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Identifying the New and Practical Components and Dimensions of Entrepreneurship in the Banking Network with a Digital Technology Approach

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A B S T R A C T

Objective: The aim of this study is to identify the components and dimensions of entrepreneurship within the banking network from a digital technology perspective.

Methodology: This research is categorized as applied research, qualitative in nature, and employs a descriptive survey approach. The statistical population consists of all experts specializing in information technology and entrepreneurship within the banking industry. Following Strauss and Corbin's guidelines, 15 participants were selected through snowball sampling. Data collection was conducted through both library research and fieldwork, utilizing semi-structured interviews. The interviews were analyzed using MAXQDA software and a systematic coding process, complemented by the fuzzy Delphi method. To enhance the reliability and validity of the questionnaire, preliminary consultations were held with academic professors, who reviewed and provided feedback on the questions. Subsequently, a subset of the statistical population was given the revised questionnaire to address and resolve any ambiguities, before distributing the final version. Cronbach's alpha coefficient was employed to assess the reliability of the measurement instrument.

Findings: The research findings indicate that the establishment and expansion of digital entrepreneurship by banks are influenced by various dimensions, including the development of financial technologies, the creation of e-business models, the provision of e-entrepreneurship facilities, e-commerce infrastructure management, digital currency and blockchain development, the adoption of digital entrepreneurship ideas, and the advancement of electronic banking.

Conclusion: It can be concluded that these dimensions are potentially pivotal in forming a digital banking entrepreneurial network.

Keywords: *entrepreneurship, banking network, digital technology approach*

1 Introduction

Innovation is a fundamental necessity for organizations that seek to maintain their survival and effectiveness. Many organizations actively pursue innovative and entrepreneurial strategies to enhance their efficiency, effectiveness, and adaptability. In this context, organizational entrepreneurship has become a strategic choice for numerous institutions. Organizational entrepreneurship involves fostering an entrepreneurial mindset and skill set, embedding these characteristics into the organization's culture and operational activities (Almeida, 2024; Losová, 2024; Parsaiyan & Arabi, 2018).

The transition into the information age, characterized by the widespread integration of new technologies into various aspects of life, has elevated digital entrepreneurship as a new paradigm for initiating businesses based on innovative ideas and strategies. This shift has particularly impacted the service and production sectors (Ariaparsa & Ebramihi, 2023). The need for an entrepreneurial orientation strategy arises from three core issues: the emergence of new competitors, a growing distrust of traditional management methods, and the exodus of top talent seeking independent entrepreneurial ventures. Concurrently, advancements in information and communication technology have accelerated significantly (Asgharinezhad et al., 2024; Hakimi et al., 2024)). Despite these advancements, the banking sector in the country lacks the necessary diversity, quality, and speed in service delivery, leading to inefficiencies in resource mobilization and service provision (Silva et al., 2019).

Digital transformation is reshaping traditional banking practices, revolutionizing customer interactions and enabling banks to use cutting-edge digital technologies to deliver seamless customer experiences across multiple platforms, any time, and anywhere (Wahyono, 2024). The evolution of communication and information transfer processes, driven by global trends in information technology and e-commerce since 1959, has caused electronic banking to replace traditional models. The competitive edge of banks has increasingly relied on information symmetry between debtors and creditors, necessitating systemic optimization (Weber et al., 2022; Xiao, 2019; Xiao, 2023).

Developing a business model with an entrepreneurial focus, alongside innovation, can catalyze a major transformation in banking. It is clear that entrepreneurship and global market participation are interdependent, and focusing solely on domestic entrepreneurship without an international perspective diminishes the credibility and strategic value of banks (Kordnori et al., 2019).

Digital technologies, including the Internet, smartphones, and various applications, have a transformative effect on the global economy, significantly altering entrepreneurial processes. These technologies create new entrepreneurial opportunities, allowing businesses to market and sell products and services globally. The rapid realization of entrepreneurial goals in developing economies is facilitated by the digitization of economic systems. For instance, the banking sector has been targeted by digital startups, leading to cost reductions and the removal of market entry barriers, while generating opportunities for the next generation of entrepreneurs (Ben Youssef et al., 2021).

