

# The use of ChatGPT on learning modes: A case study of postgraduate students in Grenoble, France

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Research Dissertation

## The use of ChatGPT on Learning Modes.

A case study of Postgraduate Students in Grenoble, France.

Presented by: OLALEYE Mayowa

Host organization : IAE, Université Grenoble Alpes, Saint Martin D'heres

Date: 07/02/2023 - 11/06/2023

Internship supervisor : Prof Carine
Dominguez-Pery, Prof Rana Tassabehji

M2 MSI – ADVANCED RESEARCH IN MANAGEMET OF INFO.

2022 - 2023

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**ABSTRACT** 

Artificial Intelligence (AI) technologies are increasingly being integrated into educational settings,

transforming the learning landscape and offering new opportunities for postgraduate students in

higher education. This study presents a comprehensive investigation into the influence of Artificial

Intelligence (AI) technologies, specifically ChatGPT, on the learning experiences of postgraduate

students in higher education. By extending the Technology Acceptance Model 2 (TAM2) and the

Unified Theory of Acceptance and Use of Technology (UTAUT), the study explores students'

perceptions of ChatGPT as a learning tool and evaluates the impact of its adoption on their learning

experiences.

Qualitative research was undertaken via semi-structured interviews with postgraduate students to

gain in-depth insights into their perceptions and experiences with ChatGPT. According to the study's

findings, it confirms the applicability of the TAM2 and UTAUT models in explaining the acceptance of

ChatGPT among postgraduate students. Factors such as perceived usefulness, perceived ease of use,

and attitude toward ChatGPT directly influenced the actual usage of the tool. Additionally, behavioral

intention and the enabling environment had a direct impact on the students' intention to use

ChatGPT, aligning with previous studies.

The findings also revealed that while students acknowledged the benefits of AI technologies like

ChatGPT, they still exhibited a preference for traditional modes of learning. They considered AI as a

supportive tool rather than a replacement for teachers, emphasizing the importance of the human

element in education.

This study contributes to the ongoing discussion about AI in education by providing a comprehensive

understanding of how ChatGPT influences the learning experiences of postgraduate students,

highlighting the importance of integrating AI technologies with traditional educational approaches. It

serves as a foundation for future research by identifying factors that influence AI acceptance among

students and suggesting directions for investigating the long-term effects of AI on learning

experiences and the evolving role of educators in the digital era.

KEYWORDS: Artificial Intelligence, ChatGPT, Postgraduate Students, Education

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## Foreword



#### Introduction

In the last few years, science and technological advancements have had a significant impact on society. Artificial intelligence is one of these advancements and is currently applied with success in a wide range of sectors (Russel, 2016). Artificial Intelligence is one of the most revolutionary technologies of the 21st century having a significant impact on diverse sectors of the economy, including education. In the last 50 years, research in the subject of artificial intelligence has advanced significantly. This field of study first evolved based on concepts like the notion that computers or robots can think and feel. In today's world, countries now place a high priority on investing in artificial intelligence research. Because of the contribution of recent, profitable ventures, it draws more and more attention every day (Talan, 2021). The origins of AI can be traced back to the 1950s, when researchers began to explore the idea of creating machines that could perform tasks that normally required human intelligence (Haenlein et Kaplan, 2016, Rajaman, 2016). The first AI program was created by John McCarthy, Marvin Minsky, Nathaniel Rochester, and Claude Shannon in 1956. The program was able to play a game of chess, marking the beginning of the AI revolution and brought together researchers from various fields to create a new research area aimed at building machines that could simulate human intelligence. Participants included Nathaniel Rochester, who later designed the IBM 701, the first commercial scientific computer, and Claude Shannon, who founded information theory - a mathematical framework for studying the quantification, storage, and communication of information. It is based on probability and statistics, and "information" here means not so much "what" you send but what you "can" send. Shannon's key contributions to research include: Shannon Entropy, Source code, channel capacity etc. (Haenlein et Kaplan 2019, Strawn, 2014)

Al can be defined as computer systems that have been designed to interact with the world through capabilities (for example, visual perception and speech recognition) and intelligent behaviours (Luckin et al., 2016). Baker and Smith (2019) provide a broad definition of Al, describing it as computers that perform cognitive tasks, usually associated with human minds, particularly learning and problem-solving.

#### Overview of Al

Artificial Intelligence refers to a system's capacity to recognize, understand, make inferences and learn from data in order to accomplish set organizational and social objectives. (Mikalef et Gupta, 2021). For the purposes of this study, we employ Popenici et Kerr's (2017) definition of artificial



intelligence in relation to education, which is defined as information processing systems that can participate in human-performed processes like learning, adaptation, synthesis, self-correction, and

the use of data for complex processing tasks. Artificial intelligence's goal is to replicate human intelligence in computers, i.e., to endow computers with the capacity for learning (Talan, 2021). The different facets of AI, such as machine learning and deep learning, are interconnected and contribute to the overall goal of replicating human intelligence in computers (Brynjolfsson et Mcafee, 2017). AI, machine learning, and deep learning are interconnected concepts that represent different facets of the broader field of artificial intelligence, Figure 1 below shows the relationship between the three facets of AI. Understanding their relationship is important because they collectively contribute to the development of intelligent systems and have significant implications for various industries (Brynjolfsson et Mcafee, 2017, Gori et al, 2023).

Machine learning is a branch of artificial intelligence that entails the creation of algorithms and statistical models that allow computers to learn from data and make predictions or decisions without being expressly programmed. Machine learning can be used to recognize things like faces, language, stock values, and objects. In other words, machine learning can forecast the future using current data. The algorithms used in machine learning can automatically improve their performance with experience, without being explicitly programmed (Gori et al, 2023). Application areas where machine learning is used include computer vision, speech recognition, natural language processing, and robot control (Jordan et Mitchel, 2015). Deep learning is a branch of machine learning, first posited by Alan Turing in 1950 (Copeland in Shukla et al, 2022). Deep learning is described as a particular type of machine learning that depicts the world in an overlaid layer structure, each layer being defined as a simple concept, and each concept that is not abstract being calculated as a whole and learned in abstract expression, achieving great power and flexibility (Shukla et al, 2022). Natural language processing (NLP) is another subfield of AI that concentrates on how computers interact with human language. It analyzes, comprehends, and generates natural language writing and speech. One fundamental principle of deep learning in relation to NLP is that if a model can be trained at several expression levels to optimize the end result, the model itself can learn an intermediate level of expression necessary for the task being done at the moment (Hirschberg & Manning 2015). Because of its self-learning capabilities, AI is having a significant impact.



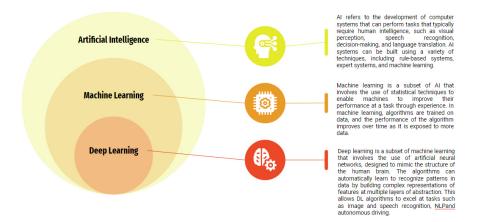


Figure 1.0: Relationship between AI, machine learning and deep learning

As a result of the investments and technological advancements achieved over the years, artificial intelligence applications have begun to be deployed in many fields and have been a huge convenience in those fields, one of such fields is education, where AI technologies have been employed to enhance learning experiences and improve educational outcomes (Becker et al., 2018).

#### AI in Education

Artificial Intelligence has begun to manifest itself in the field of education and could lead to significant advancements and fundamental changes to the education sector with far reaching implications. In modern education, students and teachers are utilizing an array of technologies and applications that harness the power of artificial intelligence (AI). These tools include smart lesson systems, teaching robots, and adaptive learning systems, among others (Chen et al., 2020). These technologies are transforming the educational landscape and revolutionizing how knowledge is imparted and acquired. One of the significant advancements in educational technologies, according to the 2018 Horizon study is artificial intelligence (Becker et al., 2018). Big data and machine learning have become increasingly popular over the past two decades, and this has greatly aided the advancement of artificial intelligence in education (Song & Wang, 2020). The use of artificial intelligence technology in education has broadened the reach of what was previously a human-centered system (Liu et al, 2018). In recent years, numerous countries like the United States of America (USA) and People republic of China (PRC) have made significant investments to advance artificial intelligence (AI) and its potential in the field of education (Talan, 2021, Wang et al., 2021). However, there is a discrepancy between the leaders and laggards in AI investments in education. The United States has emerged as a leader in AI investments, benefiting from a strong research ecosystem and industry-academia collaborations (Wang et al., 2021). China, too, has made substantial investments in Al for education, driven by government initiatives and collaborations with tech companies (Chen et al., 2020). On the other hand, developing countries face challenges in allocating sufficient funds and overcoming



infrastructure constraints, which contribute to their lag in AI investments (Huang et al., 2020). Additionally, policy and regulatory barriers hinder AI investments in education in some countries, as complex frameworks and concerns over data privacy and security slow down progress (Schaaff et al., 2021). To ensure successful utilization of AI applications in education, further study is required to address these disparities and facilitate widespread adoption.

The development of novel technologies and the powerful processing power of intelligent machines are two key factors that are profoundly linked to higher education (Popenici and Kerr 2017). With the growing recognition of the potential of AI to transform teaching and learning processes, making education more personalized, efficient, and effective. The development of novel technologies, including AI-powered systems and intelligent machines, has opened up new possibilities for enhancing educational practices (Luckin et al., 2016, Popenici et Kerr 2017).

So, as artificial intelligence advances, teaching and learning in the context of higher education present new opportunities as well as obstacles. Higher education institutions play a crucial role in harnessing these technological advancements to prepare students for the evolving demands of the digital age. Additionally, it has been demonstrated that artificial intelligence has the potential to completely revolutionize the way we engage with educational systems and how we learn and teach. It brings potential possibilities for personalization, automation, and the development of more engaging and intriguing educational experiences (Luckin et al. 2016). As technology and learning methodologies continue to evolve, we are now experiencing what is being referred to as the educational revolution, which has given birth to various learning models. The technological advancement we have witnessed over the past fifty years has been a fluid process of adjustments brought on by human's social and economic needs. We are seeing the extent to which technology related to the growth of the Internet is changing the globe and education is a part of the process of these changes (Huk, 2021). Education has evolved from the traditional classroom model to the current emergence of online and blended learning and continues to respond to changes in society, technology, and the needs of students. The concept of the educational revolution is a continuous evolution of education, from Education 1.0 to Education 4.0, depicted in Figure 1.1, where each phase represents a different level of technology integration and educational paradigm shift aligned with the development of Web 1.0, 2.0, and 3.0 (Gerstein, 2014).



#### **EDUCATION REVOLUTION** Innovation based Knowledge education based Internet education enabled Lectures, learning learning & memorization Education 4.0 **Education 3.0** Education 1.0

Figure 2: Education Revolution (Adapted from Gerstein, 2014, Chen et al, 2020)

The first era, Education 1.0, was characterized by a one-to-many approach to teaching, where teachers served as the main knowledge source, and students were passive recipients. Industrialization, which predominated in the 19th and early 20th centuries, had an impact on this paradigm. Students were unable to comment, share or interact with the content. Thus, the use of this technology was based only on passive acquisition of knowledge (Gerstein 2014). Education 2.0 marked an important turning point in the development of the educational system and the advent on the internet. Educational interactions occur between a student and a teacher, a student and another student, a student and content, a student and an expert, as well as a student and a student. Students might carry out instructional initiatives both locally and internationally using synchronous and asynchronous communication. The work on a project was carried out in a specific online community, whose participants could be located on two separate continents. The "online world" of education provided an opportunity to comment on and engage with content directly by editing and sharing it on social networks (Gerstein 2014).

Further technology breakthroughs including the web, smart devices, and social media were the driving forces behind Education 3.0. This paradigm placed a focus on individualized instruction based on the interests, creativity, and innovation of the student. Students themselves thus play a crucial part in "Education 3.0" as creators of "knowledge artifacts" that are shared in online communities (Gerstein, 2014). According to Derek Keats and J. Philip Schmidt (2007), this paradigm altered the role of teachers by requiring them to organize an environment in which students can collaborate to acquire their knowledge. Another feature of "Education 3.0" is the change in sharing of content that should be free and open to students as well as available for modification by them. Also, new technologies are used in the training process to enable students to develop global competencies such as intercultural communication, collaboration and creative networking.



The latest evolution is Education 4.0, which is driven by advanced data-driven technologies like Artificial Intelligence, IoT, big data analytics. Artificial Intelligence (AI) offers new opportunities resulting from deeper symbiotic and emotional interaction between a human being and a machine (Demartini & Benussi, 2017). Education has undergone a significant shift from traditional classroom settings to online learning platforms, as artificial intelligence makes its way into education and brings about a new wave of learning and assessment (Chen et al, 2020).

The rapid advancement of artificial intelligence has already had a profound impact on the nature of services provided by higher education (Fahimirad, 2018). Al-powered tools can provide;

- Personalized learning: Personalized learning opportunities are one of artificial intelligence's most crucial functions in education (Karsenti, 2019). Hopcan et al., (2022) defined personalized learning as adapting educational materials to meet students' needs, delivering customized learning and learning materials according to the needs and abilities of the individual (Brown et al., 2020; Chassignol et al., 2018; Vincent-Lancrin & Van der Vlies, 2020). Each person is assessed according to their knowledge level and interest using tailored education methods assisted by artificial intelligence. They gain greater in-depth knowledge of the material as a result.
- Support for students with physical limitations: Over 15% of the world's population, or more than seven billion people, are physically handicapped in some way. Few of them have access to schooling and supportive technologies (Alam et al., 2022). All applications provide solutions for a variety of limitations. Customized systems can fit students' specific needs and unique characteristics (Brown et al., 2020; Fahimirad & Kotamjani, 2018). All benefits students with specific needs (Karsenti, 2019). A variety of Al-powered solutions that cater to students with special needs, promoting both engagement and learning are:
- Virtual Reality (VR): VR technology provides immersive and interactive experiences that can
  be especially beneficial for students with special needs. For instance, students with mobility
  impairments can explore virtual environments, such as historical sites or scientific
  simulations, without physical constraints. VR allows them to experience and learn about
  different concepts in a more inclusive and engaging manner (Vincent-Lancrin & Van der Vlies,
  2020).
- Augmented Reality (AR): AR integrates virtual elements into the real-world environment, enhancing students' understanding and engagement. AR applications can overlay visual cues or sign language interpretations on printed texts, aiding students with hearing impairments.
   It can also offer real-time feedback or prompts to support students with cognitive challenges (Vincent-Lancrin & Van der Vlies, 2020).



 Robotics: Al-powered robots can serve as educational companions and facilitators for students with special needs. These robots are designed to adapt to individual students' requirements, providing personalized assistance and support. They can help students practice social skills, reinforce learning concepts, and provide emotional support, contributing to an inclusive and supportive learning environment (Vincent-Lancrin & Van der Vlies, 2020).

However, there are also concerns regarding the impact of AI on the student's educational experience. For example, some studies have highlighted the risk of over-reliance on AI tools, which may undermine critical thinking, creativity, and independent learning (Zawacki-Richter et al 2019). Additionally, there are concerns about the ethical implications of AI in education, including privacy, bias, and discrimination (Popenici and Kerr 2017).

#### ChatGPT: An Introduction

One such AI tool which is a focus of this research is ChatGPT - A sophisticated natural language processing model from OpenAI. OpenAI is a research institute self-proclaimed dedicated to the development of artificial intelligence (OpenAI web). ChatGPT is based on a transformer-based system that merges the benefits of generative models with huge scalability. Its modular architecture enables it to carry out a wide variety of tasks, including language modelling, machine translation, and question-answering (Aydin et al; 2023). The model was pre-trained on a large dataset, allowing it to create a language that is coherent, contextually appropriate, and often indistinguishable from that written by humans (Aydin et al., 2023).

A week after ChatGPT's initial release into the public domain on November 30, 2022, it had more than a million subscribers (Mollman, 2022). The introduction of this AI tool has sparked both excitement and apprehension among professionals in the field of education, leading to a contentious debate. While some educators view ChatGPT and similar generative AI as a revolutionary force that will shape the future of teaching, learning, and educational research, others express uncertainty and perceive it as a potential threat that could undermine educational activities and hinder students' analytical abilities (David et al., 2023). Researchers and experts have identified several ways in which students can benefit from utilizing ChatGPT and other chatbots to enhance their learning experience. For instance, these sophisticated AI systems possess the capability to provide well-organized explanations for complex ideas, making them valuable as virtual tutors. Students can seek clarifications and receive responses to their inquiries on various topics, particularly when they encounter difficulties comprehending specific subjects or require additional support outside the classroom (Herft in David et al., 2023).



Despite the potential educational advantages that ChatGPT offers, it is important to acknowledge the existence of significant inherent flaws. Investigations have revealed instances where ChatGPT fabricates articles that do not exist and even generates non-functional URLs for non-existent sources, providing false bibliographic information (Qadir, 2022; David et al., 2023). These issues raise concerns about the reliability and accuracy of the information provided by the tool.

Nevertheless, considering the increasing prevalence of AI in various domains, including education, it is difficult to deny that ChatGPT and other generative AI systems are here to stay. Their presence will likely continue to impact and reshape the current educational system, prompting educators to navigate the challenges and opportunities they bring (David et al., 2023).

#### **Research Aims, Objectives and Questions**

This thesis aims to contribute to the conceptual review of integrating AI into education by exploring the impact of AI, specifically Chatgpt, on postgraduate education from a student's perspective. The objectives are to enhance the current understanding of the application of AI in conventional learning methods, investigate the impact of AI on postgraduate students' learning practices, and analyze their perceptions of AI as a learning tool. By discussing the advantages and challenges of integrating AI into education, this research provides insights into the future role of AI in the educational system. The research question directing this work is: "How are Artificial Intelligence technologies affecting the learning experiences of postgraduate students in higher education?"

To better address this question, three sub-research questions were formulated.

"Research question 1: How are postgraduate students using ChatGPT and how do postgraduate students perceive ChatGPT as a tool for learning"

This sub-research question will contribute to literature by providing a detailed and up-to-date analysis of the specific AI tool (ChatGPT) and its applications, as well as the perspectives of postgraduate students on the potential benefits and limitations of this tool. Furthermore, it also seeks to explore postgraduate students' perceptions of AI as a tool for learning, by providing valuable insights into the practical application of AI in postgraduate education and how it impacts student learning experiences from their perspective.

"Research question 2: What is the impact of AI on student engagement and participation compared to traditional learning methods?

What is the impact of AI on the quality and effectiveness of student assessments compared to traditional methods?



How can AI be leveraged to enhance the university learning experience?"

This sub-research question will explore how AI impacts student engagement and participation compared to traditional learning methods. This will provide insights into the effectiveness of AI in enhancing student engagement and participation, which are essential aspects of a student's learning experiences .

"Research question 3: What are the future directions and opportunities and ethical implications for the use of AI in postgraduate education"

This sub-research question will examine the potential future directions and opportunities for the use of AI in postgraduate education, as well as the ethical implications that may arise. By investigating these aspects, the research will contribute to the existing literature on the impact of AI in postgraduate education by providing insights into the potential long-term implications and opportunities for the integration of AI tools, specifically ChatGPT, in the learning environment. The research will also highlight the ethical considerations that must be addressed when using AI tools in postgraduate education. The findings of the research will provide useful information for educators, policymakers, and other stakeholders in the field of education to make informed decisions regarding the implementation of AI tools in postgraduate education.

This paper is structured with a literature section which employs a bibliometric analysis approach, providing a comprehensive overview of existing research on the topic. This analysis helps identify gaps and establish the foundation for further exploration. Furthermore, a theoretical research model was designed based on the Technology Acceptance Model (TAM) proposed by Davis (1989). This model served as an exploratory design to investigate the perception of ChatGPT among students in higher education. It provides a theoretical framework for understanding the factors influencing students' acceptance and usage of ChatGPT. Following the design of the research model, a qualitative data analysis was conducted to gather insights and perspectives from the participants. The outcomes of this research are presented in the next section, providing a detailed analysis and interpretation of the qualitative data.

The subsequent sections of the paper include a discussion section, where the findings are examined and interpreted in the context of the research objectives and relevant literature. This section allows for a deeper understanding of the implications and significance of the research findings. Additionally, a theoretical and managerial implications section is included, which explores the practical applications of the research findings and their potential impact in educational settings.



#### **CHAPTER 1: LITERATURE REVIEW**

#### I. ARTIFICIAL INTELLIGENCE

Defining the boundaries of artificial intelligence (AI), a discipline that emerged in the 1950s, poses a significant challenge, even for experts in the field. The dynamic nature of AI contributes to this difficulty, as advancements in the field often permeate everyday applications without explicitly being labelled as AI. Nick Bostrom, a renowned AI expert from Oxford University, highlights this phenomenon by stating that once a technology becomes commonplace and sufficiently useful, it is no longer recognized as AI but rather categorized as a computer program, algorithm, or app (Luckin et al., 2016). Furthermore, the interdisciplinary nature of AI adds another layer of complexity to its definition. Anthropologists, biologists, computer scientists, linguists, philosophers, psychologists, and neuroscientists all contribute to the field, each bringing their own perspectives and terminologies (Luckin et al., 2016)]. To establish a framework for this literature review, we adopt Popenici et Kerr's (2017) definition of AI in the context of education. According to their definition, AI refers to information processing systems that actively engage in human-performed processes such as learning, adaptation, synthesis, self-correction, and complex data processing tasks. It falls within the domain of computer science, exploring how computers can learn, think, and reason.

Based on these principles, Housman proposed two key abilities of AI. Firstly, AI can generate repetitive assignments by predicting outcomes based on categorical data. Secondly, AI can make decisions resembling those of humans by employing algorithms to address complex issues (Housman, 2018). By considering these dimensions, we can delve into the various aspects of AI and its applications in different fields, including the emerging field of generative artificial intelligence.

#### II. THE EVOLUTION OF ARTIFICIAL INTELLIGENCE

The evolution of artificial intelligence (AI) can be categorized into different generations, each representing a distinct phase of advancements and capabilities.

The first generation of AI, often referred to as "Symbolic AI," focused on rule-based systems and logical reasoning. This approach aimed to replicate human intelligence by encoding explicit rules and knowledge into computer systems (Nilsson., 2014). However, this approach had limitations in handling uncertainty and lacked the ability to learn from data. The second generation of AI, known as "Statistical AI" or "Machine learning," emerged as a response to the limitations of symbolic AI. This



generation leveraged statistical methods and algorithms to enable machines to learn from data and make predictions or decisions without explicit programming (Russell & Norvig., 2016).

Machine learning algorithms, such as neural networks and decision trees, became prominent in this era, allowing AI systems to handle more complex tasks. The third generation of AI, often referred to as "Deep learning," marked a significant breakthrough in AI capabilities. Deep learning is a subset of machine learning that utilizes artificial neural networks with multiple layers to process and learn from vast amounts of data (Goodfellow et al., 2016). This approach enabled AI systems to extract complex patterns and representations, leading to advancements in computer vision, natural language processing, and speech recognition.

Generative AI is a recent development in the field of AI. It falls under the third generation. It leverages statistics, probabilities, and deep learning techniques to generate artificial artifacts without direct supervision (Baidoo-Anu et Owusu Ansah., 2023). By analyzing patterns and distributions in existing digital content, such as videos, images/graphics, text, and audio, GAI models create new artifacts (Abukmeil et al., 2021 in Baidoo-Anu et Owusu Ansah., 2023). In generative Al, two major approaches have been identified: Generative Adversarial Network (GAN) and Generative Pre-trained Transformer (GPT) (Baidoo-Anu et Owusu Ansah., 2023). Currently, GAN is a widely used technique in GAI. It employs two neural networks, namely the generator and discriminator networks. The generator network generates synthetic data, such as facial images, while the discriminator network evaluates the authenticity of the content by distinguishing between real and fake data. This iterative process continues until the discriminator network can no longer differentiate between synthetic and real content, resulting in the synthetic data being recognized as authentic (Hu, 2022; Jovanovic et Campbell, 2022). GAN is predominantly used for tasks involving voice generation, graphics, and video (Hu, 2022). On the other hand, Generative Pre-trained Transformer (GPT) models utilize large amounts of publicly available digital content data, particularly in the domain of natural language processing (NLP). These models read and process vast quantities of text to generate human-like textual outputs in multiple languages (Hu, 2022; Jovanovic et Campbell, 2022).

ChatGPT, developed by OpenAI, is an example of generative AI. OpenAI employs machine learning algorithms to train its text-generating models, utilizing vast quantities of text from various sources such as books, news articles, websites, and Wikipedia (Scharth, 2022). Through the processing of terabytes of data, these models gain an understanding of language patterns and structures, empowering them to deliver users with pertinent and meaningful content in response to their inquiries. As a language model, ChatGPT utilizes deep learning to generate responses akin to those a human might provide in response to natural language queries. ChatGPT is specifically developed for



conversational environments, enabling users to engage with the model effortlessly and intuitively (Su et Yang., 2023). This technology has garnered significant attention due to its ability to generate coherent and contextually relevant responses across a wide range of topics. According to Scharth.,

2022, ChatGPT has the ability to perform various tasks such as writing stories, providing life advice, composing poems, and coding computer programs. However, there have been reports, as mentioned by Gleason.,2022, that ChatGPT may generate fake citations and replicate biases present in the literature. These biases, as highlighted by Zhai., 2022, can result in unequal and unfair outcomes for students. OpenAl acknowledges in their guidance to educators that ChatGPT has the potential to produce content that perpetuates harmful biases and stereotypes, sometimes in subtle ways. Notably, ChatGPT has gained popularity on social media, and there is anecdotal evidence suggesting that students are already familiar with it. It is reasonable to assume that postgraduate students are utilizing ChatGPT or similar software. Given the widespread usage of ChatGPT and the concerns raised by stakeholders, it becomes imperative to understand postgraduate students' perceptions and experiences with ChatGPT in order to develop effective guidelines and strategies to leverage Al technology in education responsibly.

#### III. Artificial Intelligence in Education and Its Development

With the rapid breakthroughs in AI, applications of AI in education have gained even more attention from researchers in the domains of computer science and education in recent years. For almost 30 years, researchers have been interested in the interdisciplinary topic of AIEd. An interdisciplinary approach has been made possible by the development of adaptive systems and flexible, personalized, participatory AI technologies, bringing together various fields and transforming the learning landscape(Luckin et al., 2016). Researchers anticipate further exploration of strategies to promote AI expertise at all educational levels and effectively implement AI in educational settings. AI in education has the potential to customize learning, improve learning effectiveness, guide teaching and learning activities, and enhance interactive experiences(Drigas & Ioannidou, 2012). Additionally, Luckin et al. (2016) emphasize that AIEd equips students with 21st century capabilities including creativity and critical thinking, allowing for the monitoring and evaluation of complex skills and it aids in comprehension of the instructional strategies and learning environments required to impart these skills. While AI has been shown for its potential to enhance learning experiences, it is essential to consider traditional learning methods in any discussion of AI in education. Traditional learning methods have been used for centuries and are based on face-to-face interaction between students



and teachers. These methods have proven to be effective and have led to the development of modern education systems (De Freitas et al., 2010, Shute et Kim, 2014).

- Traditional Learning Methods: Traditional learning also known as conventional learning refers to the knowledge transfer practices that have been centred on dialogic methods of interaction with instructors and text-based exchanges with learners (De Freitas et al., 2010). These methods have demonstrated effectiveness and have contributed to the development of modern education systems (De Freitas et al., 2010, Shute et Kim, 2014). Traditional learning involves dialogic interactions between instructors and learners, often relying on text-based exchanges. Assessment in traditional learning typically utilizes standardized methods, such as multiple-choice questions, essays, and oral exams. However, traditional approaches lack personalized learning experiences and individualized intelligence (Vallée et al., 2020).
- AI-Based Learning Methods: Al-based learning methods leverage advanced technologies such as machine learning, natural language processing (NLP), and data analytics to provide personalized learning experiences. NLP enables AI systems to comprehend and generate human-like language, facilitating communication between students and AI tutors. By analyzing sentiments and understanding text, AI-based systems can address students' emotions, learning challenges, and knowledge gaps, offering personalized interventions and feedback (Litman, 2023). NLP-driven applications, such as IBM Watson Assistant and language models like ChatGPT, exemplify the potential of NLP in AI-based learning. Furthermore, AI-based assessment methods enable real-time feedback and gamified learning experiences, increasing student engagement (Cope et al., 2021)

In the table below, we look at the differences between Traditional and AI based learning and assessment methods

Characteristics	Traditional Learning Methods	AI-Based Learning Methods
Teaching Approach	Teacher-centered instruction	Personalized and adaptive learning experiences
Learning Environment	Physical classrooms with face-to-face interaction	Online platforms, virtual classrooms, and blended learning
Content Delivery	Lecture-based and textbook-focused	Interactive multimedia, simulations, and gamified



		content
Data Utilization	Limited data analysis and individual progress tracking	Advanced data analytics for insights and interventions
Personalization of Learning	Limited customization based on student abilities	Tailored learning pathways, adaptive feedback, and support
Individualized Intelligence	Individualized intelligence, with traditional tests that reinforce individual knowledge.	Collaborative intelligence, emphasizing learning through collaboration, social interaction, and sharing.
Pedagogy	Didactic pedagogy that focuses on the transmission of empirical knowledge.	Active pedagogy that emphasizes the construction of knowledge through real-world experiences and problem-solving.

Table 1: Differences between Traditional learning and assessment and AI based learning and assessment (Adapted from Cope et al, 2021, Morel et Spector, 2022, Shute et Kim, 2014).

#### IV. Types of Artificial Intelligence in Education

Artificial Intelligence (AI) technologies are increasingly being integrated into educational settings, transforming the learning landscape and offering new opportunities for postgraduate students in higher education. This section explores the various types of AI in education and their potential implications for postgraduate learning experiences. By understanding the different AI applications, we can better grasp how these technologies are impacting postgraduate students' educational journey.

Intelligent Tutoring System (ITS): ITS is a human facilitator and guide that can be used in a range of educational contexts, according to Faggella (2019). These systems adapt the educational experience to meet the needs of each individual student by utilizing AI techniques like machine learning and natural language processing. Research on ITS has advanced significantly, and one example is Carniege Learning's "Mike" Software, which uses cognitive science and artificial intelligence to develop a customized tutoring system for students (Faggella, 2019; Singh et al., 2018). According to a meta-analysis by VanLehn et al. (2005), ITSs were successful in enhancing student learning experiences and promoting self-paced learning. by offering personalized instruction, feedback, and guidance to students based on their individual needs and progress.



- Adaptive learning systems (ALSs): ALSs are similar to ITSs, but instead of catering to the
  needs of a single student, ALSs are designed to meet the needs of the entire class. These
  systems analyze student performance data using AI approaches like predictive analytics and
  data mining to identify patterns and modify the curriculum accordingly. According to a
  research by Cheng et al. (2016), an ALS enhanced student learning results in a computer
  science course.
- Smart/Intelligent Content: Smart/Intelligent Content is another application of AI in education. Smart content, an AI innovation, "attempts to condense textbooks into a useful tool for exam preparation, such as true or false," according to Faggella (2019). Cram101 and JustTheFacts101 are two examples of popular smart content apps (Faggella, 2019). Johnson (2019) claims that virtual content like video conferences and video lectures can also be considered smart content. With the addition of chapter summaries, flashcards, and real-world exams, Cram101 makes textbook content more comprehensible via AI (Faggella, 2019; Johnson, 2019). A Netex learning AI system is also available that enables the development of electronic curricula and educational content (Johnson, 2019). Johnson (2019) claims that Netex "offers online support programs, audios, and illustrative materials."
- e Chatbots: Chatbots are conversational agents powered by AI that can understand user input and respond to it in a manner that is natural and human-like (O'Connor, S. 2022). These systems are made to converse with users, understanding their words and intents through the use of natural language processing. It is employed in education to give students individualized learning opportunities. An AI chatbot might be used, for instance, to engage pupils in conversation while giving comments and corrections as they learn a new language. AI chatbots could potentially be utilized to assist students with their schoolwork and tutoring by responding to their inquiries and explaining complex ideas (O'Connor, S.2022).

As the field of education continues to embrace the potential of technology, the integration of artificial intelligence (AI) has become a prominent area of research. This literature review has provided a comprehensive overview of AI, its evolution, and its application in education. By exploring the different types of AI in education and their implications for learning experiences, we have gained valuable insights into the impact of AI on the educational landscape. In order to further investigate the use of AI in education, this thesis employs a bibliometric analysis as its research methodology. By utilizing keywords such as "Education and Information Technology," "Education and Information Systems," "Education and Digitalization," and "Education and Artificial Intelligence," this analysis aims



to examine the existing body of literature and identify key trends, research gaps, and emerging themes in the field.

The bibliometric analysis will provide a quantitative assessment of the scholarly output and impact of research related to the intersection of education and Al. By analyzing publication patterns, citation networks, this research methodology will contribute to a deeper understanding of the current state of research and identify key areas for further investigation. Through this interdisciplinary approach, the thesis aims to shed light on the ways in which Al is shaping the field of education and explore the potential of Al technologies to enhance learning experiences, improve educational outcomes, and inform pedagogical practices. By connecting the findings of the bibliometric analysis with the broader discussions presented in the literature review, this research endeavor seeks to contribute to the existing knowledge base and inform future directions in the field of Al in education. We also seek to bridge the gap between theory and practice, providing valuable insights for educators, policymakers, and researchers interested in harnessing the potential of Al technologies to transform the learning landscape and improve educational practices.

#### V. Research Methodology:

This section presents the method used in obtaining the literature for the study. Following the purpose of this study, I employ bibliometric analysis, in order to expand the lines of research knowledge, which is all about summarizing previous research, in this study. Bibliometric analysis is a quantitative study of written publications that examines the development of scientific works in order to assess their impact (Broadus, 1987; Pritchard, 1969). A bibliometric study uses a quantitative method to map the research topic and analyze the literature while avoiding subjectivity (Zupic & Ater, 2015).It highlights the most well-known works and writers, the development of the prominent search terms, the most related subjects, and the predominate results, among other pieces of evidence. The network analysis visualization technique completes the examination of the research field (Cobo et al., 2011a). The VOS (visualization of similarities) algorithm is used in this study's network analysis, which is done using VOSviewer. The distance between objects (such as citations) is used by the VOS algorithm to show commonalities between them (van Eck & Waltman, 2010). Scientific areas can be visualized using network analysis, where network nodes stand in for units of study (such as documents, authors, journals, or terms), and network ties stand in for similarity relationships, with the strongest ones being pulled closer together (Zupic & Ater, 2015). In accordance with Fahimnia et al. (2015), I use a four-step methodology (choosing the search keywords, data cleaning and



formatting, initial analysis, and data analysis) to find the higher impact studies and authors and to examine the research topics that provide insights into my study.

#### VI. SEARCH STRATEGY

For the bibliometric analysis conducted in this study, the Web of Science database was selected as the primary source of data. Web of Science is widely recognized as a comprehensive and reliable database that encompasses a vast collection of scientific journals and publications. Its extensive coverage and indexing of scholarly articles make it a valuable resource for conducting bibliometric analyses and examining the research landscape. Several studies have acknowledged the significance of Web of Science as a prominent database for bibliometric analyses. For instance, Hirsch (2005) emphasized the importance of Web of Science in assessing the impact and influence of scientific research through citation analysis. Similarly, Kousha and Thelwall (2007) highlighted the extensive coverage and multidisciplinary nature of Web of Science, making it suitable for bibliometric studies in various domains. By utilizing the Web of Science database, this research aims to ensure a comprehensive and reliable analysis of the scholarly output in the field of education and its intersection with information technology, information systems, digitalization, and artificial intelligence. Moreover, the choice of Web of Science aligns with the goal of conducting a rigorous bibliometric analysis, adhering to established research practices and ensuring the credibility and validity of the findings. By focusing on a reputable and widely recognized database like Web of Science, this research contributes to the existing literature on bibliometric analysis and provides a solid foundation for evidence-based conclusions.

#### VII. DETERMINING THE SEARCH KEYWORDS

The selection of search keywords was a crucial step in this research methodology. Four search strings were employed: "Education and Information Technology," "Education and Information Systems," "Education and Digitalization," and "Education and Artificial Intelligence." These search strings were chosen to capture a broad range of literature related to the research question directing this work: How are Artificial Intelligence technologies affecting the learning experiences of postgraduate students in higher education? The choice of these search strings was guided by the aim to cover various aspects of the use of technology in education, encompassing information technology, information systems, digitalization, and specifically focusing on the impact of artificial intelligence. Each search string was run independently to ensure a comprehensive exploration of the relevant literature. To ensure the reliability and validity of the results, the search was narrowed down to



include only peer-reviewed journal articles in the English language. Peer-reviewed articles are considered a trusted source of certified knowledge, and restricting the search to English language articles helps maintain consistency and accessibility of the findings (Bhatt et al., 2020; Haleem et al., 2020). Further refinement was carried out by filtering the search results to include articles from specific Web of Science categories. The selected categories were Educational Research, Computer Science Information Systems, Computer Science Interdisciplinary Applications, Computer Science Artificial Intelligence, and Management and Business. These categories were chosen to capture relevant articles from multidisciplinary perspectives, encompassing both educational research and the technological aspects of AI. The search results from Web of Science were exported into a "tab delimited file" format, which facilitated subsequent analysis using the VOS software. The VOS software is a widely used tool for literature reviews, enabling visualization and analysis of bibliometric data (Ivanov et al., 2021). By utilizing this software, the analysis will uncover patterns, relationships, and trends within the literature, providing valuable insights into the research landscape of AI in education and its impact on postgraduate learning experiences. Overall, the selection of search keywords and the subsequent analysis will contribute to the research question by synthesizing and evaluating the existing body of knowledge on the effects of AI technologies in postgraduate education. The use of specific search strings and rigorous inclusion criteria ensures the inclusion of relevant and reliable sources, enhancing the credibility and validity of the findings. Through this bibliometric analysis, a comprehensive understanding of the current state of research and emerging themes in the field will be achieved, informing future directions and potential contributions to the field of AI in education.

#### VIII. DATA CLEANING AND FORMATTING

To ensure the integrity of the data retrieved from bibliographic databases, a thorough analysis was conducted to identify and correct any errors or inconsistencies (Cobo et al., 2011). This involved reviewing the bibliometric information and addressing issues such as misspelled elements in authors' names. Articles with bibliometric problems were either corrected or excluded from the analysis. To facilitate the analysis and extraction of key information from the remaining articles, an artificial intelligence research assistant called Elicit AI was utilized. Elicit AI is a powerful tool capable of summarizing key takeaways and extracting relevant information from research papers. By leveraging this technology, the abstracts of the remaining documents were carefully examined and understood. In line with the research scope and following the criteria established by Gümüş et al. (2019) and Soriano et al. (2018), certain inclusion and exclusion criteria were applied. Articles that were



unrelated to the focus of the research, such as those not related to Information Systems or Educational Technology, were excluded. This exclusion criterion resulted in the removal of over 3,000 articles from non-organizational domains. Additionally, non-English studies were excluded to maintain consistency and ensure a coherent analysis. This decision was made to focus on articles published in the English language, as it is a widely accepted medium of scholarly communication.

Furthermore, the inclusion and exclusion strategy considered the timeframe of the search. The search was limited to articles published between 2019 and 2023 to ensure the inclusion of recent studies and capture the most up-to-date research findings in the field.

By applying these criteria, a substantial number of articles from non-organizational domains, non-English studies, and articles outside the defined time frame were excluded. This rigorous selection process ensures that the included articles are relevant to the research objectives and conform to the specified criteria. The inclusion and exclusion criteria used in the data cleaning and formatting process are summarized in Table 2 below:

Inclusion Criteria	Exclusion Criteria
Peer-reviewed Publication: 2019 to 2023 Publication in the English Language Journal Articles, Conference Proceedings, Book Chapters Qualitative and quantitative studies	Non-organizational domains Anonymous publications Non-English publications

**Table 2: Inclusion and Exclusion Criteria** 

#### IX. DATA ANALYSIS

Data Analysis is performed using Bibliometric analysis which was carried out with the software - VOSviewer. VOSviewer offers a range of capabilities for effective visualization and analysis and is compatible with various databases, including Web of Science (van Eck & Waltman, 2010). VOSviewer utilizes advanced algorithms, such as the visualization of similarities (VOS) algorithm, to display similarities between objects in bibliographic coupling and co-citation networks. This algorithm provides precise visual information about the distance between any two objects, enabling meaningful visualizations of the research landscape [1]. By leveraging these visualizations, researchers can gain insights into the relationships and clustering of research articles (van Eck & Waltman, 2010). In addition to network analysis, content analysis was performed to complement the publication



co-citation analysis. This approach allows for a comprehensive understanding of the research areas within each cluster.

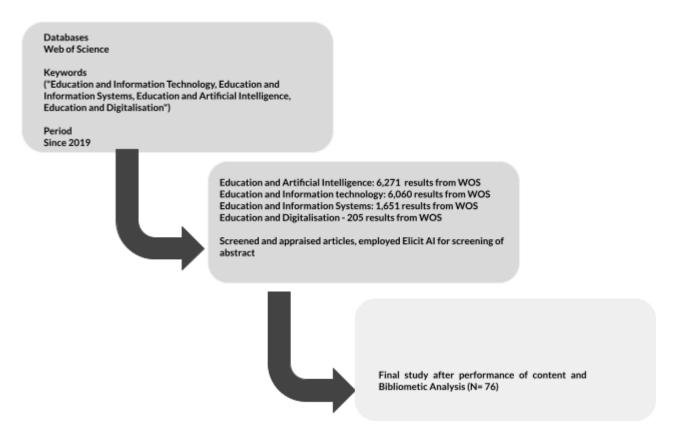


Figure 3: Article selection process for bibliometric mapping analysis and systematic review

#### X. BIBLIOMETRIC ANALYSIS

#### **Leading Publishing Journals**

The main journal repositories that are published in the field of Education, Artificial Intelligence, Information Technology and Information Systems, five main journals respond for 48 studies, corresponding to 63% of all publications under study. These journals are Elsevier, Springer, IEEE, Taylor and Francis and Emerald Group.

#### **Influential Authors and Affiliation Statistics**

In terms of the number of authors' local citations, i.e., the number of citations within the 76 publications inside our dataset, most authors cited work in the People republic of China. Analyses of the author's affiliation show the international dimension of the research field studied (Cobo et al., 2011b). The research of organizations contributing to the education and technology literature was



produced in 18 countries around the world. While most publications are from China, followed closely by the USA.

#### **Network Analysis of Publications**

Network analysis allows for visualizations of the scientific fields in which network nodes represent units of analysis (e.g., documents, authors, journals, words), and network ties represent similarity connections, with the strongest drawn closer together (Zupic & Cater, 2015). Mapping and clustering are complementary to each other. Mapping provides a picture of the structure of a bibliometric network restricted to two dimensions, and clustering does not have dimensional restrictions, but works with binary rather than continuous dimensions (Waltman et al., 2010). VOSviewer constructs maps of authors or publications based on co-citation information and generates maps of keywords based on co-occurrence data (van Eck & Waltman, 2010).

Cluster No	No of Items	Author and Local Citation	Average citation	Proposed Cluster Title
		Education and Artificial Inte	lligence	
Cluster 1	57	Lecun Y (1988) - 105 Zadeh la (1965) - 93 Lecun Y (2015) - 68 Pawlak Z (1982) - 65 Cortes C (1995) - 61 Pedregosa (2011) - 50 Zeiler MD (2014) - 50 Goodfellow I (2016) - 50 Demsar (2006) - 46 Ribeiro (2016) - 44	63.2	
Cluster 2	56	Kingma DP (2014) - 209 Hochreiter (1997) - 130 Vasmania (2017) - 124 Delvin J, (2018) - 116 Vandar Maaten (2008) - 100 Srivastava (2014) - 91 Pemington Jeffrey (2014) - 79 Vasmania (2017) - 73 Dzmitry (2016) - 68 King Db (2015) - 62	105.2	
Cluster 3	49	He Km (2016) - 279 Andrew Zisserman (2015) - 231 Krizhevsky (2012) - 197 Ren Sq (2015) - 149	142.8	



			1	
		Huang CG (2017) - 123 Lin Ty (2014) - 104 Russakovsky (2015) - 95 He K (2016) - 94 Ren Sq (2017) - 78 Long Y (2015) - 78		
Cluster 4	27	Goodfellow (2020) - 155 Deng J (2009) - 129 Ronne Berger (2015) - 79 Zhu Jy, (2017) - 64 Isola P (2017) - 61 Krizhesky (2019) - 57 Kaiming H (2016) - 52 Schroff (2015) - 51 Szegedy (2016) - 44 He Km (2015) - 37	72.9	
Cluster 5	25	Zawacki-ritcher (2019) - 47 Davis fd (1989) - 47 Vanlehn K (2011) - 45 Roll i, (2016) - 41 Popenici (2017) - 40 Fornell C (1981) - 35 Luckin R (2016) - 35 Schmidhuber (2015) - 34 Venkatesh V (2003) - 32 Vygotsky (1978) - 27	38.3	
Cluster 6	15	Tran D (2015) - 44 lowe Dg (2014) - 42 loffe S (2015) - 37 Szegedy, (2017) - 36 Szegedy, (2016) - 34 Carreira (2017) - 34 Wang XI (2018) - 28 Karpathy (2014) - 26 Feichenhoter (2016) - 24 Donahue (2015) - 23	32.8	
Education and Information Technology				
Cluster 1	167	Mishra P (2006) - 173 Hu LT (1999) - 146 Cohen J (1988) - 120 Bruan V (2006) - 108	50	Educational Research and Technology Integration



		Koehler Matthew J (2009) - 88 Ertmer PA (2012) - 73 Shulman L.S (1986) - 72 Ertmer PA (2010) - 67 Hew KF (2007) - 64 Vygotsky L.S (1978) - 63		
Cluster 2	69	Davis FD (1989) - 541 Davis FD (1989) - 277 Venkatesh V (2000) - 257 Ajzen I (1991) - 242 Taylor S (1995) - 236 Venkatesh V (2008) - 133 Nunnally J.C (1994) - 100 Davis FD (1992) - 93 Fishbein M (1975) - 92 Venkatesh V (2000) - 82	46	Information Systems and Technology Acceptance
Cluster 3	65	Delone WH (2003) - 130 Bhattacherjee A (2001) - 88 Delone WH (1992) - 84 Mohammadi H (2015) - 68 Wu B, (2017) - 68 Sun PC (2008) - 67 Goodhue DL (1995) - 54 Dhawan S (2020) - 50 Cidral WA (2018) - 48 Pituch KA (2006) - 45	44	E-Learning and Information Systems Success
Cluster 4	63	Fornell C (1981) - 470 Podsakoff PM (2012) - 169 Henseler J (2015) - 138 Chin WW (1988) - 130 Hair JF (2011) - 106 Hair JF (2010) - 104 Anderson JC (1988) - 101 Bagozzi RP (1988) - 79 Henseler J (2009) - 68 Ketchen DJ (2013) - 67	143.2	Structural Equation Modelling (SEM) Analysis
Cluster 5	47	Venkatesh V (2003) - 561 Venkatesh V (2012) - 239 Hair JF (2010) - 148 Wang YS (2009) - 61 Park SY (2012) - 53 Al-emran M (2018) - 51 Cheon J (2012) - 50 Venkatesh V (2016) - 49 El-masri M (2017) - 45 Gikas J (2013) - 42	129.9	Technology Acceptance Model (TAM) and Mobile Learning



Education and Information Systems				
Cluster 1	32	Delone WF (2003) - 134 Delone WF (1992) - 84, Bhattacherjee A (2001) - 70 Mohammadi H (2015) - 63 Anderson JC (1988) - 50	80.2	IS Success and Continuance
Cluster 2	29	Venkatesh V (2003) - 254 Davis FD (1989) - 235 Fornell C (1981) - 212 Davis FD (1989) - 111 Ajzen I (1991) - 92	180.8	Technology Acceptance and Use Models
Cluster 3	26	Abdullah F (2016) - 44 Park SY (2009) - 42 Cheung R (2013) - 35 Venkatesh V (2000) - 32 Al-emran M (2018) - 31	36.8	Technology Acceptance Model (TAM) Analysis for E-Learning Acceptance
Cluster 4	16	Henseler J (2015) - 89 Chin WW (1998) - 77 Podsakoff PM (2003) - 72 Hair JF (2011) - 49 Hair JF (2019) - 38	65	Structural Equation Modeling with PLS SEM
Cluster 5	6	Venkatesh V (2012) - 117 El-masri M (2017) - 31 Ain N (2016) - 27 Dwivedi YK (2019) - 23 Hair JF (2016) - 22	44	Technology Acceptance and Adoption Models
Education and Digitalisation				
Cluster 1	2	Ferrari A (2014) - 4 Fransson G (2018) - 3		
Cluster 2	1	Williamson B (2019) - 3		

Table 3: The Most Cited Authors Based on CCA

#### XI. Co-CITATION ANALYSIS

Figure 2 shows the networks of co-citation relationships for authors produced by VOSviewer. Co-citation analysis is about the relatedness of items and is determined by the number of times they are cited together. It is a reliable measure of the impact of publications of a field in the scholarly community through the identification of its core works (Batistic et al., 2017). The publications that are



more co-cited are more likely to present similar subject areas having a strong co-citation relationship within each cluster, being the base of the different subfields (Cobo et al., 2011a). Clustering techniques are used to identify groups of related publications, authors, or journals (van Eck & Waltman, 2017). The VOSviewer mapping technique generated five clusters as shown in Figure 2 below, each containing a group of articles with a similar co-citation profile. Therefore, each cluster has a probability of sharing the same theme or knowledge base. The size of the clusters varies according to each category as indicated in Table 4 above. Afterward, I conducted an indepth content analysis to understand the research focus under the following heading, "main concept", "research gap", "research question" "keywords", "methodology", "technology" in each of the three clusters. The articles in each cluster were scrutinized to identify the specific topics related to each cluster. Attentive analysis of the articles of each cluster can delineate the cluster's area of research focus (Fahimnia et al., 2015).

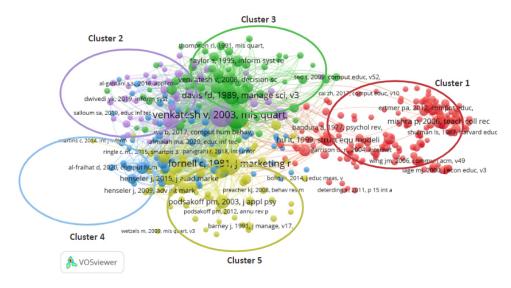


Figure 4: CCA of Education and Information Technology showing the clusters and the category label



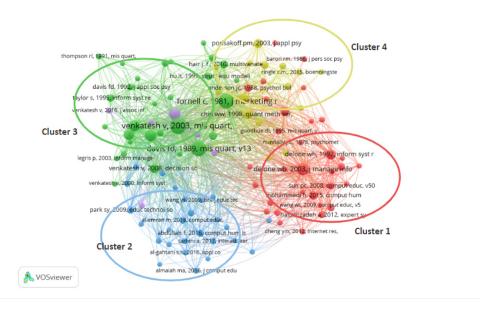


Figure 5: CCA of Education and Information Systems showing the clusters and the category label

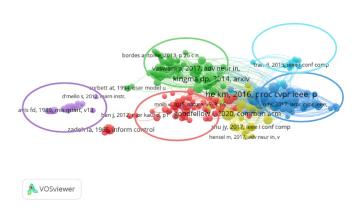


Figure 6: CCA of Education and Artificial Intelligence







Figure 7: CCA CCA of Education and Digitalisation

## XII. RESULTS

## A. CCA - EDUCATION AND INFORMATION TECHNOLOGY

Cluster 1 as indicated in Figure 4 is labeled "Educational Research and Technology Integration" and it focuses on the intersection of educational research, pedagogy, and technology integration. The papers in this cluster highlight the need for a theoretical grounding in the area of educational technology, the importance of understanding teacher thought processes and knowledge, and the alignment between technology integration practices and beliefs of technology-using teachers. The Technological Pedagogical Content Knowledge (TPCK) Framework is a recurring theme in this cluster, and several papers aim to extend and clarify this framework. Thematic analysis is also discussed as a useful and flexible method for qualitative research in and beyond psychology. The papers in this cluster examine the impact of student-centered instructional approaches and strategies on learning, as well as the current barriers related to the integration of technology into K-12 teaching and learning. Finally, the cluster aims to identify strategies to overcome these barriers and to enable teachers to leverage technology resources as meaningful pedagogical tools. Overall, the cluster highlights the importance of understanding the relationship between pedagogy, content knowledge, and technology integration in education.

Cluster 2 labeled "Information Systems and Technology Acceptance" consists of papers that investigate various aspects of user acceptance and adoption of information technology. These papers share a common focus on understanding the factors that influence users' decisions to accept or reject



technology, as well as the determinants of perceived ease of use and usefulness. Several papers in the cluster also utilize the Technology Acceptance Model (TAM) to predict the success of information system implementation, and to identify the limitations and potential improvements of the model. The cluster also includes papers that examine the theory of planned behavior and its application to the prediction of behavior related to technology use. Finally, the papers in the cluster address the lack of research on interventions to aid managerial decision-making about IT implementation in organizations, and investigate the motivations for using computers in the workplace, highlighting the role of perceived usefulness and enjoyment. Overall, this cluster provides valuable insights into the various factors that affect the acceptance and adoption of information technology, and highlights potential avenues for future research and interventions.

Cluster 3 labeled "E-Learning and Information Systems Success" includes papers that focus on various aspects of e-learning and information systems success. The papers highlight the multidimensional and interdependent nature of IS success and identify independent variables that affect IS success. They also explore the factors that influence e-learning adoption and continued use, as well as critical factors that ensure a successful e-learning design and operation. The cluster examines the impact of specific system characteristics such as information quality, IT infrastructure, and management processes, on e-learning use and investigates how aspects of technology lead to user attitudes about the system, which then leads to increased utilization.

