

Indonesia's Industrial Revolution and Landscape Fintech

(Library Research)



Written by:

(SMARTEST ONE)

Aditia Febrian

Choerul Anam Karim

Faradilla Ramadhani

Ghinaa Aulia

Usi Yuliani Nurhalizah

Walfa Oktafi Ramadhan

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ABSTRACT

Today, technology has become part of the device of life. Sectors of life such as economics, education, health and so on are sure to adapt to technology and abandon manual activities. For example, when it comes to managing personal finances, not a few in society prefer not to personally handle money (moneyless) and prefer to keep it in digital wallet applications such as OVO, Dana, Shoppe Pay, Go Pay and Link Aja. The digital wallet has many features to make it easier for the user to make transactions that have been adapted to such everyday needs as cash out, send money, the setting of bills and upgrades, the taking of bills and the taking of money.

With the present day of fintech development, certainly not apart from the history of the industry's growing revolution, beginning with the industry 1.0 to 4.0 revolution. Therefore, the study of history needs to be studied and researched so that no matter what happens at this time is necessarily past, nor is it to be apart from the present history that each has a clear basis for history. The scientific work will discuss how the industry revolution is developing and how Indonesia's landscape fintech is. It is important to discuss that Indonesia is aware of the importance of the history of the industry and the work of the project is able to enable people to grasp widely the importance of the growth of the industry revolution in which people are not only users of the technology but also becoming consumers or developers in the financial technology.

The research methods used are qualitative with data-retrieval methods using library research. As a result of the research, there are four periods of the industry of the revolution of 1.0, 2.0, 3.0 and 4.0. As for Indonesia's majority landscape fintech, it consists of peer-to-peer (p2p) and digital payment (digital payment)

Key words: revolution industries, landscape, fintech

CHAPTER I

INTRODUCTION

A. Background

Today, technology has become part of the device of life. Sectors of life such as economics, education, health and so on are sure to adapt to technology and abandon manual activities. For example, when it comes to managing personal finances, not a few in society prefer not to personally handle money (moneyless) and prefer to keep it in digital wallet applications such as OVO, Dana, Shoppe pay, Go Pay and Link Aja. The digital wallet has many features to make it easier for the user to make transactions that have been adapted to such everyday needs as cash out, send money, the setting of bills and upgrades, the taking of bills and the taking of money.

Ovo, Dana, Shoppe pay, Go Pay and Link Aja are part of the financial management breakthrough in the industry's so-called digital wallet (e-wallet) revolution and are part of the financial technology (fintech) that most societies today use. User Shoppe Pay in Indonesia reached 10 million users per month in 2020. This is a dramatic increase during the risk of covid 19, where the population is restricted to business, the OVO would, for example, increase the number of partners (merchant) 95% annually by 2020. Research manager of Indonesia's neurosum for 1000 active users of e-commerce during November 2020 through January 2021 Notes the volume of Shoppe pay transactions at 29% of the total fintech payments in Indonesia during November 2020 through January 2021, then OVO 25%, Go Pay 21%, 20% and link Aja 6% (katadata. Co. Id).

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B. Research Question

1. How is the historical development of the industry revolution?
2. What about the landscape fintech in Indonesia?

C. Aim of the Research

1. For the history of industry's revolution
2. To know the landscape fintech in Indonesia

CHAPTER II DISCUSSION

A. Research methods

The method used in writing this work is a qualitative method. According to Sugyono, the qualitative study method is the study used to examine on the condition of the natural object, which the researcher is a key instrument. As for the method of collecting the data is using literature studies or library research. According to j Supranto as quoted by Ruslan in his public relations and communications, that the study of literature is done in searching for data or research information through reading scientific journals, reference books and publications available in the library (Ruslan, 2008:31)

B. Research Findings

1. The growth history of the industry revolution?

The 4.0 industrial revolution brought various changes to the fabric of Indonesian society. One perceived change is that in the digital age, changes in every aspect, some of which are finance industries such as banking, insurance and multi-finance firms and include new industry such as financial technology. The industrial revolution pointed to the large-scale changes that result from the development of science and technology. Globally, the industrial revolution has already occurred four times. The first industrial revolution occurred in 1784 where human labour was replaced by the use of industrial steam engines. The second industrial revolution occurred in 1970 where mass production was carried out. Then followed the third industrial revolution in 1969, the use of information technology and computerization for manufacturing automation. In 2011 the term 4.0 was born as the fourth industrial revolution of integrated machines on the Internet. The industrial revolution has continued four times now - the 1.0 industrial revolution, the 2.0 industrial revolution, the 3.0 industrial revolution, and the 4.0 industrial revolution. (Source: katadata. Co. id).

