

The Business Service Model of Digital Personal Loans in Thailand

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Article History

Received: 18 February 2022

Revised: 5 May 2022

Published: 5 May 2022

Abstract

The study on the business service model of digital personal loans in Thailand aimed to study the model of digital personal loan business, standards, and regulations of the Bank of Thailand and the current digital personal loan business market. This is qualitative research that collected data from research papers and related materials, such as books, theses, websites, and related academic documents. The findings revealed that the factors affecting changes in the personal loan business of the service providers are changes in information technology and consumer behavior. As a result, entrepreneurs needed to change traditional personal loan services that relied on only documents to prove income to the new form of personal loan services that rely on information technology to provide services, such as big data analytics, alternative data, and artificial intelligence (AI) and the mobile application for digital personal loan service. Digital personal loan service today is still in the initial stage. Therefore, the Bank of Thailand needs to set standards and regulations as guidelines for the service providers to comply. However, the digital personal loan service of the service providers still relies on the traditional way of personal loan consideration along with modern information technology so the service providers have limitations in reaching new customers or people who do not have full-time jobs or retail traders cannot access personal loan services.

Keywords: Personal Loan, Digital Business, Information Technology, Thailand

Introduction

Traditional personal loan services are limited to a specific group that must be able to prove their income by documents, such as those with a regular income, medium-sized business operators, etc. On the other hand, freelancers and retailers cannot access such services. Nowadays, information technology has been continuously developed and is playing a key role in financial institutions in every dimension. Especially, service providers in the banking business have developed an innovative information technology system as a mobile application to reach consumers by providing ease in making financial transactions. Digital personal loans employ information technology, including artificial intelligence, big data analytics, and alternative data, such as payment data, online products and services, to assess a consumer's capability or willingness to pay debts instead of considering income, such as a pay slip or cash

Citation Information: Sawaengha, P., Thammajariyawat, M., & Leemakdej, A. (2022). The Business Service Model of Digital Personal Loans in Thailand. *Asian Administration and Management Review*, 5(1), 65-71. <https://doi.org/10.14456/aamr.2022.7>

flow in the deposit account to provide personal loans to customers according to the regulations of the Bank of Thailand that allow service providers to provide various loan services and increased volume of loan service, to reduce costs and time, to enhance service efficiency, and to reduce the risk of a non-performing loan (NPL) since digital personal loans have adopted information technology and data alternative in the service. As a result, service providers can better assess a customer's capability or willingness to pay debts. Additionally, those who could not access traditional personal loans are able to access personal loans, and a financial system for the people is created. This will be useful for other financial services in the future.

Related Concepts and Theories

Personal loan under supervision refers to personal loans without assets or property as collateral. According to the Bank of Thailand's announcement, it shall include (1) loans from hire purchase, and leasing of goods that the business operator does not sell in general trade, except for the categories of vehicles and machines, and (2) loans with vehicle registration as collateral. (Bank of Thailand, 2020c: 2-3)

Table 1 Personal Loan Account Balance (excluding loans with vehicle registration as collateral)

Year	2020	2021	2022 (Jan)
Commercial bank	3,283,407	3,792,925	3,849,911
Non-financial business operators	13,678,745	14,851,424	15,604,920
Total	16,962,152	18,644,349	19,454,831

Table 2 Personal Loan Outstanding Balance (excluding loans with vehicle registration as collateral) (Unit: Million Baht)

Year	2020	2021	2022 (Jan)
Commercial bank	228,962	307,094	313,357
Non-financial business operators	351,898	396,327	398,562
Total	580,860	703,421	711,919

Source: Bank of Thailand (2022b)

