## The Existence of Artificial Intelligence in the Future

#### Nur Aifiah Binti Ibrahim<sup>1</sup>

<sup>1</sup>Department of Computer and Mathematical Sciences, Universiti Teknologi MARA, Shah Alam, Selangor,

Malaysia

e-mail: nuraifiahibrahim90@gmail.com

\*Corresponding author: E-mail: nuraifiahibrahim90@gmail.com

Abstract: Artificial intelligence is arranged and communicates in a language structure to have a machine learning algorithm that picks up the faster solution in solving humanity's problems. However, the separation between good and bad all comes down to the human's intention and determination. Hence, it is crucial to look at the data patterns and come out with the most appropriate machine algorithm. The layering of nodes and information is forming to create a piece of new knowledge. It is a universal language algorithm that speaks with one another to convey the same message. In other words, dimensionality and data simplicity lure in more knowledge and understanding of the problem.

Keywords: Dimensionality; Language Structure; Machine Learning

#### **INTRODUCTION**

[1] reported that based on a recent PricewaterhouseCoopers (PwC) study, there are more than fifteen trillion U.S. dollars of artificial intelligence (AI) expenditure in the global economy by 2030. However, [1] proclaimed that 35 percent of global organizations attempted to incorporate AI in their daily business activities. Hence, [1] presumed that AI should be broadened and widened in their field of expertise.

It goes as Bonnefon and Rahwan [2] stated that folk theories emphasized how humans think can powerfully shape and modeled how the machines were made and extensively perceived by the users. Artificial intelligence is more to machines that can operate and communicate with other beings. It is different from human intellectual ability and common sense to make up their minds. In an organized manner, machines can perform tasks, such as problem-solving. Artificial intelligence attempts to copy and imitate human behaviors by coding and programming instead of making their own decisions. Artificial intelligence manages to conduct and handle massive and surmount tasks to surpass humans' capabilities. Nowadays, many decisionmakers are moving forward with artificial intelligence.

In terms of education, artificial intelligence is over the top. Students can experience and get inspired by the latest invention and technologies. Artificial intelligence also assists students in tutoring and helping them with their understanding to be more imaginative in their classrooms. For instance, Yara et al. [3] discovered the non-profit organization Enlearn from Seattle has developed an interactive educational platform operated under machine learning in speeding up their learning process. Hence, Yara et al. [3] found Ministry of Education and Science of Ukraine had made it work but safety comes first. Artificial intelligence will also reduce labour in manufacturing. Manufacturing involves a surplus amount of product lines that require strength and time. In this case, Saxena [1] added the main facility for the manufacturing sector is robotic process automation, including robotic assembly, and robots repairing damaged or malfunctioning systems. In return, human mistakes, system failures, and defectiveness of the product can be reduced and improved.

Other fields require artificial intelligence as well. They can be peacemakers, law justifications, and entertainment industries. Not only capable of having artistic taste and fair judgment but also having a sense of humanity. For instance, logical reasoning for handling human cases at the court. Intelligence is the opposite of ignorance. Artificial intelligence also holds for the future. Artificial intelligence also can be a part of humanity, but it is also emotionless at the same time. From a global perspective, artificial intelligence is a companion to humans, but one should not replace their trust and loyalty. It can be very promising, but in the end, humans decide what is best for them.

Based on DoubleClick for Publishers [4], AI also has a hidden talent but not by mimicking instead learning how humans got their hands in the art world by practicing and expressing even without having feelings and emotions to make sense of it. Remarkably, the word generative artificial intelligence is mentioned by Agence France- Presse Relaxnews [5] to be assigned in the design sector which drastically evolved with imagining tools, such as Dall-E 2, Imagen, DreamBooth, and Stable Diffusion producing interactive images generated from the written scriptures of instructions. Yara et al. [3] opened up about the authorship of music that can be proclaimed by the AI itself since the author has not contributed any creativity to the song. In the land of the United Kingdom which valued the artistic creativity of a certain artist, Yara et al. [3] claimed that the law is wellequipped with protection and ownership of machinegenerated works to contain their originality.

