

Innovation In the Digitalization Of Bank Services And Some Implications Of Case Study In Bank NTT Indonesia

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INTRODUCTION

Banking digital transformation 0069s structured by prioritizing the balance principle between digital banking innovation and prudential aspects to maintain bank performance in a healthy condition (prudent, safe and sound banking). In addition, the digital transformation blueprint carries the principle of neutral technology, that it does not regulate technical aspects related to technology (Zameer et al., 2018). The banking transformation blueprint contains 5 (five) main elements, namely data, technology, risk management, and institutional arrangements (Thanitcul & Srinopnikom, 2019). The digitalization innovation carried out by the NTT bank takes into account the environmental context, such as uncertainty, strategic orientation and market orientation, current conditions of the tendency for economic stagflation due to the Russian and Ukrainian wars, as well as the culture of the people of NTT which is reflected in the language used (Jayawarsa et al., 2020). Recognizing the existence of technological developments and the challenge of providing the best service to customers has encouraged Bank NTT to replace the core banking system (CBS) (Nuwagaba & Brighton, 2014).

Bank NTT has started to make changes from design concepts with an analogy approach (design by analogy approach) to basic principles (first principles) within the bank 4.0 framework through efforts to implement digitization as a manifestation of innovation (Ayadi et al., 2017). Bank NTT's innovation was also marked by the application of smarth branches towards bank digitization, *B'pung Mobile Service* innovation and On-line On-Boarding service development, *Be'pinjam* for consumer credit, *Be'Ju Bisa Laku Pandai* Bank NTT consists of: (1) Online Services such

as Electricity Tokens, Credit Payments, Online Samsat, Healthcare and Social Security Agency (*BPJS Kesehatan: Badan Penyelenggara Jaminan Sosial Kesehatan*), Electricity Bills, Pay TV, Local Taxes; (2) mini ATMs such as Cash Withdrawals, Cash Deposits, NTT Bank and Interbank Transfers; *Lopo Dia Bisa*; Kiosk K; NTT Weaving, *B'pung Petani*, capital innovation idea; changes in organizational structure, changes in corporate culture, updating SOPs, implementing key performance indicators (KPI) based on a balance sheet score card / BSC (Cescon et al., 2016), building a Penta helix partnership. A shared awareness actually triggers the idea of innovation among bank management about the problems they are facing (Jayawarsa, Purnami et al., 2021). The problems faced are urgently resolved through change that the initial step of change is raising a feeling of urgency so that people start telling each other, "we must do something." about problems and opportunities (Chamidah et al., 2020).

The research objective is to examine digitalization innovations at Bank NTT. Indications of empirical research problems that are signaled are service digitization innovations that are carried out that tend not to be fully optimal, which refers to Bank Indonesia policies regarding payment systems, there are still failures in purchasing credit, transfer failures from NTT banks to other banks, credit purchase transaction failures, there is still credit problematic as a result of a violation of the application of bank prudential principles as a manifestation of a tendency to behave fraudulently or fraud (Saputra et al., 2022), and opportunity, as well as the presence of an element of uncertainty, a shift in

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inherent risk from credit risk to operational risk (Saputra et al., 2020), the cost of third party funds (DPK) tends to be expensive, the tendency is not optimal operational cost efficiency (BOPO) (Saputra et al., 2022) So that it has an impact on company profits (Harelimana, 2017). Thus the main research problem is how to model digitalization innovation at NTT banks.

Literature Review

The capacity for innovation is a major element in organizational strategic planning related to new processes, products and technologies. (Prima Lita et al., 2020). Innovation is part of the focus of study on learning organizations as a discipline of organizational intelligence. Tuan (2021) further stated in their research that organizational learning and innovation are sources of strategic fit. Therefore, innovation is part of the study of organizational strategy in dealing with competition (Groen et al., 2017).

Innovation is needed because true business faces intense competition, complexity, and uncertainty (Desmaryani, 2017). These various elements are characterized, among others, by the rapid development of fintech, the spread of the Covid-19 pandemic (Saputra, 2021), and the tendency of stagflation due to the war between Russia and Ukraine. Therefore, a strategic business response is needed, namely: (1) retrenchment, (2) persevering, (3) innovating, and (4) exit. Innovation refers to understanding 3 (three) main concepts, namely the entrepreneur concept, the technology concept, and the strategy concept (Diener & Špaček, 2021). First, the concept of the entrepreneur as an innovator was actually put forward by Schumpeter (1934), which refers to the classical view of individuals who found new companies. However, the concept of an entrepreneur does not only apply to new companies doing business (He et al., 2015).

