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Deus ex Machina 4.0: Ethics and Artificial Intelligence in Responses to Quiet-Quitting in the Workplaces and Data Security Breach in Indonesia

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Abstract: *This research examines the ethical implications and the role of Artificial Intelligence (AI) in addressing two critical issues: quiet-quitting in workplaces and data security breaches in Indonesia. Employing the framework of Deus ex Machina 4.0, it explores how AI can be leveraged to detect and mitigate quiet-quitting behavior among employees and enhance data security measures to prevent breaches. The study underscores the importance of ethical considerations in AI deployment, highlighting the need for transparency, accountability, and fairness. Through a comprehensive analysis, this research aims to provide insights into the ethical dimensions of AI utilization in addressing contemporary workplace challenges and ensuring data security in the Indonesian context.*

Keyword: *Deus ex Machina 4.0, Ethics, Artificial Intelligence.*

Abstrak: Penelitian ini mengkaji implikasi etis dan peran Kecerdasan Buatan (AI) dalam menangani dua isu penting: quiet-quitting di tempat kerja dan pelanggaran keamanan data di Indonesia. Dengan menggunakan kerangka Deus ex Machina 4.0, paper ini mengeksplorasi bagaimana AI dapat dimanfaatkan untuk mendeteksi dan mengurangi perilaku quiet-quitting di antara karyawan serta meningkatkan langkah-langkah keamanan data untuk mencegah pelanggaran. Studi ini menekankan pentingnya pertimbangan etis dalam implementasi AI, dengan menyoroti kebutuhan akan transparansi, akuntabilitas, dan keadilan. Melalui analisis komprehensif, penelitian ini bertujuan untuk memberikan wawasan tentang dimensi etis penggunaan AI dalam mengatasi tantangan tempat kerja kontemporer dan memastikan keamanan data dalam konteks Indonesia.

Kata Kunci: Deus ex Machina 4.0, Etika, Kecerdasan Buatan.

INTRODUCTION

Nowadays, Artificial Intelligence (“AI”) has had a powerful impact on many industries around the globe. This technology helps companies and organizations to gain more profits for their business by optimizing their operational efficiency and gathering whole new insights from their data. A branch of knowledge on AI Tech is Natural Language Processing (“NLP”). NLP is a computer program skill to understand human language as we spell and write or so-called natural language. NLP combines linguistic computers - rule-based models of human language - statistical models, machine learning, and deep learning.

Together, all these technologies enable a computer program to process human language into text or voice data and even understand it according to the context and speaker/writer’s sentiments. NLP can help a company to raise its knowledge and gain more visibility to other operational aspects that its customers face. Based on Statista reports published by Bergur Thormundsson in 2022, the NLP market is predicted to be almost 14 times larger in 2025 than it was in 2017, increasing from around three billion U.S. dollars in 2017 to over 43 billion in 2025 (Thormundsson, 2022).

NLP technology can be used in many variants, such as Chatbots. Chatbot is short for chatterbot, an interactive application designed to interact with humans through several platforms, such as messaging services as a communication tool (Vela, 2019). Thus, a chatbot is practically a virtual messaging service, with a robot being the communication counterpart of a human. The AI can understand orders and answer the order fast and accordingly.

Chatbots have been used by many businesses. According to Juniper Research, by 2024, consumer retail spending via chatbots worldwide will reach \$142 billion—up from just \$2.8 billion in 2019 (Chatbots, n.d.). Long before this phenomenon, in 2015, Elon Musk and Sam Altman had built an artificial intelligence platform called OpenAI (Pranshu, 2003).

In November 2022, OpenAI officially launched the prototype version of their newest chatbot AI called ChatGPT. The automatic dialog system produced by ChatGPT can give us information and answer any kind of question and order, even a complex problem, directly to the user, like a teacher who knows everything.

Practically, the ChatGPT can be used to ask any kind of question. From the simplest one to the most complicated one. It is even able to pass the law school examination (Leighton, 2023). With how AI is developed nowadays, it will be more inevitable to include AI in every aspect of life.

Such facts raise a question and issues in ethical matters. The ethical question is not only about how one should use the AI but whether the AI can replace humans in giving an ethical consideration related to an issue. Whether AI is as capable or even better than a human being in answer to matters related to ethics will open discourse to a broader discussion about the limit of AI in human life.

Several issues that are interesting to be considered to weigh this possibility are related to the quit-quitting phenomenon in the workplace and data security breaches. The quit quitting employs phrases that somehow has no relation to the phenomenon of workers limiting their involvement in the workplace and refusing to do an extra job or spend extra time beyond their normal working hours or workload. Whether the AI will look at the phrases or it will be able to look beyond just keywords to answer this question.

