (Santos & Ponchio, 2021) found that psychological, emotional, and user experience barriers influence resistance to using digital banking services. While there's no empirical evidence of functional barriers impacting resistance, it underscores the importance of overcoming barriers to enhance the perceived value of digital banking.
3. **Value to the Customer**: (Komulainen et al., 2018) argue that banks must focus on delivering value that aligns with customers' daily lives, going beyond merely providing banking services.

This perspective highlights that value must be experienced holistically, aligning with the customer's needs.

4. **Value Creation with Chatbots**: (Riikkinen et al., 2018) explores the potential for value creation through chatbots. This approach shows how leveraging data, service logic, and customer data can be harnessed to create value for customers, illustrating the role of technology in value creation.

5. **Local Ethical and Cultural Aspects**: (Fall et al., 2021) indicates that value in developing countries must consider local ethical and cultural aspects, suggesting that value creation needs to be contextually relevant beyond economic and utilitarian factors, highlighting the cultural dimension of value.

6. **Digital Business Ecosystems**: (Visconti-Caparrós & Campos-Blázquez, 2022) studied the successful deployment of a digital business ecosystem, showing how innovative solutions can enable traditional banking entities to compete and transform rapidly. This exemplifies how creating value through ecosystem innovation can drive market transformation.

7. **Customer Experience in Fintechs**: (Barbu et al., 2021) highlights the multidimensional nature of customer experience in the Fintech industry, indicating that perceived value, customer support, warranty, speed, and innovation play essential roles in value creation within this context.

8. **Compensatory Model and Value Creation**: (Clemente-Ricolfe, 2017) explores a compensatory model, revealing how value is created through various forms, including perceived security, ease of use, site speed, and convenience, aligning with customers' preferences and priorities.

9. **Gamification and User Intention:** (Yang et al., 2023) stresses the significance of specific factors, such as effort expectation, facilitating conditions, and expected value, in improving user intention through gamification, showing how tailored experiences can drive value.

10. **Ecosystems and Value Creation**: (Jain, 2014) emphasizes the role of ecosystems and start-ups in creating value by bridging gaps in institutional and infrastructure environments. This approach demonstrates how interconnected ecosystems can be leveraged to deliver value to all partners involved.

11. **Spatial Elements in Value Creation**: The study by (Laukkanen & Lauronen, 2005) highlights the importance of security, convenience, and location-free access in creating value, underscoring spatial elements as key factors in mobile banking, which directly impact the perceived value for users.

The final observation highlights the lack of consensus on the definition of value creation in digital banking, as mentioned by (Bowman & Ambrosini, 2010; Lepak et al., 2007; Schneider & Sachs, 2017). This suggests that researchers use the concept of value creation as a bridge to connect various themes, revealing the evolution of the focus on value co-creation. The centralization of value and the customer in the authors' connections of constructs and concepts further underscores the importance of value as a central theme in the evolution of digital banking research.

Table 02 – Summary table of the theory and objectives (Value Co-Creation)

Authors	Theory\concept	Objective
Malar, DA; Arvidsson, V; Holmstrom, J; Malar, Dhanalakshmi Arumugam; Arvidsson, Viktor; Holmstrom, Jonny;	The co-creation of value from the perspective of the Dominant Logic of Service (Vargo e Lusch (2008)	Examine the processes by which the use of IT can create or damage business value with customers inthe creation and co-creation of value