Second, the technology concept puts forward technological analysis from the aspect of type and function (Salihu et al., 2019). The view of Aryadinata dan Samopa (2019) suggests that technology only applies to

material objects. However, Mufingatun et al. (2020) put forward material objects, including knowledge and technological thinking. While Munoz-Leiva et al. (2017) explained that technology is not only a material object but also includes work organization regarding the use of technology, management of technological processes and technology policies.

Third, the concept of strategy refers to the phenomenon that the company is (1) an image of the market and the basis of existence, (2) an image of what will be done in the future, and (3) an idea of what must be done to survive. Apart from that, the concept of strategy also refers to planning processes that are quantitative in nature or processes that are intuitive – a shot in the dark, or processes that are highly political in nature or develop outside the individual internal work – entrepreneurs (Adler, 2011; Diener & Špaček, 2021; He et al., 2015).

Innovation can also be studied from the perspective of transaction cost theory, where the company is seen as an open system that is involved in obtaining information and knowledge (Diener & Špaček, 2021; Kusuma et al., 2021). This information and knowledge are created as a basis for innovation for sustainable competitive advantage (Susanto, 2017). Epistemologically, knowledge creation refers to an ongoing relationship between tacit and explicit knowledge that encourages the creation of new concepts or ideas. (Murtaza et al., 2021). There are at least 5 (five) phases of knowledge creation: (1) sharing tacit knowledge – considered quite critical because sharing knowledge involves different backgrounds, motivations and perspectives. This process is called socialization, (2) creation of concepts – intensive interaction between tacit and explicit knowledge, sharing of mental models, organizing independent teams, articulating these concepts through ongoing dialogue in the form of collective reflection. Shared tacit mental models are verbalized in the form of words, phrases, then crystallized into explicit concepts; so that in such a phase related to externalization. Converting tacit knowledge to explicit knowledge is facilitated through various methods such as deduction, induction, and forced transfer (3) concept

justification, where new concepts created by individuals or teams must be justified into procedures. The justification process involves determining whether the newly created concept is useful for the organization and society (4) building archetypes; (5) then serving as a cross-level organizational knowledge (Bach et al., 2020; Diener & Špaček, 2021).

The innovation process, apart from being based on the knowledge creation process, also refers to identifying environmental problems that need to be analyzed and evaluated and forming value propositions. According to Lew et al. (2020), the requirements for obtaining a satisfactory theory of innovation must pay attention to the following, namely: (1) the ability to identify various issues – analysis and problem-solving; (2) the predictive ability and identify future needs/problems of the main environmental system; (3) provide objective criteria to assess the novelty of the concept; (4) is objective – independent of the user; (5) universal – works on any system. In addition, the service innovation typology must consider the context, namely environmental uncertainty, strategic orientation, and market orientation (Turner et al., 2017).

RESULT AND DISCUSSION

Service Digitalization Innovation

Bank NTT is one of Indonesia's 26 regional development banks (BPD). Bank NTT aims to become a healthy, strong and trusted bank. Based on this vision, the mission of the NTT bank was formulated: (1) to be a pioneer in driving the people's economy, (2) to explore potential regional sources to be exploited productively for the welfare of the people of NTT, (3) increasing sources of local revenue, (4) optimizing the bank's intermediary function through collecting and distribution of funds to the public in the form of credit. Bank NTT has carried out activities as a bank since July 17, 1962, and on February 04, 1998, the NTT bank changed to a Limited Liability Company from previously being a Regional Company. Bank NTT has 1 head office and 24 branch offices spread throughout the districts and cities of East Nusa Tenggara province. The number of bank NTT employees at the end of 2022 is 1,985, consisting of 1,549 permanent employees, 3 monthly employees, 2 mechanical electricals (ME) contract employees, 252 administrative contract

employees, and 178 teller administration contract employees. Innovation in digitizing NTT bank services was accelerated due to the covid 19 pandemic. As a result of the covid 19 pandemic has impacted various aspects of people's lives, including the banking industry (Alsetoohy et al., 2022; Putri & Saputra, 2022; Saputra, 2021). In Indonesia, 107 commercial banks are operating, including 26 Regional Development Banks (BPD). Growth in total assets, growth in third-party funds, and growth up to the position of June 2022 or year-to-date and year-on-year growth can be presented in table 1.

