Do We Need Financial Technology for Collecting Zakat?

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Paper to be presented at International Conference of Zakat 2018
15-16 November, Universitas Gadjah Mada, Yogyakarta, Indonesia

ABSTRACT

The development of the digital era has created opportunities and threat for the institution of amil zakat in Indonesia. The lifestyle of society is close to the technology that requires the amil zakat institution needs to be transformed to adjust zakat services that are easily accessible to the muzakki through information technology. The emergence of financial technology to facilitate business activities into strength as well as weakness for promotion activities, collection, and reporting of zakat. The purpose of this research is to analyze the strength, weakness, opportunity, and threat of using financial technology for collecting zakat in Indonesia. This conceptual paper primarily draws on observations of other scholars in exchange theories based on zakat collectible and financial technology from the Islamic perspective. Those observations used analyzing a comprehensive view of the paper’s issue in using financial technology for collecting zakat in Indonesia. The literature indicates that there is always opportunity for amil zakat institution to use financial technology for collecting zakat because the strength of information technology in 4.0 era. Nevertheless there is always threat and weakness for using financial technology. It is hoped that to overcome these threat and weakness amil zakat institution can improve the skills of amil zakat to take advantage of the opportunities that exist.

Keywords: Collecting Zakat, Financial Technology, Zakat.

INTRODUCTION

The development of the digital era has increasingly changed people's behavior in all aspects of life. One of the more interesting topics is the internet usage and financial technology. Internet usage shows an increasing trend. According to Indonesian Internet Service Provider Association (APJII) data on 2017 Indonesian internet user and user reports, the number of internet users in Indonesia reached 143.26 million, an increase of 7.96% from the previous year of 132.7 million. The growth of internet usage can be said to be very rapid because it always shows an increasing trend until the increase of more than 100 million internet users in the last 10 years. From the data in 2017, as we know the population of Indonesia has reached 260 million so that internet users have reached more than 50% of the total population of Indonesia. According to swa.co.id the number of internet users in Indonesia is predicted to reach 215 million by 2020. This number makes Indonesia as one of the countries with the largest number of internet users. Other data from emarketers mention that Indonesia is the 6th largest internet user in the world (rank by internet user, 2014) and predicted in 2018 will shift Japan which ranked 5th. As can be seen in table 1, the latest survey sourced from internetworldstats.com mention that Indonesia had the 3rd place in Asia from internet user after China and India. The potential to utilize the internet in supporting all life aspects is also getting bigger. This is an opportunity for
institutions or NGOs to utilize IT and the internet to support their strategies and policies.

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<td>200.813.818</td>
<td>133.900</td>
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Source: internetworldstats.com

Market opportunities in using the internet can also facilitate access to finance that we called Financial Technology. Based on the definition of Bank Indonesia under regulations 19/12/PBI/2017, Financial Technology is the use of technology in a financial system that produces new business products, services, technology, and / or models and can have an impact on monetary stability, financial system stability, and / or efficiency, smoothness, security, and reliability of payment systems. Financial Technology or Fintech refers to companies whose business financial services are mostly based on the technology platform to innovate products and perform financial services more efficiently (Truong, 2016). The presence of Fintech makes it easy for people to transact and carry out their economic activities. The use of fintech is not limited to space and time, so it can be flexibly used by the public.

As can be seen in figure 1, fintech investment in Indonesia are increasing. Data according to Fintech Indonesia Report 2018, Total value of disclose in 2017 as much as USD 176, 75 Million and Transaction value expected to growth rate of 16,3% gradually. As for fintech service providers in Indonesia identified a total of 167 fintech companies, as can be seen in figure 2. Fintech can be a great opportunity which is being targeted by the government to increase economic growth in Indonesia. Widjanarko as the Executive Director of the Bank Indonesia Transformation Program Center (PPTBI) said that Fintech could fill financing and productivity gaps that demanded 6% growth with a 16% loan amount. Meanwhile, if relying on the conventional sector, new loans can reach around 13.5%.