The relentless expansion of information technology and the Internet has rendered e-commerce essential for modern businesses, serving as a benchmark for national development. Electronic banking, the latest communication medium utilized by banks, integrates IT to improve service efficiency (Reshadi & Dasgar, 2012). The Internet, crucial for service delivery within the banking sector, has become indispensable for financial service provision, with banks establishing online portals to exploit time- and location-independent operations, reduced costs, and increased customer outreach. Internet banking, by providing a more convenient and time-saving alternative, has intensified competition in service offerings (Pirani & Hosseini, 2012).

Electronic banking refers to the seamless integration of banking activities through advanced IT, enabling a full suite of customer services through digital platforms. This approach offers features such as balance inquiries, fund transfers, bill payments, investment management, and loan installment monitoring, all without the need for physical bank visits (Reshadi & Dasgar, 2012). Secure and reliable e-banking services enable customers to execute a range of financial transactions on electronic devices like smartphones and computers (Badi & Dastjard, 2012).

In the present dynamic environment, entrepreneurship is crucial for organizational survival and growth. The focus on fostering innovation, initiative, and risk-taking within organizations is widely discussed in management literature. The banking system's pivotal role in national development, alongside the increasing influence of entrepreneurial, digital, and Internet-driven transformations, compels banks to modernize service delivery models (Haji Shahverdi et al., 2018; Hoffman et al., 2018).

Since the early 1990s, the banking industry has experienced rapid transformation, accelerated by

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communication advances, globalization, deregulation, and information technology progress (Cornett & Saunders, 2011). Despite this, the banking sector still struggles with service diversity, quality, and speed. Addressing these issues requires fostering entrepreneurship to drive innovation, product development, and process optimization. Private banks, focused on profitability and customer satisfaction, must prioritize creativity and efficiency in product and service delivery to meet stakeholder expectations (Darvish et al., 2019).

International and national companies recognize that leveraging entrepreneurial capabilities is imperative, not merely a challenge. Studies indicate that IT proficiency enhances entrepreneurial efficiency (Ghezali & Boudi, 2021). Financing remains critical for entrepreneurship, positioning banks as key players in economic systems. Regardless of project scale or industry, financial institutions are essential for entrepreneurial ventures. Thus, entrepreneurial potential is a key economic growth driver (Al-Naimi et al., 2021).

Organizations must adapt to the complex environment by leveraging virtual spaces to facilitate economic activities and create opportunities. Digital entrepreneurship, unlike traditional models, utilizes information technology to innovate and respond to market needs. Banks must harness digital tools to remain competitive (Dehghan Dehnavi et al., 2019). Kordnori et al. (2019) identified key business model components for development banks, emphasizing international entrepreneurship perspectives (Kordnori et al., 2019). Tavazoei Far et al. (2018) emphasized organizational culture and social factors in digital entrepreneurship, revealing the impact of internal, external, and infrastructural dimensions (Tavazoei Far et al., 2018). Asadullah et al. (2018) identified critical e-banking business model drivers, stressing service offerings and infrastructure management (Asadullah et al., 2018). Ben Youssef et al. (2021) examined student entrepreneurial intentions in Kosovo, linking them to economic digitalization (Ben Youssef et al., 2021). Al-Naimi et al. (2021) assessed Jordanian bank lending, revealing positive effects on entrepreneurship despite challenges like high interest rates (Al-Naimi et al., 2021).

In summary, Iran's developing economy faces entrepreneurial challenges, with banks often misallocating resources. Entrepreneurship, supported by digital technologies, offers solutions through transparency and efficient resource management. This study addresses the critical question: What are the components and dimensions of entrepreneurship in the banking network through the lens of digital technology?

2 Methods and Materials

This research falls into the category of applied research. It is qualitative in nature and employs a descriptive survey approach. The statistical population consists of experts in information technology and entrepreneurship within the banking industry. In line with Strauss and Corbin's recommendations, a sample of 15 participants was selected through snowball sampling. Data collection involved both library and field research methods. Semi-structured interviews were conducted, and data were analyzed using MAXQDA software through a structured coding process and the fuzzy Delphi method.