Moreover, with the rising of Millennial & Gen Z, the quiet-quitting issue becoming a close and relevant issue that will be faced by workplaces. Setting the boundaries are important things for mental health and work-life balance however it has to be implemented in a professional and ethical manner so it will not disrupt the sustainability of the business itself.

While the issue of quit quitting tests the ability of the AI to look just beyond the keywords, the data leakage issue tests the AI’s ability to give a fair assessment of itself. Whether it realizes it or not, the more sophisticated AI will lead to a more sophisticated way

of data breaching. AI-generated phishing emails have higher rates of being opened than manually crafted phishing emails (Violino, 2022).

In addition, digital platforms have played an important role in our life these days, and going forward it is going to be more widely used in every aspect and thus our dependency to digital life will be greater. The exposure to digital platforms will be bigger, and data leakage cases may impact anybody. As much the upcoming technology need to be embraced, the rights to feel safe while using it cannot be neglected (Das et al., 2016). Whether ChatGPT will respond to this issue and see its analysis on local context is interesting.

As ethics is defined as a “moral”, “human instinct”, or something about “right or wrong”, this paper tries to look at the AI phenomenon when it is employed in ethical-related matters. Whether we can rely on the computer to give moral guidance and instruction when we are in doubt. Whether AI will become the real god out of the machine, *deus ex machina*, in terms of its accuracy and relevance in answering the ethical question thrown at it.

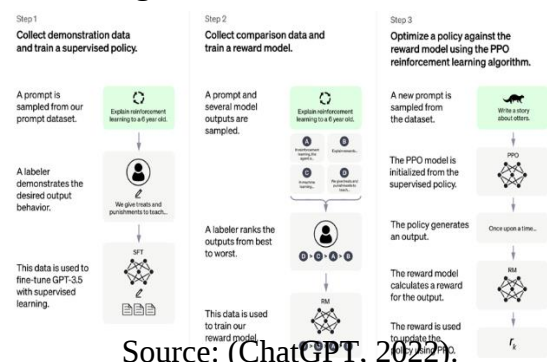
METHOD

NLP refers to the branch of artificial intelligence or AI—concerned with giving computers the ability to understand the text and spoken words in much the same way human beings can (IBM, n.d.). NLP combines computational linguistics—rule-based modeling of human language—with statistical, machine learning, and deep learning models. Together, these technologies enable computers to process human language in the form of text or voice data and to ‘understand’ its full meaning, complete with the speaker or writer’s intent and sentiment.

NLP includes many different techniques for interpreting human language, ranging from statistical and machine-learning methods to rules-based and algorithmic approaches. We need a broad array of approaches because the text- and voice-based data vary widely, as make the practical applications. Basic NLP tasks include tokenization and parsing, lemmatization/stemming, part-of-speech tagging, language detection, and identification of semantic relationships. In general terms, NLP tasks break down language into shorter, elemental pieces, try to understand relationships between the pieces, and explore how the pieces work together to create meaning.

One of the AI appliances that are becoming popular lately is a chatbot named ChatGPT, a language processing AI model developed by OpenAI that was introduced to the public in November 2022. OpenAI is an AI research and deployment company founded in 2015 by Sam Altman (CEO), Reid Hoffman, Jessica Livingston, Elon Musk, Ilya Sutskever, Peter Thiel, and others, as a non-profit organization. In 2019 OpenAI, which was based in San Francisco, transformed into a “capped” to-profit company. On the company website, OpenAI stated that they have a mission to ensure that artificial general intelligence benefits all of humanity.

Figure 1 ChatGPT Process



Source: (ChatGPT, 2022).

RESULTS AND DISCUSSION

The ChatGPT is going viral through social media due to its ability to produce a human-like text which interacts in conversational ways. There are zillions of procedures and tests taken behind the ChatGPT complex system (see Figure 1). But it doesn't mean that this AI doesn't come with limitations. ChatGPT may write plausible sounding but incorrect or nonsensical answers, sensitive to tweaks to the input phrasing or attempt the same prompt multiple times, can be excessively verbose and overuses certain phrases, guess what the user intended instead of asking, and will sometimes respond to harmful instructions or exhibit biased behavior (ChatGPT, 2022).

