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THE EVOLUTION OF BANKING BUSINESS MODELS IN THE ERA OF DIGITAL ECOSYSTEMS

Abstract: The article examines how digitalization has transformed traditional banking business models into platform- and ecosystem-based models. The relevance of the topic is determined by the rapid spread of mobile banking, open banking regulation, API-based partnerships and data-driven services. The research is based on comparative analysis of academic literature, regulatory documents and recent company examples from 2018-2025. The findings show that banks are moving from branch-centered intermediation to integrated digital ecosystems where financial and non-financial services are combined around customer needs. The article concludes that ecosystem banking strengthens customer engagement and revenue diversification, but also increases regulatory, cybersecurity and third-party risks.

Key words: digital economy; banking business model; digital banking; open banking; platform banking; financial ecosystem; customer data.

Introduction: The banking industry has undergone a profound transformation during the last two decades. The rapid diffusion of digital technologies, the expansion of mobile banking, the emergence of fintech companies and the development of open banking frameworks have challenged the traditional banking model based on physical branches and product-centered relationships. Digitalization has changed not only the channels through which banking services are delivered, but also the logic of value creation in the financial sector. Modern banks increasingly operate as digital platforms that integrate financial

and non-financial services, creating ecosystems that extend beyond conventional banking activities. The research question of this article is: how has digitalization transformed traditional banking business models into ecosystem-based models?

Methods and Research: The study employs qualitative comparative analysis of academic literature, regulatory documents and industry reports on digital banking and financial ecosystems. A systematic review of sources published mainly between 2020 and 2025 was conducted, while earlier regulatory milestones such as PSD2 were included because they shaped the development of open banking. The author compares business-model stages by identifying changes in customer interaction, revenue generation, partnership structure and risk profile.

Results and Discussion: Traditional banking business models were historically built around three core functions: deposit collection, lending activities and payment services. Revenue generation depended largely on net interest margins and commissions, while customer interaction was concentrated within branch networks. This model provided stability and regulatory control, but it also created high fixed costs and limited the speed of product innovation. The first important shift was the transition from branch-centered banking to multichannel and then digital banking. Online banking in the 2000s and mobile banking in the 2010s reduced dependence on physical infrastructure and made customer contact more frequent, personalized and data-rich.

A real example of this stage is the rise of digital-only banks. According to the European Central Bank, by the end of 2024 about 60 banks in the euro area were identified as digital-only, and seven of them were subsidiaries of traditional banks [1]. This figure illustrates that digital banking is no longer a niche format: it has become a recognized business model inside the regulated banking sector. Digital-only banks compete through lower operating costs, faster onboarding and mobile-first customer experience. At the same time, traditional

banks increasingly imitate their practices by closing inefficient branches, investing in mobile applications and automating routine processes.

The second stage of transformation was open banking. In the European Union, the revised Payment Services Directive (PSD2) became applicable in January 2018 and required banks to provide secure access to account data for licensed third-party providers, subject to customer consent [2]. This regulatory change weakened the monopoly of banks over customer data and encouraged API-based competition. Open banking made it possible for fintech firms to offer account aggregation, payment initiation, budgeting tools and embedded financial services. For banks, the strategic meaning of PSD2 was clear: customer relationships could no longer be protected only by account ownership, because value increasingly moved to the interface and the quality of digital services.

Open banking also created a new partnership logic. Instead of developing all products internally, banks began to connect external providers to their digital infrastructure. The Basel Committee notes that digitalization has expanded both the channels through which banking services are offered and the range of technologically enabled suppliers, including fintechs, big techs and third-party service providers [3]. As a result, the bank's role gradually changes from a closed financial institution to an orchestrator of services. APIs become not only a technical instrument, but also a business-model mechanism: they allow banks to distribute products through partners and to include partner services inside their own applications.

The third stage is platform banking. Platform banking means that a bank creates a digital environment where customers, financial products and external partners interact. Unlike the traditional model, in which the bank sells separate products, the platform model focuses on repeated customer engagement. For example, a client may use one application for payments, deposits, investments, insurance, travel purchases, subscriptions and loyalty programs. The economic logic is based on network effects: the more services and partners the platform

includes, the more useful it becomes for the customer, and the more data the bank receives for personalization.

