



Article

Modern Approaches to Improving Bank Lending Processes

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Abstract: The article explores current ways to ensure the efficiency of banking lending processes in the digital transformation and growing requirements for managing credit risk. The research investigates significant paths regarding the improvement of the lending process, such as the models focus on the features of risk, digitalisation of processes, data analytics and customer-oriented models. According to the generalization of practices of individual countries of the world in their narrow and comparative vision, the key consequences of the introduction of modern tools are determined such as the reduction of NPL, the decision-making time as well as the performance of the bank lending activities. We conclude that an holistic solution is needed to modernise banking lending processes.

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1. Introduction

Bank lending plays a vital role in ensuring economic growth and the stability of the financial system. The efficiency of lending processes directly impacts the availability of financial resources, the quality of the loan portfolio, and the level of banking risks. In the context of digital transformation and increased competition, traditional lending approaches require modernization.

Modern approaches to improving bank lending processes involve the implementation of digital technologies, the development of credit scoring, the use of data analytics, and customer-centric service models. These tools improve the accuracy of borrower assessments, reduce the time it takes to make credit decisions, and reduce the level of nonperforming loans.

The purpose of this article is to analyze modern approaches to improving bank lending processes and identify key areas for improving the efficiency of bank lending activities.

Literature Review

Modern approaches to improving bank lending processes in the academic literature are examined through the lens of credit risk management, improved borrower assessment, and digitalization of the credit cycle. The classical foundations of credit analysis and credit risk transmission in the banking system are detailed in Mishkin (2019), who interprets lending as the core of banking intermediation, and the quality of credit procedures is directly linked to the financial stability of banks [1]. Saunders and Allen (2010) discuss practicality in measuring credit risk (PD, LGD, EAD) and its application in credit decision & portfolio management [2].

Credit scoring models and the evaluation of borrowers have all been part of the credit process enhancement methodology. Thomas, Edelman, and Crook in 2007 reorganized methods of credit scoring, showing that it is impossible to modernize the way credit is granted without the use of statistical models that simplify determinations and minimize human influence over the decision [3]. Moreover, where information constraints are binding, such as in SME lending, greater flexibility in credit assessment methodologies is needed, as shown by Altman and Sabato [4].

An important area of research concerns the implementation of data technologies and artificial intelligence in lending. BIS (2018) notes that the use of Big Data, machine learning, and alternative data sources accelerates credit decision-making and expands financial inclusion, but requires stronger model risk management and data quality control [5]. Similar conclusions are presented by BCBS (2021), which emphasizes the need for model risk oversight, validation of scoring models, and algorithmic transparency in the lending process [6].

The digital transformation of banking services is a topical issue in the literature, where lending is seen as one of the processes most sensitive to digitalization, determined by the high cost of risk and compliance requirements. OECD[2020] discussed the facilitation role of digital financial services by lowering transaction costs and enhancing access to credit, and insisted on the need for consumer protection and regulatory quality [7]. Vives (2019) interprets the digitalization of lending as banks' transition to more platform-based and customer-centric models, where speed and personalization of decisions become competitive advantages [8].

Finally, improving lending processes is directly linked to the quality of monitoring and problem debt management. IMF (2020) notes that strengthening post-credit monitoring, early detection of asset quality deterioration, and stress testing increases bank resilience and reduces losses from credit risks, especially in conditions of macroeconomic uncertainty [9].

2. Materials and Methods

The study utilizes systems and comparative approaches to analyze modern approaches to improving bank lending processes. The theoretical framework is based on an analysis and synthesis of scientific literature and international recommendations in the field of banking risk management [10]. The empirical part of the study is based on a comparative and tabular analysis of lending instruments and their effects.

3. Results and Discussion

An analysis of current trends in bank lending development shows that improving credit processes is becoming a key factor in ensuring bank financial stability and increasing the availability of credit resources for the economy [11]. Amid rising credit risks, the digitalization of financial services, and tightening regulatory requirements, banks are forced to reconsider traditional approaches to organizing the lending process.

