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Comparative Analysis of the Implementation of Open Banking Systems for Indonesia's 2025 National Payment System Vision

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Abstrak

Industri keuangan telah dikelilingi oleh teknologi digital yang dikenal dengan FinTech. Tren saat ini memiliki pengaruh signifikan yang mempengaruhi cara masyarakat berinteraksi dengan industri perbankan. Konsekuensinya, pasti ada kebelakang dan keuntungan yang mengikuti situasi ini. Namun apakah hal tersebut akan menjadi ancaman atau peluang tergantung pada masa depan bank dalam menghadapi situasi baru tersebut. Dalam tulisan ini akan menguraikan pilihan bank untuk mengakuisisi atau bekerja sama dengan perusahaan fintech dalam menvesuaikan posisi mereka dalam gangguan keuangan mempertahankan permintaan persaingan. Perbankan terbuka merupakan awal penyesuaian atas kendala Fintech. Indonesia akhir-akhir ini mulai membangun visi masa depan pembayaran digital untuk mendukung keseimbangan antara sistem pembayaran keuangan disruptif yang didominasi oleh fintech. Beberapa negara telah berupaya menerapkan perbankan terbuka, namun tampaknya negara lain lebih memilih mengikuti Australia dibandingkan Inggris yang telah memulainya lebih awal. Yurisdiksi lain seperti Kanada, Singapura dan India sedang mempertimbangkan pendekatan Australia dibandingkan pendekatan yang kurang ekspansif seperti yang awalnya dilakukan di Inggris (Australia menunda peluncuran rezim 'perbankan terbuka'). Oleh karena itu, merupakan upaya yang tepat bagi Indonesia untuk mengambil pendekatan vang tepat yang mungkin dapat diterapkan berdasarkan strategi Australia dan kerangka peraturan yang dibuat khususnya dalam tinjauan makalah Open Banking, mengingat Indonesia masih dalam tahap tersebut. Tulisan ini bertujuan untuk menganalisis bagaimana Indonesia (bank sentral Indonesia) harus menerapkan sistem perbankan terbuka, dengan mempertimbangkan pendekatan dan penerapan Australia Open Banking dalam bidang perlindungan data, mekanisme transfer data (standar keamanan) dan proses transformasi ke dalam sistem perbankan terbuka.

Kata Kunci: Industri Keuangan; Visi Masa Depan Indonesia; Perbankan Terbuka

Abstrak

Financial industry has been surrounded by digital technology that known FinTech. This current trend has significant influence which affect the way people interact with banking industry. Consequently, there must be backwards and benefits that following this situation. However, whether it will be a threat or opportunity depending on banks' future to experience the new situation. In this paper will elaborate the option of bank to acquire or work with fintech firms in adjusting their position into financial disruption and retain the competition demand. Open banking is a start adjustment over Fintech constraints. Indonesia lately has started to build future vision for digital payment to support the balance between disruptive financial payment system dominated by fintech. Some countries have been working on implementing open banking, but it seems like other countries prefer to follow Australia than UK which has started earlier. Other jurisdictions such as Canada, Singapore and India are considering the Australian approach rather than the less expansive approach as has been initially taken in the UK (Australia delays launch of 'open banking' regime). Therefore, it would be an appropriate attempt for Indonesia to reach out the appropriate approach that might be able to be implemented on Australia strategies and regulatory framework created particularly in review into Open Banking paper, considering that Indonesia is still in the stage. This paper aims to analyse how Indonesia (central bank of Indonesia) should implement open banking system, considering Australia Open Banking approach and implementation in the subject of data protection, data transfer mechanism (security standard) and transformation process into open banking system.