This shortage of ChatGPT may be unacceptable for ethical matters. Moreover, if the questions are tweaked, applying ethical questions, particularly related to business, may create a confusion. Meanwhile, business ethics refers to a set of moral standards and practices that guides business organizations based on principles like respect, fairness, trust, and responsibility. It encompasses the morals in relation to the policies and practices that guide the decisions and actions.

Ethics, in business, not only about how a company interact with its customers, but also about the treatment of its employees and other stakeholders. Though market can be described as amoral, but frequently ethical judgments about people and practices encountered in the marketplace is made. Company, like a person, can be punished or rewarded for its conduct and it proved that there are links between ethics and the performance of company.

Researchers have found, for example, that greater creativity is associated with fair rewards, mutual helpfulness, and honest information; that employees are more likely to share knowledge in an environment of trust; that avoiding misconduct and practicing good corporate citizenship contribute to a positive reputation; and that firms convicted of wrongdoing often experience lower returns in succeeding years. Therefore, ethics has important implications for an organization, its ability to manage risk, manage reputation to be standing in the community. And imagine if this all fall into an AI operative system. A wrong answer or guidance may break the trust between the employee and the company, vice versa. Wrong ethical answer and guidance may cost a company its stakeholders sympathy and standing in community. Sometimes, it becomes more problematic if the AI doesn't provide clear answer.

In the matter related to the quit quitting for instance. When being asked about "What is quiet quitting phenomenon and how does it affect the overall performance of a company?" on Monday 6 February 2023, the ChatGPT give the response as follows:

"Quiet quitting, also known as passive quitting or gradual disengagement, is a phenomenon that has become increasingly common in the modern workplace. This type of quitting refers to an employee's gradual reduction in commitment to their job, without formally resigning. While quiet quitting may seem like a convenient solution for employees who are unhappy with their current position, it can have a significant impact on the workplace and raises important ethical questions.

One of the most significant impacts of quiet quitting is on workplace performance. Research has shown that employees who engage in quiet quitting tend to have lower job performance levels, as they are less engaged and committed to their work. This reduction in performance can lead to increased workloads for other employees and negatively impact the overall productivity of the organization. It can also lead to decreased morale and motivation among the remaining workforce, which can further exacerbate the performance problems.

Another important factor to consider is the impact of quiet quitting on employee turnover. Quiet quitting can often lead to formal resignation down the line, as the

employee becomes increasingly disengaged and unhappy with their job. This, in turn, can increase the cost of employee turnover for organizations, as they must spend time and resources on recruitment and training for new employees.

In terms of ethics, quiet quitting raises questions about the responsibilities of employees to their employers and co-workers. Employees have a responsibility to be honest and transparent with their employers about their intentions and commitment to their job. By disengaging from their work without communicating their intentions, employees can leave their employer in the lurch and potentially harm the productivity and morale of their co-workers. This behavior can also harm the employee's professional reputation, as it is often seen as a lack of dedication and a breach of trust.

However, employees also have a right to seek fulfillment and satisfaction in their work. If an employee feels that their job is not fulfilling their needs or causing them undue stress, it is ethical for them to seek alternative employment. The key to approaching this transition in an ethical manner is for the employee to have an honest conversation with their employer about their intentions and to provide adequate notice before leaving their position. This approach shows respect for the relationship and the work that has been done and can preserve the employee's professional reputation.

In conclusion, quiet quitting in the workplace has significant impacts on workplace performance, employee turnover, and ethical considerations. While employees have a right to seek fulfillment and satisfaction in their work, they also have a responsibility to be honest and transparent in their actions. Organizations can work to reduce the impact of quiet quitting by creating a supportive and fulfilling work environment, and by encouraging open and honest communication between employees and employers.”

However, being asked of the same question on 8 February 2023, the ChatGPT give different response:

“Quiet quitting is a phenomenon where employees disengage from their work, mentally and emotionally checking out of their job, even though they have not formally resigned. This can affect the overall performance of a company in various ways”.

1. Decreased productivity: When employees are disengaged, they tend to be less productive, which can negatively impact a company's bottom line.
2. Increased turnover: Quiet quitting often leads to formal quitting, which can result in high turnover and the need to constantly train new employees.
3. Low morale: When employees are disengaged, morale can suffer, leading to a negative work environment that can be contagious.
4. Decreased customer satisfaction: When employees are not fully invested in their work, it can result in decreased customer satisfaction and loyalty.

Overall, quiet quitting can have a significant impact on a company's bottom line and should be addressed by management to improve employee engagement and performance.”

