EMBRACING SOCIETY 5.0 WITH HUMANITY

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Society 5.0 is a concept presented by the Japanese as a core concept of their economic system. They believed that technology should not surpass the intelligent of men. As such, in society 5.0 the Japanese government would like to ensure that all technological things are designed to be a human-centered design. In fact, their ministry of education in 2018 has also been readily prepared the future generation through a change in their education system. For example, the minister explains that in Japan, or many parts of the world, university entrance are divided into two main concentrations, which are science and social science. The minister thought of changing the system, as society 5.0 is about creating a technology that is human centered. For instance, they gave an example on designer babies. If, people from hard science learn about philosophy, ethics, and humanities, they won't face such ethical concern when developing a product. This is what is being envision by the Japanese government for their younger generation. Collaboration between science and social science is necessary to build a better environment for our future children. Another example is the companies in Japan, such as Hitachi and Fujitsu has already been implementing this 5.0 by designing product that relied fully on technology but puts human at its center (Hitachi, 2017).

Likewise, it is currently a hot topic in Indonesia. Indonesia as a country with the 4th largest population in the world has not been implemented this concept. Our country is still on the industry 4.0. Yet, with the rising interest in AI, Blockchain, NFT, number of unicorn start-up. and all recent technological changes, our country are ready to compete with any other countries in Southeast Asia. Society 5.0 is coming, and we need to embrace it. To prepare with the society 5.0, It is not only the technological side. It is necessary for us to have a strong principle at hearts that based on our belief system. We, as an Indonesian have known to be religious that most of us believed in God. We also commonly practice our religion and tend to be kind to people because we know God would love our good deeds. I personally think that this will help us to move forward and live together with advanced technology.

Technology begets a very important leap in human's life journey. It is important to keep valued of the benefit but it's more important to look out for the human itself. As its purpose is smarter than us, to help us, it will be very ideal if we embrace the technology using our ability to be kind.

Malang, 21 Maret 2022

Diah Karmiyati

Daftar Isi

Market Potential of *Kafalah Bil Ujroh* Sharia Guarantee Through E-Policy During the Covid-19

A. Ifayani Haanurat[1], Ifadhila[2]

Introduction

Corona Virus Disease 19 (Covid-19) is a pandemic or one of the outbreaks reported by the World Health Organization (WHO) in early 2020, with the fast transmission. The existence of this global pandemic has triggered a global economic recession in 2020, and this event is worse when compared to the era of the 1930s. Even the International Monetary Fund (IMF) and the World Bank predicted this to the end of the first quarter of 2020 the global economy will enter a sharply corrected recession. And also global economic growth slumped to negative 2.8% or dragged up to 6% from the previous global economic growth, even though the initial projection estimated that at the end of the first quarter of 2020 the growth percentage was around 3% [1], [2].

The Covid-19 pandemic in 2020 was a quite tough year in the economic field because the consequences were not only health problems and the number of people who fell but greatly affected the economic growth of several countries including Indonesia [3]. One of the government's policies in suppressing the Covid-19 virus is to limit people's mobility. The policy issued by the government in handling Covid-19 was based on calculations of economic conditions, social conditions and political conditions in Indonesia, also based on experiences that occurred in other countries, namely the implementation of the lockdown rules, then PSBB (Large-Scale Social Restrictions), which was followed by PPKM rules (Implementation of Community Activity Restrictions) especially in areas with high transmission rates (red zones), as well as encouraging the community to change behaviour to 3M rules (wearing masks, keeping distance and washing hands) by strengthening the implementation of 3T or *testing*, *tracing*, *treatment* [4].

In addition, companies are required to carry out the Covid-19 protocol starting with the implementation of WFH (Work From Home) to New Normal WFO (Work From Office) [5], with the impact of covid-19 which caused panic in the financial sector which also

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$Z° = \frac{2100}{1,6} = 1312,5 = 1312$

Motor velocity that used in barrel process with 1200 kg load amount and 25 mm size product is 1312 rpm.

Conclusion

In the case that I solved using the tsukamoto, mamdani, and sogeno methods, it turned out to different results. For the calculation of defuzzification, Tsukamoto and Sugeno have the same method. To calculate inference these three methods have their own way. In terms of understanding, I think the Tsukamoto and Sugeno methods are easier than the Mamdani method and the solution is more concise.