Cluster 4 labeled "Structural Equation Modeling (SEM) Analysis" focuses on various aspects of SEM and its application. Podsakoff et al (2012) examines the potential problem of method bias in behavioral research and investigates the effects of method factors on the reliability and validity of measures. Henseler (2015) proposes a new criterion for evaluating discriminant validity in variance-based SEM and assesses whether it can improve the accuracy of modeling. Hair et al (2011) addresses the negative perception of Partial Least Squares (PLS) SEM as a less suitable method for examining relationships between latent variables and reviews its algorithm, potential, and limitations for future research. Anderson (1988) discusses the best ways to use SEM in theory testing and development, with a focus on fit assessment. Bagozzi (1988) explores the criteria for evaluating structural equation models, which have received little attention in the literature. Finally, Henseler (2009) investigates the applications of PLS Path Modeling in international marketing, revealing its strengths and weaknesses and providing guidelines for its use. Overall, this cluster provides a comprehensive view of SEM and its potential applications in various fields.

Cluster 5 labelled "Technology Acceptance Model (TAM) and Mobile Learning" includes papers that focus on the acceptance and use of technology in the context of mobile learning. The papers



primarily use the Unified Theory of Acceptance and Use of Technology (UTAUT) and the Technology Acceptance Model (TAM) as frameworks to investigate the determinants of acceptance and adoption of mobile learning. The cluster aims to understand the factors influencing the acceptance of mobile learning, including the influence of age, gender, habit, hedonic motivation, price value, and perceived use. Additionally, the papers address the challenges facing mobile learning, such as limited processing power and reduced input capabilities, and examine the effectiveness of integrating mobile computing devices and social media into higher education courses. Overall, this cluster aims to provide insights into the adoption and usage of mobile learning technologies in various contexts, with a focus on the factors that influence user acceptance and behavior.

#### B. CCA - EDUCATION AND INFORMATION SYSTEMS

Cluster 1 labelled "IS Success and Continuance" focuses on research related to the success and continuation of information systems. William Delone (2003) introduces the DeLone and McLean Model of Information Systems Success and emphasizes the multidimensional and interdependent nature of IS success. William Delone (1992) aims to identify independent variables that affect IS success, including information quality, extrinsic motivation, IT infrastructure, management processes, and organizational competence. Anol Bhattacherjee (2001) focuses on understanding information systems continuance. Mohammadi, Hossein (2015) examines an integrated model of TAM and D&M to explore the effects of quality features, perceived ease of use, perceived usefulness, and usability on users' intentions and satisfaction towards e-learning in Iran. Finally, Anderson (1988) addresses the problems and pitfalls in the application of substantive use of structural equation modeling and explores how to best use SEM in practice. Overall, this cluster seeks to understand the factors that contribute to the success and continuation of information systems and improve the use of relevant models and methods.

Cluster 2 labelled "Technology Acceptance and Use Models" includes papers that focus on the development and validation of models and scales to understand the determinants of user acceptance and use of technology. The papers in this cluster examine various models, including the Unified Theory of Acceptance and Use of Technology (UTAUT) and the Theory of Planned Behavior, as well as the variables that influence user acceptance, such as perceived usefulness and perceived ease of use. These papers highlight the importance of identifying the appropriate functional and interface characteristics to be included in end-user systems, and the need for high-quality measures of key determinants of user acceptance. Additionally, some papers in this cluster explore how to evaluate structural equation models with unobservable variables and measurement error.



Cluster 3 labeled "Technology Acceptance Model (TAM) Analysis for E-Learning Acceptance" is focused on the application of the Technology Acceptance Model (TAM) to understand the acceptance and adoption of e-learning technologies. The cluster includes papers with common keywords such as perceived ease of use, perceived usefulness, external factors, self-efficacy, and structural equation modeling. Abdullah, Fazil (2016) aims to develop a General Extended Technology Acceptance Model for E-Learning (GETAMEL) by analyzing commonly used external factors. Sung Youl Park (2009) proposes an integrated theoretical framework of university students' e-learning acceptance and intention by using the TAM to analyze the relationship of university students' intention to use e-learning with selected constructs. The study also aims to develop a general linear structural model of e-learning acceptance of university students. Cheung, Ronnie (2013). focuses on the adoption behaviors of collaborative technologies for project information sharing in a web-based environment. The study aims to explain the adoption behaviors of collaborative technologies by using the TAM and identifying key determinants of a combined model and the decomposed constructs that explain adoption behaviors of collaborative technologies. Overall, this cluster highlights the importance of understanding the factors influencing the acceptance and adoption of e-learning technologies to improve their implementation and effectiveness.

Cluster 4 labelled "Structural Equation Modeling with PLS SEM" focuses on the use of Partial Least Squares (PLS) Structural Equation Modeling (SEM) in behavioral research. The papers in this cluster aim to address gaps in the literature related to the accuracy and reliability of variance-based SEM, the potential influence of common method biases in behavioral research results, and negative perceptions of PLS as a less suitable method for examining relationships between latent variables. Henseler (2015) proposes a new criterion for assessing discriminant validity in variance-based SEM, while Podsakoff (2003) critically reviews common method biases in behavioral research and recommends remedies. Hair, Joe (2011) explores the potential and limitations of PLS-SEM as a "silver bullet" for estimating causal models, and Hair, Joe (2018) provides guidance on when to use and how to report the results of PLS-SEM, including improvements to the method. Overall, this cluster highlights the importance of careful methodological considerations in SEM, particularly in relation to PLS, in order to ensure accurate and reliable results.

Cluster 5 "Technology Acceptance and Adoption Models" comprises papers that focus on understanding the factors influencing the acceptance and adoption of technology. The Unified Theory of Acceptance and Use of Technology (UTAUT) is a central construct in all the papers. The papers in the cluster aim to extend or refine the UTAUT framework by examining various factors such as habit, hedonic motivation, learning value, social influence, facilitating conditions, etc., that affect the



adoption and use of technology. Venkatesh (2012) explores the consumer use context and investigates the applicability of UTAUT2 in understanding consumer technology use. El-masri (2017) examines how factors influencing the adoption of technology by students in developing countries differ from those in developed countries. Ain (2015) extends the UTAUT2 framework by integrating the learning value concept in the learning management system (LMS) context. The paper examines the influence of various factors such as performance expectancy, effort expectancy, social influence, facilitating conditions, learning value, hedonic motivation, and habit on students' intention towards LMS and its use. Dwivedi (2017) critically reviews and refines the original UTAUT model using meta-analysis and structural equation modelling. Overall, the papers in this cluster aim to provide a comprehensive understanding of the factors influencing the acceptance and adoption of technology in various contexts.

# XIII. RESULTS (EXPLANATORY)

One notable finding from our analysis is the presence of Cluster 1, labeled "Educational Research and Technology Integration" It highlights several interesting aspects related to our research question. One significant finding is the emphasis on the importance of theoretical grounding in educational technology. The papers within this cluster recognize the need for a strong theoretical foundation when integrating technology into educational settings. This is particularly relevant in the context of using ChatGPT as a learning tool for postgraduate students in higher education. By acknowledging the significance of theoretical grounding, researchers can ensure that the implementation of AI technologies aligns with established educational theories, pedagogical approaches, and learning principles. This understanding enables the development of effective instructional strategies and the design of learning environments that maximize the benefits of using ChatGPT in postgraduate education. Another interesting point is the alignment between technology integration practices and students' beliefs, and the impact of student-centered instructional approaches on learning. The papers emphasize the need to consider students' perspectives, beliefs, and attitudes towards technology to ensure that they perceive it as valuable and relevant to their learning experiences. By understanding students' beliefs and incorporating their preferences and needs, educators can promote a positive acceptance and adoption of technology, such as ChatGPT, as a learning tool. This alignment contributes to an effective integration of AI technologies and enhances the overall learning experiences of postgraduate students. Another notable finding related to our research is Cluster 3 labeled "Information Systems and Technology Acceptance," which focuses on understanding the factors that influence users' acceptance and adoption of technology. This cluster includes papers that



utilize the Technology Acceptance Model (TAM) to predict the success of information system implementation and identify the limitations and potential improvements of the model. Since our research question aims to explore the impact of Artificial Intelligence technologies on postgraduate students' learning experiences, TAM provides a relevant theoretical model to guide this work. This will be further explained in the section below.

Despite the valuable insights provided by the various papers in our literature, a critical analysis suggests that there are certain areas that require further investigation. Specifically, there is a need for research on interventions for IT implementation, which can aid managerial decision-making and enhance the successful adoption of AI technologies in educational settings. Additionally, the evaluation of Structural Equation Modeling (SEM) in practice is highlighted as an area that could benefit from more research, aiming to assess the accuracy and reliability of variance-based SEM and address potential method biases. Lastly, understanding the factors influencing technology adoption in different contexts is identified as an area for further exploration, indicating the need to investigate how contextual factors may impact the acceptance and use of AI technologies by postgraduate students. To advance the field, future research should focus on addressing these gaps identified in the critical analysis. By investigating interventions for IT implementation, evaluating SEM in practice, and examining contextual factors influencing technology adoption, researchers can contribute to enhancing the understanding and application of AI technologies in the learning experiences of postgraduate students in higher education. This will enable the development of evidence-based strategies and recommendations for effective integration and utilization of AI technologies in educational settings.

## TECHNOLOGY ACCEPTANCE MODEL (TAM)

The TAM (Technology Acceptance Model) is a theoretical framework derived from the theory of reasoned action and the theory of planned behavior, initially proposed by Ajzen (1991, 2002). It suggests that users are more likely to adopt an information system if they perceive it to be useful for task accomplishment (perceived usability) and require minimal effort (PEU) (Davis, 1989, 1993). There are several reasons why we chose to use the TAM model in our study. Firstly, because it is the most relevant and the most popular model in the field of information systems and technology adoption according to (Davis, 1986). Also, The TAM's two fundamental constructs, perceived usefulness (PFL)



and perceived ease of use (PEU), have been found to explain 40% of the variance in technology adoption, providing valuable insights into the reasons behind technology use (Ifinedo, 2011).

Researchers have successfully utilized and extended the TAM by incorporating additional variables to study the adoption of various advanced technologies in education, such as AI-enabled e-learning (Kashive et al., 2021), AI-driven assessments in e-learning (Cruz-Benito et al., 2019), and educational AI tools (Choi et al., 2022). It is particularly suitable for predicting system acceptance from a utility perspective (Chatterjee et al., 2021; Davis, 1989; Park et al., 2016). Given that ChatGPT is an emerging technology aimed at facilitating and enhancing students' learning experiences, we have chosen to employ the TAM model to investigate how postgraduate students utilize ChatGPT and how they perceive it as a learning tool. However, it is important to note that the TAM alone may not fully capture the multidimensional nature of new technologies, system acceptance, and use. Therefore, Davis (1989) suggested that supplementary antecedents could be incorporated into the TAM framework to provide a more comprehensive understanding







# CHAPTER 2 - METHODOLOGY

To comprehensively investigate the impact of Artificial Intelligence (AI) technologies on the learning experiences of postgraduate students in higher education, this study employs a qualitative research approach, which is well-suited for studying emerging phenomena in real-time (Reinecke et al., 2016). Qualitative research has gained recognition within the Information System research community as a legitimate endeavor (Sarker et al., 2013). The qualitative interview method is particularly suitable for gathering detailed data through personal communication with participants. This research utilizes semi-structured interviews, which are widely employed in the human and social sciences (Brinkmann, 2014).

Semi-structured interviews offer several advantages. Firstly, they allow interviewees the freedom to explore angles they consider significant, thereby maximizing the knowledge-generating potential of dialogues (Brinkmann, 2014). By deviating from a rigid interview guide, the interviewer can actively contribute as a knowledge-producing participant in the research process. Secondly, this method provides greater control over steering the conversation towards topics relevant to the study's objectives.

By employing the qualitative method, this research aims to delve into the multifaceted effects of AI technologies on the teaching and learning experiences of postgraduate students in higher education. Through semi-structured interviews, a rich and in-depth understanding of the participants' perspectives can be gained, shedding light on the research question and contributing to the broader discourse on AI in education.

## I. DATA COLLECTION

Conducting interviews serves as a valuable means of gathering information, particularly in situations where the researcher lacks pre-existing guiding theories or assumptions (Qu & Dumay, 2011). Interviews also play a role in refining theories and comprehending phenomena (Tallon et al., 2013a, b). The present research employs a qualitative approach, utilizing qualitative data to explore and explain the research question (Michael, 1997). By conducting semi-structured interviews, we tap into the experiences, beliefs, and attitudes of key respondents (Rubin et Rubin, 2011). Our research



utilized a semi-structured format for interviews, which involves posing key questions to guide the exploration while allowing participants the flexibility to express their own perspectives and insights (David et Alison, 2018, Gill et al., 2008). We developed a structured interview guideline comprising a logical sequence of questions aligned with our research objectives. The interview process commenced with basic inquiries about participants' backgrounds and experiences before transitioning into more detailed discussions. In addition to interviews, we supplemented our findings by examining secondary data from research articles and case studies, providing further depth and support.

To initiate the research process formally, a brief introduction outlining the purpose of the project was sent via email. In some cases, brief telephone calls were conducted to provide additional information as needed. Data collection took place over a three-month period, from March 2023 to May 2023. We selected postgraduate students as ideal candidates for interviews based on specific criteria. Firstly, we sought individuals who possessed knowledge and expertise in a particular field of study. Additionally, it was important for them to have an understanding of AI technologies. Lastly, we targeted students who had either heard about or used ChatGPT in their academic or personal endeavors. A total of 10 participants were interviewed, representing diverse fields of study. All participants were students enrolled in academic institutions in France. Table 5 below illustrates the equal gender representation among the participants, with five males and five females. The age range of the participants varied from 24 to 37 years old. The inclusion of participants from different fields of study allowed for the analysis of diverse perspectives within the research.

During the interviews, participants were encouraged to express their thoughts and insights in their own words, providing a deeper understanding of specific issues from their unique perspectives (Pessoa et al., 2019). Prior to each interview, we individually explained the objectives of the research and the desired outcomes. Participants were also given the opportunity to add any relevant information that they believed was important or might have been missed during the interviews.

Each interview had an average duration of approximately 49 minutes, ranging from 27 to 85 minutes. The interviews were conducted via Zoom and Microsoft teams, with each session recorded for later reference. The audio recordings were then transcribed using Otter AI, ensuring a verbatim representation of the interviews. This meticulous approach ensured the transparency and



reproducibility of the raw data, allowing for rigorous tracking and analysis. As part of the process, we carefully reviewed both the transcribed text and the audio recordings to ensure their alignment. This manual verification was crucial to guarantee the accuracy and consistency between the textual and auditory data, enabling reliable analysis and interpretation of the findings.

Code Name	School	Course	Level	Age	Sex	Location	Duration (mins)
		Applied Corporate		_			
ED	IAE, UGA	Management (ACM)	M2	24	F	Grenoble, France	35
AS	INP, UGA	Sustainable Industrial Engineering (SIE)	M1	26	М	Grenoble, France	85
WA	IAE, UGA	Advanced Research in Managemement of Information Systems (ARAMIS)	M2	24	F	Grenoble, France	56
LN	II IL, GGA	Advanced Research in  Managemement of Information Systems	1412	2-1	·	Grenosie, Trance	30
	IAE, UGA	(ARAMIS)	M2	37	М	Grenoble, France	32
AJ	IAE, UGA	Applied Corporate Management (ACM)	M2	24	F	Grenoble, France	27
454	145.1164	Advanced Research in Finance and Accounting		20		Constitution from the	
ASA	IAE, UGA	(AFA)	M2	28	М	Grenoble, France	60
GA	Grenoble école de Management (GEM)	Finance	M1	26	F	Grenoble, France	53
	Grenoble école de	International Human Resource Managemement in the					
SM	Management (GEM)	Digital Age (IHR)	M1	32	F	Grenoble, France	48
	Grenoble école de	International Human Resource					
PSV	Management (GEM)	Managemement in the	M1	28	F	Paris, France	71



		Digital Age (IHR)					
	Université Bretagne						
00	Sud	Cybersecurity	M1	30	F	Lorient, France	28

**Table 4: Attribution and demographic** 

#### II. DATA ANALYSIS

## Text Mining

In order to empirically analyze the data, we followed an iterative process of reading and interpreting the content from the interviews. The thoughts and experiences shared by the participants were utilized to address the research questions. Our analysis began by going through the interview transcripts and making notes of our initial thoughts through memos. Although memos are typically used at the beginning of text analysis, we continue to use them throughout the process to update our thoughts, interpretations, and even generate new ideas. The complete answers to the questions were preserved and referenced along with the corresponding questions. All ten interviews were consolidated into a single file, with a clear separation between each interview using a command line. The file included variables such as gender, field of study, age, and level of education (M1 or M2) provided by the interviewees. To enhance readability and consistency, each file underwent a thorough revision process. This involved rectifying typos and punctuation errors, standardizing acronyms, and consolidating complex terms. Subsequently, the transcripts were uploaded to IRAMUTEQ (Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires), a text-mining software developed by French researcher Pierre Ratinaud in 2009. IRAMUTEQ, programmed in Python and utilizing functionalities provided by the statistical software R (Souza et al., 2018), facilitates the analysis by organizing the distribution of vocabulary in a visually clear and comprehensible manner. This feature greatly aids in the organization of the gathered data (Chaves et al., 2017). The software offers a range of textual data analyses, spanning from basic lexicography, which focuses on lemmatization and word frequency calculation, to more advanced multivariable techniques like Descending Hierarchical Classification (DHC) - This analysis relies on sorting text segments based on their respective vocabularies. This classification aims to group elementary context units (ECUs) together, taking into account the frequency and average occurrence of words in different texts. As a result, ECUs within the same class exhibit similar vocabulary, while differing from ECUs in other classes. Additionally, the DHC analysis can be supplemented with a factorial correspondence



analysis (FCA), which provides a statistical analysis of the most significant words in each class, represented on a Cartesian plane (Camargo, 2013). Furthermore, the software can be utilized as a text mining tool to identify central lexical items and their peripheral connections through similarity analysis. By examining the interconnectedness of terms, one can infer which terms co-occur more frequently, the level of interconnectedness, depicted in the form of a similarity tree, indicates the extent of interrelations surrounding a particular subject (Camargo, 2013). Additionally, IRAMUTEQ includes other forms of analysis such as classic textual analysis, analyses of specificities and word cloud generation (Souza et al., 2018).



# **CHAPTER 3 - FINDINGS**

"How are Artificial Intelligence technologies affecting the learning experiences of postgraduate students in higher education?"

## I. FINDINGS

Additionally, as part of the abstract review process using the IRAMUTEQ software, a word cloud was generated. This visually organized representation highlights terms based on their frequency, enabling quick identification of keywords within a collection of texts. In the word cloud, the font size and central placement of a word indicate its frequency, with larger and more centered words indicating higher occurrence, as depicted in Figure 8 below.

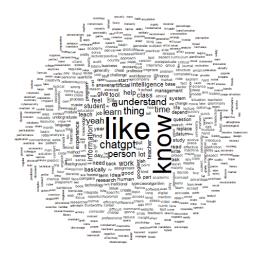


Figure 8: Word Cloud: Frequency-based Visualization of Selected Abstracts. Larger Font Indicates Higher Frequency, Smaller Font Indicates Lower Frequency. (Generated by IRAMUTEQ Software (2023)

In terms of the DHC analysis, the software utilizes the chi-square test ( $\chi 2$ ) to construct a lexicon of terms that represents the extent of association between words and specific classes. An assessment is



made based on the test value being greater than 3.84 and having a p-value of less than 0.0001, indicating a significant level of association. Conversely, a lower chi-square score suggests a weaker relationship between the variables (Chaves et al., 2017). To establish the text classes, the text segments were sized and categorized according to their vocabularies, as illustrated in Figure 12, which displays the dendrogram of the DHC. Through the DHC analysis, a dendrogram revealed the identification of six classes. This visual representation not only showcases the classes but also highlights the interconnections between them, as they are associated with one another. Each class is assigned a distinct colour, and the ECUs within each class share the same colour, as depicted in Figure 9 below.

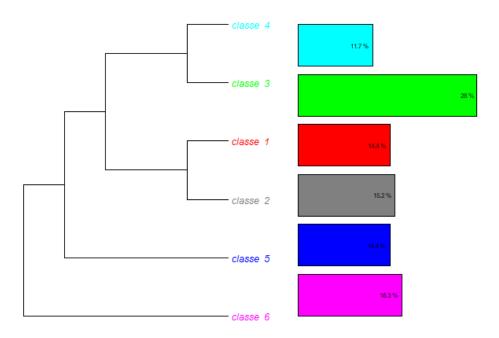


Figure 9: Dendogram of the classes provided by IRAMUTEQ software.

Based on the information provided in Figure 10, the corpus was divided into six distinct classes. When examining the connection between classes in the dendrogram, the reading direction is from left to right. The first subcorpus comprised two classes, with Class 6 accounting for 16.3% of the total, and Class 5 representing 14.4%. From Class 5, a division is made which accounts for two subcorpus, where Class 2 and Class 1 accounted for 15.2% and 14.4% of the total ECUs, respectively. The other subcorpus consisted of Class 3, representing 26% of the ECUs, and Class 4, accounting for 11.7% of the ECUs. For each class, a list of terms obtained through the chi-square test was generated. The



software provides various types of dendrograms for the selected analysis, keeps the ECUs accessible for reference and comprehension of the results, and enables the researcher to assign a title to each class at any time. These titles reflect the primary interpreted theme based on the ECUs comprising each class (refer to Figure 10 below)

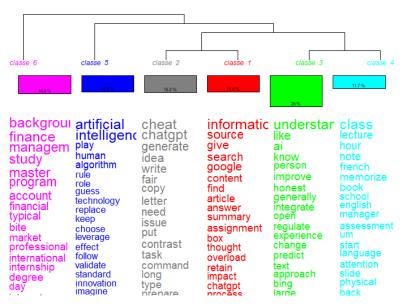


Figure 10: Dendogram with the percentage of ECU in each class and words with greater chi-square ( $\chi$ 2) provided by the IRAMUTEQ software.

The qualitative data findings were analyzed by examining the corpus and the terms presented in the dendrogram. This analysis allowed us to interpret the classes based on their content and context, providing valuable insights into the main themes and topics present in the corpus. Consequently, we were able to assign a theme to each class, facilitating our understanding of how Artificial Intelligence technologies impact the learning experiences of postgraduate students in higher education, specifically focusing on the acceptance of ChatGPT.

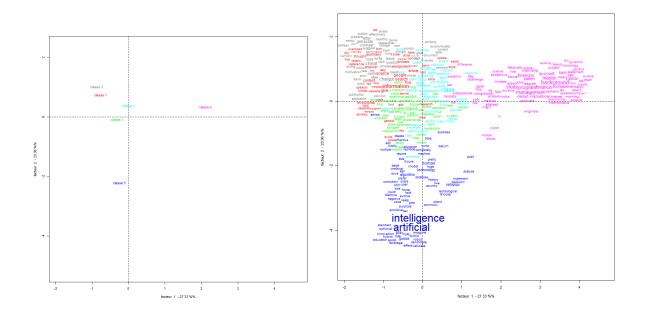
Class 5 emphasized the behavioral intention to use ChatGPT, while class 6 revealed the enabling environment for its adoption. Class 1 represented the perceived usefulness of ChatGPT, and Class 4 indicated the perceived ease of use. Additionally, Class 2 highlighted the attitude towards the use of ChatGPT, while Class 3 provided insights into the actual usage. For further details on these classes, please refer to Table 6 below

Class 1	Class 2	Class 3	Class 4	Class 5	Class 6
14.4%	15.2%	26%	11.7%	14.4%	16.3%



Profile of the Interviewee						
Actives form	information, source, search, google, content,	cheat, chatgpt, generate, idea, write	understand, like, ai, know, person	class, lecture, hour, note, assesment	artificial intelligence, human, algorithm, technology	background, finance, management, master program
Conclusion	Perceived usefulness	Attitude towards use	Actual Usage	Perecieved ease of use	Behavioral Intention	Enabling Environment

Table 5: The 6 classes of DHC



## II. THEMATIC ANALYSIS

The findings obtained through our Text mining data (DHC Results) allow us to extract primary themes from our interview transcripts. These themes provide us with a foundational understanding of the underlying perceptions and emotions expressed by postgraduate students when discussing their perception of ChatGPT as a learning tool. After thoroughly analyzing the transcripts, we were able to categorize quotes from each interviewee based on the dimensions identified in the table below. These dimensions were derived from our studies and drew inspiration from an extended version of the Technology Acceptance Model (TAM2) and the Unified Theory of Acceptance and Use of Technology (UTAUT).

S/N	Themes	Subthemes
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1.		Value Proposition
	Perceived Usefulness	Information retrieval
		Perceived Impact on Learning
2.	Perceived Ease of Use	Interactivity
		Level of training & Support
3.	Attitude Towards Use	Potential for misuse
		Lack of trust in technology
		Perception on Cheating & Plagiarism
		Ethical Considerations
4.	Behavioral Intention to Use	Adoption Intention
		Own research and academic activities
5.	Actual Use	Actual Usage
		Stickiness to traditional mode of learning
6.	Enabling Environment	Social Acceptance
		Anthropomorphism

Table 6: Themes and Subthemes generated from Interview Transcript

Subthemes	Illustrative Quote
Value Proposition	"I'm using ChatGPT sometimes for some assignments" - ED  "ChatGPT is not going to give you opinions on stuff. So you still have to produce content by yourself" - ED  And has helped a lot of students to, you know, help their learning experience, help them to get like specific knowledge, you know, reduce search time, it has also helped me to improve "my experience as a student" - ED  "I don't remember anymore. How I was doing with that ChatGPT is like anything, any question that I have now" - WA  "ChatGPT is more time effective" - WA  "If I'm troubleshooting an issue, I also use it and I'll just type what I want on ChatGPT" - OO  "I used ChatGPT to, you know, kind of formulate conversation between two different, very corporate employees" - PSV  "ChatGPT is very helpful in terms of helping me understand complex topics, basically demystifying complex topics, in terms of the structure of my writing in terms of the content of my writing" - GA "I rather look at it as a help and look at it as a part of the process. It's like, I look at it like one of the tools that would help me make my job or my task easier" - WA



	"with ChatGPT, I'm not heavily reliant on my professor anymore. Because I know that there's something digital, perhaps might I say, even better, right, than the typical traditional method" - GA "Sometimes it's even too easy. Like you're frustrating, it's kind of frustrating, it's even doing stuff better than I would have done it" - ED
Information retrieval	"We have access to much more information much more quickly. And I think now the role of the teacher is kind of evolving to become more of a counsellor of which kind of topic would be nice to investigate" - ED  "you need a command to do something or you are trying to troubleshoot something. On Google, you have to search multiple times. But with ChatGPT, you get what you want immediately." - OO  "I have mainly used ChatGPT for idea generation" - SM
Perceived Impact on learning	"No, there's been no change in my academic performance since I started using ChatGPT" - OO "I think it might have actually positively impacted my my studies " - ED "Students might become lazy because you know that You're not going to stress yourself" - OO "we don't remember things like we used to due to the proliferation of these AI tools" - SM "since incorporation of ChatGPT, I feel like in terms of my long term understanding of certain things and information on topics, I feel like that's deteriorating" - GA "I will definitely say my grades have improved. So because I'm basically exposed to a plethora of resources, but at the same time, I don't want to say it's largely influenced by ChatGPT" - GA "with ChatGPT, I'm not heavily reliant on my professor anymore. Because I know that there's something digital, perhaps might I say, even better, right, than the typical traditional method" - GA
Interactivity	"it's even doing stuff better than I would have done it." - ED "I will say ChatGPT is a smart, really smart tool to use" - OO "I found ChatGPT to be intuitive, but it has its limits" - PSV "I'll say ChatGPT is super useful" - GA "I find ChatGPT to be, because it's improving. So algorithm wise, it's much end user friendly" - PSV "I think the accuracy of ChatGPT is like, more, you know, than if compared to just, I mean, Google" - AS
Level of training & support	"I feel that you need to know how to converse, have a conversation with AI, because we still don't know sometimes that how to ask the right question" - SM "Like, if I feed an artificial intelligence algorithm false information? would he deliver false information?" - WA
Potential for misuse	"I think as much as people would use it for good, you know, people would use it for bad like that" - AS  "It can definitely be used for cheating. It's, obviously, that's why the owners of ChatGPT created the anti-algorithm" - WA  "We all know that there is nothing that is good. And that doesn't have its bad side. So I think it depends on how we use it" - OO  "There's obviously going to be bias in everything. You know, you know, I think I saw a list of, of ChatGPT, listing, the people that I mean powerful people in the world that have sososo like, I think it has some criterias, you know, and some people came out, and they were like, Nah, you know, this is wrong" - AS  "And it can create some negative consequences in the future." - LN
Lack of trust in technology	"Al cannot be trustworthy, for example, for the deep fake" - OO  "I feel like I still prefer the human to human experience. Just because for some teachers, you kind of have a personal relationship with them. And it's more motivating" - ED  "I'm not sure what its training is like, on which material it was trained" - ED  "I still go to the library scientific website to do my research" - ED  "I would say that, even if ChatGPT has given you a solution, or an answer on an idea, you should cross check with the sources before you go ahead" - SM  "when I use ChatGPT to find some pertinent articles for our research, sometimes he gives me non existent article, which I have no idea from where it's bringing that I'm really curious to know, I have this task behind the like, in the back of my mind to look for how ChatGPT is working and from where it's getting information, because some of the articles that it provides, sometimes they look



	so real, and they look like they exist, but when you do your research, they don't" - WA " If you ask, ask ChatGPT to give you the information. I think that more than 90% of the results at ChatGPT give you fake ones. " - LN " I need to be sure of their quality, the quality of data they are giving to me - AJ"
Perception on Cheating and Plagiarism	"I am completely against plagiarism on this, I would say that, I will not recommend anybody using Al. Unless it's been allowed" - SM "I feel that it's not cheating. It's not my responsibility to evolve with the tool" - PSV "it's not on the students' part to develop. Because in the real world, when I move out of the course, I will be expected to know how to use ChatGPT and leverage that to, you know, further my business needs or whatever I'm doing, use that and leverage that, to gain an advantage. And not doing so would be stupid" - PSV "I wouldn't call it cheating. I think it can be used as a source" - GA
Ethical Considerations	"any new technology has to have more realistic things set accordingly rules and regulation and a framework to be set across and it has to be done very fast" - PSV  "I don't think we should generally discourage students from using ChatGPT. I mean, it's not, it's not the right way to go. Right. I think we should just really incentivize people" - AS  "I think AI is here to stay. And the earlier we accept it, like trying to integrate it and regulate it, the better. You understand because people, if we don't accept it, and regulate it, people will still have access to it. And they will be using it unfairly." - AS  "Educate everyone about it and learn how to use it effectively to be more creative and to deliver better results, rather than fighting it and being just against it. So yeah, that would maybe in my opinion solve some of the issues of ethics" - WA  "But I think that it's going to create something not fair between the developed country and developing countries. Because, like, the develop furthermore with the ChatGPT in my country, in Vietnam, you cannot use the ChatGPT because you know, is required, you know, telephone number came from now the countries and most of them have a chat setting the telephone number from the western country, not Asian country. So I think that it can create, you know, the gap between the developing country and the developing country" - LN
Adoption Intention	"I'm kind of a shy student, I take ChatGPT help to answer my questions" - ED  "I like working with it. It's facilitating a lot of stuff, especially when it comes for example, also to writing emails to formulate in emails. It can actually really help you to hone that skill of how to write an email to get extra vocabulary and stuff." - WA "I use it to gather knowledge" - ASA "When I come across key concepts that I don't understand, I kind of know that ChatGPT would be there to assist me" - GA
Own research and academic activities	"I started using it because the girl in my class was actually using it for like, we're having an assignment together. And she was using it to ask you to ask strategic questions." - ED "I have used ChatGPT. And I use it too, if you're given a project, I used to do my research" - OO
Actual Usage	"I don't use ChatGPT for retention. I just use it to solve my problem at that moment" - OO "But for ChatGPT. I don't use it as a way to search for information but more of a way to redact." - ED "I don't use ChatGPT for research purposes or presentation purposes. You understand because like, for example, if I need data about the energy usage in the EU, I'm not going to go to ChatGPT to base my presentations on that, you know, I will still want to look for empirical facts on the web like using Google" - AS "So I use that a lot more. And also group projects, anything technical, or like analysis, even emails as well" - GA
Stickiness to traditional mode of learning	"if you want to use ChatGPT, it is whatever you are taught in class, that you will go back home and use ChatGPT to maybe research more on it" - OO I don't think that they would replace the teachers. I still view artificial intelligence as a tool - WA "I think it's an extension of each other rather than versus because sometimes if you don't know what you're looking for, you will never look towards that" - PSV "I think it will never replace a teacher. Because teachers are the Als for example, they're the intelligence behind the Al" - PSV "I think that traditional methods will always incorporate this human perspective, human insights and our sentiment" - GA



	"I feel like the traditional teaching approaches, I think it's still the best." - ASA  "I still prefer the human to human experience. Just because for some teachers, you kind of have a personal relationship with them" - ED  "Al is generally not going to substitute the conventional way of learning" - AS  "I mean, that's is what you would get from an actual class, you cannot get it from ChatGPT, you understand, like, the interactiveness, the beauty of interactiveness, you know, and sharing of ideas, criticising ideas, supporting ideas would never come up with ChatGPT you understand" - AS  "No, I don't think ChatGPT will be able to replace the professors." - AJ
Social Acceptance	"it was a rave throughout social media, throughout. students have been talking about it, you know, it was like, it's like, the buzzing thing right now" - AS "I heard about it from my classmates" - ED "Yes, one of my professors told us about it in class" - OO "I found out about ChatGPT. through Facebook" - WA "I heard from a friend, he was using it and I said, Oh, what is this and how are you getting information so quickly, so fast? And he told me though, oh, it's ChatGPT" - AJ
Anthropomorphism	"obviously, at some point, you can kind of see it's not handmade, and it's like AI based" - ED "they are learning how to convey or communicate with a real human and they are learning to you know, to think smart then before, to be more intelligent than before" - LN "They are inani,ae" - ASA "It's not real intelligence, it's still artificial" - ED "But artificial intelligence is actually moving in different directions as well. For example, it is trying to mimic human emotions and you know, other stuff, robotics is coming together neural linkage is happening." - PSV

Table 7: Illustrative Quotes from Interviewees supporting data for each Subtheme

## PERCEIVED USEFULNESS

Perceived usefulness, in the context of students, can be defined as the subjective assessment of students regarding the extent to which they believe that utilizing a particular application system, tool or technology enhances their learning experience and contributes to their academic achievements. It reflects the students' subjective perception of how using a tool positively impacts their performance and facilitates the attainment of their educational goals (Keržič et al., 2021).

Previous research has extensively explored the relationship between perceived usefulness and technology adoption. Davis (1989) conducted a study that demonstrated perceived usefulness as the most influential factor in determining individuals' intention to use a technology. In this study, we define perceived usefulness as the degree to which a person believes that using a particular tool would enhance their learning experience.

In the context of postgraduate students utilizing ChatGPT, the concept of perceived usefulness holds significant importance. Artificial Intelligence tools like ChatGPT are primarily designed to enhance human performance, automate tasks, make predictions, and solve complex problems (Wikipedia, 2023). Students are more likely to adopt and utilize AI tools that they perceive as useful, which, in turn, increases the likelihood of achieving the intended benefits of using ChatGPT to enhance their learning experience. Three sub-themes related to the theme of perceived usefulness have been identified: value proposition, information retrieval and perceived impact on learning. These sub-themes emerged as the most recurring aspects discussed in the interviews.



#### Value Proposition

The concept of value proposition is multifaceted and can be defined differently depending on the context and field of research. In the field of information systems, value proposition refers to the unique benefits and value offered by a tool or technology to enhance performance and provide specific advantages to its users (Green et Young, 2008). It articulates the reasons why individuals or organizations should adopt and utilize a particular tool by emphasizing its capabilities and potential impact on performance improvement and desired outcomes. A comprehensive value proposition typically encompasses several elements, including the distinctive features and functionalities of the tool, its potential to enhance efficiency and productivity, advantages, and the overall value it brings to users (Barnes et al., 2009).

For the purpose of our research, we adopt this definition and consider the value proposition of ChatGPT to be the benefits and value it provides to its users. The testimonies from interviewees unanimously confirm the value that ChatGPT adds to their academic performance. One interviewee explained that ChatGPT significantly improves the learning experience, facilitates access to specific knowledge, reduces search time, and enhances overall academic experience. Another interviewee expressed reliance on ChatGPT for various academic inquiries, stating that they can no longer remember how they used to work without it. Additionally, interviewees highlighted ChatGPT's usefulness in understanding complex topics, demystifying them, and assisting with writing structure and content, quotes from interviews below ( "ChatGPThas helped a lot of students to, you know, help their learning experience, help them to get like specific knowledge, you know, reduce search time, it has also helped me to improve my experience as a student" - ED, - "I don't remember anymore. How I was working anymore, I ask ChatGPT any question that I have now" - WA, - "ChatGPT is very helpful in terms of helping me understand complex topics, basically demystifying complex topics, in terms of the structure of my writing in terms of the content of my writing" - GA).

## • Information Retrieval

The development of automated information retrieval systems, facilitated by technological advancements, has significantly enhanced the accessibility of information. These systems employ algorithms and techniques to process vast collections of resources, providing users with relevant information promptly. According to the interviewees, the adoption of ChatGPT has greatly simplified the process of accessing and retrieving information. They expressed that it enables them to obtain a wealth of information quickly and effortlessly. One interviewee mentioned that with ChatGPT, they can immediately obtain the desired information without the need for multiple searches, as opposed to using search engines like Google.

## Perceived Impact on Learning

Perceived impact on learning refers to an individual's subjective evaluation or interpretation of the effects, changes, or consequences that a particular learning tool, or intervention has on their knowledge, skills, abilities, attitudes, or overall educational outcomes. It is based on the individual's



own perception and interpretation of the impact rather than objective measures or external evaluations. Perceived impact on learning can encompass various aspects, including academic performance, motivation, engagement, self-efficacy, understanding, retention of information, critical thinking skills, and overall learning experience. Based on the quotes provided, the perceived impact of learning emerged as a subtheme for the theme of perceived usefulness in the interview transcripts. The quotes highlight different perspectives and experiences related to the impact of using ChatGPT on learning experience. The quotes reveal a diverse range of opinions on the perceived impact of learning with ChatGPT. While some participants view it as potentially beneficial or as a valuable resource, others express concerns about negative effects such as reduced effort, memory reliance, and potential deterioration of long-term understanding.

#### Perceived Ease of Use

Perceived ease of use refers to the extent to which a potential user anticipates that a target system will require minimal effort (Venkatesh et al., 2003). Previous research has demonstrated that perceived ease of use has a positive association with users' intention to use technology and is a critical determinant of technology acceptance and adoption (Davis, 1989, Venkatesh et al., 2011). In the context of adoption of ChatGPT as a tool for learning for Postgraduate students, several factors can influence perceived ease of use, including technology efficiency and the level of support provided. Based on our analysis and the available data, we have identified two essential factors as discussed below

## Interactivity

Interactivity refers to the degree to which a technology or system allows users to actively engage, interact, and manipulate the content or features of the system. It focuses on users' perceptions of the ease and flexibility with which they can interact with the technology and perform desired actions (Lee et Lee., 2019). It has been recognized as a significant factor influencing users' acceptance and use of various technologies. The level of interactivity perceived by users can affect their perception of ease of use, usefulness, satisfaction, and intention to use a technology (Alassafi, 2022). When answering our questions, the interviewees evoked the interactivity of ChatGPT and explained the degree to which the tool is interactive interactive, allowing them to engage with the tool and accomplish tasks more effectively

# • Level of training & Support

Training and support play a crucial role in facilitating effective interaction and utilization of AI systems. Research indicates that AI tools offer valuable support for online learning including personalized learning, automation of routine tasks (Seo et al., 2021). However, the impact of AI systems on the culture, norms, and expectations surrounding their use needs to be considered. Our interviewee highlights the importance of knowing how to converse and ask the right questions when interacting with AI: "I feel that you need to know how to converse, have a conversation with AI because we still don't know sometimes how to ask the right question." - SM. This quote emphasizes the need for



training and support to develop the skills necessary for effective AI interaction. Users may require guidance on how to engage with AI tools like ChatGPT, understand their capabilities and limitations, and formulate appropriate prompts to extract meaningful insights.

#### **A**TTITUDE TOWARDS USE

Attitude toward use has consistently been found to be a significant predictor of technology adoption and behavioral intention to use technology (Fishbein & Ajzen, 1975; Venkatesh et al., 2003). Other influential factors that shape attitude toward use include perceived usefulness, ease of use, and subjective norms (social pressure to use or not use a technology) (Davis, 1989; Venkatesh et al., 2003). Considering the identified sub themes from the analysis, the following factors have been observed:

- Potential for misuse: The potential for technology to be misused can influence individuals' attitude toward use. Concerns about privacy, security, and unethical behavior may affect their willingness to adopt and use the technology.
- Lack of trust in technology: Trust is a crucial factor influencing technology adoption. If individuals lack trust in the technology or the entities behind it, they may be hesitant to use it.
- Perception on Cheating & Plagiarism: The perception of technology facilitating cheating or plagiarism can impact individuals' attitude toward its use. If they perceive technology as enabling unethical academic practices, they may be reluctant to adopt it.
- Ethical Considerations: Ethical considerations play a significant role in shaping attitude toward technology use. Individuals' values, moral principles, and concerns about the societal impact of technology can influence their decision to adopt and use it.

These findings align with existing research on technology acceptance, emphasizing the importance of attitude, perceived usefulness, ease of use, and subjective norms in determining technology adoption ( (Davis, 1989, Ajzen, 1991).

# ACTUAL USE

Actual Use refers to the real-world utilization of a technology or system by users. It focuses on the observable behaviors and actions of individuals or groups in using the technology, rather than their intentions or attitudes towards it (Turner et al., 2010). The understanding of actual use is crucial as it enables the evaluation of a technology's effectiveness and impact, and aids in identifying the factors that influence its adoption and acceptance. As part of our research, we have identified several sub themes related to actual use, which include Adoption Intention, Own research and academic activities, Actual Usage, and Stickiness to traditional mode of learning

#### • Adoption Intention

Adoption intention refers to the willingness or inclination of individuals to adopt and utilize a particular technology or system. It reflects their intention to incorporate the technology into their



regular activities and routines. The quotes below illustrate postgraduate students' perspectives on their adoption intention regarding ChatGPT - "I'm kind of a shy student, I take ChatGPT help to answer my questions" - ED, - "I like working with it. It's facilitating a lot of stuff, especially when it comes for example, also to writing emails to formulate in emails. It can actually really help you to hone that skill of how to write an email to get extra vocabulary and stuff." - WA, - "When I come across key concepts that I don't understand, I kind of know that ChatGPT would be there to assist me" - GA. The quotes as above collectively demonstrate the adoption intention of postgraduate students towards ChatGPT. It signifies their interest and willingness to integrate ChatGPT into their academic activities, whether for overcoming timidness, enhancing writing skills, acquiring knowledge, or seeking clarification on complex concepts.

## Actual Usage

It refers to the specific ways in which individuals employ a technology or system in their real-world activities. It encompasses the observable behaviors and actions of users when utilizing the technology, reflecting the practical applications and functions it serves. The quotes provided shed light on the actual usage of ChatGPT as perceived by different individuals. - But for ChatGPT. I don't use it as a way to search for information but more of a way to redact." - ED, - "I don't use ChatGPT for research purposes or presentation purposes. You understand because like, for example, if I need data about the energy usage in the EU, I'm not going to go to ChatGPT to base my presentations on that, you know, I will still want to look for empirical facts on the web like using Google" - AS, - " So I use that a lot more. And also group projects, anything technical, or like analysis, even emails as well" - GA. The quotes as above collectively provide insights into the actual usage of ChatGPT by different individuals. It indicates that the ways in which users employ ChatGPT can vary based on their specific needs and preferences. Actual usage includes task-oriented utilization, text modification or generation, reliance on alternative sources for research or presentation purposes, and the application of ChatGPT in various practical contexts.

# • Stickiness to traditional mode of learning

This refers to the inclination or preference of individuals to adhere to traditional methods of education and learning, despite the availability and utilization of technologies like ChatGPT. Interviewees highlighted the following - "I think it's an extension of each other rather than versus because sometimes if you don't know what you're looking for, you will never look towards that" - PSV, - "I think it will never replace a teacher. Because teachers are the Als for example, they're the intelligence behind the Al" - PSV, - "I think that traditional methods will always incorporate this human perspective, human insights and our sentiment" - GA, - "I feel like the traditional teaching approaches, I think it's still the best." - ASA. The quotes provided offer insights into individuals' perspectives on the role of artificial intelligence (Al) and technology in education, highlighting their belief in the value and significance of traditional teaching approaches. Overall, stickiness to traditional mode of learning emerges from the quotes as a subtheme characterized by the belief in the value of traditional teaching methods, the recognition of Al as a supportive tool rather than a



replacement for teachers, and the emphasis on the human element, such as personal relationships and human insights, in the educational process. It reflects individuals' inclination to maintain and prioritize traditional approaches to education despite the availability and use of AI technologies like ChatGPT.

#### **ENABLING ENVIRONMENT**

An enabling environment can be defined as a conducive ecosystem that promotes and supports innovation and entrepreneurship, facilitates competition and market access, and establishes the essential framework and conditions for businesses and individuals to generate and maintain economic value (UNCTAD, 2018). Through our research, we have identified two significant external factors that significantly influence the impact of the enabling environment on innovation adoption: social acceptance and anthropomorphism.

## Social Acceptance

It plays a crucial role in the successful adoption of innovations. It refers to the level of approval, support, and adoption of new technologies by individuals and the larger social context. It is influenced by various factors, including perceived benefits, risks, values, beliefs, norms, and trust in the technology and its developers (Ajzen & Fishbein, 1980). According to Ajzen and Fishbein (1980), who developed the theory of reasoned action, individuals' attitudes and social norms play a significant role in shaping their intentions to adopt new behaviors, including the use of new technologies. The theory highlights the importance of considering attitudes, beliefs, values, norms, and perceptions of control in understanding social behavior and technology acceptance. This framework provides a comprehensive overview of the factors that influence social acceptance of technology. The quotes provided by interviewees as below further illustrate the influence of social acceptance on the adoption of new technologies. "it was a rave throughout social media, throughout. students have been talking about it, you know, it was like, it's like, the buzzing thing right now" - AS, - "I heard about it from my classmates" - ED, - "Yes, one of my professors told us about it in class" - OO, - "I found out about ChatGPT. through Facebook" - WA. These quotes demonstrate how information is shared, discussed, and perceived through social channels, influencing the adoption and diffusion of new technologies.

## Anthropomorphism

This refers to the attribution of human-like characteristics to non-human entities or technology. It suggests that the presence of human-like qualities in technological innovations can influence their acceptance and user interaction (Kim et Kankanhalli., 2009). It involves designing and developing technologies that simulate or imitate human qualities, such as intelligence, emotions, or social interactions. Anthropomorphism plays a significant role in shaping the perception, acceptance, and interaction with technologies





# **CHAPTER 4 - DISCUSSION**

"How are Artificial Intelligence technologies affecting the learning experiences of postgraduate students in higher education?"

The aim of this research is to enhance the current understanding of the application of Artificial Intelligence (AI) in conventional learning methods, investigate the impact of AI (ChatGPT) on postgraduate students' learning practices, and analyze their perceptions of AI (ChatGPT) as a learning tool. By examining the advantages and challenges of integrating AI into education, this research provides valuable insights into the future role of AI in the educational system. The central research question guiding this study is: "How are Artificial Intelligence technologies affecting the learning experiences of postgraduate students in higher education?"

To achieve these objectives, user acceptance categories and factors were identified and mapped to the TAM2 and UTAUT models. The data collected aligned well with the analytical themes (as shown in Table 7) specified by both models, confirming their suitability for the study. The analysis resulted in the identification of 15 different themes, which were then categorized into six broad categories relevant to understanding the impact of AI, specifically ChatGPT, on postgraduate students' learning experiences. The research model consists of six key categories that are relevant to understanding the impact of AI on learning experiences:

- Perceived Usefulness: This category includes factors such as the value proposition of ChatGPT and its effectiveness in information retrieval. It examines whether students perceive ChatGPT as useful in enhancing their learning experiences.
- Perceived Impact on Learning: This category focuses on factors such as the perceived ease of use of ChatGPT, its interactivity, and the level of training and support available. It investigates how ChatGPT influences students' perception of its impact on their learning process.
- Attitude Towards Use: This category explores factors that influence students' attitudes
  towards using ChatGPT, including potential concerns about its misuse, lack of trust in the
  technology, perceptions of cheating and plagiarism, and ethical considerations.
- Behavioral Intention to Use: This category examines students' intentions to adopt and use
   ChatGPT for their own research and academic activities. It assesses whether students are inclined to integrate ChatGPT into their learning practices.
- Actual Use: This category evaluates the actual adoption and usage of ChatGPT by students. It
  examines whether students follow through with their intentions to use ChatGPT and the
  extent to which they incorporate it into their learning activities.



 Enabling Environment: This category includes factors such as social acceptance and anthropomorphism. It investigates how the acceptance and integration of ChatGPT in the educational environment can be influenced by external factors.

The TAM2 model is found to be suitable for capturing extrinsic factors related to ChatGPT acceptance, such as experience with technology. Additionally, the UTAUT model supports elements that the original TAM did not, particularly behavioral intention. Furthermore, through data analysis, a new category representing the enabling environment factor for ChatGPT acceptance was discovered.

Based on the study's findings, a model for ChatGPT acceptance was developed, combining the TAM2 and UTAUT frameworks. This model, referred to as GPT-TAM, provides an implementation approach that aligns closely with postgraduate students' perceptions of ChatGPT as a learning tool. It takes into account external factors such as adoption intention and actual usage. Educators can utilize this adapted TAM, referred to as GPT-TAM, to design instructional strategies that effectively incorporate ChatGPT into the curriculum and improve students' learning experiences. The GPT-TAM model goes beyond the static technological context in which TAM2 and UTAUT were originally developed, addressing the need for a more accurate and reliable model for Al-enabled educational tools.

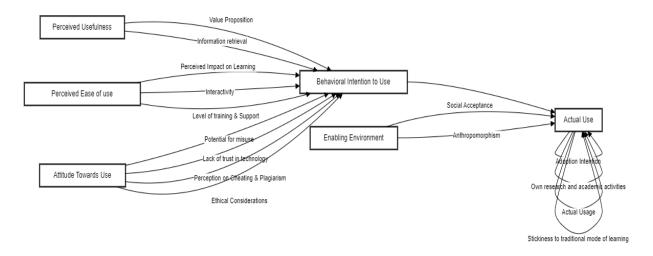


Figure 11: AI (ChatGPT) LEARN Model (Adapted from TAM 2 & UTAUT Model)

## I. THE RELATIONSHIP BETWEEN PERCEIVED USEFULNESS AND PERCEIVED EASE OF USE

The TAM model suggests that perceived usefulness and perceived ease of use are critical factors in determining an individual's intention to use a technology and their actual usage of it. The relationship between perceived usefulness and perceived ease of use is such that when a technology is easier to



use, users are more likely to perceive it as useful. This relationship is essential in understanding how postgraduate students perceive ChatGPT as a learning tool. For the purpose of our research, we define Perceived usefulness refers to the extent to which postgraduate students believe that using ChatGPT will enhance their learning experiences and provide value. It focuses on the benefits and advantages that students perceive from using AI technologies like ChatGPT in their educational context. Perceived ease of use, on the other hand, is defined as the degree to which postgraduate students perceive ChatGPT as easy to use and understand. It involves the interactivity of the AI tool.

Drawing from the study by Davis (1989), which explored the relationship between perceived usefulness, perceived ease of use, and user acceptance of information technology, it was found that perceived usefulness and perceived ease of use positively influenced user acceptance. Additionally, perceived ease of use had a direct effect on perceived usefulness. The study highlighted the significance of considering both perceived usefulness and perceived ease of use when designing and implementing new technology systems. It also revealed the positive impact of computer experience and training on perceived ease of use, which ultimately influenced perceived usefulness and user acceptance. Furthermore, Wu and Wang (2005) conducted research on user acceptance of mobile commerce and evaluated the Revised Technology Acceptance Model (TAM). Their findings supported the importance of perceived usefulness, perceived ease of use, and perceived enjoyment as significant predictors of user acceptance. They also found that subjective norms indirectly influenced user acceptance through perceived usefulness. The study revealed that user experience with mobile commerce had a moderating effect on the relationship between perceived ease of use and user acceptance.

Based on the illustrative quotes as in Table 8 as above, we observe the following insight as stated by the interviewees; **Perceived Usefulness:** The use of ChatGPT has helped students in their learning experiences by providing specific knowledge, reducing search time, and improving their overall experience as students (ED), ChatGPT is time-effective and helpful in understanding complex topics, demystifying them, and improving writing skills (WA, GA), Students perceive ChatGPT as a tool that makes their tasks easier and less reliant on professors, and it is seen as even better than traditional methods (GA, ED). **Perceived Ease of Use:** ChatGPT is considered easy to use and intuitive, but it has its limits (PSV, GA), Students appreciate the accuracy and user-friendliness of ChatGPT, which they find to be superior to other search engines like Google (PSV, AS), Students acknowledge the importance of knowing how to interact with AI systems effectively to ask the right questions (SM).