Payne, EHM; Peltier, J; Barger, VA; Payne, Elizabeth H. Manser; Peltier, James; Barger, Victor A.;	The co-creation of value from the perspective of the Dominant Logic of Service (Vargo e Lusch (2008)	Investigate the relationships that influence the valueco-creation process and lead to consumer comfort with artificial intelligence (AI) and mobile banking platforms.
Liyanaarachchi, G; Deshpande, S; Weaven, S; Liyanaarachchi, Gajendra; Deshpande, Sameer; Weaven, Scott;	Consumer vulnerability (Baker et al. (2005)	Study on banks' privacy protection practices and howbanks integrate market-driven approaches into their corporate digital responsibility initiatives to minimize the vulnerability of consumer data.
van Klyton, A; Tavera-Mesias, JF; Castano-Munoz, W; van Klyton, Aaron; Tavera-Mesias, Juan-Fernando; Castano-Munoz, Wilson;	The co-creation of value from the perspective of the Dominant Logic of Service (Vargo e Lusch (2008)	The research examines the simultaneous processesof value co-creation and codestruction in the implementation of a mobile banking app in rural Colombia, from an effort to create the first cashless society in Colombia, in which a bank engaged the entire town and the local government to create an ecosystem of services, consisting of operational resources.
Payne, EHM; Dahl, AJ; Peltier, J; Payne, Elizabeth H. Manser; Dahl, Andrew J.; Peltier, James;	The co-creation of value from the perspective of the Dominant Logic of Service (Vargo e Lusch (2008)	Offer a digital servitization framework to understandhow AI services affect value perceptions, consumerengagement, and firm performance measures. The authors use the financial services ecosystem to explore this topic.
Moliner-Tena, MA; Monferrer-Tirado, D; Estrada-Guillen, M; Angel Moliner-Tena, Miguel; Monferrer-Tirado, Diego; Estrada-Guillen, Marta;	customer engagement, non-transactional behavior, and customer experience	Highlight the central role of bank customer engagement as a mediating variable between customer experience and two non-transactional customer behaviors (advocacy and attitude loyalty).
Dwipayana, C; Prijadi, R; Hamsal, M; Dwipayana, Chandra; Prijadi, Ruslan; Hamsal, Mohammad;	The co-creation of value from the perspective of the Dominant Logic of Service and RBV	To propose an integrative model of Dynamic Dominant Logic with exploration and exploitation asan action pattern for firm performance. This study also aimed to explain the various patterns of Dynamic Dominant Logic in the simultaneous creation of technical and evolutionary fitness.
Gomber, P; Kauffman, RJ; Parker, C; Weber, BW; Gomber, Peter; Kauffman, Robert J.; Parker, Chris; Weber, Bruce W.;	customer experience, innovation, digital transformation	Discuss on: (1) operations management in financial services and the changes that are occurring; (2) technological innovations that have begun to leverage execution and stakeholder value associatedwith payment settlement, cryptocurrencies, blockchain technologies, and international payment services; (3) various fintech innovations that have impacted lending and deposit services, peer-to-peer (P2P) lending, and the use of social media; (4) issues related to investments, financial markets, trading, risk management, robo-advisory, and relatedservices that are influenced by blockchain and fintech innovations.
Peña-García, N.; Losada-Otálora, M.; Juliao-Rossi, J.; Rodríguez-Orejuela, A.;	customer experience and DominantLogic of Service	Understand which customer-owned features that influence the value co-creation process and their impact on the customer experience in order to provide meaningful business implications that lead tosuccessful business outcomes.
Omarini, A.E.;	Business Ecosystems (Moore)	Study the impact of Fintechs and non-bankingcompanies on mobile payment services versustraditional banks.
de Villiers, M.V.; Chuchu, T.;Chavarika, G.V.;	Self-Determination Theory (SDT) and Diffusion of Innovation Theory.	To verify the consumer's motivation regarding attitudes and intention to adopt co-creative bankingactivities. And whether the consumer is motivated toadopt co-creational banking activities.

Source: Research data (2023)

1. **Tracking User Transactions for Co-Creation Impact** (Malar et al., 2019): The importance of tracking user transactions on digital platforms is evident, as negative experiences can potentially influence the degradation of co-creation. An example highlighted in this study is the absence of essential features, such as the option to change the cell phone number, which is mandatory for receiving text messages to perform transactions.

2. **Seeking Service Delivery and Data Security** (Manser Payne, Peltier, et al., 2021): Consumers of digital banking platforms emphasize the value of service delivery and overall data security, revealing a holistic perspective on value delivery. As digital technologies continue to reshape the co-creation process, a comprehensive understanding of the role of AI in service delivery becomes paramount.
3. **Cost Management and Data Protection** (Liyanaarachchi et al., 2020): The ongoing growth of online banking necessitates effective cost management and robust protection against data breaches, which could devalue a bank's brand and demand substantial investments in new consumer protection mechanisms. The authors suggest that minimizing data vulnerabilities requires maintaining an open dialogue with consumers and aligning privacy strategies with their privacy "postures."
4. **Simultaneous Manifestations of Co-Creation and Codestruction** (van Klyton et al., 2022): The study reveals that the simultaneous manifestations of value co-creation and codestruction across different layers can ultimately diminish the value proposition of a digital money system. The involvement of actors transitioning between layers within the ecosystem can impact perceptions of value, particularly in the micro-layer.
5. **Identifying Links in the Service Ecosystem** (Manser Payne et al., 2021): The study suggests the identification of links between consumers, financial institutions, and fintech companies utilizing AI within the service ecosystem. Understanding how value is created among the various actors in this network is essential for effective co-creation.
6. **Customer Engagement as a Mediating Variable** (Moliner-Tena et al., 2019): Banking customer engagement serves as a crucial mediating variable between customer experience outcomes and non-transactional behaviors. This underscores the significant role of customer involvement in the co-creation of value and its influence on various behaviors.
7. **Evolving from Dominant Service Logic** (Dwipayana et al., 2022): The study indicates that the direct impact of the dominant service logic on preserving beliefs, behavior, and rules for achieving performance may have lost its dominance. The banking industry must adapt and learn from fintech disruption, potentially leading to a significant transformation in the traditional banking business model.
8. **Challenges in Fintech Innovation** (Gomber et al., 2018): Large established companies face challenges in competing with small entrepreneurial startups in producing fintech applications that create value with high innovation. Acquiring human capital with the necessary knowledge is scarce, leading to the suggestion that outsourcing apps rather than in-house creation may be more appropriate.
9. **Positive Consumer Experiences in Co-Creation** (Peña-García et al., 2021): The study concludes that consumers participating in value co-creation have positive experiences with the brand. Variables such as connectivity, creativity, and knowledge correlate users highly with brands, fostering positive interactions when consumers interact, acquire brand knowledge, and socialize with others.
10**. Combining Development with Ecosystem Participation** (Omarini, 2018): The research demonstrates a trend where banks combine the development and marketing of their own mobile wallets with participation in third-party wallets, particularly those associated with device manufacturers like Apple Pay. This approach indicates recognition of the large customer base and the pivotal role of mobile hardware in the ecosystem.
11. **Positive Attitude towards Co-Creational Innovation** (de Villiers et al., 2020): The study reports that consumers with a positive attitude towards co-creational innovation perceive a higher level of relative advantage, leading to reduced complexity in engaging in cocreational activities. This positive attitude appears to streamline the perception of the co-creation process.