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Agriculture Based on Biochemistry and Information Systems in Era 5.0

Suryani[111]

Introduction

Era 5.0 will make things easy by integrating virtual space and physical space. Japan has initiated this by applying digital technology centered on human life.[1]. Society 5.0 is a super-intelligent society where big data, the Internet of Things (IoT), artificial intelligence (A.I.), and robots blend into every industry and social segment. So also with the field of Chemistry collaborated with Agroindustry and I.T. It would be better to produce with collaboration because each will be an expert in his field and will be perfect when collaborating. Chemists will maximize chemistry research, which can also collaborate with pharmacists and will be collected in the form of Big data by alhi I.T., this information is used to make intelligent machines that humans want. It can be controlled from afar by using the internet as per human wishes.

All obstacles are used as challenges, such as the Covid-19 pandemic originating from Wuhan.[2]–[5], Humans need good drugs, chemically synthetic drugs.[6], [7] Or herbal or traditional [4], [8], to fight it. Herbal medicines needed are natural ingredients that have antimicrobial capabilities.[9], [10] both antibacterial and antifungal and especially antiviral. In addition, raw materials with immunomodulator capabilities strengthen our body's endurance.

Among the natural ingredients that have antibacterial, natural antibiotics, antifungal and antiviral abilities, and immunomodulators' ability are VCO. The search for a suitable vaccine is also always done, although until now there is no vaccine that matches covid-19.[11], Because it's always mutated. This obstacle will finally be able to be facilitated and in accordance with what humans want, namely by consuming VCO and other herbal remedies. It therefore needs an intelligence to create a VCO, using remotely controlled human-controlled working robots using the help of the internet.

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The challenge for the future is not only about covid-19, But the agricultural problem that will arise is about the climate. A climate anomaly has started from now, thus affecting the growing season for agriculture that depends on the season. For the time of 5.0, agriculture no longer depended on the seasons, but humans governed the farm. How?. Agriculture is no longer in the ground but can be in tall buildings or greenhouses where CH4 or N2O emissions are regulated. Its climate or things required by cultivation such as temperature, humidity, irrigation or water availability[12], pH, nutrients, and such are controlled by humans from afar using the internet (IoT) and buttons from Hape only.

Agriculture cultivates staples, or primary metabolites, and has cultivated secondary metabolites. Where secondary metabolite substances to be produced by plants are regulated by humans over the internet with a remote handphone. That nursery is no longer conventional but has been practiced with tissue culture.[13].

Discussion

One example of human needs for the present, until the time of 5.0, is the herbal supplement Virgin Coconut oil (VCO). Because this virus is always mutated, we will always be haunted by this virus. So we have to defend ourselves. VCO is pure coconut oil made by fermenting coconut milk without heating or adding inoculum or other bacteria.[10], [14]–[18]. But it requires certain chemical or physical conditions such as humidity, temperature, enzyme concentration, or substrate concentration for fermentation to be successful. Virgin Coconut Oil is very much a health benefit, especially to help cure covid-19 and maintain the body's immunity so that the covid-19 virus cannot attack it.[19], [20]. The use of VCO to maintain immunity and help the treatment of covid should be more popularized and socialized because this VCO is based on plants or herbal plants that not all countries have this natural produce. Indonesia is the world's No. 1 coconut producer, Malaysia, Thailand, India, and Bangladesh. In comparison, the U.S. has very few, namely in the Islands of Hawaii.

Virgin Coconut Oil, which is used to meet human needs

Figure 1. Virgin Coconut Oil

To make Virgin Coconut Oil, this can be through robots or intelligent machines. To make it needs some information collected in Big data, and will be translated into I.T. language. The tool is by mechanical engineers in collaboration with I.T. experts. The conditions manufactured are set from afar and controlled by humans according to the wishes of that human being. The required information is as follows,

