

# **THE URGENCY OF ELECTRONIC KNOW YOUR CUSTOMER (E-KYC): HOW ELECTRONIC CUSTOMER IDENTIFICATION WORKS TO PREVENT MONEY LAUNDERING IN THE FINTECH INDUSTRY**

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## ***Abstract***

*The development of the Financial Technology (FinTech) Industry in Indonesia is very rapid. Financial Technology (FinTech) can generally be defined as an industry that combines technology and financial features as its business model. One of the advantages FinTech business is the speed and convenience for parties to conduct transactions. The speed and simplicity of transactions in the FinTech business are due to the use of technology in the financial services provided. Furthermore, the FinTech industry facilitates parties to conduct non-face-to-face transactions. The advantages offered by the FinTech industry raise concerns that this business could be used by criminals to commit money laundering crimes. This research tries to see the vital role of using Know Your Customer (KYC) customer principles which are carried out electronically to be applicable in preventing FinTech businesses from being used as a means of committing money laundering crimes.*

**Keywords:** *Financial Technology; Know your Customer; Anti-Money Laundering*

## **1. Introduction**

The internet has become an inseparable part of society. The internet is no longer just a place to find information and network online. Currently, the community has expanded the use of the internet to a whole new level, such as providing a platform for economic activities and the finance industry.<sup>1</sup> For example, internet marketplaces have been widely introduced and are slowly becoming mainstream as a platform for buying and selling. This condition has affected society's behavior, which no longer relies on traditional economic activities. As a consequence, there is an urgency to accommodate technology, especially in economic activities and the finance industry. These comprehensive changes in economic activities and finance industry behavior are called financial technology (FinTech).

Hether S, Knewton, define FinTech as the technology used to provide financial markets with a financial product or financial service.<sup>2</sup> Furthermore, Leong K and Anna Sung, elaborate on

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<sup>1</sup> Adi Setiadi Saputra, "Peer To Peer Lending Di Indonesia Dan Beberapa Permasalahannya," *Veritas et Justitia* 5, no. 1 (2019): 238–261.

<sup>2</sup> Heather S. Knewton and Zachary A. Rosenbaum, "Toward Understanding FinTech and Its Industry," *Managerial Finance* 46, no. 8 (2020): 1043–1060.

the definition of FinTech as an Idea that improves financial service processes by using technology as a solution.<sup>3</sup> From these definitions, it can be concluded that FinTech is an Industry that combines both technology and financial service as a business model.

FinTech is a hot business topic in recent years; however, its concept is not new, especially in the banking sector. Information and Communication Technology (IT) has been involved in banking services since the 1960s by using Trans-Atlantic transmission cable and mainframe computers. The financial product in this era was mainly recognized, such as SWIFT code and Automated Teller Machines (ATM).<sup>4</sup> In the late 1980s, the involvement of technology in banking services rapidly increased because of the expansion of the digital industry that relies on an electronic transactions between financial institutions around the world.<sup>5</sup> Similar developments also appeared in other insurance industries, despite a smaller number and scales.

However, recently, the role of IT in the Financial industry has been massively increased. It has been expanded not only to provide IT business services for services in banking (Such as payments, investments, etc.) but also to provide IT of non-banks and new start-up businesses that focus on financial services (FinTech). Interestingly, the massive use of IT in non-banks and other financial services has changed the business models of these two sectors.

The use of IT improves the interplay of activities and processes within the organization that changes the business scope and the logic of business relationships of non-bank and start-up financial services.<sup>6</sup> At the internal level, IT has changed in business focus from a business process to a customer-centric perspective.<sup>7</sup> The core competencies also drastically changed from customer service, product and transaction handling based to the management of online channels, data analytics and online platforms.<sup>8</sup> These significant changes give a lot of room for the industry to seek innovation based on the customer perspective. Therefore, it is easier to find a FinTech product that is very innovative and very easy to use for its costumer. This change has made the FinTech industry become one of the most developed industries in the world.

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<sup>3</sup> Kelvin Leong, "FinTech (Financial Technology): What Is It and How to Use Technologies to Create Business Value in Fintech Way?," *International Journal of Innovation, Management and Technology* 9, no. 2 (2018): 74–78.

<sup>4</sup> Ibid.

<sup>5</sup> Douglas W Arner, Janos Barberis, and Ross P. Buckley, "The Evolution of Fintech: A New Post-Crisis Paradigm," *Geo. Journal Int'ernational Law* 47 (2015): 1282.

<sup>6</sup> Rainer Alt, Roman Beck, and Martin T. Smits, "FinTech and the Transformation of the Financial Industry," *Electronic Markets* 28, no. 3 (2018): 235–243.

<sup>7</sup> Nramanujam Venkatraman, "IT-Enabled Business Transformation: From Automation to Business Scope Redefinition," *MIT Sloan Management Review*, 1994.

<sup>8</sup> Dhar Vasant and Roger Stein, "FinTech Platforms and Strategy: Integrating Trust and Automation in Finance," *Communications of the ACM* 60, no. 10 (2017): 32–35.