Keywords: Financial industry; Indonesia Future Vision; Open Banking

INTRODUCTION

Currently, the financial industry has greatly influenced by technology or more technology focused known as FinTech (BCBS, Responding to Fin Tech Challenge, 2020). This emergence has strong implications towards banking industry. Fintech offer existing financial services at lower costs, and to offer new tech-driven solutions. For this circumstance, it is said that FinTech companies are the biggest threat for incumbent financial institution (Zoran Temelkov). However, whether it will be a threat or opportunity depending on banks' future plans. Hence banks need to acquire or work with fintech firms to adjust with financial disruption and retain competition (Pwc, 2016).

Open banking is the best way to start the adjustment over FinTech constraints (McKinseyCompany, 2017). It creates a way to a tremendous amount of data to understand consumers preference and needs. With more players in the financial services ecosystem, banks should aim for

collaboration over competition. A collaborative model in which banking data is shared with third-party players, is expected to revolutionize the financial services ecosystem (Reno Albra, 2020). Sharing data consumers through open banking system could mean better control over their finances. Some countries or jurisdictions have been implemented open banking system even though not using similar way or terms yet still focusing on sharing data with third party. Indonesia as the ASEAN's second-largest economy which has the most unbanked individuals, presenting an incredible opportunity for fintech growth and banks (Accenture Bankung Blok, 2018).

In November 2019, Indonesia has created future vision for digital payment to support the balance between disruptive financial payment system dominated by fintech (Indonesia Payment System Blueprint, 2025). Recently, in March until May 2020, central bank of Indonesia had followed up the plan for open banking system initiative by issuing a consultative paper to collect views and feedback from stakeholders and all element in regarding central bank initiative to launch open APIs for open banking developing system (Consultative Paper Open API Standards). However, there are still potential risks in sharing data, which is why it is critical to develop processes and governance underpinning the technical connections. (The Basic of Open Banking, 2019). The arising issue due to privacy concern over sharing data has tried to cover under Indonesia personal data bill proposal. This data protection and data technical transfer or mechanism will be looking further in Australia Data Protection under Consumer data right and data transfer mechanism recommended in Review paper.

Some countries have been working on implementing open banking, but it seems like other countries prefer to follow Australia than UK which has started earlier. Other jurisdictions such as Canada, Singapore and India are considering the Australian approach rather than the less expansive approach as has been initially taken in the UK (Australia Delays Launch of Banking Regime). Therefore, it would be an appropriate attempt for Indonesia to reach out the appropriate approach that might be able to be implemented based on Australia strategies and regulatory framework created particularly in review into Open Banking paper, considering that Indonesia is still in the stage.

This paper aims to analyse how Indonesia (central bank of Indonesia) should implement open banking system, considering Australia Open Banking approach and implementation in the subject of data protection, data transfer mechanism (security standard) and transformation process into open banking system.

RESEARCH METHODS

This paper uses library research by reading a number of literature and normative regulations due to financial regulation and data protection in Indonesia and some countries. The specification of this research is descriptive and the collection of legal materials will be analysed normatively to direct into legal concepts and framework that has possibility to be applied in Indonesia.

RESULT AND DISCUSSION

1. Fintech and Open Banking

a. FinTech Implicatioan

Fintech (Financial Technology) refers to the technology usage to offer new solutions in financial services (PwcFintech, 2016). Start-ups and other technology companies which provide and deliver digital system as a payment tool are clear example of FinTech. The Basel Committee on Banking Supervision prefer to use broad definition of Fintech as "technologically enabled financial innovation that could result in new business model, application, processes or products with an associated material effect on financial market and institutions and the provisions of financial services" (BCBS, 2018).