Zakat is one of the obligations of Muslims. Zakat can be divided into three types, namely zakat fitrah, zakat mal, and zakat profesi. Zakat fitrah is mandatory for all Muslims who are paid before Eid al-Fitr. While zakat mal and zakat profesi are sunah, it is advisable to try to narrow the economic gap between poor and rich person. Zakat is important in the effort to build Indonesia's economy because of its role as a function of the distribution of wealth.

Source: Fintech Singapore (fintechnews.sg)

Figure 1. Fintech Indonesia Report 2018
Traditional zakat collection carried out by amil includes visiting muzakki by door to door system or muzakki himself who visits the amil. Problems are found when the amil have difficulty collecting zakat because of technical problems such as long distances to visit muzakki, amil do not have enough time, difficulty of transportation, expensive and inefficient costs, and so on. In short, traditional ways for collecting zakat cause problems for the present era. Whereas the potential of zakat in Indonesia is very large. According to Canggih (2017) the realization of zakat collection compared to zakat potential is only a maximum of 0.09%.

The development of the digital era has created opportunities for collecting zakat in Indonesia. The lifestyle of society is close to the technology that requires the amil zakat institution needs to be transformed to adjust zakat services that are easily accessible to the muzakki through information technology.

Now there are many fintech platforms that provide zakat services including ZakatPay & muzaki.baznas.go.id (Baznas), zakat.or.id (Dompet Dhuafa), www.rumahzakat.org (Rumah Zakat) sedekahonline.com (Daarul Qur’an), Buka Lapak, Shopee, Matahari Mall, and kitabisa.com. The number of zakat services through this fintech encourage muzakki to be interested in always paying zakat or setting aside income for zakat.

The development of fintech that used for the payment of zakat in a sense raises pros and cons. On the one hand, with the presence of fintech can potentially increase the collection of zakat. Besides, the threat is fraud, cybercrime and many other issues related to information technology. An analysis using SWOT is needed to reanalyze the strengths, weaknesses, threats and opportunities faced when using fintech to collect zakat in Indonesia.
In view of the above, the purpose of this research is to analyze the use of fintech to collect zakat with SWOT analysis and analyze the formulation of strategies and recommendations for using fintech for zakat collection in Indonesia. In particular, it explores whether fintech continue to be used for zakat collection.

**LITERATURE REVIEW**

**The Concept of Zakah**

Literally, Zakah define as a meanings of developing (an-namaa), sanctifying (at-thaharatu) and blessing (al-barakatu). Zakah is described as the removal of some property in certain conditions to be given to a certain group (mustahik) with certain requirements (Hafidhuddin, 2002). The person who gives Zakah is called muzaki, while the person receiving the Zakah is called mustahik, which consists of eight groups (ashnaf), as Allah commands in verse 60 of At Taubah. Zakah is unique Islamic institution to reduce the poverty (Kasri, 2016).

The strategical role of Zakah as the third pillar in the principle of Islam has a very important social role in building community welfare, poverty eradication, and economic empowerment of people.. This obligatory worship not only brings reward and cleanses the body soul for the Muslims who fulfill it, but it also has a tremendous social and economic effect for muslim who receive it. Because It was different with another financial resources, Zakat is more voluntary because of the main point is philanthropy to fulfill the god order and get ridha and blessing from Allah SWT. (Andiani, 2018)

As a philanthrophy instrument, Zakat has two main financial activities, collection and distribution. According to BAZNAS estimation about Indonesia’s potential of Zakah in 2015, it was IDR 286 trillion or 2.4% of GDP 2015. As seen from the data published by BAZNAS annually, the realization of the collection and distribution of Zakah funds is still very far from its potential. In 2015, the total amount of ZIS funds collected was IDR 94.47 billion while the distributed amount was Rp26.5 billion, with the effectiveness of 26.91%. (Andiani, 2018)

Focuses on Zakah collection, According to a study by Shirazi (2014), in 2009 Indonesia had a resource shortage of 2.83% of GDP for poverty eradication programs. Thus, according to the result of this study, it can be estimated that at least 3% of GDP should be distributed optimally as Zakah so that the program can be run effectively. Muzakki seems having different structure of zakah payment (Widarwati et al, 2017)

**The Concept of Financial Technology**

Financial Technology or Fintech denotes companies or representatives of companies that combine financial services with modern, innovative technologies (Dorfleitner, 2017). Fintech has a goal to attract customers with products and services that are more user-friendly, efficient, transparent, and automated than those currently available. According to Belli (___) The FinTech sector provides technologies and software for ensuring the smooth operations of banking and financial services industries. These technologies are created by start-ups and technology companies which are looking at disrupting the traditional operations of banks and financial services organisations.