The positive trend of the FinTech industry also happened in Indonesia. The FinTech industry has changed the business models of Indonesia from traditional to internet-based financial services.<sup>9</sup>

The development of the FinTech industry in Indonesia is also relatively rapid. There are several well-known forms of the Fintech industry in Indonesia, such as Crowdfunding, Crowd-investing, and Crowdlending or Peer to Peer Lending.<sup>10</sup> Based on data from the Indonesian FinTech Management Association, it is stated that currently, the Indonesian FinTech Management Association (AFTECH) has more than 350 members, consisting of 359 FinTech companies, 24 Financial Institutions, 13 Research Partners and 6 Technology Partners in FinTech industry.<sup>11</sup>

The promising development of FinTech will undoubtedly increase the risk of this industry is utilized by criminals. One potential crime that can be committed through the FinTech industry is Money Laundering. Money Laundering is the process of hiding or disguising itself as transferring money proceeds from crime so that the proceeds from crime appear as if they came from legitimate activities.<sup>12</sup>

According to the Indonesia Financial Intelligence Unit (FIU/PPATK), money laundering through FinTech is considered a high-level and complicated scheme of money laundering. Furthermore, the FinTech industry is categorized as a high-risk industry related to money laundering. This high risk comes due to the frequent use of technology in its business processes. Therefore, it is necessary to regulate the implementation of the anti-money laundering program in the FinTech industry. However, this implementation must pay attention to the peculiarities and advantages of FinTech itself.

Anti-Money Laundering (AML) programs have an obligation to implement the Know Your Customer (KYC) process for the financial industry. Based on the Financial Action Task Force (FATF) Recommendation No.10, stated that every financial industry has an obligation. Identify and Verify customer identity using reliable documents or data.<sup>13</sup> Furthermore, the verification and identification process is an absolute process that must be carried out as part of the implementation

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<sup>9</sup> Reiner Lenz, "Peer to Peer Lending: Opportunities and Risk," *EJBR*, no. Special Issue : The Risk and Opportunities of the Sharing Economy (2016): 688.

<sup>10</sup> Ibid.

<sup>11</sup> Asosiasi Penyelenggara Inovasi Keuangan Digital (AFTECH), <https://fintech.id/id> , Accessed 19 September 2020.

<sup>12</sup> Javier Garcia, "International Measures to Fight Money Laundering," *Journal of Money Laundering* 4, no. 3 (1999): 7.

<sup>13</sup> The FATF Recommendations, "International Standards on Combating Money Laundering and The Finance of Terrorism & Proliferation," *The FATF Recommendations*, accessed November 13, 2020, [https://www.fatf-gafi.org/media/fatf/documents/recommendations/pdfs/FATF Recommendations 2012.pdf](https://www.fatf-gafi.org/media/fatf/documents/recommendations/pdfs/FATF%20Recommendations%202012.pdf).

of the Anti-Money Laundering and Terrorism Funding (APU-PPT) program in Indonesia. This obligation, usually known as the know your customer program or more commonly known as the Customer Due Diligence (CDD) process.

In general, the CDD process is long and time-consuming. It requires financial industry institutions and customers to meet each other to perform face-to-face identification and Verification of customer data. Unfortunately, this method is considered ineffective and will hinder the business processes of activities in the FinTech industry. The FinTech industry has become famous because of its speed and ease of transactions. It is because the majority of transaction activities in the FinTech industry are conducted through applications and the internet. Therefore, there is need for innovation from the government to accommodate “special” conditions for the FinTech industry to apply CDD process in its business models.

One solution to this problem is to do the CDD process without consuming much time. This method can be done by using an electronic system as a means for the CDD process. This is known as Electronic Know Your Customer (E-KYC) or Electronic Customer Due Diligence (E-CDD). The FATF Guideline on Digital Identity has accommodated the use of electronic systems as a means to carry out the CDD process as long as the electronic system is able to validate the official identity of the person. The E-KYC process can be a solution for the FinTech industry to continue to be able to carry out the CDD process as mandated by laws and regulations with the business processes of this industry that require speed and ease in conducting its financial services.

This paper mainly discusses how the FinTech industry can use the E-KYC process in conducting customer identification and Verification. The first part of this paper discusses the concept of the FinTech Industry and its risk-related money laundering offense. The second part of this paper examines how identification and Verification customer can be done by using the electronic system.

## **2. Method**

The research methodology of this paper is using doctrinal legal research approach. Doctrinal research is research that provides a systematic exposition of the rules governing specific legal issues, analyses the relationship between regulations, explains areas of predicament and predicts future developments.<sup>14</sup> This approach is used to identify the legal risk of the FinTech industry

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<sup>14</sup> Terry Hutchinson and Nigel Duncan, “Defining and Describing What We Do: Doctrinal Legal Research,” *Deakin L. Rev* 17 (2012): 83.

related to money laundering. In addition, this paper discussed how policymakers should adapt the rapid development of the FinTech industry in Indonesia. Furthermore, this paper proposed the used of E-KYC as a solution to prevent money laundering in the FinTech industry.