The analyzed paragraphs connect in various ways to the theme of cocreation of value in the context of digital banking. They address elements such as the monitoring of user transactions, the pursuit of security and services, cost management and privacy, the complexity of interactions, the identification of links in ecosystems, consumer engagement, the impact of fintech disruption, efficiency strategies, and the positive correlation between co-creation and brand experiences. These connections emphasize the multidimensional role of cocreation in shaping the digital banking landscape.

5. FINAL CONSIDERATIONS

The set of analyzed authors highlights the crucial importance of value creation in the context of digital banks. Each study reveals a unique facet of this dynamic, emphasizing that value creation is multifaceted and intricately tied to the success of financial institutions in the digital landscape. They underscore the relevance of factors such as building long-term relationships with customers (Levy, 2022 et al.), overcoming barriers to the adoption of digital services (Santos & Ponchio, 2021), delivering value aligned with customers' everyday lives (Komulainen et al., 2018), strategically using technology to provide personalized experiences (Riikkinen et al., 2018), considering ethical and cultural aspects (Fall et al., 2021), ecosystem innovation (Visconti-Caparrós & Campos-Blázquez, 2022), the importance of a multidimensional customer experience (Barbu et al., 2021), adapting to customer preferences (Clemente-Ricolfe, 2017), creating value through tailored experiences (Yang et al., 2023), the power of collaborative networks (Jain, 2014), and spatial convenience (Laukkanen & Lauronen, 2005).

The realm of digital banking is undergoing a transformative journey, with the concept of value co-creation at its core. A synthesis of multiple studies reveals a comprehensive perspective on this phenomenon. It begins with the criticality of tracking user transactions (Malar et al., 2019) as a safeguard against negative experiences that could degrade value co-creation. The holistic view of value delivery sought by consumers (Manser Payne, Peltier, et al., 2021) underscores the significance of trust and comprehensive satisfaction in value creation. The necessity of cost management and data protection (Liyanaarachchi et al., 2020) places management practices and privacy alignment at the heart of co-creation. Simultaneous manifestations of value co-creation and codestruction (van Klyton et al., 2022) illuminate the complexity within digital banking ecosystems, calling for proactive management. Identifying links within the service ecosystem (Manser Payne et al., 2021) emphasizes the collaborative roles of consumers, financial institutions, and fintech companies. Customer engagement's pivotal role (Moliner-Tena et al., 2019) underscores active consumer involvement. Adaptability (Dwipayana et al., 2022) emerges as key in the face of fintech disruption, highlighting the evolving nature of co-creation. Overcoming innovation challenges (Gomber et al., 2018) through outsourcing reveals efficiency strategies. Positive consumer experiences (Peña-García et al., 2021) showcase co-creation's tangible impact on brand perception. Ecosystem participation (Omarini, 2018) leverages collaborations for enhanced co-creation, while a positive attitude (de Villiers et al., 2020) simplifies the process. This synthesis offers a comprehensive framework for banks to navigate the digital landscape, fostering value-driven relationships with customers and setting the stage for enduring success.

The understanding of value creation and co-creation in digital banking is a complex and multifaceted task, as revealed by the analysis of various authors. Each study contributes a valuable piece to the puzzle of value generation, highlighting essential elements for the success of financial institutions in the digital era. The relevance of factors such as building strong customer relationships, overcoming technological barriers, personalizing experiences, considering ethical and cultural aspects, innovating in collaborative ecosystems, and constant adaptation emerges as a common thread in these investigations.

In this context, value co-creation stands out as a crucial approach for digital banks. Tracking user transactions, seeking security, and delivering value aligned with the customer's everyday life are fundamental. Consistent interaction with the audience, learning from disruptions brought by fintechs, and recognizing the need for collaborative expertise are key guidelines for success in value co-creation. Furthermore, understanding customer experience, exploring ecosystems, and maintaining a positive attitude highlight the necessity of an integrated approach.

However, it's important to acknowledge that value creation in digital banks still lacks a definitive definition and a unified model. Each study brings valuable perspectives, but the synthesis of all these elements remains a challenge. Ultimately, the success of digital banks in value creation and co-creation depends on a strategic and adaptable approach, in tune with customer needs, technological changes, and market dynamics. Collaboration, innovation, and a constant understanding of the customer emerge as essential foundations in this ever-evolving journey.

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