The purpose of the review paper is to give an overview of the expanding and in certain circumstances even invasive scope of AI in its practical application.

As mentioned before, Burns [6] defined artificial intelligence as the simulation process of human intelligence using machines and computer systems. Otherwise, West and Allen [7] mentioned artificial intelligence also incorporates and compiles information to conduct data analyses for human decision-making. In other words, Schroer [8] narrowed down artificial intelligence as a branch of computer science concerning the build-up of machines and computers which operate under human-structured orders. Generally speaking, Collins et al. [9], Turing [10], and McCorduck [11] in accordance with John McCarthy had defined and coined the word artificial intelligence as the science and engineering of making intelligent machines. Hence, Schroer [8] also defined it as an interdisciplinary science creating opportunities and advancements in the tech industry. In simple language, Kumari [12] stated God had given humans the intelligence to build machines. In other words, Kumari [12] also mentioned artificial intelligence obtains data and conveys information to humans to perform their tasks.

In the United States in 2017, West & Allen [7] and Davenport et al. [13] accumulated 17% of 1,500 senior business leaders who were still puzzled by the term artificial intelligence. West and Allen [7] added that they may realize the full potential of artificial intelligence in running a business but are still unaware of their ways of conducting it. Further, Schroer [8] discovered that continuous advancements in machine learning and deep learning seem to blossom in the tech industries.

The dynamic duo Stuart Russell and Peter Norvig studied the four basic approaches when defining artificial intelligence. They are separable based on the action of thinking and doing. The scopes are rational and have a sense of humanity. Artificial intelligence can think humanly or rationally and act humanly or rationally. However, Schroer [8] realized that humans are complex beings that can either be ignorant or irrational. Hence, the former Massachusetts Institute of Technology (MIT) professor of artificial intelligence and computer science, Patrick Winston, mentioned algorithms bounded by constraints are supported by looping models that combine thinking, perception, and action altogether.

Until now, Allen [14], Bhatnagar et al. [15], Brachman [16], Simon H. [17], and Nilsson [18] defended that there is still no definite meaning of artificial intelligence despite its longevity in various research fields. From a holistic view, Rai et al. [19] finalized the meaning of having the ability of a machine to perform cognitive functions that they associate with human minds, such as perceiving, reasoning, learning, interacting with the environment, problem-solving, decision-making, and demonstrating activity.

#### METHOD

A narrative review is implemented by dividing the general knowledge of artificial intelligence based on introducing the term, the cognitive process for artificial thinking, the functionality of the system, the history behind it, the gains and losses, and the future perceived by the users. Henceforth, the sections are narratively distinctive by the concepts of having AI. Hence, this review may disseminate and elaborate more on the contributions made by the AI itself.

#### Human Intelligence VS Artificial Intelligence

Thinking is an act of producing thought which requires an opinion or judgment. That is to differentiate between good and evil and to understand the outcomes. It is natural to think of the best way to survive danger. Compared to robots, there are more emotionless and indecisive depending on humans' attention at times. Not until Armstrong [20] referred to a group of researchers namely, Anastasiia Raina, Lia Coleman, Meredith Binnette, Yimei Hu, Danlei Huang, Zack Davey, and Qihang Li found that AI somehow managed to copy the behaviour of the brain's neurons that is the first neural network developed to teach itself and improve over time with minimal to no human intervention.

Based on these statements, human thinking is different from machine thinking. Artificial intelligence is more than that. The human mind is like a sponge that absorbs information and memories as it exercises like a muscle that requires training to achieve its goals. Time is valuable. Imagine if artificial intelligence does the same by keeping and restoring information in time and abundance.

