

INCREASING READING AND CREATIVE THINKING SKILLS TO FACE THE THREAT OF AI IN THE MODERN DIGITAL ERA

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Abstract

For some, Artificial Intelligence is regarded as a threat to human existence and job opportunities. However, I perceive this phenomenon differently. For some, AI will occupy many job opportunities. However, for me, human has and is still a part of the future. Human beings have thinking mechanisms that are quite different compared to AI. If humans want to be on the map, humans should develop skills that are unattainable for AI such as intuition and empathy. Critical thinking and learning are the keys to that purpose. In this paper, I will prove my stance based on a research method which is called a Systematic Literature Review (SLR).

Keywords: Reading Skills, Critical Thinking, Digital Age

Abstrak

Bagi sebagian orang, kecerdasan buatan dianggap sebagai ancaman bagi keberadaan manusia dan peluang pekerjaan. Bagaimanapun, saya menanggapi fenomena ini dengan cara yang berbeda. Bagi beberapa orang, kecerdasan buatan akan memberikan banyak peluang pekerjaan. Namun bagi saya, memiliki dan masih merupakan bagian dari masa depan. Manusia mempunyai mekanisme berpikir yang berbeda dibandingkan kecerdasan buatan. Jika manusia ingin berada di posisi tersebut, manusia harus mengembangkan keterampilan yang tidak bias dicapai oleh kecerdasan buatan seperti intuisi dan empati. Berpikir kreatif dan belajar adalah kunci untuk mencapai tujuan tersebut. Pada penelitian ini, saya akan membuktikan gagasan saya berdasarkan metode penelitian yang disebut tinjauan *literature* sistematis atau *Systematic Literature Review* (SLR).

Kata Kunci: Kemampuan Skill Membaca, Berfikir Kritis, Era Digital

Introduction

Artificial Intelligence (AI) is now used in almost every aspect of life. AI development itself has actually been going on since the 1960s. However, we can only experience its function nowadays. When it was first developed, the paradigm that emerged was that it would be like humans. It would be more effective than human and will solve many problems existing in human life. The keyword for defining this kind of technology is human-like but effective. Later on, this is not true because it is quite different from our concept of humans.

After various development, we will find out that there are so many inaccurate thoughts about AI. One of them is that it is a human-like brain. It actually can only be equal to humans in some aspects. The notion that it will work and move like humans only exists in fantasy movies. The intelligent aspects in AI are limited such as rationalization but not vision (Boden, 2016). Besides, it does not even have an emotional aspect. This emotional factor makes it different from humans. Vision and intuition only exist in humans and those two things will never exist in AI.

Indeed, there is a fear of this artificial intelligence will take every role in some kind of jobs which is called automatization (Kuzior, 2022). This fear appears due to the lack of job opportunities and life will be so difficult due to the unemployment issues. However, the reality and AI practice are different. The easiest explanation is that several job desks can be done quickly by AI such as record-keeping, predicting stock values and even detecting diseases. However, as mentioned earlier, how far can AI actually find newsworthiness? Can it only answer logical questions but not other things like perception? Vision? Spirituality? This is the weakness of AI that humans still cannot solve (Manyika et al., 2017).

If we take this thing into consideration, the human still can explore many things and play such an important role in the future. It might be able to replace human in technical or operational (Herjanto, 2007). However, it will not happen in management field which still needs experienced people and emphatical side of human. Management skill cannot be achieved just the way it is without continuous and consistent learning. That's why the most reasonable way is to be able to learn and read critically. Critical learning and reading are essential skills and only can be obtained with commitment and open-mindedness.

Critical learning and reading are not memorizing all of the knowledge. Memory-based education has led humans to stagnancy. It is because memory works better when done by computers. However critical reading is holistical learning experience; a process of making knowledge a part of us so that we can use knowledge as a weapon in achieving complete progress. This can only be done by humans. Without human development, this progress will not happen.

In the end, the author wants to emphasize that in this research we will find various aspects of scientific development and even things that are advanced without worrying about experiencing difficulties due to competition with AI. In closing this introductory chapter, the author will emphasize the author's position, namely that the author argues that humans can still compete with AI as long as they are able to apply critical thinking and continuously improve their abilities in learning so that they reach a level where humans can compete with AI and are able to place AI as a partner to help and not as a rival that makes it difficult for humans. In this study the authors used the systematic literature review or SLR research method combined with normative studies and a critical progressive learning process.