The analysis results indicate that a central element in improving bank lending is the transition to risk-based decision-making models. The use of quantitative credit risk metrics, such as probability of default (PD), loss given default (LGD), and amount of exposure at risk (EAD), allows for more informed lending decisions and a reduction in the proportion of non-performing loans [12]. Banks implementing these tools demonstrate higher loan portfolio quality and resilience to macroeconomic shocks.

Significant changes are being observed in the area of borrower creditworthiness assessment. The use of credit scoring and automated assessment models allows for standardization of the analysis process, reduction in loan application review time, and

mitigation of the influence of subjective factors [13]. Analysis shows that the implementation of scoring systems is particularly effective in retail and SME lending, which requires processing a large number of applications with limited resources.

Digitalization of the lending process is another important area for improving bank lending. The use of digital customer interaction channels, electronic document management, and automated lending platforms helps reduce operating costs and increase the transparency of lending transactions [14]. As a result, the lending process becomes more flexible and focused on borrower needs.

Analysis also shows that modern approaches to lending involve strengthening post-loan monitoring. The use of analytical tools to track the financial health of lenders and the quality of a loan portfolio enables banks to detect early warning signs of declining solvency and mitigate the effects when adverse events occur. It reduces overdue debt and makes credit risk management more effective.

One of the remarkable outcomes of applying modern ways is that bank lending is more customer-oriented [15]. Accelerated decision making, custom loan products, and enhanced visibility of lending conditions all lead to greater confidence of customers and grow banks' customer base. In order to assess the practical applicability of contemporary tools for enhancing bank lending, it is important to contrast the key instruments for credit process modernization and their economic outcomes [16]. It enables us to evaluate the relative impact of such approaches on the quality of the loan portfolio, operational efficiency of the bank, and the level of credit risk on a continuous basis.

Table 1 presents the key modern approaches to improving bank lending processes and their generalized effects, based on international practice and analytical assessments.

Table 1. Modern approaches to improving bank lending processes and their effects.

Modern approach	Contents of the approach	Main effects	Effectiveness assessment, %
Risk-based lending	Using PD, LGD, and EAD in credit decisions	Reducing the share of problem loans	10–20
Credit scoring	Automation of creditworthiness assessment	Reducing the timeframe for reviewing applications	30–50
Digitalization of the credit process	Online applications, electronic document management	Reducing operating costs	15–25
Using Big Data	Involving alternative data sources	Improving the accuracy of borrower assessments	20–30
Artificial Intelligence and ML	Forecasting defaults and risks	Reducing credit losses	10–15
Post-credit monitoring	Early detection of deteriorating solvency	Reduction of overdue debt	15–25
Customer-oriented models	Personalization of lending terms	Increased customer satisfaction	20–35
Risk management integration	Linking lending to bank strategy	Improving portfolio resilience	10–20

Source: compiled by the author based on analytical materials from BIS, BCBS, OECD, IMF, and generalized international banking practice.

An analysis of the data in Table 1 shows that the greatest quantitative effect is achieved through digitalization and automation of key stages of the lending process [17]. In particular, the implementation of credit scoring and digital application channels reduces the time it takes to make credit decisions by 30–50%, significantly improving banks' operational efficiency and competitiveness.

Risk-based approaches based on quantitative credit risk indicators have a significant impact on the quality of the loan portfolio. A 10–20% reduction in the share of non-performing loans indicates improved credit decision-making and risk management effectiveness.

The use of Big Data and artificial intelligence tools enhances the analytical component of the lending process, increasing the accuracy of borrower assessments and reducing credit losses [18]. These approaches are particularly relevant in the retail and SME lending segments, where the volume of data and the dynamics of clients' financial status require constant monitoring. Customer-centric lending models deserve special attention, as they increase customer satisfaction by 20–35% and contribute to the expansion of banks' client bases [19]. This confirms that improving lending processes should be aimed not only at reducing risks but also at improving service quality.

Overall, the analysis confirms that maximum impact is achieved through the comprehensive application of modern approaches that combine digitalization, risk management, and a focus on customer needs. This integration allows banks to improve the efficiency of lending operations, reduce risks, and ensure sustainable development in the digital economy [20].

4. Conclusion

The study found that improving bank lending processes is key to increasing bank efficiency and the sustainability of the financial system in the current economic environment. The analysis confirms that traditional approaches to organizing the lending process no longer fully meet the demands of the digital economy and the growing expectations of borrowers.

