



DIGITIZATION OF MORTGAGE APPLICATIONS: CONVENIENCE AND CHALLENGES IN THE TECHNOLOGY ERA

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Abstract

Digitalization in the financial sector has brought major changes in the process of applying for Home Ownership Loans (KPR). With this transformation, prospective borrowers can now apply for a mortgage more easily, quickly, and transparently through digital platforms, without the need to visit banks or financial institutions in person. Technological innovations have made it possible for processes that used to take weeks, to be shortened to just a few days, even hours. Various advancements such as e-KYC (electronic Know Your Customer), digital signatures, artificial intelligence (AI)-based credit analysis, and the use of big data, have accelerated the process of verification, risk assessment, and mortgage approval. The presence of fintech and digital banking platforms also further expands access for people who previously had difficulties in meeting conventional administrative and verification requirements. However, even though there are many conveniences, the digitization of mortgage applications is also inseparable from various challenges. One of the main issues is the security of personal data, given that more and more sensitive data is being processed online, which increases the risk of information leakage and misuse. The threat of cybercrime such as identity theft and banking system hacking is also a problem that needs to be anticipated by the financial industry. In addition, the lack of digital literacy among prospective borrowers, especially in areas that are not yet familiar with technology-based financial services, is an obstacle in itself. In the field of regulation, the government and financial authorities need to continue to adjust policies to remain relevant to technological developments, while ensuring consumer protection in the use of digital services. Digitalization in mortgage applications brings many benefits to the financial industry and society, but it also faces challenges that must be overcome to create a more modern, inclusive, and easily accessible financial ecosystem for all levels of society. Through this discussion, it is hoped that solutions and innovations that support the acceleration of digital transformation in the mortgage sector in a safe and sustainable manner can emerge.

Keywords: Digitization, Fintech, Data security

Abstrak

Digitalisasi dalam sektor keuangan telah menghadirkan perubahan besar dalam proses pengajuan Kredit Pemilikan Rumah (KPR). Dengan adanya transformasi ini, calon peminjam kini dapat mengajukan KPR dengan lebih mudah, cepat, dan transparan melalui platform digital, tanpa perlu mengunjungi bank atau lembaga keuangan secara langsung. Inovasi teknologi telah memungkinkan proses yang dulunya memakan waktu hingga berminggu-minggu, kini dapat dipersingkat menjadi hanya beberapa hari, bahkan jam. Berbagai kemajuan seperti e-KYC (electronic Know Your Customer), tanda tangan digital, analisis kredit berbasis kecerdasan buatan (AI), dan penggunaan big data, telah mempercepat proses verifikasi, penilaian risiko, dan persetujuan KPR. Kehadiran platform fintech dan perbankan digital juga semakin memperluas akses bagi masyarakat yang sebelumnya mengalami kesulitan dalam memenuhi persyaratan administrasi dan verifikasi konvensional. Namun, meskipun terdapat banyak kemudahan, digitalisasi pengajuan KPR juga tidak terlepas dari berbagai tantangan. Salah satu isu utama adalah keamanan data pribadi, mengingat semakin banyak data sensitif yang diproses secara daring, yang meningkatkan risiko kebocoran dan penyalahgunaan informasi. Ancaman kejahatan siber seperti pencurian identitas dan peretasan sistem perbankan juga menjadi masalah yang perlu diantisipasi oleh industri keuangan. Selain itu, kurangnya literasi digital di kalangan calon peminjam, terutama di daerah yang belum terbiasa dengan layanan keuangan berbasis teknologi, menjadi kendala tersendiri. Di bidang regulasi, pemerintah dan otoritas keuangan perlu terus menyesuaikan kebijakan agar tetap relevan dengan perkembangan teknologi, sekaligus memastikan perlindungan konsumen dalam penggunaan layanan digital. Digitalisasi dalam pengajuan KPR membawa banyak manfaat bagi industri keuangan dan masyarakat, tetapi juga menghadapi tantangan yang harus diatasi untuk menciptakan ekosistem keuangan yang lebih modern, inklusif, dan mudah diakses oleh semua lapisan masyarakat. Melalui diskusi ini, diharapkan dapat muncul solusi dan inovasi yang mendukung percepatan transformasi digital dalam sektor KPR secara aman dan berkelanjutan.

Kata Kunci: Digitalisasi, Fintech, Keamanan data

A. INTRODUCTION

The human population that is increasing every year demands a higher need for housing. This encourages people to find solutions so that they can have a house that suits their financial capabilities. A variety of housing price options have also appeared, and one of the ways that many people choose is to take out a credit loan. Home Ownership Loans (KPR) are a popular choice because they allow people to buy houses without having to wait for the funds to be fully collected.