Here is a simple explanation of how the industrial revolution developed

1) Industrial Revolution

This industrial revolution of 1.0 occurred about 1800-1900. England is the birthplace of this industrial revolution. The industry era was characterized by the invention of the steam engine used for the production of goods. Also, steam engines were used in transportation. International transport at the time was wind power. But they were not completely reliable because they might be blowing in the

opposite direction or even if there was no wind at all. As industry expanded, James watt invented steam engines that were far more efficient and inexpensive than the one before. The steam engine enabled the ship to sail for full 24 hours if the steam engine remained supported with sufficient wood and coal.¹

However, in the industries 1.0 that the creating of the steam engine has yet another negative impact of environmental pollution due to steam engine smoke and other industrial waste.²

2) industrial revolution.

The 2.0 industrial revolution occurred in the early 20th century. During this period, industrial progress was taking place very rapidly in the United Kingdom, Germany, America, France, and Japan's DNA. The 2.0 industrial revolution is known as the technological revolution because at this time there have been enormous and radical leaps in the development of technology and culture of the people and also a continuation of the 1.0 industrial revolution characterized by the invention of electricity. Nevertheless, there is still a roadblock to factory production, which is the problem of transportation. At this time, cars began to be mass-produced but did not deliver the production process quickly, to assemble many cars, assembly was required by many to assemble cars at the same time.³

The second industrial revolution also affected military conditions in World War II. Thousands of tanks, planes, and weapons were created from factories that use production lines and conveyor lines. This is the mass production. The change from agricultural society to the industry community has virtually become complete.⁴

3) 3.0 industrial revolution.

The industrial 3.0 revolution began with the advent of information and electronic technology that made its way into the industrial world. Take computer and robot automation systems. Industrial equipment is not controlled by humans; it is regulated by computers or is known as computerized terms. This period comes involve software development to utilize electronic hardware.⁵

¹ Wisnu Pangah Setiyono dkk, *Financial Technology*, Sidoarjo: UMSIDA Press, page: 28

² Wisnu, *Financial Technology*, page: 28

³ Wisnu, *Financial Technology*, page: 29

⁴ Wisnu, *Financial Technology* page: 29-30

⁵ Wisnu, *Financial Technology*, page: 30

One of the first computers developed in World War II as a machine to decipher Nazi German codes was a computer named colossus. The computer that can program it isa giant room machine that has no ram and cannot take orders from humans through a keyboard. That ancient computer received a direct order using a paper ribbon that required 8,500 watts of electricity.⁶

Computer technology, however, advanced tremendously after the second world war. Semiconductor, transistor, and then integrated chip (IC) makes computer size smaller, less electricity required, and more sophisticated numerical capabilities. Decrease in size will enable the computer to be installed in the machines that operate the production line. The computer has begun to take the place of many humans as operators and controlling the production lines.⁷

4) 4.0 industrial revolution.

The emergence of the industrial revolution 4.0 marked by human connectivity, data and machinery in virtual or cyber form. These developments brought about very rapid changes that were intended to enhance the quality of life. In the industrial revolution 4.0 enabled automation in all fields to achieve more effective and efficient productivity. (Source: katadata. Co. id).

A lot of things that weren't there before, suddenly emerged and became new innovations, and opened up huge tracts of business. Closest example, transportation emerged with a ride-sharing system like Gojek and Grab. The presence of the industry 4.0 revolution has resulted in unprecedented new businesses, new jobs, and new professions.⁸

As for the positive effects of industrial revolutions such as production processes are more effective and efficient, technology and knowledge are more advanced and more sophisticated, information access is easier and faster because of the Internet. And the negative effects of the industrial revolution are the reduced amount of labour as it is replaced by machines or robots, and the number of unemployment increases because of the lack of jobs for human resources.⁹