Budi and Krisnadi (2016) stated that Fintech with financial services such as crowdfunding, mobile payments, and money transfer services caused a revolution in startup business.

**SWOT Analysis Review**

This study uses SWOT analysis method to determine and prove the research objectives. Sammut-Bonnici, Tanya & Galea, David (2015) define SWOT
analysis as tool for evaluates the internal strengths and weaknesses, and the external opportunities and threats in an organization’s environment. The internal analysis is used to identify resources, capabilities, core competencies, and competitive advantages inherent to the organization. The external analysis identifies market opportunities and threats by looking at competitors’ resources, the industry environment, and the general environment.

SWOT is used to identify obstacles and weaknesses from the external side and identify strengths and opportunities from the internal side. So that in the analysis a balance of analysis is needed. According to Rangkuti (2006) some objectives of the SWOT analysis:

1. Identify the internal and external conditions involved as input for designing the process, so that the process that is designed can run optimally, effectively and efficiently.
2. To analyze a condition, where a plan is made to do something.
3. Knowing the advantages of competitor companies.
5. Prepare the company to be ready in dealing with the problems that occur
6. Prepare to face the possibility of planning development within the company.

RESEARCH OBJECTIVES AND METHODOLOGY

This research adopts a qualitative research method relying on secondary data sourced from previous scholarly works, working papers, case studies and relevant internet resources. The research will mainly adopt library research In line with methodological approach of qualitative research, the data was subjected to content and thematic SWOT analysis.

The objectives of this SWOT analysis study on the necessary of financial technology for collecting zakat and to uncover strategies to leverage on the strengths and opportunities and rectifying the weaknesses as well as overcoming the threats. Furthermore, it is hoped that this study will contribute in future studies and act as a guide for the process of zakat collection. Methods for collecting data is a comprehensive review on past literature The literature obtained for preliminary data collection are from various databases ranging from journal articles and books.

SWOT ANALYSIS OF FINTECH FOR COLLECTING ZAKAT

Internal Analysis: Strengths

The access to zakat services is easier and simpler. As we know that people increasingly want all things that are easy and instant, including paying zakat. With the existence of fintech, zakat payments will be easier and simpler. The payment process will also be faster when compared to the traditional way of paying zakat. This is in accordance with the research of Basuki & Hartina Husein (2018), Adhitya, Imanuel (2017) and Tsourela et Al (2007) that fintech increases the ease of conducting transactions which in this case is the payment of zakat.

Ability to reach urban and rural communities. Indonesia has regions spread from Aceh to Papua. The extent of the area makes it difficult for Muzakki to pay zakat. Indonesia's geographical conditions separated by islands, cities and villages, to remote areas make it difficult for people to access zakat services. Based on the research of Basuki & Hartina Husein (2018) and Adhitya, Imanuel (2017) that fintech is the solution to the limited service of zakat for regions.

Large volume transactions. The largest Muslim population is in Indonesia. If the
Muslim population wants to pay zakat, it is necessary to have facilities that are easily accessible and can accommodate all transactions at almost the same time. According to Saksonova & Merlino (2017) fintech can be a large volume payment solution. The payment of zakat from the Indonesian Muslim population can use fintech so that it can cover the entire collection of zakat.

Transaction costs are cheaper and more efficient. The traditional way of paying zakat requires at least time, money and energy. In this modern era, people always want all affairs to be managed cheaply and efficiently. The presence of fintech is a solution for the community to answer the problem. According to the research of Saksonova & Merlino (2017), Adhitya, Imanuel (2017), Truong, Oanh (2016) and Bhowmik & Johannes (2018) that fintech has the advantage of being low-cost and more efficient.