FinTech covers both incumbent and entrants in describing a wide array of innovations. Fintech innovation offers opportunities for all users of financial services. However, the emergence of this fintech leads banks to become offense while at the same time should play defence to be able compete with the new disruptive innovation in financial payment areas (See PwcFintech). Most incumbents are still seeking for appropriate approach to compete with the FinTech emergence. Basically, they can implement innovations like FinTech. by adopting its system, using technology to solve costumer problems and provide their needs in simple measures. FinTech companies operates lower cost that has attracted the bank's customer gradually (Zoran Temelkov).

b. Open Banking and APIs

Open Banking (OB) is being implemented in the United Kingdom (UK) and in the EuropeanUnion (EU) (More Likely to Divorce than Switch Banks vs AU Open Banking 2019). In May 2017 the Government announced its intention to introduce an OB regime in Australia. Although the UK, the EU and Australia differ in aspects of scope and implementation, in essence Open Banking comprises three key elements:

- 1. Customers having greater access to and control over their banking data
- 2. Banks being required to share product and customer data with customers and
- 3. With the consent of the customer, banks being required to share product and customer data with accredited third parties. The accreditation of third parties is addressed in rules produced by the Australian Competition and Consumer Commission (ACCC). (Open Banking Goes Live)

To stay relevant with their costumer, banks should come out from its traditional system and rethink the way they should approach the customer needs and expectations. (Its Now Open Banking). Banks needs to change the traditional system approach, product-siloed way of perceiving commercial customers to close the gap between what customers want from bank and what banks enable to provide. Open banking is commonly seen as the best approach improving costumer lifestyles in financial ecosystem (Finextra Research, 2019). Open banking has momentum to be implemented because regulators has handed support and even push this new system as a mandatory (A Shared Opportunity, 2019). Because of this ahead regulator support, open banking is unlikely to be a short-lived trend and may help the incumbent financial institutions to embrace the opportunity to work on this new system at this time.

Open Banking started with the Payment System Directive 2 regulation for Europe since 2018 and now has been adopted in Australia, several parts of Asia, Latin America and many other regions and jurisdictions. (The Basic of Open Banking, 2011). It comprises three key features through its implementation, greater access and control for consumer banking data; financial institutions in sharing customer data under consumer's consent; and data shared by financial institutions should be referred to accredited third party providers. (Emma Leong, 2019).

It is a move towards greater transparency and open data in the banking sector which gives consumers greater freedom over their data and creates more competition by allowing third parties to more easily participate in the space. (The Basics of Open Banking, 2011).

Open Banking requires all financial institutions to work with third parties for accessing customer and/or payment data. This open up can reduce the monopoly system in financial services because it is allowed more players to enter the market, leading better comparison and various products and services available for customers. The "opening up" of this data would be successful via Application Programming Interfaces [APIs as an integral part of any technology infrastructure provides a secure and effective way to expose consumer data. Open APIs would help costumer to access his or her financial data easily and permission access to third parties in order to use their services while banks are actively developing ways to facilitate secure data transmission to enable this access. (ABA Understanding APIs). API differs from institution to institution; some banks have developed their own suite of API system to enable authorized developers to use the APIs to build new products and services for the costumer. (The Jakarta Post).

2. Indonesia Open Banking Initiative

a. Indonesia National Paymen System Vision 2025

Banks need to have a paradigm shift from traditionally offering their financial product and services through hard-selling mindset, switching into Central Bank of Indonesia is projecting more instruments of finance

infrastructure to provide various offer for costumer solving their costumer's pain would give banks the competitive advantage. Central Bank of Indonesia is projecting more instruments of finance infrastructure to provide various offer for costumer. Bank Indonesia and OJK (Financial Service Authority) will continue to develop innovations of infrastructure finance, while at the same time are formulating provisions to support the data use framework of welcoming the Open Banking to create equal access for all parties involved not only large companies.

The open banking framework can be considered as a strategic approach to promote the digital transformation of the banking industry in a directed way, leading interlinkage between banks and fintech. The openness of data through open banking allows the development of new applications, new products, and opportunities for economic efficiency. In addition, the open banking will require banks to transform digitally and collaborate with fintech in order to maintain their role as well as their position as the main intermediary institutions in the financial system and monetary policy transmission.