This paper is mainly written based on data available publicly at the time of writing which are primary data such as legislation and regulations.<sup>15</sup> There are several regulations such as Indonesian law No. 08 the year 2010 concerning The Prevention and Eradication of The Crime of Money Laundering and Financial Service Authority Regulations No.23/Pojk.01/2019 as amendment of regulation No. 12/POJK.01/2017 about The Implementation of Anti-Money Laundering Program and Counter-Terrorist Financing in Financial Sector. Furthermore, this paper also uses secondary legal resources including textbooks and journal articles related to the FinTech industry and money laundering. This paper also uses the FATF recommendations, guidance and state reports and information to analyze relevant issues on the Fintech industry and money laundering.

### **3. Results and Discussion**

#### **3.1. Fintech and Money Laundering**

Criminals will make any effort to hide and disguise their illicit money through a series of Money Laundering schemes. The money laundering method is very important for criminals to ensure that they can “enjoy” their proceeds of crime by consuming or investing them in the legal economy.<sup>16</sup> Traditionally, money laundering can be done through financial institutions by depositing illegal cash into financial institutions.<sup>17</sup> The way criminals deposit their funds can be done through a series of transactions such as converting illicit cash into cheques, traveller’s cheques or other monetary instruments—another traditional method for money laundering by using the insurance sector. The technique can be done through several techniques such as investing illicit cash to a joint venture scheme with an insurance company or by using insurance services through life insurance, non-life insurance, or fraudulent claims.<sup>18</sup> However, this “old school” method has been left by launderers since both regulators and legal officers begin to understand

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<sup>15</sup> Enid Campbell, EJ. Glasson, and Ann Lahore, *Legal Research: Material and Methods 2nd Edition* (Law Company Book Limited, 1979).

<sup>16</sup> Guy Stessens, *Money Laundering: A New International Law Enforcement Model* (Cambridge: Cambridge University Press, 2003).

<sup>17</sup> John Madinger, *Money Laundering: A Guide for Criminal Investigators* (London: Taylor & Francis, 2006).

<sup>18</sup> Arthur Pittman, “Money Laundering: A Challenge for Canadian Law Enforcement,” *Criminal Law Quarterly* 41 (1999): 243–244.

this kind of laundering method. As a Consequence, Criminal try to find another method to laundry their illicit money in a more complicated and sophisticated manner.

The way criminals launder their illicit funds has evolved throughout the years. The development of technology also plays a vital role to facilitate the money laundering process. The involvement of technology dramatically changed the criminal method to hide and disguise their illicit fund, especially with the recent development of the digital economy and the rise of the FinTech industry. In 2018, Globally, the amount of money involved in the FinTech industry was approximately \$127.66 billion, with a predicted growth rate of 25% until 2022, to about 309.98 billion.<sup>19</sup> This trend also occurred in Indonesia, according to data from Financial Services Authority (OJK), the amount of money has been invested in only one FinTech sector which is Peer-to-peer lending (P2P Lending) until January 2020 approximately Rp 88,37 Trillion and involved more than 600.000 accounts lender and 20 million accounts of the borrower.<sup>20</sup> This amount of money in the FinTech industry indeed will attract criminals to use this opportunity to hide and disguise their illicit money. Furthermore, the regulations in this sector mostly are not as settled as regulations in other financial institutions.

It is undeniably true that the rapid development of the financial system in the digital economy and FinTech Industry provide a new opportunity for criminals.<sup>21</sup> Cyberspace and digital technologies are brand new tools for facilitating the criminal business to hide and laundering their proceeds of crime. Furthermore, The most challenge of the FinTech industry is it innovation that possible for cooperation to supply services without the physical presence of the participant (*non-face to face*).<sup>22</sup> Moreover, the speed and instant services provided by technology also play an essential role to put the FinTech industry in a very risky situation to be “hijacked” by launderers. This situation can be more complicated, especially when the launderer combined the FinTech industry with traditional strategies of money laundering. Therefore they are creating a complex online and offline chain of multiple transactions that are backbreaking to trace and monitor.

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<sup>19</sup> Natasha Ketabchi, “State of Fintech Industry,” *Toptal.Com*, accessed November 10, 2020, <https://www.toptal.com/finance/market-research-analysts/fintech-landscape#:~:text=the fintech industry%3F-,The global fintech market was worth %24127.66 billion in 2018,the global financial servic.>

<sup>20</sup> Otoritas Jasa Keuangan, “The Development of FinTech Lending until January 2020,” *Otoritas Jasa Keuangan*, last modified 2020, accessed November 10, 2020, <https://www.ojk.go.id/id/kanal/iknb/data-dan-statistik/fintech/Documents/Perkembangan Fintech Lending Periode Januari 2020.pdf>.

<sup>21</sup> Michael Levi, “Money Laundering and Its Regulation,” *Annals of the American Academy of Political and Social Science* 582 (2020): 182.