Normally, the approval by personal loan service providers only considers customers who can prove their income by a document, such as full-time employees and business operators with good financial backgrounds and past payments along with the ability to pay debts throughout the contract. The announcement of the Bank of Thailand specified that loan service providers shall approve personal loan limits as follows: (1) The limit is approximately 1.5 times the income if a customer earns less than 30,000 baht. For example, a person with a monthly income of 20,000 baht shall get the approval of a personal loan of no more than 30,000 baht. (2) The limit is approximately about 5 times the income if a customer earns more than 30,000 baht. For example, a person with a monthly income of 40,000 baht shall get the approval of a personal loan of no more than 200,000 baht with an effective interest rate plus a fee of less than 28% per year with the installment between 12-60 months. (Bank of Thailand, 2020d: 4-5)

Digital personal loans refer to personal loans under supervision, excluding loans with vehicle registration as collateral. Loan service providers have adopted digital technology, such as artificial intelligence, big data analytics, and alternative data such as payment data, goods and services through e-commerce platforms, and utility payments to facilitate the loan approval process more quickly. This includes reaching new customer groups that could not access or had limited access to loans from major financial institutions, such as self-employed people, freelancers, or small retailers who were not able to prove their income by a clear document, as well as low-middle income groups. Apart from increasing opportunities to access loans, it also

promotes digital footprints in the financial system, which will be useful for other financial services in the future. (Bank of Thailand, 2022a)

Table 3 The Comparison between Traditional Personal Loan and Digital Personal Loan Services

List	Traditional Personal Loan Service	Digital Personal Loan Service
Service Channels	<ul style="list-style-type: none"> • Branch • Sales via phone 	<ul style="list-style-type: none"> • Website • Mobile Application
Data for Loan Consideration	<ul style="list-style-type: none"> • Pay slip • Blank Statement • Other documents, such as tax document 	<ul style="list-style-type: none"> • Alternative data, such as payment data, utility payment, online shopping, etc.
Target Consumers	<ul style="list-style-type: none"> • People with a regular income • Small business operators 	<ul style="list-style-type: none"> • Ordinary people and small business operators who have limited access to loans from major financial institutions

Source: Bank of Thailand (2020b)

Alternative data refer to data that are included in the traditional data. For example, the traditional data used for calculating the credit score include income, payment background, sex, age, work experience, etc. (Manason, 2020) to help in decision making. Alternative data can take any form, including individual, organization, and/or government, such as social media usage, transaction, satellite image, climate, credit card usage, location of a person from a mobile phone, etc. (Nopper, 2020)

Big data analytics refers to the process of collecting, managing, and analyzing big data to find patterns of that data and to benefit from the data. (Wuermeling, 2018) Big data analytics requires technology and technique to combine, classify, and analyze data to reveal many hidden values from different big data that are far more complex and larger for more efficiently solving new or existing problems. (Riahi & Riahi, 2018)

Artificial intelligence (AI) refers to a system developed to function similar to a human nerve system for learning, processing, and handling an increased amount of data through a self-learning process that can memorize, think, analyze, learn and link complicated data quickly. (Chitturu et al., 2017) Artificial intelligence also has different meanings, depending on its use, such as industrial robotics or mechanical arms or non-human beings, (Electronic Transaction Development Agency, 2021) such as a software system with human intelligence, including the ability to observe images, forecast, or respond to dynamic environmental conditions. (Chalong, 2018)

Table 4 Examples of Artificial Intelligence Classified by Intelligence Level and Usage

Intelligence Level	Description	Usage Example
Rule Based System	A system assigns tasks for AI under clear conditions (if statement) that are not complicated and commonly used in repetitive tasks.	A computer program simulates conversations (Chat Bot) with a pre-recorded set of answers, such as FAQs by searching through available information, such as greetings.
Context Awareness	A system is more complicated by using machine learning to write massive requirements from the big data with the purpose of working more human-like.	A computer program simulates conversations (Chat Bot) developed with machine learning as a processor. It could be a Q&A data set or old conversations in the past. For example, what the answer to this question is. They can understand similar questions and also learn new information according to the language that changes all the time.
Domain Specific Expertise	A system is developed to be the highest specialized. It can handle huge amounts of data quickly and can automatically improve responsiveness based on new data added.	Google Map can learn the user's personal information, such as places to visit regularly from geolocation to suggest the weather at that location.
Artificial General Intelligence	It is able to respond to all aspects of work which works better than humans.	Artificial general intelligence is currently not available.

