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## WITH CHATGPT ABOUT CHATGPT

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**Abstract:** We often say that the need for innovation is indisputable, and the reason in many cases is that the world is changing. But if we think about it more, we change the world through our actions. According to one of the thoughts of Mahatma Gandhi (Mohandas Karamchand Gandhi) (1869–1948), an Indian lawyer and politician, “We must act as we would like to shape the world.” At the same time, we are not, we will not and cannot always be aware of the impact our actions and the innovations we create have and will have on our lives. This is undoubtedly true, that is why it is worthwhile to approach and study each (future) innovation from several points of view: examine and analyze, then draw conclusions about its values and effectiveness and think further. This paper undertakes to reveal with the help of an artificial intelligence (AI) solution, a large language model, the Chat GPT (Generative Pre-trained Transformer), how ChatGPT defines itself, what it thinks about itself, how it answers questions about itself: How predictable it is? What its self-limiting ability is? How provocative it is? What level of text generation it is? etc. Based on the “machine” answers to “human” questions, it can be concluded that humans and artificial intelligence perform better together than separately. Questions and tasks formulated with sufficient thoroughness, as well as problems described with scientific sophistication, can be approached from several aspects simultaneously. And with this human-machine collaboration, the environmental, economic, technical, and social expectations of desired sustainability are met.

**Keywords:** Industry 5.0, “human” question, “machine” answer, intelligence, collaboration

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### 1. INTRODUCTION

We live in the age of information societies, which can actually be considered a new industrial revolution (Industry 5.0) due to the rapid development of techniques and technologies. If we start a search using Google for the keywords of the topic in English, the results speak for themselves:

- ChatGPT (Generative Pre-trained Transformer) (as a technical innovation) – 1,160,000,000 results
- interactive – 4,040,000,000 results
- artificial intelligence – 1,860,000,000 results
- risk – 10,500,000,000 results
- digital library – 3,430,000,000 results
- Industry 5.0 – 237,000,000 results
- digital addiction – 223,000,000 results

The participants of the society are increasingly interested in the immanent power of the ChatGPT (Generative Pre-trained Transformer) – as a technical innovation – although skepticism also appears. A society with a high engineering culture can be particularly effective if it helps and supports digitalisation and takes advantage of the innovation inherent in cross-effects. Digitalisation creates process transparency. However, we cannot consider this as having just been transferred to another information carrier system, which was previously done on paper. The complex and precise, more and more detailed analysis and evaluation of the individual processes, and then the results serve to perform real tasks and solve and/or avoid real problems. It should be noted that we can speak of a task if the current state, the needs and possibilities, the target state and the applicable algorithm(s) are also known. While we face a problem if there is no (complete) knowledge of the current state and/or of the algorithms to be used and/or of the target state either. There is also no doubt that 5G/6G will encourage (and even force) the spread of new generations of various interactive applications. However, with the use of 5G/6G compatible components, the security/risk profile has changed, taking into account variable capacity, latency, data transfer capability, speed, different coverage, etc. So, more complex functionality may carry more/different risks. That's why customization is a key factor. So, with regard to artificial intelligence (AI), challenges must be overcome and the requirements are always:

- efficiency,
- safety and last but not least
- social utility.

Openness and willingness to innovation is one of the basic conditions for societies to be able to use the application possibilities of artificial intelligence (AI) to their own benefit. The presence of artificial

intelligence (AI) in our lives is perhaps best expressed by one of the famous sayings of the Roman poet Publius Vergilius Maro (70 BC–19 BC): *“And the winds, formed ranks, rushed out by the door he'd made, and whirled across the earth.”* (“*Venti velut agmine facto qua data porta ruunt et terras turbine perflant.*”)

It cannot be ignored that the appearance of application resistance in new, innovative or areas with different values – also related to the spread of artificial intelligence (AI) – can reduce the action potential. Therefore, the following question must be answered as a thought experiment: How is the former normality distorted, is it distorted at all? Or rather, it will be a question of how to perform tasks, solve (or avoid if possible) problems and overcome challenges in different ways and in a new way. First of all, we need to explore how ChatGPT (Generative Pre-trained Transformer) defines itself, what it thinks about itself, how it answers the questions about itself: How predictable is it? What is your self-limiting ability? How provocative is it? What is the level of text generation? etc.