Bank BTN, as one of the leading banks in Indonesia, has become the people's first choice in applying for mortgages. This bank focuses on housing financing with various mortgage products that can meet various needs, both for the purchase of new houses, used houses, and house construction. Mortgage products offered by Bank BTN include subsidized mortgages and non-subsidized mortgages, each of which has criteria that are tailored to the needs and financial capabilities of the community. Subsidized homes, which are supported by the government, offer low interest rates, light installments, and affordable prices. Meanwhile, non-subsidized houses provide more variety in terms of facilities, designs, and wider locations.

In this context, the author chose to do an internship at Bank BTN, considering that this bank is not only known as an institution that provides mortgage products, but also as a financial institution that has various savings and loan products that support easy access to housing for the community. With a commitment to provide ease of application, light installments, and competitive interest rates, Bank BTN continues to support equitable access to housing in Indonesia.

The development of digital technology also plays a big role in changes in the financial sector, especially in the mortgage application process. Previously, applying for a mortgage was often complicated and time-consuming, but now the digital system offers convenience and speed. Innovations such as electronic Know Your Customer (e-KYC), digital signatures, and artificial intelligence (AI) in credit analysis are speeding up the application process. However, this digital transformation also brings challenges, such as personal data protection and limited digital literacy among some people. Appropriate regulations also need to be updated to ensure consumer protection in the use of these digital services

B. IMPLEMENTATION AND METHODS

The activities carried out by the author during the internship took place on August 12 – December 6, 2024 for four months at PT. Bank Tabungan Negara, Tbk. Purwokerto Branch Office, the writer for one month was placed in the *consumer lending unit* unit and for four months. The internship procedure is carried out for five days a week.

Table 1. Internship Operating Hours

Weekdays	Business Hours	Break Time
Monday - Friday	07.30 – 16.30	12.00 – 13.00

Activities during the MBKM internship at PT Bank Tabungan Negara KC Purwokerto for four months, as follows:

1. Entering customer data into the BTN Property application to facilitate the process of finding and purchasing property. During the internship activity, the author helped to enter debtor customer data into the BTN Property application. The goal is to simplify the process of applying for a Home Ownership Credit (KPR)

2. Archive Management Archive management is a systematic process of organizing, storing and maintaining important documents or records produced by a company so that they can be easily accessed, managed, and reused in the future. Archive management aims to ensure that the archive can support operational and administrative activities. Managing archives has its own place and rules such as archives, memos, and letters.

3. Telephone between internal parties at Bank BTN KC Purwokerto to ensure that communication between employees runs effectively and activities run smoothly. Employees can convey any matters that need to be carried out or submitted to the unit for the sustainability of banking performance.

4. Distributing activity brochures containing data on Home Ownership Loans (KPR) products provided by banks or other financial institutions. This activity aims to provide information to prospective debtors about various types of home financing, terms, benefits, and benefits from the Home Ownership Loan products offered

C. RESULTS AND DISCUSSION

In the field of *Consumer Lending Unit*, there are 2 types of Home Ownership Loans, namely: Non-Subsidized Home Ownership Loans and Subsidized Home Ownership Loans. In the implementation of the MBKM internship, the author is assigned to the Non-Subsidized Home Ownership Credit section which focuses on customers earning above the Regional Minimum Wage (UMR). In the credit application process, the *Consumer lending Unit* section is very influential in every stage and flow of providing credit to customers. The following is the flow of credit provision carried out by PT. State Savings Bank Kc Purwokerto

1. Choosing a non-subsidized mortgage product The first process of applying for a mortgage at Bank BTN is to visit the BTN Properti website to choose a mortgage product by comparing interest rates, tenors, fees, and terms of each. The selected mortgage product can be in accordance with the needs of the debtor, for example the BTN Platinum mortgage for landed houses or apartments.
2. Preparing files for the Debtor's application after visiting the website and choosing further to apply for credit, can prepare files such as:
 - a. Personal identity: KTP, Family Card, NPWP, Marriage Book (for married people), Divorce Certificate (for divorced people), Unmarried Certificate (single).
 - b. Financial information: Salary slip for the last 3 months (for employees), bank statement for the last 6 months (for employers), employment certificate.
 - c. Supporting documents: Letter of appointment of permanent employees (if employees), Deed of establishment of the Company (for self-employed)
 - d. Property documents: Land/building certificate, Building Permit (IMB), and the last Land and Building Tax (PBB).
3. Submit the file to the BTN Property Application. Debtors who have prepared the files then fill out the mortgage application form at the nearest Bank BTN branch or through online services at BTN Properti. Attach all required documents according to the requirements.
4. Credit verification and analysis process Data documents submitted to Bank BTN are further verified, financial ability and credit history analysis is carried out

through the OJK Financial Information Service System (SLIK).