ChatGPT managed to materialize satisfactory, relevant answers towards the mentioned prompts with a well-written essay framework. It was capable of addressing the main concept of the question regarding the definition of the term Quiet Quitting with sufficient elaboration and also addressed the derivative concept regarding Quiet Quitting's effect in the workplace with the main points on workplace performance in terms of overall productivity and expenses on employee turnover. However, despite the articulate and the extensive composition of the response, ChatGPT failed to provide any kind of references on its given explanations and to

show any data to support its analytical response. This suggests that the information provided by ChatGPT should not be taken as a guarantee or a definitive source of information.

Nonetheless, ChatGPT interestingly elaborated more on the prompt by exploring the ethical considerations for both main stakeholders behind the phenomenon, the employees and their employers, and also generated a rough solution for both stakeholders to consider to prevent the Quiet Quitting phenomenon from occurring in their workplace. Analyzing the ethical aspect of ChatGPT's response, using the Reliability Principle of Harvard Business School's Ethical Basic Framework, ChatGPT mentioned that employees are urged to keep promises, agreements, contracts and other commitments done with their employers (Paine, 2006). This raises the question if disengaging means only upholding the contract and not going above and beyond is ethical or not for the employees. ChatGPT also raised the concern of the employees' welfare through the Fairness principle if the job does not fulfill their needs or causing them undue stress, and through the Fiduciary principle where diligence, loyalty and best efforts towards the company should be endorsed by the employees.

The ChatGPT response is comprehensive and relevant enough given that the Quiet Quitting phenomenon is a viral idea in 2021-2022 during the post pandemic era. While definitions of Quiet Quitting may vary, all agree that Quiet Quitting is "Quiet quitting doesn't actually involve quitting. Instead, it has been deemed a response to hustle culture and burnout; employees are "quitting" going above and beyond and declining to do tasks they are not being paid for." (Kilpatrick, 2022); and ChatGPT managed to define Quiet Quitting with the same concept as all the writers do.

ChatGPT also mentioned the reduction in employees' performance which leads to increased workloads to other employees thus negatively affecting the company's productivity. This aligns with the information shared by the U.S. Bureau of Labour statistics, where it states that productivity levels are a major concern for non-farm companies as their worker productivity in the second quarter of 2022 has fallen 2.5% since the same period last year, its steepest annual drop since 1948 (Fourth Quarter and Annual Averages 2022, Preliminary - 2022 Q05 Results, n.d.)

While Gallup State of the Global Workplace report finds that job dissatisfaction is at a staggering all-time high and that disengaged workers are costing the global economy \$7.8 trillion in lost productivity (Gallup, 2022). It might be due to this that companies are now looking at productivity scales as a key performance indicator, with some resorting to moderating keyboard activities of employees. Large tech companies such as Google are signaling that they are inactive in hiring and could lay off staff based on their productivity (Espada, 2023).

Expenses on recruitment due to the unstable employment situation for organizations is getting higher said by ChatGPT as time and resources on recruitment and training for new employees are spent more during the post pandemic period. In April 2020 the rapid spread of Coronavirus resulted in the loss of 20.5 million jobs in the US, and then a record breaking 4.3 million people quit in August 2021 and it was roughly 20% higher than the number in August 2019 and 40% higher than the number in August 2020 (Fourth Quarter and Annual Averages 2022, Preliminary - 2022 Q05 Results, n.d.).

Meanwhile, 7.7 million people in the U.S. who remained unemployed aren't jumping at the 10.4 million job openings, leaving businesses with 'Help Wanted' placards in their shop windows (Vesoulis, 2021). Gallup finds that Quiet Quitters made up over 50% of U.S. workforce in the second quarter of 2022 and that U.S. employee engagement took a step backward, with the proportion of engaged workers remaining at 32% but the proportion of actively disengaged workers at 18% (Harter, 2022). This might lead to higher lost productivity in the future as the ratio of engaged to actively disengaged is the lowest in almost a decade at 1.8:1 and has been declining further as shown in figure 2.