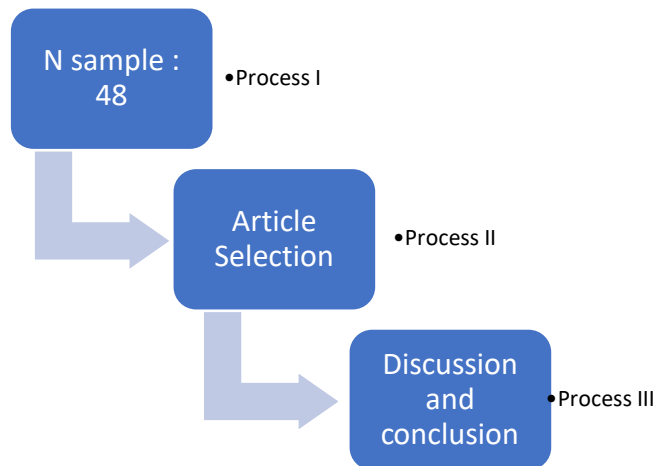
Therefore, the writer would like to emphasize that in this study we will figure out several aspects in knowledge development and even advanced things without being worried to face the obstacles for competing with AI. As the closing of this introduction part, the writer would also like to emphasize her position, namely that the writer argues that humans can still compete with AI as long as they are able to apply critical thinking and continuously improve their ability to learn so as to reach a level where humans can compete with AI and are able to place it as a partner to help and not as a rival that makes it difficult for humans. In this research the writer used *systematic literature review* (SLR) research method that is combined with the normative study as well as critical progressif learning.

Method

The research method being used in this research is systematic literature review (SLR). SLR puts the keywords of the research first which is artificial intelligence (AI), the problem of artificial intelligence, the opportunity for human position in artificial intelligence and also how this SLR system can help us find the answers to the research questions (Rother, 2007; Xiao & Watson, 2019). The following is the systematics organized in this SLR system: finding the problem formulation, the first topic is to find the existing problem formulation. In this case, the problem to be solved is: How Can Reading and Critical Thinking Improve Human Competitiveness with Artificial Intelligence?

The next step is finding keywords related to the given problem formulation. The first is artificial intelligence. The second is human competence. Next is about critical thinking and critically reading about the core of the problem.

The next step is to understand the n samples that we will use in this study. n samples in this study itself are 48 samples of the minimum 30 requested. These 48 samples are then selected which contains three keywords that are the source of questions from this research. Drawing Conclusions, The next step is to draw conclusions from the database obtained along with the keywords.



Result and Discussion

The table bellows will provide the titles that have been selected and the first conclusion that has been made based on the selections (Berhil et al., 2020; Garrison et al., 2016; Jatobá et al., 2019; Paschen et al., 2020; Pertama & Kedua, n.d.; Shneiderman, 2020; Surden, 2019; Tambe et al., 2019):

TITLE	SUMMARY
Artificial Intelligence in Human Resources Management: Challenges and a Path Forward	In reality, artificial intelligence cannot replace or answer the complexity of human resource management needs in Indonesia.
Evolution of Artificial Intelligence Research in Human Resources	Research and artificial intelligence usage for human resources has not worked well yet.
A Review Paper on Artificial Intelligence at the Service of Human Resources Management	There is still a need for changes in human resources management using artificial intelligence

Will Artificial Intelligence Take Over Human Resources Recruitment and Selections?	Some job fields has been taken role by AI with a limited administrative approach.
Introducing Artificial Intelligence into a Human Resources Function	It takes a long process to using AI for a complex working process.
Human-Centered Artificial Intelligence: Reliable, Safe & Trustworthy	Collaboration between humans and artificial intelligence is still needed to achieve an optimal work.
Human-centered Artificial Intelligence and Machine Learning	A good artificial intelligence system is a collaboration of humans and technology.
Collaborative intelligence: How human and artificial intelligence create value along the B2B sales funnel	Collaboration between humans and artificial intelligence can boost up sales and trade
Bibliographical Analysis of Artificial Intelligence Learning in Higher Education: Is the Role of the Human Educator and Educated a Thing of the Past?	Although Artificial Intelligence has helped a lot, its ability to understand culture and psychology is still limited.
Artificial Intelligence and Law: An Overview	There are still many incorrect understanding about AI.

From these 10 articles, there are some lessons that we can take. Firstly, there are myths about artificial intelligence. AI is often misunderstood that it copies the human ways of thinking. In fact, artificial intelligence is a way for humans to approach the level of intelligence. One of the technologies used is the case-based reason or CBR (Devianto & Dwiasnati, 2020). It means, there are some algorithm that encourage people to rationalize question based on the answers of previous questions. This is what case based reason means.

Another system to manipulate artificial intelligence is Fuzzy Logic is changing the thought from Boolean Logic that only knows the number 0 and 1 becomes 0 to 1 with their own description (Dzitac et al., 2017). It enlarges the range of ways computer process information. Next is the cognitive-based architecture that tries to organize algorithms to produce rational thinking. Various ways are done in order to imitate the so-called human mindset (artificial intelligence). Of course, this is different from how the human brain works, which is not based on algorithms.