5. Bank BTN property appraisal will conduct *an appraisal* of the property you submit as collateral. The purpose of the assessment is to ensure that the market value of the property is in accordance with the loan proposed.
6. Credit approval. Complete documents and credit analysis are declared feasible, the bank will issue a Credit Approval Letter (SPK), SPK containing such as the loan amount, interest rate, tenor, and payment schedule.
7. The signing of the credit contract is an agreement between the debtor and Bank BTN for the disbursement of funds, the credit contract is carried out with a notary with BTN. In the contract process, the debtor needs to pay costs related to the down payment (DP), notary fees, administrative fees, and life insurance.
8. Disbursement of Debtor Funds who have followed the terms and procedures for submission will receive the disbursement of mortgage funds to the *developer* or in accordance with the agreed agreement.
9. Starting to pay installments The debtor pays installments starts according to the schedule that has been agreed upon Together, the installments are paid through various payment methods, such as bank transfer or auto-debit.

During the implementation of the MBKM internship of PT. The State Savings Bank Kc Purwokerto found several things that need to be evaluated regarding the process of providing customer credit.

- a. Simplification and Digitization The process of applying for a Home Ownership Loan (KPR): Digitalization is the process of simplifying physical form into digital

form with the aim of making it more efficient, automatic, and easily accessible through digital technology. Digitization of Credit Procedures at Bank BTN Kc Purwokerto The public still cannot access easily or the reach is not wide because the distribution of brochures or marketing is still centralized. Evaluation needs to be carried out marketing and education about credit application procedures such as *websites*, advertisements or paid promotions on Facebook ads, Instagram ads, and other social media, to make it easier to find information.

- b. Strengthening Periodic Supervision and Evaluation by Implementing SOP Monitoring and Evaluation System: BTN must implement an effective supervision system for the implementation of SOPs, such as the appointment of an internal audit team that can monitor and evaluate the implementation of SOPs periodically.
- c. Improving Employee Training and Competency by means of periodic training for employees: Hold regular training for employees on the latest procedures in applying for Non-Subsidized Mortgages and the importance of implementing SOPs consistently. This aims to reduce administrative errors and increase efficiency. Regular SOP socialization: in order for employees to always be updated on changes in SOPs, BTN needs to hold socialization sessions and discussions about the latest procedures. This training should also include the development of *soft skills* such as effective communication with customers.

D. CONCLUSION

Conclusion

During his internship at Bank BTN Kc Purwokerto, especially at the *Consumer Lending* Unit, the author realized that the credit



application procedure had met the operational standards of employees. However, the evaluation of the credit application procedure is still not fully accessible, there needs to be an update or new adaptation in the era of digitalization 5.0 so that Bank BTN is able to keep up with the times and compete with other banks, it is necessary to carry out several controls such as employee SOPs in assessing risks and making credit decisions based on available data, in order to be more efficient in supporting the work process. Especially related to the speed of data access and coordination between departments, and the ability to convey information clearly and professionally is very important in maintaining good relationships with customers and ensuring a smooth credit application process.

Suggestion

Suggestions for the *Consumer Lending Unit* of Bank BTN based on the evaluation carried out, here are some recommendations for the *Consumer Lending Unit* of Bank BTN.

1. Simplification of the Administration Procedure:

It is recommended to simplify administrative steps, such as reducing the number of documents that need to be taken care of manually. Digitizing documents and implementing an online filing system can help speed up the process.

2. Increased Information Transparency:

The developer, bank, or related institution must provide clear and detailed guidance regarding the requirements, costs, and stages of home ownership. This information can be submitted through the official website or a dedicated app.

3. Strengthening Cooperation with Financial Institutions:

To make it easier for prospective buyers, cooperation with financial institutions in providing credit facilities or more flexible Home Ownership Loans (KPR) needs to be improved. A transparent and easy-to-understand payment

scheme is essential.

4. Use of Digital Technology:

- a. Developing a digital platform to monitor the status of home ownership applications.
- b. Provides online mortgage simulations to help potential buyers plan their budget.
- c. Implementation of digital signatures to accelerate document validation.
- d. Training and Socialization to Potential Buyers

5. Strict Supervision and Regulation:

The government needs to strengthen supervision of developers and property agents to ensure that homeownership procedures are running according to the rules, avoid fraud, and protect buyers' rights.

6. Adjustment of Administrative Fees:

It is recommended to evaluate and adjust administrative costs to make them more affordable for low-income people, including providing subsidies or incentives for first-time home buyers.

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