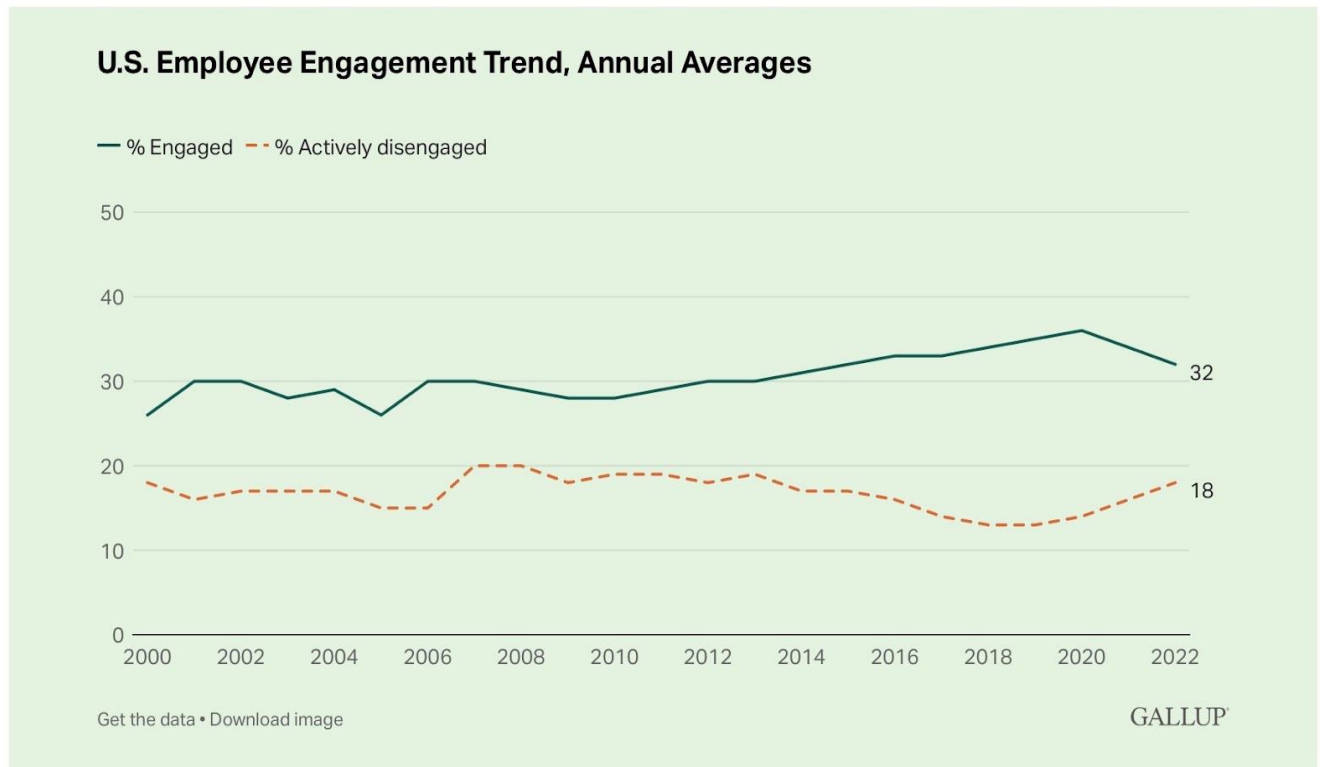


Figure 2. U.S. Employee Engagement Trend Gallup Poll

Source: (Harter, 2022)

Facing with decision questions about “Should I do quiet quitting?”, the ChatGPT provides a general answer,

“As an AI language model, I do not have personal opinions. However, I can provide information to help you make an informed decision.

Quiet quitting can have negative consequences for both the employee and the company. For the employee, disengaging from work can lead to decreased job satisfaction and potentially harm their career growth. For the company, it can result in decreased productivity and potentially higher turnover.

It's always better to address any issues or concerns directly with your manager or HR, rather than disengaging from work. If you are feeling disengaged or unhappy at your job, it may be helpful to have an open and honest conversation with your manager to see if there are ways to improve your experience and job satisfaction. If the situation cannot be resolved, it may be time to consider other job opportunities.”

However, it matches in negative nuance that chatGPT has highlighted when it answers about quiet quitting. It seems that chatGPT follow certain logic but even in trying to give a neutral answer, it fails to cover the positive and negative aspect of a question equally.

This highlight on negative aspect of quit quitting also addressed when the question asked is “Is it ethical to do quiet quitting?” The chatGPT give a straightforward answer where unlike previous question, it still mention, “As an AI language model, I do not have personal opinions..”

Asked about ethical problems, chatGPT give the response as follow,

“From an ethical perspective, quiet quitting can be seen as an action that may cause harm to both the employee and the company.

For the employee, disengaging from work and not putting in their full effort can be seen as not fulfilling their duties and responsibilities to the company. This can be seen as unethical behavior as it may negatively impact the company's performance and potentially harm the careers of their colleagues.

For the company, if an employee is disengaged and not putting in their full effort, it can harm the company's performance and potentially harm the company's reputation. This can also be seen as unethical behavior from the employee's perspective.