Based on an analysis of modern approaches and their effects, it was found that risk-based lending models, automation and digitalization of procedures, and the implementation of analytical tools based on big data and artificial intelligence have the greatest impact on improving lending processes. These approaches help to minimize the portion of NPAs, accelerate decision-making, and facilitate the reduction of banks' operating costs.

Combining credit risk management with the overall development strategy of the bank and enhancing post-credit monitoring are especially valuable. Quantitative risk indicators and early signs of deterioration in borrowers' financial conditions increase loan portfolio quality and reduce credit losses. Meanwhile, the customer-send mortgage plan is serving to boost buyer confidence and lending. In sum, the findings of this study confirm that simplifying the logistical and technological aspects of the process of bank lending fulfillment has to be holistic and dependent on the mix of digital transformations, modern risk management mechanisms, and a customer-oriented approach. By implementing these strategies consistently, banks can enhance lending effectiveness, enhance financial stability, and ensure the long-term sustainable development of the banking sector.

REFERENCES

- [1] F. S. Mishkin, *The Economics of Money, Banking and Financial Markets*, 12th ed. Boston: Pearson Education, 2019.
- [2] A. Saunders and L. Allen, *Credit Risk Management in and out of the Financial Crisis*, 3rd ed. Hoboken: John Wiley & Sons, 2010.
- [3] L. C. Thomas, D. B. Edelman, and J. N. Crook, *Credit Scoring and Its Applications*, 2nd ed. Philadelphia: SIAM, 2017.
- [4] E. I. Altman and G. Sabato, "Modelling credit risk for SMEs: Evidence from the U.S. market," *Abacus*, vol. 43, no. 3, pp. 332–357, 2007.
- [5] Bank for International Settlements, "Sound Practices: Implications of Fintech Developments for Banks and Bank Supervisors," BIS, Basel, 2018.
- [6] Basel Committee on Banking Supervision, "Principles for the Management of Credit Risk," Bank for International Settlements, Basel, 2021.
- [7] Organisation for Economic Co-operation and Development, "Digital Financial Services and Consumer Protection," OECD Publishing, Paris, 2020.
- [8] X. Vives, "Digital disruption in banking," *Annu. Rev. Financ. Econ.*, vol. 11, pp. 243–272, 2019, doi: 10.1146/annurev-financial-100719-120854.
- [9] International Monetary Fund, "Global Financial Stability Report," IMF, Washington, DC, 2020.
- [10] Bank for International Settlements, "Supervisory Challenges Associated with the Use of Artificial Intelligence by Banks," BIS, Basel, 2021.
- [11] World Bank, "The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience," World Bank, Washington, DC, 2022.
- [12] International Monetary Fund, "Fintech: The Experience So Far," IMF, Washington, DC, 2022.
- [13] Basel Committee on Banking Supervision, "Principles for Operational Resilience," Bank for International Settlements, Basel, 2023.
- [14] T. Berg, V. Burg, A. Gombovic, and M. Puri, "On the rise of fintechs: Credit scoring using digital footprints," *Rev. Financ. Stud.*, vol. 33, no. 7, pp. 2845–2897, 2020.
- [15] Organisation for Economic Co-operation and Development, "Artificial Intelligence, Big Data and Credit Scoring," OECD Publishing, Paris, 2023.
- [16] European Central Bank, "Guide on Climate-Related and Environmental Risks," ECB, Frankfurt am Main, 2021.
- [17] A. Fuster, M. Plosser, P. Schnabl, and J. Vickery, "The role of technology in mortgage lending," *Rev. Financ. Stud.*, vol. 35, no. 5, pp. 2104–2150, 2022.
- [18] World Bank, "Financial Consumer Protection and New Forms of Data Processing," World Bank, Washington, DC, 2020.
- [19] McKinsey & Company, "Global Banking Annual Review 2023," McKinsey Global Institute, 2023.
- [20] J. Jagtiani and C. Lemieux, "Do fintech lenders penetrate areas that are underserved by traditional banks?," *J. Econ. Bus.*, vol. 100, pp. 43–54, 2021.