The relationship between perceived usefulness and perceived ease of use in the context of ChatGPT highlights the positive impact of AI technologies on postgraduate students' learning experiences. The



perceived usefulness of ChatGPT, such as its value proposition, information retrieval capabilities, and assistance in learning tasks, contributes to enhancing students' academic performance, knowledge acquisition, and efficiency. The perceived ease of use, including intuitive interactions and improved user-friendliness, enables students to access information quickly and effectively, facilitating their engagement with ChatGPT as a learning tool.

## II. THE RELATIONSHIP BETWEEN ATTITUDE TOWARDS USE AND BEHAVIORAL INTENTION

The relationship between Attitude Towards Use and Behavioral Intention is an important aspect to consider when exploring the impact of Artificial Intelligence technologies on the learning experiences of postgraduate students in higher education. Attitude Towards Use refers to individuals' overall feelings, beliefs, and opinions about using a particular technology, in this case, ChatGPT. Behavioral Intention refers to the individual's willingness and inclination to engage in behaviors related to using the technology. The relationship between Attitude Towards Use and Behavioral Intention, as reflected in the illustrative quotes as shown in Table 8, highlight various aspects of students' attitudes towards using ChatGPT and their perceptions of it as a learning tool, it also shed light on the impact of Al, specifically ChatGPT, on student engagement and participation.

# III. THE RELATIONSHIP BETWEEN PERCEIVED USEFULNESS, PERCEIVED EASE OF USE, ATTITUDE TOWARD USE & BEHAVIORAL INTENTION

The relationship between users' perception of a technology as useful and easy to use and their positive attitude toward it has been established in previous research (Venkatesh, V., & Bala, H., 2008). This positive attitude, in turn, increases their intention to adopt and use the technology. In the context of ou research, The relationship between perceived usefulness, perceived ease of use, attitude toward use, and behavioral intention is crucial in understanding the adoption and acceptance of ChatGPT:

Perceived usefulness refers to the belief that using ChatGPT can enhance one's learning experience and provide specific knowledge. Many students find ChatGPT helpful in various academic tasks such as assignments, troubleshooting, idea generation, and writing assistance. Students appreciate its ability to demystify complex topics, improve writing structure and content, and reduce search time. ChatGPT is seen as a valuable tool that complements traditional learning methods, providing additional resources and support.

Perceived ease of use is another important factor influencing behavioral intention. Students find ChatGPT intuitive, time-effective, and user-friendly. Its algorithmic improvements and accuracy are



often praised, and the ability to receive immediate answers and information retrieval is seen as a significant advantage compared to traditional search engines like Google. However, some users also acknowledge that they need to develop conversational skills to interact effectively with ChatGPT.

Attitude toward use reflects the overall sentiment and perception of ChatGPT as a tool. Students generally have positive attitudes, seeing it as a smart, helpful, and valuable resource. They view it as an extension of their learning process and recognize its potential to improve their academic performance. However, there are concerns about becoming overly reliant on ChatGPT and the potential negative impact on long-term understanding and information retention. Some students still prefer human-to-human interaction, highlighting the importance of personal relationships with teachers and the unique aspects of traditional teaching methods.

Behavioral intention refers to the inclination to use ChatGPT in academic activities. Students who perceive ChatGPT as useful and easy to use are more likely to have a positive behavioral intention toward its adoption. Shy students find it particularly helpful for answering questions, and many appreciate its assistance in research, writing, and knowledge gathering. However, the intention to use ChatGPT is not universal, as some students remain skeptical or have reservations about its limitations and potential misuse.

The positive attitude towards ChatGPT, resulting from perceiving it as a useful and easy-to-use tool, would contribute to postgraduate students using it as a regular learning resource. The value proposition of ChatGPT, including information retrieval and perceived impact on learning, aligns with students' needs for accessing information and enhancing their learning experiences. This positive attitude would likely lead to a higher intention to adopt and use ChatGPT for learning purposes.

When students perceive ChatGPT as a useful and easy-to-use tool, it enhances their engagement and participation in learning. The interactivity offered by ChatGPT and the level of training and support provided contribute to students' positive attitude and intention to adopt and use the technology. However, concerns regarding potential misuse, lack of trust in technology, and ethical considerations need to be addressed to ensure responsible usage and ethical engagement. The positive attitude resulting from perceiving ChatGPT as a useful and easy-to-use tool contributes to a higher level of trustworthiness in using AI technologies like ChatGPT for postgraduate education.

The relationship between perceived usefulness, perceived ease of use, attitude toward use, and behavioral intention is complex and multifaceted. Students perceive ChatGPT as a valuable and time-effective tool that enhances their learning experience. However, concerns about overreliance, information reliability, trust, and ethical considerations also shape their attitudes and intentions



toward its adoption. Striking a balance between leveraging the benefits of AI tools like ChatGPT and maintaining the unique aspects of traditional teaching methods remains a challenge.

## IV. THE RELATIONSHIP BETWEEN ACTUAL USE AND THE ENABLING ENVIRONMENT

The relationship between actual use and the enabling environment sheds light on the perceptions and dynamics surrounding the use of ChatGPT in the learning experiences of postgraduate students in higher education. The illustrative quotes provide insights into this relationship:, The quotes reveal that postgraduate students use ChatGPT for specific purposes, such as problem-solving, redaction, and technical tasks. However, they do not heavily rely on it for research or presentations, preferring traditional methods and empirical facts. Their perception of ChatGPT as a tool rather than a comprehensive learning solution aligns with their actual usage patterns. The preference for traditional teaching approaches and the recognition of the unique aspects of human interaction and idea sharing indicate that ChatGPT, as an AI tool, does not fully replace or replicate the engagement and participation experienced in actual classes. Students value the interactive nature and personal relationships with teachers, suggesting that the impact of AI on student engagement and participation is limited in comparison to traditional learning methods. The quotes also highlight social acceptance and the growing curiosity surrounding ChatGPT. This indicates potential future directions and opportunities for the integration of AI technologies in postgraduate education. However, ethical considerations, including the distinction between artificial and real intelligence, need to be addressed to ensure responsible usage and clear understanding among students.

In conclusion, the relationship between actual use and the enabling environment, considering sub themes such as actual usage, stickiness to traditional mode of learning, social acceptance, and anthropomorphism, provides valuable insights into how postgraduate students use and perceive ChatGPT as a tool for learning. It addresses the research questions by shedding light on students' actual usage patterns, their preference for traditional learning methods, the level of social acceptance, and the ethical implications of AI in postgraduate education.

# V. THE RELATIONSHIP BETWEEN BEHAVIORAL INTENTION, ENABLING ENVIRONMENT AND ACTUAL USE

The relationship between behavioral intention, enabling environment, and actual use is crucial in understanding the adoption and utilization of ChatGPT.

Behavioral intention refers to an individual's inclination or likelihood to adopt and use a particular application, such as ChatGPT. It serves as a measure of the individual's intention to engage in the



behavior. On the other hand, actual use represents the self-reported measure of the time or frequency of adopting the application, as per the Technology Acceptance Model (TAM) proposed by Davis et al. in 1989.

Attitude plays a significant role in shaping behavioral intention. It refers to an individual's evaluative effect, whether positive or negative, towards the behavior of using ChatGPT. In the context of ChatGPT use, attitude is influenced by factors such as trustworthiness. Users' trust in the tool contributes to their overall attitude towards using ChatGPT.

While measuring an individual's intention to engage in an action objectively from various perspectives is challenging, numerous studies have provided strong theoretical and empirical evidence supporting the relationship between the desire to engage in an activity and the actual behavior. Research by Dabholkar and Bagozzi (2002), Lucas and Spitler (1999), and Vijayasarathy (2004) has demonstrated the connection between behavioral intention and subsequent behavior adoption.

Enabling environment is also a critical factor that influences the relationship between behavioral intention and actual use. It refers to the external factors that facilitate or hinder the adoption and utilization of ChatGPT. Factors such as social acceptance contribute to the enabling environment. A favorable enabling environment enhances the likelihood of translating behavioral intention into actual use.



# **CHAPTER 5 - CONCLUSION**

This research enabled us to provide a comprehensive understanding of how Artificial Intelligence technologies, specifically ChatGPT, influence the learning experiences of postgraduate students in higher education. Additionally, we explored postgraduate students' perceptions of ChatGPT as a learning tool. By extending the TAM2 and UTAUT models, we assessed the impact of ChatGPT adoption on students' learning experiences and examined their perception of the tool as a regular learning resource.

To achieve our research objectives, we collected qualitative data from students to gain insights into their perceptions of ChatGPT and its effect on their learning experiences. Through our rigorous analysis, we were able to generate reliable and comprehensive results that contribute to the existing body of knowledge.

By collecting qualitative data from students, we gained a comprehensive understanding of their perceptions and experiences with ChatGPT. Our findings confirmed the applicability of the TAM2 and UTAUT models in explaining the acceptance of ChatGPT among postgraduate students. Factors such as perceived usefulness, perceived ease of use, and attitude toward ChatGPT directly influenced the actual usage of the tool. Additionally, behavioral intention and the enabling environment had a direct impact on the students' intention to use ChatGPT. These results align with previous studies, supporting the theoretical foundations established by Davis (1989), Davis et al. (1989), Taylor and Todd (1995), and Yoon (2009).

Furthermore, our analysis uncovered additional factors that influence ChatGPT acceptance among students. External factors, within the social context, included the enabling environment encompassing social acceptance and the implementation context involving perceived trustworthiness, level of training and support. Internal factors highlighted the technological context, including the value proposition, information retrieval, perceived impact on learning, and interactivity.

Interestingly, our findings revealed that while students acknowledged the benefits of AI technologies like ChatGPT, they still showed a preference for traditional modes of learning. They viewed AI as a supportive tool rather than a replacement for teachers. The human element, such as personal relationships and human insights, remained essential in the educational process. This inclination to maintain and prioritize traditional approaches to education despite the availability and use of AI technologies reflects students' values and their emphasis on the importance of human interactions.



These findings have practical implications for educators and policymakers. They highlight the importance of integrating AI technologies like ChatGPT in a way that complements and enhances traditional educational approaches, rather than replacing them. The human element and the role of teachers remain crucial in the learning process, and AI tools should be seen as supportive resources to augment the educational experience.

As AI continues to advance and shape the future of education, it is essential to further explore and understand its implications for various stakeholders. Future research should investigate the long-term effects of ChatGPT and other AI technologies on learning outcomes, student performance, and the evolving role of educators in the digital era.

## **Theoretical Implications of Research:**

This study holds significant theoretical implications for the field of Al-based technology adoption in the education sector. By proposing a comprehensive model to explore how ChatGPT affects the learning experiences of postgraduate students, this research contributes in several ways.

Firstly, this study presents a novel model that integrates the Technology Acceptance Model 2 (TAM 2) and the Unified Theory of Acceptance and Use of Technology (UTAUT) to explain students' perceptions and adoption of ChatGPT as a learning tool. The existing research on AI-based technology adoption in education is limited, with only a few studies exploring this area. By applying established theoretical frameworks to understand the adoption of ChatGPT, this research adds substantial value to the current literature on advanced education technology adoption.

Furthermore, the qualitative approach employed in this study provides in-depth information about the adoption of ChatGPT as an educational technology. This qualitative methodological contribution is noteworthy as it enhances our understanding of Al-based technology adoption in learning. Previous research predominantly focused on quantitative measures, and this work takes a crucial first step in using qualitative methods to explore the adoption of Al-based technologies in education. By doing so, it bridges a research gap and complements the existing body of literature.

Additionally, this study addresses the research gap concerning the adoption of Chatbots in education. While previous studies have examined the adoption of Chatbots, this research empirically validates the proposed adoption model specific to ChatGPT. It contributes to the literature on Chatbot adoption in education and responds to the call for further scholarly research on AI technology bots in the education sector.



# **Practical Implications of Research:**

The findings of this research have several practical implications for educational institutions, educators, and policymakers who are interested in incorporating AI-based technologies like ChatGPT into the learning environment.

Firstly, the results of this study highlight the factors that influence the acceptance and adoption of ChatGPT among postgraduate students. Understanding these factors can assist educational institutions in designing effective strategies for promoting the use of Al-based tools in the classroom. For example, by addressing students' concerns related to the perceived usefulness and ease of use of ChatGPT, educators can enhance students' willingness to adopt and utilize this technology as a learning tool.

Additionally, the study emphasizes the importance of creating an enabling environment for the successful adoption of Al-based technologies. This includes factors such as social acceptance, implementation context, level of training and support, and perceived trustworthiness. Educational institutions can leverage these insights to provide appropriate training and support to students and create a supportive social and technological context that encourages the integration of ChatGPT into the learning process.

Furthermore, the research highlights the need to balance the use of AI technologies with traditional approaches to education. Despite the availability and use of AI tools, students still value the human element in the educational process, such as personal relationships and human insights. This implies that educational institutions should consider integrating AI-based technologies as supportive tools that complement rather than replace teachers. They should promote a blended learning approach that combines the benefits of AI technologies with the strengths of traditional teaching methods.

Moreover, policymakers can utilize the findings of this research to inform the development of guidelines and policies related to the integration of Al-based technologies in education. By understanding the factors that influence students' acceptance and adoption of ChatGPT, policymakers can create frameworks that support the effective and responsible use of Al tools in the classroom. They can also allocate resources to provide the necessary training and infrastructure to facilitate the integration of Al technologies into the education system.

### **Limitations and Future Research:**



Despite the valuable insights gained from this research, there are certain limitations that should be acknowledged. These limitations provide opportunities for future studies to build upon and expand the current understanding of how ChatGPT affects the learning experiences of postgraduate students in higher education.

Firstly, it is important to acknowledge that this research focused specifically on postgraduate students in France. Therefore, the findings may not be fully representative of the diverse student populations and educational contexts found in other countries or regions. To address this limitation, future research can adopt a comparative approach by conducting experimental and longitudinal studies in different geographies. By including a more diverse range of participants, researchers can gain a more comprehensive understanding of the impact of ChatGPT on learning experiences across various cultural, institutional, and geographical contexts.

Another limitation is the reliance on qualitative data for this study. While qualitative research provides rich and in-depth insights into students' perceptions and experiences, future studies may consider incorporating quantitative measures to assess student satisfaction with ChatGPT. By using a mixed-methods approach, researchers can gather both qualitative and quantitative data, allowing for a more comprehensive analysis and triangulation of results. This can provide a more robust understanding of the factors influencing student satisfaction with ChatGPT as a learning tool.

Additionally, future studies may consider including control variables to provide a more nuanced analysis. Factors such as the type or size of the university, gender of the students, or prior experience with Al-based technologies can be included as control variables. This would enable researchers to examine the differential effects of these variables on students' perceptions and adoption of ChatGPT. By considering these contextual factors, future studies can provide more meaningful insights into the specific conditions under which ChatGPT is more likely to be accepted and used effectively.

Furthermore, given the dynamic nature of technology and its rapid advancements, future research should also consider the longitudinal effects of ChatGPT adoption on students' learning experiences. Longitudinal studies can provide insights into the long-term impact of using ChatGPT as a learning tool, allowing for a deeper understanding of its effectiveness over time.

Finally, future research can explore the potential integration of other AI-based tools and technologies within the educational context. This would enable a comparative analysis of different AI tools and their effects on learning experiences. By examining a broader range of AI technologies, researchers can identify the unique contributions and limitations of each tool and make informed recommendations for their implementation in educational settings.





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FIGURE 1.0: RELATIONSHIP BETWEEN AI, MACHINE LEARNING AND DEEP LEARNING

https://www.simplilearn.com/tutorials/artificial-intelligence-tutorial/ai-vs-machine-learning-vs-deep-learning (Accessed 11/06/2023, 14:25PM)

FIGURE 2: EDUCATION REVOLUTION (ADAPTED FROM GERSTEIN, 2014, CHEN ET AL, 2020)

FIGURE 3: ARTICLE SELECTION PROCESS FOR BIBLIOMETRIC MAPPING ANALYSIS AND SYSTEMATIC REVIEW

FIGURE 4: CCA OF EDUCATION AND INFORMATION TECHNOLOGY SHOWING THE CLUSTERS AND THE CATEGORY LABEL

FIGURE 5: CCA OF EDUCATION AND INFORMATION SYSTEMS SHOWING THE CLUSTERS AND THE CATEGORY LABEL

FIGURE 6: CCA OF EDUCATION AND ARTIFICIAL INTELLIGENCE

FIGURE 7: CCA CCA OF EDUCATION AND DIGITALISATION

FIGURE 8: WORD CLOUD: FREQUENCY-BASED VISUALIZATION OF SELECTED ABSTRACTS. LARGER FONT INDICATES HIGHER

FREQUENCY, SMALLER FONT INDICATES LOWER FREQUENCY. (GENERATED BY IRAMUTEQ SOFTWARE (2023)

FIGURE 9: DENDOGRAM OF THE CLASSES PROVIDED BY IRAMUTEO SOFTWARE.

FIGURE 10: DENDOGRAM WITH THE PERCENTAGE OF ECU IN EACH CLASS AND WORDS WITH GREATER CHI-SQUARE (X2) PROVIDED BY THE IRAMUTEQ SOFTWARE.

FIGURE 11: AI (CHATGPT) LEARN MODEL (ADAPTED FROM TAM 2 & UTAUT MODEL)

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TABLE 2: INCLUSION AND EXCLUSION CRITERIA

TABLE 3: THE MOST CITED AUTHORS BASED ON CCA

TABLE 4: ATTRIBUTION AND DEMOGRAPHIC

TABLE 5: THE 6 CLASSES OF DHC

TABLE 6: THEMES AND SUBTHEMES GENERATED FROM INTERVIEW TRANSCRIPT

TABLE 7: ILLUSTRATIVE QUOTES FROM INTERVIEWEES SUPPORTING DATA FOR EACH SUBTHEME

### ABBREVIATIONS AND ACRONYMS USED

ABBREVIATION: abbreviation expanded

ACRONYM : acronym expanded



### **G**LOSSARY

- Adaptive learning systems (ALSs): Systems that analyze student performance data using Al approaches like predictive analytics and data mining to identify patterns and modify the curriculum accordingly (Cheng et al., 2016).
- Artificial Intelligence (AI): an information processing systems that can participate in human-performed processes like learning, adaptation, synthesis, self-correction, and the use of data for complex processing tasks (Popenici et Kerr's, 2017).
- Intelligent Tutoring System (ITS): A human facilitator and guide that can be used in a range of educational contexts. (Faggella, 2019)
- TAM 2: In order to increase the adaptability of the technology acceptance model and search for the essential influencing elements outside of perceived usefulness and perceived ease of use, Venkatesh and Davis introduced in 2000 the extended technology acceptance model.
- TAM 3: is a further extension of the model that was developed by Venkatesh and Davis in 2000 in the aim of filling the gap in the literature of how managers may effectively decide on interventions that can increase the adoption and use of IT. It adds three additional constructs to TAM 2 which are behavioral intention, perceived behavioral control, and social influence. (Venkatesh and Bala, 2008)
- Technology Acceptance Model (TAM): Davis (1989) initially created the Technology Acceptance Model (TAM) to explain the behaviors of those who used information technology (IT) (Chau et al., 1999)
- Unified Theory of Acceptance of Technology Model (UTAUT): Eight technological acceptance
  models were evaluated by Venkatesh et al. (2003) & based on their findings they developed a
  model that combines and unifies these models and was given the name of UTAUT



# TABLE OF APPENDICES

# APPENDIX 1: ARTICLES BELONGING TO THE RESEARCH DATASET

Cluster	Research paper Authors	Research Title	Main Subject	Keywords	Research Question	Approach	Technology				
	Education and Information Technology										
	MISHRA, P., & KOEHLER, M. J. (2006).	Knowledge: A Framework for Teacher	Technological Pedagogical Content Knowledge framework	Knowledge, pedagogical content knowledge, teacher professional development, faculty	conceptual framework for educational technology by building on Shulman's formulation of "pedagogical content knowledge" and extending it to the phenomenon of teachers integrating	quantitative and	computers,				
Cluster 1	Hu, Li-tze; Bentler, Peter M. (1999).	Conventional criteria	the determination of adequacy of fit	covariance structure analysis, generalized least squares, multivariate	or GLS can still correctly describe and	x a simulation was used to study the robustness of normal theory statistics under different conditions					



		1	1	<u> </u>		
				nonnormally		
				distributed variables		
	Statistical Power					
	Analysis for the		Power Analyis,			
Jacob Cohen (1988)	Behavioral Sciences	х	Covariance, Regression	x	Quantitative	x
		Thematic analysis		to clarify the		
		as a useful and		similarities and		
		flexible method		differences between		
			epistemology; flexibility;			
		research in and		that share features in		
Braun, Virginia; Clarl	e, Using thematic analysis		psychology;		Qualitative (thematic)	
Victoria (2006).	in psychology.	psychology	thematic analysis	thematic approach	analysis	x
	+ · · · · · · ·			To better understand	, 	
		Technology,		the teacher thought processes and		
			Educational Technology,	l'		
	What is Technological	""	Professional	teachers' actions and		
Koehler, M. & Mish	_		Development,Teaching	their observable		Educational
P. (2009)	Knowledge (TPACK)?.	Framework	Methods, Knowledge	effects.	x	Technology
1. (2003)	Knowledge (TFACK):	Tramework	Methous, knowledge		<u>^</u>	recimology
				to investigate whether		
				the influence of		
				external constraints on		
				teachers' technology		
		The alignment		practices has changed		
		between	<u> </u>	over the past decade		
		technology	Inservice teacher	and whether these		
Peggy A. Ertmer; An		integration	Technology use	first-order barriers still		
	n; Teacher beliefs and	1.	Technology integration	pose significant		
_	technology integration		Teacher technology use	_	multiple case study	
·	at practices: A critical		· ·	technology integration		
Sendurur (2012)	relationship.	teachers	development	in education	qualitative analysis	Web 2.0 tools



				To understand how		
				teachers acquire and		
				apply subject matter		
				knowledge in the		
				process of teaching,		
	Those Who			particularly in the		
	Understand:			transition from expert		
SHULMAN, Lee. S.	Knowledge Growth in	case knowledge in	teacher, pedagogy,	student to novice		
(1986).	Teaching.	teaching	knowledge, student	teacher	Qualitative analysis	х
				To examine technology		
				integration through		
				the lens of the teacher		
				as an agent of change:		
				What are the		
				necessary		
		the impact that		characteristics, or		
	Teacher Technology	student centered		qualities, that enable		
	Change: How	instructional	teacher change, teacher	teachers to leverage		
Ertmer, Peggy A.;	Knowledge,	approaches and	knowledge, teacher	technology resources		
Ottenbreit-Leftwich,	Confidence, Beliefs,	strategies have on	beliefs, technology	as meaningful		Pedacological tools,
Anne T. (2010).	and Culture Intersect	learning	integration	pedagogical tools?	х	ICT tools
				to examine the current		
				barriers related to the		
				integration of		
				technology into the		
				curriculum that are		
				currently faced by		
	Integrating technology			K-12 schools both in		
	into K-12 teaching and		Technology integration,	the United States and		
	learning: current	integrating	teachers, Barriers,	in other countries, and		
	knowledge gaps and	technology into	Strategies, K-12,	to identify strategies		
Khe Foon Hew;	recommendations for	K-12 teaching and	Curriculum, Future	to overcome those	Constant comparative	Educational
Thomas Brush (2007).	future research.,	learning	research	barriers	method	Technology



De L. S. Vygotsky,	Mind in Society: Development of Higher Psychological Processes					
	User acceptance of information systems: the technology acceptance model (TAM).		systems, system design,		Quantitative (field study of 112 users regarding 2 end user systems)	TAM
Paul Legris; John Ingham; Pierre	Why do people use information technology? A critical review of the technology acceptance model.,	usefulness in predicting success of Information	technology; Ease of use; Usefulness; IS use; Change management;	research methods	Qualitative - Article review	ıs
Venkatesh, Viswanath	Determinants of Perceived Ease of Use: Integrating Control, Intrinsic Motivation, and Emotion into the Technology Acceptance Model. I				Quantitative (Partial Least Squares)	x
	The theory of planned behavior. ,	theory of planned behavior	l '	What is the cognitive self regulation in the context of a dispositional approach to the prediction of behavior	Theoretical exposition, critical analysis	×



	Todd, Test of Competing	and 2 variations of the Theory of	Information technology usage, theory of planned behaviour, TAM,	understand usage of information		
Peter A. (1995)  Viswanath Ver Hillol Bala (200)	Technology Acceptance Model 3 and a nkatesh; Research Agenda or	interventions for	Innovation  technology Acceptance Model perceived ease of use, computer self efficacy, perceptions of external control,	effective interventions	Quantitative (surveys)	
	aul R. Computers in the	the motivation to use computers in the workplace		computers at work more because they are	Qualitative Analysis Shneiderman's task analysis and Olson's representational schemes to identify the appropriate functionality of a new computer system and to determine the tasks for which new computer applications are being developed	, -
Venkatesh, Vis (2000).	Determinants or Perceived Ease of Use Integrating Control Intrinsic Motivation and Emotion into the wanath Technology Acceptance Model.	the determinants	internal control, external control, intrinsic motivation, emotion		Quantitative (Partial Least Squares)	x



William H. Delone & Ephraim R. McLean	The DeLone and McLean Model of Information Systems Success: A Ten-Year Update	The DeLone and McLean Model of Information Systems Success	model, task productivity, task innovation,	to synthesize previous research involving IS success into a more coherent body of knowledge and to provide guidance to future researchers.	Quantitative (surveys)	
	· ·	understanding information systems continuance	IS use, continuance, acceptance, user satisfaction, confirmation, expectation-confirmation theory, technology acceptance mode	To understand information systems continuance	Quantitative (Structural equation modelling)	
	Success: The Quest for	variables that affect information systems success,	Management Processes,	to identify the independent variables that affect IS success	Quantitative	
		Past studies used information technology adoption theories such as Technology Acceptance Model		to examine an integrated model of TAM and D&M to explore the effects of quality features, perceived ease of use,		
Mohammadi, Hossein	perspectives on	(TAM), Innovation Diffusion Theory (IDT) and the	Quality Satisfaction	perceived usefulness on users' intentions and satisfaction, alongside the	Quantitative	



1			<u> </u>	1		
		Use of Technology		usability towards use		
		(UTAUT) and the		of e-learning in Iran		
		DeLone &				
		McLean's model				
		to				
		explore e-learning				
		users' behavioral				
		patterns				
		unified model				
		integrating the		To gain a better		
		technology		understanding of user		
		acceptance model		behaviors in		
		(TAM), task fit		MOOCs.		
		technology (TTF)		to investigate		
	Continuance intention	· ·		continuance intention		
			MOOCs	to use MOOCs		
		social motivation		does individual		
	technology acceptance	_	TTF	technology fit has a		
	model (TAM) and task		MOOCs features	positive effect on the		
-	technology fit (TTF)	intention to use	Social motivations	perceived usefulness	Quantitative	
Xiaohui (2016).	model.	MOOCs	Continuance intention	of MOOCs	(questionnaire)	
				to identify critical		
				factors ensuring a		
	What drives a			successful e-Learning		
	successful e-Learning?			design and operation		
	An empirical		e learning, e-learning			
Pei-Chen Sun; Ray J.	•	critical factors		viewpoint and present		
Tsai; Glenn Finger;	-	influencing	_	guidelines for		
=	influencing learner	_		e-Learning		
-	satisfaction.,	satisfaction	satisfaction.	management.	Quantitative	
Dale L. Goodhue and	Task-Technology Fit	how aspects of				
Ronald L. Thompson		technology lead to	task technology fit,	does task technology	Quantitative	
· ·	Performance.		information systems, user	l		
<u>'</u>			<u>'</u>	l	· · · · · · · · · · · · · · · · · · ·	



	<u> </u>		r		<del> </del>	
		about the system,	attitudes, beliefs,	individual		
		which then leads	performance	performance		
		to increased				
		utilization				
				the importance of		
				online learning and		
				Strengths,		
				Weaknesses,		
				Opportunities, &		
				Challenges (SWOC)		
				analysis of e-learning		
				modes in the time of		
				crisis. the growth of		
				EdTech Start-ups		
				during the time of		
		to understand the		pandemic and natural		
		importance of		disasters and includes		
		online learning in		suggestions for		
		the period of a		academic institutions		
		·	online learning, covid-19,			
Dhawan, Shivangi	Panacea in the Time of		_ ·	challenges associated		
(2020).	COVID-19 Crisis.	the Covid-19	analysis.	with online learning.	Qualitative	
	20 112 13 011313.		unarysis.		Quantative	
Cidral, Wilmar Audye;				to achieve a better		
Oliveira, Tiago; Di			_	understanding of		
Felice, Massimo;	E-learning success		success, online learning,	satisfaction, use, and		
Aparicio, Manuela	determinants: Brazilian	e learning success	satisfaction, use,	success of e-learning	Quantitative	
(2017).	empirical study.	determinants	individual performance.	in the Brazilian context	(Questionnaire)	
		to test 2	Adult learning;			
			J	to examine the impact		
			communication; Distance	•		
	The influence of			characteristics and		
Keenan A. Pituch;		· ·	telelearning; E-learning;			
	on e-learning use.		Webbased learning	base on important	Quantitative	
180-kuei Lee (2006).	on e-learning use.	icarrillig systerii	Webbaseu leal lillig	base on important	Quantitative	



					determinants of e-learning use. ttest two alternative models that seek to explain student use of an e-learning system,		
	Claes Fornell and David F. Larcker (1981).			chisquare, simulation analyis, structural equation modeling			
				variance, response style			
	Podsakoff, Philip M.; MacKenzie, Scott B.; Podsakoff, Nathan P.	in Social Science Research and Recommendations on	which method bias is a problem in behavioral	technique, instrumental variable technique, unmeasured latent	covariation between measures of different	Quantitative	

# Cluster 4



			Structural equation			
			modeling (SEM) . Partial			
			least			
			squares (PLS) . Results			
			evaluation .			
			Measurement model			
			assessment .Discriminant			
			validity .Fornell-Larcker			
		a new criterion for		new criterion for		
	A new criterion for	_	-	assessing discriminant		
	assessing discriminant			validity can improve		
	•	validity in variance		the accuracy of		
Henseler, Jörg; Ringle,			Heterotrait-monotrait	variance based		
Christian M.; Sarstedt,	structural equation	equation	` '	structural equation		
Marko (2015).	modeling.	modeling	correlation	modeling	Quantitative	
				to examine whether		
				PLS SEM path		
				modeling is a "silver		
				bullet" for estimating		
				causal models		
				to review PLS-SEM and		
				its algorithm, and to		
				provide an		
				overview of when it		
				can be most		
				appropriately applied,		
Hair, Joe F.; Ringle,	DIC CENA		CENA D VIII C	indicating its potential		
	PLS-SEM: Indeed a		SEM, Partial least Square			
Marko (2011).	Silver Bullet.	PLS SEM	(PLS)	future research	Quantitative	
		structural				
Anderson, James C.;	Structural equation	equation		how to best use		
	modeling in practice: A	·		structural equation		
	- '	focus on theory	SEM, fit assesment	· ·	Quantitative	
		· · · · · · · · · · · · · · · · · · ·		ı - ·		



		recommended	testing and				
		two-step approach	development				
	Richard P. Bagozzi; Youjae Yi (1988).	On the evaluation of structural equation models.	the evaluation of structural equation models	Evaluation model fit, overall modelfit, model assesment	to discuss criteria for evaluating structural equation models.	Quantitative	
	Henseler, Jörg; Ringle, Christian M.; Sinkovics,		Applications of PLS Path Modeling	PLS, pls path modeling, marketing,	to reveal the strengths and weaknesses of PLS path modeling and to deliver guidelines for its use in international marketing	Quantitative	
	l '	· ·	the research is Partial Least Squares Structural Equation Modeling (PLS SEM)	PLS, SEM			
	Michael G. Morris, Gordon B. Davis and		Theory of Acceptance and	l ' '			
Cluster 5	Viswanath Venkatesh,	and Use of Information	use of technology in a consumer	acceptance and use of	consumer use context	Quantitative (survey)	Internet Technology



	Acceptance and Use of		mobile Internet,	whether UTAUT2 is a	
	Technology		consumer, technology ad	powerful framework	
				for understanding	
				consumer use of	
				technologies	
				to investigate the	
				determinants, as well	
				as the age and gender	
				differences, in the	
	Investigating the			acceptance of	
Yi-Shun Wang;	determinants and age			m-learning based on	
_	and gender differences	the determinants		the unified theory of	
	in the acceptance of		I ITΔIIT Learning	acceptance and use of	
(2009).	· '	acceptance	perceived use	technology (UTAUT)	
(2003).	mobile learning.	acceptance	perceived use	teciniology (OTAOT)	
	University students'				
	behavioral intention to	University		to verify the use of	
Sung Youl Park;	use mobile learning:	students'		TAM to explain and	
_	_	behavioral		predict students'	
	technology acceptance			acceptance of mobile	
(2012).			E-learning, TAM	learning in university	
(2012).	model.	Thoblic learning	L icurring, i/ (ivi	learning in aniversity	
			Technology Acceptance	to understand the	
Mezhuyev, Vitaliy;	Model in M-learning	learning	Model; Mobile Learning;	research trend of TAM	
Kamaludin, Adzhar	context: A systematic	acceptance	Systematic Literature	with reference to	
(2018).	review.	among students	Review	M-learning studies	
				to ovamino whathar	
				to examine whether	
	[ <u>.</u>			college students'	
	An investigation of			attitudes, subjective	
	mobile learning			norms, and perceived	
	readiness in higher		Mobile learning	behavioral controls	
Jongpil Cheon; Sangno	education based on the	how and why	m-learning	towards m learning	
Lee; Steven M. Crooks;	theory of planned	college students	Higher education	predict their intention	
Jaeki Song (2012).	behavior.	adopt m learning	m-learning adoption	to adopt m learning	



	J. Y., & Xu, X. (2016)	_			"What are students'		
	Gikas, Joanne; Grant, Michael M. (2013).	perspectives on	learning are affected by the integration of	education	experiences when mobile computing devices are integrated into higher education courses?"		
			Education a	nd Information Systems			
	William H. Delone & Ephraim R. McLean	The DeLone and McLean Model of Information Systems Success: A Ten-Year Update	The DeLone and McLean Model of Information Systems Success	model, task productivity, task innovation,	to synthesize previous research involving IS success into a more coherent body of knowledge and to provide guidance to future researchers.	Quantitative (surveys)	
		Success: The Quest for	variables that affect information systems success,	Management Processes,	to identify the independent variables that affect IS success	Quantitative	
Cluster 1	Anol Bhattacherjee (2001).	·	understanding information systems continuance		To understand information systems continuance	Quantitative (Structural equation modelling)	



		1	Τ	Ι		
	Expectation-Confirmat					
	on Model.					
				to examine an		
				integrated model of		
				TAM and D&M to		
				explore the effects of		
				quality features,		
				perceived ease of use,		
				perceived usefulness		
				on users' intentions		
	Investigating users	' e learning		and satisfaction,		
	perspectives or	satisfaction and		alongside the		
	• • • • • • • • • • • • • • • • • • •		IS success model, quality	•		
	ossein integration of TAM and	actual use of e	features, perceived ease			
(2015).	IS success model.	learning	of use, user satisfaction	of e-learning in Iran	Quantitative	
		structural				
	Structural equation	equation				
	modeling in practice: A	modeling, with a				
Anderson, Jam	es C.; review and	focus on theory		how to best use		
Gerbing, David	W. recommended	testing and		structural equation		
(1988).	two-step approach	development	SEM, fit assesment	modeling in practice	Quantitative	
				to examine whether		
				the Unified Theory of		
				Acceptance and Use of		
			Theory of planned	Technology (UTAUT)		
			behavior, innovation	can provide a useful		
		The Unified	characteristics,	tool for managers		
Viswanath Venl	atesh, User Acceptance o	f Theory of	technology acceptance	needing to assess the		
Michael G. M	Information	Acceptance and	model, social cognitive	likelihood of success		
Gordon B. Dav	s and Technology: Toward	Use of Technology	theory, unified model,	for new technology		
Fred D. Davis (20	03). Unified View.	(UTAUT)	integrated model	introductions		



				i		
		the development				
		and validation of				
		new scales for 2				
		specific variables,				
		perceived				
		usefulness and		to examine whether		
		perceived ease of		perceived usefulness		
	Perceived Usefulness,	l ·		and perceived ease of		
	Perceived Ease of Use,	· ·	User acceptance, end			
	and User Acceptance		· ·	predictors of user		
		determinants of		acceptance of		
Fred D. Davis (1989).	Technology.	user acceptance	measurement	computers		
		aser acceptance	measurement	Computers		
	Evaluating Structural					
	Equation Models with					
	Unobservable Variables		chisquare, simulation			
Claes Fornell and	and Measurement		analyis, structural			
David F. Larcker (1981).	Error.		equation modeling			
		the development				
		and validation of				
		new scales for 2				
		specific variables,				
		perceived				
		usefulness and		to examine whether		
		perceived ease of		perceived usefulness		
		use, which are		and perceived ease of		
	User Acceptance of	· ·		use are valid		
	Computer Technology:		Information technology.	predictors of user		
	A Comparison of Two			l ·		
Paul R. (1989).	Theoretical Models.	user acceptance	intention models	computers		
1 ddi 11. (1303).	Theoretical Wiodels.	aser acceptance	mendon models	•		
				What is the cognitive		
			· ·	self regulation in the		
	The theory of planned	theory of planned	Behavior, behavior,	context of a	Theoretical exposition,	
Icek Ajzen (1991).	behavior. ,	behavior	attitude, norm	dispositional approach	critical analysis	х



to the prediction of	
behavior	
Technology acceptance	
Developing a General model to develop a General	
Extended Technology General Extended Perceived ease of use Extended Technology	
E-Learning (GETAMEL) Acceptance Model External factor E Learning by	
Abdullah, Fazil; Ward, by analysing commonly for E-Learning E-Learning analysing commonly Quantitative meta	
Rupert (2016). used external factors. (GETAMEL) Learning technology used external factors analysis	
To propose an	
integrated theoretical	
framework of	
university students'	
e-learning acceptance	
and intention	
To use technology	
acceptance model	
(TAM) to analyze the	
relationship of	
university students'	
intention to use	
e-learning with	
Structural selected constructs	
equation such as their attitude,	
An Analysis of the modeling (SEM) perceived usefulness,	
Technology Acceptance technique perceived ease of use,	
Model in employed with self-efficacy of	
Understanding the e-Learning, Technology e-learning, subjective	
TUniversity Students' LLISREL program to Lacceptance model. I norm and system I	
University Students' LISREL program to acceptance model, norm and system  Behavioral Intention to explain the Structural equation accessibility.	



					To develop a general linear structural model of e-learning acceptance of university students that would provide a school manager or an educator with implications for better implementing e-learning	
		acceptance of collaborative technologies: An	explain the adoption behaviors of	based learning, collaborative	to explain the adoption behaviors of collaborative technologies for project information sharing	web 2.0
	The Impact of Knowledge Sharing on Information Systems: A Review					
Cluster 4		A new criterion for assessing discriminant validity in variance-based	discriminant validity in variance based structural	modeling (SEM) . Partial least squares (PLS) . Results evaluation .	assessing discriminant validity can improve the accuracy of variance based structural equation	



			Multitrait-multimethod			
			(MTMM) matrix.			
			Heterotrait-monotrait			
			(HTMT) ratio of			
			correlation			
			Correlation			
				to examine the extent		
				to which method		
				biases influence		
				behavioral research		
				results, identify		
				potential sources of		
				method biases, discuss		
				the cognitive		
				processes through		
				which method biases		
				influence responses to		
	Common mothed			· ·		
	Common method			measures, evaluate		
Podsakoff, Philip M.;				the many different		
MacKenzie, Scott B.;				procedural and		
-	review of the literature			statistical techniques		
Podsakoff, Nathan P.			Method bias, method			
(2003).	remedies		variance	control method biases		
				to examine whether		
				PLS SEM path		
				modeling is a "silver		
				bullet" for estimating		
				causal models		
				to review PLS-SEM and		
				its algorithm, and to		
				provide an		
Hair, Joe F.; Ringle,				overview of when it		
	PLS-SEM: Indeed a		SEM, Partial least Square			
Marko (2011).	Silver Bullet.	PLS SEM	(PLS)	appropriately applied,	Quantitative	



					indicating its potential and limitations for future research		
					To explain the procedures and metrics that are applied by editors and journal review boards in assessing the reporting quality of PLS-SEM findings		
		When to use and how to report the results of PLS-SEM.		comparisons, partial least squares, PLSpredict,	SEM manuscript and reviews some recently		
	Viswanath Venkatesh,		use of technology	acceptance and use of technology (UTAUT), UTAUT2, habit, hedonic motivation, price value,	for understanding consumer use of	Quantitative (survey)	Internet Technology
Cluster 5		Factors affecting the adoption of e-learning systems in Qatar and USA: Extending the Unified Theory of	motivation and how it affects the		factors influencing the adoption of technology by	Quantitative (survey)	



	1			1		
	Acceptance and Use of			developing countries		
	Technology 2			differ from those in		
	(UTAUT2).			developed		
				countries		
				To extend the UTAUT2		
				framework by		
				1		
				" "		
				learning value concept		
				in the LMS context.		
				To explore the		
				influence of		
				performance		
				expectancy (PE), effort		
				expectancy (EE), social		
				influence (SI),		
		the relationship		facilitating conditions		
		between		(FC), learning		
		behavioral		value (LV), hedonic		
	The influence of	intention to use		motivation (HM), and		
	learning value on	and actual use of	UTAUT2, learning value,	habit (HB) on		
	learning management	a learning	learning management	students' intention		
Ain, N.; Kaur, K.;	system use: An	management	system, e-learning,	towards LMS and its		
Waheed, M. (2015).	extension of UTAUT2.	system	Malaysia	use.	Quantitative	
Dwivedi, Yogesh K.;	Re-examining the					
Rana, Nripendra P.;	Unified Theory of		UTAUT, Meta-analysis,			
Jeyaraj, Anand;	Acceptance and Use of		Structural equation	to critically review and		
Clement, Marc;	Technology (UTAUT):		modelling, MASEM,	refine		
Williams, Michael D.	Towards a Revised		Behavioural intention,	the original UTAUT		
(2017).	Theoretical Model.		Attitude, Usage		Meta analysis	
		Education a	nd Artificial Intelligence			



	Backpropagation Applied to Handwritten Zip Code Recognition	learning net Backpropagation, Handwritten, Zip Recognition	vorks code,	Convolutional Neural Network (CNN), which is designed to process images and other structured data.  MNIST(Modified National Institute of Standards and Technology database).	
L.A. Zadeh (1965).	Fuzzy sets	Fuzzy logic, Fuzzy membership fun Fuzzy operations, reasoning, complem set	ction, Fuzzy	Fuzzy systems	
LeCun, Yann; Bengio, Yoshua; Hinton, Geoffrey (2015).	Deep learning.	Convolutional r networks, super learning,	ning, eural	Graphics processing units (GPUs) and tensor processing units (TPUs).	
Zdzisław Pawlak (1982).	Rough sets.	Artificial intellig	rning, ition, lough uting,	MATLAB, R, Python, or Java.	



1	Support-Vector Networks.	Support vector machines, Machine learning, Classification, Regression, Kernel functions, Margin-based methods, Optimization, Statistical learning theory, Black box models, Imbalanced datasets, data processing, data analysis.	MATLAB, R, Python, and Java.Tech used	
	Scikit-learn: Machine learning in Python	Machine learning,Python,Scikit-lea rn, Algorithms, Supervised learning, Unsupervised learning, Model selection, Preprocessing, Feature selection, Cross-validation, Grid search, Ensemble methods, Clustering, Dimensionality reduction, Visualization, Scalability, Interpretability, Imbalanced datasets, Deep learning	Python	
Matthew D. Zeiler and Rob Fergus	Visualizing and Understanding Convolutional Networks	Convolutional neural networks, Deep learning, Image classification, Feature visualization, ImageNet, AlexNet, Network architecture, Feature maps, Filters,	Deep learning: AlexNet CNN	



		Backpropagation, Receptive fields, Object recognition, Transfer learning, Fine-tuning, Performance evaluation		
lan Goodfellow (2016)	Generative Adversarial Networks	Generative Adversarial Networks (GANs), Deep learning, Machine learning, Artificial intelligence, Image generation, Unsupervised learning, Convolutional neural networks (CNNs), Discriminator network, Generator network, Wasserstein GANs, Spectral normalization.	Convolutional n	
Janez Demsar (2006)	Statistical Comparisons of Classifiers over Multiple Data Sets	Model selection,Bias-variance tradeoff, Cross-validation, Overfitting, Classification, Machine learning,Performance evaluation, Statistical testing, Multiple datasets	Machine learning, py R, MATLAB	thon,
Ribeiro, Marco Tulio; Singh, Sameer; Guestrin, Carlos (2016).	Why Should I Trust You?	Explainable artificial intelligence, Interpretable models, Local explanations, Model-agnostic methods, Machine learning interpretability,	No specific techn used how model-agnostic me was proposed researchers	ever,



		Counterfactual		
		explanations,		
		Trustworthy AI, Black		
		box models, Feature		
		importance, Local		
		surrogate models.		



### **APPENDIX 2: INTERVIEW GUIDE**

Hello, I am Mayowa Olaleye, a student from Grenoble Alpes University, studying Advanced Research in the Management of Information Systems. For my Master's final thesis, I am researching the impact of artificial intelligence on postgraduate education from a student's perspective. My objective is to understand the impact of AI on traditional teaching and learning methods, the impact of AI on the learning practices of postgraduate students, and their perceptions of AI as a learning tool. I would like to request your participation in an interview for this study. The interview will be based on a set of open questions and will take around 40-60 minutes.

Before proceeding, I would like to clarify the ethical guidelines of this research project:

- 1. Participation in this project is voluntary, and you can withdraw at any time without providing a reason. In such a case, any data collected from you will be deleted and destroyed.
- 2. Your participation will remain anonymous, and any data reported will be de-identified to ensure your privacy.
- 3. Your data will be coded, and the code key will only be accessible to the researchers. This coding system is necessary for supplementary information and to ensure that the correct material is destroyed if you choose to withdraw from the study.
- 4. Data collected in this project may be shared in conferences or seminars. You will have the opportunity to review and approve any material before it is published.

If you require further information about this project, you can contact my supervisor, Prof. Carine Dominguez at University Grenoble Alpes via email at <a href="mailto:carine.dominguez-pery@univ-grenoble-alpes.fr">carine.dominguez-pery@univ-grenoble-alpes.fr</a> If you agree to participate in this study, please sign below. Your participation implies your consent to being recorded and analyzed.

I have read and understood the guidelines for this research project and hereby agree to participate in the study

City:

Date:

Signature:

Printed Name:

Contact Details: (Voluntary)

### Overview:

This interview aims to explore the impact of Artificial Intelligence (AI) on postgraduate education from a student's perspective. the impact of artificial intelligence on postgraduate education from a student's perspective. My objective is to understand the impact of AI on traditional teaching and learning methods, the impact of AI on the learning practices of postgraduate students, and their perceptions of AI as a learning tool. The purpose is to gain student insights into the impact of AI-based tools on (i) traditional teaching and learning methods, (ii) the learning practices of



postgraduate students, including engagement, participation and assessments (ii) student perceptions of AI as a tool for learning (iv) ethical implications of using AI-based tools and systems in postgraduate education.

# **Research Questions:**

- What is the impact of Artificial Intelligence on academic experiences (teaching/learning) of students in postgraduate education ? (Main RQ)
  - What AI tools are postgraduate students using/being exposed to by teachers and how are these being used?
- How do postgraduate students perceive AI as a tool for teaching/learning
- What is the impact of AI on student engagement and participation compared to traditional teaching and learning methods?
- What is the impact of AI on the quality and effectiveness of student assessments compared to traditional methods?
  - ♦ How can AI be leveraged to enhance the university learning experience?
  - What are the future directions and opportunities and ethical implications for the use of AI in postgraduate education

### Type of study that will be carried out:

A Qualitative Study (40 -60mins in-depth interviews) with Postgraduate students in diverse programs: (Biomedical science, Finance, Project Management Corporate Management, Engineering, Information Systems, Sociology etc.)

# Themes and Topics:

The use of AI-based tools and systems in postgraduate education
The impact of AI on traditional teaching and learning methods
The learning practices of postgraduate students and how AI affects them
Perceptions of postgraduate students towards AI as a tool for learning
The effect of AI on the level of student engagement and participation

### **Interview Questions:**

Questions	Objectives
Segment 1: Introduction: General details about students, how they learn and their current academic experiences	
Could you please tell me about yourself: Masters level, your field of study, courses you have taken	To build a relationship with the participant and learn about their academic background and area of expertise.
Could you please tell me more about your course of study and your school/institution	



a.	Can you describe a typical day in your	
	life as a postgraduate/masters student?	

To gain an understanding of the participant's current educational experience and identify any challenges or opportunities they face.

b. Can you tell me about your current teaching and learning experiences at university? how are you taught e.g. lectures/seminars/labs etc... and how do you find them ? How do you learn? (from class, from reading after class, from talking to students etc. How effective/interesting do you find them (e.g. boring, interesting)

To understand the how participants view existing teaching and learning practices in their field of study

Are there any challenges that you currently face as a student?

## Segment 2: AI-Based Tools and Systems in Postgraduate Education:

Have you ever used any Al-based tools and			
systems in your university education? If so, can			
you tell me what they were and how you used			
them?			

To learn more about the participant's experiences with AI in education and to pinpoint any perceived benefits or drawbacks.

IF you haven't used any – why not?

Did you use any of the tools you mentioned as an undergraduate? Can you tell me how you used them compared to now as a postgraduate To assess any developments or changes in the participant's experience with AI in education over time.

Were there any specific Al-based tools more useful than others for your studies, and why?

To identify specific AI-based tools that have been useful to the participant and understand their reasoning.

Have you ever used Chatgpt? What did you think about it?

To understand participant perception of chatgpt

Do you think you could use ChatGPT in your current postgraduate programme?
Can you tell me how you might use it for your studies and why?

To understand how the participant uses chatgpt in their daily study routine

#### Segment 3: Traditional teaching and Learning Methods vs AI

Have you seen any differences between your undergraduate and graduate learning/study methods? Can you tell me what these are?

To assess the participant's perception of the impact of AI on their learning methods and identify any advantages or disadvantages.



When compared to traditional approaches, how has/ will student learning be affected by Al-based tools	To gain insight into the participant's experience of using AI-based tools compared to traditional teaching and learning methods.		
Have you found/Do you think that traditional teaching and learning approaches are more effective than AI-based methods? Can you give me some examples?	To identify any strengths and weaknesses of traditional teaching and learning methods compared to AI-based methods.		
Segment 4: Perceptions of Postgraduate Students towards AI			
How do you feel about AI to help you learn in your studies? Do you think this could be considered cheating? Why do you say this?			
How do you feel about AI in teaching? Do you see them replacing teachers? Why do you say that?			
What potential changes do you see coming in your field of study's current teaching and learning practices as a result of AI-based tools	To gain insight into the participant's perception of the future impact of AI on the traditional teaching and learning methods in their field of study.		
What would make you use AI as a regular learning tool?			
Thinking specifically about ChatGPT - how do you feel this tool will impact your ability to learn and retain information?	To assess the participant's perception of the impact of chatgpt on their learning and memory retention.		
[If they have experience of Chat GPT) Have you noticed any differences in your academic performance since incorporating chatgpt into your studies?	To assess the participant's perception of the impact of chatgpt on their academic performance.		
How did you find out about ChatGPT? Did you recommend it to your fellow students? Did your fellow students recommend it to you?			
Segment 5: Level of student Engagement & Participation			
In what ways have you adjusted your study habits to make the most of Al-based tools? Please state the tool	To understand how the participant has adapted their study habits to incorporate AI-based tools effectively.		
How has the integration of this tool impacted your level of engagement and participation in coursework?	To explore the impact on engagement and participation		



Do you think Al based tools encourage or discourage student engagement and participation?

To assess how AI is perceived to affect participation and engagement

How have your interactions with teachers and classmates changed since incorporating this tool into your studies?

To understand how AI-based tools and systems may have impacted the participant's social and academic interactions.

### Segment 6: Trust in the use of AI and Ethical Implications

Do you think AI technology in general is trustworthy, ethical and fair? Why do you say that?

Do you think using AI in postgraduate education as a tool for student teaching and learning is trustworthy? Why do you say that?

What measures do you think need to be put in place to make sure that using AI for teaching and learning is trustworthy?

Do you think using AI postgraduate education as a tool for student teaching and learning is ethical? Why do you say that?

What measures do you think need to be put in place to make sure that using AI for teaching and learning is ethical?

Do you think using AI as a tool for student postgraduate teaching and learning is fair? Why do you say that?

What measures do you think need to be put in place to make sure that using AI for teaching and learning is fair?

To gain insight into the participant's perspective on the measures that can be taken to build and maintain trust between students and instructors when using AI-based tools and systems in postgraduate education.

To understand the participant's opinions regarding the actions that postgraduate schools should take to ensure that the use of AI-based tools and systems is morally just and equitable for all students.