Table 1. Growth in Total Assets, DPK, and Credit
Year-to-date and Year-on-year

No	Indicator	BPB	Commercial Banks
<u>Year-to-date growth</u>			
1	Total Asset Growth	Rp 45,71 trillion (5,30%)	Rp 195,69 trillion (1,94%)
2	Deposit growth	Rp 53,93 trillion (7,91%)	Rp 122,83 trillion (1,64%)
3	Credit Growth	Rp 19,49 trillion (3,78%)	Rp 408,28 trillion (7,08%)
<u>Year-on-year growth</u>			
1	Total Asset Growth	Rp 85,66 trillion (10,42%)	Rp 897,25 trillion (9,53%)
2	DPK Growth	Rp 71,88 trillion (10,83%)	Rp 635,95 trillion (9,13%)
3	Credit Growth	Rp 36,55 trillion (7,32%)	Rp 595,07 trillion (10,66%)

Source: National Seminar on the Board of Commissioners Forum of All Indonesian Regional Development Banks (FKDK BPDSI), Labuan Bajo NTT, August 03, 2022

From the aspect of BPD financial indicators compared to commercial banks in the aggregate is presented in table 2.

Table 2. BPD Financial Ratios compared to Commercial Banks

No	Indicator	BPD Aggregate Ratio as of June 30, 2022	Commercial Bank Aggregate Ratio as of June 30, 2022
1	CAR Ratio	22,31	24,73
2	ROA Ratio	2,15	2,37
3	BOPO Ratio	75,39	78,46
4	NIM Ratio	5,51	4,69
5	LDR Ratio	72,81	81,25
6	NPL Gross Ratio	2,42	2,86

Source: National Seminar on the Board of Commissioners Forum for Indonesian Regional Development Banks (FKDK BPDSI), Labuan Bajo NTT, August 03, 2022.

While the financial ratios of BPD NTT as of June 30, 2022, when compared to BPD in Indonesia in general, can be presented in table 3.

Table 3. Financial Ratios BPD NTT

No	Indicator	NTT BPD ratio as of June 30, 2022	BPD Aggregate Ratio as of June 30, 2022
1	CAR Ratio	25,36	22,31
2	ROA Ratio	1,55	2,15
3	BOPO Ratio	84,87	75,39
4	NIM Ratio	7,07	5,51
5	LDR Ratio	79,48	72,81
6	NPL Gross Ratio	2,60	2,42

Source: BPD NTT, Financial Report for Semester I 2022

Bank NTT's CAR ratio and BPD aggregate ratio are sufficient because they are above the minimum of 8%, the ROA ratio is healthy (1.25% - 2%), the BOPO ratio is still below the maximum limit of 90%, the NIM ratio is still quite good because it is above 6%, the LDR ratio is relatively adequate, ideally 80-90%, thus the NPL ratio is still below the psychological threshold set at 5%. However, it was found that there were still bad loans. Bad credit results from various factors, including violations of prudential principles, and tends to behave fraudulently and opportunistically (Williamson, 1975, 1985, and 1995). Due to the existence of bad loans, reserves are needed that are prepared to face the risk of impairment losses (impairment losses). With a decrease in credit growth, a synergy was created with the directorate of funds and treasury, namely reducing credit interest rates and maintaining them in the 12-14% range. Now there is a Bank Indonesia's policy that sets a policy of interest rates below 2 digits, and NTT banks follow this Bank Indonesia's policy to suppress expensive funds, implemented bulk SMS as a means of promotion so that there were 3,525 potential debtors who confirmed their interest in applying for credit. From the aspect of the soundness level, the NTT bank has occupied a healthy position, as presented in table 4.

Table 4. Assessment of Bank NTT Soundness Level

No.	Indicator	OJK Assessment Des. 2021	Assessment Bank NTT
1.	Risk Profile	2	2
2.	Good Corporate Governance (GCG)	3	3
3.	Profitability	2	2
4.	Capital	2	2
*	Composite	2	2

Source: Bank NTT Health Report June 2022

The research findings show that in bank services, there is an existing model or a generic model (see Hanfizadeh and Marjaie, 2021) for NTT banks which can be presented in table 5.