1. Raw materials
    a. Coconut age one year
    b. Cook
    c. There is no puff/cork in coconuts
2. Coconut milk
    a. Comparison of grated coconut with water 1:2Viskositas
    b. Temperature
    c. Light
    d. Moisture
    e. pH
3. VCO
    a. Lauric fatty acids
    b. Palmitic Fatty Acids
    c. Myristate fatty acids
    d. Stearic Fatty Acids
    e. Other fatty acids
    f. Antimicrobial ability
    g. Antibiotic ability
    h. Antivirus capabilities
    i. Immunomodulator capabilities
    j. Components of phenol compounds
    k. Sterol compounds
    l. Steroids

m. Alkaloids
n. Tocopherol

It can be explained at No. 1. It is the selection of raw materials done by humans because it cannot be helped. Humans must do it. Then the coconut fruit is peeled using a machine, divided using a device, then taken coconut meat using a machine, and mashed still using a machine. Following VCO produce is no. 2. Using a machine, the manufacture of coconut milk with a water arrangement compared to fine coconut is 2:1 can be by using a machine. Then the fermentation process also uses a machine equipped with viscosity, temperature, light, humidity, and pH measuring instruments. Finally, no. 3, VCO produced from fermentation can be harvested with the machine modified using the principle of separation. It can be done using a machine that serves as a centrifuge separating the liquid from the twisted solids. And immediately in the analysis of the VCO content of the harvest by installing G.C. chromatography tools. All of them are digital and used for human purposes. Humans can control this process from an infinite distance by using the internet network. Control by humans is when humidity is less qualified, then the alarm will sound, and humans can remotely process the increase in humidity so that the process runs.

Antimicrobial analysis of Virgin Coconut Oil.

The thing that supports VCO can help human difficulties in era 5.0 is because there has been some research on its antimicrobial capabilities.[20], [21], Using test bacteria Lactobacillus plantarum , Lactobacillus thermobacterium, Corineaebacterium bovis, Corineaebacterium xerosis, and Micrococus luteus[21]–[23]. Continued by using pathogenic bacteria isolated from the push of patients with otitis media supurative khronis (OMSK).)[24], yaitu Staphilococcus aureus, Pseudomonas sp, Escherichia coli,and Klebsiella sp. In addition to antibacterial has also been done antifungal with mushroom tests are Candida, dan Rizhopus.

Bioactive components of coconut plants present in VCO.

Coconut plants contain secondary metabolites as bioactive components that can inhibit the growth of covid -19 [16], [20] like,

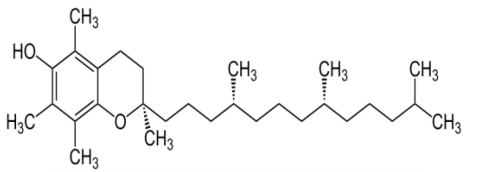

Figure 2. Structure of Tocoferol

In figure 2 is a bioactive Tocoferol that serves as an antioxidant substance that can inhibit the growth of the covid-19 virus

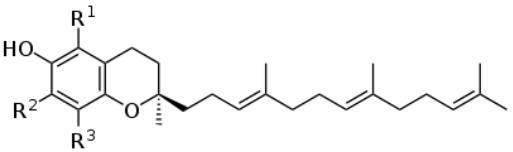

Figure 3. Structure of Tocotrienol

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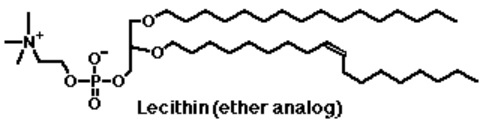
Figure 3 is the bioactive structure of VCO which is a tocotrienol derivative of phenol compounds that can inhibit the development of covid-19.



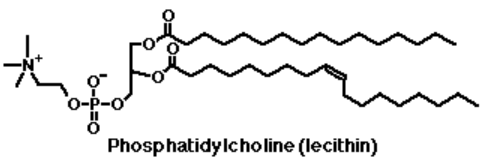


Figure 4. Phospolipid Structure

Virgin Coconut Oil conceives various types of fatty acids as a bioactive that can inhibit the life of the covid-19 virus, either as an antimicrobial, antiviral, anti-cancer, or as an immunomodulator. Three types of VCO are distinguished from water to extract coconut milk is analyzed its fatty acid content which results are as follows. In

VCO (A), which water to remove grated coconut water is used, the fatty acid Laurat 54. 06% (at most), palmitic fatty acids not found, stearic fatty acids 12. 03%. For VCO(B), lauric fatty acids were 53.90%, palmitic fatty acids were not found, and stearate fatty acids were 12.01%. And for VCO(C), its lauric fatty acids were 53.70%, its palmitic fatty acids were also not found, and its stearic fatty acids were 11.9%.