## 2. POSSIBILITIES, EFFECTS AND NECESSITY OF USING CHATGPT

Before the questions to be asked are formulated, it is worth getting to know the application conditions of ChatGPT (Generative Pre-trained Transformer). The comprehensive, overview literature is primarily for global understanding, but at the same time, it is also a guide for orientation towards new areas. Studying them reveals a more detailed picture of the given topic. I admit that I gained a lot of new knowledge while I was selecting and organizing scientifically sophisticated papers and professional presentations related to the topic (URL1, URL2), as well as the lectures and round table discussions given on the occasion of the Day of Hungarian Science (URL3, URL4, URL5). It can be said about every age that it is a world of surprises and uncertainties, and that there are always “unknown unknowns”, that is, we do not even suspect that they exist (Hankiss, 1979; Rumsfeld, 2011). Perhaps uncertainty is also a social need and expectation, because it always stimulates our curiosity, our willingness to investigate and research, and ultimately our needs for change, and changes also change our thinking (Veszelszki, 2013). It should be noted that constructions that collapse like a house of cards cannot be created if and only if the ideas are framed by a firm and flexible consistency.

It can also be useful to make reflective diaries in addition to information through a reflective, analytical and evaluative study of the literature, giving the opportunity for a deeper analysis of experiences. A deeper analysis is also necessary because break-through and ground-breaking innovations must always be approached with sufficient curiosity (Lury, 2019). However, it is worth filtering out business motivations when exploring and analyzing opportunities and effects, because they distort reality. The investigation can be specified as the dynamics of the process (regardless of the possibilities and effects):

- perception,
- the consideration,
- the decision and
- the action.

In the process of improving artificial intelligence (AI), such as ChatGPT (Generative Pre-trained Transformer), the “interested parties” must be sensitized towards each other, because the collaboration is based on the values of the past in the present, but it must also find a stimulating environment in the future. Furthermore, pre-communication precedes an answer/text generation to a simple or complex question, or effective human-machine communication. Artificial intelligence (AI) is imperceptibly rewriting the concept of work, taking possession of our homes and significantly influencing our human relationships and the means of acquiring knowledge, so we cannot waste time (Tilesch – Hatamleh, 2023). However, there were, are, and will be obstacles. However, these can be overcome and partially avoided if we can set optimistic and optimistic goals, which can be done, for example, by applying George T. Doran's S M A R T model published in 1981 (Doran, 1981), where the goal is both

- S – Specific,
- M – Measurable,
- A – Achievable,
- R – Relevant and
- T – Time-boxed.



In higher education, for example, it is particularly important to realize the symbiosis of the content generated by ChatGPT (Generative Pre-trained Transformer) and the students' own work. However, this can be realized if and only if we always use it responsibly and cooperation is replaced by collaboration.

### 3. MATERIAL AND METHOD

Always keep in mind when introducing/applying/expanding “new” technology, Confucius (551–479 BC) is one of the most important Chinese philosophers' eternal statement, according to which *“If the use of words is not correct, the interpretation of concepts is confusing, it cannot be properly to act.”* According to this, the questions to be answered by the ChatGPT (Generative Pre-trained Transformer) are sufficiently thorough that the use of available data and information sources provides relevant answers.

First of all, we have scrupulous questions for the sorting/selection of ideas that offer solutions to static/dynamic problems with a systemic approach for carrying out realistic, real-world tasks (Table 1). At the Engineering Innovation course at the University of Szeged, the answers to some of the questions listed in Table 1 were generated using the ChatGPT (Generative Pre-trained Transformer) 3.5 and 4.0 programs. And in the next chapter (Common and individual interest. Common and individual responsibility?), the characteristics that influence its use, as well as the arguments and counterarguments that can limit it, come to light.