Table 5. Model Existing Model - Bank NTT
Generic Model

Key Aspects	Various Aspects of Main Activities	
1. Business Operations	a. Funding, credit, treasury and placement services.	
	b. Withdraw cash and transfer using a card through automated teller machines (ATMs).	
	c. Accounting and tax payments	
	d. Perform billing on troubled debtors.	
	e. Change of main banking system (core banking system/CBS).	
	f. Increasing the capacity of human resources for business operations.	
	g. Research and Development	
2. Bank Business Support	a. General	
	b. Asset, liability committee (ALCO)	
	c. Human Resource Management	
	d. Legal Activity	
	e. Procurement of goods and services activities	
	f. Bank soundness level self-assessment	
	g. Obedience	
	h. Risk management	
	i. Corporate Secretary (CORSEC)	
	j. Cooperation with various	
		parties
		k. Record management
		a. Internal supervision and advice by the board of commissioners
		b. Audit by the internal audit work unit (SKAI)
		c. Micro-supervision and assessment of bank soundness level by financial services authorities
	3. Supervision	d. Macro supervision by Bank Indonesia regarding the national payment and clearing system as well as real-time gross settlement (RTGS)
		e. Auditing by an independent KAP auditor and a financial audit agency (BPK)

Source: Research Findings

Because of the OJK policy regarding the transformation of bank digitization and BI policies regarding the Payment System, the rapid development of financial technology, competition, and Covid 19 has encouraged NTT banks to innovate in the form of digitization - mobile banking such as *Lopo Dia Bisa*, *B'pung Mobile*, *B'pung Petani* and Smarth Branch, real-time online call center 14013. Bank NTT has been implementing digitization innovations for 4 (four) years. Digitization innovation at NTT banks was supported by changes in the use of core business technology (CBT) from the old CBT to the new T24 CBT. The innovation of digitizing/electrolyzing the NTT bank started to be put in place in 2018 (Riwu Kaho, Alexander in Bayu Prawira Hie, 2021: 223 – 229). Digitalization-based product

innovation targets local government segmentation as the main customer (prime customer) of NTT banks, the private sector, and the general public. In the government segmentation, the NTT bank presented an innovative cash management system (CMS) service product, namely local government finances wholly managed by the NTT bank, and the management of 9 (nine) local taxes, namely hotel taxes, restaurant taxes, entertainment taxes, advertisement taxes, street lighting taxes, , tax on non-metallic minerals and rocks, parking and groundwater taxes.

The advantage of the CMS service is that there is a concentration of revenue, minimized leakage, and the average number of transactions is IDR 1 trillion per month. Digitalization of services in education and health (hospitals) and mobile banking services were also presented (Priya et al., 2018). The purpose of mobile banking services for local governments, the private sector, and communities/individuals is to increase competitiveness and efficiency of operational activities and obtain non-interest income, namely fee-based income. (Aryadinata & Samopa, 2019). The NTT bank is developing digitization applications in the education sector to expand the reach or connectivity between parents, students, teachers and schools to create a quality generation. Through this application, parents can monitor their child's academic development, fulfill their child's educational obligations, and all payment systems are accommodated in this application. (Predana et al., 2020). Through mobile banking, literacy is realized for various parties in the context of financial inclusion (Jayawarsa, Saputra et al., 2021). In 2019 *Dia Bisa* (a digital NTT bank agent) was introduced to students and the public. There are at least more than 5,000 digital NTT bank agents who are seen as new entrepreneurs.

Bank NTT's innovative form was created by the *Lopo Dia Bisa* application to map the potential of an economic ecosystem based on local potential, especially in the tourism segment, creative businesses such as cafes and digital lounges active 24 hours. In addition, the NTT bank has a network strength spread across 24 districts/cities in NTT that also reaches villages through the fostered village model, the flagship village. There are at least 3

(three) approaches used, namely the business approach, the contribution approach to the region, and the tourist destination approach (Predana et al., 2020). Based on these three approaches, a new business model/innovation emerged as a breakthrough, namely the birth of a financing ecosystem and an ecosystem for developing superior potential in tourist destinations or superior villages. In 2021 the NTT bank was conducting a mobile banking Top Up in which there are super apps, namely various services in one application (first introduced by Mike Lazaridis, 2010). The results of an in-depth interview with the main director of the NTT bank (22 – 03 – 2022) stated:

