

A stylized white outline of a human figure with arms outstretched, set against a dark blue background with a network of white lines and dots. Yellow and blue lines extend from the figure's arms and legs, suggesting a digital or technological theme.

EMBRACING  
SOCIETY 5.0  
WITH HUMANITY

Editor: Diah Karmiyati

 Bildung

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## Embracing Society 5.0 with Humanity

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Penerbit:  
BILDUNG  
Jl. Raya Pleret KM 2  
Banguntapan Bantul Yogyakarta 55791  
Telepon: +6281227475754 (HP/WA)  
Email: [bildungpustakautama@gmail.com](mailto:bildungpustakautama@gmail.com)  
Website: [www.penerbitbildung.com](http://www.penerbitbildung.com) Anggota IKAPI

Bekerja sama dengan Direktorat Program Pascasarjana  
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***Embracing Society 5.0  
with Humanity***

## ***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 4<sup>th</sup> 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**

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# The challenge of building critical thinking in Era 5.0

Zahara Tussoleha Rony<sup>121</sup>

## Introduction

The trends of life are filled with various dynamics of new styles. Unconsciously the established become obsolete, even the arrival of new things has never been predicted before. People change easily trends feel unsuitable and do not even want to use old trends. They want to be different and change the way they think, how they work, cultured ways, and then form a new lifestyle. They proudly show all things new despite the forced efforts of force: "Those who are not adaptive to the new lifestyle must shift aside" covering, enjoying his conventional style, while a new phenomenon unfolds around him, just looking on, silently stunned and standing in a corner with a *"marginalized psychological feeling"* [1].

Mark Zuckerberg as the founder of Facebook reminds that the world has undergone a change [2]. The face and appearance of the world is a new face because humans are and live in an environment where information becomes a new commodity. In other words, information has changed the way of life. Changing the way of life both in cities and villages. Changing the way ordinary people think and the elite. Today, information becomes an institution that can manage the world. An institution which stands without an obscure rule and system. The presence of information gives a pattern of people's lives and world order of life, determining the direction and even controlling the world. Information can bring each other closer, distant becomes close, near becomes open. Without realizing it, world life is present in the human behavior system. Human can capture any information from anywhere. Have direct access and connect to the world's living order. We immediately become citizens of the world.

The new order is constantly coming with exponential movements. Often, the old order meets the new order. Often the touch does not last softly, sometimes the touch lasts hard even occasionally has a collision, breaks the old one, crushes it into pieces without any leftovers and becomes a memory. That's why readiness to face disruption must be the awareness of all of us, so that we are not too surprised when we see the world around us rapidly changed, we do not necessarily feel strange ourselves. It's a fact we live with.

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<sup>121</sup> University of Bhayangkara Jakarta Raya



The above phenomenon describes major changes in the order of life and automatically demands changes in the world of education and industry. In the rapidly evolving era of technology, information, and communication, the demands of information literacy skills are increasingly important and required. The sheer amount of information available in various forms requires skilled individuals to choose and use information effectively [3]. With the ability to literacy information and critical thinking, individuals can determine that the information obtained is truly important information, whether information is needed, and can be utilized, especially can add horizons of knowledge. Individuals are expected to be able to adapt to new systems of thinking. The system of thinking may be different from the one we embrace. New systems of thinking are blended through a variety of information, diverse perspectives, variety of values and diverse interests. [4] The thinking system requires an integrated skill.

Grouping thinking skills is one of the life skills of the 21st century [5]. Skills often called 21st century skills consist of 6 C; Computational Thinking, Creative, Critical thinking, Collaboration, Communication, and Compassion. Several organizations have formulated definitions of 21st century skills. Of all the definitions formulated by several organizations, all have almost the same essence. Recognizing the importance of 6 C proficiency for each individual, the government through direct messaging and webinars and face-to-face establishing 21st century skills must be taught in schools [6]. Industry practitioners through seminars are also no less great calling for that 6C skills are highly considered and needed in the world of work. Although this article has been reviewed quite often with other interesting themes, but in this article the author wants to explain how important critical thinking skills are, how we are able to become individuals who continue to learn to build responsible information literacy and critical thinking. The author's hopes, this paper provides additional insight, knowledge as well as high awareness for individuals who have a role as parents and educators.