#### **APPENDIX 3: INTERVIEW TRANSCRIPT**

OKAY, I AM AN ENGINEER, I GRADUATED LAST YEAR FROM MECHANICAL ENGINEERING IN GRENOBLE. AND RIGHT NOW I'M DOING A MASTER'S DEGREE IN BUSINESS ADMINISTRATION AT IAE, GRENOBLE AND I'M COMING TO THE END LIKE I'M FINISHING NEXT WEEK.

YEAH, WELL, OBVIOUSLY, IT'S VERY DIFFERENT. THE TOPICS WE ARE STUDYING ARE VERY DIFFERENT. AND EVEN THE WAY WE HAVE TO STUDY IS DIFFERENT. LIKE, I'M USED TO VERY SCIENTIFIC METHODS, AND A LOT OF NUMBERS, LOTS OF FIGURES EVERYWHERE CALCULATIONS, WHICH OFFER ME A WAY OF LEARNING BY UNDERSTANDING. WHILE HERE, WHAT I'M DOING AT IAE IS MORE ABOUT THEORETICAL CONCEPTS OF MANAGEMENT AND BUSINESS ADMINISTRATION, AND I HAVE TO LEARN SOME STUFF BY HEART, WHICH I HAD TO DO BEFORE BUT NOT TO THIS EXTENT. AND YEAH, CHALLENGES LIKE BECAUSE I DON'T HAVE MANAGEMENT'S BACKGROUND, OBVIOUSLY, SOME SOME CONCEPTS OR KIND OF HARD TO LEARN TO COMPREHEND ALSO. BUT OTHERWISE, IT'S GOING PRETTY GOOD. I THINK IT'S A GOOD COMPLEMENTARY TRAINING TO MY ENGINEERING AND SCIENTIFIC BACKGROUND.

Now, actually, specifically the opposite before I was having a lot, a lot more lectures. And right now, what I'm doing is more about workshops, that we always do have a lot of a lot of lectures, still. But there's also a part of workshops, and just hands-on management training, because we see that there is some stuff you only learn by doing. While before I had many lectures, also practical, practical stuff in engineering, mechanical engineering, I have lots of training on the machines. But on the very, I would say the theoretical knowledge was 100% lecture, while now the theoretical knowledge, also transmitted through workshops, and hands-on training.

When I wake up, I go to school around 9:30, I try to be a little bit ahead every day, then we'll have one period of class in the morning, then lunch break and one period of class in the evening. And then I don't know, I spent one or two hours working on what I have to do if I have to work and then going out with friends. Typical life.

So mainly motivation, motivation to study and to work on the things that I have to work on. It is pretty, pretty easy right now, because the workload that I have right now is nothing compared to what I had before. So I honestly feel like it's kind of a holiday. But it's actually kind of tricky, because this makes me not want to work anymore. Then the cycle is feeding itself.

SO DURING MY STUDIES, I MAINLY USE THE WOLFRAM ALPHA, WHICH IS AN AI TOOL TO COMPUTE MATHEMATICAL EQUATIONS THAT I HAVE USED SINCE MY BACHELOR, SO IT'S BEEN LIKE THAT SINCE 2019. AND RIGHT NOW, YEAH, I'M USING CHATGPT SOMETIMES FOR SOME ASSIGNMENTS. THESE ARE THE TWO MAIN TOOLS THAT I'M USING. SO WOLFRAM ALPHA IS VERY GOOD FOR MATHEMATICAL EQUATIONS WHEN I HAVE A PROBLEM. AND THEN I WASN'T ABLE TO SOLVE IT BY MY\$SELF, OR DIDN'T HAVE THE TIME BECAUSE I HAVE TOO MUCH WORK. WE TRY TO USE THAT PROBLEM WITH THE FIRST OR THE FIRST AI FOR MATHS, THAT YOU'RE GONNA HAVE TO CHECK BEHIND IT. BECAUSE IT MAKES SOME MISTAKES, SOMETIMES IT WILL FALL FOR THE MAJORITY. YEAH, IT WAS A WAY TO KIND OF CHEAT, I WOULD SAY, LIKE NOT DOING THINGS BY MYSELF, BUT MAYBE AI DOING IT OR, LIKE IF IT WAS TOO, TOO COMPLICATED, MAYBE GIVE ME AN IDEA OF WHAT COULD BE THE START OF THE SOLVING OF THE EQUATION OR THE CALCULATION OR STUFF LIKE THAT. MAINLY TO GIVE ME A SOURCE. AND RIGHT NOW FOR GPT. It'S MAINLY THE SAME, SO I DON'T USE IT AS A BROWSER, I WILL SAY, OKAY, SO YEAH, ONE MORE THING THAT I'M USING BROWSERS, LIKE GOOGLE WILL IS ALSO AI BASED. BUT FOR CHATGPT. I DON'T USE IT AS A WAY TO SEARCH FOR INFORMATION BUT MORE OF A WAY TO REDACT. SO WHEN I HAVE A LOT OF THINGS, LIKE I JUST DROP MY IDEAS, AND I SAY, TO CHATGPT, WRITE ME A TEXT, AND IT GIVES ME A FIRST DRAFT. SO IT'S REALLY QUICKER TO START. IT SAYS STUFF LIKE THAT.

It's a powerful tool. But then, obviously, at some point, you can kind of see it's not handmade, and it's like AI based, because, well, I use it for reduction. So the sentences that are produced are kind of tasteless, in a way, and you definitely need to rework behind it. So I will say it's a true like, it's like, it's like a calculator, but more advanced. And then the calculator is just type eventually just giving you the answer to the question you've asked. So we have to ask the right questions. So I wouldn't say it's a miracle tool to any of the problems that we have.



OKAY, IT'S KIND OF THE ENGINEERING SCHOOL, WHICH IS MAYBE INFLUENCING MY RESULTS, BUT IN, IN THE BACHELOR, WHAT WE CALL THE BACHELOR, FOR ENGINEERING SCHOOL, IT'S A LOT ABOUT THEORETICAL KNOWLEDGE AND DOING A LOT OF SCIENCE. SO IT'S MORE ABOUT THE QUANTITY OVER THE QUALITY OF WHAT YOU'RE PRODUCING. SO YEAH, IT WAS REALLY, REALLY INTENSE. AND YEAH, LIKE YOU'RE, YOU'RE OUT OF HIGH SCHOOL, FRESH OUT OF HIGH SCHOOL. SO AGAIN, YOU HAVE TO READ A LOT IN ORDER TO LEARN IN ORDER TO COMPREHEND THE NOTIONS. AND THEN BACK IN THOSE DAYS, WE'RE GOING TO HAVE CHATGPT. AND THEN IN ENGINEERING SCHOOL, WHICH IS THE MASTER'S, STILL DID NOT HAVE CHATGPT, BUT IT WAS MORE ABOUT, I DON'T KNOW, GIVING EXPERTISE AND REFLECTING ON THE TOPICS. SO STILL A LOT OF LEARNING. BUT HE WAS MORE, WE WERE MORE ASKED TO REFLECT ON WHAT WE ARE LEARNING INSTEAD OF JUST LEARNING THIS AND DON'T ASK QUESTIONS, WHICH I HAD IN MY BACHELOR'S. AND, YEAH, AND THEN NOW NOW, NOW, IN MY SECOND STUDY, YEAH, WELL, NOW THAT I HAVE CHATGPT WELL, CHATGPT IS NOT GOING TO GIVE YOU OPINIONS ON STUFF. SO YOU STILL HAVE TO PRODUCE CONTENT BY YOURSELF. FROM THE LEARNING I DON'T I DON'T REALLY know just the process of learning. I don't really know what changed. I will say before the site what I had before the SCIENTIFIC WAS REALLY ABOUT LIKE, COMPREHENDING STUFF LIKE REDOING THE EQUATIONS, REDOING THE MATH, THE PHYSICS TRYING TO FIND EXAMPLES TO TRY TO UNDERSTAND THE, YOU KNOW, THE SCIENCE BEHIND IT. WHILE NOW WHAT I'M LEARNING IS MORE ABOUT TRYING TO PICTURE MYSELF IN DIFFERENT SITUATIONS, AND HOW I COULD HAVE USED DIFFERENT MODELS AND THEORETICAL KNOWLEDGE THAT WE ARE PRESENTED IN ORDER TO SOLVE A SITUATION LIKE MANAGERIAL FOR EXAMPLE, MANAGING A TEAM LIKE, SAY LIKE YEAH, MY PAST EXPERIENCES WORKING. I'VE BEEN CONFRONTED WITH THESE TOPICS, AND THEN HOW CAN I APPLY MODULES? Why do you deal with science because you don't do it? Exactly. Yeah,

So I will say now that we are presented with, like, we have access to much more information much more quickly. And I think now the role of the teacher is kind of evolving to become more of a counsellor of which kind of topic would be nice to investigate. While before it was like the teacher, present your notion, then explain it to you. Now, it's much more like, yeah, so there is this and this, and this, there's the list, and you can look by yourself, because there's so many resources. And anyway, you're gonna do it by yourself. I Feel like this is more how I see it changing?

YEAH, I FEEL LIKE I STILL PREFER THE HUMAN TO HUMAN EXPERIENCE. JUST BECAUSE FOR SOME TEACHERS, YOU KIND OF HAVE A PERSONAL RELATIONSHIP WITH THEM. AND IT'S MORE MOTIVATING, LIKE TO BECAUSE YOU LIKE A TEACHER OR YOU LIKE THEM, THEY ARE ENCOURAGING YOU. YOU'RE GOING TO PUSH YOURSELF MORE WELL, WITHIN AN ALGORITHM IF YOU LIKE. IF I ASKED YOU A QUESTION, AND I DON'T UNDERSTAND THE ANSWER, MAYBE I WON'T BE AS MOTIVATED TO LOOK FOR THE ANSWER. YEAH, I DON'T THINK I THINK IT'S A GOOD COMPLIMENT. USING WORDS LIKE A TOOL THAT

YEAH, SOMETIMES IT FEELS A BIT LIKE CHEATING. SOMETIMES IT'S EVEN TOO EASY. LIKE YOU'RE FRUSTRATING, IT'S KIND OF FRUSTRATING, IT'S EVEN DOING STUFF BETTER THAN I WOULD HAVE DONE IT. SO THIS IS VERY FRUSTRATING. SOMETIMES YOU FEEL LIKE YOU'RE CHEATING. BUT SOMETIMES, AS I SAID, SOMETIMES IT'S JUST A TOOL TO DRAFT SOMETHING ON THE FIRST HAND, AND YOU HAVE TO REWORK IT BEHIND BY YOURSELF. SO STILL, YOU'RE DOING SOME WORK, MAYBE NOT 100% OF WORK, BUT YOU'RE DOING SOME WORK. SO I WOULD SAY IT DEPENDS ON SITUATIONS AND HOW MUCH WORK I PUT IN IT. IF I JUST USE IT. LIKE, I TAKE MY IDEAS, CHATGPT TYPES, ME THE PARAGRAPH AND THEN I SEND THE ESSAY TO THE TEACHER, YEAH, I WOULD FEEL LIKE CHEATING. BUT IF IT'S LIKE I TYPE IN MY IDEAS, CHATGPT PARAGRAPHS AND THEN I REWORK IT AND I TRY TO PUT ON MORE OF MY SENTENCES, MY IDEA AND I TRY TO ENRICH IT, THAT IS JUST USING A TOOL.

YEAH, I WOULD SAY DEFINITELY, LIKE, IF I HAVE TO REDO MY STUDIES IN ENGINEERING WITH CHATGPT I THINK THE WORK PRODUCED WOULD BE VERY DIFFERENT. AND THE AMOUNT OF WORK I WOULD PUT IN WOULD BE VERY DIFFERENT. LIKE EVEN LESS, I WOULD SAY. YEAH, BECAUSE CHATGPT A WAY SINCE IT'S ABLE TO REPHRASE EVERYTHING KIND OF MAKES PLAGIARISM OKAY, IN A WAY LIKE YOU CAN PUT IN THE ESSAY OF THE GUY FROM LAST YEAR AND SAY TO GPT REPHRASE IT, AND IT'S GONNA REPHRASE AND THEN IT'S NOT PLAGIARISM ANYMORE. DEFINITELY DO USE LIKE DEMOCRATISATION WITH, LIKE, WHO'S GOING TO BE USED EVERYWHERE, ESPECIALLY IN CONTENT THAT DOES NOT SPECIFY AND DOES NOT SPECIFICALLY REQUIRE ANY THOUGHTS IN IT OR IN YOUR REFLECTION, AND IT ANALYSES? LIKE, I FEEL LIKE IT'S GOING TO BE USED, ESPECIALLY FOR CHATGPT, THIS IS GOING TO BE USED FOR REDACTING A LOT, A LOT OF THINGS, PROCEDURES, AND EVEN CONTENT THAT DOES NOT I'M THINKING ABOUT LINKEDIN POSTS, FOR EXAMPLE, BUT IT DOESN'T HAVE MUCH TO DO WITH THE STUDIES. YEAH. OKAY.

I WOULD SAY IF I KNEW WHAT, WHAT THE DATABASE IS, AND HOW RELIABLE THE DATABASE IS, LIKE, EVEN GET TO THE SOURCE. YEAH, THE SOURCE? YEAH. LIKE, BECAUSE, OKAY, I HAVEN'T REALLY LOOKED INTO IT. BECAUSE I DON'T USE IT AS A WEB BROWSER,



BASICALLY. BUT I FEEL LIKE SOMEHOW I'M NOT SURE WHAT ITS TRAINING IS LIKE, ON WHICH MATERIAL IT WAS TRAINED. AND MAYBE IF I HAD MORE, LIKE, IF I WAS SURE THAT THE DATA SET WAS ABOUT CERTIFIED UNIFIED DATA AND STUFF, I WOULD USE IT AS A WEB BROWSER IN A WAY LIKE TO SEARCH FOR INFORMATION AND ASK HIM QUESTIONS. SO I MEAN, THE TRUE ANSWER.

YEAH, I THINK IT WOULD DEFINITELY IMPACTED IT IS ALREADY WHEN I THINK ABOUT WHEN I WAS IN HIGH SCHOOL, AND YOU HAD TO LEARN ALL THIS HISTORY YOU KNOW, THAT LIKE FOR HISTORY HISTORY TOPIC, YEAH, TO LEARN ALL THE DATES AND ALL THE ALL THE WARS AND ALL THE SINGLE KINGS OF FRANCE AND STUFF LIKE THAT. I FORGOT ALL OF THIS, OBVIOUSLY, BUT I FEEL LIKE I'M NOT GONNA LEARN IT AGAIN. AND THIS IS THE TYPE OF THING THAT I FEEL IS KIND OF USELESS TO LEARN. BECAUSE JUST YOU HAVE THE ACCESS TO IT TO THE INFORMATION SO EASILY THAT DOESN'T REALLY MATTER

Definitely spending more time on written and written assignments, and therefore the grades know how long I spent like the time I put in, yeah, did like the ratio time. If I put it in the time I put in compared to the result, the result is still the same at the time. By putting in the effort is really less. So. Okay. Okay.

UM, I'VE, I MEAN, I'VE LEARNED I'VE HEARD ABOUT IT DURING THE WHOLE INITIAL RELEASE AND ALL DIVERSITY ONLINE WITH SOCIAL MEDIA AND TWITTER. BUT THEN I STARTED USING IT BECAUSE THE GIRL IN MY CLASS WAS ACTUALLY USING IT FOR LIKE, WE'RE HAVING AN ASSIGNMENT TOGETHER. AND SHE WAS USING IT TO ASK YOU TO ASK STRATEGIC QUESTIONS. AND SO I FELT LIKE YEAH, WHY NOT USE IT AS A, AS A WAY TO? YEAH, SEARCH FOR FOR INFORMATION OR TO REPHRASE OR TO MAKE SENTENCES

YES. LOOKING AT STUDENTS' ENGAGEMENT AND PARTICIPATION AND HOW CHATGPT WOULD INFLUENCE IT. SO, FOR YOU, IN WHAT WAYS HAVE YOU ADJUSTED OR MAYBE YOU'VE SEEN OTHER PEOPLE THAT ARE CLOSE TO YOU? IN WHAT WAYS HAVE YOU SEEN THEM ADJUST THEIR STUDY HABITS, TO MAKE THE MOST OF Albased tools like Chatgpt. Well. So now that everyone is taking notes on the computer, and using Google, for example, if I cite another one using Google at every time, I feel like the way we interact with the teacher, for example, is very different. Because we can check for information more regularly. Like, when we have a quiz. I feel like me, for example, when I have a question. If I know that I have seen it in the class, and I can find the information on Google real quick, I will do that. Instead of asking for the teacher. Like hey, can you remind me of this notion or stuff like that? But I have classmates that are not really I don't see like raising hand and maybe social cultural differences. And then yeah, I think since now everyone is using ChatGPT and going on to their research to be going pretty common, I guess.

No, I would say I'm kind of a shy student, not really not really asking questions and stuff. Listen, before I just I think I was just like, trying to retain more like looking through my notes or stuff like that, why now I take less notes. And I know they can have the answer. I think yeah, I think it might have actually positively impacted my my studies in the way that before I wasn't asking the questions and maybe sometimes I wasn't like, I had a question hanging never asking it because I was too shy to ask or not confident enough or well as I would just ask like one of my students mate before asking the teacher

In the classwork Yeah, I don't think so. No, not in the classwork. Google. Yes.

No, I think I'm not using it in class. I'm using it for personal work in class like during the teacher. I'm not using it but I'm using Google as a way to find out answers. But not not changing. To let's say neutral.

I would say like if you're using it in class, it might be discouraging you in a way that it might be just distracting you from the relationship you can have with the teacher or the lecturer because obviously, like you're doing something else is taking notes and absorbing when the teacher is telling you. But then yeah, it can be also seen as positive maybe in certain situations where I know you need to find information quickly and ask about it. That's something you don't really remember about the moment that you will have kind of an idea and your strategy because you didn't say you as a teacher or something. I have no idea.



YES, I THINK SO WITH MY CLASSMATES. DURING GROUP WORK, FOR EXAMPLE, I KIND OF HATED WHEN PEOPLE ARE LIKE, WHEN THE PHASE OF BRAINSTORMING FOR EXAMPLE, WHICH IS FOR ME A PHASE WHERE YOU HAVE TO BE WITHOUT A COMPUTER OR LIKE A LITTLE COMPUTER. DO YOU HAVE A CHATTY TEAM? IS IT REALLY ANNOYING ME? BECAUSE I FEEL LIKE IT'S DISTRACTING THE CONVERSATION THAT WE WERE HAVING, LIKE TRYING TO BRAINSTORM IDEAS? BECAUSE FOR ME, I FEEL LIKE THE IDEAS SHOULD COME FROM OURSELVES. SO NEGATIVELY IN THAT WAY, AND POSITIVELY, I WOULD SAY THAT DURING GROUP WORK, YES. I FIND THAT THE WORK THAT MY COLLEAGUES ARE PRODUCING IS MAYBE MORE ELABORATE, OR MAYBE LIKE, YOU DON'T SEE AS MUCH COPY PASTING AS I WOULD BEFORE. YEAH, ALSO, THE COLLEAGUES I'VE BEEN WORKING WITH ARE CHANGING. SO I CAN'T REALLY GIVE THE IMPACTS. I WILL SAY DIFFERENTLY DEPENDING ON WHICH PHASE OF THE WORK THE TOOL IS USED, IS IMPACTING DIFFERENTLY. I WOULD SAY FOR DISCUSSION NEGATIVELY, LIKE THE USE OF TRAGIC IT IS IMPACTING NEGATIVELY THE DISCUSSIONS I'M HAVING, BUT THEN FOR THE WORK THAT IS PRODUCED POSITIVELY. AND THEN FOR THE TEACHERS. SINCE I'M NOT USING ANY CLASSES, OR I DON'T READ, OKAY.

SO TRUSTWORTHY? IN TERMS OF LOOKING FOR INFORMATION? NO, YOU KNOW WHAT, EVEN THE THINGS THAT YOU'RE LOOKING ON GOOGLE, IF YOU'RE LOOKING FOR OPINIONS, ARE GOING TO BE BIASSED. SO IF I'M REALLY LOOKING FOR SOME SCIENTIFIC INFORMATION, I WOULD GO TO THE LIBRARY SCIENTIFIC WEBSITE TO DO MY RESEARCH. AND WE TEND TO PAPER AND STUFF. THEN ETHICAL AND FAIR, LIKE YOU CAN'T REALLY SINCE AS I SAID BEFORE, LIKE SINCE I DON'T KNOW HOW IT HAS BEEN TRAINED, I CAN'T REALLY SAY LIKE, THAT IT'S FAIR, BECAUSE I DON'T KNOW ON WHICH HE WAS BASED. BUT OBVIOUSLY, SINCE HE WAS TRAINED ON SOME DATA, AND THE DATA HAS BEEN SELECTED BY A SET OF PEOPLE, IT'S BEEN LIKE, IT'S NOT FAIR. IN A WAY, IT'S NOT COMPLETELY EQUAL. SO NO, I DON'T CONSIDER THEM COMPLETELY TRUE.

WHEN THE SAME ANSWER, NO, I DON'T THINK SO. I THINK THE FACT THAT WE ARE HAVING HUMANS CHECKING INFORMATION, AND IT'S MORE, I MEAN, IT'S STILL NOT FAIR. BUT IT'S SET IN A DIFFERENT WAY THAN FOUR FOR IS IT ETHICAL FOR STUDENTS TO USE IT TO USE IT AS A WAY OF REDACTING ESSAYS AND STUFF LIKE THAT? I DON'T THINK SO. I THINK IT'S ETHICAL OF US TO USE IT TO COMPLETELY COMPLETELY REPLACE OUR WORK, ESPECIALLY FOR EARLY EDUCATION. I KIND OF SAY THAT. I FEEL LIKE AT SOME POINT, WE HAVE TO CONTINUE LEARNING HOW TO WRITE OURSELVES AND HOW TO LOOK FOR INFORMATION ON THE INTERNET OR EVEN LIKE PHYSICAL BOOKS AND STUFF OURSELVES IS TRAINING. I FEEL LIKE IT'S REALLY IMPORTANT THAT WE STILL KEEP HAVING IT AND WE DON'T RELY 100 PERSONS ON IT. AND I AM REALLY GLAD THAT I HAD THE EDUCATION THAT I HAD WITHOUT CHATGPT AND WITHOUT. WHEN I WAS IN HIGH SCHOOL, I DIDN'T HAVE A COMPUTER, FOR EXAMPLE, SO I COULDN'T CHECK ON GOOGLE. SO I'M KIND OF GLAD I HAD IT. AND UM, MAYBE THIS KIND OF BETTER TIME WAS BEFORE, IT WAS A BETTER KIND OF OLD WAY, MY WAY OF THINKING. BUT, YEAH, I FEEL LIKE

But I think it's going to ask a lot more effort from the teachers to maybe so I chose, say, well, rephrasing maybe changing up for more the topics of evaluation, the topics of essays, and having more diversity in the question that I asked the students and asking more questions of like opinion, what is your opinion on it and for false, in quotation marks to force the students to build their reflection? Because ChatGPT right now is not able to give us opinions and is telling you like, No, I can't give opinions. So maybe, yeah, maybe not asking for opinions and asking for maybe more detailed work. So yeah, the first thing would be having more diversity in what is asked to the students, and then asking for more reflective work? Than just playing look alike, searching more like discussion? What can be the different point of views? And how can you agree with it?

I THINK IT WAS REALLY COMPLETE, ACTUALLY, LIKE YOU MADE ME THINK ABOUT THINGS THAT I HAD NEVER THOUGHT BEFORE. SO THANK YOU FOR THAT. WHAT I WOULD SAY IS, IT IS PRETTY IMPRESSIVE THAT YOU'RE ALREADY LIKE THEM, AND IT'S GOOD THAT YOU'RE ALREADY THAT THEY'RE ALREADY STUDENTS HAVING META REFLECTION ON THE TOOL, SUCH AS WHAT YOU'RE DOING. SO IT'S REALLY INTERESTING. AND I THINK MAYBE LIKE FROM THE LAST QUESTION, IF I CAN COME BACK ON THE LAST QUESTION, MAYBE ASKING US TO THINK ABOUT THESE KINDS OF AI AND HOW YOU WILL USE IT IN REAL LIFE WOULD BE A GOOD IDEA TO MAKE IT MORE TRUSTWORTHY IN OUR PRACTICES. OKAY, THANKS FOR THE OPPORTUNITY TO TALK ABOUT IT.

My name is Adeyemi Adeoye Samuel, I am currently an M1 master's student. I'm going through the course sustainable industrial engineering. And I'm majorly focusing on operations and supply chain management. I'm



CURRENTLY IN THE SECOND SEMESTER OF THE FIRST YEAR. AND I'VE GONE THROUGH COURSES LIKE DATA, INFORMATION SYSTEMS MANAGEMENT, SIMULATION, OPTIMAL CONTROL. ECONOMICS FOR BUSINESS. WHAT ELSE? YEAH, THAT'S TO BE MENTIONED BUT A FEW. AND FOR THIS SEMESTER, I HAVE DONE COURSES IN DATA THIS YEAR. OKAY. OPERATIONS MANAGEMENT, INVENTIVE DESIGN. ALSO, I'M ALSO DOING ECONOMICS. WHAT ELSE? YEAH. IN AN INVENTIVE THINKING AND SUPPLY CHAIN. YEAH, BASICALLY. SO THAT'S WHAT I'VE DONE SO FAR. IN MY MASTER'S. I MEAN, THROUGH MY MASTER'S PROGRAM.

OKAY. SO, I THINK, CLASSES, FOR ME STARTS BY 9:30AM. OUR CLASSES ARE MAJORLY OF TWO KINDS. IT'S EITHER THE TEACHER GUIDED CLASS, OR THE SELF GUIDED CLASS, EACH CLASS LAST FOR THREE HOURS. SO I HAVE CLASSES 9:30, TO 12:30, THEN A BREAK, THEN I CONTINUE BY 1:30 TO 4:30. SO LIKE, THAT'S LIKE A TYPICAL DAY IN MY LIFE AS A STUDENT IS, I WOULD SAY, IT'S MORE COLLABORATIVE, YOU KNOW, THE CLASSES, I MEAN, THEY EXPECT YOU TO, YOU KNOW, WALK IN TEAMS WORK TOGETHER. AND THIS EXPERIENCE HAS HELPED TO, YOU KNOW, RELATE WITH PEOPLE MORE, DO A LOT OF TEAMWORK, YOU KNOW, AND IT ALSO HELPS YOU TO EXPRESS YOURSELF, I MEAN, BECAUSE A LOT OF PEOPLE MIGHT NOT BE ABLE TO EXPRESS YOURSELF IN LARGE GROUPS. SO, YEAH, IT HELPS YOUR EXPRESSIVENESS. SO, MAJORLY, WE DO A LOT OF PRESENTATIONS, A LOT OF RESEARCH, A LOT OF, YOU KNOW, LITTLE TERM PAPER, SO TO SPEAK. I MEAN, THAT'S ASIDE THE NORMAL LIKE, CLASS WORK. SO, BASICALLY, THAT'S HOW IT IS, EVEN THOUGH THE LEARNING EXPERIENCE HERE IN FRANCE IS LIKE A SHIFTS FROM WHAT I'M USED TO, YOU KNOW, HERE, YOU'RE EXPECTED TO DO MORE OF THE WORK, YOU'RE EXPECTED TO DO LIKE A LARGE PERCENTAGE OF THE RESEARCH. AND SOMETIMES IT'S NOT, IT'S WORKS FOR SOME COURSES, BUT SOMETIMES IT DOESN'T WORK FOR SOME COURSES, BECAUSE, FOR EXAMPLE, IN A COURSE LIKECODING. LAST SEMESTER, WE HAD LIKE, ISSUES WITH THE LECTURE, BECAUSE THE, EXPLANATIONS HE GAVE IN CLASS, THEY WERE VAGUE. AND, YOU know, people had a lot of issues when doing the work themselves. So the class wasn't really like,it was less than our EXPECTATION, IF I COULD SAY SO, IT'S, IT'S ALSO GOOD TO, I MEAN, TO IMPROVE YOUR, I MEAN, YOUR IMAGINATION HELPS YOU TO THINK ON YOUR TOES, YOU KNOW, HELPS YOU TO BE MORE CREATIVE, YOU KNOW, HELPS YOUR TEAMWORK HELPS YOUR CONFIDENCE, YOU KNOW, AND ALSO OPENS YOUR MIND. BECAUSE, FOR THOSE RESEARCHES AND THE PRESENTATIONS, YOU'D HAVE TO, LIKE, DO PERSONAL RESEARCH, AND, LIKE, GIVES YOU INSIGHTS INTO, YOU KNOW, THINGS THAT IT GIVES YOU INSIGHTS INTO THINGS THAT YOU haven't learnt before, you know, opens your mind to more knowledge. So generally, I would say, it's been a good EXPERIENCE, BECAUSE THEY ARE MAJORLY TRYING TO TEACH US HOW TO BE MANAGERS, YOU KNOW, HOW TO BE TEAM LEADERS AND ALL THAT. SO, THE LEARNING APPROACH, OVERALL, I WOULD SAY, IN TERMS OF GETTING EXPECTED RESULTS, I WOULD GIVE IT A 7/10, because it works in some aspects of the teaching, and it doesn't work in some aspects. So generally, I would SAY, YEAH, IT'S, IT'S BEEN A GOOD EXPERIENCE, YOU KNOW, IT'S BEEN A GOOD EXPERIENCE SO FAR. I MEAN, IT'S WELL ABOVE AVERAGE,

How will I see this? I think there is, you know, there is you know, little or no time for like, how would I say this, like THE TEACHERS FOCUS MORE ON TRYING TO MAKE YOU DO THE WORK YOURSELF RATHER THAN GIVING YOU LIKE, INTENSIVE LIKE, BASIC KNOWLEDGE, DO YOU UNDERSTAND AND AT THE END, A LOT OF PEOPLE FIND IT DIFFICULT, I MEAN, PEOPLE HAVE DIFFERENT LEVELS OF UNDERSTANDING AND LEVELS AT WHICH THEY AND SOME PEOPLE MIGHT GET IT FASTER THAN THAN EACH OTHER. BUT LIKE, THERE IS NO I MEAN, THERE IS NO ACTUAL WAY OF GETTING FEEDBACK FROM STUDENTS OH, DO YOU UNDERSTAND THIS, YOU UNDERSTAND THIS BECAUSE EVERY LECTURE IS TRYING TO MEET IT, I GET, HE'S TRYING TO FINISH YOUR COURSEWORK BY THIS TIME. SO, THERE IS NO TIME FOR THEM TO LIKE OH DO A FEEDBACK SESSION AFTER EACH COURSE TO ASCERTAIN THE DEGREE OF YOU KNOW, THE DEGREE OF I MEAN, THE DEGREE AT WHICH LIKE, WHAT THEY HAVE TAUGHT HAS BEEN UNDERSTOOD BY THE STUDENTS, YOU KNOW, ALSO GENERALLY, THE LANGUAGE HAS ALSO HAD A LITTLE TO DO WITH THIS, YOU KNOW, YOU WOULD SEE LECTURERS TENDING TOWARDS MORE TOWARDS French, the French students because, you know, it's easier to communicate, even though the Masters in English some LECTURERS DO NOT REALLY KNOW HOW TO SPEAK THE LANGUAGE. DO YOU UNDERSTAND? SO? THERE'S THIS THERE'S THIS, I WOULD SAY IS UNINTENTIONAL. BUT LIKE THEY ARE MORE COMFORTABLE, YOU KNOW, WITH THE FRENCH STUDENTS, I MEAN, AMISS THE CLASS OR PEOPLE THAT CAN SPEAK FRENCH AMISS THE CLASS AND THAT SORT OF LIKE, DISCOURAGED. SOME STUDENTS, YOU KNOW, THEY JUST GO, THEY JUST GO WITH THE FLOW AND THEIR MAIN OBJECTIVES OR THE COURSE IS NOT REALLY MET, YOU KNOW, TO ITS FULL EXTENT. SO THOSE ARE ONE OF THE THINGS THAT SOME OF THE ISSUES THAT WE I MEAN, WE'VE HAD WITH I MEAN, WITH THE COURSES ARE MAJORLY THE CODING COURSES ALSO. OKAY.

OKAY, SO, I MEAN, I THINK WE ARE IN THE AGE, WHICH, I MEAN, WHERE, EVERYONE IS TALKING ABOUT CHATGPT. AND I THINK THE PENETRATION OF OPEN AI IS LIKE GOING DEEPLY INTO THE EDUCATIONAL SPACE. I THINK I'VE RECENTLY DISCOVERED THAT, LIKE, EVEN A LOT OF STUDENTS WOULD PREFER TO USE LIKE, YOU KNOW, WHAT WOULD I CALL IT NOW? I MEAN, MACHINE LEARNING TOOLS. I MEAN, IN THEIR STUDIES, RATHER THAN USE GOOGLE BECAUSE OF LIKE, AI TOOLS BASICALLY GIVES YOU LIKE, YOU KNOW, MORE



SPECIFICS, YOU KNOW, RATHER THAN USING PROBABLY USING GOOGLE, WHICH WOULD LIKE, VAGUELY GIVE YOU LIKE RESULTS, LIKE YOU WOULDN'T GET, LIKE THE RESULTS THAT YOU LIKE YOU WANT. FOR ME, MY FROM MY PERSONAL EXPERIENCE, THE ONE I USE PARTICULARLY IS, YOU KNOW, CHATGPT, LIKE EVERYBODY, YOU KNOW, AND I THINK, LIKE, IN THE LAST LIKE, FOUR OR FIVE WEEKS, LIKE, I HAVE REALLY, LIKE SEEN A LOT OF THINGS THAT IT CAN DO FOR ME. I MEAN, MOST TIMES WHEN I'M TRYING TO DO MY CODING ASSIGNMENTS, YOU KNOW, I CAN JUST TRY TO SPLIT YOUR DATA SETS INTO LEARNING? AND, YOU KNOW, YOU KNOW, AND IT WILL TRY TO EXPLAIN TO YOU HOW, WHAT TO DO WHAT NOT TO DO, YOU KNOW, I MEAN, I'VE ALSO TRIED TO USE CHATGPT TO, LIKE, CREATE HOW DO I CALL IT INTRODUCTION LETTERS, COVER LETTERS FOR JOBS, I MEAN, JUST TO GET TEMPLATES, YOU KNOW, EVEN THOUGH, USING CHATGPT, IS FROWNED UPON BY, IN THE EDUCATIONAL SPACE, BECAUSE IT'S, IT'S, IT HAS BEEN ARGUED THAT, IT'S REDUCES ORIGINALITY, AND IT'S, IT HAS BEEN MAKING, YOU KNOW, STUDENTS LAZY AND ALL THAT. WELL, TO BE HONEST, LIKE, I THINK, I MEAN, YOU KNOW, AI APPS IF I COULD SAY, SO LIKE IT, THEY'RE LIKE, THE BABIES OF LIKE EDUCATION, THEY WERE BRED FROM, EXTENSIVE EDUCATION FOR THEM TO GET HERE IN THE FIRST PLACE. SO I THINK, IT'S, I\$T'S MORE OF, IT HAS DONE MORE GOOD. AND HAS HELPED A LOT OF STUDENTS TO, YOU KNOW, HELP THEIR LEARNING EXPERIENCE, HELP THEM TO GET LIKE SPECIFIC KNOWLEDGE, YOU KNOW, REDUCE SEARCH TIME, IT HAS ALSO HELPED ME TO IMPROVE MY EXPERIENCE AS A STUDENT, YOU KNOW, S/O I THINK IT'S GENERALLY LIKE THE EXPERIENCE HAS BEEN GOOD. AND I THINK AI SYSTEMS ARE HERE TO STAY, YOU KNOW, YOU'RE HERE TO STAY. AND IT WILL BE A BIG PART OF LIKE, OUR LEARNING EXPERIENCE ON THE EDUCATIONAL SECTOR, AS A WHOLE, OKAY,

I have found, like, the popular one, like the most reliable for me. And recently, I think Bing is trying to integrate AI systems into their search engines and I think I've demoed that once or twice. But most times, my first call is always like a ChatGPT. So that's what I've been, I've majorly been using personally.

I THINK LIKE, I MEAN, WELL, WHILE I WAS DOING MY UNDERGRADUATE, I DON'T THINK AI TOOLS WERE THIS POPULAR. I MEAN, I DON'T EVEN THINK IT HAS A USER BASE OF EVEN 1000. YOU UNDERSTAND, BUT THE ONE I KNOW THAT I, I STARTED TO USE, LIKE, SOME FEW MONTHS BEFORE I CAME TO FRANCE WAS DEEPL. FOR A LANGUAGE TRANSLATION, AND ALL THAT. I THINK THAT WAS LIKE ONE OF THE EARLIEST AI TOOLS THAT WAS AVAILABLE. I MEAN, IT'S BEEN QUITE SOME TIME SINCE I FINISHED UNIVERSITY, YOU KNOW, AND AT THAT TIME, YOUR MAJOR SOURCE WAS GOOGLE, YOU UNDERSTAND? WELL, DURING MY TIME, I WOULDN'T, I DON'T KNOW, IF SPIN BOTS IS AN AI TOOL. I DO NOT KNOW. I MEAN, THOSE TIMES, LIKE WHEN WE WANT TO DO AN ASSIGNMENT, AND WE WANT TO REDUCE, YOU KNOW, PROBABLY THE CORRELATION BETWEEN THE SOURCE OF WHERE YOU GOT IN IT, AND WHAT YOU WANT TO SUBMIT FOR YOUR ASSIGNMENT. I THINK STUDENTS WERE USING, YOU KNOW, SPINBOT AT THAT TIME. SO, I MEAN, I'M NOT CATEGORICALLY SURE IF SPIN BOT IS AN AI TOOL, OR MAYBE THEY ARE NOW BUT LIKE, THAT WAS LIKE, THE HEIGHT OF EVERYTHING. I MEAN, THAT WAS LIKE THE CLOSEST THING TO AI LIKE I USED DURING MY UNDERGRADUATE. OKAY. YEAH.

OKAY, SO FOR EXAMPLE, I THINK, YOU KNOW, THERE ARE DIFFERENT AI TOOLS, YOU KNOW, PROBABLY THERE ARE NEURAL TEXTS. AND I THINK I SEE HERE ONE CALLED FIREFLIES, YOU KNOW, THERE'S ALSO, YOU KNOW, TEXT TO TEXT TO SPEECH, AI, YOU KNOW, YEAH, THOSE ARE THE, THOSE ARE THE DIFFERENT ONES. BUT PARTICULARLY TO WHAT I'M DOING, YOU KNOW, I WOULD, SAY LIKE, THE AI TOOL THAT WILL BE MOST USEFUL FOR LIKE, MY LINE OF WORK WILL BE PROBABLY LIKE, FOR BUSINESS, YOU KNOW, I'VE BEEN THE AI TOOLS FOR BUSINESS THAT CAN HELP YOU LIKE, AUTOMATES PROBABLY YOUR, YOUR EXCEL SHEETS, YOU KNOW, I CAN HELP YOU, LIKE, HELP YOU, LIKE DO LIKE AUTO, AUTOMOTIVE BUSINESS FORECASTS AND ALL THAT. I MEAN, I CAN'T REMEMBER THE NAME RIGHT NOW. BUT I KNOW THERE'S SOMETHING LIKE THAT YOU PUT IN YOU PUT IN THE PARAMETERS AND IT HELPS YOU TO PREDICT, GIVE YOU LIKE INSIGHTS OR WHAT YOU THINK WHAT IT THINKS IT'S YOU SHOULD DO, YOU KNOW, PERTAINING TO BUSINESS. I THINK THAT'S THE ONLY ONE I THINK IT'S LIKE, A MAJOR. I MEAN ASIDE CHATGPT OF COURSE, LIKE DOES ANYONE I THINK THAT HAS A MAJOR CORRELATION TO WHAT I'M STUDYING RIGHT NOW.

Where do I start from? I think that we have honesty like ChatGPT has really improved, like our searching experience, you know, our data mining experience. I mean, because, for example, if you Google works based on like, search, I mean, keywords in as it helps. It's picks up like keywords in your, that you insert into the search box, you know, like processes, it's to give you, you know, information but, what ChatGPT has done here is like improving your experience, narrowing down your search time, helping you to get specific data, rather than, you know, giving you like, 1000 sources, you know, what ChatGPT does is that, it gives you, you know, the best answer, the best data, the best source, which you can get more information about what you're looking for. Do you understand? So, Also, you know, for researchers, you know, it gives you the specifics? I mean, if you use Google to search for something, you know, you would have like a lot of conflicting ideas, I think the accuracy of ChatGPT is like, more, you know, than



IF COMPARED TO JUST, I MEAN, GOOGLE OR, YOU KNOW, BING, OR I MEAN, THE OLD BING OR LIKE, OTHER LIKE, SEARCH ENGINES, YOU UNDERSTAND, LIKE, IT NARROWS DOWN YOUR EXPERIENCE, AND IT GIVES YOU, I MEAN, THE BEST ANSWER, I MEAN IN RECORD TIME, SO IT REDUCES YOUR, YOU KNOW, THE STRESS, YOU WOULD HAVE TO START CLICKING, CLICKING EACH LINK, OR, OKAY, THE ANSWER INFO IS NOT HERE, YOU MOVE TO ANOTHER ONE, LIKE, CHATGPT JUST HELPS YOU TO NARROW DOWN LIKE, YOUR, YOUR OPTIONS, YOU KNOW, GIVES YOU DIFFERENT OPTIONS WHERE YOU CAN DO DIFFERENT THINGS. LIKE, AND THESE ARE THE BEST THINGS YOU CAN GET. SO I THINK IT GENERALLY IMPROVES PEOPLE'S EXPERIENCES ON THE WEB. OKAY. YEAH.

I MEAN, I THINK, LIKE I'VE SAID, LIKE, IT'S NOT TOTALLY, IT'S NOT TOTALLY PERFECT. DO YOU UNDERSTAND? AND I THINK I'VE SAID IT MULTIPLE TIMES HERE THAT IT'S JUST IMPROVING YOUR EXPERIENCE ALSO, THERE ARE GOING TO BE LIKE, LITTLE, YOU KNOW, DISCREPANCIES, LITTLE MISTAKES HERE AND THERE, YOU KNOW, LITTLE BIASES, BECAUSE THE CHATGPT WORKS LIKE BASED ON THE DATA THAT HAS BEEN FED INTO IT. YOU UNDERSTAND? AND THE WAY AI WORKS IS THAT OVER TIME, YOU KNOW, THE EXPERIENCES IMPROVE, BASED ON THE USAGE OF PEOPLE, I MEAN, CHATGPT HAS OVER 100 MILLION, OR, YOU KNOW, 90 I THINK 90 OR 100 MILLION USERS THAT WILL ALSO AS THE MORE PEOPLE USE IT, THE MORE IT WILL IT WILL TRAIN I MEAN, IT'S A TRAIN MODEL. NOW MOST IMPORTANTLY, RIGHT? I THINK THE CREATORS OF THIS WOULD ALSO HAVE TO LIKE, GO BACK TO THE DRAWING BOARD, AND TO LIKE IMPROVE THE EXPERIENCES OF PEOPLE. I DON'T KNOW IF THIS THING YOU ARE SAYING IS ON THE FREE VERSION, OR ON THE PAID. I MEAN, IF IF THE EXPERIENCES ARE DIFFERENT ON THE ON THE PAID VERSION, BUT THE CURRENT VERSION THAT WE KNOW, I THINK YOU'RE MAKING A LOT OF SENSE, WHEN YOU SAY, IT DOESN'T REALLY GIVE YOU, ACCURATE, LIKE, REFERENCES. DO YOU UNDERSTAND? LIKE, IT'S JUST, IT ALSO HAS THIS DOWN, DOWN DOWNSIDES? DO YOU GET I DON'T THINK IT'S 100%. LIKE, YOU KNOW, ACCURATE, YOU KNOW, WHEN YOU GET THE DATA, I THINK YOU CAN STILL GO BACK TO PROBABLY LIKE, GOOGLE, YOU KNOW, TO GET WHAT'S IT CALLED, LIKE DEEPER INSIGHTS, YOU PROBABLY YOU WANT A SPECIFIC DATA WHERE THIS DATA WAS GOTTEN FROM BLAH, BLAH, BLAH, BLAH, BLAH. YOU KNOW, I THINK FOR THAT PROBABLY, THE CREATORS OF CHATGPT WILL PROBABLY HAVE SOMETHING LIKE, OH OKAY. CHATGPT FOR RESEARCHERS. DO YOU UNDERSTAND? YEAH, I MEAN, PROBABLY, I DON'T KNOW, IF, IF THEY'RE GOING TO PUT THAT IN THEIR BUSINESS MODEL. SOMETIME SOON. YOU KNOW, WHERE, YOU KNOW, IT'S MAJORLY FOR RESEARCHERS. AND IT GIVES YOU LIKE, OKAY, THIS WAS THE PAPER BLAH, BLAH, BLAH, BLAH, BLAH, OKAY. POSTED SIX ARTICLES OF CULTURAL DIMENSIONS. THESE ARE THESE ARE THE PAPERS THAT AS I MEAN, APPEARED IN BLAH, BLAH, BLAH, BLAH, MEAN, THOSE, THOSE ARE GOING TO BE SPECIFICS, DO YOU UNDERSTAND AND I DON'T KNOW, I MEAN, THEY ALSO PUT THIS IN MIND, IF THEY WANT TO, LIKE DESIGN A BUSINESS MODEL, LIKE PROBABLY LIKE, SO ALSO, LIKE GETS MONEY OUT OF IT, YOU KNOW, MAYBE THERE CAN BE CHATGPT FOR RESEARCHERS, DO YOU GET? CHATGPT FOR, YOU KNOW, PRIVATE DEVELOPERS, DO YOU UNDERSTAND? THE SAME WAY WE HAVE, YOU KNOW, THIS CODE BASE WHERE LIKE, GUYS PUT LIKE, THEIR CODES, BLAH, BLAH, BLAH, BLAH, BLAH, SO LIKE, IF YOU HAVE AN ISSUE, YOU GO THERE. SO I THINK ASIDE FROM THE FACT THAT CHATGPT, LIKE, WANTS TO CLAIM THAT HE WANTS TO DO EVERYTHING. I ALSO THINK THAT THEY SHOULD ALSO BE SUBDIVIDED INTO LIKE, DIFFERENT NICHES WHERE YOU KNOW THAT WHEN YOU GO TO CHATGPT UP FOR MUSIC, YOU UNDERSTAND YOU ARE CERTIFYING THAT YOU ARE GOING TO GET THE BEST EXPERIENCE. WHEN YOU PUT CHATGPT FOR RESEARCH, YOU KNOW, YOU'RE GOING TO BE ABLE TO GET LIKE 1000 EVERYBODY THAT HAS REFERENCED THIS, YOU KNOW, WHERE IT WAS FIRST PUBLISHED, YOU KNOW, LIKE, GET ACCESS TO ALL THESE PAPERS, YOU KNOW, AND ALSO, I MEAN, WE KNOW THAT THIS IS LIKE AN ITERATIVE PROCESS, AND, YOU KNOW, PROBABLY IN LIKE, UPCOMING ITERATIONS, THEY WOULD SEE TO ALL THESE WORDS, ALSO PEOPLE TO ALSO KNOW THAT NOBODY HAS CLAIMED THAT ARTIFICIAL INTELLIGENCE IS 100%. I OFTEN TELL PEOPLE WHO DON'T YOU DON'T NEED YOU DON'T HAVE TO EVEN COPY THE WHOLE THING THAT'S CHATGPT HAS TOLD YOU, YOU UNDERSTAND AS A RESEARCHER, YOU KNOW, THAT IT IS IMPORTANT FOR YOU TO COMPARE YOUR SOURCES, COMPARE INFORMATION FOR YOU TO ALSO GIVE THE BEST ONE DO YOU UNDERSTAND? SO, MOST TIMES YOU GET POSITIVE RESULTS FROM CHATGPT, OR SOMETIMES THE EXPERIENCE YOU GET IS NOT WHAT YOU WANT, DO YOU UNDERSTAND? SO, I THINK PEOPLE SHOULD BE CAREFUL. AND ALSO LIKE TRYING TO CROSS REFERENCE OR CROSS SEARCH WIDER TO GET BETTER INFORMATION SOURCES

YEAH. OKAY, SO I THINK LET ME LET ME START FROM MY UNDERGRADUATE, SOMETHING I REALLY APPRECIATED DURING MY UNDERGRADUATE WAS I MEAN THE, THE EXTENSIVENESS, AT WHICH THE LECTURERS, YOU KNOW, TRY TO EXPLAIN THINGS, DO YOU UNDERSTAND, LIKE, THEY TAKE THEIR TIME, YOU KNOW, AND THE DOWNSIDE OF THIS IS, IT BECAME LIKE, IT'S, THE DOWNSIDE WAS BECAUSE LIKE, PEOPLE STARTED TO OVER DEPEND ON THE LECTURER TO, TO GET INFORMATION. SO IF YOUR LECTURER IS NOT GIVING YOU THE INFORMATION, I MEAN, IT MADE PEOPLE LAZY, YOU KNOW, TO GO AND LIKE TO SOURCE FOR MORE INFORMATION YOURSELF, YOU KNOW, BACK IN NIGERIA, IN MY UNDERGRADUATES, YOU ARE TAUGHT LIKE, STEP BY STEP, THEY POINT FOR YOU, EXACTLY! LIKE THEY POINT IT TO YOU, BUT HERE, IT'S MORE LIKE, WELL, I'M JUST GOING TO GIVE YOU THE BASICS, YOU KNOW, GO AND GET INFORMATION BY YOURSELF. AND NOW THAT WAS WHY HE WAS DIFFERENT WHEN I CAME HERE. AND I'M LIKE, IS THAT ALL? I MEAN? THAT'S ALL WE'RE GONNA SAY, FOR THREE HOURS. DO YOU UNDERSTAND, AND TO BE HONEST, IT HAS, IT HAS GOOD SIZE, BECAUSE IF



WE WERE USED TO THE TEACHING METHODS OF LIKE, THE, YOU KNOW, HOW PEOPLE TAKE NOTES, YOU KNOW, WHEN WHEN SOMEBODY IS TALKING, THEY RE TAKING NOTES, DO YOU UNDERSTAND, BECAUSE MOST OF THE THINGS THEY SAY IN THE CLASS, THEY ARE NOT IN THE, IN YOUR SLIDES, DO YOU UNDERSTAND, LIKE YOUR SLIDES, BUT IN NIGERIA, YOU HAVE EVERY SINGLE THING YOU UNDERSTAND, AND MAJORLY THE QUESTIONS DON'T MAKE YOU THINK OUTSIDE THE BOX, YOU KNOW, MOST OF THESE QUESTIONS ARE QUESTIONS THAT YOU WILL FIND OUT THE ANSWERS IN YOUR, IN YOUR, YOU KNOW, YOUR SLIDES, THE SLIDES OR THE LECTURES, THINGS DO YOU LIKE IN MY UNIVERSITY NOW, LIKE EVERY, LIKE WE USE PPT SLIDES, YOU KNOW, WE USE PDFS CREATED BY THE LECTURES, YOU KNOW, THAT THEY USED TO, FOR THEIR TEACHING GUIDE SO MOST OF THESE THINGS ARE LIKE, BASED AROUND IT HERE, YOU KNOW, YOUR SLIDES ARE MAJORLY LIKE, PICTURES AND ILLUSTRATIONS, YOU KNOW, AND YOU HAVE TO LIKE, HAVE LIKE, ACTIVE LIKE LISTENING SKILLS. LIKE FOR YOU TO GET MORE FROM THE CLASS, YOU UNDERSTAND, LIKE IN NIGERIA, IF YOU LIKE, YOU MIGHT NOT EVEN LISTEN IN THE CLASS, BUT YOU KNOW, THAT'S WHEN YOU GO BACK TO THE NOTES, RIGHT? IT GIVES YOU LIKE, YOU CAN GET WHAT YOU WANT TO GET FROM THE NOTES. IT'S DIFFERENT, YOU KNOW, THE NOTES ARE NOT REALLY RICH, BUT LIKE THE BEST WAY TO GET KNOWLEDGE FROM THE COURSE IS, WHEN YOU LISTEN TO THE LECTURE. DO YOU UNDERSTAND, LIKE, MOST OF THE THINGS HE WOULD SAY IN THE CLASS ARE NOT IN ANY WAY IN YOUR SLIDES. DO YOU UNDERSTAND? SO LIKE, THAT'S ALSO DIFFERENT. SECONDLY, HERE WE DO A LOT of team, group exercises, you know, mostly in Nigeria, it's majorly individual. You know, mostly, I'm saying mostly BECAUSE, LIKE, DURING MY UNDERGRADUATE, I ALSO DID, LIKE, A LOT OF GROUP WORK, NOT AS MUCH AS HERE, YOU KNOW, EVERY COURSE I'M DOING HERE HAS LIKE A GROUP WORK. YOU KNOW, AND ASIDE FROM ONLY THE LEARNING EXPERIENCE IMPROVES, YOUR, YOU KNOW, YOUR SOFT SKILLS, YOUR PRESENTATION SKILLS, IMPROVES YOUR CONFIDENCE, YOU KNOW, IMPROVES WORKING WITH OTHER PEOPLE, PEOPLES MANAGEMENT'S, YOU KNOW, IT HELPS YOU TO SEE THINGS FROM PEOPLE'S PERSPECTIVE, IT ALSO HELPS YOU TO LEARN CONFLICT MANAGEMENT, WHEN WHEN YOU HAVE A DISAGREEMENT WITH A TEAM MEMBER, YOU KNOW, YOU KNOW, HOW TO COME BACK ON BOARD, YOU KNOW, I MEAN, AND TO BE HONEST, LIKE, YOU NECESSARILY DO NOT HAVE TO, LIKE, GO HAVE A CLASS on, oh, this is how you relate to these people. Now, you get all this knowledge from, I mean, all this all the KNOWLEDGE FROM LIKE, YOUR EXPERIENCES, WHAT YOU HAVE DONE, OR PROBABLY SO, WHEN YOU GET TO LIKE THE WORKSPACE, YOU UNDERSTAND, LIKE, IT GIVES YOU LIKE, OH, I'VE SEEN THIS SITUATION BEFORE, THIS IS HOW THIS IS HOW I HANDLED IT. I'VE SEEN THIS ILLUSTRATION BEFORE, I DIDN'T HANDLE IT ENOUGH THAT TIME, THIS IS THE BEST WAY THAT OH, I CAN HANDLE THIS NOW, BECAUSE I HAVE SEEN THIS BEFORE, YOU KNOW, THIS GIVES, IT'S MORE OF IMPROVES YOUR INTERPERSONAL SKILLS, YOU KNOW, WORKING WITH TEAM MEMBERS WORKING WITH STUDENTS, YOU KNOW, EVEN HERE, IT'S IT'S MORE OF YOU WORKING WITH PEOPLE FROM DIFFERENT COUNTRIES, DIFFERENT BACKGROUNDS, YOU KNOW, WHAT YOU THINK IS RIGHT IN YOUR OWN CULTURE, WHO IS DIFFERENT FROM WHAT THEY THINK IS RIGHT IN THEIR OWN CULTURE. AND YOU HAVE TO LIVE WITH THAT. YEAH. AND SO, TO BE HONEST, PROBABLY BECAUSE I LIKE THE STAGE WHERE I AM NOW. I SORT OF APPRECIATE, YOU KNOW, THE LEARNING PATTERN. IN FRANCE. YES, THE LEARNING PATTERN IN FRANCE, BECAUSE YOU CAN'T BE SPOON FED INFORMATION EVERY SINGLE TIME. YOU KNOW, YOU HAVE TO, YOU HAVE TO, LIKE, GET KNOWLEDGE BY YOURSELF. DO YOU UNDERSTAND? I MEAN, MOST TIMES LIKE, YEAH, I MEAN, THE SLIDES ARE ENOUGH, YOU KNOW, IF YOU WANT EXTRA KNOWLEDGE, YOU GO INTO THE, YOU KNOW, YOU GO TO GET TEXTBOOKS, YOU KNOW, AND HERE, IT'S MORE PRACTICAL, YOU KNOW, WHATEVER, YOU HAVE TAUGHT, PLAYS OUT, THEY MAKE YOU PLAY IT OUT, YOU KNOW, THEY MAKE YOU WORK ON IT DIRECTLY. YEAH. DO YOU UNDERSTAND? I MEAN, MOST OF THE THINGS WE SAW IN SCHOOL THAT TIME, EVEN THOUGH I WOULD SAY, PROBABLY MY UNIVERSITY TRIED, YOU KNOW, THEY HAD LIKE, A LOT OF LIKE, EQUIPMENT AND ALL THAT, WHERE WE RUN SIMULATIONS AND ALL THAT, BUT TO BE HONEST, IT WASN'T ENOUGH. YOU KNOW, MOST OF THE PROJECTS WE DID WERE PROJECTS THAT WE'RE GOING TO END UP IN, IN A TRASH BAG, YOU KNOW, THEY NEVER GOT DEVELOPED. BUT NOW WE'RE DOING REAL STUFF, YOU KNOW, WE'RE USING THINGS THAT WE NEVER THOUGHT, OH, WE WOULD LIKE TO USE BACK THEN FROM HOME. SO NOW, IT'S LIKE, MORE OF LIKE, PRACTICAL, YOU ARE SEEING WHAT YOU ARE LEARNING, YOU KNOW, WE ARE USING SOFTWARES. SO PROBABLY BY THE TIME WE ARE DONE WITH YOUR POST GRADUATES, YOU WILL HAVE BEEN INTRODUCED TO THIS SOFTWARE, THIS SOFTWARE, THAT software that software, but like, in Nigeria, you only hear about it, you know, you don't get a practicalise it. So I THINK HERE IS MORE PRACTICAL BASED, YOU KNOW, TRANSLATING THE CLASS LEARNING, AND TRYING TO RELATE IT TO WHAT WOULD HAPPEN IN REAL LIFE. SO, YEAH.