<sup>22</sup> Aleksandre Mikeladze, “Do Trendy Technologies Facilitate Money Laundering,” *International Journal Information Theories and Applications* 25, no. 2 (2018): 192–193.

### **3.2. Typology of Money Laundering in Fintech Industry**

In Anti Money Laundering and Counter Financing Terrorism (AML/CFT) regime, the term of “Typology” is used to explain the comprehensive techniques used to commit money laundering or finance terrorism.<sup>23</sup> Money laundering is the process of concealing, converting, or transferring the existence of illegal income and disguising that illegal income to appear legitimate.<sup>24</sup> Money laundering can be done by putting illegal income through three stages which are placement, layering and integration. Placement is a physical introduction of the proceeds of crime into financial systems.<sup>25</sup> Layering can be described as the disguise of the origins of the proceeds through a series of complex financial transactions.<sup>26</sup> Integration is a final stage of money laundering in which the criminal combines the newly laundered funds with that of a legitimate origin The amount of money from this illegal market.<sup>27</sup>

The development of the FinTech Industry seems to be a “place” where the launderer is trying to hide and disguise not only his identity but also his proceeds of crime. There are two main factors why the FinTech Industry could facilitate criminals to hinder and disguise their proceeds of crime. Firstly, the non-face-to-face nature of the FinTech Industry.<sup>28</sup> The systems and services in Fintech Industry allow its consumers to make a request and execute that request fully (or partially) automatic without the presence of human factors (non-face to face). As a consequence, the process for identification and Verification of consumer data becomes more challenging than before—secondly, the speed of transactions of the FinTech Industry. FinTech services mostly facilitate moving funds more rapidly on long distances. In addition, despite the speed of transactions, FinTech services offer less cost and risk than old-fashion transactions.

The non-face-to-face nature of the FinTech Industry and the rapid service of transactions most likely become two important aspects that will attract criminals. Criminals will exploit these aspects to put and hide their proceeds of crime. Therefore, FATF in its guidelines about Digital

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<sup>23</sup> International Moneter Fund, “The Definition of Typologies in AML/CFT Context,” *International Moneter Fund*, accessed November 11, 2020, <https://www.imf.org/external/np/leg/amlcft/eng/aml1.htm#:~:text=In the AML%2FCFT context,lauder money or finance terrorism.&text=Money laundering and terrorism financing,counter financing of terrorism regimes>.

<sup>24</sup> Javier Garcia, “International Measures to Fight Money Laundering,” *Journal of Money Laundering* 4, no. 3 (2001): 7.

<sup>25</sup> Neil Boister, *An Introduction to Transnational Criminal Law* (Oxford: Oxford University Press, 2012).

<sup>26</sup> William C. Gilmore, *Dirty Money: The Evolution of International Measures to Counter Money Laundering and the Financing of Terrorism*, 3rd ed. re. (Council of Europe Publishing, 2004).

<sup>27</sup> Mark Pieth and Gemma Aiolfi, *A Comparative Guide to Anti-Money Laundering, A Critical Analysis of Systems in Singapore, Switzerland, the UK and the USA* (London: Edward Elgar Publishing, 2004).

<sup>28</sup> Wojciech Filipkowski, “Cyber Laundering: An Analysis Typology and Techniques,” *International Journal of Criminal Justice Sciences* 3, no. 1 (2008): 15–16.

Identity, clearly states that every business that conducts without the presence of a customer (non-face to face) is considered a high-risk business that can be used by criminals.

There are several typologies of money laundering that are possibly utilized and exploited by criminals in the FinTech Industry. These typologies become more complicated because criminals try to combine the “old-school” techniques of money laundering and the product or services offered by the FinTech industry. These possible typologies can be described as follows:

First, using a false identity to open and hide their proceeds of crime. False identity is a very classic and simple method of money laundering scheme. Furthermore, this type of technique most likely is combined with other technologies in order to deceive the legal officer. This technique started when criminals use false identities while opening an account to get access to FinTech services. This situation becomes more complicated since the process of Identification and Verification of customers are committed through technology (Internet or Mobile Applications). Therefore, Criminals can produce false documents that look authentic.<sup>29</sup> In Indonesia, the risk of false identity becomes more evident because Indonesia still does not have a single identification number to verify and identify the personal data of Indonesian Citizens.

Second, is the use of a *nominee* that is registered to access FinTech services. The use of *nominees* is also a classic technique of money laundering. A *nominee* is anyone appointed to fill a particular post or designated to perform certain acts or functions.<sup>30</sup> In most cases, the *nominee* is a relative of the perpetrator such as a family member (wife and children) or other people the perpetrator can trust such as a personal assistant, friends or even drivers. The role of a *nominee* in the money-laundering scheme is vital. The *nominee* is used to obscure and disguise the illicit fund of the perpetrator. It can be done by entrusting the illicit fund to the *nominee*. In several cases, the *nominee* will be the person to put the illicit fund into the financial institutions. In terms of FinTech services, the *nominee* can register using his/her own identity and using FinTech services by the illicit fund from the criminals. From this very simple scheme, the real identity of the perpetrator has been disguised and obscured.