To ensure the reliability and validity of the research instruments, the questionnaire was first reviewed by several professors. The feedback was used to refine the questions, after which preliminary questionnaires were distributed to a portion of the statistical population to address and resolve ambiguities. The finalized questionnaire was then distributed. The reliability of the measurement tool was assessed using Cronbach's alpha coefficient, indicating the reliability of each component. The fields related to the creation and expansion of digital entrepreneurship by banks achieved a Cronbach's alpha of 0.870, demonstrating high reliability. The development of banking entrepreneurship had an alpha of 0.798, while the creation of a banking digital entrepreneurship network recorded an alpha of 0.756. The overall reliability of the questionnaire was strong, with a Cronbach's alpha coefficient of 0.854. These values reflect the robustness and internal consistency of the research measurement instruments.

3 Findings and Results

This section presents the findings aimed at addressing the research question and achieving the study's objectives. After conducting the interviews and analyzing the theoretical foundations and research literature, key indicators and components were identified. The Delphi method facilitated expert consensus, concluding the coding process. The Content Validity Ratio (CVR) index was used for data analysis. A questionnaire was distributed to the experts, who rated each component and dimension on a three-point scale: "necessary," "useful but not necessary," and "not necessary." With 15 experts participating, a CVR value above 0.49

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confirmed the content validity of each component. The results are summarized in Table 1.

Table 1

CVR Value for Each Component

Row	Components	CVR Value	Result	Dimensions	CVR Value	Result
1	Development of financial technologies	1	Verified	The fields of creating and expanding digital entrepreneurship by banks	1	Verified
2	Creating e-business models	1	Verified			
3	Development of e-entrepreneurship facilities	1	Verified			
4	E-commerce infrastructure management	1	Verified			
5	Development of digital currency and blockchain	1	Verified			
6	Attracting digital entrepreneurial ideas	1	Verified			
7	Development of electronic banking	1	Verified			
8	Development of organizational entrepreneurship	1	Verified	Development of banking entrepreneurship	1	Verified
9	Development of business entrepreneurship	1	Verified			
10	Development of e-entrepreneurship	1	Verified			
11	Development of digital entrepreneurship models	1	Verified			
12	Creating a banking digital entrepreneurship network	1	Verified	Creating a banking digital entrepreneurship network	1	Verified

The findings demonstrate that all 12 components and 3 dimensions were unanimously accepted by the experts, establishing a solid consensus for model design. The research categorized the 12 components into 3 dimensions, validated through the CVR index. Consequently, these components are integral to the proposed entrepreneurial model for the banking network, grounded in a digital technology approach (Table 2).

Table 2

Identified Components for Model Design

Row	Components
1	Development of financial technologies
2	Creating e-business models
3	Development of e-entrepreneurship facilities
4	E-commerce infrastructure management
5	Development of digital currency and blockchain
6	Attracting digital entrepreneurial ideas
7	Development of electronic banking
8	Development of organizational entrepreneurship
9	Development of business entrepreneurship
10	Development of e-entrepreneurship
11	Development of digital entrepreneurship models
12	Creating a banking digital entrepreneurship network

4 Discussion and Conclusion

The analysis conducted in this study identified 12 components and 3 dimensions integral to understanding the creation and expansion of digital entrepreneurship within banking networks. The findings indicate that the development of financial technologies, creation of electronic business models, establishment of e-entrepreneurship facilities, e-commerce infrastructure management, advancement of digital currency and blockchain, attraction of digital entrepreneurship ideas, and development of e-banking are all crucial for forming a robust digital banking

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entrepreneurial network. Additionally, the growth of banking entrepreneurship, characterized by the dimensions of organizational entrepreneurship development, commercial entrepreneurship development, electronic entrepreneurship development, and digital entrepreneurship model development, facilitates the acceleration of a digital banking entrepreneurial network.

