

SWOT Analysis of Financial Technilogy Implementation on The Quality of Banking Services in Indonesia

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Abstract: *The implementation of financial technology (FinTech) has significantly transformed the banking sector in Indonesia, impacting the quality and accessibility of services offered. This study examines the strengths, weaknesses, opportunities, and threats (SWOT) associated with the adoption of FinTech in the banking industry. Using a qualitative approach, data was collected from industry reports, case studies, and expert interviews to provide a comprehensive analysis. The results highlight several strengths, including improved efficiency, enhanced customer experience, and expanded financial inclusion. However, weaknesses such as high operational costs and cybersecurity risks remain prevalent. Opportunities for growth lie in the increasing digital literacy and government support, while threats include intense competition and regulatory challenges. This study concludes that while FinTech presents significant potential to elevate banking service quality in Indonesia, its success depends on addressing key challenges through strategic innovation and robust policy frameworks.*

Keywords: *FinTech, SWOT analysis, banking services, financial inclusion, Indonesia*

1. INTRODUCTION

The rapid growth of science and technology in today's digital era has profoundly impacted human behavior, especially in the way people access information and electronic services. In Indonesia, one of the key areas of focus is Financial Technology (FinTech) in the banking sector. The National Digital Research Centre (NDRC) defines financial technology as innovations within financial services, driven by the combination of "finance" and "technology." This definition reflects the integration of modern technology with financial services to enhance the efficiency and security of transactions (Sukma, 2016). FinTech encompasses various digital financial services that are expanding in Indonesia, including payment systems, digital banking, online insurance, Peer-to-Peer (P2P) lending, and crowdfunding (Siregar, 2016). This aligns with the statement of Tris Yulianta, Deputy Director of Licensing and Banking Information at the Financial Services Authority (OJK), who highlighted that banks should adopt FinTech to improve operational efficiency and service quality. As the demand for online financial services rises, leveraging FinTech solutions becomes crucial (Apriyani, 2016).

The advancement of technology in banking has also streamlined transaction systems between customers, leading to increased time efficiency (Firmansyah and Widiati, 2016). This is supported by a 2015 survey by the Indonesian Internet Service Providers Association (APJII), which revealed that internet users in Indonesia grew from 71.9 million in 2013 to 88.1 million in 2014, covering about 34.9% of the population (Heriyanto, 2015). This indicates the

substantial adoption of digital technology in Indonesia, outpacing the combined population of other ASEAN nations. It has also influenced various sectors, such as e-commerce, digital communication, online publications, public transportation, and FinTech (Siregar, 2016). From 2014, when there were 83.7 million users of financial technology and internet access, there has been a noticeable increase in adoption, signaling a major shift in digital engagement across the country.

Table 1 below (Julianto 2016):

Table 1 List of the Top 25 Countries by Internet Users Rank 2013-2018

No	Country	2013	2014	2015	2016	2017	2018
1.	China	620,7	643,6	669,8	700,1	736,2	777,0
2.	Amerika Serikat	246,0	252,9	259,3	264,9	269,7	274,1
3.	India	167,2	215,6	252,3	283,8	313,8	346,3
4.	Brazil	99,2	107,7	113,7	119,8	123,3	125,9
5.	Jepang	100,0	102,1	103,6	104,5	105,0	105,4
6.	Indonesia	72,8	83,7	93,4	102,8	112,6	123,0
7.	Rusia	77,5	82,9	87,3	91,4	94,3	96,6
8.	Jerman	59,5	61,6	62,2	62,5	62,7	62,7
9.	Meksiko	53,1	59,4	65,1	70,7	75,7	80,4
10.	Nigeria	51,8	57,7	63,2	69,1	76,2	84,3
11.	Inggris	48,8	50,1	51,3	52,4	53,4	54,3
12.	Perancis	48,8	49,7	50,5	51,2	51,9	52,5
13.	Filiphina	42,3	48,0	53,7	59,1	64,5	69,3
14.	Turki	36,6	41,0	44,7	47,7	50,7	53,5
15.	Vietnam	36,6	40,5	44,4	48,2	52,1	55,8
16.	Korea Selatan	40,1	40,4	40,6	40,7	40,9	41,0
17.	Mesir	34,1	36,0	38,3	40,9	43,9	47,4
18.	Italia	34,5	35,8	36,2	37,2	37,5	37,7
19.	Spanyol	30,5	31,6	32,3	33,0	33,5	33,9
20.	Kanada	27,5	28,3	28,8	29,4	29,9	30,4
21.	Argentina	25,0	27,1	29,0	29,8	30,5	31,1
22.	Kolombia	24,2	26,5	28,6	29,4	30,5	31,3