Table 1 | Modern scruples

?	Ban it or work with it? What basic skills are required for proper use? How can data protection be implemented? Is security achieved (threat prevention)? Cooperation and/or collaboration? Does the principle of effect and counter-effect work? Can you provide a sample? Do the questions have a clue? General or chiseled basic operation? Connecting or separating generations? What risk, social and ethical challenges does it hide? ...
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### 4. COMMON AND INDIVIDUAL INTEREST. SHARED AND INDIVIDUAL RESPONSIBILITY?

The answers to the questions show that it is worth experimenting with our thoughts from several aspects. Without claiming to be complete, here should be some details, information from the “machine” answers to the “human” question. First, how ChatGPT defines itself: ChatGPT is an artificial intelligence-based conversational platform that learns from large amounts of data sources such as web articles, books, and other written materials. Using this process, he is able to generate useful, meaningful, coherent, “human-like” responses. It can be useful for users in searching for information, providing advice, and solving problems. Its operation is based on a recursive neural network that uses sequence generation.

Adapting to people's changing needs, artificial intelligence systems can offer new opportunities and approaches in different areas of life. With its use, it is possible to communicate quickly and efficiently and to search for information, but critical thinking and general awareness of the given topic are important. ChatGPT and other similar technologies can help people communicate, study, work, etc. more easily and efficiently.

It is important to be aware that ChatGPT is not perfect (its answers are sometimes inaccurate or inappropriate, and ethical questions may also arise, e.g. regarding the protection of confidential data), so do not rely solely on the information it provides.

There were also limitations regarding cooperation and collaboration, which still need to be overcome: users must always interpret the information/answers critically, because it is a general system, so it does not have deep expertise in all topics, and therefore it is not always able to give accurate and complete answers. It cited medicine and engineering as examples. Therefore, its knowledge may be more limited due to the lack of information regarding questions formulated in areas that require very special or deep expertise, and in terms of extracting up-to-date information. But the interpretation and management of human emotions and experiences is also present as a challenge.

The answers always depend on the quality and quantity of available data and learning resources, but its flexibility is indisputable, as it can provide general information, ideas, and inspirations in many different areas, which can help you navigate or start further research.

It answered the question, “What is needed to use ChatGPT well?”, as follows:

- interest and openness, because the better someone knows and understands what it can be used for, the more effectively they will be able to use it
- asking questions accurately, because this helps communication to be effective and to obtain accurate and relevant answers
- patience and willingness to experiment because it can learn from interactions
- critical thinking to evaluate information and answers
- ability to correct and guide
- sensitivity to data protection, which enables security
- acceptance of limitations, i.e. adaptive attitude

Both advantages and opportunities, as well as disadvantages and challenges, and even limitations and obstacles appeared in the answers. Based on the answers to the questions, the system of the technology's criteria was also outlined (Table 2).

Table 2 | Pros and cons of the technology

system 1 (yesterday/past...)	transition (uncertainty band)	system 2 (tomorrow/(near)future...)
leaves the system of usual paths it does not fit into the system as a miracle bug explodes the norm it changes people's lives/work characterized by instinctive self-righteousness particular unpredictability new and new extreme provocative restrictive nature of rules it's complicated ...	transition (uncertainty band)	leaves the usual schemes behind its ideas are different from the traditional ones new, unusual, but social it pushes outdated skills to the background characterized by relative freedom curiosity freedom from constraints and conventions the possibility of interesting associations it is full of possibilities, but it has self-limiting abilities holistic interpretation of rules effective ...