Cultivation of agricultural, medicinal plants / secondary metabolites.

The problem of tackling the covid-19 virus in era 5.0 can be solved using drugs from natural materials that produce secondary metabolites. So that the farm moves on the cultivation of medicinal plants. The use of medicinal plants is very significant, because based on the utilization of bioactive compounds [26], such as the description of the following plant phytochemicals,

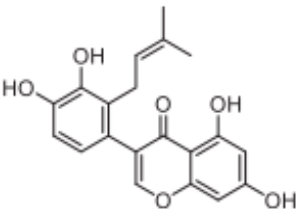


Figure 5. 5,7,30, 40-Tetrahydroxy-2'-(3,3-dimenthylallyl) isoflavon

Figure 5. Showing the structure of phytochemicals that become secondary metabolites is 5,7,30,40-Tetrahydroxy- 2'-(3,3-dimethylallyl) isoflavones derived from the psorothamnus arborescent plant. This plant can inhibit the growth of the covid-19 virus. In Indonesia this the plant is called the renek tree.

Figure 6. Renek Tree Palnts that can inhibit the growth of the covid-19 virus

Red spinach vegetables have an excellent bioactive component to inhibit the growth of the covid-19 virus

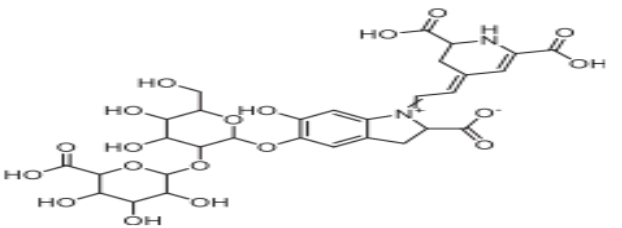


Figure 7. Amaranthine

Figure 7. It can be explained that the phytochemical structure of the red spinach vegetable plant is Amaranthin. This red spinach vegetable can inhibit the growth of the covid-19 virus.

Figure 8. Red spinach vegetables

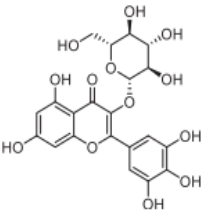


Figure 9. Myricetin 3-0 Camellia beta-D-Sinensis glucopyranoside

Figure 9 explains the phytochemicals structure of the bioactive Myricetin 3-O-Camellia beta-D-Sinensis glucopyranoside. This bioactive substance is found in the tea plant Camellia Sinensis. So that for the time to come, the indeed need to be popular when

cultivating and its use. Because it contains bioactive substances that can inhibit the growth of covid-19

Figure 10. The plant that contains phytochemistry antiviral covid-19

Artificial drugs used to kill the covid-19 virus are usually those that have the following active components,

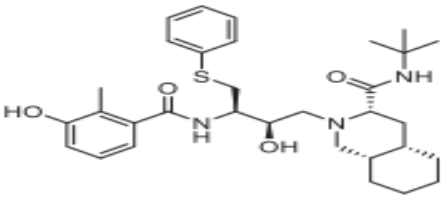


Figure 11. Nelfinavir

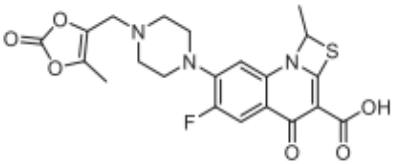


Figure 12. Prulifloxacin

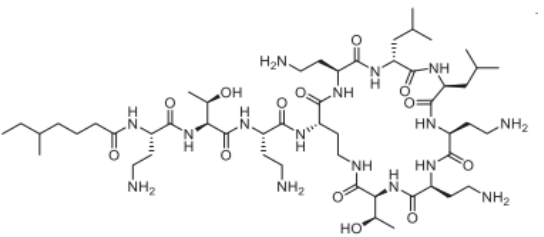


Figure 13. Colistin

It is best to use herbal medicines. We are no longer using synthetic drugs.