International fintech examples show the scale of this shift. Revolut reported 52.5 million customers by the end of 2024, almost 15 million new customers during the year, and transaction volumes approaching GBP 1.0 trillion [4]. Nubank reached 114.2 million customers globally by 31 December 2024 after adding 20.4 million customers during the year [5]. These companies started from narrow digital financial services, but gradually expanded into broader platforms with payments, cards, credit, investments, insurance, telecom or lifestyle services. Their growth demonstrates that customer acquisition in modern banking depends not only on balance-sheet products, but also on convenience, ecosystem breadth and daily digital engagement.

Russian banking practice also reflects the ecosystem logic. T-Technologies reported that the number of customers using the T ecosystem increased by 18% year-on-year to 48 million by the end of 2024, while revenue doubled to RUB 962 billion and net profit grew by 51% to RUB 122 billion [6]. This example is important because it shows how a bank-originated digital platform can combine financial services with lifestyle and partner services and convert engagement into financial performance. Sber also illustrates the Russian ecosystem model: in its 2024 results, Sberbank reported net profit of RUB 1,562.4 billion under RAS and ROE of 23.4%, while continuing to develop its digital channels and ecosystem positioning [7].

These examples show that ecosystem banking changes the revenue model. Traditional banks relied mainly on lending income and transaction commissions. Ecosystem-based banks diversify revenue through subscriptions, partner commissions, merchant services, advertising, data-driven personalization, cross-selling and non-financial services. This diversification can reduce dependence on interest margins and increase customer retention. However, it also changes the bank’s risk profile: the bank becomes dependent on technological

infrastructure, third-party providers, cloud services, cybersecurity systems and data governance.

Artificial intelligence and big data strengthen this transformation. DBS reported that its data analytics and AI/ML initiatives delivered more than SGD 750 million of economic value in 2024 and supported more than 1,500 models across over 370 use cases [8]. Such cases show that the competitive advantage of banks increasingly depends on their ability to analyze customer behavior and provide personalized recommendations at scale. Personalization turns the bank from a passive provider of financial products into an active digital assistant that anticipates customer needs.

The evolution of banking business models can therefore be summarized in three stages. The first stage is traditional branch-centered banking, focused on financial intermediation and standardized products. The second stage is digital banking, characterized by online and mobile channels, automation and lower transaction costs. The third stage is ecosystem banking, where banks function as digital platforms that coordinate interactions among customers, partners and service providers. Each stage reflects a higher level of digital maturity, greater use of data and stronger dependence on cooperation rather than purely internal production.

Despite the advantages of ecosystem models, several challenges remain. Data privacy, cybersecurity, regulatory compliance and operational complexity become more serious when banks integrate many external partners. The Basel Committee emphasizes that digitalization creates benefits but also new implications for banks and supervisors, including the need to manage risks connected with innovative technologies and new suppliers [3]. Therefore, ecosystem banking should not be interpreted only as expansion into non-financial services. It also requires stronger governance, clear responsibility for customer data and continuous supervision of third-party relationships.

Conclusion: The research demonstrates that digitalization has transformed the bank from an institution that mainly holds accounts and issues loans into a platform that organizes customer experience. Real cases from the EU, Revolut, Nubank, T-Technologies, Sber and DBS show that this transformation is measurable through customer growth, digital-only bank expansion, ecosystem usage and AI-generated economic value. Open banking, APIs, mobile platforms, data analytics and artificial intelligence have played central roles in this shift. At the same time, ecosystem banking increases cybersecurity, privacy and third-party risks, which means that long-term success depends not only on innovation, but also on governance, trust and regulatory compliance. The future banking business model will probably be hybrid: banks will remain financial intermediaries, but their competitive position will increasingly depend on ecosystem orchestration. The most successful banks are likely to be those that combine three advantages: technological capability, trust and regulatory expertise. Fintech firms may be faster in innovation, but banks still possess customer trust, licenses, risk-management experience and access to financial infrastructure.

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