Human brain is one of complex organs that can process feelings, learn new things and any kind of actions that cannot be done by computers. Brain development is important to human development since AI is still limited and only some of complex algorithm that cannot be compared (Lusiawati, 2019).

One of the weaknesses of artificial intelligence is unable to see the problem from different points of view (Salas-Pilco, 2020). It is different from human who naturally can think critically and see things from any point of view. Based on the research, in human management, AI is only able to process data only; it cannot value human subjectively. Therefore we may not neglect human's ability. So how human can place themselves? It can be done by way of thinking and critical reading. What program can support this skill?

In general, reading and critical thinking is an active process to respond a text that is being read or learnt (Mu'ti & Arief, n.d.). if we creatively think and read, we will not read something textually but we use several approaches to comprehend what we are learning. So what is the thing we understand?

The first is the context, when we learn critically, we must be prepared to understand the context in which knowledge is developed. For example, when we hear about Machiavellian science. Then we cannot immediately accuse this of being a cruel science but we must understand why Machiavelli had such thoughts. What drives Machiavelli to believe what he believes allows us to understand the context. The context here is how Machiavelli's life situation was. This is different from the second thought which is personal rather than scientific.

Personal means that we must understand the background of the person doing the research. This personal factor, for example, can be seen from Freddy Rangkuti's perspective in assessing humans. Each human being has his own attitude, namely strengths, weaknesses, threats from himself and potential that can be developed (Rangkuti, 2015). For example, we can see how the different perspectives of Soekarno and Muhammad Hatta in seeing the Indonesian economy, even though both of them undoubtedly understood Pancasila. Soekarno, who was accustomed to giving speeches, directly leading the community and being tough, viewed the Pancasila economy at a visionary level. He felt that there needed to be a special push for the Indonesian economy to accelerate. That's why he built various monuments in Jakarta. Meanwhile, Mohammad Hatta saw the Pancasila economy systemically and applied cooperative thinking that allowed employees to also become company owners. Both of them cannot be said to be more right or more wrong. But what is certain is that their thinking is different because their personalities are also different. Hatta, who was born from reading books and getting a lot of education, had a perspective that prioritized progress.

The third is empirical. We have to understand that at that time, the empirics were also limited unlike today. People who decided that the earth was flat reflected on the empirics of that time. This was later opposed by Rene Descartes with his theory of rationalism. However, the beginning of science was initially empirical. Thoughts such as those of John Locke and David Hume consider that it is only from this empiric that we can connect to the reality of scientific reality (Puspitasari, 2016). Empiricism is also commonly used in the social sciences including this research where the writer collects various previous studies in order to understand how AI works and what opportunities are still possible in this AI-dependent world.

The happy news is that human still has a role in science. In the natural sciences, AI is considered to be able to match or even exceed human abilities. But in the social sciences, the human ability to read and think critically will be much more useful.

In natural sciences, AI has the advantage of being able to maintain concentration continuously. It also has high accuracy even close to perfect because humans are definitely not free from the element of human error. Therefore, in the exact sciences, artificial intelligence will be much more useful. But when we talk about social sciences, something different happens. Social science does not seek for ultimate truth.

In social science we get data and reality, but the interpretation we give to each data we have is our own choice. We don't have to stick to a fixed formula. For example, in social science we recognize what is called the Golden Arches Theory (Friedman, 2000; Musa, 2015). In Golden Arches Theory, we have an introduction to the science of globalization. It states that two restaurants that have McDonald's restaurants will not go to war. Despite this irrational way of thinking, McDonald's as the largest franchise chain restaurant in Indonesia symbolizes globalization and the market economy/capitalism system. Thus, countries that have accepted

McDonalds have indirectly accepted globalization and most likely have the same ideology. However, this was not entirely true when Russia attacked Ukraine because both countries had McDonalds even though McDonalds in Russia was soon closed. The lesson we can take is that social science is not about certainty but opinions and perspectives from various sides. The ability to assess and analyze from various sides is what makes AI unable to defeat humans.

AI can strengthen itself and continue to develop its learning capabilities. But on the other hand, it also has limitations in the sense of feeling. Therefore, based on the SLR that we did, we can find that the biggest problem is the inability of AI to use the sense of feeling to determine the right talent in the field of Human Resources. It is a very interesting point when we talk about the well-known book Moneyball.

In Moneyball, it is described that with the right statistical approach, almost any problem can have a certain answer (Wang & Cotton, 2018). What kind of certainty exactly is it? To answer this, we need to see that the root of Moneyball is the game of baseball. To find the right player candidate, statistics are shared that can affect performance on the field. This is what is used in HR theory. There is a specific character to be a salesperson. Disadvantages and advantages that sales must have and so on. But this is disproved in the book Barking Up the Wrong Tree (Barker & Wayne, 2017).