According to the Indonesian Financial Intelligence Unit (PPATK), the case that uses false identity and nominee in Indonesia is very high. Almost all money laundering cases in Indonesia used false identities and nominees as a basic technique to launder their money.<sup>31</sup> Hence, with the

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<sup>29</sup> Camelia Popa, “Money Laundering Using the Internet and Electronic Payments,” *Metalurgia International* 17, no. 8 (2012): 219.

<sup>30</sup> Madinger, *Money Laundering: A Guide for Criminal Investigators*.

<sup>31</sup> PPATK, “Tipologi Pencucian Uang Berdasarkan Putusan Pengadilan Tahun 2018,” PPATK, last modified 2018, accessed November 13, 2020, [http://www.ppatk.go.id/backend/assets/images/publikasi/1581670316\\_.pdf](http://www.ppatk.go.id/backend/assets/images/publikasi/1581670316_.pdf).



rapid development of the FinTech industry, it is not impossible for criminals to use the same way to launder their money through FinTech services. Yet, the regulation of the FinTech industry in Indonesia still has not prepared to tackle this new risk in money laundering.

### **3.3. The Concept of Know Your Customer Principle**

The Know Your Customer principle (KYC) is a tool to prevent money laundering through financial and non-financial institutions. This principle came from American Bank Secrecy Act (BSA) in 1970.<sup>32</sup> Originally, the KYC principle in BSA required Banks in America to comply with certain procedures such as suspicious transactions and financial transactions that exceed a particular threshold. Later, this principle was adopted as a global standard to fight anti-money laundering.

The first international convention that used KYC approach can be found in the United Nations Convention Against Transnational Organized Crime (UNTOC). The UNTOC did not explicitly use the term KYC; however, the convention contained regulations that includes the requirements for customer identification, transactions record and the reporting of suspicious transactions.<sup>33</sup> The first specific international instrument that explicitly uses KYC policies is the Financial Action Task Force (FATF) through its 40 Recommendations. The KYC process is clearly stated under Recommendation No. 10. Recommendation 10 require every financial institution to have specific procedures that include identifying the customer and verifying customer identity using reliable, independent source documents, data or information and reporting every suspicious transaction to Financial Intelligence Unit (FIU).<sup>34</sup>

Besides FATF Recommendations, The Basel Committee on Banking Supervision (Basel Committee) also published The Anti-Money Laundering guidelines and standards and banking supervision issues. The Basel Committee came up with the concept to combine KYC and CDD procedures to tackle potential abuse of financial institutions by criminals. According to The Basel

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<sup>32</sup> Boister, *An Introduction to Transnational Criminal Law*.

<sup>33</sup> See article 7 par. 1 (a), The United Convention Against Transnational Organized Crime, 2004, [https://www.unodc.org/documents/middleeastandnorthafrica/organised-crime/UNITED\\_NATIONS\\_CONVENTION\\_AGAINST\\_TRANSNATIONAL\\_ORGANIZED\\_CRIME\\_AND\\_THE\\_PROTOCOLS\\_THEREO.pdf](https://www.unodc.org/documents/middleeastandnorthafrica/organised-crime/UNITED_NATIONS_CONVENTION_AGAINST_TRANSNATIONAL_ORGANIZED_CRIME_AND_THE_PROTOCOLS_THEREO.pdf), Accessed on 13<sup>th</sup> November 2020.

<sup>34</sup> The FATF Recommendations, "International Standards on Combating Money Laundering and The Finance of Terrorism & Proliferation."

Committee, the main elements of KYC policy/ CDD measures are a procedure that includes customer acceptance policy, customer identification, high-risk monitoring and risk management.<sup>35</sup>

The implementation of KYC/CDD procedure is a fundamental aspect in the Anti-Money Laundering regime. The implementation of KYC/CDD is very important to maintain market and financial institution integrity.<sup>36</sup> The KYC/CDD procedure provides information not only to the financial institutions themselves but also to legal officers related to the identity of the new customer and consumer. Furthermore, this procedure also provides the transaction trend of the customer.

In Indonesia, the KYC/CDD procedure is already implemented, especially in Financial institutions such as banks and Insurance companies. The obligation to use CDD/KYC approach is specifically regulated in Financial Services Authority Regulation No. 12 the year 2017 regarding the implementation of the anti-money laundering program and counter-terrorism in Financial institutions. This regulation stated that every financial institution/service should implement the CDD/KYC procedure. The CDD/KYC procedure must include identification, Verification and supervision of customer documents, data or information.<sup>37</sup>

The implementation of KYC/CDD procedure in the Bank and Insurance sector is (most likely) robust and rigid. On the one hand, the strong and rigid implementation of KYC/CDD procedures could give benefit maintaining the integrity of the market from criminal disruption such as money laundering and other financial crimes. On the other hand, the strong and rigid implementation can also give a disadvantage for the financial institutions themselves, especially related to the complex procedure within KYC/CDD procedures. In most cases, the KYC/CDD procedure must be completed through a direct interview. This situation gives a drawback not only for the financial institutions but also for a customer.