Bank service products well known to the public. Public financial literacy and inclusion are increasingly encouraged by the government to increase. Many people who use banking services make their own strength for the use of fintech, because fintech requires bank facilities to make payments. For example for zakat. Adhitya, Imanuel (2017) in his research stated that the use of fintech is in line with the use of bank products so that it can expedite zakat payments.

Expand access to other service. Zakat is one of the services related to hablumminannas for the sake of equal distribution of people's welfare. Besides, there are also zakat called Shadaqah, Infaq, and Waqf, in Indonesia known as ZISWAF. ZISWAF can be applied in one fintech application to be able to be used as an access service for various ZISWAF products.

Real time system management. By using fintech, zakat will be managed with a real time system. Muzakki can check the validity and accuracy of the zakat nominal directly in their smartphone or laptop. Amil can also easily find out the amount of zakat collection every time.

Exact zakat calculation. Besides providing online services, Fintech also provides zakat calculation services. Zakat can be calculated to adjust the wealth we have, it is used to calculate zakat mal.

Internal Analysis: Weakness

Internet connection problems. One weakness in using the internet is connection. In Indonesia internet connection varies greatly, some are fast and some are slow to adjust the conditions of the place. According to Basuki & Hartina Husein (2018) and Adhitya, Imanuel (2017), the slow internet connection in Indonesia will be a weakness to build a fintech ecosystem especially for zakat payments in Indonesia.

Knowledge and skills in information technology are relatively low. The condition of Indonesian people who do not have adequate knowledge and skills in IT matters can be a weakness. Fintech for zakat payments will be hampered by these conditions, this has been proven by Basuki & Hartina Husein (2018).

Inequality of IT Infrastructure. IT infrastructure in Indonesia is now still inequality. Areas that are in the island of Java may be better in using fintech zakat. As for areas outside Java, especially Sulawesi and Papua, it will be difficult to access this fintech. Basuki & Hartina Husein (2018) in his research made infrastructure inequality a weakness for the application of fintech in Indonesia.

Lack of public trust & negative perception. Indonesian people are not used to trusting
Fintech for everyday payments because of the many scams and cybercrime. Negative perception also developed in the community to be the result of the phenomenon. Especially the negative perception came from doubts about the payment of zakat through online payment. This weakness point is in accordance with the research of Basuki & Hartina Husein (2018) and Rizhuan (2013).

*High risk.* The potential to pose a risk in the use of fintech for the payment of zakat is very large when compared to traditional methods. This risk is feared by the community and the weaknesses for Fintech are also in accordance with the research Saksonova & Merlino (2017).

*Not all fintechs have licenses, systems and legal.* Fintech in Indonesia, many of which do not have legal or institutional permits. This has become a weakness for Fintech so that Fintech Company and OJK must monitor closely the Fintech transaction.

*Information asymmetry of muzzaki and amil.* Information is important in fintech management. If Amil does not care about information, then Amil will certainly fail in the management of zakat using fintech. Information mismatch or commonly referred to as information asymmetry will occur between muzakki and amil. This is in accordance with Prawirasasra's research (2018).

*Lack of regulatory for fintech based syariah principle.* Until now there are no regulations governing sharia-based fintech. While the Islamic fintech and ZISWAF payment facilities have been around for years. Limited regulations can hinder the implementation of fintech for zakat payment facilities in Indonesia.

**External Analysis: Opportunities**

*The development of information technology is increasing rapidly.* Along with the development of information technology in Indonesia, the development of fintech will continue to grow. Fintech will become a future trend to answer the needs of the times, including in terms of easy and cheap zakat payment services. This opportunity is believed by Tsourela et al (2007); Mnuchin & Phillips (2018); Medcraft (2016) that the prospect of fintech will be bright, and zakat can take advantage of this opportunity.

*Platforms have rapidly grown.* The development of information technology, the fintech platform will also develop. This can be used by amil zakat to use fintech as a means of paying zakat in Indonesia. This opportunity is proven by Mnuchin & Phillips (2018).