## **Discussion**

In the 21st century information exists in time. Not yet lost old information, new knowledge information present. Suddenly came hoax knowledge information accompanied by mixed knowledge, not too clear the truth and presented unfiltered in front of us. We need to carefully select, which information of knowledge is true. We become the last key to stating and determining which information is reliable,

true, and accurate. Therefore we need to determine attitudes, which information is useful and can be utilized to drive our own progress. We become the vanguard for ourselves who unravel, select all the supplies of that information, so that the information is useful for our lives. We are the one who enforce ethics for ourselves although sometimes, the invasion of information gives rise to what is referred to as "quantum information" [7]. Information that comes and comes before us that goes beyond our needs. Information that spills out everywhere. Information which encourages people to be chaotic. Information which no longer pays attention to the dose. It is supplied massively and applies universally, to the public, without discrimination between the receivers [8].

This kind of information, really, forces people to behave or act "jumping up and down". Jumping his way of thinking. Jump how to deal with it. Jumping figs judged it. Jumping the way it responds, so people tend to lead to a well-informed situation. We fail to be reasonable in our information. We are wrong in assessing information. We're stuck in misinformation. The rush of information supply can lead to the development of information in the community. This condition can encourage chaos during the lives of the wider community. Chaos because there is a mass information in society. When this situation occurs in our lives, we are in an unbelievable information system. Therefore, individuals should ideally be able to adapt to the rush of diversity of new ways and "engage" in "a new system thinking". Without such abilities, the rush of information would give rise to "a distraction of mentality". It is certain that we do not want to include individuals who include psychological confusion in responding to various information presented simultaneously at the same time.

### **So, what's important for us to pay attention to?**

A society 5.0 concept which was initiated and coveted by the Japanese government can be a basic reference, the concept emphasizes efforts to put humans at the center of innovation [9]. Humans as thinking creatures are very possible to use artificial intelligence-based science and the internet of things. The presence of technology accompanied by the ability to do information literacy and ethical critical thinking is expected to create innovation and a dignified modern civilization. [10] Era society 5.0, It puts people as the main component in it, not just as passive component just like in the industrial revolution 4.0." In society 5.0, people are required to more

quickly produce solutions to meet their needs. This has an impact on humans to continue to dig up information and create new innovations to support their survival. The concept of Era 5.0 encourages all generations to do growth mindset, especially in the post-Millennials generation who need to prepare to penetrate into the world of work with various character values which need to be developed and must be fostered in line with the development of appropriate competencies and needed in Era 5.0 including higher order thinking skills (HOTS). This becomes important because the ability to think critically is an essential core life skills [11]. Critical thinking is different from argumentative which often just throws arguments and leads to long, endless debates. A person's success in acting on critical thinking depends on many factors including managing emotional intelligence. An integrative review of the literature shows that emotional intelligence and critical thinking are interdependent [12].

Emotional intelligence is defined as "the ability to control the emotions of oneself and others." Emotional intelligence is necessary in guiding one's thoughts and actions in managing information [13]. Many studies have shown that emotional intelligence has a significant effect on critical thinking, creativity, academic success, mental health, and cognitive-based performance [14], [15]. Affirmed by Goleman, an expert on emotional quotient (EQ) that emotions and thoughts are interconnected with each other [16]. In addition, research conducted by [15] showed that people with higher emotional intelligence can process emotional information more efficiently and automatically, and always demonstrate high levels of critical thinking skills. Therefore "a distraction of mentality", can be avoided when someone has a good EQ, we can use information and process information responsibly. Where does information come from, who provides information, whether information provides benefits.

### **Where do we start building critical thinking competencies?**

Schools and educational institutions should be one of the containers for a child to get a foundation and process getting something unknown before through the learning process. It can be started from basic knowledge such as mathematics, natural sciences, social sciences, languages and various another knowledge. In school, children can be taught to seek, use reason and mind to keep thinking [17]. However, the problem that arises is precisely the child's curiosity is sometimes unconsciously limited by teachers and parents themselves. It can be said, to build children's ability to think to be

constrained when teachers and parents do not want to understand the importance of building critical thinking competencies early on, even though these abilities are very important for them to be independent and collaborate throughout their lives.