The idea to simplify the KYC/CDD procedure has been a significant issue right now, especially with the development of the FinTech Industry. Aforementioned, the FinTech industry offers the simplicity and speed of transactions as its main benefit. The complex and rigid KYC.CDD procedure is clearly not suitable for this industry. Therefore, the Regulators are faced

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<sup>35</sup> Maphuti Tuba and Chinelle van der Westhuizen, "An Analysis of the Know Your Customer Policy as an Effective Tool to Combat Money Laundering: Is It about Who or What to Know That Counts?," *International Journal Public Law and Policy* 4, no. 1 (2014): 59.

<sup>36</sup> Doulgas W.et.al Arner, "The Identity Challenge in Finance: From Analogue Identity to Digitized Identificaiton to Digital KYC Utilities," *European Business Organization Law Review* (2019): 57.

<sup>37</sup> Article 1 par. 11 Financial Service Authority Regulations No.23/Pojk.01/2019 as amendment of regulation No. 12/POJK.01/2017 about The Implementation of Anti-Money Laundering Program and Counter Terrorist Financing in Financial Sector.

with the need to develop regulatory approaches that do not hinder development and innovation while still limiting risks to consumers and financial stability.

### **3.4. The needs of Reg-Tech in Regulating E-KYC to Prevent Money Laundering in Fintech Industry**

The tremendous growth of the FinTech industry has changed and clearly caused disruption in the Financial industry. These changes have affected every sector of finance from banking, insurance, or even asset management.<sup>38</sup> The impact of the FinTech industry is very massive to society at large. However, like two sides of a coin, the effect of the FinTech industry also creates inevitable challenges, especially for a regulator.

The development of FinTech has changed the way to deliver financial services through the development of new technologies based on the internet or mobile applications. It is drastically reduced the cost of the services and increased the speed of transactions. In contrast, such benefits of FinTech services are faced very huge obstacles by old-school regulations that contained very complex and “costly” procedures. Therefore, the evolution of FinTech must be followed by a similar evolution of its regulation.<sup>39</sup> FinTech needs a regulation that contained flexibility and adaptively to the development of technology—this kind of regulation is widely known as RegTech.

RegTech is a contraction of the “regulation” and “technology”. RegTech can be described as a regulation that uses information technology (IT), in the context of monitoring, reporting and compliance.<sup>40</sup> Essentially, RegTech used IT as a solution to improve the regulatory process, requirements, and related compliance. It can be done through the digitization of reporting document and compliance processes by using new technological development such as the Internet, Mobil Applications, Artificial Intelligence, and machine learning technology.

For the regulator, RegTech can be used as a response to the rapid development of FinTech Industry. RegTech provides a sophisticated approach to make regulators keep up with the disruption caused by the FinTech industry. It provides more effective market supervision by the regulator. Furthermore, RegTeh allows the automation of compliance and monitoring process for

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<sup>38</sup> William Magnuson, “Regulating Fintech,” *Vanderbilt Law Review* 7, no. 4 (2018): 1187.

<sup>39</sup> Yen-Te Wu, “Fintech Innovation and Anti-Money Laundering Compliance,” *National Taiwan University Law Review* 12, no. 2 (2017): 204.

<sup>40</sup> Douglas W. Arner, Janos Barberis, and Ross P. Buckley, “The Emergence of Regtech 2.0: From Know Your Customer to Know Your Data,” *Journal of Financial Transformation* 44 (2016): 3.

the Financial Industry.<sup>41</sup> In short, the application of technology to regulation and compliance can massively increase efficiency to achieve a better outcome for the regulator and FinTech Industry.

The existence of RegTech can be an answer for the FinTech industry which needs the flexibility in regulation. The most crucial aspect that can be regulated in RegTech is related to KYC/CDD compliance with the help of technology (E-KYC/CDD). With the help of technology, the process of KYC/CDD such as identification and Verification of new consumer or consumer that can be done through an electronic system.

### **3.5. Identification and Verification of Consumer Identity through Electronic Measures (Electronic KYC/ Electronic CDD)**

Identification and Verification of new consumers and consumers are the first and the most important step in KYC/CDD compliance. In a mainstream financial institution such as a bank and insurance company, the Identification and verification process must be done through face-to-face meetings. This first step of KYC/CDD requires the consumer to provide a document that consists of name, birthdate, nationality, address, and so on. In short, it is a very complicated process and costs so much time for the consumer.

The FinTech industry has heavily criticized this identification and verification process using analog identity. The long-need process is not suitable for the FinTech industry that already used technology in their daily business. Moreover, the long-need process of identification and Verification merely gives obstacles to the rapid development of the FinTech industry. Therefore, there is a huge demand from society to find an alternative process.