According to Kumari [12], there are seven fundamental differences between human and artificial intelligence as follows:

- 1. Humans make up their minds. By dealing with figures and numbers, humans discover more and increase their knowledge to understand real-world problems.
- 2. Hence, artificial intelligence is dependent on the data to finalize the answer. Unlike humans, they have logical thinking for rationality and reasoning.
- 3. History makes your day. It is a reality for humans to learn and recall their past mistakes. The given information is in the present, so artificial intelligence can only pick up what is already for them.
- 4. For coping and adapting, humans are more capable than artificial intelligence but require adjustments to the new environment.
- 5. Artificial intelligence consumes less energy than humans. Human brainpower consumes more power than physical labor.
- 6. Humans are slow when processing information as compared to computers until now.
- 7. Humans are better companions than artificial intelligence by excelling in social interactions and interpersonal skills.

Overall, Collins et al. [9] found AI is achieved in separate ways to achieve different goals in terms of structure, behavior, capability, and function which are relatively operated and functioned using the same human brain. Hence, Collins et al. [9] added intelligence does not belong to any biological beings but is also referred to as a general notion to impersonate the mind itself artificially even for robotic inventions as well.

Henceforth, Bonnefon and Rahwan [2] perceived the rough idea of having a fast and slow

thinking process which is a dual process to differentiate between intuition and reason. Humans can come out with their own intuitions and reasons even for others but artificial intelligence is more of the word reasoning with provided logical thinking behind it. Further, Armstrong [20] quoted from John Zimmerman, Professor of Artificial Intelligence and Human-Computer Interaction. at Carnegie Mellon University that it is difficult to predict intuition. So as, the involvement of others, humans tend to care and appreciate others' help and care for their individual or group needs. Artificial intelligence is not far behind as nowadays humans wanted to give life to the machinery world in having a meaningful community. This is what is called by Bonnefon and Rahwan [2] implementing intuitive and reflective processes. As mentioned by Bonnefon and Rahwan [2], artificial intelligence should also learn from the perspective of others in the act of cultural and background differences. Bonnefon and Rahwan [2] described it as having metacognition machines which is the way human cognition is projected onto machines. However, time for speed is the amount of information gathered between humans and artificial intelligence that is measured to be compared with each other. Then, Armstrong [20] added all an algorithm does is make predictions and probabilities.

Fast thinking involves a rapid and quick response to a certain situation that requires a thoughtful act to be carried out. Slow thinking instead of taking a shortcut requires a more careful and arranged set of behaviors to react in a kind of way. In this case, the features and criteria for differentiating between both systems can be elaborated more by Bonnefon and Rahwan [2] as shown in the following table.

Table 1. The Distinguished Parts Fast and Slow Thinking

Thinking Systems	Fast Thinking	Slow Thinking
Information containment	A large amount of information with less effort.	A small amount of information can be processed at a time.
Set of rules	Implicit and provide ideal solutions in a timely manner.	Explicit rules are set in with invisible reasons.
Type of roles	Off track and become reliant on the usual, normal, and familiarity.	With careful inspection, there is a corrective role.

It seems as if both thinking skills whether it is fast or slow are compromising for different fields of study. Bonnefon and Rahwan [2] mentioned in the engineering field they are able to differentiate between heuristic and analytical reasoning. Heuristic is a simplification of the complexity of problems to minimse

the overload of thinking independently. In a user experience, Bonnefon and Rahwan [2] summarized slow thinking is known to be objective and fast thinking is more subjective. Bonnefon and Rahwan [2] and Castelo et al. [21] understood some machines may think fast making them conceivable for subjective tasks. Bonnefon and Rahwan [2] found slow thinking machines conduct themselves at their own will without human interference. Further, Bonnefon and Rahwan [2] and Kupor et al. [22] notified some intelligent machines operated under both thinking modes for their daily operations. Accordingly, Saxena [1] found that the so-called intelligent machines to replace smart devices, including manage smartwatches, smart televisions, smart appliances, and smart thermostats which are commonly known as the Internet of Things (IoT).