These results align with the prior (Ariaparsa & Ebramihi, 2023; Asadullah et al., 2018; Asgharinezhad et al., 2024; Badi & Dastjard, 2012; Ben Youssef et al., 2021; Cornett & Saunders, 2011; Dehghan Dehnavi et al., 2019; Ghezali & Boudi, 2021; Haji Shahverdi et al., 2018; Hakimi et al., 2024; Hoffman et al., 2018; Kordnori et al., 2019; Losová, 2024; Parsaiyan & Arabi, 2018; Pirani & Hosseini, 2012; Reshadi & Dasgar, 2012; Silva et al., 2019; Tavazoei Far et al., 2018; Wahyono, 2024).

The identified fields and dimensions—such as the development of financial technologies, creation of e-business models, and advancement of digital currency and blockchain—play a pivotal role in establishing a digital banking entrepreneurial network. Furthermore, the acceleration of banking entrepreneurship through organizational, commercial, and digital entrepreneurship model development highlights the critical influence of these elements on fostering a comprehensive digital banking ecosystem.

Based on the research findings, several practical recommendations are proposed:

Banks should invest in areas that promote and expand digital entrepreneurship, specifically in financial technology development, electronic business models, e-entrepreneurship facilities, e-commerce infrastructure management, digital currency and blockchain advancements, and the attraction of digital entrepreneurial ideas. Such investments will facilitate economic growth by establishing a digital efficiency network.

To support the creation of a digital banking entrepreneurial network, it is recommended that banking sector managers conduct in-service training for senior bank executives in organizational entrepreneurship, business entrepreneurship, electronic entrepreneurship, and digital entrepreneurship models. These efforts will enable practical advancements in digital banking entrepreneurship.

Based on interview insights, financial and banking institutions should work to enhance the entrepreneurship system in the country by refining digital entrepreneurship components and dimensions according to the current research model.

As with any research, limitations exist in this study. A significant limitation was the variability in the importance assigned by respondents to interview and questionnaire topics. Some interview responses diverged from the main concepts of the study, and biases introduced by respondents posed challenges. Additionally, the complete lack of response from some experts required substituting with alternative respondents, which influenced the research process.

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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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were observed.

References

Al-Naimi, A. A., Al-Masaeed, A. A., & Al-Eitan, G. N. (2021). The impact of banking lending on the development of entrepreneurship: Analysis study on the Jordanian small and medium enterprises. *Materials Today: Proceedings*, 1-7. https://doi.org/10.1016/j.matpr.2021.04.520

Almeida, F. (2024). Causes of Failure of Open Innovation Practices in Small- And Medium-Sized Enterprises. *Administrative Sciences*, *14*(3), 50. https://doi.org/10.3390/admsci14030050

Ariaparsa, M., & Ebramihi, H. (2023). Technology Transfer Process in the Context of Open Innovation Paradigm. *Dynamic Management and Business Analysis*, *2*(2), 28-39. https://doi.org/10.22034/dmbaj.2024.2022823.1017

Asadullah, M., Sanavi Fard, R., & Hamidizadeh, A. (2018). Electronic banking business model based on the emergence of fintechs and financial startups. *Technology Development Management Quarterly*, *7*(2), 195-248. https://www.sid.ir/paper/260252/fa

Asgharinezhad, S., Rezghi Shirsavar, H., & Khanzadi, K. (2024). Investigating the Status of Internet of Things Development in Schools based on the Future Research. *Sociology of Education*, *10*(1), 152-160. https://doi.org/10.22034/ijes.2024.2017649.1517

Badi, A., & Dastjard, A. (2012). Presenting a conceptual model of technology acceptance in electronic banking based on TPM, TAM, TAM2, TRA. Electronic Business and Economy Conference,

Ben Youssef, A., Boubaker, S., Dedajc, B., & Carabregu-Vokshi, M. (2021). Digitalization of the economy and entrepreneurship intention. *Technological Forecasting & Social Change*, *143*, 1-14. https://doi.org/10.1016/j.techfore.2020.120043

Cornett, M. M., & Saunders, A. (2011). *Financial Institutions Management: A Risk Management Approach* (7th ed.). McGraw-Hill/Irwin. https://www.mheducation.com/highered/product/financial-institutions-management-risk-management-approach-saunders-cornett/1264413041.html

Dehghan Dehnavi, H., Heydarianizadeh, A., & Karaminia, M. (2019). Identifying and prioritizing factors affecting the improvement of e-entrepreneur organization: Case study of export banks in Yazd province. The 11th National Conference on New Approaches in Management, Economics and Accounting, Babol.