We are currently in the transition period (in the period of the uncertainty band according to Table 2), however, we must be prepared that if something is added or connected to a new piece of information, it will be something else. The use of ChatGPT (Generative Pre-trained Transformer) will also feature prominently in legal documents related to data security. However, it is not worth limiting artificial intelligence (AI) applications in the initial and breakthrough stages by creating too many unnecessary, meaningless rules. Because we can use the “novelties” offered by technology, which also teach us. Applications (especially ChatGPT) can be effectively used in the following areas:

- comparison of antimodern, modern, postmodern, ultramodern possibilities
- reframing of tasks and problems (instant approach from several aspects at the same time)
- supporting the generation/creation of related content
- favouring the instant nature of suboptimal (worse than the expected best) results
- supplementing cognitive ability (knowledge based on cognition and thinking).
- addition of automatic skills (a high level of knowledge that can also be observed in action).
- completion of proficiency (practical application without hesitation and error).
- promoting the emergence of virtual responsibility
- re-evaluation of the role of individual responsibility
- promoting risk and information sharing
- exploiting opportunities in uncertainty
- the symbiosis of different interpretations of the past and the future

Finally, here are some basic rules that will allow you to transfer the values of the past:

- sophisticated operation of the orientation reflex (necessary description of the subject of the question)
- correcting the question if necessary
- individual decision of the proportions of skepticism vs. trust
- identification of the nature of the data vs. information



- to live/exist with it on a daily basis (avoiding addiction)
- operational support for control and regulation with stabilization, troubleshooting and monitoring of dynamic behaviour
- it is necessary that several generations use it together, each generation preferring its own strengths
- compelling circumstances must be taken into account

Overall, it can be said that ChatGPT (Generative Pre-trained Transformer) is a complex, fine-tuning technology that creates an instant world where the power of the crowd is based on the power of individuals. So instead of waiting, we can expect immediate results, so we also have to help its development. A question with sufficient thoroughness and iteration is required for a concrete and thorough answer. It should be noted here that with previously known answers, you can practice how changing the questions changes the answers. Answers that are not sufficiently thorough indicate that the given question is not sufficiently thorough.

Artificial intelligence (AI), especially ChatGPT (Generative Pre-trained Transformer), is also expected to transform higher education. The aspects of development are determined by the motivations of the participants in higher education. It can bring about an extreme change in the learning environment, which means that education embedded in technology frames the disciplines. Currently, however, it prefers to use adjectives with variable content of meaning during text generation, such as significant, huge, numerous, fast, etc.

## 5. SUMMARY

Artificial intelligence (AI) solutions, including ChatGPT (Generative Pre-trained Transformer), are exciting a lot of people, and its social utility is undeniable. It creates a world in which everything is connected to everything else, and if it isn't already, it can be connected. We are already standing in its front room and it mostly depends on us how it turns out. In the American–Australian film *The Matrix* (directed by Lana and Lilly Wachowski, 1999), Morpheus is played by Laurence Fishburne, who exhorts Keanu Reeves, who played Neo: *"I told you. I'm just showing you the door. You have to enter it!"* The message is to be an active part of the change, to harness the momentum of novelty.

We are witnessing that it is developing day by day, thus the continuous change can be considered permanent. It will be a real supporter, here is the opportunity for community orientation and self-centeredness to be present at the same time as a generational ensemble. Based on the "machine" answers to the "human" questions, it can be stated that the results always affect our thinking and the thinking of the participants in the process, which also enables possible correction. However, in a dynamically changing technical and technological environment, experimenting with our thoughts is at least as important as dialogue. It is therefore important that performing our tasks, solving and/or avoiding our problems, and resolving conflicts should be an opportunity to overcome challenges. ChatGPT (Generative Pre-trained Transformer) creates an instant environment for experimenting with our thoughts, but only within a framework that has an enhanced function of our orientation reflex. Anyone can use it, but it should always be used responsibly. Innovation can be promoted through responsible use, potential negative effects can be minimized, ethical application can be ensured, and the spread/distribution of incorrect or misleading information can be avoided.

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