### How Does Artificial Intelligence Work?

At a preliminary level, Saxena [1] noticed every human endeavor generates data. Preoccupied with data management, Saxena [1] added a manageable data comes with the right strategic business operations, goals, and priorities. Saxena [1] underlined data quality to be checked and diagnosed first before implementing AI and machine learning. Burns [6] and Kumari [12] summarized that artificial intelligence deals with training data, analyzing patterns, and correlations to make future predictions. The so-called training data as referred to by Armstrong [20] will be initiated first before training models are utilized in machine learning. Thus, Kumari [12] explained artificial intelligence may be more precise and accurate than humans in analyzing data and producing results, but humans are the pioneers in technology. Saxena [1] exclaimed that in this revolutionary era of big data, both structured and unstructured data are the underlying patterns and behavioral analyses for consumers' preferences and business environments. It is discovered by Burns [6] states that artificial intelligence interacts with humans to meet their needs for image recognition tools. Then, Kumari [12] added it can be done by basic reasoning behind it. Further, Burns [6] elaborated there are three cognitive skills that artificial intelligence requires to keep in touch with humans, such as learning, selfreasoning, and self-correction. In business, for instance, Saxena [1] proposed that unraveling the data value comes with a long-lasting business impact.

The first step as identified by Burns [6] and West and Allen [7] is the learning process involving algorithms using numbers and calculations to conduct a specified human task. Then, Burns [6] ensured that the selected algorithm will do the job of obtaining the most accurate results. Collins et al. [9] added artificial intelligence is at another level of cognition involving a learning process as proposed by Langley [23] as follows: 1. Multi-step reasoning

- 2. The meaning of natural language
- 3. Innovative artifacts
- 4. Novel plans that achieve goals
- 5. Reason out their actions

Based on these steps taken, Kurzweil [24] referred the artificial intelligence as a general human-like intelligence classified as strong AI. Instead of relying only on chatbots and virtual agents to have quick and imminent responses, Collins et al. [9] also brought up the human-agent interaction which is also known as hybrid knowledge. The term hybrid knowledge as discovered by Collins et al. [9] is used to describe the knowledge gained through physical and virtual meetings among each other by compiling between the two to have real experience in the outside world. Besides that, Collins et al. [9] studied business values that may fully develop from the different stages of maturity.

According to Saxena [1], there are four types of data analytics that are in the form of descriptive, diagnostic, predictive, and prescriptive. The first one is considered by Saxena [1] to be descriptive in nature based on historical data. As for the repetitive use of data, Saxena [1] classified it as diagnostic analytics. Then, Saxena [1] mentioned predictive analytics rely on probability, not certainty which soon develops into prescriptive analytics that makes concluding remarks based on the predictive results.

To put into work, Saxena [1] studied for algorithm made by the Netflix business for movie watchers even for a huge crowd of audiences which found to be accessible during the pandemic somehow manage to keep its' originality content and get satisfying reviews from online streaming of tv shows and movies. From the basic calculation of correlation analysis, Saxena [1] reported the smallest detail as in the thumbnails images from different movies are strongly correlated with a tv show or a movie.

#### History In Making

During the Industrial Revolution, human labor and capitalism were on top of business productivity. The diversification of the human economy creates job opportunities as part of survival. Not until pioneers come out with automotive skills to help create robots and automatic machines to assist humans doing the laborious jobs. Thus, Armstrong [20] discovered the function of capitalism in implementing something new to engage with the customers.

Schroer [8] started off with the breaking code of enigmatic made by Alan Turing over a decade ago for Allied forces in the Second World War. It turns out successful, thanks to Alan Turing becoming the first human to break the code. Schroer [8] also summarized that it all comes down to his question of whether machines can think.

Saxena [1] dated back to the 1950s when robots made their debut but were missing components of big data and artificial intelligence. In the 1950s and 1960s, as recalled by Saxena [1], companies operated using large mainframe computers. Despite their outstanding achievement during that time, Saxena [1] stated that there is a limitation in storage capacity and a slower micro processing system. However, Saxena [1] studied Moore's Law which envisioned that machines tend to become smaller in size and have a bigger storage capacity to give more room for analyzing the larger size of data. That is, in the 1970s, Saxena [1] added Gordon Moore estimated computer processing speeds or power will double every two years. As indicated by Armstrong [20], there is a long history of incorporating human emotions and behavior into non-human entities.

