

Detection Implementation of Risk Management for Commercial Digital Banking

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Abstract

This study aims to analyze the detection of risk management implementation related to the digital era in banking. Risk management is a process that includes identification, analysis, and handling of risks that may arise in the operations of an institution or business. In the digital context, risk management prioritizes the identification of potential risks in digital processes, as well as how these risks are anticipated, minimized, or managed so as not to interfere with operational performance and sustainability. The method used in this research is descriptive qualitative. This research shows that risk management in the digital era in banking can run well and in accordance with applicable regulations. Effective implementation in identifying, analyzing, and managing digital-related risks allows banks to avoid potential losses and maintain operational sustainability. Investment security, organized liquidity, good reputation, and business sustainability are positive outcomes of successful risk management. Nonetheless, banks need to continuously monitor, adapt and evaluate risk management measures in the digital era to remain relevant and effective in the face of changing conditions that may occur in the future.

Keywords: *risk management; digital era; banking, sustainability, performance.*

1. Introduction

Banking or bank is a company engaged in finance, meaning that banking activities are always related to the financial sector. The definition of a bank in Law Number 10 of 1998 dated November 10, 1998 amending Law Number 7 of 1992 concerning banking, which states that a bank is a business entity that collects funds from the public in the form of deposits and distributes them to the public in the form of credit and or other forms in order to improve the lives of many people (Kasmir, 2013: 24). Funds that have been successfully collected by banks are allocated in various forms of fund allocation, one of which is lending. According to Law No.10 of 1998 concerning banking, what is meant by credit is the provision of money or bills that can be equated with it, based on a loan and borrowing agreement between the bank and another party which requires the borrower to pay off the debt after a certain period of time with interest (Kasmir, 2013: 85). The more funds that are channeled, of course, the greater the potential for default which will lead to non-performing loans. This results in the risk borne by the Bank from the issuance of

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products and the implementation of activities becoming higher. The increase in risk borne by the Bank must be balanced with adequate risk control. To control these risks, the Bank needs to improve the quality of risk management implementation. Efforts to improve the quality of risk management implementation are not only intended for the interests of the Bank but also for the interests of customers. One important aspect in protecting the interests of customers and in the context of risk control is the transparency of information related to the Bank's products or activities. Through improving the quality of risk management implementation, banks are expected to be able to better measure and control the risks faced in conducting their business activities. Furthermore, improving the quality of risk management implementation by banks will support the effectiveness of the risk-based bank supervision framework conducted by Bank Indonesia (PBI No. 11/25/PBI/2009). The situation of the external and internal banking environment that is experiencing rapid development followed by the increasingly complex risks of banking business activities increases the need for healthy (good) bank governance practices. The risk classification used by a bank is in accordance with the classification set by Bank Indonesia, among others: Credit risk, Market risk, Liquidity risk, Operational risk, Legal risks, Strategic Risk, Compliance Risk, Reputation Risk. The risk management implementation process includes risk identification, measurement, monitoring and control activities. Risk identification is proactive, covering all of the Bank's business activities and is conducted in order to analyze the source and likelihood of risk and its impact.

Furthermore, the Bank needs to measure risk in accordance with the characteristics and complexity of business activities. In monitoring the results of risk measurement, the Bank establishes a Risk Management Work Unit to monitor levels and trends and analyze risk direction. In addition, the effectiveness of risk management implementation is supported by risk control by considering the results of risk measurement and monitoring. Risk and banks are inseparable in line with the development of bank digitalization in Indonesia. The development of information technology has changed the business strategy of the business world including banking by placing information technology as a major element in the production process or service delivery. In addition, the development of information technology has also encouraged innovation in the field of services including banking services. The increase in banking risk is in line with the development of system digitization in banking. In the era of banking digitalization, one of the digital products being implemented is electronic transaction is one of the new forms of bank service delivery channel development that has changed the banking business strategy which originally relied more on human technology to information technology. This activity uses the internet network as an intermediary or link between the customer and the bank without having to visit the bank office. Customers can use desktop computers, laptops, tablets, or smartphones connected to the internet network as a link between the customer's device and the bank system. The current pandemic has changed people's views on the use of E-banking. Bank services in the form of E-banking seem to have become a necessity. The digital era in the banking world is a form of service transformation that must be socialized to customers, digitalization becomes very important when the covid-19 period hits Indonesia. The implementation of risk management includes: risk identification, measurement, monitoring and control activities. Risk identification is proactive, covering all business activities of the Bank and is carried out in order to analyze the source and possibility of risk and its impact. Furthermore, the Bank needs to measure risk in accordance with the characteristics and complexity of business activities. In monitoring the results of risk measurement, the Bank establishes a Risk Management Work Unit to monitor levels and trends and analyze risk direction. In addition, the effectiveness of risk management implementation is supported by risk control by considering the results of risk measurement and monitoring. In order to support the process of risk identification, measurement, monitoring and control, the Bank also develops a management information system that is tailored to the characteristics, activities and complexity of the Bank's business activities.