23.	Thailand	22,7	24,3	26,0	27,6	29,1	30,6
24.	Polandia	22,6	22,9	23,3	23,7	24,0	24,3
25.	Afrika Selatan	20,1	22,7	25,0	27,2	29,2	30,9

Sumber: www.eMarketer.com dalam Julianto (2016)

2. LITERATURE REVIEW

Although the number of internet users in Indonesia continues to rise each year, the adoption of financial technology for banking services remains relatively limited. A survey by Sharing Vision, conducted on six major banks in Indonesia, reported 5.7 million internet banking users in 2012. Table 2 illustrates the growth in internet users over the years. However, when compared to the total population, the proportion of people using the internet for banking services remains relatively small (MRI Writing Team, 2016).

Table 2: Internet Users in Indonesia Based on Customer Data from Six Banks (2012-2015)

Year	Population	Internet Users (%)	Internet Penetration (%)
2012	240,000,000	22%	26%
2013	245,000,000	30%	34%
2014	248,000,000	37%	44%
2015	250,000,000	42%	56%

Source: Sharing Vision, processed from various sources (2013) in MRI (2016).

In addition to the low adoption of financial technology, uneven access to banking services across the country remains a significant issue, particularly in remote, outermost, and underdeveloped (3T) areas. This challenge is further exacerbated by a lack of familiarity with banking products and services among certain segments of the population, leaving them vulnerable to exploitation by unethical actors (Habibi, 2016).

Problem Statement

Based on the issues outlined above, the main research question is:

"How effective is the implementation of financial technology in improving banking service quality in Indonesia, when evaluated through strengths, weaknesses, opportunities, and threats (SWOT), and how can it better serve all segments of the population, particularly in 3T areas?"

Research Objective

This study aims to address the problem by conducting a literature review on finance and banking. The insights gained from this research are expected to provide recommendations for banking management to improve the quality of services delivered through advanced financial technology, ensuring better accessibility for all Indonesians.

3. HYPOTHESIS FORMULATION

Definition of SWOT Analysis Banking Service Quality SWOT Analysis

SWOT analysis is a strategic tool used to evaluate an organization's internal strengths and weaknesses, alongside external opportunities and threats (Kotler & Armstrong, 2008:64). It provides insights into how a company can leverage its strengths, address its weaknesses, capitalize on opportunities, and mitigate threats (Hartono, 2005:46). According to David (2006:8), every organization has distinct strengths and weaknesses in its functional areas, which can guide the formulation of objectives and strategies. In the context of this discussion, SWOT analysis is employed to assess banking service quality, aiming to reduce institutional weaknesses and minimize the impact of external threats.