A collaborative action between banks and non-banks (including fintech) is one approach that can be pursued by banks to respond the transformation demand in the digital economy and payment system. (Bank Indonesia, 2010) Fintech growth and role as payment systems provider can benefit banks to collaborate through open banking cooperation to enhance their financial services digitally. In this case, open banking allows banks, based on their consumers' consent, to open the consumers' data to third parties (including fintech) reciprocally through Open API. With this collaboration, third parties can develop suitable products and services to meet the consumers' needs and lifestyles while in the flip side, the banks can also use the consumers' digital transaction information owned by fintech, based on the consumers' consent, to scale up the banks' products and services.

Further to that, this effort can be accelerated by an open banking framework. (Post, The Future of Digital Banking in Indonesia 2013). The open banking system aims to boost financial inclusion in financial industry through open banking, but a lack of security standards and data protection regulation can hold up the central bank's current effort to reach this aim. To date, Bank Indonesia has announced open banking standards under National Payment System Vision Blueprint 2025. Following the Blueprint Vision 2025, in March 2020 Central Bank of Indonesia launched a consultative paper for Open APIs standards and Banks Interlinkage with FinTech for Payment Service Providers. Moreover, this standardization as the implementation of the second and third vision in Payment System Blueprint 2025. Through this paper, Bank Indonesia aims to collect inputs and opinion towards the effectiveness of the APIs implementation.

b. Open API Standars

The Open API Standards in Indonesian's context initiative is influenced by Open APIs standards implemented by other countries and jurisdictions. Other forms become resources and reference to formulate appropriate model implementation for Indonesia. The implementation of open banking in various countries is different one another in terms of development stages, approach and strategies, and implementation scope, depending on policy context. However, in general, each country seeks to support innovation and attain the integrity of the digital ecosystem, while it remains to consider domestic industry players and consumer protection. The Open API Standards developed by Bank Indonesia focuses on the payment system transactions involving Payment Service Providers (PSPs) conducted by banks and non-banks. In addition, it is expected to create the integrity of data opening in the framework of open banking, to improve the efficiency, security, and reliability of payment systems as well as to increase innovation and competition.

b.1 Data Standars

Data standards will cover the scope, model and types of data that need to be opened by banks and fintech players. (Indonesia payment Systems Blueprint, 2025). The governing of data standards is aiming to ensure the uniformity and consistency of payment transaction data in order to improve interoperability and efficiency for Open API players. The uniformity and consistency of data will improve the quality as well as the adequacy of data to support innovation and analysis process.

Payment transactions in the Open API Standards are domestic and cross-border payment transactions initiated by consumers and merchants from domestic or abroad, which are carried out using the Open API through licensed PSP in Indonesia.1 Data standards are applied to;

- through various 1) payments made channels including proprietary channels (internet banking and mobile banking), virtual accounts, offline payments through outlets.
- 2) payments made through various instruments including electronic money, electronic wallets, credit cards, debit cards; including if PSP licensed in Indonesia cooperates with issuers of payment instruments that are incorporated abroad; and
- 3) payments made for various services, including fund transfers, top-up, payments for purchases of goods or services, payments for bills or utilities.

b.2 Technical Standard

Technical standards will cover various reference for Open API specifications, including communication protocols, architecture types, data formats, and data structures and data format. (Indonesia Payment Systems Blueprint, 2025). This technical standard aims to support the compatibility and interoperability of the Open API. For standardization purposes, the Open API technical standards are proposed to at least meet the following principles:

- 1) guarantee the integrity, security, and confidentiality of data;
- 2) guarantee the security of connections (secure connections) that are transmitted through the communication protocol.
- 3) prioritize the ease of implementation by various parties; and
- 4) use a data format with easily defined structures.

b.3 Security Standard

Security standards comprise minimum security compliance requirements that should be covered by banks and fintech players, namely authentication, authorization, and encryption. (Indonesia Payment System

¹ Bank Indonesia (n 10).