2. Literature Review

2.1 Risk

Risk and banks are two things that cannot be separated from each other, without the courage to take risks, there will never be a bank, in the sense that banks appear because of the courage to risk and even banks are able to survive because they dare to take risks. However, if the risk is not managed properly, the bank can fail and eventually go bankrupt. In the large Indonesian dictionary, risk is the possibility, danger, loss, unpleasant consequences of an action, business, and so on. According to Soehatman Ramli (2010: 27), risk is a combination of the likelihood and severity of an event. The amount of risk is determined by various factors, such as the amount of exposure, location, user, quantity and vulnerability of the elements involved. Risk according to Pandia (2012: 199) is the threat or possibility of an action or event that has an impact that is contrary to the goals to be achieved. In other words, risk is the possibility of suffering losses due to the loss of part or all of the capital. Risk itself is caused by uncertainty. From the above notions of risk, we can conclude that risk is always associated with the possibility of something detrimental happening that is unexpected/unexpected. Thus this risk has characteristics:

- a) Is the uncertainty of the occurrence of an event
- b) It is an uncertainty that, if it occurs, will cause loss.

So uncertainty is a condition that causes risk. Uncertainty conditions themselves arise for various reasons, including:

- a) The grace period between the planning of an activity until the activity ends, where the longer the grace period, the greater the uncertainty.
- b) Limited available information required for the preparation of the plan.
- c) Limited knowledge/decision-making ability of planners.

2.2 Risk Management

In relation to risk management, the Bank is required to carry out sound risk management. According to Pandia (2012: 198), the definition of risk management in simple terms is the implementation of management functions in risk management, especially the risks faced by organizations or companies, families and communities. So it includes activities of planning, organizing, compiling, leading/coordinating, and supervising (including evaluating) risk management programs. Bank Indonesia through Bank Indonesia regulation No.5/8/PBI/2003. Dated May 19, 2003 which is described in more detail in the attachment to Bank Indonesia's circular letter No.5/21/DPNP Dated September 29, 2003 explaining the definition of risk management is, a series of procedures and methodologies used to identify, measure, monitor, and control risks arising from bank business activities. The risk management process is the action of all related entities in the organization. Continuous actions are carried out in line with the definition of risk management that has been stated, namely: identification, quantification, determining attitudes, determining solutions, and monitoring and reporting risks, as follows according to Pandia (2012; 201); Risk Management Process, as follows:

1) Conduct Risk Identification and Mapping

Risk identification aims to systematically find the risks (potential losses) that a business may face. In this case, if the risk is not identified, it means that the business bears the risk unconsciously.

2) Quantify Assess/Rank Risk

Apply modeling techniques in measuring risk and expansion by utilizing benchmarking, modeling, and forecasting from outside the organization. External sources include industry best practices.

3) Confirm Risk Profile/Risk Management Plan

Identify the organization's risk appetite, whether management is generally risk averse, risk neutral, and risk seeker.

4) Risk Solution Implementation of Mitigation Measures

a) Avoidance

The decision taken is not to carry out the activity in question. This means that the bank does not have to make a decision not to carry out activities / actions that are detrimental to the bank itself.

b) Transfer

It means sharing the risk with another party. Consequently, there are costs that must be incurred or share the profits obtained.

c) Mitigate Risk

This means accepting risk at a certain level by taking action to mitigate risk through improved control, process quality, and clear rules for the implementation of activities and risks.

d) Retention of Residual Risk

This means accepting the risks that may arise from the activities undertaken. The availability of accepting this risk is associated with the availability of a buffer if losses on risk occur.

2.3 Monitoring and Updating/Review of Risks and Controls

In the preparation of a credit application, the discussion of risk aspects aims to explain whether the business is feasible to finance in the event of changes in the elements of marketing, technology and production and financial feasibility. The study of this risk aspect is mainly to present and analyze: first, the factors that affect the size of the risk of business failure that may be faced by entrepreneurs. Second, the risk aspect in a business feasibility analysis if in the future it turns out that this business will be proposed and financed by the Bank. Third, the formulation of steps that need to be anticipated to get out of the risk of business failure. In the context of a risk management organization, the Bank must certainly be able to create a risk management function that is independent of the Risk-Taking Unit. So, there must be supervising and being supervised. The Bank must develop policies, methodologies and infrastructure that can protect the Bank from losses due to risk in every aspect of its activities. In its policies, the Bank must determine its tolerance level for risk that remains consistent with its business strategy, and the strategy itself must state the objectives to be achieved in terms of risk and return targets.