Source: Bank of Thailand (2019)

Methodology

This study collected data from related theories to the digital loan business and other related studies, such as books, journals, articles, and academic documents. Then, the data were analyzed to conclude the results.

Results

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Digital personal loan in Thailand is now popular in terms of service providers who were interested in applying for business licenses from the Bank of Thailand and customers that have grown exponentially in number. Therefore, a digital personal loan is a start for a financial business to develop other digital loan services to grow steadily in the financial world. (Bank of Thailand, 2020a: 83-87)

When technology has put financial services into smartphones. Therefore, smartphone behaviors, such as social media, phone location, or online financial services are stored on big data, resulting in alternative data that can be used to assess the individual's capability or intention to pay debts. As a result, financial service operators are aware of the importance of technology with a variety of data and the availability of service users who have access to smartphones to make financial transactions via online channels, such as mobile banking. (Visuthisakchai, 2018)

Apart from those with regular income with clear proof of income, this will provide opportunities to new potential groups, such as freelancers or merchants whose loan applications are often rejected by service providers despite the low amount of loan as there is no proof of

income or regular income with a history of financial losses reported by the Credit Bureau, to access digital personal loans. (Bank of Thailand, 2020e: 6)

Criteria and Regulations of the Bank of Thailand

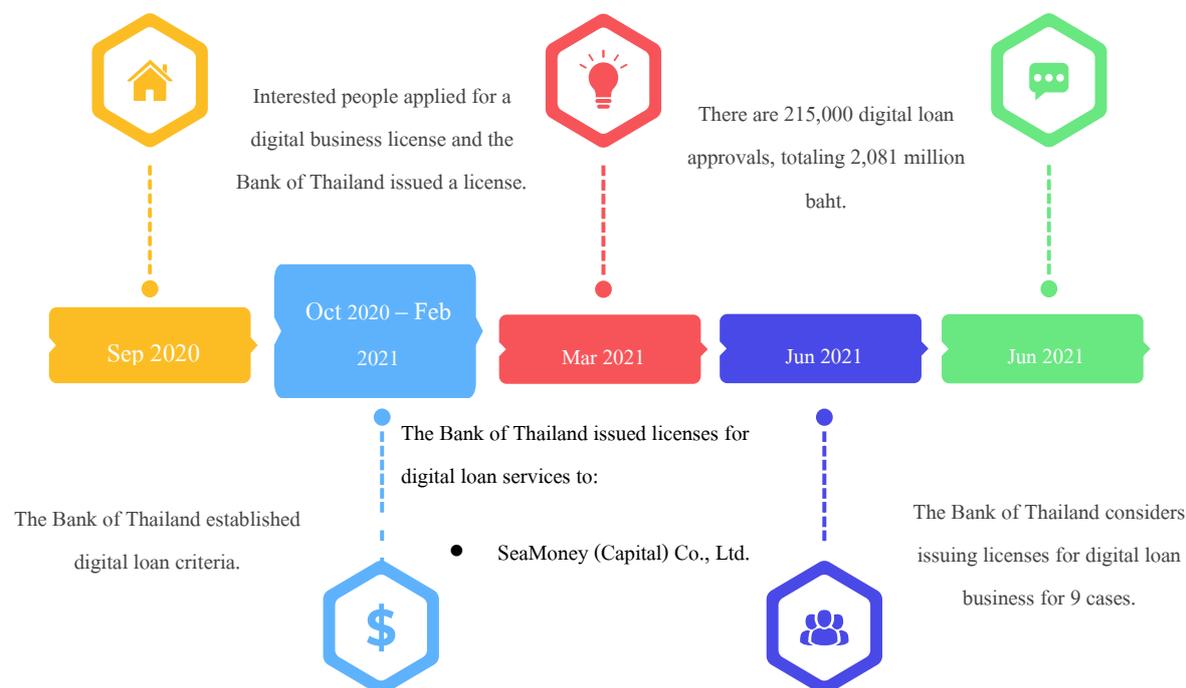


Figure 1 The Timeline of Digital Personal Loan under Supervision by Bank of Thailand
Source: Losereewanich (2021)