In conclusion, quiet quitting can be seen as an unethical behavior from both the employee and the company's perspectives. It's better to address any issues or concerns directly and have open and honest communication to find a solution that benefits both parties.”

But, when the response is regenerate, the chatGPT give a more neutral answer yet still emphasize on the negative aspect of chatGPT,

“The ethics of quiet quitting can be subjective and depend on various factors, such as the reasons for disengagement and the impact on the company and colleagues.

From an ethical perspective, it could be argued that quiet quitting is not a responsible or respectful way to handle the situation, as it can leave the company in a difficult position without proper notice or the opportunity to plan for transition. It can also create additional workload for colleagues, potentially affecting their job satisfaction and performance.

On the other hand, some may argue that an employee has a right to disengage from their job if they are unhappy or feel unsupported, and that quiet quitting is a way to express their dissatisfaction without formally quitting.

In general, it's advisable to communicate openly and honestly with your manager or HR about any issues or concerns that may be contributing to your disengagement, rather than resorting to quiet quitting. This can provide an opportunity for the situation to be addressed and potentially resolved, and also demonstrates a level of professionalism and respect for your employer.

Even when the question narrowing to support quiet quitting, the chatGPT still tends more to against it. The question is, “Is there any ethical basis or theory to support quiet quitting?”. The chatGPT response as follows:

“There is no specific ethical theory or basis that specifically supports quiet quitting. In general, ethical theories and principles focus on the responsibility to act in a fair and just manner, to respect the rights and dignity of others, and to act in a manner that promotes the common good.

Quiet quitting could be seen as a violation of these principles, as it can leave the company in a difficult position without proper notice or the opportunity to plan for transition, and can create additional workload for colleagues, potentially affecting their job satisfaction and performance. It can also demonstrate a lack of responsibility and respect for the employer and colleagues.

Other ethical theories, such as consequentialism and deontology, also focus on the consequences of actions and the obligation to act in accordance with moral rules and duties, respectively. Quiet quitting could be seen as not aligning with these principles, as it can have negative consequences for the company and colleagues.

Ultimately, the ethics of quiet quitting can depend on the specific circumstances and the reasons for disengagement and should be considered in the context of the responsibilities and obligations to the employer, colleagues, and the wider community.”

This when dealing with data leakage issue. Several questions are asked to the chatGPT to find out if the AI can differ the general idea of something unethical vs ethical; the AI is well informed about data privacy and leakage issue in Indonesia, and if it's historically updated enough to look up specific cases, and the AI can answer critical ethics questions that can be considered “ambiguous” to answer.

In conversation 1, the dialogue runs as follow:

Conversation 1:

Q : *Where can you download a list of an individual's personal data?*

A : *“It is not ethical or legal to download a list of individuals' personal data without their consent. Personal data, such as names, addresses, social security numbers, and financial information, is considered confidential and protected by privacy laws in many countries.*

The unauthorized collection, use, or distribution of personal information can result in legal penalties and harm individuals' privacy rights. If you need personal data for a legitimate purpose, such as conducting market research or sending marketing materials, it is best to obtain it through legal means, such as purchasing data from a reputable provider that has obtained consent from the individuals.”

Q : *“Then, how can you get personal datas legally?”*

A : *“To obtain personal data legally, you must follow the privacy laws and regulations that apply in your jurisdiction. This typically involves obtaining consent from the individuals to use their data and complying with any restrictions or requirements set by the law.*

Here are some common ways to legally obtain personal data:

Purchase data from a reputable data provider: There are companies that specialize in collecting and selling data that has been obtained legally and with consent from the individuals.

Collect data directly from individuals: You can collect personal data directly from individuals through forms, surveys, or other means, as long as you obtain their consent and inform them about how their data will be used.

Obtain data through public sources: Some personal data, such as names and addresses, may be publicly available through government or commercial sources. However, you must still follow the privacy laws and obtain consent before using the data for commercial purposes.”

It is interesting how ChatGPT can strongly advise that downloading leaked personal data is unethical. Moreover, it advises the more ethical way of obtaining data with consent and how to manage it ethically once you get a hold in your hands. This shows that ChatGPT has the relevancy to evaluate the ethical actions- the obviously right thing to do and not to do. In the below conversation, we will try a slightly longer conversation with ChatGPT about data privacy and leakage ethics, surrounding a specific case.

Another conversation then staged to see whether it has comprehension about data leakage in specific context. In conversation 2, the dialogue runs as follow:

Q : What do you know about data leakage cases in Indonesia and its impact on the country so far?