3. Result and Discussion

Evaluation of the risk management of digital banks can be used as an example of a case at BRI bank where BRI Bank is a commercial bank that uses digital banking. BRI recorded an increase in transactions using e-banking in March 2020 by 86% on an annual basis or year on year (yoy). This increase was partly influenced by transaction trends that have begun to shift to digital and due to the socialization of the use of electronic channel services during the COVID-19 pandemic. Many types of transactions can be carried out using BRI e-banking, starting from non-financial ones such as balance information and account mutations (can make it easier for customers to be able to check checking accounts to ensure that every transaction made is correct and can avoid theft of savings funds) to financial transactions such as transfers, bill payments and credit purchases. Some of these transactions are free of administration fees. So, customers do not need to worry about

administrative costs which are one of the burdens of using electronic channel services. Director of Finance and Operations of BRI, Wahyu Avianto said there were five transaction features that were most frequently used by customers during the February-March 2020 period, including transfers between BRI / BRI accounts, payments through virtual accounts, interbank transfers, topping up electronic money balances and purchasing prepaid credit. BRI also provides benefits for its customers who are prospective pilgrims by providing the option of paying the Hajj Pilgrimage Travel Fee (BIPIH) through non-teller, namely through BRI mobile banking so that customers no longer need to come to the branch for registration and activation of mobile banking. For customers and prospective pilgrims who want to register and activate BRI mobile banking can be done through the link <https://bit.ly/PelunasanHajiBRIS1>. BRI e-banking users do not require customers to register and verify at the nearest branch office by using a website or application that can be installed via PlayStore or AppStore registration and verification can be done anywhere and anytime. BRI e-banking can also be activated and used for transactions abroad. Despite the benefits and convenience of all business transactions, there are risks involved. We cannot avoid these risks but we can prevent them to minimize the threat of loss. Risks that occur can approach the bank and its customers. The risk that is often experienced by customers in general is forgetting or incorrect User-Id / password transactions 3 times in a row can cause blocking of e-banking facilities, especially BRI mobile banking and the most fatal if the customer loses the cellphone that has been activated BRI mobile banking can be misused for non-financial transactions and does not rule out the possibility that it can also be misused for financial transactions. In Bank Indonesia Regulation No. 13/23/PBI/2011 concerning the Implementation of Risk Management for Commercial Banks and Business Units, it is stated that there are ten risks faced by commercial banks including credit risk, market risk, liquidity risk, operational risk, legal risk, reputation risk, strategic risk, compliance risk, yield risk and investment risk. Researchers argue that some of these risks are related to bank health and can be caused by irregularities that occur in electronic channel services (BRI mobile banking and internet banking) including liquidity risk, operational risk, legal risk, reputation risk, strategic risk and compliance risk.

- 1) Liquidity Risk can occur if the customer does "Rush Money" or
- 2) continuous financial transactions that exceed the limit set by the bank in the electronic channel which results in the bank being unable to fulfill its obligations to customers.
- 3) Operational Risk can occur if there is human or system error. Errors that occur can be in the form of fraud, dishonesty or errors in management and e-banking systems.
- 4) Legal Risk can occur if there is an e-banking service that causes customers to report the behavior to the authorities so that the settlement deals with the law.
- 5) Reputation risk can be interconnected with legal risk because if the bank's services violate the law, it can cause the bank's image or good name to be bad so that the bank loses customer confidence.
- 6) Strategic Risk can occur if there are mistakes or inaccurate decisions that cause failure to anticipate changes in the business environment.
- 7) Compliance Risk can occur if the bank does not follow the applicable rules or regulations and deviates from prudential principles and principles.

The implementation of risk management includes at least four pillars, namely:

- 1) Active supervision of the Board of Commissioners, Board of Directors and Supervisory Board.
- 2) Adequacy of risk management policies, procedures and limit setting.