Banking and Financial Technology in Indonesia

As discussed earlier, the integration of digital technology into everyday life has significantly influenced societal behavior in Indonesia. Digital transformation is evident in areas such as e-commerce, social interactions, digital media, transportation services, and financial technology (Siregar, 2016). Quantitative studies also highlight how digital technology adoption has made economic activities more efficient, particularly in the financial sector, with banking being a key beneficiary (Margaretha, 2015). In response to these changes, Bank Indonesia introduced initiatives to enhance financial service accessibility nationwide. In May 2013, a pilot project for branchless banking was conducted in collaboration with five banks and two telecommunications companies across several provinces, including West Java, Central Java, East Java, Bali, and South Sumatra. The program aimed to assess public and provider interest, explore suitable business models, and draft regulations tailored to Indonesia's needs. This branchless banking initiative relied heavily on mobile technology and partnerships with local agents (Bank Indonesia, 2016). These efforts have significantly bolstered the performance of banking institutions, enabling them to offer improved services through financial technology systems. Financial technology is recognized as a pivotal element in advancing financial inclusion and promoting digital banking in Indonesia (Julianto, 2016). Sutojo (1997:119) emphasizes that advancements in electronic data processing, now synonymous with financial

technology, have substantially enhanced the efficiency of data processing, reporting, and product marketing in the banking industry. Similarly, information systems have profoundly influenced banking operations, which are heavily reliant on data collection, processing, and delivery to meet customer needs (Kurnia et al., 2015). Given its crucial role, the Indonesian banking sector continues to be a key player in maintaining financial system stability (Financial Services Authority, 2016:5). The integration of financial technology is expected to extend banking services to underserved areas, particularly 3T regions (Frontier, Outermost, and Remote). The Financial Services Authority (OJK) actively supports these efforts by developing financial technology systems tailored for the financial services industry, including banking applications in Indonesia (Fajriah, 2016).

4. RESEARCH METHODOLOGY

Service Quality in Banking: Definition and Key Dimensions

Quality refers to a dynamic state that influences products, services, processes, and environments to achieve or exceed expectations (Tjiptono, 2001). Service, as defined by Kotler (2002:83), involves intangible actions or activities provided by one entity to another without resulting in ownership. Service quality, therefore, is the effort to address customer needs and deliver outcomes that align with their expectations (Tjiptono, 2001). For organizations, especially service providers, ensuring effective implementation of quality standards is essential (Supranto, 2006:226).

In the banking sector, the quality of services can be measured by comparing customer perceptions with the expected service standards. If customers perceive the service as meeting or surpassing their expectations, it is considered high quality. Conversely, if the service falls short, it is deemed inadequate.

Customer perceptions play a vital role in determining their loyalty and willingness to recommend a bank to others. Positive experiences often lead to stronger loyalty, as observed by Nursiana (2015). Similarly, Tobing et al. (2016) argue that loyal customers tend to share favorable feedback, influencing others' perceptions of the service.

The evaluation of banking service quality often relies on five core dimensions (Lupiyoadi, 2001:148):

1. **Tangibles:** Physical elements such as buildings, tools, and employee appearance, which represent the organization's capability to deliver services.
2. **Reliability:** The consistency and accuracy of delivering promised services.

3. **Responsiveness:** The speed and willingness to assist customers and provide clear communication.
4. **Assurance:** The knowledge, professionalism, and courtesy of employees that build customer trust.
5. **Empathy:** A personalized approach to understanding and meeting customer needs.

In summary, service quality is a significant factor influencing customer satisfaction in the banking industry. Banks that consistently provide excellent services can strengthen customer loyalty and maintain their credibility in a competitive landscape.

Definition and Dimensions of Service Quality in Banking

Research Methodology

This study employs a descriptive qualitative research approach. Such research focuses on gathering comprehensive and current data, identifying problems, comparing or evaluating findings, and analyzing how similar challenges have been addressed by others. The ultimate goal is to use these insights to develop strategies and make informed decisions for the future (Suyanto & Sutinah, 2006). Descriptive qualitative research emphasizes describing responses to specific events or situations without delving into causal relationships or hypothesis testing.