“Digital innovation/transformation in the banking world has reached a point of disruption where the NTT bank reacted to it as a momentum to be able to accelerate the improvement and development of various business potentials, business processes, becoming a super smart bank which has an impact on good governance, meeting the needs of service users, increasing profits, increasing contribution to regional development as an agent of development. Bank NTT's digital transformation is strengthened by controlling and mitigating various inherent risks, especially operational risks. The digital transformation steps carried out at the NTT bank are gradual, quality and sustainable, accompanied by an increase in the capacity of soft skills, hard skills, and digital programmer talents. NTT, geographically and topographically with islands and special characters, provides a profitable opportunity for Bank NTT to become a Regional Championship Bank. The strength of the breadth of the existing office network compared to other competitors is optimally utilized with a smart service strategy through the development of new digital-based business models”.

This statement means that several digital transformation steps started with the NTT bank upgrading the core banking system so that bank operations were more flexible and dynamic, accompanied by changes in the diversification of various funding and credit products which were preceded by research, mastery of data, data analysis gave rise to optimism that the NTT bank has the power resilience, competitiveness and ability to grow with different superior values. By achieving a healthy level of Bank health, the dynamics of digital transformation at Bank NTT are accelerating with optimism for positive growth. Smart Branch, Digital Lounge, Smart Teller, BPung Mobile Application services that are in accordance with developments in payment system technology as well as Financial Services Authority (OJK) and BI (*Bank Indonesia*) policies and regulations, NTT banks provide QRIS applications, BI Fast, Cardless Cash Withdrawals, including Be Loan (digital loan) services, specifically for MSMEs and Consumers). Bank NTT pursues a strategy of collaborative work and synergy alliances with a pentameric approach creating a close loop-based financing ecosystem that starts from villages with superior potential development. The stages of business expansion are supported by using a data warehouse to become a dashboard to drive smart bank business development in digital transformation at Bank NTT.

Specifically, the innovation idea at the NTT bank was initiated by research by the division to obtain the required data. The results of an interview with (Salmon Terru, head of the IT supporting division – now a research and development division, 07 – 07 – 2021)...the digital innovation of the NTT bank with various service feature ideas was obtained based on our capture results from the habits of our customers. This is possible because of the leader's discretion, which characterizes the transformational leadership style in realizing digitalization innovations (Gupta, 2012). This means that the source of knowledge comes from outside, which is absorbed into the NTT bank. This strengthens the view of Diener and Špaček (2021) that external knowledge is important for knowledge creation, and knowledge creation is the basis of innovation.

Bank NTT has provided a new experience - the basic principles for customers in making transactions using the Android application (Predana et al., 2020).

The results of this research were accompanied by informal and formal brainstorming among directors and division heads as well as individuals according to their respective fields of assignment. Through this brainstorming, it is possible to share ideas, experiences and mental models (shared knowledge and experience and mental models) so that they become shared knowledge of the division. This is important because this knowledge is still in the form of ideas, experiences, and mental models embedded in each individual's mind as tacit knowledge/implicit knowledge. (Baumard et al., 2013). This knowledge and experience are most difficult to absorb from the perspective of the Four Modes of Knowledge Creation theory, where the conversion of tacit knowledge to tacit knowledge is called socialization. Further innovation ideas were also discussed in the Financial Services Authority (OJK) prudential meeting forum (Baptista & Oliveira, 2016).

So that the pattern of knowledge creation in the context of innovation is not only cross-level internal to the organization but also includes external relations between organizations, and this is the difference between this research and the view Diener and Špaček (2021). In addition, the differences in the findings of this study mainly lie in the context and typology of the companies. If the study of Diener and Špaček (2021) is built on empirical experience in pure private companies and the environmental context has not yet occurred Covid 19, then the development of theory in this study in terms of locus is based on pseudo-private companies (NTT banks) where management follows business principles, but mostly Bank capital is dominated by provincial, district and city governments (series A shares) and a small portion belongs to the public (series B shares). Third, bank management, annual performance achievements, capital payments, and bank business plans must be reported and accounted for to NTT bank owners, namely 1 (one) provincial government as the controlling shareholder, 23 district governments and 1 city government in the annual GMS as the highest

forum in accordance limited liability company law.