Hence. Armstrong [20] mentioned the development of AI consumed most of history time. Beforehand, in 1964, Joseph Weizenbaum invented an early natural language processing computer program, ELIZA, at the Massachusetts Institute of Technology (MIT) located at the Artificial Intelligence Laboratory which is an early chatbot to form a simple pattern matching to simulate basic conversational responses to a user. In the present time, in 2019, Schroer [8] referred to a paper entitled "One the Measure of Intelligence" stating how a veteran deep learning researcher and Google engineer, Francois Chollet debates intelligence learned through experiences that then develop into valuable skills for future prospective. Thus, Armstrong [20] added the main branch of AI during that time is machine learning. As clarified by Saxena [1], Starbucks is not a company but a data company that sells coffee. This shows that business momentum is not holding on to a certain commodity offered, such as food and beverages, but can also give more satisfying services to the customers based on their personal customization and preferences. In fact, Saxena [1] mentioned the humanoid robots which learn, and study human behaviors based on a sufficient amount of data.

#### The Benefits and Risks of Artificial Intelligence

As mentioned by Bonnefon and Rahwan [2], machines may assist humans in the approval of bank loans, the determination of a defendant to get parole, managing kidney transplantation, and in driving which signaled the driver to speed up in a jiffy when facing obstacles along the road. On the road, Yara et al. [3] and managed to explain the cooperation between AI and the Traffic Organization Center of Ukraine to calculate and analyze the behavior of cars including the number of cars in a traffic jam and the number of vehicles by the direction of movement, depending on the time of the day and other influential factors. Then, Saxena [1] added in an autonomic system of a vehicle, AI had the sensibility to correct error codes to avoid dangerous situations while on a highway. Instead, Saxena [1] even mentioned having shortcuts or alternative routes to shorten the distance for the car to reach its destination. In this case, Armstrong [20] portrayed AI as a human navigation system to guide them in reaching their destinations.

Bonnefon and Rahwan [2] added ethical standards need to be addressed in the final touch. Bonnefon and Rahwan [2], Wong [25], and Srivastava et al. [26] viewed it ironically as humans tend to think too slowly when applying corrective measures to improve the ethical issues faced by Fast Thinking machines. Bonnefon and Rahwan [2], Mercier and Sperber [27], and De Neys [28] also explained that rationalization is one of the psychological perspectives owned by humans when making their judgments to be put in use for

building machines in the era. Steels and Brooks [29] unraveled in 2015 that Bill Gates was well-versed in artificial intelligence, but it can be a warning to humankind for being exposed to the overdevelopment of artificial intelligence systems. It sounds difficult as soon as Stephen Hawking describes that artificial intelligence will end the human race. Elon Musk, the founder of Tesla and SpaceX shares the same statement. Thomas [30] enlisted the potential risks that surround artificial intelligence until now as follows:

- 1. Automation layoffs. In other words, Armstrong [20] depicted the word deskilling of humans. As mentioned by Chadha [31] and Saxena [1], there should be a balance between automation and growth without leaving behind loyal employees. Chadha [31] suggested holding back on automating until there is a comparison of growth rates being made in the business. Hence, Chadha [31] reasoned out by giving room to them is another welcoming strategy for having a long-term strategy and reducing the speed of automation. Remember humans are better adapters than artificial intelligence which may cope and strategies with the automation process.
- 2. Thomas [30] dated back in 2018 and reported social violation is ranked as one of the top dangers of artificial intelligence. For instance, Thomas [30] depicted TikTok as the most widely anticipated social network to ever be used for a political purpose in Filipina. People need to be careful when expressing their viewpoints in public especially when involved in their personal lives. Another example as referred by Thomas [30] is that TikTok's artificial intelligence algorithm tends to trace back and filter out some harmful and inappropriate media to be shared among the users. Hence, one after another caused some misunderstandings or misperceptions about a certain subject that seems to violate their privacies and intricacies at the same time.
- 3. Micro scoping other people's lives is against the law. The involvement of social surveillance uncovered by Thomas [30] can also be referred to as a criminal act to violate one's privacy and security. Instead, monitoring people in public places also requires personal data to be collected which seems to be too overcontrolled or overprotective up to the point that might also endanger their lives.
- 4. Then, Thomas [30] added artificial intelligence is also biased against gender and race. Stereotyping and other types of biases may influence the viability or appropriateness of artificial bits of intelligence algorithms in measuring humans' capabilities. Even artificial intelligence would not recognize their talents and skills in improving themselves to achieve their dreams.
- 5. Due to earlier unfairness and discrimination, this may lead to other problems. As mentioned before, the talent pool and the growth of communities are unable to be measured and analyzed by artificial intelligence. Hence, Thomas [30] had the idea of

having artificial intelligence in assisting humans to overcome social boundaries or create job opportunities seems to be far-fetched until now.

- 6. Push over the boundaries seems to be overboard this time. Some law enforcers or lawmakers tend to make their lawful statements to be decided by artificial intelligence. To follow blindly artificial intelligence interpretations and predictions without firm belief or justification, may pose a great risk to humanity across all ages.
- 7. Overly and freely automated artificial intelligence without human interference is a risky situation. This may include hacking systems and cyberattacks that are invaders to the computerized system to handle and control their operations. By handling them in proper hands, there is less risk and danger, to begin with.

There are economic challenges when it comes to artificial intelligence. This is because Thomas [30] studied the consequences of having investors become even timider and unconfident when dealing with the current financial situation. As known by Thomas [30], artificial intelligence may decide for the financier to make the profitable or riskier decision when handling the monetary future. But still, they need to be well-equipped by knowing how to decide by using their artificial intelligence.

The Charlotte Observer/ Tribune News Service [32] referred to Better Business Bureau in finding out the most recent cybercrimes, such as phishing, impersonation, and romance scams that took advantage of personal information posted online on social networks. For instance, The Charlotte Observer/ Tribune News Service [32] studied scammers who interfered with businesses online, including Amazon which falsely proclaimed to change their account website forcing them to create a new profile when signing up.

One of the ways to mitigate the risk is to have a balanced relationship between humans and artificial intelligence. The way we attach and interact with artificial intelligence plays a vital role in having a more meaningful mechanistic relationship with each other. It all depends on their intentions and wants which could not easily influence the way they are making their decisions and plan for their future as well. Artificial intelligence hopes to have remained compatible and engaged in human lives which assists them in doing laborious work and timely behaviour. As a community, it is crucial to have the knowledge and tools in improving themselves by using artificial intelligence in their daily lives. It does not mean that humans must stick to their old-fashioned ways of doing their business and continuing doing what they are doing but also to be able to expand their knowledge and curiosity towards the future of the people.

Hence, The Charlotte Observer/ Tribune News Service [32] is expected to have a lookout for suspicious content when using online services by following the steps as shown below.

- 1. Be cautious of unsolicited messages.
- 2. Asking for contact information for verification.
- 3. Labeled as red flags.
- 4. Authenticate personal account.
- 5. Generate a strong password.
- 6. Make sure of the originality of the website before downloading files or clicking on links.

# The Future Perspectives of Having Artificial Intelligence

One of the prospects of artificial intelligence is the increased number of job layoffs. Edubirdie [33] accounted for what Forrester wrote an article on 'The Future of Work' which predicts by 2030 that job losses will reach a rate of 29 percent equivalent to roughly 20 million jobs with an even lesser job creation which amounted to 13 percent. This is because Edubirdie [33] escalated that most projects are dealing with hands-on artificial intelligence especially data entry, inventory trackers, proofreaders, and receptionists. Nowadays, even practical training is replaced by automated machines and vehicles for high performance and cutting edge.