To be honest how will I explain this, you know, like, different people, people, different people react differently to change. Yeah. Do you understand? And I think the first step of asserting change is open mindedness. Do you understand like, if you're open minded, you would, it will be easier for you to transition. But if you have a rigid mind, and you don't want to switch to the realities of your present situation, it will be difficult for you to accept that, oh, this is how things are going to be going forward. Do you understand what I mean? In my first few weeks? I mean, I had like 10 things, 10 deliverables to do. It was really overwhelming. I'm like, what?! Well, this is postgraduates, you know, you're required to do more. And to be honest, like, the first stage of acceptance like, open your mind and be



POSITIVE. IF I KEEP MY MINDSET OR OH, I'M USED TO THIS. WHY ARE THEY DOING THIS, YOU HAVE TO ALSO, LIKE, ACCEPT THAT, BECAUSE OF YOU, THEY'RE NOT, NOBODY'S GOING TO CHANGE THE SYSTEM BECAUSE OF YOU, YOU ONLY HAVE TO CHANGE TO FIT INTO THE SYSTEM, BECAUSE THE SYSTEM IS LARGER THAN YOU. SO IF YOU UNDERSTAND ALL THOSE THINGS EARLY ENOUGH, YOU KNOW, IT GIVES YOU, YOU KNOW, HELPS YOU TO ADAPT QUICKLY, DO YOU UNDERSTAND, AND THAT'S ALSO WHAT WE SEE IN TOPICS LIKE CHANGE MANAGEMENT, YOU KNOW, HOW TO HANDLE CHANGE, HOW DIFFERENT PEOPLE REACT DIFFERENTLY TO CHANGE, YOU KNOW? SO IT'S GOOD TO BE ABLE TO, LIKE, OPEN YOUR MIND, DO YOU UNDERSTAND LIKE, BECAUSE EVEN GENERALLY, YOU KNOW, A LOT OF THINGS THAT ARE NOT, LIKE WE SEE AS ABNORMAL, FROM WHERE WE'RE COMING FROM, YOU UNDERSTAND, AND HERE IT IS NORMAL, DO YOU UNDERSTAND? SO LIKE, IT GIVES US AN OPPORTUNITY TO BE ABLE TO LIKE, DIG DEEP, I MEAN, DIVE DEEP INTO, LIKE, EXPERIENCING OTHER CULTURES, YOU UNDERSTAND. SO IT GIVES YOU A DIVERSE MINDSETS, YOU KNOW, YOU HAVE SEEN HOW THIS PERSON BEHAVES, YOU SEE, I'VE SEEN HOW THIS WORKS, HE HAS SEEN HOW THIS WORKS. SO GENERALLY IN LIFE, IT HELPS YOU TO, TO EMBRACE, YOU KNOW, THE DIFFERENT THINGS. I MEAN, AND I THINK THAT WAS ONE OF THE REASONS WHY WE CAME HERE FOR MASTERS IN THE FIRST PLACE. YOU KNOW, EVERYBODY WAS TALKING ABOUT THE ABILITY FOR, I MEAN, IT AFFORDS US THE OPPORTUNITY TO BE ABLE TO, LIKE EXPERIENCE DIFFERENT CULTURES, YOU UNDERSTAND? SO, THAT HAS HELPED ME TO LIKE, YOU KNOW, YEAH, TO COME IN TERMS OF THE REALITY AND SEE, OKAY, YOU KNOW, YOU DON'T ALWAYS HAVE TO DO THINGS THE SAME WAY EVERY SINGLE TIME. YOU UNDERSTAND? LIKE, THERE ARE DIFFERENT ROUTES, I MEAN, THERE ARE DIFFERENT APPROACHES TO A SOLUTION. SO IT HELPS ME TO LIKE, I MEAN, YEAH, I'M IN FRANCE, HOW THINGS ARE DONE HERE, YOU KNOW, AND I QUICKLY ADJUSTED MY MINDSET, AND IT WAS EASY FOR ME TO LIKE, INTEGRATE AND CONTINUE WHAT I WANTED TO DO.

YEAH, TO BE HONEST, LIKE, YOU KNOW, I SUPPORT IT, TO BE HONEST, BECAUSE, LIKE I'VE SAID, LIKE, IT WILL HELP YOU TO LIKE, THERE IS NO WAY YOUR LEARNING EXPERIENCE WILL NOT IMPROVE. AND GENERALLY, EVERYBODY'S TRYING TO INTEGRATE AI INTO THEIR SYSTEMS. I MEAN, I WATCHED A MICROSOFT LAUNCH, WHERE THEY ARE INTEGRATING AI, FROM COMING FROM OPEN AI, THE COMPANY THAT OWNS CHATGPT, YOU KNOW, TO INTEGRATE IT INTO THEIR SEARCH ENGINE, THAT IS BING LIKE, SO IT GIVES YOU DIFFERENT OPTIONS. I MEAN, I DON'T KNOW HOW BING WORKS NOW, BUT LIKE, IT HELPS YOU TO NARROW DOWN YOUR SEARCH TIME, YOU KNOW, IT GIVES YOU LIKE, WHAT'S IT CALLED NOW, BETTER INSIGHTS, AS IN INCREASES ACCURACY, YOU KNOW, LANGUAGE TRANSITIONS AND ALL THAT. SO, I THINK AS AI IMPROVES OVER TIME, YOU KNOW, LEARNING EXPERIENCES WILL ALSO IMPROVE. DO YOU UNDERSTAND, AS IT GETS BETTER, IT'S ALSO GOING TO BE EASIER FOR STUDENTS TO USE IT. I KNOW, SOME PEOPLE HAVE ARGUED THAT, YOU KNOW, STUDENTS WILL BE USING THIS WRONGLY, YOU KNOW, IT WILL MAKE STUDENTS RELAX TO MAKE STUDENTS, YOU KNOW, LESS INNOVATIVE, YOU KNOW, LESS INTUITIVE AND ALL THAT BUT GENERALLY, I THINK AI IS MORE OF THE FUTURE. DO YOU UNDERSTAND, LIKE, IT'S NOT GOING TO BE 100% ACCURATE? I THINK EVEN BIG CORPORATIONS ALSO, LIKE, USE AI TO LIKE, YOU KNOW, PREDICT PRODUCTION TRENDS, PREDICT THIS, A LOT OF PREDICTIONS ARE BUILT AROUND AI IN RECENT TIMES. YOU KNOW, SO GENERALLY, IN THE NEAR FUTURE, AI IS GONNA BE A BIG PART OF OUR LIFE, OUR EDUCATION AND IT'S, I THINK AI IS HERE TO STAY. OKAY,

YEAH. TO BE HONEST, IT'S JUST SIMPLE. I THINK, IF, RATHER THAN AT THE END OF EACH COURSE, YOU UNDERSTAND AT THE END OF EACH WEEK, DO YOU UNDERSTAND LIKE, I THINK A SURVEY SHOULD BE DONE? YOU UNDERSTAND? LIKE, AND IT'S, IT'S REALLY EASY TO DO, LIKE, IT'S, IT'S SOMETHING THEY CAN JUST INTEGRATE INTO, INTO, LIKE, WAS HE CALLED THE SCHOOL WEB? DO YOU UNDERSTAND? OR SHAMIDO YOU UNDERSTAND, LIKE YOU CAN GO TO CAMILO AND LIKE, ANONYMOUSLY READ, OH, OH, HAS THE COURSE MET YOUR EXPECTATIONS, RATHER THAN WAIT TO THE END OF THE COURSE. OKAY, IT'S BETTER FOR YOU TO HAVE IT DURING THE COURSE AND AFTER THE COURSE, BECAUSE THE DAMAGE HAS ALREADY BEEN DONE AT THE END OF THE COURSE. BUT LIKE, THERE'S STILL SPACE OR LIKE, THERE'S A CHANCE TO CHANGE. AND THE FUNNY THING IS THAT THE LETTER MIGHT NOT BE AWARE THAT I'M DOING THINGS WRONGLY. BY THE TIME OR IT IS AT THE END OF THE COURSE, THAT YOU ARE HAVING THESE ISSUES. OR I MEAN, THE PEOPLE ARE NOW SEEING THESE ISSUES. IT'S DONE. IT'S NOT AS IF OH, YOU'RE GOING TO HAVE LIKE ANOTHER THREE MONTHS OF LEARNING WHERE THE LECTURER HAS TO CORRECT HIS MISTAKES. DO YOU UNDERSTAND THIS PARTICULAR LECTURE IN MY SCHOOL, AND ANYTIME WE MENTIONED HIS NAME, I THINK PEOPLE HAVE COMPLAINED AND THE SCHOOL IS NOT DOING ANYTHING. YOU UNDERSTAND, LIKE PEOPLE ON UNDERGRADUATE STUDENTS ARE LIKE, OH, WHO TAUGHT YOU THIS? OH, THIS PERSON. EVEN THE M2 STUDENTS ARE LIKE, JUST DON'T FAIL THIS COURSE. JUST KEEP IT MOVING. DO YOU UNDERSTAND LIKE, AND I DON'T THINK THEY'RE REALLY DOING ANYTHING ABOUT IT, TO BE HONEST. SO I THINK FEEDBACK IS MEANT TO BE DONE AFTER EACH CLASS, YOU KNOW, PROBABLY AFTER THE TP. YOU KNOW, AFTER YOUR FIRST TEACHING PRACTICE, YOU DO IT, YOUR SECOND ONE, YOU DO IT SO THAT, YOU KNOW THAT OH, OKAY. IT ALSO EVEN HELPS THE LECTURE. OKAY, YOU GUYS KNOW, UNDERSTAND THIS PART. PROBABLY DURING YOUR SELF ASSESSMENTS, YOU CAN GIVE ME ONE HOUR. AND I WOULD GO BACK TO THIS. WE HAVE A PARTICULAR LECTURE IN WHICH SHE'S THE ASSISTANT FOR GI IN MY SCHOOL IN THE ASSISTANT DIRECTOR BEFORE EVERY CLASS, RIGHT? WHAT SHE DOES IS SHE GIVES YOU WHAT



TO READ BEFORE THE NEXT CLASS. SO WHAT AND SHE GIVES YOU AN ASSIGNMENT, WHEN SHE COMES TO THE NEXT CLASS, SHE TAKES HER TIME TO, YOU KNOW, GO THROUGH YOUR QUESTIONS. OH, THIS IS THE QUESTION I HAVE. AND SHE EXPLAINS IT, THEN SHE GIVES YOU ANOTHER CLASSWORK. AND SHE LIKES WHAT YOU READ FOR THE NEXT CLASS. AND AFTER EVERY CLASS, SHE GIVES US AN ASSESSMENT, RIGHT? THE NEXT CLASS, THE WHAT HAPPENS IN THE ASSESSMENT IS WHAT SHE USES TO RE-EXPLAIN IN THE NEXT CLASS. OKAY, I SAW THAT A LOT OF PEOPLE HAD ISSUES WITH THIS PARTICULAR NUMBER. LET ME RE-EXPLAIN. SO I THINK THAT THAT WAS HER OWN WAY OF LIKE, GETTING WEEKLY EVALUATIONS OF HOW MUCH TEACHING SHE HAS DONE. YOU KNOW, I MEAN, YOU KNOW, PEOPLE ARE DIFFERENT. I MEAN, PROBABLY THAT'S. I MEAN, SHE HAS BEEN TEACHING FOR OVER 20 YEARS. SO LIKE, SHE HAS DEFINED THAT METHOD TO BE ABLE TO GET PROPER FEEDBACK FROM THE STUDENTS. YOU UNDERSTAND. SO PEOPLE ARE ALSO I THINK IT'S NOT THAT THEY CAN JUST INTEGRATE INTO THE SYSTEM AND LIKE, DO IT BEFORE I MEAN, BEFORE THE END OF THE COURSE NOT NOT HAVING AN EVALUATION AFTER THE WHOLE COURSE HAS BEEN DONE. YEAH.

So, coding for example. Right. I think there are various modes of learning. And, you know and I think other people that are recently into, will tell you that, oh, they had to watch video then practice. You understand? I think there are things that would necessarily not totally work with artificial Intelligence? Do you understand? And I think coding is one of them. Like, you need somebody to actually teach you. Like, probably, you're going to pick a lot of things by hearing and seeing what people are doing. So, I think, AI is generally not going to substitute the conventional way of learning or teaching, you understand? I think the AI tool is just there to complement the efforts of conventional teaching, it will not it will not necessarily eliminate it, you know, it's just there to complement the efforts, you know, of conventional teaching. So, both of them will go hand in hand. You know, before there was a I mean, I think we're fine, but I keep just seeing that AI is improving experiences, not more like replacing it.

I MEAN, I DON'T THINK I MEAN, PEOPLE WOULD ARGUE THAT WHEN THEY INVENTED THE GUN, YOU KNOW, IT WAS IT WASN'T MADE FOR, FOR THE HARM OF PEOPLE HE WAS MADE TO PROTECT, SOME PEOPLE WILL TELL YOU THAT IT WAS MADE TO HARM PEOPLE, YOU KNOW, I'M SURE THERE ARE GOING TO ALWAYS GOING TO BE DIFFERENT PERSPECTIVES AND DIFFERENT FEELINGS OR DIFFERENT INTERPRETATIONS OF PERCEPTIONS OF CHATGPT. I MEAN, THERE'S GONNA BE IT CALLED CONFLICTING IDEAS OR WHATEVER. BUT I THINK AS MUCH AS PEOPLE WOULD USE IT FOR GOOD, YOU KNOW, PEOPLE WOULD USE IT FOR BAD LIKE THAT. I MEAN, EVERYTHING MADE IS BASICALLY A TWO EDGED SWORD. SO I THINK WE SHOULD FOCUS ON THE POSITIVE SIDES. AND WE SHOULD ALSO TRY TO REGULATE HOW NEGATIVELY PEOPLE CAN USE THESE TOOLS. YOU UNDERSTAND? I THINK I'VE BEEN TRYING TO LIKE MELTDOWNS, PROPER PUNISHMENTS TO PEOPLE THAT, YOU KNOW, TRY TO USE IT NEGATIVELY WOULD, YOU KNOW, REDUCE THE PERCENTAGE OF HOW PEOPLE LIKE TO USE IT WRONG? BECAUSE IT HAS A LOT OF POTENTIAL TO HELP? RIGHT. AND I DON'T THINK PEOPLE SHOULD, I DON'T THINK WE SHOULD GENERALLY DISCOURAGE STUDENTS FROM, I MEAN, USING CHATGPT I MEAN, IT'S NOT, IT'S NOT THE RIGHT WAY TO GO. RIGHT. I THINK WE SHOULD JUST REALLY INCENTIVIZE PEOPLE THAT ARE OKAY. YES. IT CAN GIVE YOU EVEN WHEN YOU USE GOOGLE, YOU KNOW, SOME PEOPLE CAN STILL BE CHARGED FOR PLAGIARISM USING GOOGLE. PEOPLE JUST COPY AND PASTE WHAT YOU SEE THERE. SO I REALLY DON'T SEE IT AS MY AI OR CHARGED CHATGPT ISSUE. LIKE I JUST SAID, AS LONG AS IT'S A PERSONNEL ISSUE, THAT IT'S NOT, IT'S NOT BECAUSE OF CHATGPT AT ALL, RIGHT? IT'S JUST A PERSONAL ISSUE. SO PEOPLE SHOULD JUST KNOW THAT OH, OKAY. THE SAME WAY YOU CAN BE CHARGED FOR PLAGIARISM. YOU KNOW, FOR USING GOOGLE WRONGLY IS THE SAME WE CAN BE CHARGED FOR CHATGPT FOR USING A WRONG VIEW. SO LIKE, I THINK IT WILL HELP PEOPLE TO LIKE, YOU KNOW, KNOW HOW TO RELATE THE INFORMATION GOTTEN THERE FROM, YOU KNOW, FROM THESE AI TOOLS.

OH, LIKE I THINK I THINK IT'S LIKE TWO QUESTIONS ABACK LIKE I SAID, LIKE IT CANNOT REPLACE CONVENTIONAL TEACHING. IT CANNOT BE LIKE THE NORMAL TEACHING OR GOING TO. IT CANNOT REPLACE IT. DO YOU UNDERSTAND? LIKE, AS MUCH AS YOU ARE FOR EXAMPLE, LIKE, LET ME USE, LIKE THE MOST EXTREME CASE, OH NOW BECAUSE I WANT TO BE A DOCTOR, NOW I CAN JUST GO ON CHATGPT FOR ONE YEAR, AND START, YOU KNOW, OPERATING PEOPLE BECAUSE, I'VE READ, I'M IN CHATGPT HAS GIVEN ME, YOU KNOW, PROPER INFORMATION. IT'S NOT POSSIBLE, LIKE IT CAN'T REPLACE CONVENTIONAL TEACHING EVER, IT CAN REPLACE TEACHERS, YOU KNOW, I'M FOR IT TO COMPLEMENT AND TO IMPROVE LEARNING EXPERIENCES, BUT IT'S GENERALLY CANNOT REPLACE THE JOB OF TEACHERS, AND PRACTICALS. DO YOU UNDERSTAND? LIKE, FOR EXAMPLE, YOU KNOW, PEOPLE PEOPLE WOULD CLAIM THAT OH, YOU ARE, I CANNOT, I CAN BE A PROJECT MANAGER BY DOING COURSES WITHIN BLAH, BLAH, BLAH, BLAH, BLAH, YOU KNOW, PEOPLE WILL ALSO HAVE THE ARGUMENTS THAT I MEAN, YOU CAN DO ONLINE COURSES AND GET ON WITH WHAT YOU'RE DOING. BUT TO BE HONEST FROM PEOPLE, SOMEONE LIKE ME THAT HAS DONE MULTIPLE, MULTIPLE MULTIPLE, YOU KNOW, COURSES, PROBABLY COURSERA OR WHATEVER, LIKE, YOU CANNOT COMPARE IT TO THE ACTUAL LEARNING EXPERIENCE YOU GAIN, YOU UNDERSTAND, BECAUSE LIKE, THESE



ARE SHORT COURSES OR COURSES FOR YOU IS A SHORT COURSES FOR A REASON. THEY UNDERSTAND YOU, IF YOU HAVE AN ISSUE WITH SOMETHING DURING THE COURSE YOU DON'T GET TO ASK FOR CLARIFICATIONS, YOU KNOW, YOU DON'T GET TO LIKE, ASK THE PERSON THAT HAS AN IN DEPTH KNOWLEDGE. THAT OH WHAT IF, YOU KNOW, WHAT IF WHAT YOU'RE SAYING DOESN'T GO THIS WAY? HOW ELSE WILL IT GO? SO ALL THESE THINGS ARE JUST STREAMLINED TO ONE EXPERIENCE, NOT MULTIPLE EXPERIENCES. AND THAT IS WHAT YOU WOULD GET FROM A CONVENTIONAL CLASS, YOU KNOW, OH, THIS IS HOW THIS IS DONE. I MEAN, YOU MIGHT JUST THINK, I MEAN, WE, I HAD AN INVENTIVE CLASS, YOU KNOW, AND WE WERE TALKING ABOUT HOW TO IMPROVE TOASTING EXPERIENCES USING A TOASTER. SOMEONE SPOKE ABOUT USING A MAGNIFYING LENS ON THE SUN, YOU KNOW, CHANNELLING THE RAYS FROM THE SUN, AND FOCUSING IT ON YOUR BREAD, AND YOUR BREAD IS GOING TO TOAST. WONDERFUL IDEA. RIGHT. AND EVERYBODY HAD DISCUSSIONS ABOUT IT, YOU KNOW, YOU KNOW, I MEAN, I TALKED ABOUT HAVING A TOASTER THAT CAN CHOOSE 10 BREAD, BUT I MEAN, THAT'S IS WHAT YOU WOULD GET FROM AN ACTUAL CLASS, YOU CANNOT GET IT FROM CHATGPT, YOU UNDERSTAND, LIKE, THE INTERACTIVENESS, THE BEAUTY OF INTERACTIVENESS, YOU KNOW, AND SHARING OF IDEAS, CRITICISING IDEAS, SUPPORTING IDEAS WOULD NEVER COME UP WITH CHATGPT YOU UNDERSTAND? SO IT CANNOT REPLACE THE CONVENTIONAL MODE OF TEACHING. IT CAN ONLY IN SOME AREAS, IMPROVE YOUR LEARNING EXPERIENCE.

SO I THINK, YOU KNOW, FIRST THINGS FIRST, THE REASONS WHY, YOU KNOW, OLDER PROFESSORS ARE, LIKE FROWNING TO IT IS BECAUSE, YOU KNOW, GENERALLY PEOPLE BELIEVE THAT BECAUSE THEY HAVE, BECAUSE THEY HAVE DONE SOMETHING THE HARD WAY, YOU HAVE TO DO THE HARD WAY, OR THEY LOSE CREDIBILITY, BECAUSE YOU BECAUSE YOU HAVE IT EASIER. IT'S A GENERAL CONCEPTION, HE GETS, YOU KNOW, BECAUSE I DID NOT STRUGGLE TO GET SOMETHING. I MEAN, IT MAKES IT LESS CREDIBLE, YOU KNOW? SO, I THINK AS TIME GOES ON, I MEAN, THERE ARE THINGS THAT WE DO NOW THAT WE'RE NOT ACCEPTED 30 YEARS AGO. YEAH. BECAUSE OF THE RIGID MINDEDNESS OF PEOPLE. I THINK AS TIME GOES ON, WE WOULD NORMALLY, WHEN YOU WANT TO DO RESEARCH, THERE'S, THERE'S A TOPIC CALLED RESEARCH METHODOLOGY, YOU UNDERSTAND? WHERE YOU ARE TAUGHT HOW TO DO THIS, HOW TO DO THAT, BLAH, BLAH. I THINK, AS TIME GOES ON, THERE'LL BE A TIME WHERE WE WOULD HAVE, OKAY, PROPER REFERENCING AND PROPER USAGE OF CHATGPT AI TOOLS. IN YOUR RESEARCH? THERE IS NO HOW, I MEAN, WE CAN'T, WE CAN'T KEEP LIVING IN THE OBLIVION THAT PEOPLE DON'T USE IT. YOU UNDERSTAND. AND THE BEST WAY FOR US TO REGULATE OR TEACH PEOPLE HOW TO USE IT IS TO LIKE, PROPERLY, EDUCATE THEM ON THE BEST PRACTICES OF USING THESE TOOLS. YOU UNDERSTAND? SO WE WOULD NOT SAY, OH, okay, yeah, give us a 700 page or 300 page. PhD thesis is how you and you think the person is not going to try and GET INFORMATION FROM SOURCES IS JUST TO YOU KNOW, BUILD ETHICS AROUND IT. OKAY, THIS IS THE BEST WAY TO DO THIS. IF YOU DO THIS BEYOND THIS IS GOING TO BE UNETHICAL. YEAH. SO I THINK HE'S JUST TRYING TO, I WOULDN'T SAY REGULATE IT, YOU UNDERSTAND, IS JUST COMING UP WITH THE BEST WAYS THAT PEOPLE CAN USE THIS. BECAUSE WE KEEP DECEIVING OURSELVES THAT WELL, THERE'S CHATGPT, I DON'T EXPECT YOU TO USE IT, IT'S A LIE, PEOPLE ARE GOING TO USE IT. RIGHT. AND AS TIME GOES ON, I MEAN, PEOPLE THAT ARE BEING WE THAT WE ARE CURRENTLY, I MEAN, DOING ACADEMICS, NOW, PROBABLY I WILL BECOME A PROFESSOR LATER, YOU UNDERSTAND, WE WILL, WE WILL BE THE ONES TO CHANGE THE SYSTEM, YOU KNOW, CURRENT PROFESSORS THAT PROBABLY DID THEIR PHD IN 1987. THEY WOULD FROWN AGAINST IT, YOU UNDERSTAND. SO IT DEPENDS ON THE PROGRESSIVENESS OF, YOU KNOW, THE EDUCATIONAL COMMUNITY GENERALLY. AND THE ACCEPTANCE AND SEEING THE POSITIVE SIDES. IF THEY WEIGH THE PROS AND CONS AND THE PROS AND CONS, YOU UNDERSTAND, IT'D BE ADEQUATELY LIKE, SAYING, OKAY, YEAH, LET'S INTEGRATE THIS INTO THE EDUCATIONAL SYSTEM, AND TRY TO FIND A WAY TO REGULATE IT. SO, AS TIME GOES ON, IT WILL BE SOMETHING THAT WE WOULD HAVE, YOU KNOW, IN OUR CLASSES, THERE IS NO HOW THERE IS NO HOW WE KNOW THAT WAS. THE WAY THE INTERNET WAS WHEN THE WWW CAME ON THE FIRST WORLD WIDE WEB CAME OUT FIRST, IT IS NOT THE WAY IT IS NOW, YOU UNDERSTAND, AND THE RULES THAT WERE MADE AROUND THAT TIME. SO THAT'S WHY YOU HAVE TO CONSTANTLY THE MORE TECHNOLOGY IS ADVANCING, YOU UNDERSTAND YOU HAVE TO RECEIPT EVERY SINGLE TIME AND SEE HOW YOU CAN INTEGRATE, I MEAN, REGULATES OUR LIKE TO BE ABLE TO LIKE, YOU KNOW, CONTAIN ADVANCEMENT, TECHNOLOGICAL ADVANCEMENTS IN EVERY SECTOR, YOU UNDERSTAND RULES THAT WERE MADE TO MEET LATE SEVEN YEARS AGO, 70 YEARS AGO, TODAY, THEY ARE OBSOLETE, BECAUSE REALITIES HAVE CHANGED. DO YOU UNDERSTAND? SO, THE MORE WE GET TO THIS, THIS IS HERE TO STAY. SO THE MORE WE TRY TO EMBRACE IT, YOU KNOW? AND I PERSONALLY BELIEVE THAT THE MORE PEOPLE WILL SAY DON'T USE IT, THE MORE PEOPLE ARE GOING TO USE IT. I PROMISE YOU, YOU UNDERSTAND. BUT IF YOU TELL PEOPLE THAT OKAY, YES, IT IS ACCEPTABLE TO USE AI TOOLS, BUT THIS is how you're going to use it. Now. If you now falter. You know you if you now use it wrongly, that's when you're GOING TO HAVE AN ISSUE.

OH, YOU KNOW, TO BE HONEST, CURRENTLY, I WILL THINK LIKE, YOU KNOW, ARTIFICIAL INTELLIGENCE IS LIKE, HAS BEEN INVOLVED IN MAJOR, LIKE, YOU KNOW, DECISION MAKING, GENERALLY THE WORLD, BUT AS MUCH AS, AS THOSE PROJECTIONS HAVE BEEN DONE WITH AI, YOU KNOW, MOST TIMES, IT'S NOT ALWAYS LIKE, THE SAME THING WITH REALITY, YOU KNOW, AS MUCH AS



COMPANIES WILL DO THEIR PROJECTIONS USING AI, YOU KNOW, THEY WILL ALSO DO LIKE, LIKE, THEY ARE CALCULATIONS BASED ON REALITY, YOU UNDERSTAND, YOU KNOW, BECAUSE MOST TIMES IT, A COMPANY MIGHT SAY, OH, YEAH, THIS IS HOW THIS IS GOING TO BE THE SPENDING PATTERN OF PEOPLE IN THE NEXT 10 YEARS, OR IN THE NEXT ONE YEAR. SO, WE SHOULD PRODUCE MORE OF THIS QUANTITY BLA BLA BLA, BLA BLA, YOU KNOW, AI CANNOT PREDICT, HUMAN FEELINGS. DO YOU UNDERSTAND? AI CANNOT PREDICT, YOU KNOW, WHAT IS GOING TO HAPPEN, IF THERE'S GOING TO BE A PANDEMIC, IE THERE'S GOING TO BE THIS, IF THERE'S GOING TO BE THAT, YOU KNOW, AS MUCH AS AI IS GOING TO BE INVOLVED IN SOME CERTAIN DISEASE, YOU KNOW, IT'S, NOT GOING TO BE LIKE, THE FINAL ANSWER. I DON'T KNOW, IF YOU UNDERSTAND, LIKE I'VE SAID, IT IS GOING TO BE USED SIDE BY SIDE, HAND IN HAND, BUT WE ARE DEFINITELY NOT GOING TO BE TOTALLY DEPENDENT ON, YOU KNOW, AI PREDICTIONS TO MAKE, LIKE BUSINESS DECISIONS GENERALLY. SO IT'S STILL, IT'S STILL GOING TO BE A CASE OF, OKAY, LET'S SEE WHAT, LET'S SEE WHAT THE AI THINKS. AND LET'S ALSO SEE WHAT IS HAPPENING IN REALITY. YOU KNOW, IT JUST HELPS YOU TO LIKE, SO LIKE, OKAY, THIS IS WHAT WOULD HAPPEN NEXT, BECAUSE THIS, THIS, THIS, THIS HAS HAPPENED FIVE YEARS AGO, YOU KNOW, IT MIGHT GIVE US LIKE, AN INSIGHT INTO THE FUTURE, BUT IT CANNOT PREDICT IT ACCURATELY, YOU UNDERSTAND THERE'LL STILL SEE THERE WILL BE SOME ERROR OF DEGREE REGARDLESS. SO EVEN THOUGH IT'S, IT'S ACCEPTED TO FAULT, IN PROBABLY LIKE BUSINESS, YOU KNOW, SUPPLY CHAIN , PRODUCTION AND ALL THAT, YOU KNOW, IT'S STILL IT'S CAN BE 100%, LIKE, RELIED UPON THEM, YOU DON'T WANT TO MAKE ALL YOUR DECISIONS BASED ON WHAT YOU THINK YOU UNDERSTAND. THAT'S WHY NORMALLY, LIKE, THEY WOULD SAY, OH, OKAY, WHEN YOU'RE DOING YOUR BUSINESS MEETINGS, AND WE ARE MAKING PREDICTIONS FOR THE FUTURE, YOU HAVE A FIVE YEAR PLAN, EVEN YOUR PLAN CAN START FAILING FROM THE THIRD MONTH, DO YOU UNDERSTAND? SO THAT'S WHY THERE'LL BE CONSTANT ITERATIONS, CONSTANT CHANGES TO WHAT'S IT NOW TO SEE YOUR BUSINESS TO BUSINESS IDEAS. SO AS MUCH AS YOU WANT TO USE AI, YOU WANT TO USE NORMAL INTERACTIONS, YOU WANT TO USE FEEDBACK FROM PEOPLE, YOU WANT TO USE, YOU KNOW, SURVEY FORMS, AND ALL THAT ALL THESE THINGS ARE GOING TO WORK HAND IN HAND.

SO I MEAN. I DON'T USE CHATGPT FOR RESEARCH PURPOSES OR PRESENTATION PURPOSES. YOU UNDERSTAND BECAUSE LIKE, FOR EXAMPLE, IF I NEED DATA ABOUT THE ENERGY USAGE IN THE EU, I'M NOT GOING TO GO TO CHATGPT TO BASE MY PRESENTATIONS ON THAT, YOU KNOW, I WILL STILL WANT TO LOOK FOR EMPIRICAL FACTS ON THE WEB LIKE USING GOOGLE. DO YOU UNDERSTAND? Mostly what I used to do before would basically probably be how to construct sentences. You know how to use this PHRASE, BUT RECONSTRUCT THE SENTENCE FOR ME. I WAS HELPING SOMEBODY WITH SOMETHING AND THE PERSON SENT ME THEIR SENTENCES. YOU WROTE THIS THING WITH CHATGPT. YEAH, YES. I'M LIKE, IT LOOKS ROBOTIC. RIGHT, BUT NOT USING IT AS THE ACTUAL THING. SO I THINK GENERALLY, LIKE, IT'S JUST LIKE AN ADDICTION, IT JUST HELPS YOU TO LIKE, YOU KNOW, WRITE BETTER SENTENCES, HELPS YOU TO GIVE IT ACCURATE INFORMATION, OR NOT ACCURATE INFORMATION, LIKE ENOUGH INFORMATION THAT YOU CAN BUILD. EXACTLY, NOT WHAT WE CAN BASE YOUR WHOLE SUBMISSION ON. YOU ALSO, LIKE, AS I USE, I USE, I USE AI VALUES. IT'S ALSO IN CONJUNCTION WITH OTHER TOOLS. YOU KNOW, I USE IT WITH INTERNATIONAL JOURNALS. I USE IT WITH THIS, BECAUSE EVEN THOUGH YOU HAVE SAID, CAN YOU DEFEND WHAT YOU HAVE DONE? YOU HAVE TO BE ABLE TO DEFEND IT. YOU KNOW, WHERE'S THE SOURCE? I MEAN, YOU CAN'T, YOU CAN'T, YOU CAN'T WRITE IF THEY TELL YOU TO WRITE YOUR REFERENCES, PROBABLY ON THE LAST PAGE, REFERENCE NUMBER 27. YOU KNOW, WRITE CHATGPT, IT'S GONNA BE A PROBLEM, YOU UNDERSTAND? SO LIKE, I THINK MY PERFORMANCE? YEAH, IT PROBABLY DOES HELP MY PRODUCTIVITY. I'M NOT GOING TO TAKE THAT OUT OF IT. YOU KNOW, HELP ME TO DO WHAT I WANT TO DO FASTER. YOU UNDERSTAND, BUT I THINK ON THE BASICS, LIKE YOUR EFFORTS TO BE ABLE TO ACTUALLY PUT INTO THE QUALITY OF YOUR WORK WOULD BE WHAT WOULD TRANSLATE INTO WHAT YOU GET. Y

It was, it was a rave throughout social media, throughout. Students have been talking about it, you know, it was like, it's like, the buzzing teen right now, you understand? I mean, most times when you want to login, the site is oversaturated. Because of the influx of people that are trying to use it are first time users or, you know, existing users that are trying to use it. So it's a rave of the moment so you cannot see anywhere you turn around like probably campus. You're hearing somebody talking about it. You understand?

YES. I ALSO ALWAYS GIVE THE CLAUSE THAT DOESN'T USE HIS VERBATIM. YOU UNDERSTAND? LIKE, ALSO TRY AND USE JUST AS A REFERENCE POINT, YOU KNOW, AND YEAH, THAT'S, THAT'S HOW I'VE BEEN, YOU KNOW, INTRODUCING IT TO OTHER PEOPLE.

YES, YOU UNDERSTAND, LIKE, I WOULD NOT LIE LIKE IT'S, MOST STUDENTS WILL TAKE IT AS AN OPPORTUNITY TO BE LAZY. DO YOU UNDERSTAND, LIKE, IS IT GOING TO BE USED AS AN OPPORTUNITY TO BE LAZY? I MEAN, EVEN BEFORE CHATGPT YOU UNDERSTAND? LIKE, WE HAVE BEEN USING AI IN YOU KNOW, OUR TYPING EXPERIENCE, YOU KNOW, YOUR KEYBOARD USES AI TO PREDICT, YOU KNOW, SOMETIMES WHEN YOU'RE WHEN YOU'RE RIGHT TWO THINGS. I MEAN, SOMETIMES I FIND THE FUNNY NAMES OF PEOPLE THAT



ARE PROBABLY LIKE, TYPED THREE YEARS AGO, AND I WANT TO TYPE SOMETHING IN THIS PERSON'S NAME POPPED UP, YOU KNOW, WE ARE USING IT IN TEXT-TO-SPEECH? WE ARE USING IT IN LIKE PREDICTIVE, YOU KNOW, PREDICTIVE TYPING, YOU KNOW, MOST PEOPLE WILL USE GRAMMARLY YOU UNDERSTAND LIKE GRAMMARLY HAS BEEN THERE I MEAN, YEAH, I MEAN, I'LL BE USING GRAMMARLY SINCE WHEN I WAS IN LIKE MY UNDERGRADUATES, YOU KNOW, TO LIKE HELP YOU TO LIKE TO CHECK THE CORRECTNESS OF YOUR OF YOUR OF YOUR TYPING ANOTHER, SO I THINK GENERALLY IT WOULD IT WOULD IMPROVE, LEARNING. YEAH. I DON'T THINK I'VE ANSWERED THE QUESTION.

OH, YEAH. WELL, IT DEPENDS. IT DEPENDS. BUT LIKE, I THINK EVERYBODY JUST UNDERSTANDS THAT THE BEST PLACE TO GET YOUR INFORMATION, YOU AND IT'S LIKE, THE BEST AND RELIABLE PLACE TO GET YOUR INFORMATION, BECAUSE IT'S A LECTURER THAT IS GOING TO MARK YOU. YOU UNDERSTAND. SO LIKE, THE BEST WAY TO GET INFORMATION IS GOING TO BE YOUR TEACHER. BUT ALSO, WHEN IT COMES TO ASSIGNMENTS, YOU KNOW, IN CLASS INTERACTIONS, YOU WOULDN'T WANT TO DO THAT. PEOPLE MOSTLY USE, YOU KNOW, CHATGPT WHEN THEY ONLY HAVE ASSIGNMENTS TO DO. LIKE, DURING CLASS LEARNING. YOU UNDERSTAND? I THINK EVERYBODY KNOWS THAT THE BEST PERSON TO ASK QUESTIONS FROM, YOU UNDERSTAND, IS YOUR TEACHER PRIMARILY. NOW YOU CANNOT GO BACK HOME AND START USING CHATGPT.

HMM. WELL, ETHICAL TO BE HONEST, LIKE, I DON'T THINK I WILL BE ABLE TO, LIKE, BE IN A POSITION TO LIKE, TO EXPRESS THIS PROPERLY, BUT TRUSTWORTHY. LIKE, THERE IS NO SOURCE THAT IS TRUSTWORTHY. SO YOU'RE HONEST, BECAUSE, THAT IS WHY YOU SEE, LIKE, PEOPLE LIKE DOING DIFFERENT RESEARCH ON A PARTICULAR TOPIC. THERE'S OBVIOUSLY GOING TO BE BIAS IN EVERYTHING. YOU KNOW, YOU KNOW, I THINK I SAW A LIST OF, OF CHATGPT, LISTING, THE PEOPLE THAT I MEAN POWERFUL PEOPLE IN THE WORLD THAT HAVE SOSOSO LIKE, I THINK IT HAS SOME CRITERIAS, YOU KNOW, AND SOME PEOPLE CAME OUT, AND THEY WERE LIKE, NAH, YOU KNOW, THIS IS WRONG, THIS IS WRONG. THIS IS WRONG, YOU KNOW, AS IN, NOTHING IS CORRECT. YOU UNDERSTAND? AND FOR SOMETHING TO BE CORRECT, LIKE, A LOT OF PEOPLE HAVE TO SAY THAT. OH, YES. LIKE, A LOT OF PEOPLE HAVE TO COME TOGETHER. OKAY, YEAH, THIS IS THE TRUTH. YOU UNDERSTAND? OKAY, THIS IS FACTS. YOU UNDERSTAND? I MEAN, TRUTH MEANS DIFFERENT THINGS TO DIFFERENT PEOPLE. SO LIKE, CORRECTNESS IS LIKE, REALLY? LIKE, I DON'T KNOW, I DON'T KNOW, YOU KNOW, EVEN WHEN WE USE GOOGLE, WE DON'T SAY IS TOTALLY CORRECT. YOU UNDERSTAND, LIKE, SOMEONE'S PERCEPTION MIGHT BE DIFFERENT THAN YOUR PERCEPTION. THAT'S WHY IT'S GOOD TO LIKE COMPARE OTHER SOURCES FOR YOU TO LIKE, OKAY, YEAH, I THINK EVERYBODY AGREES ON THIS, BUT THIS PART OF THIS PUBLICATION, BUT NOT EVERYBODY AGREES ON THIS PART OF THIS PUBLICATION. DO YOU UNDERSTAND SO, SO CORRECTNESS IS NOT IS NOT 100%? CORRECT. ETHICAL, ETHICAL. I MEAN, TO BE HONEST, LIKE, IF YOU WERE, LIKE I'VE SAID, THERE WOULD BE THINGS TO BE USED FOR GOOD AND THINGS TO BE USED FOR. SO, IT DEPENDS, IT HONESTLY JUST DEPENDS ON YOUR INTENTION OF USING SOMETHING. SO, YEAH, AND IF IT WORKS, LIKE GENERALLY ETHICAL STANDARDS, LIKE WHAT IS ETHICAL IN SOME PLACES WOULD BE LIKE UNETHICAL IN OTHER PLACES, UNDERSTAND WHAT LIKE, I THINK LIKE, THERE ARE THERE ARE GENERAL BASIS THAT EVERYBODY AGREES ON THAT OH, THIS IS NON ETHICAL. YOU UNDERSTAND, LIKE, IT DEPENDS ON THE VIEWS OF WHAT YOU'RE USING OR WHAT YOU'RE USING IT FOR. YOU UNDERSTAND AND IF IT EXCEEDS, LIKE GENERAL STANDARDS, OF WHAT ETHICAL, ETHICAL IT MEANS, WELL, WE CAN SAY IS UNETHICAL. YOU KNOW, IT'S REALLY LIKE A, IT'S NOT LIKE A STABLE, STABLE, STABLE TOPIC. IT DEPENDS ON WHAT YOU USE IT FOR.

SO IT'S LIKE, LIKE I'VE SAID, LIKE, REGULATIONS, YOU UNDERSTAND? LIKE, THE RATE AT WHICH YOU CAN USE SOMETHING? YOU UNDERSTAND? LIKE, OH, YEAH, FOR YOU TO BE FAIR TO EVERYBODY? YEAH. LIKE, THE BEST THING IS, THE FIRST THING IS BEST MAKE IT MAKE IT USABLE FOR EVERYBODY. YOU UNDERSTAND? BECAUSE SOMEONE WAS SMARTER THAN OTHER PEOPLE. YOU SAY, DON'T USE CHATGPT. AND SOMEBODY'S USING IT. AND THE FUNNY THING IS THAT THE LECTURER MIGHT NOT KNOW, IT'S NOT AS IF YOU CAN PUT THE PERSON'S WRITING UP INTO LIKE, IT'S ANOTHER SOFTWARE? AND IT TELLS YOU THAT OH, IS IT THE PERSON WHO HAS USED CHATGPT, SOME PEOPLE ARE SMARTER THAN THE OTHER. THE FIRST THING I THINK IS THE APPROACH THAT SHOULD BE USED, MAKE IT OPEN TO EVERYBODY. EVERYBODY CAN USE IT. IT JUST REGULATES HOW THEY USE IT, THE EXTENT TO WHICH THEY USE IT, YOU UNDERSTAND? SO I THINK WE SHOULD SEE IT AS LIKE, POSITIVE, YOU KNOW, POSITIVE TOOL, YOU KNOW, WE'LL ALSO TRY TO REGULATE THE USE. YOU UNDERSTAND? LIKE, THE SAME WAY PEOPLE WOULD ARGUE ABOUT, LIKE, HOW THEY CALL IT NOW, LIKE GUNS FOR DEFENDING THEMSELVES? YOU UNDERSTAND? LIKE, YEAH, THERE HAS TO BE REGULATIONS AROUND THESE THINGS. FOR IT TO BE FAIR TO EVERYBODY. YEAH.

YEAH, SO GENERALLY, LIKE, I THINK AI IS HERE TO STAY. AND THE EARLIER WE ACCEPT IT, LIKE TRYING TO INTEGRATE IT AND REGULATE IT, THE BETTER. YOU UNDERSTAND BECAUSE PEOPLE, IF WE DON'T ACCEPT IT, AND REGULATE IT, PEOPLE WILL STILL HAVE ACCESS TO IT. AND THEY WILL BE USING IT UNFAIRLY. DO YOU UNDERSTAND? LIKE, TO THEIR ADVANTAGE, TO THEIR ADVANTAGE AND AT THE



DETRIMENT OF OTHERS? SO I THINK, YEAH, IT'S, IT'S, IT'S GOING TO BE PART OF OUR LIVES, I MEAN, THERE'S GOING TO BE WELL, WE'RE ALWAYS GOING TO BE USING IT FOR SIMULATIONS, WE'RE ALSO WE'RE GONNA BE USING IT FOR LIKE PREDICTIONS, YOU UNDERSTAND, YOU KNOW, WE'RE GONNA BE USING IT FOR SEARCHES, I MEAN, COMPANIES, DIFFERENT COMPANIES ARE ALREADY INTEGRATING IT INTO THEIR SYSTEMS, YOU KNOW, LIKE, I LIKE I SPOKE ABOUT, YOU KNOW, BING, BING ALREADY HAS LIKE, LIKE, I CURRENTLY JOINED THAT THEIR TEST VERSION. AND LIKE, I'M ALREADY TESTING IT OUT, LIKE, RATHER THAN PUTTING YOUR, YOU KNOW, YOUR SEARCHES INTO THE BOX, YOU CAN CHAT RIGHT THERE, AND IT GIVES YOU THE BEST, THE BEST ANSWER. SO LIKE, THE MORE WE LIKE, TRY TO EMBRACE IT, YOU KNOW, THE EASIER IT WILL BE FOR US TO REGULATE IT. AND, YOU KNOW, TRY AND, YOU KNOW, MEASURE THE FAIRNESS OF HOW PEOPLE CAN USE IT. SO ONE PERSON DOESN'T USE IT TO HIS OWN ADVANTAGE AT THE DETRIMENT OF OTHERS. SO YEAH, I THINK IT IS GOING TO BE GAME CHANGING. YOU UNDERSTAND, AND IT'S GOING TO COMPLEMENT EDUCATION IN GENERAL. YEAH. SO YEAH, I THINK AI IS THE FUTURE TO BE HONEST, AS THE FUTURE

OKAY, SO I WILL START WITH MY BACKGROUND. AS YOU KNOW, MY NAME IS WISSEM, I COME FROM ALGERIA. AND I HAVE A MASTER'S AND ENGINEERING DEGREE FROM A SCHOOL CALLED THE ECOLE NATIONALE SUPÉRIEURE D'INFORMATIQUE. IT IS SITUATED IN ALGIERS, THE CAPITAL OF ALGERIA, AND MY SCHOOL IS ABOUT COMPUTER SCIENCE. SO BASICALLY, THE TRANSLATION WOULD BE THE HIGHER NATIONALS OF COMPUTER SCIENCE. AND MY MASTER'S IN ENGINEERING DEGREE IS SPECIALIZED IN INFORMATION SYSTEMS AND TECHNOLOGY. SO I HAD LIKE, TWO PREPARATORY YEARS THEN, THEN ONE YEAR ONLY STUDYING COMPUTER SCIENCE. SO THE FIRST TWO YEARS I STUDIED MAINLY MATHEMATICS. AND THEN IN THE THIRD YEAR, I STUDIED COMPUTER SCIENCE ONLY RELATED MODULES. AND THE FOURTH YEAR, I STUDIED ONLY MODULES THAT HAVE A RELATION WITH INFORMATION SYSTEMS AND TECHNOLOGY. I HAVE VARIOUS, I HAVE VARIOUS THEORETICAL BACKGROUNDS, WHEN IT COMES TO VARIOUS SUBJECTS, LIKE BUSINESS INTELLIGENCE, LIKE AUDIT, LIKE DATA ANALYSIS, ETC. BUT DURING MY FINAL YEAR, FIFTH YEAR, I MEAN, I HAVE DONE AN INTERNSHIP FOR APPROXIMATELY 10 MONTHS, AND I HAVE ONLY FOCUSED ON BUSINESS INTELLIGENCE. SO THIS WAS A VERY PRACTICAL EXPERIENCE FOR ME. OKAY. AND THEN, AS YOU KNOW, I MOVED HERE TO FRANCE, AND I'M DOING MY SECOND MASTER'S, IN ADVANCED RESEARCH MANAGEMENT INFORMATION SYSTEMS. AND YOU KNOW, ALL ABOUT THAT.

As a current master's student? Yeah. Um, a typical day for me would be like, day one I have like school, it would be to wake up in the morning depending on the start of the day. And then it also depends on the course. So for example, if I had, like a work to present, I would review the work before going, and then I would go to the class and present it. It depends on the course. It's like, do I describe detail by detail? Or what do you want to know? Exactly?

SO I WOULD GO, AND I ALWAYS HAVE MY LAPTOP WITH ME, LIKE MOST OF THE TIME, 90%, I HAVE MY LAPTOP. AND TO BE HONEST, IF THE COURSE IS INTERESTING, I WOULD BE FOLLOWING THE TEACHER, IF, OF COURSE IT IS NOT INTERESTING. I WILL BE DOING MY STUFF ON MY LAPTOP, WHICH IS GENERALLY DOING OTHER TASKS, LIKE OTHER MODULES, THAT THEY REQUEST TASKS FROM US. SO I WILL BE DOING THAT. OR I WOULD BE DOING SOME ADMINISTRATIVE PAPER STUFF. SO YEAH, THIS IS DURING THE CLASS. AND AFTER I WOULD HAVE LUNCH, AND THEN IF I HAVE ANOTHER COURSE IN THE EVENING, I WOULD DO THE SAME THING THAT I DID IN THE MORNING. AND THEN YEAH, AND THEN I GO OUT IN THE EVENING, I WOULD HAVE COFFEE, BECAUSE I NEED COFFEE AFTER A LONG DAY. AND THEN I WOULD GO HOME, HAVE A SHOWER GENERALLY, AND THEN PREPARE SOMETHING TO EAT AND DO WHAT I HAVE TO DO. LIKE IF I HAVE A TASK TO DO IF I HAVE AN ASSIGNMENT, I WOULD DO THAT. AND IF I DON'T, I WOULD JUST CHILL TO DO SOME OF MY HOBBIES, PLEASE. SO YEAH.