In the context of identity compliance in KYC/CDD, there is an innovative solution to cut the long haul process of KYC by using the help of technology. It can be done by introducing the digitalization of KYC/CDD process or is widely known as Electronic KYC/CDD (E-KYC/CDD). In the digitalization era, the identity compliance process can be done through digital identity.<sup>42</sup> Digital Identity or Electronic Identity is a “digital version” of legal identity that consists of passports, national identity cards, or even a driving license. In several countries, digital identity can also include physical identities such as fingerprint, IRIS or DNA biometrics.<sup>43</sup> Therefore,

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<sup>41</sup> Yvonne Lootsma, “Blockchain as the Newest RegTech Application-The Opportunity to Reduce the Burden of KYC for Financial Institutions,” *Banking & Financial Services Policy Report* 36, no. 8 (2017): 17–18.

<sup>42</sup> Ibid.

<sup>43</sup> Arner, “The Identity Challenge in Finance: From Analogue Identity to Digitized Identificaiton to Digital KYC Utilities.”

digital identity can be used by the FinTech industry to identify and verify the data of the consumers.

FATF, in its guidance on Digital Identity, clearly endorses the use of this innovation in E-KYC/CDD Process. The process of identity compliance (E-KYC/CDD) can be done through non-face-to-face occasions if and if only it is using Digital Identity Systems that is independent and reliable.<sup>44</sup> FATF endorsement of E-KYC/CDD process can be a win-win solution for the FinTech industry and Anti-Money Laundering compliance. It can provide KYC/CDD compliance as requested in the AML regime while still maintaining the speed of the services in the FinTech Industry. Furthermore, the E-KYC/CDD process through digital identity has been widely used in India (through Aadhaar number).

The regulation in Indonesia provides an opportunity for the FinTech industry to use the E-KYC/CDD process. The regulation can be found in the Financial Service Authority Regulations No.23/Pojk.01/2019 as an amendment of law No. 12/POJK.01/2017 about The Implementation of Anti-Money Laundering Program and Counter-Terrorist Financing in the Financial Sector. According to article 17 of these regulations, in case of financial institutions want to verify the identity of consumers through non-face to face, the verification process must be done through electronic systems owned by the financial institutions and/or owned by the new consumer. Furthermore, the verification process is obliged to use of national identity that meets 2 (two) authentication factors.<sup>45</sup>

2 (two) factor authentication (2FA) is a method to protect the KYC procedures that is used through digital measures from identity theft and fraud. In 2FA, the financial institution or anyone else that conducts E-KYC must implement at least two steps of authentication.<sup>46</sup> It can be done by verifying the consumer document identity and combining it with the biometric data of the consumer.

Ideally, the financial institution which is conducting E-KYC has access to identify and verify the consumer data from the government. This perfect example can be seen from the implementation of the Aadhaar number in India. In India, Financial Institutions have been permitted

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<sup>44</sup> FATF, "Guidance on Digital Identity," *FATF*, accessed November 17, 2020, <http://www.fatf-gafi.org/publications/fatfrecommendations/documents/digital-identity-guidance.html>.

<sup>45</sup> Article 17 paragraph 4 Financial Service Authority Regulations No.23/Pojk.01/2019 as amendment of regulation No. 12/POJK.01/2017 about The Implementation of Anti-Money Laundering Program and Counter Terrorist Financing in Financial Sector

<sup>46</sup> Mondal P.C., R. Deb, and M.N. Huda, "Know Your Customer (KYC) Based Authentication Method For Financial Services Through the Internet," in *19th International Conference on Computer and Information Technology (ICCIT)*, 2016, 535–536.

to access to use Adhaar numbers as a tool to identify and verify the consumers' identity.<sup>47</sup> Unfortunately, Most of the FinTech industry in Indonesia, still does not have permission to access Population and Civil Registration Data that is stored in the Population and Civil Registration Agency (DUKCAPIL). Population and Civil Registration Data is very sensitive information that can only be accessed by a limited agency. The private sector can only get access by acceptance of cooperation from the fintech industry and DUKCAPIL.<sup>48</sup> Yet, the use of Population and Civil Registration Data is still debatable. Moreover, Indonesia still does not have strong regulations related to Data Protection. Therefore, the FinTech industry in Indonesia still has to find another solution to conduct E-KYC that is suitable and applicable according to Indonesia Regulation.

### **3.6. Digital Signature: Tools for Digital Identification and Verification of the Consumer Identity**

The concept of Digital Signature could be a possible solution for FinTech Industry to identify and verify its consumers as required in E-KYC/CDD process. Digital Signature or Electronic Signature is different from a digitized image of handwritten. The digital signature is made with the help of cryptographic methods, with the aim of such an ordinary signature.<sup>49</sup> According to Electronic Information and Transactions regulations, Electronic Signature is a signature that contains Electronic Information that is attached to, associated or linked with other Electronic Information that is used for means of Verification and authentication.<sup>50</sup> In short, a digital signature is a signature that contains Electronic Information and can be attached to a digital document to retain the authenticity and Verification of the document. Furthermore, there are three basic principles in the Digital Signature process, the first principle is verifying signatory authentication, the second is document authentication, and the last is digital signature verification.<sup>51</sup> These three principles must be accomplished in order to make a digital signature.