In addition, the innovation developed is the development of contextual innovation theory by taking into account environmental uncertainties such as the impact of Covid 19 on the NTT bank business, historical factors because loans provided by NTT banks are still dominated by consumption credit, and the use of the local diction *B'Pinjam* which comes from the Kupang language (B means *Beta* or I, *Pinjam* in Indonesian means borrow). The research findings show that innovative ideas at Bank NTT can originate from within the company, namely employees, through the discretion and autonomy granted by the directors in order to meet customer needs in providing services. (Munoz-Leiva et al., 2017). The dynamics of innovation at the NTT bank are still relatively moderate because the innovation climate needs to be fully running well. The results of in-depth interviews with bank consultant Fanani (16 – 03 – 2022) state that:

“The dynamics of innovation in BPD are generally still relatively moderate. The point is to realize the importance of innovation but not have a strong desire to innovate. A strong desire can be in the form of providing human resources, work units, financing and providing an innovation 'climate.' Only a few BPDs consciously innovate to meet the needs and expectations of their customers. The main challenge is the awareness that innovation is the only way to maintain business continuity and gain a sustainable competitive advantage/SCA. The Bank carries out various innovations to retain outgoing customers and meet the needs of society/customers to deal with the complexity and dynamics of the environment. Innovation is very important/important and urgent/urgent for Regional Development Banks (BPD), including Bank NTT.”

This statement means that the ideal innovation implemented by Bank NTT in the Covid 19 Era is innovation in capital and services based on electronic banking that supports the business growth of Bank NTT and can regulate and describe the targets of OJK provisions and applicable laws and regulations, especially those related to covid-19 as the basis for policies, provisions, internal systems and procedures at Bank NTT.

Bank NTT's innovation is to strengthen the core capital base of 3 trillion rupiahs by 2024, as mandated by Financial Services Authority Regulations (PJOK: Peraturan Otoritas Jasa Keuangan) 11 of 2016 concerning the Minimum Capital Adequacy Requirement for Commercial Banks. If the core capital of 3 trillion cannot be met, according to the OJK regulations, the Bank will merge, consolidate, acquire or build a joint business group (KUBE). As an example, KUBE implementation has been implemented between BPD Lampung and BPD West Java (BJB), for NTT banks, according to the decision of the extraordinary general meeting of shareholders/EGMS on February 10, 2021, as follows: (1) capital injection by provincial, regency and city series A shareholders, and individual series B shareholders, (2) the lack of capital will be invited investors to invest in Bank NTT, but not as a controlling shareholder with a portion of under 25%. In terms of capital, according to the governor of East Nusa Tenggara, who is also the controlling shareholder/of PSP Bank NTT, in the future, the NTT bank must run with 2 engines. Engine 1 is capital sourced from Series A and Series B shareholders. Meanwhile, Engine 2 is capital sourced from investors, which means it adheres to the acquisition model according to POJK 11 of 2016. However, based on developments in capital contributions by provincial, district and city governments in NTT, it has now reached IDR 2.01 trillion, not including the 50% payout dividend as paid-in capital, so it is almost certain that by the end of 2024, the capital deposited by NTT banks can reach 3 trillion according to the POJK.

PT Bank Pembangunan Daerah NTT continues to innovate in increasing lending through improving services in the digital era in the form of developing an electronification-

based service system (Susanto, 2017), where Bank NTT already has an application to make it easier for prospective borrowers in the NTT region, namely the customer onboarding application (COB) and loan origination system (LOS) whereby the application makes it easier for prospective debtors to process credit distribution services, prospective debtors will be served directly by officers from the place of activity of prospective debtors, so that services will be more efficient and effective (Priya et al., 2018). Bank NTT is transforming its operational system development towards a super smart bank, namely innovating in the digitalization era in the form of additional service features, including loan application features such as initiation of consumer credit applications through Kiosk K and Bank NTT mobile banking, making it easier for prospective debtors to process applying for a consumer credit loan amid the covid-19 pandemic situation. The results of an in-depth interview with Helena Herlina Seni Sae - Candidate for Head of the Credit Supporting Division (September 06, 2021), stated that:

“Credit expansion in the era of the Covid-19 pandemic was carried out through the creation of new products in the form of credit schemes for houses of worship and the development of independent micro products by increasing the independent credit limit from 5 million rupiahs to 10 million rupiahs so that it could encourage micro business on the one hand, and at the same time breaking the chain of loan sharks, improving the Smartbank KIOSK Application from just a submission application (specifically for Multipurpose Loans), moving forward to the disbursement stage, and new products for instant credit, accompanied by a continuous increase in credit HR capacity through education and training.”