SO I'M RECORDING MY LEARNING EXPERIENCE. I FIND THE MOST INTERESTING LEARNING EXPERIENCE IS WHERE THERE IS INTERACTIVE INTERACTIVENESS IN THE CLASS. SO FOR EXAMPLE, THE CLASS THAT WE HAD ABOUT CREATIVITY, IT WAS SO INTERESTING FOR ME, EVEN THOUGH I DON'T LIKE IT, I DIDN'T LIKE THE SUBJECT. AT FIRST, I THOUGHT IT'S JUST SOMETHING THAT I WOULD NOT NEED, LIKE CREATIVITY. LIKE, WHO NEEDS THAT? IT SEEMS LIKE ABSTRACT CONCEPTS, RIGHT. AND THEN WHEN I HAD THE CLASS, AND IN THE WAY THAT THE TEACHER WAS, EXPLAINING AND PRESENTING CREATIVITY WAS REALLY CREATIVE ITSELF. IT HOOKED ME, AND I LIKED THE ACTIVITIES THAT WE WERE DOING. ANOTHER CLASS THAT I LIKED, ALSO WAS WHEN WE HAD THE ERPS CLASS. SAP, I LIKED IT, BECAUSE IT WASN'T SO MUCH ABOUT THEORY, IT WAS MORE ABOUT PRACTICE. SO I LIKED THAT THE TEACHER PROVIDED US WITH A GUIDELINE, AND THAT WE OURSELVES, WE FOLLOW THE GUIDELINES. AND AT THE SAME TIME, WE DO LIKE HAVING, LIKE A DIRECT EXAMPLE OF HOW WE CAN USE SIP, FOR EXAMPLE, IN A CASE STUDY IN A BUSINESS CASE STUDY. I ALSO LIKED THAT WAY OF TEACHING. UM, I'M TRYING TO REMEMBER OTHER CLASSES THAT I LIKED. UM, I ALSO LIKE IT, WHEN, WHEN, FOR EXAMPLE, THERE'S A NEW



COURSE COMING UP, AND THEN THE TEACHERS SEND US SOME THINGS TO READ, OR SOME ARTICLES TO READ BEFORE THE CLASS OR BEFORE THE COURSE, THAT WAY, IT WOULD BE MORE INTERESTING. YOU KNOW, I ALSO LIKE THIS WAY OF TEACHING. IT'S LIKE YOU DON'T GO INTO THE CLASS, YOU HAVE NO IDEA WHAT THE CLASS IS ABOUT, BUT YOU GENERALLY HAVE SOMETHING TO PRESENT OR SOME QUESTIONS TO HAVE. THIS ALSO IS VERY GOOD. IN MY OPINION, I LIKE THIS, I LIKE THIS WAY OF LEARNING. SO ANYTHING THAT HAS THAT HAS TO DO WITH AUTONOMY. INTERACTIVENESS I LIKE. IT'S LIKE I LIKE IT WHEN I'M AUTONOMOUS. AND I, LIKE I'M GIVEN TASKS TO DO BEFORE THE COURSE OR DURING THE COURSE, AND TASKS THAT REQUIRE THINKING AND STUFF. SO YEAH.

OH, IT'S SO DIFFERENT. IT'S SO DIFFERENT EVEN THOUGH THE ALGERIAN EDUCATION SYSTEM AND FRENCH EDUCATION SYSTEM ARE SOMEHOW ALIKE WHEN IT COMES TO ADMINISTRATION PAPERS. AND I FEEL LIKE EVEN THE PROFESSORS ARE ALIKE SOMETIMES. BUT THE WAY THEY DELIVER THE INFORMATION IS DIFFERENT. BUT I THINK THAT'S JUST PARTICULAR TO ARAMIS, BECAUSE THE THING ABOUT ARAMIS IS THAT SOMETIMES THEY BRING PEOPLE FROM REAL LIFE LIKE THEY'RE NOT ACADEMICS. FOR EXAMPLE, THE CLASS OF AUDITING, THE ONE, THE TEACHER THAT IS DOING THE CLASS OF AUDITING. SHE'S NOT AN ACADEMIC, SHE'S ACTUALLY WORKING IN THE REAL WORLD. SO I THINK THAT'S THE BIGGEST DIFFERENCE. AND I THINK IT'S JUST ABOUT OTHER MEANS THAT OTHER MASTER'S DEGREES BECAUSE I THINK OTHER MASTER'S DEGREES, THEY ONLY HAVE ACADEMICS THAT TEACH. IN THE SAME CASE, WITH MY OLDER SCHOOL, I HAD ONLY FEW TEACHERS THAT ACTUALLY HAVE WORK EXPERIENCE, AND THOSE FEW TEACHERS, THE MODULES WERE THE MOST INTERESTING FOR ME. SO FOR EXAMPLE, I GOT HOOKED TO AUDITING AS A MODULE, BECAUSE THE TEACHER FROM MY PREVIOUS SCHOOL, WHO WAS TEACHING ME, ACTUALLY HAD WORK EXPERIENCE AND HE WAS WORKING AT THE SAME TIME AS TEACHING. LIKE HE WAS WORKING AS AN INDEPENDENT CONSULTANT FOR COMPANIES. AND HE AND HE TEACHES AT UNIVERSITY AT THE SAME TIME. THIS GAVE US A GLIMPSE OF HOW THE REAL WORLD WORKS. AND I PARTICULARLY LIKE TO TAKE HIS CLASS BECAUSE IT'S SOMEHOW RESEMBLED TO HOW ARAMIS IS WORKING NOW, FOR EXAMPLE, IN THE CLASS, HE ASKED, HE GAVE US LIKE A CASE STUDY AND HE ASKED US TO DO BASICALLY THE SAME THING THAT THE TEACHER IS DOING NOW IS LIKE TO PREPARE THE DIAGNOSIS TO PREPARE A REPORT AT THE END AND TO PRESENT IT. SO IT WAS FULL OF INTERACTIVENESS, IT WAS FULL AUTONOMY AND AT THE SAME TIME, IT IS SOMETHING PRACTICAL, THAT YOU CAN ACTUALLY LIKE TO BRING TO THE REAL WORLD TO THE PROFESSIONAL WORLD AFTER SO, SO YEAH, THERE ARE OTHER MODULES, THEY WERE THE SAME, LIKE BASIC ACADEMIC WAY. IT'S LIKE THE TEACHER COMES AND HE LECTURES YOU FOR THREE HOURS, ONLY HIM SPEAKING, NO QUESTIONS THAT IS, FOR ME, THE MOST HORRIBLE WAY TO DELIVER INFORMATION THAT ALL ITS TEACHERS BECAME, AND NO QUESTIONS NO ATTRACTIVENESS WHATSOEVER. SOME TEACHERS DON'T EVEN LIKE TO GIVE YOU THE SILENCE BREAK, YOU KNOW, BETWEEN SENTENCES. SO YOU CAN ASK QUESTIONS LIKE YOU DON'T EVEN HAVE AN OPPORTUNITY TO ACTUALLY ASK A QUESTION. So, YEAH, THAT WAS THE MAJORITY, HOW I THOUGHT HOW I WAS TAUGHT IN MY PREVIOUS EDUCATION EXPERIENCE, EXCEPT FROM THE FEW EXAMPLES THAT I MENTIONED.

YES, I WOULD SAY MY BIGGEST CHALLENGE NOW IS TIME MANAGEMENT. AND, YEAH, IT'S TIME MANAGEMENT, BASICALLY, BECAUSE THIS IS DUE TO THE MANY THINGS THAT I HAVE TO DO NOW. SO FOR EXAMPLE, WE HAVE LIKE THE RP PROJECT, I HAVE MY MASTER THESIS, I HAVE, I HAVE OTHER STUFF LIKE PAPER STUFF, LIKE LOOKING FOR, FOR A PLACE TO STAY. WHEN I STARTED MY INTERNSHIP, I HAD MY INTERNSHIP PAPERS. I HAVE SOME FAMILY STUFF THAT I HAVE TO ALSO SOLVE. SO YEAH, TIME MANAGEMENT IS NOW MY BIGGEST CHALLENGE, HOW, AT THE SAME TIME, I WOULD REALLY LIKE NOT TO FALL INTO THE TRAP OF NOT TAKING CARE OF MYSELF AND LIKE BURNOUT. AND SO I'M TRYING TO FIND SOME TIME TO MYSELF, TOO. SO YEAH, TIME MANAGEMENT IS MY BIGGEST CHALLENGE RIGHT FOR NOW.

I HAVEN'T TAKEN ARTIFICIAL INTELLIGENCE AS A COURSE, DURING MY PREVIOUS EDUCATION. THEY WERE OPTIONAL, THE MODULE OF ARTIFICIAL INTELLIGENCE FOR THE ONES WHO DID THE INFORMATION SYSTEM AND TECHNOLOGY, BECAUSE THEY WERE LIKE MULTIPLE MAJORS INSIDE MY SCHOOL, AND THIS MAJOR IS THE ONE THAT I CHOSE. AND IN THIS CLASS, YOU DON'T HAVE TO TAKE ALL OF THE MODULES, YOU HAVE SOME MODULES WHICH ARE OPTIONAL. SO I DIDN'T TAKE THE ARTIFICIAL INTELLIGENCE CLASS, BECAUSE AT THAT TIME, I WAS NOT TO BE HONEST, I WAS NOT INTERESTED IN IT. I ONLY FOCUSED ON THE MODULES THAT HAVE A DIRECT LIKE RELATION WITH THE INFORMATION SYSTEM AS OPTIONAL. AND ALSO, BECAUSE OF LACK OR LACK OF TIME, MY PREVIOUS EDUCATION EXPERIENCE WAS REALLY TOUGH, BECAUSE THE SYSTEM WAS DIFFERENT. THE SCHOOL THAT I WAS STUDYING IN HAS A CLASSICAL SYSTEM. SO IT IS DIFFERENT FROM THE WAY THAT I'M STUDYING HERE IN FRANCE. SO FOR EXAMPLE, IN FRANCE, YOU WOULD HAVE A DIPLOMA, FOR EXAMPLE, AFTER THREE YEARS AS THE SOUNDS, AND THEN AFTER EXTRA TWO YEARS, YOU WOULD HAVE MASTER'S IN MY SCHOOL, MY PREVIOUS SCHOOL, IT WASN'T THE CASE. SO TO GET THE FINAL DIPLOMA, YOU HAVE TO GO THROUGH ALL FIVE YEARS. AND YOU HAVE NO EXTRA SESSIONS IF YOU FAIL IN ONE MODULE. SO FOR EXAMPLE, IF I FAILED ONE MODULE, I WOULDN'T HAVE LIKED TO TAKE THAT MODULE FOR AN EXTRA SESSION, LIKE IN SEPTEMBER OR SOMETHING, AND THEN LIKE, GOING INTO THE NEXT YEAR NOW, I WOULD HAVE TO REDO THE WHOLE YEAR IN THE CLASSICAL SYSTEM. IT'S ONE OF THE OLDEST SYSTEMS IN THE WORLD, I THINK. SO YEAH, IT



WAS VERY STRICT. IT WAS VERY RIGOROUS, AND IT HAS A LOT OF MODULES. SO I PREFER NOT TO TAKE ANOTHER MODULE THAT WILL REQUIRE TIME AND EFFORT TO UNDERSTAND AND THAT WAS THE CASE FOR ARTIFICIAL INTELLIGENCE. SO YEAH, I DIDN'T TAKE THE CLASS. BUT I HAD AN EXPERIENCE DURING MY FIFTH YEAR. AND WHILE I WAS WORKING ON MY FINAL YEAR PROJECT TO GET MY ENGINEERING DIPLOMA, I WORKED WITH THE TALENT DATA PREPARATION. SO MY ROLE WAS THE BUSINESS. I WAS A BUSINESS INTELLIGENCE INTERN. AND WE HAD LIKE A HUGE SET OF DATABASE USED SET OF DATA TO USE IN ORDER TO HELP THE DECISION MAKERS MAKE THE DECISION, BASICALLY, AND THE DATABASE WAS WAS REALLY HEAVY AND WAS REALLY LIKE, IT WAS NOT CLEAN LIKE THERE WERE A LOT OF MISTAKES, THERE WERE A LOT OF EXTRA INFORMATION THAT WE DON'T NEED. SO WE USE TALEND DATA PREPARATION TO CLEAN THAT DATA. AND WHILE WE WERE USING TALEND DATA PREPARATION, THE PREMIUM VERSION, BECAUSE AT THAT TIME, IT WAS POSSIBLE TO HAVE A PREMIUM VERSION FOR ONE MONTH, NOW IT STOPPED, THEY DON'T OFFER THAT ANYMORE. SO IN THAT PREMIUM VERSION, YOU CAN ADD AN ARTIFICIAL INTELLIGENCE ALGORITHM TO HELP YOU ENRICH THE DATA. SO FOR EXAMPLE, THERE WERE SOME COLUMNS, THERE WAS SOME INFORMATION THAT WAS MISSING. SO MY COLLEAGUE, I WORKED BY PEER, SO MY COLLEAGUE WAS TRYING TO FIND AN ARTIFICIAL INTELLIGENCE OR MACHINE LEARNING ALGORITHM TO ENRICH THE DATA TO FILL THE GAP BASED ON WHAT IS ACTUALLY WHAT ACTUALLY EXISTS IN THE DATABASE ITSELF. SO THE ALGORITHM WOULD ANALYZE THE DATABASE CONTENT ENDING WITH A TRY AND IN WHICH, AND GUESS THE EMPTY COLUMNS OR THE EMPTY ROWS THAT ARE IN THE DATABASE, AND WE WILL TRY TO REVIEW THAT AND KEEP WHAT'S GOOD AND WHAT'S NOT. SO YEAH, THAT WAS THE ONLY TIME THAT I HAD AN EXPERIENCE WITH ARTIFICIAL INTELLIGENCE

YES, I DID. I USE BOTH CHATGPT, DEEPL. I DON'T KNOW IF QUILLBOT IS CONSIDERED AS I DON'T KNOW IF THE BASE OF QUILLBOTS, THE ONE THAT WE USE TO REFORMULATE PHRASES, IS ALSO BASED ON AN ARTIFICIAL INTELLIGENCE MECHANISM. I HAVE NO IDEA BUT I ALSO USE THAT. SO YEAH, I USE ALL OF THEM.

YEAH. AFTER STARTING USING CHATGPT, I WONDER HOW WE WILL FUNCTION IN THIS WORLD WITHOUT CHATGPT. IS IT LIKE YOU REALIZE THAT YOU WERE DOING A LOT OF WORK? I WAS DISCUSSING IT JUST THIS EVENING. IT'S LIKE, I DON'T REMEMBER ANYMORE. HOW I WAS DOING WITH THAT CHATGPT IS LIKE ANYTHING, ANY QUESTION THAT I HAVE NOW, I WOULD DIRECTLY GO TO IT AND ASK IT AND ASK THE MACHINE TO GIVE ME THE ANSWER DIRECTLY. OF COURSE, I'M AWARE THAT NOT NOT ALL THE ANSWERS PROVIDED ARE CORRECT AND ARE TRUE. AND THEY EXIST BECAUSE SOMETIMES WHEN, FOR EXAMPLE, WHEN I USE CHATGPT TO FIND SOME PERTINENT ARTICLES FOR OUR RESEARCH, SOMETIMES HE GIVES ME NON EXISTENT ARTICLE, WHICH I HAVE NO IDEA FROM WHERE IT'S BRINGING THAT I'M REALLY CURIOUS TO KNOW, I HAVE THIS TASK BEHIND THE LIKE, IN THE BACK OF MY MIND TO LOOK FOR HOW CHATGPT IS WORKING AND FROM WHERE IT'S GETTING INFORMATION, BECAUSE SOME OF THE ARTICLES THAT IT PROVIDES, SOMETIMES THEY LOOK SO REAL, AND THEY LOOK LIKE THEY EXIST, BUT WHEN YOU DO YOUR RESEARCH, THEY DON'T. SO I'M REALLY CURIOUS TO KNOW, FROM WHERE IT'S GETTING THIS, THIS AUTHOR'S NAME, THE TITLES, ETC. LIKE, DO THESE ARTICLES REALLY EXIST SOMEWHERE, LIKE IN THE DEEP WEB OR SOMETHING? AND IF NOT APPEARING ON THE FIRST PAGE OF GOOGLE OR IF SOMETHING ELSE, BUT YEAH, MY EXPERIENCE WITH IT SO FAR, IT'S LIKE IT'S POSITIVE. I LIKE WORKING WITH IT. IT'S FACILITATING A LOT OF STUFF, ESPECIALLY WHEN IT COMES FOR EXAMPLE, ALSO TO WRITING EMAILS TO FORMULATE IN EMAILS. IT CAN ACTUALLY REALLY HELP YOU TO HONE THAT SKILL OF HOW TO WRITE AN EMAIL TO GET EXTRA VOCABULARY AND STUFF. SO YEAH, MAINLY IN THIS TO LIKE FOR RESEARCH, FOR ARTICLES RESEARCH, AND FOR EMAIL WRITING STUFF. OKAY.

Let me think about this a little. Okay. It's like, I don't know, if the way that we are learning now, for example, using ChatGPT is more effective or not, because it certainly is, like more time effective, because instead of like opening 10 tabs in Google, in order to find one information, you would just only like, type the question into ChatGPT. And ask him for the source. And, and the source provided, like, I can say, like, 50% of the time exists, and it's true, and it's useful, like 50% of the time, that article does not exist, I'm talking about other 50%, it does exist, and it gives you like, pretty much what you want to know. So I guess in this area, like from time, effectiveness, it is very effective. And it is way different than the old style in which we had to open like many tabs in order to search for only one information that we needed. And you had like, like you had an information overload. It's like you type a question into Google. And there's like the, the 10, the 10 websites coming up with the same title with the same information that you think you would find in the article, but sometimes you don't. So yeah, it's like it's time effective. And also, it avoids the information overload because there's only one interface and there's only one responding to your question, which is ChatGPT. And at the same time, you can ask for the source. And you like to search from that. And you can search like from that source to other sources. So you're like following the straight path, not many paths, not



BRANCHES. SO THAT'S ONE DIFFERENCE THAT I NOTICED, LIKE EVEN IN YOUR MIND, THERE ISN'T LIKE 100 TABS OPENED, JUST CHATGPT. AND SO YEAH, THIS MAY BE EFFECTIVE. WHAT OTHERS LIKE DIFFERS FROM THE TRADITIONAL APPLICATIONS, THOUGH, SOMETIMES EVEN IT HELPS. IT HELPED ME WITH BRAINSTORMING. SO IF I HAVE AN INITIAL IDEA, AND I WANT TO, AND I WANT TO DEVELOP IT, I WANT MORE. I WOULD JUST TYPE THE IDEA AND JUST ASK IT FOR MORE INFORMATION, ASK IT FOR MORE, IF IT CAN ADD OTHER STUFF, AND MOST OF THE TIME, IT ACTUALLY DOES. SO YEAH, IT IS VERY GOOD FOR BRAINSTORMING ALSO, UM, I HAVEN'T REALLY USED IT FOR OTHER STUFF, LIKE, BECAUSE I'M NOT DOING THAT. BUT IF I WERE LIKE IN MY PREVIOUS SCHOOL, AND THIS CHATGPT CAME UP, LIKE WHEN I WAS IN MY PREVIOUS SCHOOL, AND IN MY PREVIOUS SCHOOL, WE WERE DOING A LOT OF CODING, ESPECIALLY DURING MY THIRD YEAR. WE WERE DOING A LOT OF CODING STUFF, A LOT OF EXCUSE ME, PROJECTS THAT REQUIRE YOU TO, TO LEARN LIKE THE LANGUAGE. SO I WOULD CERTAINLY 100% ASK IT FOR THE CODE, ASK IT FOR THE FORMULA, ASK IT FOR HELP IN GETTING WHAT I WANT. OR IN CORRECTING THE CODE. I JUST REMEMBERED THAT YESTERDAY, WHEN I WAS WORKING ON THE DATA ANALYSIS OF THE AUDITING ASSIGNMENTS I WAS USING, I WAS USING POWER BI. AND I ACTUALLY DIDN'T HAVE THE IDEA TO GO AND SEARCH FOR THE FORMULAS IN CHATGPT. BUT NOW I HAVE IT. I TOTALLY FORGOT THAT IT EXISTS. BUT YEAH, I WOULD TOTALLY USE IT. IF I WAS IN MY PREVIOUS SCHOOL, I WOULD TOTALLY USE IT ALSO FOR CODING ASSIGNMENTS. BECAUSE I HAVE SEEN SOME OF MY FRIENDS' FEEDBACK ABOUT IT. AND MOST OF THE TIME, IT'S REALLY USEFUL TO CORRECT THE CODE AND TO GET THE CODE THAT YOU WANT TO GET THE RESULTS THAT YOU WANT, BASICALLY, OKAY.

YES, YES, MORE LIKE A PROCESS THERE ARE SOME TIMES THAT. YEAH, I ACTUALLY QUITE UNDERSTOOD THE IDEA. IT CAN DEFINITELY BE USED FOR CHEATING. IT'S, OBVIOUSLY, THAT'S WHY THE OWNERS OF CHATGPT CREATED THE ANTI-ALGORITHM. SO BASICALLY, THE PURPOSE OF CHATGPT IS TO CREATE A PROBLEM THAT SOLVES IT AND SELL THE PROBLEM. SO NOW THEY'RE SELLING THE SOLUTION TO UNIVERSITIES, THE PLAGIARISM DETECTOR TO UNIVERSITIES, BECAUSE THEY CREATED THE PROBLEM, AND THEN THEY'RE SOLVING IT. SO YEAH, I THINK THAT IN MY OPINION, THAT WAS THE PURPOSE OF CHATGPT BY THE OWNERS, IT WASN'T MUCH ABOUT ARTIFICIAL INTELLIGENCE AS MUCH AS HE WAS SELLING THE SOLUTION. SO YEAH, IT CAN ABSOLUTELY BE USED FOR CHEATING. BUT, I THINK THAT THE DILEMMA WITH ARTIFICIAL INTELLIGENCE IS HOW YOU ARE GOING TO USE IT OR HOW IT'S GOING TO BE USED. SO I CAN TOTALLY USE CHATGPT FOR CHEATING. BUT I RATHER LOOK AT IT AS A HELP AND LOOK AT IT AS A PART OF THE PROCESS. IT'S LIKE, I LOOK AT IT LIKE ONE OF THE TOOLS THAT WOULD HELP ME MAKE MY JOB OR MY TASK EASIER. SO FOR EXAMPLE, THE WAY THAT WE USE THINGS LIKE, FOR EXAMPLE, PLANNERS, PLANNERS, SOFTWARE, BRILLIANT OH, IN MY CASE, I USE NOTIONS A LOT. SO THIS NOTION IS HELPING ME ORGANIZE MY MIND, ORGANIZE MY TASK, ORGANIZE MY LIFE. I'VE USED CHATGPT THE SAME WAY, JUST IN DIFFERENT CONTEXTS. SO NOTION IS HELPING ME TO ORGANIZE AND PLAN MY LIFE. CHATGPT IS HELPING ME GET MY TASKS DONE TIME EFFECTIVELY, AND ALSO IN AN EFFECTIVE WAY, WHETHER WE'RE TALKING ABOUT TIME, ARE WE TALKING ABOUT EVEN THE IDEAS THAT ARE GENERATED? SO YEAH, I USE IT AS A PROCESS. AND I DON'T USE IT AS A MEANS TO CHEAT, BUT RATHER AS A TOOL THAT WOULD HELP ME GET THE BEST, THE BEST RESULTS LIKE THE IDEAL RESULTS.

No, I don't think that they would replace the teachers. I still view artificial intelligence as a whole. This is a tool to help us humans, like to live better lives. Get our task better done. I don't think that any machine or artificial intelligence would replace the human experience. And the human mind especially so if I imagine myself in a class and there's like a robot that would like to work with artificial intelligence teaching me about that class. And yes, it would be more effective, maybe it would understand me more, it would deliver the answers and there was no margin for human error. But at the same time, there's also No, no human creativity in it and no, no human experience. So I would rather learn from someone who in the case, for example, my previous school, someone who has gone to the real world and worked with real people who delivered a real project with its mistakes with its faults rather than a machine who would also always deliver me the perfect ideal answers. So no, I don't think they are for me, I don't think that replacing teachers with artificial intelligence and learning is going to be as effective as we imagined it to be. Because it would lack the realistic touch. And after all, we live like we live in reality. Like we don't live in an ideal world where only machines and artificial intelligence rule. So the part of human creativity, human experience, human emotional states with us would always be a part of our reality. So we should also learn from people like us, as they say. Okay,

Do I see any career changes maybe in the long run? So I should admit that this thought process was in my mind when I was deciding what I would do in my career later. So for example, the internship that I'm going to do is about IT consultancy. And I kid you not, I asked many people and I asked Google IF, for example, the career of consultant is going to be replaced by artificial intelligence, because basically, IF you do audits all the time, or you do consultancy,



YOU HAVE LIKE A SET OF SET PROCEDURES, YOU HAVE A SET OF RULES, A SET OF STANDARDS TO FOLLOW. AND IN THAT CASE, AN ARTIFICIAL INTELLIGENCE ALGORITHM CAN DO THAT. SO IT CAN FOLLOW THE PROCEDURES, IT CAN FOLLOW STANDARDS AND MAKE SURE THAT THE CLIENT IS RESPECTING THE RULES. SO I WAS WONDERING IF THAT WOULD REPLACE THE ROLE OF CONSULTANTS IN THE FUTURE, ESPECIALLY WHEN IT COMES TO AUDITING. BECAUSE IT'S SO STRUCTURED, IT'S SO OBVIOUS THAT AN ARTIFICIAL INTELLIGENCE ALGORITHM WOULD DO IT. BUT THEN I THOUGHT ABOUT, AS I SAID, THE ADDED VALUE THAT A HUMAN WOULD ADD INSTEAD OF ARTIFICIAL INTELLIGENCE. SO I DON'T KNOW IF ARTIFICIAL INTELLIGENCE HAS THE CAPABILITY OF HAVING LIKE, HISTORY? LIKE, I DON'T KNOW, I'M SURE I'M PRETTY SURE THAT THERE'S NO CONSCIOUSNESS. I DON'T KNOW. MAYBE THERE IS CONSCIOUSNESS IN SOME OF THE ROBOTS THEY CREATED. AND THEY ARE NOT TELLING US BUT UNTIL NOW THAT THE ARTIFICIAL INTELLIGENCE TOOLS THAT ARE IMPLEMENTED CAN THINK FOR THEMSELVES. THEREFORE, I DON'T THINK THAT THEY HAVE A HISTORY. WHY I'M BRINGING THIS UP, BECAUSE I WAS THINKING THAT IF THE ARTIFICIAL INTELLIGENCE WOULD HAVE THE ABILITY TO REMEMBER THE EXPERIENCES THAT IT HAD, WITH LIKE, PREVIOUS WORK EXPERIENCES, IF WE SAY THAT ARTIFICIAL INTELLIGENCE WOULD REPLACE THE HUMANS IN SOME JOBS, ARE THEY ABLE TO ADD THE SAME VALUE THAT THE HUMAN WOULD WOULD BE ADDING? BASED ON HIS PREVIOUS EXPERIENCES, I DON'T KNOW IF YOU'RE, IF YOU UNDERSTAND. SO YEAH. IS IT GOING TO BE ABLE TO DO THAT? SO IF IT'S, IF HE'S GOING TO DO THAT, I'M PRETTY SURE THAT SOME OF THE JOBS ARE GOING TO BE REPLACED, AND EVEN THE JOBS THAT WE DIDN'T IMAGINE THAT YOU WOULD BE REPLACING? SO IF HE GOT THAT, YEAH, I WOULD SAY THIS. JUST TO BE SURE, FOR NOW, THE LONG TERM. I DON'T THINK THAT'S POSSIBLE. BUT LIKE IF THEY GIVE ME LIKE AN EXTRA FIVE, FIVE YEARS, I WOULD FIND ANOTHER CAREER. I WOULD LIKE IT FIND THE SOLUTION FOR MYSELF. BUT FOR NOW, I WOULD JUST STICK TO THIS CARRIER BECAUSE IT'S GOOD.

Oh, as I mentioned before, I actually use ChatGPT to brainstorm and to add ideas to them to my existing ideas that I have. That's like answer number one, um, the impact on retaining information? For sure, it's going to have an impact. But I don't think it has a relation with like, I don't believe that you have to retain all the information in your head to be an expert. So for example, if I get to have the information in two seconds, and that information is not very essential to my work, like I can have access to it, and I can find it using for example, ChatGPT. It's not very important. For me, the most important thing for me, as a student now, or as, what do we say, as someone who works like has a career in the future, I would be more concerned of how I am doing the work like the know how, rather than retaining like information specific to my job, because every time I do that job, I would retain that information automatically. Same thing with being students. So every time I search for specific information, it would accumulate to my previous specific information that I have searched for, and that would connect the dots inside my head. So I don't know, maybe it's just the way that I'm using ChatGPT. It's not like it affects my retaining information, because I actually take the information and then like, rewrite it or add more to my ideas. But yeah, it would have an effect, but at the same time, not that dangerous, like, we should be scared of the fact.

Well, I don't know, since we didn't get the results. So I have no idea. But like, I don't have the performance metrics to tell you if I did, like better than if I relied only on my capabilities rather than ChatGPT. Because I don't have the results. But yeah, it's more, it's more, it's more effective, in my opinion. Like, I'm noticing the process now. While I'm doing my assignments, and writing my projects and stuff, it's certainly very helpful. So in terms of getting the job done more rapidly, and effectively, yes, it's, I noticed the difference.

I FOUND OUT ABOUT CHATGPT. THROUGH FACEBOOK, I FOLLOW ONE OF ALGERIAN ENGINEERS, WHO WORKS IN AMAZON, AND HE HAS LIKE A PUBLIC PAGE, WHERE HE POSTS THINGS RELATED TO IT, LIKE INFORMATION, ALGORITHMS, SOME TIPS AND TRICKS, YOU KNOW, AND WHEN CHATGPT FIRST WAS RELEASED, HE WAS THE ONE TO PUBLISH ABOUT IT. SO HE SAID, LIKE, THIS COOL TOOL THAT WAS RELEASED. GO TRY IT, BLAH, BLAH, BLAH. SO YEAH, THAT WAS HOW I GOT TO KNOW CHATGPT NEXT. LIKE, ALMOST LIKE AFTER ONE DAY OF TRYING IT. AND HONESTLY AT THE BEGINNING, I WAS LIKE IT WAS FAMILIAR BECAUSE THERE WAS LIKE AN OPEN AI. YEAH, BUT IT WASN'T THAT POPULAR AND FAMOUS AND I THINK AS PERFORMANCE CHATGPT SO IT'S LIKE WHY IS EVERYONE PANICKING ABOUT THIS ISN'T THE SAME AS OPEN AI. BUT I DIDN'T LIKE TO USE IT A LOT. SO TO UNDERSTAND THAT IT'S ACTUALLY LIKE A MORE DEVOLVED VERSION OF OPEN AI. AND THEN THERE WAS ONE FRIEND OF MINE WHO IS ACTUALLY ALSO IN FRANCE. AND HE'S STUDYING, I THINK HE'S STUDYING MACHINE LEARNING, OR DATA SCIENCE, SOMETHING LIKE THAT. AND HE WAS ACTUALLY ALREADY USING CHATGPT, LIKE, AFTER ONE DAY TO SOLVE ONE OF THE PROBLEMS OF HIS FACE ALGORITHMS. AND HE WAS TEXTING ME TELLING ME ABOUT IT, LIKE, LOOK, HOW COOL IS IT? I JUST MANAGED TO DO THIS THING THAT I WOULD DO, LIKE IN TWO HOURS IN HALF AN HOUR, ETC. SO I WAS LIKE, YEAH, MAYBE THIS IS MORE INTERESTING THAN I THOUGHT IT WOULD BE. SO YEAH, THIS IS THE STORY.



I DIDN'T, I DIDN'T CHANGE A LOT ACTUALLY, IS THE TIME THAT CHANGED, LIKE THE DURATION OF TASKS THAT CHANGED. LIKE ONE OF THE CHANGES THAT I ACTUALLY NOTICED IS, FOR EXAMPLE, WHEN I FIRST OPENED MY LAPTOP, AND I HAD AN ASSIGNMENT TO DO, FIRST THING, FIRST, I WOULD START LIKE, OPEN THE DOCUMENT FOR THE ASSIGNMENTS, READ THE ASSIGNMENTS, ETC. AND THEN I WOULD LIKE TO HAVE SOME INITIAL IDEAS, SOME INITIAL KEY WORDS THAT I WOULD USE IN ORDER TO FORMULATE THE REQUEST IN CHATGPT. SO THERE'S ALWAYS THE TAB OF CHATGPT OPEN. SO AND FROM WHAT CHATGPT GIVES ME LIKE THE RESULTS, I WOULD DIG DEEPER USING GOOGLE. SO I WOULD LIKE TO SPECIFY EXACTLY WHAT I NEED THROUGH CHATGPT. AND THEN I WOULD GO TO GOOGLE TO FURTHER INVESTIGATE AND READ, IF IT GIVES ME SOMETHING LIKE A RESEARCH ARTICLE, ETC. SOMETIMES, I WOULD ALSO USE CHATGPT, TO GIVE ME A GLIMPSE OF WHAT THE ARTICLE IS ABOUT. SO FOR EXAMPLE, I COPY A LINK AND I SAY THIS ARTICLE, BLAH, BLAH, BLAH, CAN YOU GIVE ME A SUMMARY OF WHAT IT TALKS ABOUT? IF I'M TOO LAZY TO READ? AND MOST OF THE TIME, IT'S ACCURATE, WHAT IT SAYS TO ME. SO YEAH, THAT'S ANOTHER CHANGE. LIKE, RATHER THAN SKIM SKIM THROUGH THE ARTICLE, I WOULD JUST USE CHATGPT, TO GIVE ME A SUMMARY AND SEE IF THAT WOULD HELP. WHAT OTHER THING? BASICALLY, I USED TO USE DEEPL. FOR TRANSLATION, I ALSO USE ANOTHER TOOL. I JUST REMEMBERED, I USE ANOTHER TOOL, IT'S CALLED REVERSAL. REVERSAL. YES, I DON'T USE THE WEBSITE, THE WEB VERSION, I USE THE APPLICATION VERSION, LIKE ON IPHONE. AND IT'S ACTUALLY PRETTY AMAZING HOW THE ALGORITHM CAN UNDERSTAND EVEN SOME OF THE SLANGS USED, LIKE FOR EXAMPLE, YEAH, IT GIVES YOU LIKE, REALLY ACCURATE, FROM, LIKE, LONGER FAMILIAR, LIKE, MORE CLOSE TO REALITY THAN THE ACADEMIC TRANSLATION THAT WE FIND USUALLY. SO YEAH, I ALSO USE THAT SOMETIMES IN MY LIFE. TRANSLATING SOME OF THE STUFF. UM, ESPECIALLY WHEN I WAS LEARNING ENGLISH, I USED A LOT OF REVERSAL. I DIDN'T KNOW THAT IT WAS POWERED BY AI. BUT YEAH, THE RESULTS THAT IT GIVES ARE PRETTY AMAZING. SO I USE THAT TO LEARN LANGUAGE. I USE THAT FOR ENGLISH, ACTUALLY. OKAY. SO THEN, TO THE NEXT QUESTION, DO YOU THINK THAT CHATGPT WOULD DISCOURAGE OR MAYBE ENCOURAGE STUDENTS' ENGAGEMENT AND PARTICIPATION? IF IT WOULD ENCOURAGE THEM? MAYBE IT WOULD ENCOURAGE THEM OR DISCOURAGE, YOU KNOW, STUDENTS BY PARTICIPATION? I MEAN, FOR EXAMPLE, IN SOME OF THE EXAMPLES OF SOME BORING CLASSES THAT YOU MADE AN EXAMPLE OF, SO WHY LISTEN, IF I KNOW THAT I CAN GET THE CONTENT INFORMATION FROM CHATGPT ABOUT A PARTICULAR COURSE THAT THE LECTURER IS TAKING. UM, THAT WAS NOT ACTUALLY THE THOUGHT PROCESS THAT I WOULD HAVE IN MY MIND. IN THE CASE OF A BORING CLASS. I WOULDN'T THINK OF CHATGPT AS OPTION TWO, BECAUSE I THINK THAT NOTHING CAN REPLACE THE ACTUAL COURSE. IF I THINK THAT A CLASS IS BORING. I DON'T PAY ATTENTION TO THE TEACHER. SURE TO BE HONEST, AND THEN I WOULD GO HOME AND READ EVERYTHING MYSELF. LIKE I READ THE RESOURCES THAT THE TEACHER PROVIDED. I DON'T. I DON'T GO TO CHATGPT FOR THAT. SO I DON'T THINK THAT IT IS A FACTOR IN PARTICIPATION OR NON PARTICIPATION OF STUDENTS. I THINK IT SOLELY RELIES ON THE CLASS. OKAY, AT LEAST FOR ME, I DON'T KNOW, BUT OTHER PEOPLE, BUT I WOULDN'T THINK ABOUT GPT. LIKE, I CAN GO TO CHATGPT AND GET THE INFORMATION. YEAH. BUT WHEN IT'S A COURSE, LIKE A WHOLE COURSE. I DON'T THINK THAT CHATGPT COULD PROVIDE YOU WITH A WHOLE UNDERSTANDING OF THE COURSE AS MUCH AS THE TEACHER RESOURCES. I THINK THE TEACHER RESOURCES, PDFs, THE CLASS MAYBE WOULD BE BETTER.

Um, do I think they're trustworthy? No, because sometimes, as I mentioned, before they give you false information. They give you false information. False, yeah, false information, but not not, like with intention, not intentionally. It's BECAUSE THEY RELY ON THE SOURCES THAT EXIST, AND WHAT, WHAT THEY GET FED. LIKE, IF I FEED AN ARTIFICIAL INTELLIGENCE ALGORITHM FALSE INFORMATION? WOULD HE DELIVER FALSE INFORMATION? FOR SURE. SO THERE'S ONE PART I DON'T THINK THAT WE SHOULD LIKE 100%. TRUST THE RESULTS THAT THEY GAVE US. UM, WHAT'S THE OTHER TRUSTWORTHY? AND WAS THE OTHER THING ETHICAL AND FAIR? ETHICAL AND FAIR? IT'S THE SAME THING. IT'S BECAUSE, UM, FOR EXAMPLE, WHEN IT COMES TO MACHINE LEARNING, THEY GET LIKE MACHINE LEARNING THAT IS USED, FOR EXAMPLE, IN SOCIAL MEDIA. SO THE DATA THAT THEY HAVE, AND THE data that they base their results, or what they're given on, is basically based on real data from users. So if a user is RACIST IF THE USER IS SEXIST, IF THE USER HAS SOME WEIRD BELIEFS THE MACHINE LEARNING ALGORITHM WOULDN'T HAVE THE ETHICS ENOUGH TO DIFFERENTIATE BETWEEN WHAT'S RIGHT AND WHAT'S WRONG, AND WE TAKE IT AS IT IS. SO IF, FOR EXAMPLE, THERE IS A MACHINE LEARNING ALGORITHM THAT COULD HELP HIRE PEOPLE. AND THAT MACHINE LEARNING ALGORITHM, DATA IS ACTUALLY FILLED WITH SEXIST COMMENTS FROM USERS, OR SEXIST SENTENCES. IT WOULD BE LIKE, ACTUALLY UNETHICAL IN CHOOSING THE CANDIDATES BECAUSE IT HAS THE BELIEF THAT, FOR EXAMPLE, WOMEN ARE DUMB, MORE DUMB THAN MEN, JUST ONE EXAMPLE OF SEXIST SEXIST COMMENTS. SO IT WOULD HAVE THAT AND IT WOULD NOT CHOOSE LIKE FEMALE CANDIDATES BASED ON THAT. SO I DON'T, I DON'T. I DON'T KNOW IF THEY FOUND A SOLUTION FOR THIS, LIKE AVOIDING THE AI TO BE BIASED, AVOIDING THE ALGORITHM TO BE BIASED, BUT CERTAINLY, THIS IS A PROBLEM. AND IT EXISTS BECAUSE I HEARD MULTIPLE, I READ MULTIPLE ARTICLES TALKING ABOUT THIS BIAS IN ALGORITHMS.



 $\mathsf{I}^\mathsf{I}\mathsf{M}$  thinking if it could be a good idea, if, for example, just the teachers or the university staff just accept the idea THAT THERE IS CHATGPT AND ACTUALLY USE IT INSTEAD OF GOING AGAINST IT. YEAH, SO THEY WOULD LIKE TO BE INTEGRATED INTO THE CLASSES. I DON'T KNOW HOW BUT THEY WOULD INTEGRATE THE USE OF CHATGPT OR MAYBE EVEN DO SOME CLASSES ON IT. EDUCATE EVERYONE ABOUT IT AND LEARN HOW TO USE IT EFFECTIVELY TO BE MORE CREATIVE AND TO DELIVER BETTER RESULTS, RATHER THAN FIGHTING IT AND BEING JUST AGAINST IT. SO YEAH, THAT WOULD MAYBE IN MY OPINION SOLVE SOME OF THE ISSUES OF ETHICS. BECAUSE THE STUDENT WOULD NOT BE FEELING ALL THE TIME THAT HE'S DOING SOMETHING WRONG BY USING CHATGPT. AND INSTEAD, FOCUS ON WHAT'S REALLY WRONG IS LIKE, IF I DON'T THINK THAT IT'S WRONG, OR MORALLY UNETHICAL TO USE THAT ChatGPT for your assignments, if you like use it as a helping tool, rather than a 100% replacing you, it's just you USE IT IN THE PROCESS TO DELIVER BETTER RESULTS TO HAVE MORE ACCURATE RESULTS TO ENHANCE YOUR CAPABILITY OF BRAINSTORMING. SO, I WOULD LIKE TO THINK THAT THIS IS RIGHT, I WOULD AVOID DOING THE WRONG THING, WHICH IS BASICALLY RELYING 100% ON CHATGPT, AND DELIVERING EXACTLY WHAT IT DOES WITHOUT EVEN LIKE, DOING THE EXTRA WORK TO VERIFYING. SO YEAH, IF, IF THERE IS A PROCESS OF INTEGRATION, I WOULD THINK THAT AND MORE LIKELY, LIKE A PROCESS OF INTEGRATION, AND ETHICAL, LIKE USE CLASSES, SOMETHING LIKE THIS WILL SOLVE THIS ISSUE FOR THE ERM, I THINK IT'S A GOOD EXAMPLE, WHEN YOU ASKED ME ABOUT IF, IF ARTIFICIAL INTELLIGENCE WOULD REPLACE SOME PEOPLE, THERE WAS AN EXAMPLE WHEN I TALKED WITH, WITH THE PROFESSOR IS ABOUT HOW THEY ARE HOW THEY HR NOW THEY ARE RECRUITING PEOPLE. SO HE SAID THAT THERE IS THIS DILEMMA OF ARTIFICIAL INTELLIGENCE SELECTING SOME CANDIDATES, OR IN THE CASE OF COMPANIES, SOME COMPANIES EVEN USE ARTIFICIAL INTELLIGENCE TO SELECT SOME CLIENTS TO WORK WITH. SO HE SAID THAT, FOR EXAMPLE, IF THE COMPANY USED TO WORK WITH WITH A SPECIFIC CLIENT, AND THAT CLIENT IS NOT SELECTED BY THEIR ARTIFICIAL INTELLIGENCE DUE TO SOME REASON, BUT THE COMPANY WOULD RATHER WORK WITH THAT CLIENT, BECAUSE SHE ALREADY HAVE A, LIKE, A COMMON HISTORY HISTORY TOGETHER, THEY ALREADY KNOW THEIR WAYS OF DOING HIS THE GOOD CLIENTS, FOR EXAMPLE, HE PAYS ON TIME, ET CETERA. IT WOULD BE UNFAIR TO RELY SOLELY ON THE OPINION OF ARTIFICIAL INTELLIGENCE. AND THIS HUMAN LIFE VALUE, THE ADDED VALUE OF HUMANS NOW IS ACTUALLY THE EMOTIONAL PART OF IT. SO YEAH, I REMEMBER THIS EXAMPLE, WHICH WAS VERY PERTINENT FOR ME, AND ALSO THE EXAMPLE OF RECRUITING PEOPLE. SO AN HR, HOW AN HR WOULD KNOW THAT THE UNSELECTED CANDIDATES OF THE AI ALGORITHM ARE NOT THAT INTERESTING, MAYBE HE WOULD LIKE TO NOTICE THE DETAIL THAT IS IMPORTANT FOR THE HR THAT THE ARTIFICIAL INTELLIGENCE WOULD NOT BECAUSE HE'S SIMPLY NOT HUMAN.

OKAY. SO, MY NAME IS LUAN AND I COME FROM VIETNAM BASICALLY MY BACHELOR BACKGROUND WAS IN MANAGEMENT SPECIFICALLY IN MARKETING AND NOW THAT I HAVE MORE THAN 10 YEAR WORKING IN MANY ENTERPRISE THE LOCAL ONE VIETNAM AND ALSO THE INTERNATIONAL COMPANIES AND MOST OF THE TIME IS FOCUSED ON THE FOOD AND BEVERAGE INDUSTRY AND ALSO IN TECHNOLOGICAL ENTERPRISE AND REGARDING MY ACADEMIC BACKGROUND SO UNTIL NOW I HAVE EARNED TWO MASTER DEGREE THE FIRST ONE A MASTER'S IN MARKETING SPECIFICALLY MANAGEMENT UP ON FURNITURE I RETAIL SO BETWEEN THE SECOND ONE WE'RE IN ADVANCE RESEARCH AND MARKETING NOW FOLLOWING THE MASTERS IN BRAND RESEARCH MANAGEMENT OF THE INFORMATION SYSTEM IN FRANCE. SO WELL OH, BY MYSELF.

YEAH, SO BASICALLY NOW I'M FOLLOWING THE NAME APHID, RESEARCH MANAGEMENT OR INFORMATION SYSTEM. SO BASICALLY, WE LEARN ABOUT THE FUNDAMENTAL MANAGEMENT INFORMATION SYSTEM LIKE KNOWLEDGE MANAGEMENT, IT ARCHITECTURE IT BUSINESS AND ALSO ARTIFICIAL INTELLIGENCE, AND ALSO THE MANAGEMENT WITH INFORMATION SYSTEM, FLAVOR, LIKE SUPPLY CHAINS, ALSO, MACHINE LEARNING ARTIFICIAL INTELLIGENCE, AND ALSO ANOTHER INTENSIVE TRAINING IN RESEARCH SKILL LIKE QUANTITATIVE AND QUALITATIVE RESEARCH.

YEAH, SO AS A STUDENT, BASICALLY JUST STUDYING AND STUDYING. SO BASICALLY, IF I HAVE A BUSY DAY, IN THE UNIVERSITY, SO I WILL START MY DAY BY DOING SOME EXERCISE, HAVE A BREAKFAST AND ALSO GOING TO UNIVERSITY TO LEARN AND IF WE DON'T HAVE, IF I DON'T HAVE STUDYING DAY, I USE SOME OF THE TIME IN READING SOME ARTICLE AND ALSO COLLECTING SOME IDEA ABOUT THE DEVELOPMENT OF TECHNOLOGY NOW, AND ALSO DOING EXERCISE LIKE RUNNING AND DOING MEDITATION.

So basically, our research training course most of the time could be a workshop, the workshop session because they said that we will flip and flop teachings so it means that they will give you some fundamental knowledge and you have to develop and expand by yourself. And also we have some projects like group work for the innovative research projects and also now courses like knowledge management. I actually feel it is quite interesting because firstly, you can have something like you know, build teamwork and also have a chance to integrate with other guys who come



FROM ALL OVER THE WORLD BECAUSE MY MASTER CLASS IS REALLY INTERNATIONAL. AND ALSO, I ALSO LEARNED BY MYSELF DURING THE WEEKEND FOR THE DATA ANALYTICS SKILL, LIKE LEARNING HOW TO CODE IN PYTHON AND IN R AND ALSO HOW TO DO THE VISUALISATION SOFTWARE LIKE POWER BI, TABLEAU. SO BASICALLY, I FEEL IT IS REALLY INTERESTING AT THIS MOMENT, BECAUSE AS YOU KNOW THAT MY BACKGROUND WAS IN MANAGEMENT. SO NOW I HAVE A CHANCE TO REVIEW AND ALSO TO BE UPDATED FOR THE MOST TRENDING MANAGEMENT RESEARCH. AND ALSO, I CAN LEARN, YOU KNOW, EXTENSIVE KNOWLEDGE ABOUT THE TECHNOLOGY NOWADAYS, ESPECIALLY WITH ARTIFICIAL INTELLIGENCE IMPLEMENTATION.

BASICALLY, YOU KNOW, IT'S ALREADY MY FIRST MASTER DEGREE IN FRANCE. SO HONESTLY, IT'S NOT REALLY A BIG CHALLENGE FOR ME, BUT AT THIS MOMENT, THE BIGGEST CHALLENGE FOR ME, YOU KNOW, WORKING IN THE GROUP, BECAUSE LIKE, I'M LIKE, ONE OF THE OLDEST GUY IN THE CLASS, SO CAN BE SOMETHING LIKE THE GAP GENERATION BETWEEN ME NOW THE GUYS CLASS, SO SOMETIMES WE HAVE CONFLICT DURING THE TEAMWORK, BUT THIS IS ALRIGHT, AT THIS MOMENT.

HONESTLY, MY MASTER'S DISSERTATION IS ABOUT DIGITAL ETHICS. IT MEANS THAT WE HAVE TO KNOW HOW TO UTILIZE AND TAKE ADVANTAGE OF TECHNOLOGICAL INNOVATION IN THE BEST WAY BUT NOT THE NEGATIVE IMPACT. SO I HAVE TRIED TO DO SOME RESEARCH ABOUT THIS ARTIFICIAL INTELLIGENCE BASE TOOL, SOMETHING LIKE, YOU KNOW, CHATGPT IS SOMETHING REALLY COMMON AT THIS MOMENT. SO I LEARNED HOW TO DO THAT, BUT I HAVE NOT USED THAT IN MY STUDY.

I SHOULD LEARN, YOU KNOW, I. I HAVE JUST DONE SOME RESEARCH ABOUT TRYING TO PLAY AROUND WITH IT, TO UNDERSTAND HOW IT WORKS, AND THE FUNCTION OF ARTIFICIAL INTELLIGENCE BASED TOOLS BUT I HAVE NOT USED THAT IN MY STUDYING. OKAY.

YES, BECAUSE MY UNDERGRADUATE SCHOOL WAS MORE THAN 10 YEARS AGO. OKAY. SO AT THIS MOMENT NO ARTIFICIAL INTELLIGENCE TOOL.

YEAH, I FOLLOWED CHATGPT FROM THE FIRST TIME WHEN IT'S JUST YOU KNOW, CONCEPT AND THEY TRY TO DEVELOP THAT FROM THE FIRST TIME WITH GENERAL ENERGY G IN AGREEMENT WITH G AND TECHNIQUE. SO I WAS QUITE CONFIDENT THAT I KNEW ABOUT THAT SO WELL. SO, UM, I TRY TO USE THAT, YOU KNOW, LIKE, SOME TEST ABOUT HOW MUCH INTELLIGENT THE OPEN AI CAN BE AND ALSO HOW WE CAN MANIPULATE THE CHATGPT. SO, PERSONALLY, I THINK THAT THIS FROM THE BEGINNING IS QUITE A GOOD IDEA, BECAUSE IT CAN HELP PEOPLE YOU KNOW, CAN GRAB UP THE GENERAL IDEA OF SOMETHING, A GENERAL DEFINITION ABOUT SOME PHENOMENON OR SOME OBJECTIVE HAPPENING AROUND THE WORLD. BUT AT THIS MOMENT COULD BE USED FOR SOMETHING NOT IN THE GOOD OBJECTIVE. YES. AND IT CAN CREATE SOME NEGATIVE CONSEQUENCES IN THE FUTURE.

OKAY, SO BASICALLY FROM BEING WITH THEM, AND GRADUATE TRAINING AND ALSO GRADUATING THE META IS REALLY, YOU KNOW, FOR ME IT REALLY IS COMPLETELY DIFFERENT BECAUSE FIRSTLY, I HAVE STUDIED IN, YOU KNOW, IN THE DIFFERENT CULTURES, THE ASIAN ONE AND THE WESTERN ONE. OKAY, SO, YES, FIRSTLY, WITH ASIAN ONE IS SOMETHING LIKE THE CLASSICAL TRAINING, SOMETHING LIKE, YOU GO TO CLASS, AND YOU'D SPEND AROUND FIVE HOURS CONTINUOUSLY. AND LISTEN TO WHAT THE TEACHERS SAY, TRY TO TAKE NOTE, AND AFTER THAT YOU GET BACK HOME AND REVIEW YOUR DAY BY DAY, REPEAT IT, LIKE, FAST AND IN THE END, YOU WILL HAVE, YOU KNOW, AN EXAMINATION TO EVALUATE. SO IT'S NOT REALLY, YOU KNOW, LIKE, FIRST, THE CREATIVITY FROM STUDENTS IS SOMETHING LIKE YOU TRY TO, YOU KNOW, YOU'VE TRY TO GRAB THE IDEA, AND YOU TRY TO UNDERSTAND AND LEARN SOMETHING PASSIVELY FROM YOUR TEACHERS IS NOT THE TWO WAY COMMUNICATION OR LEARNING BY YOURSELF. BUT GRADUATING IS SOMETHING FOR ME AT THIS HIGH LEVEL, ESPECIALLY WHEN I GOT A CHANCE TO STUDY HERE IN FRANCE. SO, THE TEACHERS OR THE PROFESSOR, THEY ARE JUST, YOU KNOW, THE GUIDER, THIS MEANS THAT HE WOULD COME TO CLASS AND GIVE YOU THE DIRECTION, WHAT YOU NEED TO DO WHICH BOOK WHICH PAPER YOU NEED TO READ, AND ALSO, WHICH DIRECTION FOR YOUR, YOU KNOW, FOR YOUR RESEARCH, YOU SHOULD TAKE CONSIDERATION, YOU KNOW, THEY HAVE NOT ON IMPOSED YOU, AND TELL YOU, WHAT YOU MUST DO, IT IS TO CONVINCED YOU ON WHAT YOU SHOULD DO? SOMETHING FOR ME IS REALLY DIFFERENT, AND YOU HAVE TO LEARN TO BALANCE YOUR PERSONAL LIFE AND STUFF AND STILL LIVE ON. SO THAT'S SOMETHING DIFFERENT BETWEEN UNDERGRADUATE AND GRADUATE STUDY METHODS FOR ME.