Without realizing it, parents often softly kill their curiosity by reason questions and actions of children trouble parents. Even in this era, parents easily silence and ask children to look for answers all on google without the process of assistance. At the launch of the Kalbe Junior Scientist Award [18] April 2021, in Jakarta, Soedjatmiko, a specialist in child development, said that children need to be given freedom as long as they do not harm others and themselves or violate ethics and morals. Children need to be encouraged to explore their ability to cultivate their self-confidence [19]. And it needs to be done as early as possible. Not waiting for the teenage years. Instead, if it is too late, the child's confidence is more difficult to develop. In addition to family, teachers in schools are the main support to build a pleasant learning atmosphere and encourage children to explore their knowledge widely.

Mal Leicester and Denise Taylor [20] explain some aspects that need to be considered in building children's critical thinking skills developed from Brookfield [21] namely 1) Asking is one of the habituation developed, in this aspect a child forms his own opinion and builds his own thinking. 2) Analysing, where a child must learn to evaluate the evidence and assess how beliefs must be maintained. 3) Being rational, children are required to give reasons for the viewpoints they believe in while also accepting the differences in the viewpoints of others with different backgrounds of experience and reasons. 4) Finding out basically asking is one way to find out. Children are accustomed to ranging from simple facts to more complex facts. 5) Analysis is divided into three parts, namely conceptual analysis, meta-analysis, and categorization & comparison.

Giving an understanding that what is right, is not as easy as to turn over the palm of our hand. Because what we hear or what we see is not necessarily true. Humans are creatures which cannot be separated from mistakes, the issue of right and wrong can be subjective view. However, if children are always limited because of subjective knowledge and are not allowed to imagine deeper about science. Then as adults, we have limited the function of the human mind which is very extraordinary. Being adult person, it doesn't mean we become individual who are always right, adults only live in this world prior to their children. They have more life experiences than

children, but that does not mean that their life experiences will be the same as those of their children. So that, we should not taboo to be criticized, and always feels right. Giving an understanding of good and bad and willing to admit mistakes in front of children is the highest form of education. Because of that, children will understand that humans are unique, humans are different, humans can be wrong and right. Dictatorship in education and family is terrible because it will form a child who is timid and insecure to develop. It will even become an individualist child who is not sensitive to the surrounding environment.

In critical thinking, sensitivity to the environment is very important as a trigger in creating crazy and unthinkable ideas and thoughts. Let children not to be limited in thinking [22]. Questioned what he had doubts about, said what he wanted to say. We as adults only give knowledge of what we know, about good and bad, about the consequences, about the responsibility he must bear if he chooses something. Activities that are prepared for children or those that are passed by children must be activities that facilitate critical thinking skills Daloz, 1986 in Brookfield [21]. Activities that make them able to become confident individuals, synergize so that they will give birth to many useful innovations in society.

We should think about breaking and scolding them just for not agreeing with what they said. The learning gained at school is not enough to be a provision for the experiences that children experience from seeing, hearing, and being felt. Children are not inanimate objects, they are human beings who have reason to think, have different ways and perspectives in seeing a problem. Every child has different desires, desires, and strengths. Do not let us compare something that is clearly different. If it refers to the greatness of God. He created humans with different human faces and fingerprints even though there are so many humans. Humans are unique and different from one another. Don't we believe that every human being is given different potential and greatness?

## **Conclusion**

The Era 5.0 concept encourages all generations to adopt a growth mindset, especially the post-Millennials generation to become innovative people who use technology as a tool to produce a world with a new face. The impact of information and communication technology has brought fundamental changes, especially the quality of information material and the wider range of information. The ability

to build critical thinking is a must, therefore it is necessary a continuous and consistent formation process with the support of the family environment and educators. The government as a policy maker must be involved and in fact has high hopes for the formation of Indonesian people who are able to think critically because critical thinking as one of the life skills is needed by an individual.

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