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<sup>47</sup> Reserve Bank of India, "Master Direction RBI/DBR/2015-16/18, Master Direction – Know Your Customer (KYC)," *Reserve Bank of India*, last modified 2015, accessed November 18, 2020, <https://www.rbi.org.in/commonman/Upload/English/Notification/PDFs/MD18KYCF6E92C82E1E1419D87323E3869BC9F13.pdf>.

<sup>48</sup> Aulia Delvina, "Penggunaan Tanda Tangan Elektronik Dalam Pengajuan Pembiayaan Berdasarkan Prinsip Syariah," *Jurnal Akuntansi Bisnis dan Ekonomi* 5, no. 1 (2019): 1306.

<sup>49</sup> Irawan..et.al Afrianto, "E-Document Autentification with Digital Signature for Smart City," *Reference Model* 407 (2018): 2.

<sup>50</sup> See article 1 par. 12, Law Number 19 Year 2016 about amendment of Law Number 11 Year 2008 about Electronic Information and Transactions.

<sup>51</sup> Alok ; Y. Alex Tung and James R. Marsden Gupta, "Digital Signature: Use and Modification to Achieve Success in next Generational e-Business Processes," *Information & Management* 41, no. 5 (2004): 71–75.

In Indonesia, the digital signature must be certified in Electronic Certification from the provider. An electronic Certificate is a certificate of an electronic nature that contains an Electronic Signature and Identity, demonstrating a status of a legal subject of parties to an Electronic Transaction issued by Certification Service Providers.<sup>52</sup> To become a provider, a digital signature is very limited. This provider must fulfill all required to become a digital signature provider and have been acknowledged by the competent authority.<sup>53</sup> Furthermore, the digital signature must be made from at least a combination of two-factor authentication to prove the identity of the owner through electronic measures.<sup>54</sup> There are 3 (three) types of authentication factors that are widely known, which are: 1) What you Have. It is about something you own personally such as Id Card, SIM Card, etc. 2) What you know. It is about something that is known individually such as password security, mother's name and etc. and 3) What you are. Something related to the characteristic of a person/individual such as a Biometric photo, fingerprint, or even handwriting.

The process to make a certified digital signature must strictly follow procedures that are regulated in the regulation. The first process is registration to the digital signature platform. In this process, the user registered their data such as name, email address, phone number, and uploads a photo of the National Identity Card (KTP).<sup>55</sup> After the completed registration process, the user also needs to upload his photo that is taken from a different angle (for biometric purposes) and draw a signature by dragging your finger/stylus/mouse cursor on the canvas provided to create your signature. The process continues with the Verification of the document from the user by the provider. In this process, the provider will verify the documents that are submitted by the user in the registration process. If everything is completed and verified, then the provider will send an email that contains the confirmation, digital signature and electronic certification to the user. From this procedure, it can be seen that the digital signature provider combines two-factor authentications to make a digital signature fulfilled all security compliance that including authenticity, integrity and non-repudiation of the digital signature.

According to article 17 Financial Service Authority Regulations No.23/Pojk.01/2019 as an amendment of regulation No. 12/POJK.01/2017 about The Implementation of Anti-Money

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<sup>52</sup> See article 1 par. 9, Law Number 19 Year 2016 about amendment of Law Number 11 Year 2008 about Electronic Information and Transactions.

<sup>53</sup> See Ministry of Communication and Information Technology Regulation number 11 Year 2018 about Electronic Certified Provider.

<sup>54</sup> See Article 64 Government Regulation Number 71 Year 2019 about The Operation of Electronic Systems and Transactions

<sup>55</sup> See Privy.Id user guide available at <https://privy.id/guide> accessed on 20 November 2020.

Laundering Program and Counter-Terrorist Financing in the Financial Sector, the FinTech Industry can establish E-KYC by making an agreement with the Digital Signature provider in order to verify and identify the identity of the consumer. The process to make a digital signature through the provider has been appropriate with the requirement under article 17 of the Financial Service Authority which requires the use of two authenticate factors while conducting E-KYC.

#### **4. Conclusion**

The rapid development of the FinTech industry has disrupted not only the financial industry itself but also the regulator. The existence of FinTech pushed everyone to keep up with its development. As a consequence, today, the mindset of sociality has changed to follow the innovation which is brought by fintech, including the need of innovation in the regulation.

It is undeniably true that regulation is the main challenge of the FinTech industry. Most of the regulation that exists today still contain certain administrative procedures that cost both time and money for the financial industry. One of the most important issues is related to the implementation of KYC/CDD procedures that are very complicated and exhausted. Thus, this old-school type of regulation is clearly not suitable for the FinTech industry that offers speed and ease of transaction through internet and mobile application. The regulator has to adapt and innovate in making a regulation that is suitable for FinTech. Adapting the concept of RegTech by combining regulation and technology can be a solution for the regulator to keep up with the FinTech development. In this matter, the process of identification and Verification (KYC/CDD) can be done through digitalization. In Indonesia, the process of E-KYC/CDD can be done by using the electronic signature to verify and identify the profile of the consumer.

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