YEAH, I THINK THAT BECAUSE, PERSONALLY, I THINK THAT I FIND, YOU KNOW, I'M QUITE A WELL ADAPTED VERSION, SO I'M QUITE EASY TO LEARN SOMETHING NEW, QUITE EASY TO ADAPT TO THE NEW THING THAT HAPPENED. SO WITH THAT, AND LUCKILY, DURING THE TIME WE WORK IN THE COMPANY, AND SO, AGAIN, NOW IT'S A HUGE OPPORTUNITY TO, YOU KNOW, TO GRAB THE TECHNOLOGICAL INNOVATION TRENDS, SO IT'S NOT REALLY HARD FOR ME TO ADAPT WITH THE TECHNOLOGY DEVELOPMENT. AND TO BE HONEST, I THINK



THAT IF WE CAN USE TECHNOLOGY IN A POSITIVE WAY, IT CAN HELP YOU TO LEARN SOMETHING FASTLY. BUT THE CRITICAL THINKING FOR ME IS SOMETHING LIKE THE DISADVANTAGE OF TECHNOLOGY, BECAUSE FOR EXAMPLE, IF YOU GET A TOPIC FROM THE TEACHERS, THE FIRST THING YOU WILL DO YOU WILL DO. I THINK THAT MOST OF THE STUDENTS WILL GO TO GOOGLE TO CHECK ABOUT THE DEFINITION OF THAT TERM. BUT IF YOU DON'T KNOW THE CRITICAL THINKING YOU CAN EASILY BE FACTORED IN THE WAY GOOGLE YOU KNOW, YOU WHO ARE USUALLY YOU THE SEO AND SEM TO PROVE THE HIGH RANKING FOR THE WEBSITE FROM THE BEGINNING. SO IF YOU DON'T KNOW THAT IT AFFECTS INFORMATION OR MISLEADING INFORMATION OR NOT. SO THE CRITICAL THINKING HERE YOU SHOULD USE SHOULD DEVELOP BY YOURSELF ABOUT US YOURSELF ABOUT OKAY, WHAT IS THE YOU KNOW, THE CREDENTIAL OF THIS INFORMATION? WHERE DOES THAT COME FROM? AND IS THAT, YOU KNOW, HAS IT BEEN VALIDATED OR NOT. SO FOR ME, TECHNOLOGY CAN HELP YOU TO UNDERSTAND SOMETHING. AND YOU KNOW, THE NATURE OF THE PROBLEM FIRSTLY, BUT WITH CRITICAL THINKING, I THINK THAT IT DEPENDS ON HOW YOU DEVELOP BY YOURSELF, NOT BASED ON TECHNOLOGY.

YES. SO I THINK THAT, IN MY OPINION, I THINK THAT THE TRADITIONAL TEACHING ARE MORE EFFECTIVE THAN ARTIFICIAL INTELLIGENCE BASED METHOD, FOR EXAMPLE, IT'S QUITE EASY FOR YOU TO FLASH BACK AROUND FIVE OR SIX YEARS AGO, WHEN YOU, YOU KNOW, YOU JUST YOU HAVE NOT GOT ANY CHANCE TO WORK WITH ARTIFICIAL INTELLIGENCE OR TO APPROACH THE ARTIFICIAL INTELLIGENCE IN THAT MOMENT WHEN THE TEACHER THEY CAME TO CLASS, THEY GAVE YOU A TOPIC. AND YOU SHOULD GO TO THE LIBRARY SHELF ON THE SYSTEM, ON THE SYSTEM LIKE GOOGLE SCHOLAR, OR THE INTERNAL LIBRARY SYSTEM OF THE UNIVERSITY TO FIND KEYWORD, TO FIND THE DEFINITION ABOUT THE PREVIOUS RESEARCH ABOUT THAT WORK, AND TO LEARN BY YOURSELF ABOUT HOW THE PREVIOUS WORK THEY HAVE MENTIONED ABOUT THIS PHENOMENON, OR HOW THEY CONDUCTED THE RESEARCH ABOUT THAT, AND HOW THE, YOU know, the practical thing they apply into real life. So you learn by yourself, you do the research by yourself. So it's SOMETHING LIKE YOU EARN THAT KNOWLEDGE. AND YOU AND ANOTHER THING THAT YOU CAN SAY IT, OKAY, SO YOU CAN MAKE ANY DIFFERENT CONSUMPTION OR ASSUMPTION ABOUT ONE PROBLEM. AND NOW FOR THEM, BUT WE CHATGPT, YOU JUST GO TO CHATCPT AND YOU'RE LIKE OKAY, PLEASE TELL ME ABOUT THE DEFINITION OF MAYBE THE DEFINITION OF MACHINE LEARNING BUT CHATGPT WILL GIVE YOU THE DEFINITION OF THE MACHINE LEARNING. AND YOU DON'T KNOW IF IT'S THE RIGHT OR WRONG DIRECTION. AND IF YOU ASK, ASK CHATGPT TO GIVE YOU THE SHORT OF THE INFORMATION. I THINK THAT MORE THAN 90% OF THE RESULTS AT CHATGPT GIVE YOU FAKE ONES. AND IF YOU WANT TO TRY WITH THE AI AUTO MICROSOFT, I THINK THAT IS BETTER, IT'S GONNA GIVE YOU SOME DEFINITION ON THE INFORMATION FROM SOME WEBSITE. SO BASICALLY, BUT THE YOU KNOW, THE ONE COMMON THING BETWEEN USING BETWEEN USING CHATGPT AND AI, IS SOMETHING LIKE YOU RELY 100% ON THE RESULT OF ARTIFICIAL INTELLIGENCE GIVES YOU AND YOU HAVE NOW, YOU HAVE NOTHING IN YOUR MIND THAT OKAY, WHERE THAT CAME FROM OTHER SOURCE, YOU VALIDATED IF IT'S GOOD OR NOT, YOU JUST GIVE AND GRAB THE IDEA FROM ARTIFICIAL INTELLIGENCE WITHOUT THINKING BEYOND THE DEFINITION OR THE INFORMATION THEY GIVE YOU IT TOTALLY DIFFERENT WITH THE TRADITIONAL ONE WITH A TRADITIONAL ONE, YOU HAVE TO APPROACH MANY RESOURCE ON THE INTERNET OR IN THE INTERNET OR THE LIBRARY AND ALSO THE BOOK FROM THE OFFICERS OR TEACHERS. SO I THINK THAT I HAVE A DOUBT THAT YOU KNOW, THE STUDENT NOW THEY IT'S QUITE HARD FOR THEM TO READ A WHOLE BOOK ABOUT ONE TOPIC AND ANOTHER BOOK TO MAKE A COMPARISON LIKE THE YOU KNOW, THE PREVIOUS DAYS, THEY JUST NEED TO MAKE THE COMPARISON THEY JUST NEED TO GRAB THE MAIN IDEA IS SO

Okay. So basically, you know, it depends on for Me, it depends On the you know the purpose or the objective of the way there are certain student use artificial intelligence, for example, if you just use the artificial intelligence to give you know, the general idea about something this for Me it's not consider that cheating, but you use the artificial intelligence, like you rely, you know 100% on artificial intelligence to do all the thing and You just copy and paste it into your exercise or into your PowerPoint and submitted it. So, for Me that is cheating and you are a cheater so, basically, it depends on the, you know, the way the student uses it.

I THINK THAT IT CAN REPLACE A TEACHER IN YOU KNOW, IN SOME ASPECTS, BUT IT'S NOT REALLY YOU KNOW, FULLY REPLACING THE TEACHERS, I BELIEVE THAT BECAUSE FURTHERMORE IT CAN HELP THE TEACHERS OR CAN REPLACE TEACHER IN SOME THING LIKE, YOU KNOW, LIKE, IT CAN GIVE YOU THE GENERAL IDEA ABOUT SOMETHING, BUT, IT CANNOT REPLACE THE TEACHERS BECAUSE THE TEACHER'S VIEW WILL GIVE YOU THE CRITICAL THINKING WITH THIS VIEW THE CRITICAL THINKING, HOW YOU CAN VALIDATE THE INFORMATION AND ALSO FOR THEM, BUT EVEN THE TEACHERS CAN BE YOUR FRIEND OUTSIDE THE CLASS AND ARTIFICIAL INTELLIGENCE, THEY CANNOT DO THAT

OH, OKAY. SO, I THINK THAT MAYBE IN THE FUTURE, THAT ARTIFICIAL INTELLIGENCE CAN BE YOU KNOW, BECAUSE NOW EACH OF THE FIRST SOME FIRST STEPS THEY ARE LEARNING HOW TO CONVEY OR COMMUNICATE WITH A REAL HUMAN AND THEY ARE LEARNING TO



YOU KNOW, TO THINK SMART THEN BEFORE, TO BE MORE INTELLIGENT THAN BEFORE. SO, I THINK THAT IN THE FUTURE, THE ARTIFICIAL INTELLIGENCE WILL BE USED QUIET IN THE EDUCATION LIKE SOMETHING LIKE WELL, YOU KNOW, THE TEACHING ASSISTANT OR THE TEACHERS, THIS CAN HELP THE TEACHER YOU KNOW, TO GIVE THE FUNDAMENTALS OF THE COURSE, EVEN CAN HELP TO GRADE STUDENT BASED ON THE CRITERIA, LIKE THE MULTIPLE CHOICE THAT TEACHER ALREADY INPUTTED FOR THE ARTIFICIAL INTELLIGENCE. SO, I THINK THAT IN THE FUTURE, IT CAN BE LIKE TEACHING ASSISTANTS FOR TEACHERS IN THE FUTURE.

Basically, for Me, You know, I think that even if ChatGPT will become really smart, then at this moment, I will not use it, like a regular learning tool. Because I'm having, you know, a doubt and a feeling to, you know, to be scared or worried about relying completely on artificial intelligence, because for Me, we call that artificial intelligence it means that something can be you know, programmed, something can be restricted, not like the real intelligence. So, I think that nothing can make Me use artificial intelligence, like a regular learning tool.

YES, I THINK THAT CHATGPT HAS ABILITY TO YOU KNOW, TO IMPACT AND TO DO OR TO RETAIN THE INFORMATION ON STUDENT LIKE I ALREADY TOLD ABOUT THE THING THAT NOW IS IS BECOME THE PHENOMENON AND PEOPLE TRY TO USE THAT, TRY TO APPROACH THAT OR TO TRY TO PLAY WITH THAT, AND WE STILL HAVE THE, YOU KNOW, THE NOTION OF THE STUDENT, YOU KNOW, AND I THINK THAT IS NOT 100 PERCENT, BUT THEN BUT MOST OF THE STUDENTS, WHEN THEY COME TO CHATGPT OR EVEN WITHOUT CHATGPT, THEY TRY TO YOU KNOW, TO DELIVER SOMETHING JUST IN A SECTORAL WAY. SO, FOR EXAMPLE, IF SOMETHING LIKE THE URGENT ASSIGNMENT, LAST MINUTE OR IN IN THE LAST MINUTES, I'D SAY THAT WILL USE THE CHATGPT SO, I THINK THAT IT COULD IMPACT ON THE ABILITY TO LEARN AND ALSO RETAIN INFORMATION BECAUSE, IF SOMETIME YOU KNOW, IF SOME MINUTE YOU IS OR SOMETIME YOU JUST RELY ON THAT ONE OR TWO TIME, AND IT CAN BE HAVE A THIRD TIME, FOURTH TIME IN ONE DAY, YOU CANNOT YOU KNOW, LEARN BY YOURSELF OR THINK BY YOURSELF WITHOUT CHATGPT

#### EXACTLY.

UM, I HAVE TO SAY, I THINK THAT ARTIFICIAL INTELLIGENCE TECHNOLOGY OR EVEN YOU KNOW, ANOTHER TECHNOLOGY CALLED INNOVATION BORDERS ON BOTH ETHICAL AND FAIR BECAUSE YOU KNOW, ALL THE INNOVATION WAS CREATED BY HUMANS AND IT DEPENDS ON THE WAY, YOU KNOW, THE PEOPLE USE THAT FOR ANY PURPOSE. WE CANNOT, YOU KNOW, BLAME THAT, OKAY, THE ARTIFICIAL INTELLIGENCE, TECHNOLOGY IS NOT JUST WORTHY, ETHICAL AND NOT FAIR FOR EVERYONE. BUT I THINK THAT IT'S GOING TO CREATE SOMETHING NOT FAIR BETWEEN THE DEVELOPED COUNTRY AND DEVELOPING COUNTRIES. BECAUSE, LIKE, THE DEVELOP FURTHERMORE WITH THE CHATGPT IN MY COUNTRY, IN VIETNAM, YOU CANNOT USE THE CHATGPT BECAUSE YOU KNOW, IS REQUIRED, YOU KNOW, TELEPHONE NUMBER CAME FROM NOW THE COUNTRIES AND MOST OF THEM HAVE A CHAT SETTING THE TELEPHONE NUMBER FROM THE WESTERN COUNTRY, NOT ASIAN COUNTRY. SO I THINK THAT IT CAN CREATE, YOU KNOW, THE GAP BETWEEN THE DEVELOPING COUNTRY AND THE DEVELOPING COUNTRY.

So, it's mean that you want, do you want to ask me about using artificial intelligence in the post graduate like a tool for teaching and learning just

OKAY. SO, THE THING THAT I THINK IS A REALLY INTERESTING QUESTION . SO, I THINK THAT TO MAKE A CHOICE, THEY HAVE TO, YOU KNOW, TO OPEN THE ASSESS FOR THE CHAT FOR THE OPEN AI TO THE YOU KNOW, THE OPEN ACCESS FOR THE FOR OPEN AI HAVE A RIGHT TO HAVE ACCESS, TO THE, YOU KNOW THE SCIENCE PUBLICATION, BECAUSE AS YOU KNOW, THAT AT THIS MOMENT JUST CHATGPT THEY CAN'T, YOU KNOW, THEY DON'T HAVE THE ABILITY TO ACCESS TO THE SCIENTISTS PUBLICATION. SO THAT'S THE REASON WHY JUST CHATGPT CANNOT ANSWER, YOU KNOW, A REAL QUESTION ABOUT SCIENCE TERMS. SO I THINK THAT IN YOUR IN THE FUTURE IF THEY WANT TO UPGRADE THAT THERE SHOULD BE THE COOPERATION BETWEEN THE SCIENTISTS PUBLICATION AND OPEN AI OKAY MAKE SURE THAT IT CAN BE THE JUST WORTHY AND VALIDATED INFORMATION

I think that the another thing we should year I think is is is quite well you know and probably only about everything but I think that the one thing we need to address more about your the motivation of the people why the student they decide or make decision to go with ChatGPT or with artificial intelligence because we have many you know, many kinds of motivation. So it comes with technology or emotional motivation when we make the decision to go with technology or not. So maybe it's something we need to address more.



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SO BACK IN INDIA AND HERE IN FRANCE, THE CORE STRUCTURE AND THE WAY THEY TAKE EXAMS AND ASSIGNMENTS AND EVERYTHING, IT'S VERY SIMILAR, LIKE, I CANNOT TELL THE DIFFERENCE. BUT YES, IT'S DIFFERENT FROM A SCIENCE DEGREE. SO THERE'S THAT. BUT I ENJOY IT REALLY HERE BECAUSE I'M MORE OF AN EXTROVERTED PERSON. AND I LIKE INTERACTING WITH NEW PEOPLE WITH GROUPS AND TALKING AND GETTING TO KNOW THEM MORE. SO THIS MANAGEMENT DEGREE IS REALLY HELPING ME OUT AND GETTING TO KNOW THE PEOPLE AROUND ME.

OKAY, SO FOR MY DAILY LIFE, IT'S LIKE, I WAKE UP AT SIX, OR SEVEN, AND I GET READY FOR MY CLASS, WHICH USUALLY STARTS AT 9:30am in the morning. And then we have classes until 123:0, then I have lunch in crous restaurant with my friends. And then we attend another lecture that commences between two to 5pm. After 5pm, if I have some free time, I usually go for coffee, or some sweets, or maybe shopping with my friends. And at around 8pm, I work out, and then I have my dinner and do my assignments or any homework that I need to do. Yeah, at 11 or 12, I go back to sleep. And as far as challenges are concerned, I think the one challenge that I'm facing is the language of course, because I'm not fluent in French, I'm learning I'm an intermediate. And I know the importance of French here. And I totally agree with that. No issues whatsoever. So I'm trying to improve my French. And another challenge that I faced was finding internships actually not finding internships, I found internships, but the timing between the internship starting date. And when the ER allowed us to join that internship was not matching. So it was a bit frustrating for me, because the ER says that you have to join the internship from April, but you cannot delay it more than June. And most of the opportunities that I liked that I wanted to build a career in started from either January or July. So it was heartbreaking for me to let go of these opportunities. But I hope in future, I will come back to these companies again. But for right now I got a nice internship that I will be pursuing soon. So I overcame that challenge of time clashing, but I think that's life. We can't control.

I HAVE USED BOTH, I USE DEEPL MORE FREQUENTLY DURING MY FRENCH LESSONS. AND IF I NEED TO TRANSLATE ANYTHING FROM FRENCH TO ENGLISH, OR ENGLISH OR FRENCH, I OFTEN USE IT FOR THAT. AND I HAVE USED CHATGPT ONLY ONCE DURING MY BUSINESS GAME WHERE MY TEAMMATES USE CHATGPT TO GENERATE SOME MARKETING IDEAS. BUT OTHER THAN THAT I DIDN'T USE IT. FIRST OF ALL THE INFORMATION ON CHATGPT CANNOT BE RELIED UPON, BECAUSE WE DON'T KNOW WHAT THE SOURCE OF INFORMATION IS AND WHAT INFORMATION IT IS COMPILING. SO IF I'M DOING A SERIOUS ASSIGNMENT OR WORK, I CANNOT RELY ON THE INFORMATION GIVEN BY CHATGPT UNTIL UNLESS I FIND IT MYSELF. AND ALSO, I ONCE TRIED TO SORT SOMETHING ON CHATGPT FOR AN ESSAY. I HAD TO WRITE SOME IDEAS BUT THE SERVER IS SO FULL BECAUSE EVERYONE IS USING IT RIGHT NOW. IT SAYS THAT YOU NEED TO WAIT, WAIT, WAIT, SO FOR ME IT WAS A WASTE OF TIME. SO I AM NOT ATTRACTED TOWARDS CHATGPT ANYMORE, BUT DEEPL. YES, IT'S REALLY GOOD FOR TRANSLATION. BUT IN COMPARISON TO DEEPL I THINK I LIKE GOOGLE TRANSLATE MORE. BECAUSE WHEN THERE IS AN OPTION TO HEAR WHAT THE WORDS SAY LIKE YOU CAN CLICK ON THE BUTTON AND THEN HEAR TO HEAR THE PRONUNCIATION, RIGHT? THERE'S A FEATURE. DEEPL SAY IS IT REALLY FAST? LIKE IT DOESN'T SLOW DOWN SO THAT YOU CAN LISTEN ACCURATELY. AND GOOGLE TRANSLATE IS MUCH BETTER IN TERMS OF THAT. SO I USE DEEPL SOMETIMES, BUT OTHER THAN THAT, I USE GOOGLE TRANSLATE MORE. OKAY. ALL RIGHT. SO, UM, WHEN YOU COMPARE, LIKE WHEN COMPARED TO TRADITIONAL APPROACHES, AND WHEN I'M TALKING ABOUT TRADITIONAL APPROACHES, I'M TALKING ABOUT HOLD ON, I THINK I MOVED PAST A QUESTION.

OKAY, BACK IN INDIA, I USED TO. FIRST OF ALL, I DON'T KNOW IF IT COUNTS, OR COUNTS AS ARTIFICIAL INTELLIGENCE, BUT IT IS AN ONLINE TOOL TO CONVERT YOUR FILES INTO PDF. BECAUSE I HAD A LOT OF ASSIGNMENTS, I USED THAT. AND THEN THERE IS A WEBSITE TO CHECK YOUR PLAGIARISM, BECAUSE FOR A REPORT, WE NEEDED TO GET PLAGIARISM BELOW 13%. AND I DID NOT HAVE A PAID SOFTWARE TO CHECK THAT. SO ON THE WEBSITE, THERE ARE ARTIFICIALLY ARTIFICIAL INTELLIGENCE TOOLS THAT YOU CAN USE TO CHECK THE PLAGIARISM. AND ALSO, I USED SOME LANGUAGE, ARTIFICIAL INTELLIGENCE PLUGINS IN MY GOOGLE CHROME, SO THAT WHENEVER YOU FIND SOMETHING, WRITE SOMETHING, SO IT WILL CORRECT YOUR GRAMMAR IF YOU NEED THAT. AND THERE'S A WEBSITE THAT IS USED TO DOWNLOAD THE PAPERS, SCIENTIFIC PAPERS WITHOUT PAYING FOR THEM. YOU JUST COPY PASTE THE DOI LINKS. AND YOU CAN JUST DOWNLOAD IT FROM THERE. BECAUSE OTHERWISE THOSE PAPERS ARE NOT FREE, YOU HAVE TO PAY FOR THEM. BUT AS STUDENTS, WE CANNOT AFFORD TO PAY THEM. SO IT'S A GOOD RESOURCE. AND THEN YES, LANGUAGE TRANSLATORS ALSO SOMETIMES, BECAUSE I WORKED WITH PROFESSORS FROM ALL OVER THE WORLD, AND SOMETIMES THEY TALKED IN A LANGUAGE



THAT WAS DIFFICULT FOR ME, OF COURSE, THEY TALK TO ME OVER EMAILS. SO IN ORDER TO REPLY TO THEM AND HAVE CONVERSATIONS WITH THEM, I USED A FRENCH TRANSLATOR, DANISH, TRANSLATOR. AND, YEAH, THESE ARE THE THINGS THAT COME TO MY MIND RIGHT NOW.

They have great potential to really ease the working and the research of people all around the world, not just students, in fact, people who are working in industries, and we will be working professionals soon. So if we need some information, we can just command the artificial intelligence software to give us information. And it will save a lot of time. But right now, because it's just beginning, and there's a high level of inaccuracy. So which is why we cannot professionally use it as a concrete source of information. But definitely it can replace Wikipedia or just general Google search. But if you want to make a thesis and do some research, and convey or conduct some interviews just like this or surveys, of course, you need some human touch some human participation and that so I don't think ChatGPT will be able to replace that but of course, there are other forms even I think, ChatGPT in the future have the potential to create documents for you. You can just come on ChatGPT to prepare a Word file for you, a PDF for you, or things like that, or maybe interlink some different software or tools for you to create a map. So it would be great if I can command charge up to you and say, okay, ChatGPT. I have this topic. And this topic, how can I combine these two topics to create a new idea? So if ChatGPT can just suggest some things like this, it will really add to my creativity.

I WOULD PREFER A HYBRID MODEL OF THESE TWO, BECAUSE IF NEW TECHNOLOGIES COME AND IT SAVES TIME, IT'S BETTER FOR YOU. SO WHY NOT LIKE I HAVE NO BIAS AGAINST THEM. BUT I NEED TO BE SURE OF THEIR QUALITY, THE QUALITY OF DATA THEY ARE GIVING TO ME. SO I WOULD PREFER A HYBRID MODEL, BECAUSE I WOULD NOT WANT TO RELY ENTIRELY ON ONE SIDE. BECAUSE IT'S LIKE, YOU ARE CREATING BARRIERS AND RESTRICTING YOURSELF FROM EXPANDING YOUR HORIZONS. SO IT WOULD BE GREAT TO USE BOTH DEPENDING UPON THE SITUATION AND THE TYPE OF INFORMATION YOU NEED. AND FOR EXAMPLE, IF THERE IS A REALLY SENSITIVE INFORMATION THAT YOU NEED TO PROCESS, OR SEARCH FOR, OR SOMETHING LIKE THAT, THEN I DON'T THINK CHATGPT WOULD BE SUITABLE THERE. BECAUSE FIRST OF ALL, YOU CANNOT GIVE THAT INFORMATION TO A THIRD PARTY APP TO PROCESS. AND SECOND, YOU NEED TO MAKE THE COMPUTATIONS YOURSELF. BUT AS FAR AS THE GENERAL SEARCHING ON GOOGLE GOES, CHATGPT CAN REPLACE IT AND I REALLY DON'T MIND. IT'S GOOD. OKAY. ALL RIGHT. SO, FOR YOU AGAIN, DO YOU CONSIDER PEOPLE THAT USE CHATGPT? ARE STUDENTS GENERALLY USING CHATGPT? AS FOR ASSIGNMENTS, DO YOU CONSIDER IT CHEATING? I DON'T KNOW ABOUT CHEATING REALLY? WELL, IT WILL NOT GIVE THEM THE KNOWLEDGE THEY SHOULD HAVE OBTAINED FROM RESEARCH. LIKE, IF I RESEARCH A SUBJECT BY OPENING UP A FEW ARTICLES AND READING, I DON'T USE THE I DON'T READ THE WHOLE ARTICLES. BUT IF I READ A FEW LINES, OF COURSE, I GET TO UNDERSTAND THE TOPIC BETTER. AND IF STUDENTS ARE JUST USING IT TO TYPE IN A WORD, GET THE WHOLE ESSAY WRITTEN JUST COPY PASTE, THEN THEY DIDN'T READ IT, ACTUALLY, THE COMPUTER READ IT FOR THEM. SO THEY DON'T HAVE ANY knowledge about it. So in person if someone asks them about this question that is okay, what do you know about THIS? THEY WILL BE BLANK, THEY WILL NOT KNOW ANYTHING ABOUT IT. SO IF YOU WANT TO CONSIDER THIS, IS THIS CHEATING? NO, I WILL NOT SAY THAT IT IS CHEATING. BUT IS IT HEALTHY FOR LEARNING? THAT IS ALSO NOT TRUE.

No, I don't think ChatGPT will be able to replace the professors. But of course with COVID Everyone saw how easy it is to teach in a hybrid mode or even online mode. So ChatGPT can be useful for those types of orientations where you want to teach remotely without having to sit face to face, and that's okay. But when it comes to teaching, there have also been researchers that prove that when human to human contact is made, the information is retained better because our brain is more receptive to human gestures, expressions, tones of voice and body language. And we remember information better when we associate a personality with a teacher who told us this and shared his experience with that. So I don't think ChatGPT will be able to replace that ever. It can be an addition to the teaching models, but it cannot replace it.

RIGHT, AS OF RIGHT NOW? NO, BECAUSE SORRY, CHATGPT IS STILL NEW. SO RIGHT NOW, I'M NOT SEEING ANY EFFECTS OR CHANGES BECAUSE OF THAT. BUT IN THE FUTURE, I THINK IT CAN HAVE AN EFFECT BECAUSE, OKAY, IT CAN HAVE BOTH POSITIVE AND NEGATIVE EFFECTS. THAT'S WHAT I THINK THE POSITIVE EFFECT WOULD BE THAT ANY PERSON WOULD BE ABLE TO RETRIEVE AND HAVE ACCESS TO ANY KIND OF DATA. SO EVEN IF I'M NOT, I'M OLD, I'M 90 YEARS OLD. I'M NOT VERY FAMILIAR WITH THE NEW TECHNOLOGY, I DON'T KNOW HOW TO USE THE NEW COMPUTERS AND USER SOFTWARES, I CAN JUST OPEN THIS APP, OR SOFTWARE, TYPE IN MY WISH AND GET THE INFORMATION. SO I HAVE ACCESS TO INFORMATION, EVEN THOUGH IT'S HARD FOR ME TO OPERATE THE HARDWARE OR THE



SOFTWARE. SO THAT'S REALLY GREAT. SO IT WILL NOT BE LIKE I AM OUTDATED, OR I AM DISCONNECTED WITH THE INFORMATION. BUT ON THE OTHER HAND, BECAUSE MOST OF THE INFORMATION WILL BE AUTOMATED, AND ALONG WITH CHATGPT, SOME OTHER TASKS WILL BE AUTOMATED, IT MIGHT LEAD TO REDUCTION IN JOBS AND PLACES. SO PEOPLE MIGHT BE LOOKING FOR JOBS, BUT THERE WILL NOT BE ANY JOBS AVAILABLE. AND THAT'S A DOWNSIDE. BUT ON THE OTHER HAND, THERE'S ALSO A POSSIBILITY THAT MANY OTHER NEW TYPES OF INDUSTRIES AND JOBS WILL BE CREATED, AS COMPARED TO THESE TRADITIONAL ONES. JUST LIKE THESE DAYS, INSTEAD OF WORKING PEOPLE ARE MORE DRIVEN TOWARDS FREELANCING, OR CDD. OR SOME PEOPLE ARE EVEN MORE MONEY IN THROUGH DIGITAL CURRENCY. SO THESE ARE THE NEW TYPES OF JOBS THAT HAVE EMERGED. SO EVERYTHING EVOLVES AND CHANGES. AND I THINK WE JUST HAVE TO WAIT AND SEE WHAT HAPPENS.

I HEARD FROM A FRIEND, HE WAS USING IT AND I SAID, OH, WHAT IS THIS AND HOW ARE YOU GETTING INFORMATION SO QUICKLY, SO FAST? AND HE TOLD ME THOUGH, OH, IT'S CHATGPT. YOU DON'T KNOW ABOUT IT? AND I SAID, NO, I DID. DON'T WORRY ABOUT IT. AND THEN HE TOLD ME THAT YOU JUST NEED TO TYPE IN AND IT WILL SUGGEST YOU EVERYTHING AND SAY NO, THAT'S PRETTY FAST AND COOL. THAT CAN COME IN HANDY.

YEAH, I RECOMMEND IT TO MY FRIENDS. THEY WERE STRUGGLING TO FIND SOME INFORMATION FOR THEIR ASSIGNMENT. AND THEY DIDN'T KNOW WHAT TO PUT IN THE GOOGLE SEARCH BAR. BECAUSE THEY ARE ALSO NOT FLUENT IN ENGLISH, BUT THEY NEED TO DO THEIR ASSIGNMENT IN ENGLISH. SO I SAID JUST PUT IT EVEN IN BROKEN ENGLISH, JUST PUT IT ON CHATGPT AND IT WILL HELP YOU. SO I SUGGESTED IT TO THEM.

YEAH, 100%. I'D GO BACK TO MY PREVIOUS ANSWER THAT SAID THAT IT CAN BE AN ADDITION TO EDUCATION, BUT IT CANNOT REPLACE TRADITIONAL EDUCATION. SO OF COURSE, IF WE DON'T GIVE TIME TO OUR OWN RESEARCH ON OUR OWN THINKING, OR PUTTING OUR OWN THOUGHTS AND JUST RELYING ON AUTOMATED FACTUAL INFORMATION, JUST DRY INFORMATION GIVEN TO US BY SOFTWARE, IT'S REALLY GOING TO AFFECT HUMAN UNDERSTANDING AND BEHAVIORS AND PATTERNS OF LEARNING. SO IT'S NOT HEALTHY IN THE LONG RUN.

As long as ChatGPT doesn't have access to our personal and critical information, like my location, my family history, my background, my bank balance and things like that, I think it's fine. But once it enters this personal space, then it will be a source of problem because no one wants to be tracked. Nobody wants to disclose sensitive information if nobody wants to be watched 24/7 via machinery. So for right now, it's fair. But if it crosses that personal barrier, then I think not it's not just about me, everyone would be uncomfortable with that. So let's hope that it doesn't come to that. I think they might also be using it to a certain extent. So they are preparing material to teach us and if they don't know how to write it, or if they need some support, they might also be using it, put in the word and just retrieve information to effectively teach students. So I would like to take this as something that is improving the quality of information and access right now.

Thank you so much. Well, other than that, I think the topic that you chose is very interesting, because AI and ChatGPT are really hot right now. And even there is so much artificial intelligence, other software that we don't know the name of, but are used 24/7, for example. You know, there's one thing that I realized a few months ago that there are Nike shoes, right? They're very popular, and as soon as you want to buy them, they're out of stock within seconds. So they're artificial intelligence software that are used by the resellers. And they just set it up. So whenever the Nike brand releases those shoes online, they just buy it quickly, and humans cannot buy it. So we have The customers only have the option to buy it from those resellers, we cannot buy directly from the Nike website. So it was really not a good thing to see. Because, for example, Nike released the shoe at the price of, say 100 euros. And the resellers bought it with the help of artificial intelligence to make their stock. And then they are reselling the same shoe at 150 euros. And now customers just have the option to buy it from the resellers. I don't think it's fair, because Nike should have some type of control over these resellers who are just buying stock. But then again, it's part of their marketing strategy, because it's creating a hype in the market that, oh, your shoes are not available, you will have to wait, oh, only two pairs have come, you have to rush and buy from us. So I mean, it's not healthy marketing, in my opinion, and you have to overpay for the same thing as when it was released. So



YEAH, THAT'S TRUE. I MEAN, THEY ARE SOLD FOR DOUBLE THE PRICE THAN WHAT THEY WERE RELEASED FOR. YEAH. AND I'M SURE THE OWNER COMPANIES JUST LIKE NIKE AND THE COMPANY THAT IS HOLDING THE MUSIC CONCERT, ARE GETTING A COMMISSION OUT OF IT. SO IT'S LIKE YOU'RE EARNING TWICE, YOU KNOW? YEAH. AND THAT IS CHEATING. RIGHT? YOU ARE MAKING TWICE THE AMOUNT OF MONEY FROM THE PEOPLE. BUT YOU ARE HAVING A WHITE TAG ON YOUR CALLER SAYING, OH, WE'RE FAIR. WE JUST CHARGED YOU THE MINIMUM THAT WE COULD, BUT IN TURN, IT'S LIKE DOUBLE. SO THAT'S GOOD.

OKAY, MY NAME IS ALBERT SOLOMON, AND CURRENTLY, AN M2 STUDENT IN ADVANCED FINANCE AND ACCOUNTING. AND, MY FIELD OF STUDY, IT'S CUT ACROSS EVERYTHING RISK, EVERYTHING FINANCE, ACCOUNTING, AUDITING, OUT HOW BEST TO HAVE BEST INVESTMENTS PORTFOLIO, HOW BEST TO KNOW ABOUT THE EFFICIENT FRONTIER, AS THEY WILL CALL THEM EFFICIENT FRONTIERS, BY EFFICIENT FRONTIERS, I MEAN, INVESTMENT INVESTMENTS THAT ARE DOING VERY WELL THAT THAT AN INVESTOR CAN INVEST IN THAT AN INVESTOR CAN SAY, OKAY, I'M EXPECTING A PARTICULAR AMOUNT OF PERCENTAGE IN ONE TO THREE YEARS. SO THAT'S ABOUT THE EFFICIENT FRONTIER ASPECT. AND MY COURSE CUTS ACROSS BANKING ALSO AND FINANCE AND ORGANIZATION DECISION MAKING PROCESS ON DATABASE WITH PROGRAMMING OF FINANCE AND ACCOUNTING AS WELL. SO THAT'S WHAT MY PROGRAM ENTAILS. AND MY BACKGROUND, I HAD A DEGREE IN ACCOUNTING AND BUSINESS TO SAY, AND I'M FROM THE NATIONAL UNIVERSITY OF NIGERIA THEN IT'S BASICALLY ACCOUNTING BASED ACCOUNTING, COST ACCOUNTING, MANAGEMENT ACCOUNTING BASED EVERYTHING ACCOUNTS AND SO THAT'S WHAT'S MY BACKGROUND IS ALL ABOUT AND MY PRESENT COURSE THAT IS WHAT'S SORRY, THAT'S WHAT BOTH ARE ALL ABOUT.

OKAY, IN THE LIFE OF A OF AN AVERAGE FINANCE STUDENT, IT'S TYPICAL DAY IS IS A HECTIC ONE, BECAUSE YOU WILL NEED TO DO A LOT OF THINGS YOU KNOW, AND WHAT I MEAN BY A LOT OF THINGS IS READ ARTICLES GO TO SCHOOL AND DO A LOT OF ANALYSIS, A LOT OF MATHEMATICS ECONOMICS. SO, A TYPICAL DAY IN THE LIFE OF FINANCE STUDENTS IS NUMBER ONE IS FINANCIALLY ORIENTED. SO, YOU CANNOT DO IT WITHOUT THE FINANCIAL ASPECT OF LIFE IN A TYPICAL DAY OR IN A TYPICAL LIFE OF FINANCE STUDENTS. SO, YOU HAVE TO LIKE GO TO SERIES OF FINANCIAL ANALYSIS, YOU HAVE TO, YOU HAVE TO CONCLUDE ON FINANCIAL ANALYSIS, YOU NEED TO LIKE CHECK THROUGH THE, THE OLD RECORDS, THE PRESENT RECORDS RECORDS FROM MANY YEARS BACK, AND COMPARE AND CONTRAST, SEE IF THERE IS IMPROVEMENT, IF THERE IS NO IMPROVEMENT, SEE, OR TRY TO CHECK WHAT COULD BE WRONG, AND TRY TO SEE HOW BEST TO COME ABOUT WITH STRATEGIES THAT CAN ENHANCE THE KIND IMPROVEMENT. SO IT'S FINANCIAL WISE, FINANCIALLY ORIENTED. SO THAT'S WHAT A TYPICAL DAY IN THE LIFE OF A FINANCE STUDENT LOOKS LIKE.

OKAY, SO MY CURRENT LEARNING EXPERIENCE AT THE UNIVERSITY OVER TIME OR BEFORE NOW, I HAVEN'T HAD MUCH EXPERIENCE IN FINANCE BECAUSE, LIKE I SAID, MY BACKGROUND WAS IN ACCOUNTING, MAJORLY ACCOUNTING AND ACCOUNTING TAX AND MANAGEMENT ACCOUNTS. AND SO TO SAY. SO FOR ME, AT THE BEGINNING OF MY ACADEMIC YEAR IT LOOKED LIKE IT WAS GOING TO BE STRENUOUS, BECAUSE IT'S AN MII PROGRAM. AND FOR THE FACT THAT I DO NOT HAVE MUCH OF A FINANCE BACKGROUND. SO AT FIRST I THOUGHT I WAS GOING TO BE TASKY. THOUGH IT WAS CHALLENGING, ACTUALLY, WITH THE TEACHING METHODS IN MY DEPARTMENT, OR THE ONES THE PROFESSOR'S DECIDED TO USE, IT BECAME SO MUCH EASIER FOR ME. AND LET ME IT WAS SO MUCH EASIER FOR ME BECAUSE I WAS ABLE TO BLEND IN AND I WAS ABLE TO CATCH UP WITH THE HOPE WAS, BECAUSE TO STUDY FINANCE, YOU NEED LOTS OF MATHEMATICS BACKGROUND, WHICH SOME OF US YES, SOME OF US ARE, LET ME SAY MYSELF, I DON'T REALLY HAVE MUCH OF FINANCE AND MATHEMATICS BACKGROUND. BUT WITH THE HELP OF THE TEACHING METHOD, IT ENHANCED MY LEARNING process, and I was able to move along, M ost times, if I come back home from the classes, I will have to go over to THEM THOUGHTS TAKE MY TIME TO START ALL OVER AGAIN AND LOOK AT THE PROCESSES, TAKE THEM ONE AFTER THE OTHER. Whenever I'm lost, I go back to Google Scholar, I check for updates, and I get to read one or two things about WHATEVER I FIND CHALLENGING, AND I COME BACK TO THE CHALLENGE PART AND I'M ABLE TO, TO FLY OVER THE BRIDGE, I'M ABLE TO GET THAT PARTICULAR THING. AND I NOTICED THAT IF I TAKE MY TIME TO STUDY, WHATEVER WE WERE TAUGHT IN SCHOOL, I GET TO UNDERSTAND IT EVEN MUCH BETTER THAN THE WAY I UNDERSTOOD IT IN THE CLASS. SO THE TEACHING METHOD HAS REALLY HELPED ME TO BE ABLE TO FIND A GOOD SITTING IN THE, IN THE FINANCIAL OR IN THE FINANCIAL LEVEL OF THE PROGRAM. AND, UM, WE DON'T GO TO LABS, BECAUSE WHAT WE DO MAJORLY IS WE ANALYZE DATA, AND FINANCIAL DATA TO BE PRECISE. AND WE READ SO WE DON'T REALLY ATTEND SEMINARS ALSO, BUT WE WILL NEED LOTS OF FINANCIAL ARTICLES, THERE WILL BE LOTS OF FINANCIAL ARTICLES THAT ENABLE US TO TO HAVE A BETTER VIEW OF FINANCIAL ANALYSIS. SO WE ARE ABLE TO GO THROUGH MANY ARTICLES FROM MANY YEARS



BACK. AND WE TAKE OUR TIME TO READ IT 2,3,4 TIMES TO HAVE AN OVERVIEW OF WHAT THE WRITER OF THE ARTICLE IS SAYING. SO WE MAJORLY WORK WITH ARTICLES, WE MAJORLY WORK WITH FINANCIAL DOCUMENT ACCOUNTING BANKS AND DOCUMENTS FROM WAY BACK AND WE ARE ABLE TO HAVE A BROADER VIEW OF THE WHOLE THING. IT HAS BEEN INTERESTING. IT HAS REALLY BEEN INTERESTING THOUGH, THERE ARE SOME PARTS THAT ARE BORING, LIKE THE R CLASS, WHICH WAS BORING, KIND OF BECAUSE THE R WAS WE DID NOT REALLY HAVE THE R BACKGROUND BECAUSE MOST OF US WERE NOT DATA ANALYST RIGHT FROM TIME, EXCEPT FOR ONE OF MY COLLEAGUES WHO IS A DATA ANALYST THAT REALLY ENJOYED THE WHOLE CLASS BECAUSE AT SOME POINT, SOME OF THE STUDENTS THEY STOPPED ATTENDING THE CLASS BECAUSE THEY FIND IT VERY BORING. BECAUSE THEY FEEL LIKE MAYBE THEY ARE NOT BEING CARRIED ALONG IN THE PROCESS OF UNDERSTANDING THE PROGRAMMING PART OF THE COURSE, YEAH, EXCEPT FOR THE PROGRAMMING PART OF THE COURSE, WHICH WAS A BIT BORING. EVERY OTHER THING WAS INTERESTING, IT HAS BEEN REALLY INTERESTING BECAUSE IT'S HELPED SOMEBODY LIKE MYSELF, WHO DOESN'T HAVE GOOD BACKGROUND OF FINANCE, IT HAS REALLY HELPED ME TO TO BE WITH MYSELF IN THE FINANCE PART OF THE PROGRAM AND THE ACCOUNTING AND AUDITING PART THAT THAT IS EMBEDDED IN THE PROGRAM IS VERY SWEET BECAUSE I HAD GOOD BACKGROUND IN ACCOUNTING AND AUDITING BEFORE NOW. SO THE TEACHING METHODS ARE VERY GOOD. THEY ARE VERY OKAY AND WE ARE ABLE TO SEE ARTICLES TO EVEN SEARCH FOR MORE TO BE ABLE TO ANALYZE MORE DATA AND DO OUR FINANCIAL ANALYSTS THINGS AND ALL THAT, SO THAT HAS BEEN A VERY, VERY GOOD ONE APART FROM THE PROGRAMMING PART, WHICH IS A BIT SKETCHY.

YES, A LITTLE BIT A LITTLE BIT. BECAUSE THE CHALLENGES THAT I PERSONALLY FACE IS THE AREA OF THE LANGUAGE, WHICH I JUST STARTED FRENCH CLASS. SO THAT'S THE MAJOR CHALLENGE BECAUSE THERE ARE SOME COURSES THAT WE HAD THAT WE HAD TO WORK WITH EXCEL, BUT MOST OF OUR PROFESSORS, THEY'RE VERY VERSED WITH THE FRENCH VERSION OF EXCEL AND, YOU KNOW, WE HAVE TO START LOOKING FOR THE ENGLISH FORM. WHAT'S IT CALLED? THE ENGLISH FORMULAS AND ALL OF THAT. SO SOME OF US THAT DO NOT SPEAK THE LANGUAGE WE HAVE, WE HAVE TO DOWNLOAD THE LANGUAGE TO PARK AND SAY, OKAY, THIS IS THE LANGUAGE, THIS IS THE MEANING IN ENGLISH. SO AS A RESULT, THAT'S WHAT IT DOESN'T MAKE, IT DOES NOT HELP US TO BE VERY FAST WITH SOME THINGS AT SOME POINT BECAUSE IT SLOWS US DOWN ON GETTING SOME RESULTS. BUT AT THE END OF THE DAY, WE ENDED UP GETTING THE RESULTS, EVEN IF IT TOOK EXTRA TIME. SO THAT'S LIKE THE MAJOR CHALLENGE, BUT I DON'T KNOW, BUT FOR ME, IF SOME OF US DECIDED TO TAKE CLASSES IN LANGUAGE AND SOME SOME HAVE NOT EVEN STARTED WITH I'M NOT SURE IF THEY HAVE INTEREST OR NOT. BUT THAT IS THE MAJOR CHALLENGE SOME OF US FACED AS STUDENTS, YES. AS A STUDENT.

OKAY, SO THE AI BASED TOOLS, WE IN MY PROGRAM, WE DIDN'T USE ANY, WE HAVEN'T USED ANY, BUT PERSONALLY, I HAVE USED ONE, WHICH IS THE CHATGPT I AM FAMILIAR WITH CHATGPT. I HAVE USED IT BEFORE NOW, TO GET SOME, TO GET SOME FACTS TO BE ABLE TO INCULCATE THOSE FATS INTO MY LEARNING. AND I BASICALLY FIND IT INTERESTING. SO THAT'S THE ONLY AI TOOL THAT I HAVE USED BEFORE NOW. SO THAT IS. WELL, BASICALLY, IN MY UNIVERSITY, WE HAVEN'T WE DIDN'T USED ANY OF THAT. I DON'T THINK WE ARE GOING TO USE ANY.

OKAY, SO A FRIEND OF MINE MENTIONED ABOUT IT SOMETIMES BACK SO I THOUGHT OKAY, LET ME TAKE A GOOD LOOK AT IT AND HAVE A BROADER VIEW ABOUT THE TOOL. SO I DECIDED TO TRY THIS AND REALLY I WAS WOWED. RIGHT I WAS WOWED BECAUSE IT SIMPLIFIED A PARTICULAR WORK FOR ME BECAUSE I WAS TRYING TO WRITE A PARTICULAR SPEECH AND TO SIMPLIFY IT FOR ME SO I FOUND IT VERY INTERESTING, BECAUSE IT'S JUST LIKE TELLING ME NOT TO BOTHER TO DO A LOT OF THINGS. ALL I NEED TO DO IS JUST PUT IT ON THE AI TOOL AND GIVE ME ANSWERS THEN I'M ABLE TO INCORPORATE IT INTO WHATEVER I WANT TO DO. YOU KNOW, SO I FOUND IT VERY INTERESTING. THAT IS PARTICULARLY SO.

OKAY, AS AN UNDERGRADUATE, I WAS NOT REALLY AWARE OF ANY I TO BECAUSE IT WAS LIKE THE TRADITIONAL MEANS OF TEACHING THAT I HAD UNDERGONE. YEAH, BECAUSE IT WAS JUST THE NORMAL METHOD OF TEACHING, WHICH IS THE NORMAL TRADITIONAL WAY OF TEACHING. SO I DIDN'T USE ANY AI TOOL AND I WAS NOT FAMILIAR WITH ANY AI TOOL, APART FROM THE NORMAL WORD, EXCEL, POWERPOINT, ALL THESE NORMAL SOFTWARES WE USE AS STUDENTS. BUT WHEN IT COMES TO ARTIFICIAL INTELLIGENCE TOOLS, IT'S A NO, WE, I WAS NOT AWARE OF IT. AND I DIDN'T USE ANY DURING MY UNDERGRADUATE DAYS. BUT FOR MY POSTGRADUATE PERIOD, YEAH. I'M AWARE OF THE TOOL AND THE FACT THAT I'M ABLE TO, LIKE MIX TWO COURSES TOGETHER TO MAKE ONE IS ACTUALLY FASCINATING. YEAH, LIKE, MY UNDERGRADUATE, LIKE, IT WAS JUST ACCOUNTING. YOU KNOW, WHAT, IN MY POSTGRADUATES, I'M DOING FINANCE AND ACCOUNTING, YOU KNOW, TO IT, BECAUSE IT'S TO HELP EXPAND OR BUTTRESS THE THINGS I'VE KNOWN ABOUT ACCOUNTING AND FINANCE ARE LIKE, MY UNDERGRADUATE DAYS, THAT IT'S JUST THE, A ONE WAY TRAFFIC LANE, IS JUST ACCOUNTING AND EVERYTHING CONCERNING ACCOUNTING. SO IT'S JUST A BIT OF A BIT OF, OKAY, A BIT OF TAX, A BIT OF A BIT OF A BIT OF THE TAX, THE STUDIES, IS INVOLVED, UNLIKE MY PRESENT COURSE THAT CUTS ACROSS, THE MANAGEMENT PART, THE FINANCIAL PART OF THE TAX, THE



ACCOUNTING, THE MANAGEMENT AS A WHOLE. SO,IF I COMPARE BOTH, I WOULD SEE THAT MY POSTGRADUATE PART IS ACTUALLY HIGHLY IMPORTANT. YEAH, IT'S VERY GOOD COMPARED TO MY UNDERGRADUATE TIME AND, AND REALLY, MY POSTGRADUATE AS IT HAS OPENED MY MIND TO A LOT OF THINGS THAT I DIDN'T KNOW. AND I'M ABLE TO REMIND MYSELF ABOUT THE THINGS I'VE LEARNED IN MY UNDERGRADUATE DAYS TOO, BECAUSE THERE ARE SOME COURSES THAT YOU'LL BE TAKING BACK TO THE THINGS YOU'VE LEARNED BEFORE. SO ONE WAY OR THE OTHER, THEY ARE INTERCONNECTED, BOTH THE POSTGRADUATE AND UNDERGRADUATE, BUT IN TERMS OF HIERARCHY, BECAUSE COLLEGE IS FAR, FAR BIGGER THAN THE UNDERGRADUATES. SO FOR ME,THE FACT THAT I'M ABLE TO KNOW MORE OR I'VE BEEN ABLE TO KNOW MORE TOOLS AND USE MORE TOOLS IN MY POSTGRADUATES THAN MY UNDERGRADUATES.

OKAY. SO, THE CHATGPT THAT I MENTIONED EARLIER, I WANTED TO LIKE I SAID, I WANTED TO WRITE A SPEECH. AND I NEEDED TO GO OUT OF WHAT I HAVE KNOWN TO GET NEW KNOWLEDGE, YOU KNOW, SO I, I HAVE HAD A PARTICULAR WRITE UP ALREADY THAT I HAD WRITTEN ON MY OWN. AND I DECIDED, OKAY, LET ME TRY CHATGPT AND SEE WHAT I CAN GET OUT OF IT. SO I DECIDED TO I DECIDED TO REGISTER AND TO HAVE AN ACCOUNT AND WHICH I GOT TO THE TO THE CHAT INTERFACE AND, AND I JUST TYPED IN THE THINGS I WANTED TO DEVELOP THE POINTS ON AND ALL THE POINTS I GOT OUT FROM CHATGPT I HAD TO GO OVER THEM AND AND THAT'S THE POINT. I WAS LIKE, OKAY, THIS IS GOOD, THOUGH. AT SOME POINT. I FELT SOMEHOW BUT I'M SURE WE'LL GET TO THAT STAGE. BUT I FELT WOW BECAUSE IT'S LIKE TELLING ME I DON'T HAVE TO DO A LOT OF THINGS ANYMORE. ALL I NEED TO DO IS JUST COME TO CHATGPT. OKAY, WHAT IS A NOUN? WHAT IS A PRONOUN? AND WHAT IS THE SOURCE OF THAT JUST GIVE ME POINTS, I HAVE TO JUST ASSIMILATE THESE POINTS WITH THIS POINT, UNDERSTAND THIS POINT, AND I'M ABLE TO JUST GIVE A SPEECH ON THIS POINT. SO, THE CHATGPT HAS ACTUALLY HELPED ME TO, YOU KNOW, IT'S GIVEN ME A LOT OF POINTS. AND IT GAVE ME OPTIONS. ALSO, I HAVE A COLLEAGUE, WHO DIDN'T MEET UP WITH A PARTICULAR TARGET. AND HE SAID, HE WAS GOING TO USE A SOFTWARE TO JUST TO JUST FINISH UP THE THING, OF WHICH I KNOW WHAT HE WAS TALKING ABOUT. BUT I ACTED LIKE, OKAY, WHAT I DO NOT JUST MAKE SURE I LIKE TO DO IS JUST DO NOT SUBMIT YOUR ASSIGNMENT ON TIME. AND AT THE END OF THE DAY, HE SAID IT'S DONE. OKAY, GOOD. NO PROBLEM. SO I FEEL LIKE IT'S A, IT'S ACTUALLY A GOOD TOOL RIGHT, BUT AT THE SAME TIME, I'M SURE IT'LL HAVE SOME OF SOME OF ITS DISADVANTAGES, BUT THEN IT'S MAKES YOU FEEL LIKE, YOU DON'T HAVE TO DO OTHER THINGS, ALL YOU NEED TO DO IS JUST PUT IT AND GET ANSWERS. SO THAT'S MY EXPERIENCE WITH CHATGPT.