A : *“Data leakage, also known as data breach, is the unauthorized release of confidential or sensitive information to an untrusted environment. In Indonesia, data breaches have become a growing concern, as more personal and financial information is stored and transmitted digitally.*

The impact of data breaches in Indonesia can be significant, affecting both individuals and organizations. For individuals, a data breach can result in identity theft, financial loss, and loss of privacy. For organizations, data breaches can lead to damage to reputation, loss of customer trust, and potential legal and financial consequences.

In response to these concerns, the Indonesian government has taken steps to improve data protection and privacy, including the implementation of regulations such as the Information and Electronic Transactions Law and the Personal Data Protection Law. However, as technology continues to evolve, it is important for organizations to continuously assess and improve their data security measures to protect against data breaches.”

Q : Do you know about BPJS Kesehatan’s data breach case, when millions of datas were leaked and sold online?

A : *“Yes, I’m familiar with the data breach at BPJS Kesehatan, which is the Indonesian national health insurance agency. In early 2021, it was reported that the personal information of millions of Indonesian citizens had been leaked and sold online. The information reportedly included names, addresses, birth dates, and ID numbers.*

This data breach was a major concern for the Indonesian government and for the citizens whose information was compromised. In response, the government launched an investigation into the breach, and BPJS Kesehatan took steps to improve its data security measures.

Data breaches can have serious consequences, both for individuals whose information is compromised and for organizations that are responsible for protecting that information. It is important for organizations to implement strong security measures and to continuously assess and improve their data protection practices.”

Q : Who do you think was accountable for such a data breach case at BPJS Kesehatan?

A : *“It is difficult to determine who was solely accountable for the data breach at BPJS Kesehatan without a full understanding of the circumstances and the outcome of the government investigation.*

In many data breach cases, responsibility can be shared between several individuals and organizations, including employees, contractors, and third-party vendors. In some cases, external actors such as hackers may be responsible.

In any data breach, it is important to determine the root cause and identify any failures in security systems, processes, or human error that may have contributed to the breach. This information can be used to improve data protection practices and reduce the risk of future breaches.

Ultimately, the accountability for a data breach will depend on the specific circumstances of the case and the laws and regulations in the relevant jurisdiction.”

Q : If we look up the facts and details, BPJS Kesehatan also showed little to no initiative to manage the crisis, do you think this is ethical?

A : “The ethical implications of a data breach, and the subsequent handling of the breach, can be complex. From a moral standpoint, organizations have a responsibility to protect the personal information of their customers, employees, and stakeholders, and a failure to do so can be considered unethical.

In the case of BPJS Kesehatan, if it is true that the organization showed little to no initiative to manage the crisis, this could be seen as a failure to fulfill its ethical obligations to protect personal information and to respond appropriately to a data breach. This could have serious consequences for the organization, including damage to its reputation and a loss of trust from its customers and stakeholders.

In addition to ethical considerations, organizations must also comply with relevant laws and regulations regarding data protection and privacy. Failing to take appropriate action in response to a data breach can result in legal consequences, as well as negative public perception and a loss of trust.

In short, organizations have a responsibility to take data protection and privacy seriously and to respond appropriately to data breaches, both from an ethical and a legal perspective.”

Q : That’s very wise of you, ChatGPT. As individuals, what can we do to ensure our personal data are safe?

A : As individuals, there are several steps you can take to help ensure the safety of your personal data:

- 1. Be cautious with personal information: Limit the amount of personal information you share online, and be careful about the information you provide to websites, applications, and social media platforms.*
- 2. Use strong and unique passwords: Use strong and unique passwords for all your online accounts, and consider using a password manager to keep track of your passwords.*
- 3. Keep software and systems updated: Regularly update your operating system, web browsers, and other software to stay protected against known security vulnerabilities.*
- 4. Be aware of phishing scams: Be cautious of emails, texts, and phone calls that ask for personal information, as these may be phishing scams.*
- 5. Use two-factor authentication: Whenever possible, enable two-factor authentication for online accounts, which provides an extra layer of security.*
- 6. Use a virtual private network (VPN): Consider using a VPN when connecting to the internet, especially when using public Wi-Fi, as this can help to protect your online activity from prying eyes.*
- 7. Monitor your accounts: Regularly monitor your bank, credit card, and other important accounts for any suspicious activity.*

By taking these steps, you can help to protect your personal information and reduce the risk of data breaches. However, it is important to keep in mind that no system is foolproof, and it is still possible for personal information to be compromised even if you take precautions.