The research findings show the idea of innovation in the form of creativity at the

dictional level, namely combining the acronyms for the names of the major islands in NTT (FLOBAMORA - Flores, Sumba, Timor, and Alor) with NTT bank standard products to become an innovation product for Flobamora Dia Bisa Savings, combining words/terms IT, for example, mobile banking pay becomes NTT pay mobile banking where customers can make non-cash transactions (electronic banking) through Android phones (without having to come to the bank) such as interbank transfers, paying telephone bills, subscription TV, electricity, Healthcare and Social Security Agency (*BPJS Kesehatan: Badan Penyelenggara Jaminan Sosial Kesehatan*), pay *QRIS*, *PDAM*, *e-PBB P2*, *Samsat* and others; merging the name of the traditional house on the island of Timor (*Lopo*) with the word IT digital to become *Lopo Digital Bank NTT*, the *B'pung Petani* application, merging the local language and the language of international technology standards that have never been found in various banks and have never existed before in NTT banks, namely *B'Pung Mobile*, which refers to the Kupang language, means *Beta Punya Mobile* or I Got Mobile because it's easy to remember and as an integral part of one's own (Aryadinata & Samopa, 2019; Gupta, 2012; Priya et al., 2018), *B'pung Petani*, namely *Beta Punya Petani*, or My Farmers. This means that creativity and innovation occur at the level of diction up to its implementation as part of a marketing promotion that relies on the value of a sense of language as a power to support the use of technology owned by NTT banks.

CONCLUSION

Based on the pattern of innovation carried out by the Bank NTT fund division strengthens the theoretical view that Bank NTT is an open system involved in seeking information and knowledge, then this information and knowledge is created as a basis for innovation. Epistemologically, created knowledge refers to an ongoing relationship between tacit and explicit knowledge that encourages the creation of new concepts or ideas. Even though these new ideas are in the minds of individuals, ontologically, the critical factors for developing and sharing knowledge

lie in individual, group, organizational and inter-organizational relationships. The relationship is referred to in the context of Bank NTT, where individuals and groups are given autonomy to search for information and create knowledge as a basis for innovation. At the same time, granting autonomy in the framework of knowledge creation as a basis for innovation is a sign that transformational leadership is needed. The information obtained is created through formal institutions through meetings to realize the innovation concept. Furthermore, the concept of innovation is socialized through exposure to the concept of innovation. So it is submitted across levels and inter-organizations to obtain approval from the board of directors in a circular manner.

The concept of innovation is reviewed under the coordination of the directorate of compliance and the risk management division, which involves both the organs of the board of commissioners (BOC) - the board of commissioners - the chairman and members of the risk monitoring committee, as well as the board of directors. Implementing these innovative ideas can be realized due to the use of Bank NTT's new IT system, namely T24. Procurement of a new IT system must obtain consideration and approval from the Bank Indonesia Representative of East Nusa Tenggara Province and the Financial Services Authority (OJK) and a compliance and risk review. Involvement across levels of external and internal institutions of Bank NTT is primarily intended to make procuring and utilizing the New IT system more prudent due to various inherent risks, including operational risk, reputation risk and legal risk.

Furthermore, during the current crisis, the strategic choice taken by Bank NTT was to innovate and reorganize the organizational structure rather than leave the business altogether. Bank NTT is also carrying out organizational transformation where it is necessary to have a new directorate, namely the Directorate of Information Technology / IT, which must obtain approval from the GMS and OJK. Specifically, the general directorate was previously changed to the information technology and operations directorate in accordance with the mandate of the EGMS on

October 18, 2021, in Kupang. The Indonesian Banking Development Roadmap (RP21) issued by the OJK contains directions and guidelines for short-term development as well as gradual development over a period of 6 (six) years. The short-term development aims to optimize the role of banking in accelerating the national economic recovery process due to the impact of the Covid-19 pandemic. Meanwhile, structural development is aimed at strengthening the national banking system so that it has better and higher competitiveness and makes a more optimal contribution to the national economy.

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