5. ANALYSIS AND DISCUSSION

SWOT Analysis of Financial Technology Implementation in Banking Services

The adoption of financial technology in banking brings significant advancements by providing faster, more convenient, and secure services, enabling greater accessibility for communities across Indonesia. Below is an in-depth analysis based on the SWOT framework:

Strengths Analysis

The application of financial technology in Indonesian banking institutions offers the following advantages:

1. Improved access to comprehensive banking service data and the ability to perform transactions anytime, anywhere.
2. Enhanced outreach to underserved populations, particularly in remote and underdeveloped regions (3T areas).
3. Reduced operational and marketing expenses through partnerships between banks and fintech service providers, allowing broader distribution of banking products.
4. A variety of widely recognized banking products, including 24/7 services such as mobile banking, internet banking, SMS banking, and call banking (Rahadi & Zaniat,

2015). While these services are not yet fully utilized by all, collaborations between banks and fintech providers simplify public access to such services.

Weaknesses Analysis

Despite its strengths, financial technology implementation in banking institutions has several limitations:

1. Dependence on stable and high-speed internet connections, which are crucial for seamless financial transactions. Unreliable internet access can disrupt banking services.
 2. The risk of cyber threats such as hacking, fraud, and other forms of online crime, leading to public hesitation in adopting digital transactions and maintaining a preference for physical bank branches.
 3. The presence of unlicensed fintech providers may result in unauthorized or improper transactions, posing risks to both customers and banking institutions.
1. The public's relatively low level of knowledge about financial technology limits their ability to maximize the use of banking services. This necessitates collaboration between the government (represented by the Financial Services Authority or OJK and Bank Indonesia), banking institutions, and financial technology service providers to promote the use of financial technology.
 2. Disparities in access to banking services due to uneven communication technology infrastructure between urban and 3T regions make online financial transactions challenging, preventing optimal use of banking services.

Opportunities Analysis

The opportunities associated with implementing financial technology in Indonesian banking institutions include:

1. The growing public awareness of saving and borrowing financial resources through banking services, as they are considered safer and more profitable. This is accompanied by expectations of high-interest returns on savings and relatively affordable interest rates on loan transactions.
2. The presence of the Financial Services Authority (OJK) as a regulatory body dedicated to improving the inclusivity and security of financial services in Indonesia.

Financial Services Authority (OJK)

The OJK (Financial Services Authority) sets regulations and oversight for banking financial transactions, thus minimizing banking criminal activities and reducing public concerns about using financial technology services provided by banking institutions.

Threats Analysis

The threats associated with the implementation of financial technology in Indonesian banking institutions are as follows:

1. The use of increasingly advanced technology by financial technology service providers, but without a corresponding improvement in the quality of banking human resources, leading to imbalances in serving the public who use these banking services.
2. The global trend of globalization and openness in conducting cross-border transactions, which allows for a variety of financial technology service providers, increasing competition in attracting public interest to use banking services.
3. Political instability and relatively high inflation in Indonesia lead banking institutions to be more cautious in providing loans to the public, resulting in more complex banking bureaucracy and higher administrative fees for the public as collateral.

6. CONCLUSION

Conclusion

Based on the analysis of strengths, weaknesses, opportunities, and threats (SWOT) related to the implementation of financial technology, it can be concluded that financial technology has a high effectiveness in improving the quality of banking services in Indonesia. Banking management can implement this technology to reach all segments of the Indonesian population, especially those in remote, outermost, and underdeveloped (3T) areas.

Limitations and Recommendations

While financial technology has proven to be effective in improving the quality of banking services in Indonesia, its implementation is still relatively new, and there is a lack of relevant financial literacy studies concerning this technology. Therefore, follow-up efforts are needed from the government, OJK, banking practitioners, and financial technology service providers to conduct more in-depth, ongoing studies on the implementation of this technology in Indonesia.

Thus, banking institutions and financial technology service providers need to establish structured, mature collaborations with the government, particularly with Bank Indonesia (BI) and OJK. This collaboration aims to minimize the weaknesses and threats related to banking financial transactions, ensuring that every element of society can access the features and products offered by banking institutions in Indonesia quickly, safely, and beneficially for their financial needs.

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