*High internet usage.* Research and surveys from Mnuchin & Phillips (2018), Belli, Melike. (___), Basuki & Hartina Husein (2018), Tsourela et Al (2007) agree to state that the world community including Indonesia has an opportunity to increase internet usage. If internet usage gets higher, the use of smartphones and laptops is getting higher, then zakat payments have the opportunity to be directed to fintech facilities. This is in addition to increasing the collection of zakat, this will be the future asset of a zakat institution.

*Awareness and willingness of using fintech.* Awareness raising using fintech was proven by Belli's research, Melike. (___), Basuki & Hartina Husein (2018) and Tsourela et Al (2007). According to demographic conditions, Indonesia's population at a young age will be the majority in the future. This causes fintech awareness to also increase. Fintech can be integrated with zakat payments to take advantage of this opportunity.

*Government plans related to fintech.* The government's plan to establish a fintech center, implement pro-fintech policies, and socialize financial inclusion using fintech
raises its own opportunities. Amil Zakat institutions can take advantage of this opportunity so that zakat is not left behind by other Islamic financial products.

**Government plans related to zakat.** With so many policies and plans regarding zakat management, it is not impossible that zakat will continue to be encouraged to adjust the needs of this modern age, one of which is by using fintech.

**Partnership between bank and fintech company.** Fintech is impossible to run if it is not supported by a good banking system. This encourages the two institutions to cooperate with each other in providing financial services for the entire community. This is according to Bhowmik & Johannes (2018) and Truong, Oanh (2016).

**External Analysis: Threats**

**Digital legal identity and data security.** Data and identity are two things that are very important for someone. In this age of technology, it is not impossible for data leakage to occur so that someone's data is used arbitrarily for things that are beyond our expectations. This data and identity issue is feared by several researchers including Basuki & Hartina Husein (2018), Saksonova & Merlino (2017) and Mnuchin & Phillips (2018).

**Cybercrime and abuse of Fintech.** Several cases of cybercrime in the world and in Indonesia have worried many parties. Losses will be borne if exposed to cybercrime or abuse of fintech. This threat according to Basuki & Hartina Husein (2018);

**Regulatory challenges related to transparency, audibility and accountability (based on Islamic perspective).** Three things, namely transparency, audibility and accountability are the most important things for the use of fintech for zakat payments. This reason is based on the existence of money resources that can trigger conflict between muzakki and amil if Amil does not care about these things. Moreover, the management of zakat is in the spotlight for every Muslim. This theory according to Mnuchin & Phillips (2018). The threat is also if the management of zakat carried out by amil is not based on Islamic teachings or principles.

**Human resources (Amil) are inadequate.** The inability of amil in managing information technology is a separate threat if amil zakat implements payments through fintech. If Amil does not undergo education or practice, then Amil will forever not master information technology. If Amil continues to force it to use Fintech in paying zakat, then it will be in vain. This threat has proven by Adhitya, Imanuel (2017).

**Miscommunication between muzzaki and amil.** The threat of miscommunication will also occur if the factor of transparency and accountability is not considered by amil. Fintech-based zakat services need to be provided well to maintain muzakki satisfaction. Miscommunication will occur if Amil does not understand the background of Muzakki because he does not meet face to face. This is according to Saksonova & Merlino (2017).

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**DISCUSSION AND CONCLUSION**

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<th>Category</th>
<th>Item</th>
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<td><strong>Strengths</strong></td>
<td>The access to zakat services is easier and simpler.</td>
<td>Basuki &amp; Hartina</td>
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</table>
- Ability to reach urban and rural communities
- Large volume transactions of zakat
- Transaction costs are cheaper and more efficient
- Bank service products well known to the public.
- Expand access to other services
- Real time system management
- Exact zakat calculation

**Weakness**
- Internet connection problems
- Knowledge and skills in information technology are relatively low
- Inequality of IT Infrastructure
- Lack of public trust & negative perception
- High risk
- Not all fintechs have licenses, systems and legal
- Information asymmetry of muzzaki and amil
- Lack of regulatory for fintech based syariah principle.