Breeding with Genetic Engineering methods

There are also nurseries using genetic engineering methods, among others, by using tissue culture or engineering seedlings according to human wishes. Such as engineering rice seedlings that respond to drought[13]. For the time of 5.0, this will be even more popular, such as cultivating rice seeds that produce more fruit with tissue culture.[25]. Breeding plants such as in Japan [26], namely rice breeding based on its genomics in the future in Indonesia, will also occur. Rice seeds resistant to Methane and N2O emissions [12] are also made through genetic engineering. Rice growth can be monitored with synthetic aperture radar (SAR) time series.[27], It is connected to the Internet (IoT). Likewise, the problem before harvest is studied using molecular mechanisms.[28] so that the resulting seedlings do not experience loss before harvest. To get rice seeds whose rice color is putting clean and no longer requires bleach, the manufacture of seedlings is also done by genetic engineering by marking the properties of the white carrier.[29].

Conclusion

Agriculture in the future, era 5.0 is agriculture that collaborates between agrotechnology, chemistry, especially biochemistry, and the Internet. Or it's also said that agriculture is integrated. All of that serves human needs and is controlled by humans from far separate places connected to cyberspace. Human health control also goes back to natural or herbal ingredients, which breed through genetic engineering techniques.

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Problem Based Learning Model Integrated With Islamic Values

Sutrisni Andayani[112]

Introduction

Society 5.0 is a human-centered and technology-based concept of society. This concept was born as a development of the Industrial Revolution 4.0 Industrial Revolution 4.0 is considered to have the potential to degrade human roles. Society 5.0 aims to integrate virtual space and physical space with the help of technology [1]. This era is an integration of science and technology with economic progress and the resolution of social problems [2]. Technological advances cover various fields including transformation technology, information, communication, medical, construction and education. These technological advances also occur during the COVID-19 pandemic, where the students study a lot from home. Teachers and students learn with limited face to face and online system using communication and information technology

With regard to technology in education, efforts to facilitate and improve learning performance are the definition of educational technology. As AECT 2008 states that educational technology is the study and ethical practice to facilitate and improve learning performance. The study and ethical practice can be through the creation, use, management of processes, and technological resources [2]. In the learning process we expect a learning process to occur in students. The learning process is carried out to obtain behavioral changes in the cognitive, affective and psychomotor domains. Learning is a process in which an organism changes its behavior. Behavioral changes occur based on the results of practice or experience. Change processes using certain methods and the results of the changes tend to last a long time [3]. In order for a good learning process to occur, teachers try to apply learning method/model

The learning model is a pattern for designing learning materials in order to form a curriculum (long-term plan). The function of this model to guide learning in the classroom [4]. [5] Trianto calls it a conceptual framework in organizing learning experiences through systematic procedures to achieve the learning objectives. In using the learning model the teacher can help students learn and achieve

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As a result, the company was able to increase sales while expanding its fan base. The sustainability and transferability of the model remains uncertain, but the initial economic benefits are very promising.

Some of the major case studies are using digital technology to transform their business models. However, the results are mixed, emphasizing the high risk. In the past, software companies have provided custom software to large customers. The software was developed and implemented at a higher price according to the customer's request, and after completion, the intellectual property (IP) was transferred to the customer. This feature allows the company to source project management software from industries key customers. This allowed the company to release a standardized version of its software and sell it to many new customers, creating an online hosting service for management large-scale projects. This has revolutionized the business model executives refer to as "service production," from selling individual services to specific customers to selling standardized products and services for multiple customers. Organizations can promote licenses a couple of instances to minimize replication costs and increase revenueIn addition, the new hosting service allows businesses to connect multiple customers over a long period of time (for example, 57 years for large construction projects), stabilize service revenues, and significantly improve a company`s financial position. I can do it gain. The key to the success of the new business model is the customer broadband and 3G / 4G broadband. Business models are changing rapidly. Product offerings have changed from software developed for a single customer to standard products and hosted services that use the software for multiple customers. The profit model has changed to billing some customers for additional development costs and recurring services to charging multiple customers for recurring hosting in addition to licensing fees. The structure of values, especially the writing and recording of values, is fundamentally changing. In a functional architecture, non-standard products become standard and are also used to support hosting services. Necessary infrastructure to build and deploy hosting products and services is vastly different than ever before. Customer relationships change from managing individual relationships with a small number of large customers to managing full relationships with multiple customers.