The Bank of Thailand has removed some criteria that limit access to loan services for self-employed people or those who cannot provide clear income documents by requiring digital loan service providers to choose alternative data, such as online shopping on the application platform, and history of buying goods and services through online channels. Various data are used to consider a digital personal loan approval instead of proof of income, collateral, and customer's history from the credit bureau report by using digital technology to provide services, including loan approval, starting from applying for a loan, identity verification through e-KYC, risk assessment, money withdrawal, debt settlement via bank account/e-money accounts. Each customer would be informed of a loan limit for use in a career or buying products and services. (Leepitpaiboon & Lertmethapat, 2019)

Based on the terms and conditions of the Bank of Thailand's announcement for digital personal loan services, this reflects the overview of the digital personal loan market in Thailand as follows: (Bank of Thailand, 2020f)

1) Digital personal loan service providers will reach new customers from those who have never accessed personal loans before due to a lack of proof of income. The fact that service providers use alternative data to consider personal loans is an opportunity for operators to reach new customers to expand to digital marketing or other products in the future.

2) The interest rate of digital personal loans based on the latest announcement by the Bank of Thailand lowered costs. Previously, digital personal loans had an interest rate as high as 36 percent per year as many service providers used Pico-financing licenses to provide a service. When compared to the interest of informal loans which may be as high as 50 percent per year, informal debtors might use more formal loan services. While some operators in the market already used alternative data, they may provide another type of personal loan business at a lower interest rate. (Losereewanich, 2021)

Today's Digital Personal Loan Business Marketing

Apart from alternative data, the factor encouraging the digital loan market to grow is the investment in digital technology of service providers as it provides opportunities for new service providers in the market. This is because digital loan services require digital technology, including big data analytics, artificial intelligence (AI), machine learning, and application platform to reduce operating costs and make the loan approval process faster to meet customers needs. (Nopper, 2020) Due to the development of digital technology, the cost of loan services is reduced. Consequently, service providers might lower the interest rate as well. This will lead to an increase in the personal loan service recipient as an opportunity for the market to expand.

Conclusion and Suggestion

The changes in digital technology and consumer behavior today changed traditional personal loan to digital personal loan services. As a result of such change, operators who provided traditional personal loan services have changed their service by using digital technology more. The service provision through branches has changed to through the mobile application or the service provider's website with alternative data to consider loan approval which previously relied on financial documents, such as a pay slip, a bank statement, sales documentation, etc. As a result, service providers can reach new customers who are self-employed or retail traders apart from the existing customers who can only prove income from documents. Factors of changes in digital technology and consumer behavior and alternative data also provide opportunities for new operators, with a customer database in the former business, such as a signal service business, to enter the market. This leads to higher competition which may result in the development of new innovations or interest rate competition, causing benefits to the customers. Another factor that contributes to the development of digital personal loans in Thailand is the Bank of Thailand's announcement about digital personal loan services that reduce some rules according to the current context.

However, digital personal loans in Thailand are still in the initial stage. In practice, service providers still use some traditional loan approval criteria. The approval of a small amount and shorter loan periods might be a limitation for the customer's decision to choose a digital personal loan. Moreover, there is a lack of solid information on non-performing loans (NPL) and legal processes. So, new service providers or operators might not be able to clearly assess the risks of the digital loan business. As a result, the sales of the digital personal loan market would not meet the goal.

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