**Opportunities**
- The development of information technology is increasing rapidly
- Platforms have rapidly grown
- High internet usage
- Awareness and willingness of using fintech
- Government plans related to fintech
- Government plans related to zakat
- Partnership between bank and fintech company.

**Threats**
- Digital legal identity and data security
- Cybercrime and abuse of Fintech
- Regulatory challenges related to transparency, audibility and accountability (based on Islamic perspective)
- Human resources (Amil) are inadequate
- Miscommunication between muzzaki and amil

It is known that the use of fintech for zakat collection has strengths, weakness, opportunities and threat. It is expected that this SWOT analysis will be useful for amil zakat especially in the face of information technology era like now. Of course, to answer the first aim is whether Fintech continues to be used for zakat collection in Indonesia, it must be considered from all reference sources. At least in using this SWOT analysis can be illustrated how the illustration if the use of fintech for zakat collection is enforced massively in Indonesia.

From various sources of reference that support, can prove that actually the use of fintech is very necessary to support the collection of zakat in Indonesia. However, this reasoning does not apply if all interested parties do not have concern and willingness to overcome any weaknesses and threats that will be faced. After perceived weaknesses and threats can be reduced, then amil can utilize strengths and opportunities for the use of fintech to collect zakat in Indonesia.

The strategies that can be formulated to answer the second research objective are as follows:

**Table 2. Strategy of Using Fintech for Collecting Zakat**

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<th>SO</th>
<th>Providing access to be easy, cheap, efficient and easily</th>
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Husein (2018); Zaman (2018); Adhitya, Imanuel (2017); Tsourela et Al (2007); Saksonova & Merlino (2017); Truong, Oanh (2016); Bhowmik & Johannes (2018).

Basuki & Hartina Husein (2018); Adhitya, Imanuel (2017); Saksonova & Merlino (2017); Prawirasasra (2018); Rizhuan (2013).
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<th>WT</th>
<th>they can be firm and clear in their implementation based on Islamic principles.</th>
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<td>• Improve and build an adequate internet network infrastructure throughout Indonesia.</td>
<td>• Creating reliable human resources to be amil in the information technology era</td>
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<td>• Conduct socialization and education for all people, especially young people regarding fintech, zakat and digital eras.</td>
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<td>• Promote zakat fintech to be more trusted by the community.</td>
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<td>• Develop a secure, and minimally risk-based zakat payment system</td>
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<td>• Make effective communication through regular friendship to Muzakki, or provide remote online communication services that are easily accessible to Muzakki.</td>
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<tr>
<td>• Develop SOP and regulations that support transparency, audibility and accountability, especially to maintain the muzakki trust</td>
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<td>• Encourage all fintechs to have legal systems and licenses.</td>
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<td>• The government is to compile sharia fintech regulations so that</td>
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LIMITATION OF RESEARCH AND SUGGESTIONS FOR FURTHER RESEARCH

This study has limitations regarding the methods used. This study only uses literature study in the SWOT analysis process. This causes incomplete data collected for analysis needs. In addition to the weaknesses in the method, this study also has weaknesses in fintech categorization. This study does not specify the type of fintech and marketplace so that the analysis is too general.

In conducting further research, the researcher suggests using the method of interviewing, observing, and utilizing secondary data to better maintain valid and complete data sources of SWOT analysis. In addition, it can also be devoted to focus on the types of fintech types that are the focus of analysis.

REFERENCES


Penyelenggara Jasa Internet Indonesia (APJII).
Belli, Melike. (____). Banking Fintech (Developing A Fintech Ecosystem In Istanbul). London: Bankalizarasi Kart Merkezi.
Broom, Dominic. (____). Innovation in Payments: The Future is Fintech. BNY Mellon
Peraturan Bank Indonesia Nomor 19/12/PBI/2017 Tentang Penyelenggaraan Teknologi Finansial
Snyder, Naomi. (____). Threats and Opportunities: Partnering With Fintech Companies. Bank Director Magazine.