- 3) Adequacy of risk identification, measurement, monitoring, and control processes as well as risk management information systems, and
- 4) Comprehensive internal control system

The implementation of the four pillars of risk management, among others, is carried out by the following functions:

- 1) Organizational designations and functions, among others:
 - a. The Risk Monitoring Committee (RMC) is a commissioner-level committee that assists the Board of Commissioners in supervising the Board of Directors' Risk Management policies and implementation.
 - b. The Risk Policy Committee is a committee that assists the Board of Directors in the Implementation of BRI Risk Management. KKR meetings are held at least once every three months.
 - c. Enterprise Risk Management Division (ERD), which is a work unit that functions to manage and control risks in BRI. ERD is independent from the Operational Unit and Internal Audit Work Unit.
- 2) Preparation and implementation of the General Risk Management Policy (KUMR) and other Risk Management policies, as well as preparing corporate guidelines and implementation instructions as one of the guidelines for carrying out the Bank's operations.
- 3) Establishment of risk limits and implementation of stress testing.
- 4) Establishment of risk measurement and monitoring tools and methodologies consisting of Credit Risk, and Operational Risk.
- 5) Development of risk management information systems, including calibration of parameters in the Electronic Financing Origination (eFO) system for credit risk management, optimization of the use of the Traffic Light system for credit risk monitoring, development of the Loss Event Database module in the Operational Risk Tool (PERISKOP) for operational risk.

BRI's risk management assessment for this year can be done by analyzing quarterly financial reports (March 2020). Liquidity risk mitigation can be done by monitoring bank liquidity using liquidity ratio calculations which can be calculated using one of the financial ratios, the Financing to Deposit Ratio (FDR) or in conventional banks known as the Loan to Deposit Ratio (LDR), which is the ratio between the amount of the lending side (funds distributed) and the amount of the funding side (funds collected). In BRI's quarterly financial report, it is known that the Financing to Deposit Ratio (FDR) in the financial ratio report table has an amount of 71.93%. It can be seen that if the bank has an FDR of 100% then the bank has been very effective in distributing financing, this means that the bank is right on target in providing financing. So, BRI is good enough to fulfill customer obligations offline and online. E-banking operational risk can be carried out with the Operational Risk Tool (PERISKOP), which serves to measure and identify operational risk. PERISKOP consists of two parts, namely Risk and Control Self Assessment (RCSA) which serves to identify operational risks in each unit and Loss Data Event (LED) which serves as a record of operational risk events and losses that have occurred. PERISKOP self-assessment filling is carried out every quarter by all units at the head office and at branch offices. Electronic Corporate Guidelines (ECG), which serves as an online corporate guideline that can be accessed by every employee to carry out daily operational activities. The quality and improvement of the risk management information system continues to be improved and monitored periodically in order to have a positive influence in achieving the company's business targets. Compliance risk control can provide benefits for banks to avoid a bad image or good name and can avoid misuse of bank services that can cause

banks to deal with the law. BRI has a risk culture that aims to maintain its reputation. So, to avoid reputational risk, compliance risk and legal risk BRI employees must:

- 1) Maintaining the company's credibility through sound business practices, upholding the trust given by customers, shareholders and the community.
- 2) Work based on prudent principles and principles.
- 3) Behave in accordance with the corporate culture and in accordance with the BRI Code of Ethics.
- 4) Upholding the principles of company secrets and job secrets.
- 5) Developing a culture of compliance and an anti-fraud culture.
- 6) Carrying out activities and business activities based on BRI's vision and mission and referring to the business plan that has been set.
- 7) Referring to BRI risks in accordance with applicable regulations, in order to support the creation of optimal company performance so as to establish a good corporate reputation.
- 8) Upholding responsible transparency in accordance with GCG practices.
- 9) Environmentally sensitive and responsive to the needs of all stakeholders.

4. Conclusions and Recommendation

Analysis of risk management in e-banking services, it can be concluded that BRI e-banking services provide security and convenience for customers in conducting online transactions. Since its launch, BRI e-banking has never experienced cases of crime or irregularities. Complaints that have occurred are the problem of not being able to use the e-banking feature but behind that BRI has a reason why it is not allowed, one of which is due to the negligence of the customer himself. Therefore, BRI conducts risk management on its e-banking services to anticipate threats that occur. In implementing risk management, BRI refers to Bank Indonesia Regulation No. 13/23/PBI/2011 concerning the Implementation of Risk Management for Commercial Banks and Business Units. In addition, to minimize the risk of BRI providing safe tips, requirements, how to register in accordance with the procedure and the limitation of transaction limits in the use of E-banking to avoid fraud, fraud and misuse. These suggestions include:

- 1) Reinforce the rules for using e-banking so that customers are not negligent in their use because it can harm customers and BRI Syariah.
- 2) Add Law No. 11 of 2008 on electronic information and transactions in the policy of protecting customers who use e-banking services (internet banking, mobile banking, sms banking).

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