Ghezali, F., & Boudi, A. (2021). Achieving banking entrepreneurship through the marketing mix: Case of some Algerian commercial banks. *Revue Organisation & Travail*, *10*(2), 338-351. https://www.asjp.cerist.dz/en/downArticle/147/10/2/159947

Haji Shahverdi, D., Zamardian, G., Fallah Shams Lialestani, M., & Hanifi, F. (2018). Designing a systematic banking crisis early warning system in Iran's financial market (using Markovian chains). *Financial Economics Quarterly*, *13*(47), 135-154. https://journals.iau.ir/article_668628.html

Hakimi, N., Fathi, Z., & Pourbahrami, B. (2024). Application of Metacombination Technique in the Financial Flow Based on Blockchain Technology in the Hospital Ecosystem. *Dynamic Management and Business Analysis*, *2*(4), 74-93. https://doi.org/10.22034/dmbaj.2024.2035663.1036

Hoffman, B. W., Sellers, R. D., & Skomra, J. (2018). The impact of client information technology capability on audit pricing. *International Journal of Accounting Information Systems*, *29*, 59-75. https://doi.org/10.1016/j.accinf.2018.03.002

Kordnori, A. H., Edalatian Shahriari, J., Azizi, M., & Kabaranzadeh Ghadim, M. (2019). Designing a conceptual business model in development banks with an international entrepreneurship approach. *Financial Economics*, *14*(53), 157-172. https://journals.iau.ir/article_682974.html

Losová, V. Š. (2024). The Role of Open Innovation In addressing Resource Constraints in Healthcare: A Systematic Literature Review. *Journal of Health Organization and Management*, *38*(2), 150-175. https://doi.org/10.1108/jhom-06-2023-0203

Parsaiyan, A., & Arabi, S. M. (2018). *Fundamentals of organization theory and design*. Cultural Research Office.

Pirani, M., & Hosseini, M. (2012). Presenting a comprehensive service quality evaluation scale in electronic banking. Electronic Business and Economy Conference,

Reshadi, F., & Dasgar, M. (2012). Review and review of factors affecting the adoption of electronic banking. Electronic Business and Economy Conference,

Silva, V. L., Kovaleski, J. L., & Pagani, R. N. (2019). Technology Transfer and Human Capital in the Industrial 4.0 Scenario: A Theoretical Study. *Future Studies Research Journal: Trends and Strategies*, *11*(1), 102-122. https://doi.org/10.24023/FutureJournal/2175-5825/2019.v11i1.369

Tavazoei Far, A., Shihaki Tash, M., & Keshavarz, S. (2018). Identifying drivers effective on digital entrepreneurship in small and medium businesses with a hybrid approach. *Science and Technology Policy*, *09*(3), 61-72. https://www.sid.ir/paper/364495/fa

Wahyono, T. (2024). Digital Transformation in MSMEs in Indonesia: The Importance of Commitment to Change. *International Journal of Social Service and Research*, *4*(01), 378-384. https://doi.org/10.46799/ijssr.v4i01.703

Weber, E., Krehl, E. H., & Büttgen, M. (2022). The digital transformation leadership framework: Conceptual and empirical insights into leadership roles in technology-driven business environments. *Journal of Leadership Studies*, *16*(1), 6-22. https://onlinelibrary.wiley.com/doi/abs/10.1002/jls.21810

Xiao, J. (2019). Digital transformation in higher education: critiquing the five-year development plans (2016-2020) of 75 Chinese universities. *Distance Education*, *40*(4), 515-533.

Xiao, J. (2023). How Digital Transformation Improve Government Performance: The Mediating Role of Partnering Agility. *IEEE Access*, *11*, 59274-59285. https://doi.org/10.1109/access.2023.3284793

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