Artificial intelligence is also a medium for humans to further discover and explore new inventions and hidden places even in space. For instance, Edubirdie [33] mentioned Lawrence Berkeley National Laboratory can predict thermoelectric materials by using artificial intelligence. According to Edubirdie [33], it does not only stop there since the technology also advanced in 2017 after discovering a shocking exploration involving the National Aeronautics and Space Administration (NASA) which discovered the eighth planet in the solar system using the technology of artificial intelligence. Then, in 2019, Edubirdie [33] also found another two planets discovered by astronomers at the University of Texas. This also includes what Agence France- Presse Relaxnews [5] has found that NASA also put in a lot of effort to master the design of a Preserverance rover in bringing back the Earth's soil from the Red Planet called MARS as a sample.

In terms of healthcare, Edubirdie [33] remained at a standstill as it does not take years and effort for artificial intelligence to suggest some preventive measures to put a halt to any such epidemic occurring in the world. As mentioned by Edubirdie [33], in the healthcare sector, artificial intelligence got the chance to study the underlying patterns of diseases, diagnoses, and treatments based on several sets of data. It was later explained by Edubirdie [33] that life expectancies, the onset of diseases, improvement in drug trials, and becoming an assistant to a doctor for detecting and diagnosing symptoms of a certain kind of disease. Agence France- Presse [34] encountered Garmi as a doctor's assistant in remote communities in Germany to keep on track of the health progress and look for data updates on their personal health profiling to keep their betterment in health. For their healthcare support, Agence France- Presse [34] cherished their family and friends that are always in their minds and hearts for their journey of recovery with the brought-up AI in their hands. But Edubirdie [33] continuously uncovered that the so-called nanotechnology collaborated with artificial intelligence to identify bad cells in cancer patients for tumor penetration and drug distribution.

There is a need to have a humanoid robot as a friend in the future. As well as; Armstrong [20] emphasized the empathic relationships with AI by observing their relationships with lifelike robots. Edubirdie [33] described the process of having caregivers or home companions as future caretakers. Edubirdie [33] is aware of their extension to record and convey meaningful information to have intelligent conversations, prepare healthy meals, and smoothen the daily average of human activities at the same time. That is mentioned by Armstrong [20] that there is a possibility of blending AI intelligence with human interpersonal skills. The latest one is to develop an emotion AI in detecting their feelings and emotions using a neural network of mappings onto their connected nodes in determining the positivity or negativity vibe received by the researcher. Saxena [1] referred to it as artificial emotion intelligence also known as affective computing made of sensors, cameras, and deep learning to interpret human emotions after seeing movies or engaging in any educational activities. Yara et al. [3] measured the possibility of measuring human emotions under psychological indicators, such as pulse and body electrical impulses. However, Armstrong [20] also reminded them that the machine's ability to read and interpret human emotions may take time to rejoice.

In Japan, there is drastic and progressive changes had been pointed out by Yara et al. [3] in the law-making procedures using AI. In criminology, Yara et al. [3] studied the use of software "Cassandra" incorporated with the elements of AI that analyses the repeated violations which broke the law. Yara et al. [3] also come across the same law enforcement introduced by another AI program known as COMPAS designated for certain states of the United States of America including New York, California, Florida, and Wisconsin. Due to the heap amount of criminology and correctional practices that are still expanding until now, the software programs have yet to be evaluated and implemented again in the future. Thus, Yara et al. [3] and Yong [35] suggested that software programs can be assessed in three ways, such as the risk assessment of general recidivism, violent recidivism, or the possibility of escape modeled in an algorithmic computerized system with some adjustments under the law. However, the profiling system of a suspect remains undetectable and unrecognizable as there is a weakened system in the identification records. Further, Yara et al. [3] found the fallibility and impairment of AI due to the non-linearity and heterogeneity of other data making it impossible to build an efficient algorithm. As mentioned before, Yara et al. [3] also referred to the impairment as a human mistake also related to cognitive biases. Eventually, Yara et al. [3] stated that AI is not vulnerable to these kinds of mistakes that provided humans with eligible objective results when analyzing a complex set of facts in making more definitive and rational decisions. For instance, Fam [36] mentioned the application of Chat-GPT in the Law sector for supporting well-structured clauses provided with concrete evidence to finalize their statements in court.