The creative industries, in particular, have succeeded in supporting innovation by exporting creative methods to other

industries. This trend began in 2009 with the publication of two influential books. We have been very successful in driving innovation by exporting industries creative methodologies to other industries [6], [12].

The Internet can be a very useful tool for marketers to build strong brands and gain a competitive advantage [13]. However, to harness the power of the internet, businesses need to use social media as their channel to reach out to their customers. Revenue from stakeholder engagement eventually increased. As marketing communications become digital, marketers can use social media to create digital connections with their customers. You can create these links in two ways. Implement different types of social media interactions to (1) behave like a digital or interactive business, maintain or improve your use of digital marketing at a high level, or (2) do your best with digital marketing. The increase will lead to more positive interactions, stronger customer relationships and subsequent customer loyalty. Dynamic opportunity is defined as the ability to (1) identify and shape opportunities and threats (2) seize the opportunity it is decided advantage [14].

Conclusion

The creative industries enable entrepreneurs to use cutting-edge technology and lead an intelligent life of. Creative organizations are developing into a dynamic and profitable sector of the domestic economy. Their main goal is to realize their creative potential. This is how human resources, cultural, social and institutional capital are combined. The creative sector is less prone to financial and economic crises than the 4,444 traditional sector. To grow your business, you need to get the most out of social media marketing. Communication with our community and our customers allows us to adapt our products to our customers' needs. Increasing attention to the creative industries brings not only intellectual benefits but also concrete benefits.

This work contributes to an understanding of business model theory and how digital technologies are used to drive innovation in business models. He also identified key trends in business model innovation, from brand extension to monopoly, personalization associations to dynamic pricing and payment models. These discussions also provide insights into the policies and practices of the creative industries and their role in promoting innovation and entrepreneurship in the high-tech and other economic sectors.

According to this article, in order to maximize the utility and value of technology in the creative industry, research on technology that surpasses it should be done in the future. This study will focus on future research to improve personalization, user experience, user engagement and engagement, online creativity (collaboration) and collaboration that maximize the creative industry by facilitating the use and value of technology content creation and automatic (online) creation, new optimized production methods, content consumption, storage and infrastructure, archiving and digital storage, content distribution/broadcasting, game collaboration and personalization, visual interfaces, multimedia holograms, and more. New and better digital rights management tools, as well as 3D Vision, 3D physical, VR/AR. Therefore, surrounding governments must expand the use of innovative industries to put pressure on monetary growth.

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EMBRACING SOCIETY 5.0 WITH HUMANITY

Society 5.0 is a concept presented by the Japanese as a core concept of their economic system. They believed that technology should not surpass the intelligent of men. As such, in society 5.0 the Japanese government would like to ensure that all technological things are designed to be a human-centered design. In fact, their ministry of education in 2018 has also been readily prepared the future generation through a change in their education system. For example, the minister explains that in Japan, or many parts of the world, university entrance are divided into two main concentrations, which are science and social science. The minister thought of changing the system, as society 5.0 is about creating a technology that is human centered. For instance, they gave an example on designer babies. If, people from hard science learn about philosophy, ethics, and humanities, they won't face such ethical concern when developing a product. This is what is being envision by the Japanese government for their younger generation. Collaboration between science and social science is necessary to build a better environment for our future children. Another example is the companies in Japan, such as Hitachi and Fujitsu has already been implementing this 5.0 by designing product that relied fully on technology but puts human at its center (Hitachi, 2017).

Likewise, it is currently a hot topic in Indonesia. Indonesia as a country with the 4th largest population in the world has not been implemented this concept. Our country is still on the industry 4.0. Yet, with the rising interest in AI, Blockchain, NFT, number of unicorn start-up. and all recent technological changes, our country are ready to compete with any other countries in Southeast Asia. Society 5.0 is coming, and we need to embrace it. To prepare with the society 5.0, It is not only the technological side. It is necessary for us to have a strong principle at hearts that based on our belief system. We, as an Indonesian have known to be religious that most of us believed in God. We also commonly practice our religion and tend to be kind to people because we know God would love our good deeds. I personally think that this will help us to move forward and live together with advanced technology.

Technology begets a very important leap in human's life journey. It is important to keep valued of the benefit but it's more important to look out for the human itself. As its purpose is smarter than us, to help us, it will be very ideal if we embrace the technology using our ability to be kind.

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