2. Landscape fintech in Indonesia

⁶ Wisnu, *Financial Technology*, page: 30

⁷ Wisnu, *Financial Technology*, page: 31

⁸ Wisnu, *Financial Technology*, page: 31

⁹ Wisnu, *Financial Technology*, page: 31

In the first semester of 2008, the company's net profit in the first quarter of 2007 fell to rp2.1 trillion from rp7.9 trillion in the same period last year. After all, Indonesia itself is a vast island nation. Digital finance provides the solution to the problem, supported by modern times that are equipped with technology and the Internet that provide services of online transaction payment so that the process is more practical, fast, and inexpensive. Less transportation costs to pay monthly needs or liabilities, such as electricity costs and taxes. These service providers generally take the form of virtual wallets that come with various features to make online transactions between customers and owners or businesses easier. The significant difference between digital and non-digital is a much higher market target than non-digital. This digital financial would indirectly connect society with its needs. Leveraging digitisation in the modern age can reach broad connections in industry so that what we will offer will increase revenue as well as profits as the user or user of the fintech service platform is growing and expanding in society. The development of the industrial revolution, which we will not only be users or user technologies, especially fintech, but we will also be polluters or developers in the financial industry, which we will create or provide digital financial platforms, which we will also take advantage of the most profitable.(kumparan.com).

With Internet penetration of 6% and financial inclusion still a major challenge, Indonesia offers fertile land for fintech innovation. Indonesia's burgeoning fintech ecosystem is driven largely by proactive governments that have introduced rules in many areas including peer-to-peer loans (p2p), digital payments, and the latest from open banking, in the hope of encouraging innovation and boosting financial inclusion. The profitable landscape has brought the attention of local and international investors, many of whom are placing a big bet on the prospects for digital financial services in this country.¹⁰

In the second quarter of 2007, the company's net profit in the first quarter of 2007 fell to rp778.3 trillion from rp67.9 trillion in the same period last year. Fintech's fastest growing growth in Indonesia is peer-to-peer loans (p2p) and electronic payments. According to bank Indonesia statistics, the value of electronic

¹⁰ Wisnu, *Financial Technology*, page: 34

transactions grew six times between 2012 and 2017 to rp12.3 trillion (\$840 million).¹¹

Fintech types in Indonesia¹²

Basically, fintech has a lot of services and products that people can use. However, according to the bank of Indonesia, it is divided into four types:

1. Peer-to-peer (p2p) length and crowd cater p2p commentary and crowd assist, also said, financial aid. These platforms are able to connect those who need funds with those who invest in them. Usually, this process through p2p is more practical because it can be done in one online platform.

2. Risk management investments

In this type, you can monitor financial conditions and also do easier and practical financial planning. Types of risk management investments usually present and can you access through the smartphone. All you have to do is give me the data you need to control your finances.

3. Payments, clearing, and settlement

There are some financial start-ups that often provide most take and e-wallet, which both products still fall into the one with the take, clearing, and settlement.

4. Market aggregator

The fintech currently refers to a portal which collects a variety of financial related information to be presented to an audience or user target. Usually, this type of fintech contains a variety of information, tips

Finance, credit CARDS, and investments.

The advantage and advantage of digital finance can have far-reaching effects to facilitate the financial presence of fintech (digital financial) in an indirect way will be a boon to financial affairs. Not only does it give easy ease, it can even help faster and safer. All feel the benefits of using digital finance, now that people with low income can easily get financial services, such as low interest loans. Fintech likewise facilitated that those who had previously been unable to reach could now reach a wide range of financial services.

This, of course, will also affect the growing purchasing power of people on the financial products in the market that can lead society to reach those products with the

¹¹ Wisnu, *Financial Technology*, page:34

¹² Wisnu, *Financial Technology*, page: 34

finances provided. When we sell our merchandise, there is a transaction method of service and finance services that USES digital technology tools such as mobile or web through third parties. There is also a specially routed service at an e-commerce to simplify the transaction chain.

CHAPTER III

CONCLUSION

1. The industry revolution began in the 18th century and divides into the fourth period of the industry revolution:
 - a. the industry 1.0 revolution marked the invention of the steam engine
 - b. the 2.0 industrial revolution marked the invention of electricity
 - c. the industrial 3.0 revolution was characterized by the creation of computer and computerized systems
 - d. the industrial 4.0 revolution is marked by the creation of human connectivity, data and machines in virtual form
2. We will take the one which we will take.

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