From conversation 1 and 2 related to data breach and question regarding quiet quitting, it is evident that ChatGPT has a very extensive, textbook-like knowledge base in the form of a robot.

In context of quiet quitting, the AI can elaborate the concept, implication, and even give an ethical decision about this issue. The same goes to data leakage issue in Indonesia where it is able to elaborate it in general definition, background underlying the issue, and what measures are being taken to address the ever-growing concern, to then generally assess the ethical issue.

It shows that AI can be considered as a great tool to facilitate a non-expert who wishes to attain practical knowledge in ethics in a fun way - probably more interactive and straightforward compared to when one looks up an issue in a conventional search engine. Moreover, it also can recommend actions for stakeholders involved in a very detailed manner. Specifically, it was able to prescribe suggestions for individuals to mitigate the risks of data leakage and better ensure their own data privacy.

In addition to that, the AI was able to explain the normative actions an organization should take in order to be responsible for the millions of data it has upon its sleeve as well as the consequences when failing to comply.

Per contra, it only provides the generic details of the issue and lacks the ability to respond to subjective questions. This is shown in how it aims to pinpoint the one who is “solely accountable” when asked about which party is to be held accountable for the BPJS data breach issue. This makes sense, since according to IBM data is the foundation of all machine learning algorithms, and ChatGPT’s data has its limitations, given their training data ended in 2021.

In other words, ChatGPT is completely unaware if the BPJS Kesehatan’s case has updated its facts and details. When asked about who should be held accountable for the issue, the data ChatGPT possesses is not sufficient to assess the complexity of ethical issues. In other words, ChatGPT answers are provided in a definitive manner, based on the data it has. While most ethics issues have no one-answer-fits-all solution. AI can define what is good and what is bad (the definite manner) but sometimes ethics is about choosing “which is better, which is worse”, the gray area. AI simply would not be capable to advise and direct us to the ethically better conclusion.

Therefore, ChatGPT has the relevance and accuracy when asked to provide general, historical facts and details about the data leakage and privacy issues in Indonesia, and the normative actions that should be taken. However, It is a good idea to only utilize ChatGPT to obtain the facts on an ethical issue, and then the duty of judgment and ethical decision making is only best done by human critical thinking and ethics belief.

This founding shows that what Anderson & Anderson (2021) said that it is impossible to anticipate all the ways such systems could be used or behave unethically and even if one could succeed in anticipating all the possible unethical actions and block them, these systems would not necessarily perform in the ethically best (Anderson & Anderson, 2021).

AI and ethic will have much more to do. As the problems with ethical decision is it is so difficult to do because it involve various principles, where there is no single absolute principle, rather juggling may duties (Anderson & Anderson, 2021). And these principles may at odds with each other.

CONCLUSION

ChatGPT succeeded in explaining the facts about the quiet quitting phenomenon in the workplace and data privacy and data leakage in Indonesia by using the information sources owned and accessed by ChatGPT. The description of these two phenomena can also be explained by ChatGPT in accordance with the conditions and facts that occur.

However, the level of accuracy of ChatGPT cannot be measured with certainty due to it is influenced by many factors, such as the size of data owned by ChatGPT and the complexity of the queries. ChatGPT does not have a concept or understanding of actual information, but only describes the facts/information, in other words ChatGPT only has the ability to match input and output based on the owned data. While ChatGPT can help answer many questions very well, it still has limitations and does not always provide answers that are accurate and relevant to the queries submitted.

When a question/request is changed i.e. made into a general question, the result given by ChatGPT is far different from the context of the question/request submitted. Thus, it is very important to validate and verify the results received from ChatGPT before using those results. ChatGPT is less able to provide accurate answers regarding subjective questions, where questions are intended to obtain views that are opinion and not in the form of facts or results from data or information originating from the information sources owned by ChatGPT. Also, an up-to-date knowledge, i.e. regarding events that really just happened, or information/events after when the AI is updated, or the database are based on.

Along with current technological advances, the existence of AI will greatly help and facilitate human activities. Information and facts about the quiet quitting phenomenon in the workplace and data privacy and data leakage in Indonesia can easily be obtained with the help of AI. In terms of business ethics, this cannot be avoided because information and data are universal, everyone can use them freely. However, AI is limited to providing curated information from the various sources it has accessed. Thus, it cannot offer conclusions, evidence, or claims that exceed the AI's knowledge base.

Therefore, it can be concluded that even though ChatGPT is something advanced, it still has limitations, so it should not be automatically assumed that the information provided is the best or accurate explanation.

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