Blueprint, 2025). In term of authentic and authorization the Open API Security Standars are proposed to at leas meet the following principles:

- 1) guarantee the principle of non-repudiation.
- 2) ensure the validity/authenticity of the user identity (whether system or human) who accesses/uses the system (strong authentication); and
- 3) guarantee the security of access (access control).

While for the encryption aspect are proposed to at least meet the following principles:

- 1) guarantee the confidentiality of data; and
- 2) guarantee the integrity of the data

b.4 Governance Standard

Governance standards comprises standard governing body, Open APIs contract standard, consumer protection, consumer consent, and data protection. Each element requires to be considered in every Open API implementation as a foundation to establish the integrity of the Open API ecosystems. The Open API ecosystems that uphold integrity are the ecosystems that carry out their efficient, reliable, accurate, comprehensive, consistent, and safety functions.

b.5 Time of Implementation of APIs Standard

In consultation paper has been issued by Central Bank of Indonesia as regard to Indonesia government to implement open banking system in accordance with National Payment System Vision 2025, it covers three parts of the implementation timeline. First, the preparation and development phase. Currently Indonesia is in this stage. Secondly, the testing phase that will be started in the first quarter and the second quarter of 2021 for the APIs users who meet the standard requirement and the APIs users who cooperate with other parties. Last stage is the full implementation of open APIs standard in the rest of 2021.

In terms of data protection, Indonesia has enacted several regulations such as Law No.11 of 2008 concerning Electronic Information and Transactions ('ITE Law'), (Law, No. 11 of 2008). Government Regulation No. 71 of 2019 as regard to Implementation of Electronic

System and Transaction. (Government Regulation No.71mof 2019). and The Indonesia Financial Service Authority ('OJK') issued OJK Regulation No. 77/POJK.01/2016 on Information Technology-Based Lending Services ('POJK No.77/2016'). Regarding of the issue on personal data protection and privacy in open banking, Indonesia Parliament has proposed a draft of the Personal Data Protection Bill. It regulates the data individual, protection of Indonesia based public entity, organization/institution in or outside Indonesia territory. The regulation covers three main players; (1) data owner who possess the personal information; (2) data controller as the party who determines the goals and examines control over the processing of personal data; and (3) data processor as the party processing the personal data on behalf of the data controller.

The bill regulates that the data processing should be exercise by personal data protection principles, namely, (1) the data collection is limited and specific, legal, appropriate and transparent; (2) the data processing is executed according to its purpose; (3) respecting the data owner's data protection rights; (4) the data processing is accomplished in accurate, thorough, nondeceptive, and legitimate; (5) preserve the personal data with adequate security; (6) data processing is performed by notifying the purpose, method, as well as if any data protection failures; (7) personal data is removed and/or erased after retention period; (8) data processing is executed responsibly by fulfilling the implementation of the personal data protection principles.

3. Australia Open Banking System

On July 2017 the treasurer Scott Morrison MP commissioned the Review into Open Banking in Australia. (Understanding Austalia's Consumer data Right, 2020 recommendation to figure out the best way to make data work for Australians. According to the ABA, open banking gives you the ability to share your banking data (such as your transaction history and account balances) with third parties that have been accredited by the Australian Competition and Consumer Commission (ACCC). (Open Banking Goes Live in Australia, 2020). These third parties may be other banks, financial institutions or other authorised organisations such as

fintech businesses. You control which third party can access your data and how they can use that data under the open banking framework.

The process of designing open banking system in Australia has been highly consultative and intense. (Australia Open Banking Report Executive Summary). Within five months, the Review has had over 100 meetings with interested parties involved; banks, firms, industry bodies, consumer groups, regulators, and data specialists and participants from other jurisdictions to understand their experience. Open Banking is an early implementation of reforms and aims to share value captured by bank with customers by giving them greater access to, and control over, their banking data. By doing so, Open Banking has the potential to transform the banking system. The Review has designed an Open Banking system that is customer-focused, efficient and fair. Ideally, the system will inspire confidence, promote competition and encourage innovation. In mandating Open Banking, the Government should be careful to leave other avenues open in order to promote competition and test the system design.