According to Fam [36], the Generative Pretrained Transformer 3.5 (GPT- 3.5) language model is popularized as a chatbot that provides human-like responses for generated questions by the user. However, it is more like a prototype and unready made since it provided responses that required further evidence to support its statements. Fam [36] added even if the company runs wholly on Chat-GPT, it really needs some refinements in supporting its business growth. Then, came along GPT-4 which may replace internet search engine tools aligned with digital books and online texts to provide the most accurate answer in assisting humans to make adjustments in their daily lives. Associated Press [37] given their word as GPT-4 is also ethical when answering extreme questions, such as making explosions to endanger people's lives by halting the system from responding to such questions.

#### **RESULT AND DISCUSSION**

Artificial intelligence is the advanced stage of accumulating knowledge on the making process of having human thoughts and beliefs to be put into action. Neuroscience is referred to as the structure or function of the nervous system and brain [38]. Neurobiology is the study of nerve and brain function [38]. Nerves are impulses that were triggered by the brain or spinal cord to be transmitted to the muscles and organs [38]. It shows that the simulation of a computer system enhanced the chances of being able to think like a human brain after undergoing cognitive processes. **Besides** that. interdependence between humans and machines can be balanced by having both human and artificial intelligence to help build a better ecosystem. It all started with the Turing- powerful intelligent systems [38] and [39]. This shows that the most recent build-up models may embrace the technicality of the human brain [38].

However, humans should have full responsibility when handling the future technology of AI. It is not an argumentative statement. It all starts with humans who are creating artificial intelligence until now in different genres from different backgrounds. It also includes human rights and ethical standards to meet their specifications. Based on the findings, humans are still searching for the truth, especially when they are also curious in looking up information about the end of the day on planet Earth.

By putting full trust in AI, humans' imaginations are running wild without thinking about further consequences and outcomes of it. In fact, AI does put some effort into it but it would not last long when it comes to the unknown. Further, AI is more technical, and machinery works rather than draining out ideas and opinions to weigh in, especially for business adjustments.

To earn trust, an AI system should avoid any potential bias and discrimination for the protection of human equal rights. Unequal rights may lead to unjustifiable legal actions, especially in employment, economic mobility, and economic growth. So basically, by practising good sampling and data collection methods, there will be a representative sample to generalise the outcome of the study. In this case, AI with good training data will increase the confidence to have a reliable predictive model employed by machine learning.

The word certainty is highly expected in this uncertain world. Hence, this can be measured by consistent probabilistic events. That goes for not underestimating the dangers of errors in machine learning models as well. The errors, in this case, can be referred to as a failed output for the outcome of the study.

Despite the harmful effects of AI, there are several challenges to be tackled. Therefore, AI systems may profoundly have data to be trained in producing more precise and accurate results. Besides a number of misidentifications using facial recognition, an enhanced AI may assist to take it to another level.

#### **CONCLUSION AND SUGGESTION**

There are both positive and negative impacts of artificial intelligence on their precious lives. Ethics and morality should also be looked into although artificial intelligence operates on its own. Safety first. The privacy and security of public users should not be invaded and violated since their personal data are out in the open. As mentioned by Yara et al. [3], from now on, the protection of personal data, information protection, intellectual property, and competition are on their shelves. This is followed by Saxena [1] emphasizing that AI is also viable for any misfit in attempting to access private and sensitive data. For instance, Saxena [1] found that bank branches tend to have AI for detecting any invalid users that invade the data breach for gaining information on bank accounts. After what the Agence France- Presse Relaxnews [5] has gone through specifically in the art and design concept universally intact with humans for them to achieve balanced and optimal results in harnessing their creativity.

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