Humans can value and understand. Not all of the data is valid and it needs human touch to comprehend how this world actually works. For instance when we thought that a good salesman has to speak a lot, know a lot, and is extrovert, but it turns out that we can find introverted sales who often listens and has good empathy which can lead to the goals of obtaining clients rather than those who babble a lot about their product quality. From this case, we know that there are several abilities that will never be in artificial intelligence.

It is often called as intuition. Intuition is a human strength because humans learn and absorb what they learn such as experiences and feelings when reading a text. The writer really likes the book Outliers as an example, this book was written by Malcolm Gladwell (Gladwell, 2016). In that book, it is said that the factor that a person can achieve success is because this person experiences continuous habits and gets the right place to develop his abilities. This is the closest description to the concept of intuition according to the author. A very logical person may not even have the ability to develop this intuition and this is the weakness of AI because they see everything in the form of data-based while humans do not work like that.

This is what makes the writer interested in the discussion and critics on Rene Descartes' rationalism (Budiwan, 2016). Rene Descartes' rationalism is criticized for believing that knowledge can be obtained from nothing because of rationality. However, rationality stops at the ability of the senses and the ability of the brain. Because of this, many figures who are obsessed with rationalism fall down and become atheists because they have not been able to rationalize God. This is also what is often cited as the reason why we are getting into the Asian century and western civilization seems to be lagging behind (Lingle, 2019). Asians see all these elements as having connections that do not have to be explained by the limitations of ratio and logic alone. Ironically, we also experience and see the downfall of countries like China because they no longer rely on intuition and criticism but rather the rigid rationalism of the west.

In the following section, the writer would like to emphasize how different it is when humans learn and when AI learns. When humans learn and criticize knowledge and texts, they do not only absorb data but also understand other meanings of the knowledge they learn: experience, context, personal, logic and many others. While AI can only absorb part of humans such as logic and experience which again is also data-centric.

Then, what can we learn from this? The important thing is that human may not become AI. This is the main problem when we are in a situation and condition where education depends on only memorizing. In fact, if someone only remembers and learns from experience

to avoid being wrong, AI is far better. What we should be doing instead is setting the stage for the critical learning that is essential for children and older humans.

Reflective

This reflective learning starts from religious institution. It means that when we start to learn something new, we always start it from the philosophy of 'empty glass'. Empty glass means that as a human, we know nothing. We come to school from knowing nothing and not resist all of the knowledge coming to us. After we have received all the knowledge, we then reflect on what suits us and what doesn't and build our intellectual traits and character.

Context and Subjectivity

When we learn, we have to understand that all of the knowledge we absorb always has context and subjectivity. Even when we are comprehending a knowledge, there is subjectivity in our mind. We could imagine if we don't have any subjectivity in learning we will never have revolutionary thinking. For example, Elon Musk created his electric car and self-driving car because he had a vision and believed that obstacles could be overcome. Similarly, with rationalism, when we put too much faith in the ability of our senses and logic, but ignore the possibility of other possibilities, it is likely that humans will not be able to generate more opportunities than AI.

Personalization of Knowledge

We also need to personalize knowledge which means that the knowledge we obtain is in the same line with our personal and experience. It is quite different from subjectivity. Subjectivity is how we see knowledge based on our perspective meanwhile, the knowledge personalization is how we make the knowledge become the part of our personal life. By learning, we evolve it to the next level that become special for us and from that thing we are able to encourage ourselves to produce a much different output than if we just interpret it as logic. This is where humans have an advantage over AI. This personalization keyword will be especially important in skills that require intuition, feeling, sense such as in jobs as chefs, baristas, managers and so on. These are the fields that AI cannot master.

To become an expert in that field, humans have to learn how to read and think creatively with hope that it can absorb the essence of knowledge that is personal, based on intuition and positive subjectivity and visionary. Things that AI is incapable of achieving.

Conclusion

There is still a lot of room for human to compete with AI. The most important thing is that human has to see and understand that human has advantages more than AI. This advantage of humans over AI must be realized by learning and critical reading. It can be done by critical reading and learning. Human should learn without feeling burdened to achieve a certain competence, reflect what they learn, consider the knowledge with empathy and vision and personalize the knowledge to be the part of an individual's life so that they can then use the knowledge for better interests in the future.

Human needs to believe that AI is not a threat. It helps humans but it cannot replace humans' strengthness. It is just a group of algorithms that try to imitate human's way of thinking. However, AI that we know will never get into the level of awareness like humans. Even in Turing Test, it just tries to reach the level where it can shape like human but not independent as human. The work of the human brain, intuition and rationality still has its privileges and advantages as long as we are willing to open ourselves and be logical while believing in our abilities and dignity as human beings.

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