Since few months, four major banks costumer in Australia (ANZ, Commonwealth, Westpac, NAB) can start applying sharing data by request and share their transaction account, deposit account, credit card and debit card data with an accredited and authorised data recipient. (Open Banking in Australia Goes Live, 2020). According to the ABA and Australian Government, there are four advantages benefits using open banking (1) easiness to sign; (2) time efficient; (3) able to opt using personal standard and styles; and (4) broader view for costumer financial position.

Another point highlight in paper review by commission which seems would become a benefit is ability to access without online banking system which planned to be provided by data holder and transparency of a record data usage by the data holder and should be reported or accessible for the regulator at any time. (Review Into Banking in Australia, 2010). Besides the benefits offered by Open Banking, there has been much discussion in the media around security and privacy issue regarding of sharing data asking whether the open banking truly secure.

Prior to that, there was a debate through consultation process about the consumer data privacy concerns. Some believe that open banking can provide more secure process compared to other running sharing data already done by consumer in some company services (screenscraping). Moreover, the need to upgrade the scope of privacy laws are stressed to ensure the data protection of consumer. For regulatory framework (umbrella) is even still arising debate in which provision that open banking should be regulated, under competition law, competition and privacy laws or even the financial services laws over the review process. (Review Into Open Banking in Australia).

Due to the digital right and privacy issue, Australia indicates two digital rights approaches. (Data and Digital Right). The first is digital platforms inquiry that being undertaken by general market regulator; the Australian Competition and Consumer Commission (ACCC). The second one is Consumer Data Rights which is stated that Data is an asset. In fact, on the direction of government, the ACCC also have a key role to form the consumer data right. Following an Open Banking Review commission, the Australian Government has decided to legislate a Consumer Data Right in order to give Australian greater control over their data. This legislation aims to empower the costumers to choose and feel safe to share their data with accredited data recipients. Moreover, this framework would be under Privacy Act.

a.Consumer Data Rights

Australia's open banking movement is part of the country's Consumer Data Right (CDR), aiming to provide greater options and sufficient control for Australians towards their data use. (Open Banking Convergence, 2019). Australia continues to establish its Consumer Data Right (CDR) with Open Banking at its first stage. The Consumer Data Right implementation is following the recommendations of the Australian Government's Open Banking Review, which highlighted and emphasised customer control, choice, convenience and confidence. (King & Wood Mallens, 2009).

The Consumer Data Right (CDR) aims to give consumers the right to share their data between providers through secure technology. The CDR website has outlined this following process:

- 1. Give consent. The data owner need to first give permission to the accredited data recipient provider to access their data. It can be done through their website or app in their CDR page.
- 2. *Perform an identity check*. This process will be redirected through costumer bank's website or app CDR page and from there will need to verify costumer identity.
- 3. Confirm data to be shared. Once identity is confirmed and then access given to that page, to confirm what data want to share, how data would like to be shared and for what period.
- 4. Share data. The data would be transferred electronically through an application programming interface (API) to the prospective data recipient in a machine-readable format.
- 5. Use the provider's service. Once the data is shared, then will be directed back through to the accredited data recipient's app or website to begin using their service. (See Open Banking Goes Live).

b. Data Tranfer Mechanism

In Review into Open Banking stated that Customer data should be transferred via APIs. These APIs should be built in accordance with the Standards. According to the Australian Government, it the website or software application should be provided some key features clearly; what data will be shared and how, who is able to access the data, and how long the data exist and how the data would be managed or even withdrawn based on the costumer's consent. (Review Into Open Banking in Australia).

In the paper review of Open Banking Australia, it stressed that the Australian Data Standard Setting Body, chaired by an independent data specialist, should design these Standards (using the UK's technical specification as a starting point) The Standards should not mandate specific technology and should not intend to restrict innovation for data transfer. The Standards should enable basic functionality for Open Banking to put the costumer at ease and they should also be useful for other sectors. Furthermore, due to the unavailability of the online banking access by the costumer, the banks or provider services are mandated to provide other channels that would be accessible for the costumer.

Regarding of the friendly authorisation and authentication for costumer, the Australian open banking system in paper review and implementation process is trying to avoid longer term risk for costumers' data accessed. It stated that currently the Australia system still on the "read access" data by the third parties. However, in some discussion related to this issue have gathered some agreement to improve the access to be "write access". This shift is considered that can provide better service from the data recipient by helping the costumer to identify banking products that suits them well or even can offer personal financial management.

c. Open Banking Implementation Timeline

Open banking is still infancy stage and it is clearly seen that the process will need more time, leading costumer to recognize the benefits offered by this new system. In paper review commissioned by the Australian Government the implementation timeline is not only about the implementation phase and regulation enactment but also the education program for the costumer through public events and some gathering or group activities. The approach phase for consumer education and awareness is part of the implementation timeline. It is measured to be really important to help the costumer moves smoothly into open banking system. In addition, in the implementation timeline it also covers the cost for the implementation and put into two categories: regulatory cost and regulatory compliance cost. It is also followed by the choice to minimise the cost. Lastly, there is also post-assessment of implementation. (Review Into Open Banking in Australia).

ANALYSIS

Due to the Indonesia Open Banking initiative plan under National Payment System Vision 2025, in this analysis there are three parts that would be covered based on Australia Open Banking implementation (review).

1. Data Protection Regulation.

Indonesia has proposed the Personal Data Bill right in 2019 and still under review at this moment. Comparing to Australia system that

already legislated the Consumer Data Rights as the umbrella for consumer data protection, it will be a good example for Indonesia to follow this movement. In terms of the regulation enactment, it should remain focusing on the national legal system and interest of Indonesia as civil law jurisdiction.

2. Data Transfer Mechanism and Payment Initiation

Through open APIs standard it is clearly seen that data types and authorization as well as authentication during the sharing data has clearly regulated under the consultative paper issued by Central Bank of Indonesia. It is very relevant with APIs standard in Australia. However, due to the data access by the data recipient, Indonesia may see that there is opportunity for scaling up the data access process whether following Australia in applying "read access" or other jurisdiction which has implemented "write access". However, this still arises potential risk if the costumers are careless to ensure the accredited data recipient. If Indonesia can mitigate the risk, it might be possible to apply the payment initiation under "write access" because it would serve better service for the costumer in terms of greater option and personal financial service management.

3. Implementation Timeline

Analysing the Australian government paper review issued in 2017 is alike Indonesia current stage. Australian consultative paper has covered a holistic aspect rather than only focusing on open banking implementation phase but has gone beyond that. Indonesia should consider all aspects including the transformation process that would be faced by the costumers. Providing education and promotion due to the open banking implementation to build the costumer's awareness. This concept is truly important because a paradigm shift is not easy, changing habitual action would create resistance and vulnerability. Banks should be aware about this issue. Besides, cost of implementation and sources to cover that need to be estimated. Post assessment of implementation also needs a space.

CONCLUSION

Open banking initiative under Indonesia Payment System Blueprint 2025 as a movement strategy for banks to adjust with fintech emergence and implications should have got fully support from government

particularly in data protection regulation. Privacy issue can hold back this initiative. Therefore, Indonesia could learn from Australia which has mitigated this issue under Consumer Data Rights. Personal Data Bill Rights would be an appropriate legislation to support open banking implementation for Indonesian context. Besides, Indonesia may consider implementing its own payment initiation whether refers to Australian current system (read access) or prefer another one (write access), this should be put into open banking consideration because it has not yet covered in consultative paper. Educating consumer to recognize the benefit of open banking should also become an agenda of Indonesia government and having awareness due to the cost implementation as well.

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