Well, well yes, there are lots of differences between both my undergraduate and my graduate Learning or study METHODS. FOR EXAMPLE, DURING MY UNDERGRADUATE DAYS, WE DIDN'T REALLY DEAL WITH LET'S SAY, GOING FOR EXTENSIVE KNOWLEDGE. YOU KNOW, WE ARE JUST JUST GOOD WITH WHATEVER WE HAVE BEEN TAUGHT OR WHATEVER WE HAVE BEEN TAUGHT IN THE CLASS. AND BECAUSE WE ARE SO SURE THAT OUR EXAMS ARE COMING BASED ON THE THINGS WE'VE BEEN TAUGHT, BUT NOT IN REAL LIFE SITUATIONS UNLIKE MY, IN MY GRADUATE OR MY POSTGRADUATE LEARNING OR MY POSTGRADUATE PROGRAM, MOST OF THE THINGS WE DO THEY ARE RELATED TO REAL LIFE SITUATIONS, BECAUSE AT THE END OF THE DAY, HOW DO YOU TREAT THESE PARTICULAR THING IN REAL LIFE? WHAT DO YOU DO IN A REAL LIFE SITUATION? HOW ARE YOU ABLE TO TACKLE THESE THINGS IF IT COMES UP IN THE REAL LIFE SITUATION? SO THE DIFFERENCES BETWEEN BOTH TEACHING METHODS ARE BOTH STUDIES, THEY ARE VERY FAR APART. THEY ARE FAR APART. AND ALSO, THE FACT THAT WE'RE ABLE TO LIKE, WORK AS ONE, TWO COURSES IS IT'S ACTUALLY INTERESTING, BECAUSE IF YOU IF FOR EXAMPLE, IF I FINISH MY PROGRAM AND I GRADUATE, I CAN WORK IN DIFFERENT I CAN WORK AS, AS AN ACCOUNTANT, I CAN WORK AS A FINANCIAL ANALYST, I CAN WORK IN THE FINANCIAL MARKETS, I CAN DECIDE TO WORK IN AN INSURANCE COMPANY, I CAN DECIDE WORK IN THE BANKING SECTOR, AND THEN DECIDE TO WORK IN THE AUDITS INTERNAL CONTROL OR TO WORK AS AN EXTERNAL AUDITOR, IF I HAVE THE NECESSARY CERTIFICATE AND ALL OF THAT, UNLIKE THE THE UNDERGRADUATE DAYS THAT IS JUST JUST UP TO BEING THERE IN THE ACCOUNTING SECTOR OR IN THE ACCOUNTING DEPARTMENT. SO MY POSTGRADUATE STUDIES DEAL WITH REAL LIFE SITUATIONS, THE THINGS THAT ARE HAPPENING ON THE MARKET, THE THINGS THAT WILL HAPPEN IF YOU EVENTUALLY WORK ON THE FINANCIAL MARKET. UNLIKE MY UNDERGRADUATES, IT'S JUST A PARAPHRASE OF OKAY, IT'S JUST A PARAPHRASE, SO THESE ARE THE MAJOR DIFFERENCES.

OKAY, FOR ME, I STAND TO BE CORRECTED. YEAH, BUT I FEEL LIKE THE TRADITIONAL TEACHING APPROACHES, I THINK IT'S STILL THE BEST. BECAUSE, FOR EXAMPLE, IF YOU ARE A PROFESSOR, YOU'RE ABLE TO RELATE TO IT, AND THEY WALK YOU THROUGH THE PROCESSES, YOU GO THROUGH, FROM ONE TO TWO, FROM TWO TO THREE, FROM THREE TO FOUR, AND SO ON. SO YOU'RE ABLE TO THINK BEYOND THE PRESENT SITUATION, IT'S THE TRADITIONAL APPROACH TO TEACHING, IT OPENS YOUR MIND TO, TO THINKING OF DIVERSE METHODS TO THINK IN DIFFERENT WAYS, OKAY, IF THIS THEN HAPPENS THIS WAY, WHAT CAN USE TO TACKLE THIS, BUT WHAT STRATEGY CAN WE PUT TOGETHER TO INCREASE SALES? WHAT CAN WE DO TO DO THIS? WHAT CAN WE DO TO DO THAT? THOUGH, AT THE END OF THE DAY, I DON'T THINK THE STUDENTS SHOULD BE AFFECTED BY THE USE OF AI TOOLS. BECAUSE, IF THEY HAVE BEEN TAUGHT IN A TRADITIONAL WAY, AND THEY ARE THINKING THE FACULTY IS WIDE, IT WILL BE SO EASY FOR



THEM TO EVEN USE THE AI TOOLS AND THE ONLY REASON THEY CAN USE THE AI IS TO GET OTHER OPINIONS COMPARED TO WHAT THEY HAVE. AND DECIDE, OKAY, THIS IS THE ROUTE I WANT TO GO TO. SO IT'S LIKE WHEN THE WHOLE THING IS INTERWOVEN. THE TRADITIONAL APPROACH IS STILL THE BEST FOR ME. EVEN IF THE TRENDING AI TOOLS LOOK FASCINATING AND ALL, I STILL FEEL LIKE THE TRADITIONAL APPROACH IS STILL THE BEST BECAUSE YOU HAVE SOMEONE YOU'RE INTERACTING WITH, AND THEY WALK YOU THROUGH THE PROCESS. AND YOU GET TO TACKLE REAL LIFE MATTERS BY THINKING DEEPER THAN YOUR PRESENT SITUATION.

I THINK THEY ARE MORE EFFECTIVE THAN AI AND WHY? YEAH, OKAY. LIKE I SAID, LET ME CITE AN EXAMPLE. OKAY, SO I WANT TO LEARN A PARTICULAR THING. AND I HAVE A PROFESSOR WHO IS READY TO TEACH ME AND I HAVE THESE JOURNALS THAT I HAVE TO READ TO UNDERSTAND THIS, THIS PROCESS THAT I WANT TO LEARN ABOUT, AND THIS PROFESSOR HAS READ THIS JOURNAL OVERTIME. THIS PROFESSOR CAN SUMMARIZE THIS JOURNAL TO GIVE ME AN IN DEPTH KNOWLEDGE OF WHAT IS THAT JOURNAL, SO IF I'M READING THAT JOURNAL, TO HAVE A DEEPER OR CLEARER UNDERSTANDING OF THAT THING IT WILL BE IT WILL BE EASIER FOR ME OR LIKE ME SITTING IN FRONT OF THE COMPUTER AND JUST LIKE, OKAY, AI BOT. I WANT TO DO THIS. WHAT IS THIS? IT MAKES ME LAZY. I FEEL LIKE ME, IT MAKES ME LAZY. IT DOES NOT HELP ME TO THINK. FINE AT THE END OF THE DAY, I CAN HAVE MY ANSWERS BASED ON THE THINGS I READ AND STILL COME TO THIS AI BOT TO GET ANSWERS AND AND COMPARED TO WHAT I HAVE AND EVEN THE OPTIONS THAT I HAVE OR THAT I GET FROM THE THE AI TOOL, IT CAN EVEN HELP ME THINK, DEEPER THAN THE ANSWERS I HAVE GOTTEN FROM THE AI TOOL. SO I STILL FEEL LIKE THE TRADITIONAL WAYS OF THE TRADITIONAL METHOD OF TEACHING THE APPROACHES WHICH IS MORE EFFECTIVE THAN AI BASED METHODS. I DON'T KNOW IF I'VE GIVEN YOU THE EXAMPLE YOU NEED.

Well, yes, yes, it can be considered cheating to Me. Because, like I said, it makes Me Lazy. If I just have the mentality that okay, there is a chatbot, all I need to do is just put in blah, blah. And it gives Me an answer, and I just go out there to defend it and all of that. So it's not my thinking, it's the thinking of the computer. So to Me, I feel like it's cheating. Because no professor would see his or her student using ChatGPT to answer questions. I would feel fulfilled that yes, this student understands this thing that we're teaching them, you know, so consider it. Consider it cheating.

OKAY, CAN I SAY A FEW THINGS? YEAH. OKAY, SO LIKE I SAID, UNLIKE YOU SAID, THE INTENSE MATTERS, RIGHT? AND I SAID SOMETHING EARLIER AND I SAID, IF, FOR EXAMPLE, I HAVE AN IDEA ALREADY, LIKE I USED THE CASE OF LET'S SAY, I WANT TO LEARN SOMETHING, AND THE PROFESSOR HAS GIVEN ME THE SUMMARY OF THE WHOLE THING FOR ME, BASICALLY, I HAVE AN IDEA OF THIS THING ALREADY. RIGHT? AND I COME TO CHATGPT, AND I PUT THINGS ON IT AND IT BRINGS MORE IDEAS, RIGHT? I'M ABLE TO COMPARE AND CONTRAST. AND EVEN WITH THE RESULTS I HAVE FROM CHATGPT I'M ABLE TO DEVELOP MY OWN IDEAS. THAT CANNOT BE CONSIDERED AS CHEATING. NOW, BUT IN A CASE WHEREBY LET'S SAY I HAVE AN ASSIGNMENT AND I JUST PUT IT THERE AND I just copy the whole thing and I put it there that is considered as cheating. Without thinking of anything, I just COPIED THE WHOLE ANSWERS I GOT FROM CHATGPT AND I PUT THEM. I CONSIDER THAT TOO AS CHEATING. MAJORLY. WHAT ARE YOU STARTING CHATGPT FOR AS A MOTIVATION LETTER? OKAY, YEAH. OKAY ABOUT THIS JOB. OKAY, JUST PUT IT ON. I HAVE THIS MUCH MOTIVATION ABOUT THE JOB. OKAY. I LOOK AT WHAT I HAVE ON CHATGPT. I LOOK AT WHAT I VE WRITTEN DOWN. I COMPARE AND CONTRAST, OKAY? I FEEL LIKE THIS SENTENCE THAT ISN'T CHATGPT MORE CONSTRUCTIVE THAN THE ONE I HAVE? OKAY, HOW BEST CAN I EVEN CONSTRUCT IT BETTER THAN WHEN I HAVE ON CHATGPT? SO I HAVE AN IDEA ON CHATGPT TO GIVE ME AN IDEA. I MERGE BOTH TOGETHER, COMPARE AND CONTRAST AND I COME UP WITH AN ANSWER AT THE END OF THE DAY. THAT IS NOT CHEATING. I DON'T KNOW IF I'M CLARIFYING MYSELF. SO BUT THE IDEA OF ME JUST PUTTING IT THERE, AND I HAVE THE ANSWERS AND JUST COPY THE WHOLE THING AND I DON'T EVEN CARE IF IT'S RIGHT OR WRONG. I JUST PUT IT IN. I'M LIKE, YEAH, I'M DONE WITH MY ASSIGNMENT. I CONSIDER THAT TOO AS CHEATING. SO YEAH, TWO THINGS NOT SO I FEEL CLARIFIED BOTH.

Well, I don't think I can replace teachers? I'm not sure. I don't think so. I'm not sure. I'm not sure. Because before AI came there were tons of professors that have been doing these researches. And I mean, coming up with hypotheses coming up with lots of analysis. So I don't think AI will replace teachers anytime soon.

CONCERNING THAT? I'M NOT TOO SURE, I'M NOT TOO SURE. I'M NOT SURE ABOUT THAT? I'M NOT TOO SURE. I'M NOT TOO SURE.

I FEEL LIKE CHANGES WILL COME OR ARE COMING VERY SOON. AND THAT'LL BE IN TERMS OF ANALYSIS, BECAUSE ANALYSIS TAKES A LOT OF TIME. AND YEAH, IT TAKES A LOT OF TIME. AND SO I FEEL LIKE IF THERE IS INVOLVEMENT OF AI TOOLS, IT MIGHT MAKE IT FASTER.



OKAY, AND IN GETTING THE END RESULTS. SO, IN MY CURRENT FIELD OF STUDIES, I THINK IN TERMS OF ANALYSIS AND DATA SO I THINK THERE'LL BE RAPID CHANGES.

OKAY, YEAH, I THINK THAT IT HAS A LOT OF ROLE TO PLAY. I MEAN, WHEN IT COMES TO LEARNING, BECAUSE, FOR EXAMPLE, WHEN YOU IMPUTE SENTENCES OR QUESTIONS, IT COMES UP WITH A BROADER VIEW, THE ANSWER AND ALL, SO IT'S REALLY A LEARNING AVENUE. IT'S AN IMPORTANT ONE, REALLY LEARNING AVENUE. BUT IF WE'RE ABLE TO, FOR EXAMPLE, HAVE GOOD LEARNING IN THE SCHOOL AND WE ARE ABLE TO MERGE OR TO LEARN MORE OR TO EVEN READ MORE ABOUT THINGS WE'VE LEARNT OR THE THINGS WE'RE LEARNING. I THINK IT REALLY ENHANCES THE LEARNING PROCESS.

Well, yes, yes. Yes. Since I started using ChatGPT. Because basically, the only thing I use ChatGPT for is when it comes to job offers and other stuff. Yeah, majorly job offers. So it has really helped me in terms of, you know, writing different things about writing cover letters about the job I want to apply for. And really, it has helped me to not be on a one way unlike, let's say, if I, for example, want to use one particular motivation letter for about five different kinds of jobs with different job descriptions, you know, so it has actually gotten in my knowledge through on that path. So it has really improved my learning habits too. It has really

OKAY, SEE, LIKE I SAID, I WAS DISCUSSING IT WITH A FRIEND. AND WE WERE TALKING RANDOMLY ABOUT CVS, COVER LETTERS, JOBS AND ALL THESE THINGS. AND I SUGGESTED THAT IF I DIDN'T WANT TO GO THROUGH THE STRESS OF WRITING DIFFERENT COVER LETTERS, I COULD JUST USE CHATGPT.

It'S NOT LIKE IT. I HAVEN'T, BECAUSE I'VE NOT HAD THE CHANCE TO RECOMMEND IT. YEAH, BECAUSE I FEEL LIKE IT'S SOMETHING TRENDY SO A LOT OF PEOPLE DON'T KNOW ABOUT IT. BUT I'VE NOT BEEN PUT IN THE POSITION TO RECOMMEND IT TO ANYONE, YET.

Well, I've accommodated these tools, but not really. In terms of adjusting my studies. Not really. Okay. Do you get that?

OKAY, BECAUSE THIS IS WHAT I'M SAYING. YEAH, IF I WANT TO TRANSLATE I USE DEEPL LIKE SAY THE CHATGPT I ONLY USE IT FOR ONE PARTICULAR THING, WHICH I MENTIONED EARLIER. AND WHEN IT COMES TO MY STUDIES, WHEN IT COMES TO MY STUDIES, I DO IT THE NORMAL WAY. FOR EXAMPLE, BECAUSE I WANT TO GET USED TO THE ANALYSIS PART OF MY PROGRAM. SO I HAVEN'T REALLY I HAVEN'T ALLOWED THE AI TO COME INTO THAT. APART FROM THE FACT THAT I JUST USE IT FOR THE THINGS I USED IT FOR, I'VE USED IT FOR A LONG TIME, BUT I'VE NEVER REALLY ACCOMMODATED IT INTO MY STUDIES. BECAUSE BASICALLY, IF I, I KNOW MYSELF IF I, IF I END UP ACCOMMODATING IT LETS SAY TO A 75 - 80%. I MIGHT, I MIGHT, I MIGHT, HOW BEST CAN I PUT IT? I MIGHT ABUSE IT. OKAY, YES. I MIGHT ABUSE IT. SO I GO THROUGH IT WHENEVER I FEEL LIKE, OKAY, THIS THING, THE ONLY THING I NEED TO DO NOW IS OKAY, SINCE I HAVE I HAVE AN IDEA, LET ME JUST, CHECK IT OUT ON THIS BOT TOOL AND GET ANSWERS AND COMPARE AND LET'S SEE OUR CAR COME ABOUT THE FINAL ANSWER AT THE END OF THE DAY. YOU KNOW, BUT THE ONE FOR THE ONE FOR TRANSLATION, I USE THAT ALMOST ALL THE TIME. BECAUSE I HAVE TO TRANSLATE SOME CERTAIN THINGS FOR ME TO HAVE KNOWLEDGE OF WHAT THE DOCUMENT IS SAYING. SO IS IT CLEAR NOW?

YES, YES,IT HAS HELPED ME IN SOME OF MY STUFF IN SCHOOL? BECAUSE, FOR EXAMPLE, DO YOU WANT TO LEARN A LANGUAGE? YEAH. BECAUSE, UM, MY FRENCH IS NOT VERY GOOD. SO IT DOES DOES REALLY HELPED ME ONE WAY OR THE OTHER IN MY ACADEMICS

OKAY, I SAID, IN MY ACADEMICS, IT HAS REALLY HELPED ME, IN MY ACADEMICS. AND I CITED AN EXAMPLE OF THE TRANSLATOR TOOL. SO I STARTED AN EXAMPLE OF THE TRANSLATOR TOOL, THERE ARE SOME THINGS I MIGHT HAVE TO TRANSLATE TO GET A QUICKER KNOWLEDGE OF WHAT THEY SENT. IT HAS REALLY, HAS HELPED ME. YEAH, THAT'S LITERALLY US.

Well, I think it changed my interaction with my classmates, but not my teachers,

WE WERE ABLE TO, TO HAVE A BROADER VIEW OF HAVE SOME SOME DISCUSSIONS, YOU KNOW, WE'RE ABLE TO LIKE FOR EXAMPLE, AFTER A PARTICULAR HAVE A PARTICULAR DISCUSSION AT CLASS, AND WE, WE HAVE TO LIKE FORM A GROUP AND TALK ABOUT IT OR TO TALK ABOUT THE THOSE THINGS LATER AFTER THE CLASS. WITH THE WITH THE KNOWLEDGE I GATHERED FROM IT, IT HAS ITS BROADENED



IN MY MIND AND I'M ABLE TO LIKE TALK MORE ON THE ON THE USEFULNESS OF SOME CERTAIN THINGS AND I IT HELPED MY INTERACTION WITH WITH MY OTHER COLLEAGUES IN SCHOOL AS WELL.

OKAY, BASICALLY, THE ESSENCE OF HAVING ALL THIS AI TO IS TO LESSEN, OR IS TO EASE STRESS? RIGHT. SO I THINK IT IS FAIR. I THINK IT IS FAIR AND THEY ARE TRUSTWORTHY. THEY ARE TRUSTWORTHY, AND IT'S EQUALLY FAIR. IT BECAUSE THEY HELP YOU TO EASE YOUR STRESS, BECAUSE BASICALLY THAT'S WHAT MOST OF THESE TOOLS ARE FOR, TO EASE YOUR STRESS TO HELP YOU DO SOME CHALLENGING WORK, YOU KNOW, EVEN IF YOU HAVE HAD KNOWLEDGE OF WHAT YOU WANT TO DO AND YOU DECIDED TO SEEK EXTERNAL KNOWLEDGE TO, TO MAKE TO COMPARE TO CONTRAST TO SEEK ANOTHER OPINION. SO, I THINK THIS FAIR, ETHICAL. OKAY. UM

OKAY. EARLIER ON, WE MENTIONED INTENT. YOU KNOW, THE REASON FOR USING IT IS, IS SOMETHING WE'RE REALLY LOOKING INTO. SO, THE REASONS BEHIND USING IT IS ONE THING, IF THE ONLY REASON TO USE THE TOOL IS TO COPY AND PASTE THEN IT'S NOT FAIR. BUT IT IS TO GATHER KNOWLEDGE WITH WHAT YOU HAVE IN MIND. AND TO SEE HOW BEST YOU CAN COME UP WITH OTHER THINGS AT THE END OF THE DAY, THEN IT IS ETHICALLY FAIR. SO, THERE ARE TWO THINGS, IT MIGHT BE FAIR, IT MIGHT NOT BE FAIR, DEPENDING ON THE INTENT OF USING THE TOOLS AND I'M CONCERNING THE PROFESSORS OR THE TEACHERS HOW TO MAKE SORRY, WHAT'S THE QUESTION AGAIN?

YEAH, THEY NEED TO BE SURE THAT THE STUDENT UNDERSTANDS WHAT THEY HAVE BEEN TAUGHT. FOR EXAMPLE, IN MY CURRENT PROGRAM, OUR ACADEMIC DIRECTOR, HE TOOK US ON ABOUT THREE COURSES AND WHENEVER HE TAKES US, HE ASKS, DO YOU UNDERSTAND IF YOU DON'T UNDERSTAND THEM, YOU KNOW, CALL ME ATTENTION, LET ME GO BACK TO MAKE SURE YOU UNDERSTAND BECAUSE THE ONLY REASON WHY THEY ARE THERE IS TO HELP US UNDERSTAND. SO, IF WE AND SO, TO DO ALL OF THAT, IF THEY ARE MEETING WITH THEIR MEETING UP WITH THIS MISSION OF UNDERSTANDING THESE STUDENTS AND THEY ARE IMPROVING IN THEIR EDUCATION, THEN THEY ARE FULFILLED. BECAUSE THE GOAL OF EVERY TEACHER IS TO SEE THAT THEIR STUDENTS UNDERSTAND AND THEY GET WHATEVER THEY HAVE BEEN PASSED ON TO THE OR WHATEVER THEY ARE TEACHING THEM. SO IN MY OPINION, THAT'S WHAT I FEEL.

HERE? WELL, LIKE I SAID EARLIER, AI. OKAY, SO AI WOULD DEFINITELY HAVE ITS ROLE TO PLAY. AND THE HUMAN FORCE CAN NEVER BE UNDERESTIMATED, AS WELL. YOU KNOW, FOR EXAMPLE, FOR EXAMPLE, LET'S SAY FETCHING DATA AND ANALYZING DATA ON SOFTWARE'S AND ALL OF THESE THINGS, THEY ARE THOSE AI CAN PLAY. AND WHEN IT COMES TO AUDITING, FIXED ASSETS, YOU KNOW, ALL THESE THINGS, AI CAN REALLY COME TO PLAY IN ALL OF THIS. SO THERE IS ACTUALLY HOPE FOR THE AI TO CREATE AI TOOLS TO PLAY IN, IN MY KIND OF INDUSTRY. SO I TOTALLY AGREE WITH YOU.

Well, when it comes to data and all, I can't be very sure, because even when you keep data in the cloud, I am not sure if you can lose your data in the cloud. So let's not forget that this AI tool was created by a human being that didn't Eclipse themselves, so and so. So I'm very certain that when it comes to the data protection, where they might not be completely trustworthy, I stand to be corrected. I'm not sure but in my opinion, because before now, there are ways in which details are kept, ways in which they are protected and all and since the AI tools they've come into being have come into play and which they have their own roles to play. Also, they might not be 100% when it comes to data protection because we need to, we need to think about, let's say, whatever at the end of the day, there is a malfunction, blah, blah, blah, at the end of the day. I'm not sure. But that's just what I feel.

OKAY, SO MY NAME IS GBEMI ADESANYA. I AM AN MSC FINANCE STUDENT AT GRENOBLE ECOLE DE MANAGEMENT. SO IT'S A TWO YEAR TRACK, I JUST FINISHED MY M1, I'M CURRENTLY DOING MY INTERNSHIP. SO THE COURSE ITSELF IS PRETTY MUCH GENERALIZED OR NOT NECESSARILY SPECIALIZED. SO WE DO A LOT OF GENERAL FINANCE. AND THEN IN THE SECOND YEAR, WE'RE GOING TO BASICALLY SPECIALIZE. AND SOME OF MY KEY COURSES INCLUDE ACCOUNTING AND FINANCIAL STATEMENT ANALYSIS, QUANTITATIVE FINANCE, OR DOWNWARD CONTROLLING IFM, WHICH IS BASICALLY INTERNATIONAL FINANCIAL MANAGEMENT, ETC.

OKAY, IT'S A TYPICAL DAY. SO LET ME USE A FULL DAY FROM 9 - 5. SO 9AM -12:15PM, WE KIND OF HAVE THE SAME CLASS, BUT LIKE, SPLIT INTO TWO PARTS. SO WE COULD HAVE FINANCIAL MARKETS, FOR EXAMPLE. SO THAT'S LIKE, ALL FOR AN HOUR, 30 MINUTES EACH, RIGHT. AND THEN AFTER THAT, WE HAVE LIKE ONE HOUR LUNCH BREAK, THEN WE HAVE ANOTHER CLASS THAT'S DIFFERENT. BUT



YOU HAVE THREE HOURS FOR DIFFERENT CLASSES. SO IT COULD BE LIKE ACCOUNTING AND FINANCIAL STATEMENT ANALYSIS. RIGHT. SO THAT COULD BE A COURSE. YEAH, SO THAT'S BASICALLY WHAT IT IS, MOSTLY ABOUT, IT'S VERY TECHNICAL, BUT AT THE SAME TIME, WE ALSO GET TO INTERACT WITH ALL THE STUDENTS. SO IT JUST REALLY DEPENDS. I WOULDN'T REALLY SAY THIS IS MORE OF A TYPICAL DAY, BUT SOMETIMES, YOU KNOW, WE COULD HAVE PEOPLE COME TO TALK TO US AS WELL, LIKE, PEOPLE THAT HAVE PROFESSIONAL EXPERIENCE. SO THEY BASICALLY COME IN TO TALK TO US ABOUT THINGS LIKE, THEIR EXPERIENCE, YOU KNOW, WHAT, WHAT WE SHOULD DO AND HOW WE SHOULD KIND OF START THINKING ABOUT OUR CAREER PATHS, I'M LIKE.

YES. SO WE BASICALLY HAVE A MIXTURE, RIGHT, UM, WHICH IS WHAT I LIKE ABOUT THE COURSE. SO IT'S LIKE A MIXTURE OF LECTURES, MAINLY, PRINCIPALLY LIKE, LECTURES, AND THEN WE HAVE SEMINARS, TOO. SO WE HAVE EXPERIENCED PROFESSIONALS, LIKE I SAID, BEFORE THEY COME IN TO SPEAK TO STUDENTS, WE ALSO HAD SOMETHING KIND OF STRANGE, BUT VERY DIFFERENT, VERY INTENSE. SO IT WAS A DIGITAL TRANSFORMATION IN FINANCE COURSE. SO WE BASICALLY HAD LIKE HUGE BLOCK TYPE CLASSES, SO FOR LIKE, THREE DAYS, IT WAS JUST DIGITAL TRANSFORMATION IN FINANCE FOR THREE DAYS. SO THAT WAS INCREDIBLY INTENSE. I DIDN'T PARTICULARLY LIKE THAT VERY MUCH, BECAUSE I DIDN'T THINK I REALLY FULLY GRASPED THE CONCEPT OF DIGITAL TRANSFORMATION IN FINANCE, BECAUSE I HAD THREE DAYS TO COME UP WITH A PROJECT AND THREE DAYS TO UNDERSTAND EVERYTHING, SO IT WAS A BIT I DIDN'T LIKE THAT VERY MUCH. AND THEN YOU TALKED ABOUT CHALLENGES, RIGHT? IF I LIKED IT, IF I LIKED THE COURSE IT IS ALWAYS SAID. IF, okay, so, I mean, for me, I basically come from a non finance background. So the transition to finance was a bit DIFFICULT AT THE BEGINNING, BECAUSE I HAD TO READJUST. I HAD TO KIND OF READJUST TO NEW CONCEPTS, RIGHT, NEW FINANCIAL TERMS AND FINANCIAL JARGON. SO THAT WAS SUPER HARD FOR ME TO ADJUST. ESPECIALLY WITH THAT STYLE OF TEACHING. SO IT'S VERY BLOCKY, BUT I THINK OVER TIME, I JUST KIND OF LEARNED HOW TO, YOU KNOW, ADJUST AND DO BETTER IN CLASS BY OBVIOUSLY DOING MORE OUTSIDE OF CLASS AND NOT IN TERMS OF THE COURSE ITSELF. I THINK IT'S VERY TECHNICAL, I THINK IT'S VERY GOOD. I THINK KNOWLEDGE TRANSFER WOULD PROBABLY BE A CHALLENGE. SO IN THE SENSE THAT SOME OF THESE PROFESSORS, I MEAN, I JUST DON'T FEEL LIKE THEY MIGHT HAVE THE RIGHT MECHANISM TO TRANSFER KNOWLEDGE, MAYBE BECAUSE OF BARRIERS SUCH AS LANGUAGE, AND ALL THAT STUFF. OR MAYBE BECAUSE THEY'RE JUST SO TECHNICAL. SO SOFT SKILLS MIGHT BE MISSING. SO, YOU know, those are some of the challenges or things I don't really necessarily like about the course. But not all of THEM. SOME.

OKAY, I MEAN, THERE'S LIKE, TURNITIN PLAGIARISM CHECKERS, SO THOSE ARE KIND OF LIKE AI TOOLS. RIGHT. SO THEN, OBVIOUSLY, I THINK EVERYONE WOULD DEFINITELY SAY CHATGPT. AND ALL THIS SORT OF LIKE EDITING TOOLS LIKE GRAMMARLY. SO, ALL THIS STUFF THAT I TALKED ABOUT LIKE CHATGPT, GRAMMARLY ARE PERSONAL. IN TERMS OF TURNITIN, THAT WOULD BE LIKE, SCHOOL SYSTEM BUT NOT NECESSARILY MY MSC MORE UNDERGRAD. IN THE SENSE THAT WE HAVE TURNITIN IN MY POSTGRADUATE COURSE, LIKE WE HAVE THAT. T WHEREAS IN MY UNDERGRAD, YOU HAVE ACCESS TO THINGS LIKE HOW MANY PERCENT PLAGIARISM, ALL OF THAT TECH DIGITAL AWARENESS STUFF, RIGHT. SO BUT THEN YOU COULD STILL SAY TURNITIN. SO FOR BOTH, BUT I'LL JUST SAY IN TERMS OF HAVING DETAILED TYPES OF INFORMATION, THEN I HAD ACCESS TO THAT IN MY UNDERGRAD.

I MEAN, IN TERMS OF CHATGPT I WILL DEFINITELY SAY THERE'S LIKE A HUGE VARIANCE IN TERMS OF LIKE USAGE. OBVIOUSLY, AT THE TIME, IN MY UNDERGRAD CHATGPT WAS NON-EXISTENT. SO THAT WAS LIKE ZERO, COMPARED TO NOW. I KIND OF USE IT MORE OFTEN, LIKE IN TERMS OF WRITING REPORTS, WHEN I DON'T UNDERSTAND KEY CONCEPTS IN FINANCE. SO I BASICALLY GO THERE, AND LIKE, WRITE STUFF SUCH THAT THEY EXPLAIN TO ME IN A MANNER THAT I UNDERSTAND. SO I USE THAT A LOT MORE. AND ALSO GROUP PROJECTS, ANYTHING TECHNICAL, OR LIKE ANALYSIS, EVEN EMAILS AS WELL. SO I ALSO KIND OF USE IT TO PROOFREAD MY EMAILS. IF I WANT TO MAYBE WRITE SOMETHING IN FRENCH, BUT I DON'T KNOW IF I'VE USED IT IN SCHOOL BECAUSE IT'S TAUGHT IN ENGLISH, BUT IT JUST CAME TO MY HEAD. I ALSO USE THAT TO KIND OF LIKE, PROOFREAD.

Oh, definitely, I'll say ChatGPT is super useful. In terms of helping me understand complex topics, basically demystifying complex topics, in terms of the structure of my writing in terms of the content of my writing, in terms of obviously, proofreading as well. So that will feed into the content. Okay,

IF I LOOK AT IT RIGHT NOW, THIS IS 2023 WHEN I STARTED USING CHATGPT, I THINK I'LL DEFINITELY SEE AN ADVANTAGE IS THAT I WORK MORE EFFICIENTLY. YEAH, SO I BASICALLY CAN FEED THE AI WHAT I WANT, SO THAT IT BASICALLY JUST GENERATES MY OUTCOME THAT I DESIRE. AND I CAN THEN EXAMINE IT AND PROOFREAD IT. SO IT'S, IT'S KIND OF LIKE, HELPING ME, IT'S MORE EFFICIENT FOR ME TO DO THAT. I NOW UNDERSTAND MORE THINGS. I DON'T FEEL AS ANXIOUS. WHEN I COME ACROSS KEY CONCEPTS THAT I DON'T UNDERSTAND, I KIND OF KNOW THAT CHATGPT WOULD BE THERE TO ASSIST ME. SO I'M NOT JUST HEAVILY RELIANT ON MY PROFESSOR



ANYMORE. BECAUSE I KNOW THAT THERE'S SOMETHING DIGITAL, PERHAPS MIGHT I SAY, EVEN BETTER, RIGHT, THAN THE TYPICAL TRADITIONAL METHOD.

YEAH, SO UNDERGRADUATE, TO BE HONEST, I THINK THE DIFFERENCE WAS, I WROTE MORE REPORTS BY MYSELF. SO ALTHOUGH IT TOOK ME LONGER, I CANNOT SPEAK TO THE QUALITY. BECAUSE OBVIOUSLY, I WROTE THAT ONE, AND THEN CHARGED ME TO KIND OF INFLUENCE MY WRITING NOW. SO IT TOOK ME A LONGER TIME TO GET THINGS DONE. BUT A LOT OF MY ATTENTION WAS RIGHT THERE. BECAUSE I WAS GETTING THINGS DONE. I HAD TO DO A LOT MORE RESEARCH ONLINE. INSTEAD OF LIKE, DEPENDING ON CHATGPT I ALSO GAVE MYSELF LIKE, SHOULD I SEE A TIME WINDOW. SO I SHOULD ACTUALLY SAY GIVE MYSELF LIKE MORE OF A BUFFER TIME COMPARED TO NOW? BECAUSE I KNOW, OKAY, I NEED TO LIKE RESEARCH A LOT. I NEED TO LIKE REFERENCES, I NEED TO DO THIS. WHEREAS IT'S KIND OF BEING REDUCED. NOW, BECAUSE I KNOW CHATGPT KIND OF DOES MOST OF IT.

I feel like there will always be advantages and disadvantages to both. I think that traditional methods will always incorporate this human perspective, human insights and our sentiment, right? To be able to provide something insightful. So for example, let's say accountant, I did a bit of financial statement analysis in my group or as a group project. And I feel like as humans, we can detect, should I see root causes or causes of something? Right, within a statement? Okay, why is this that we why is it that revenue increased? Why is this ratio different, you know, there is a rationale that humans tend to have, that I feel that is lacking. There are limitations, basically, to the depth of what an AI would offer. So there's definitely one advantage. But on the other hand, I just feel like traditional methods are so overly structured, So you have to fit into a box, you understand. And that box might not necessarily help other people, right? So my way of learning could be completely different. Whereas AI leverages on that AI can understand like, Okay, this is the gap that you have, right? It's almost like it does a gap analysis. And it understands like you're lacking in this, and it can bridge that gap very quickly. Right, very, very quickly for you. So I think that having that hybrid method would be more effective. So you still have the traditional, but you're still leveraging AI at the same time.

I MEAN, I WOULD SAY IT'S NOT. I THINK IT DEPENDS. I WOULDN'T CALL IT CHEATING. I THINK IT CAN BE USED AS A SOURCE, RIGHT? BUT I DON'T THINK IT SHOULD BE YOUR ONLY SOURCE OF REFERENCE, LIKE IT SHOULD NOT BE THAT WAY. IT SHOULD NOT BE A SITUATION WHERE YOU JUST SAY, OKAY, I'M JUST GOING TO TYPE THE QUESTION, WHAT ARE THE QUESTIONS THE TEACHER HAS GIVEN ME? I'M GOING TO FEED INTO THE AI, GENERATE A REPORT AND SEND IT TO THE TEACHER. NOW, THAT IS NOT YOUR WORK. SO IT'S A THIN LINE? LET ME PUT IT THAT WAY. I DON'T SEE IT AS CHEATING. BUT IT CAN BE CHEATING. SO IT DEPENDS ON WHO'S LIKE, IT DEPENDS ON WHO'S BEHIND THE SCENE. SO IF IT'S A QUESTION OF YOU ACTUALLY JUST DOING YOUR WORK BY USING THE AI AS A MEANS OF ASSISTANCE, RIGHT. BUT IN THE END, IT STILL HAS YOUR VOICE, STRUCTURE, EVERYTHING IS ALL YOU THEN OF COURSE, IT'S NOT CHEATING, IT CAN BE USED AS A MEANS OF SUPPORT. RIGHT. SO I THINK IT JUST DEPENDS ON WHO'S KIND OF USING IT.

I MEAN, I DON'T, I DON'T SEE THEM? WELL, ACTUALLY. SO MY FIRST REACTION WAS, OKAY, I DON'T SEE THEM REPLACING TEACHERS. BUT INTERESTINGLY, I'VE BEEN COMING ACROSS VIDEOS IN PLACES LIKE CHINA, WHERE THEY'RE A LITTLE BIT MORE STRINGENT AND HOW THEY TEACH. SO THERE'S A POSSIBILITY THEY COULD REPLACE THEM, BUT IN CERTAIN ASPECTS OF THE WORLD. BUT IF YOU'RE LOOKING AT IT FROM A LARGER SCOPE, I DO NOT NECESSARILY SEE THEM REPLACING TEACHERS AS MUCH RIGHT. I STILL FEEL THAT TEACHERS WILL STILL REMAIN, THEY WILL STILL BE A FORCE BASICALLY TO RECKON WITH BECAUSE THEY ARE VERY PERTINENT IN TERMS OF BUILDING THE LEADERS OF TOMORROW, YOU UNDERSTAND? AND IF I JUST LOOK AT IT FROM A PRIMARY SCHOOL PERSPECTIVE, I THINK THAT KIDS ARE VERY YOUNG, THEY'RE GROWING. SO THERE'S THIS SETTING LEVEL OF EMOTIONAL ATTACHMENTS, YOU UNDERSTAND THAT THEY HAVE WITH TEACHERS THAT HELPS THEM TO FORGE THEIR PERSONAS, UNDERSTANDING CERTAIN THINGS, CONCEPT FORMULAS, ALL OF THAT INFORMATION THAT I FEEL THAT AI IS NOT YET CAPABLE OF. RIGHT. SO I DON'T I DON'T SEE THAT HAPPENING IN THE LONG RUN. TO BE FAIR, I DO THINK THAT IN CERTAIN AREAS, LIKE CHINA, I FEEL LIKE THOSE PLACES WILL PROBABLY HAVE MORE AIS.

So, you know, within the finance space. The market is very volatile, like things change, you know, you see the Feds increase in the interest rates and a decrease in it tomorrow with that kind of thing. So I think AI will definitely revolutionize that industry, because it's able to analyze data very quickly, it's able to make decisions very quick, quickly, very, like even definitely faster than humans. So it can understand the trends in patterns. And it can basically give you a more informed decision, right on how to respond quickly to the market. So as digital advancement is basically on the rise. It obviously means that things like fraud rate, cybersecurity, all of that stuff would also increase. So AI is very, very important here, because they can easily identify fraudulent activities more quickly than



HUMANS. THEN IF YOU LOOK AT THE ASPECT OF LIKE CUSTOMER SERVICE, LIKE CLIENTS, AND BANKING, ALL OF THAT, YOU SEE A LOT OF INTRODUCTION LIKE OF CHATBOTS, SO IT'S MORE ABOUT THEM, OPTIMIZING THIS CHATBOT SUCH THAT IT GIVES YOU THE IMPRESSION THAT YOU'RE TALKING TO LIKE A HUMAN, YOU'RE HAVING LIKE A GOOD SEAMLESS EXPERIENCE. SO THAT'S WHERE I SEE AI COMING THROUGH FOR FINANCE.

SO I THINK THAT'S A VERY GOOD QUESTION. BECAUSE I THINK FOR ME, RIGHT. BECAUSE CHATGPT HAS SUCH A QUICK OUTPUT. YOU KNOW, I FEEL LIKE IN TERMS OF MY LONG TERM UNDERSTANDING OF CERTAIN THINGS AND INFORMATION ON TOPICS, I FEEL LIKE THAT'S DETERIORATING. BECAUSE WHAT'S HAPPENING IS I GO ON CHATGPT, LIKE A DAY BEFORE THE DEADLINE, BECAUSE I KNOW CHATGPT is going to give me something. So my long term understanding, I might not necessarily understand it. So I feel like THAT'S GOING TO HAVE A HUGE IMPACT FOR STUDENTS, WHERE YOU HAVE QUICK, QUICK OUTPUTS, BUT NO UNDERSTANDING. I ALSO THINK MY BRAIN WILL NOT BE STRETCHED AS MUCH UNDER PRESSURE. SO GOING BACK TO MY UNDERGRAD, UNDERGRAD, IT'S LIKE, I HAD I WAS FORCED TO LEARN NEW THINGS, RIGHT. I HAD TO SIT, I HAD TO ASSIMILATE. I HAD TO UNDERSTAND I HAD TO DO SO MANY THINGS. BUT NOW IT'S LIKE MY BRAIN IS NOT NECESSARILY BEING STRETCHED. SO CHATGPT HAS KIND OF ELIMINATED THAT STEP WHICH I THINK IS VERY CRUCIAL. AND WE'RE PROBABLY GOING TO BE LOSING REALLY, REALLY INTELLIGENT PEOPLE TO AI AT SOME POINT. AND I DON'T WANT TO SAY PLAGIARISM, BUT IN TERMS OF THE LEVEL OF COPIED CONTENT, EVEN THOUGH I'VE TAILORED IT, RIGHT, THAT'S INCREASED FOR ME BECAUSE I DON'T NECESSARILY HAVE LIKE, REFERENCES ONLINE, RIGHT. SO BECAUSE I KNOW CHATGPTIS THE ONE SOURCE. SO MOST OF THE CONTENT IS COMING FROM THERE. SO THAT'S REALLY IMPACTED. SHOULD I SAY, THE RELIABILITY AND THE ACCURACY OF ALL OF THE CONTENT THAT I'M GIVING OR OTHER STUDENTS, RIGHT, COMPARED TO BEFORE WHERE I'LL GO TO LIKE 20, SITES, JOURNALS, ONLINE, ONLINE, WEBSITES, ALL OF THAT STUFF. BUT NOW IT'S DEFINITELY LIMITED. WHAT ELSE DO I DO BUT I THINK THAT IN TERMS OF LIKE, A POSITIVE IMPACT, I THINK AI DEMYSTIFIES A LOT OF THINGS FOR YOU. SO YOU HAVE A BETTER UNDERSTANDING COMPARED TO A TEACHER THAT MAY NOT NECESSARILY TEACH THE WAY YOU WANT. SO AI BREAKS EVERYTHING DOWN, RIGHT, TO A LAYMAN LEVEL, RIGHT, WHICH IS AMAZING FOR KIDS THAT ARE SUPER CURIOUS ABOUT SOMETHING OR MYSELF THAT I'M CURIOUS ABOUT A TOPIC. I JUST KNOW THAT I CAN JUST REACH OUT TO CHATGPT AND YOU KNOW, THAT'S MY DIGITAL TEACHER.

To be fair, I will definitely say my grades have improved. So because I'm basically exposed to a plethora of resources, but at the same time, I don't want to say it's largely influenced by ChatGPT. But at the same time, it's almost like a dual type effort, you know, because it's almost like I'm guiding it to give me what I want. Right? So it has largely improved my grades for sure.

SO I HEARD IT FROM A FRIEND, ACTUALLY, LIKE A STUDENT, LIKE MYSELF. AND THEN I KIND OF STARTED GAINING MOMENTUM EVERYWHERE. AND THEN I SAW IT ON LINKEDIN, AND IT WAS JUST SPREADING LIKE WILDFIRE, LIKE EVERYWHERE. SO IT STARTED OFF WITH A FRIEND TELLING ME ABOUT IT.

OH, DEFINITELY. OKAY.

OKAY, IN TERMS OF MY STUDY HABITS, I THINK IT'S DEFINITELY DETERIORATED. I DON'T STUDY AS OFTEN. BECAUSE I'M KIND OF DEPENDENT ON IT. REALLY? I WOULD DEFINITELY SAY THAT. BUT THAT'S FROM AN ACADEMIC PERSPECTIVE, RIGHT? BUT FROM A PERSONAL DEVELOPMENT PERSPECTIVE, THE WAY I STUDY HAS IMPROVED BECAUSE I'M INTERESTED IN DIFFERENT TOPICS, SO I USE IT MORE OFTEN.

SO I USE CHATGPT. UM, I USE A MULTICOAT. I ALREADY SAID GRAMMARLY, THERE'S ANOTHER ONE NOTION, I USE NOTION AS WELL. THEN WHAT ELSE? THEN I USE QUITE A LOT OF THINGS LIKE CHATBOTS ONLINE, MAYBE WHEN I WANT TO MAKE AN INQUIRY LIKE WITH THE BANK OR THINGS LIKE THAT, BUT I DON'T THINK THAT HAS ANYTHING TO DO WITH MY STUDY HABITS.

SURE. HI, MY NAME IS P SAI VIGNESH, BASICALLY I'M FROM INDIA. I'VE BEEN AROUND INDIA. SO I CANNOT PARTICULARLY TELL YOU FROM ONE PLACE THAT I COME FROM, BUT I ACTUALLY DID MY SCHOOLING IN THE NORTHERN PART OF INDIA, THEN MOVED TO THE SOUTHERN PART OF INDIA FOR MY BACHELOR'S AND STAYED THERE FOR THE DURATION OF MY BACHELOR'S AND A FEW MORE YEARS.



And then, during this time, I did a lot of internships, to get to know about what is there outside what are the opportunities, I did a lot of volunteering work. And then, during that time, I mostly did internships and they were in startups and in the HR sector. So I got intrigued by that, I had to learn many, many caps, so got interested in tech as well. And I learned a lot. I became a certified product manager, as well as web designing, graphic designing, I do it as my pastime. And as a career, I chose human resource management because even though I was interested in tech, human interaction and being in the HR sector interests me more. So I thought, of course doing a masters and because India is an emerging market, and has a very different working style, I thought of getting an international exposure about different markets out there. That's why I chose a master's in Grenoble, Ecole de Management, international human resource management. So I joined seven months back, I had a very diverse cohort, we learned a lot, even about the tech sector. And you know that because we have different modules, so got interested in lots of things. Similarly, during one of the modules, gamification, we learned about AI tools. I got fascinated, and I've been studying and using a lot for different aspects of my professional career because I'm currently pursuing an internship in a travel mobility company here in Paris. In the talent acquisition sector, I use AIs and when I get back I do my research on different things, and use it in my other passion as well. So I got fascinated by AI and used it alot. And this is something about myself and my career.

In My Bachelor's, I did. I majored in three different subjects. I majored in psychology, sociology, and economics. It WAS A BACHELORS OF ARTS PROGRAM. SO I MAJORED IN THREE DIFFERENT SUBJECTS. SO TO PUT IT VERY PRECISELY IN VERY LAYMAN'S TERMS. PSYCHOLOGY TAUGHT ME ABOUT HOW MAN ACTS AND SOCIOLOGY TAUGHT ME HOW THAT PARTICULAR MAN ACTS IN A SOCIETY AND IN WHAT OTHER SOCIETAL CONTEXT AND ECONOMICS TAUGHT ME HOW A RATIONAL MAN IN A SOCIETY MAKES NOT SO RATIONAL DECISIONS, AND WHAT ARE THE JUSTIFICATIONS AND HOW THAT AFFECTS THE ECONOMIC ACTIVITIES AROUND THE WORLD AND AND EVENTUALLY AFFECTING THE MAN IN ECONOMIC SENSE. SO THOSE WERE MY BACHELOR'S STUDIES TO PUT IT IN SIMILARLY, BUT IT WAS MUCH MORE IN DEPTH CROSS FUNCTIONAL, WE DID SOME MODULES OUTSIDE OF THE SCOPE OF THESE STUDIES AS WELL. AND DURING THE COURSE OF STUDY, I ALSO DID A LOT OF VOLUNTEERING. SO WHATEVER I LEARNED IN SOCIOLOGY AND PSYCHOLOGY IN TERMS OF PRACTICES AND THEORIES ABOUT HOW TO DEAL WITH PEOPLE, I GOT TO APPLY THEM DURING MY VOLUNTARY ACTIVITIES, BECAUSE IN THAT VOLUNTARY ACTIVITIES ARE DEALING WITH CHILDREN COMING FROM UNDERPRIVILEGED BACKGROUND AND TEACHING THEM LIFE SKILLS AND MANAGING ALL SORTS OF ISSUES THAT THEY FACE IN THEIR DAILY LIFE WITH THEIR FAMILIES AND WITH PEOPLE WHO ARE WORKING WITHIN THE ORGANIZATION. THAT WAS VERY FASCINATING. AND DURING THE MASTERS THAT I'M DOING RIGHT NOW, THE PROGRAM NAME IS INTERNATIONAL HUMAN RESOURCE MANAGEMENT IN THE DIGITAL AGE. THE MODULES OR THE CURRICULUM HAS A MIXED BACKGROUND IN THE SENSE THAT WE TAKE MODULES FROM BUSINESS, LIKE RISK MANAGEMENT, PROJECT MANAGEMENT, ACCOUNTANCY QA FINANCE, THAT IS THE MODULES THAT ARE BUSINESS AND COMMON FOR ALL MASTER'S PROGRAMS AND THE SPECIALIZATIONS. THE HR PART COMES WITH FUNDAMENTALS OF HR, AND THE MODIFICATION WITHIN HR, HR RECRUITING AND BUDGETING, COACHING FOR HR. PERSONNEL PERSONALITY TESTS, AND RECRUITMENT, TALENT ACQUISITION, TALENT MANAGEMENT, CSR AND DIVERSITY. THESE WERE THE FEW MODULES THAT WE WERE DOING, YOU KNOW, DIFFERENT VERTICALS OF HR. FOR EXAMPLE, TALENT ACQUISITION, TALENT MANAGEMENT, LEARNING AND DEVELOPMENT. SO THIS IS WHAT MY MASTER'S IS ABOUT. I'M NOT DONE WITH MY MASTERS AS OF NOW, BECAUSE I'VE JUST COMPLETED M1, AND I'M DOING AN INTERNSHIP AND THEN I'LL GO BACK TO MY M2. So this has been my academy journey so far.

YEAH. SO BASICALLY, THE LEARNING MODULES, THE LEARNING PEDAGOGY IN THE MASTERS THAT I'M PURSUING IS A IS A VERY DYNAMIC IN THE SENSE LIKE, WE HAVE A FULL TIME PROFESSORS LIKE WHO ARE IN ACADEMY TEACHING A CERTAIN SUBJECTS, CERTAIN PROFESSORS ARE LIKE NOT FACETS AT ALL, THEIR BACKGROUND IS NOT FROM ACADEMIA, THEY'RE DIRECTLY COMING FROM THE CORPORATE WORLD, THEY'RE WORKING, AND THEN THEY'RE COMING IN TEACHING US SO THAT GIVES US WORLD THE CURRICULUM, IN THE SENSE IS LIKE MUCH MORE ORIENTED TOWARDS WHAT'S HAPPENING IN THE MARKET RIGHT NOW, RATHER THAN WHAT IS THERE IN THE BOOKS AND WHAT IS THE THEORY AND MORE IMPORTANTLY, I HAVE A CLASS VERY SMALL BATCH SIZE, LIKE 20 PEOPLE FROM VERY DIFFERENT BACKGROUNDS, DIFFERENT NATIONALITIES, AND THEIR EXPERIENCES, LIKE SOME PEOPLE HAVE 10 YEARS OF EXPERIENCE AND FIVE, SOME HAVE NO EXPERIENCE NOT EVEN RELATED TO HR. SO THEIR CONTRIBUTIONS WITHIN THE CLASS MIX IS MUCH MORE INTERESTING AND DYNAMIC. AND I FEEL THAT LEARNING HAS MORE MUCH MORE BECOME LIKE A DIALOGUE AND A DISCUSSION EVERY DAY, RATHER THAN YOU KNOW, JUST TEST AND NOT EVEN THE, THE ASSIGNMENTS THAT ARE ON WHICH WE ARE GRADED ABOUT, ABOUT THE UNDERSTANDING IS MUCH MORE IN DEPTH IN THE SENSE IT TOUCHES UPON THINGS, VARIOUS THINGS, AND IT'S CROSS DISCIPLINARY, AND IT'S MUCH MORE REAL LIFE BASED. SO IN THAT SENSE, I FIND THE CURRICULUM TO BE MUCH MORE DYNAMIC, INTERESTING, AND TWO WAY RATHER THAN JUST BEING ONE WAY.



The current challenges that I think that I face, comes from the fact that I'm an international student studying in a different environment. The first and the foremost challenge is the language, the culture, the understanding, and even, you know, people's biases towards immigrants, which, obviously, will not be overt, obviously, will be covered. So those biases, even if they're not showing any biases, there is a tendency to stick with people who already know, when together, not accepting the person that, you know, comes from outside that and the second part is not taking into account what has been, you know, going on nowadays, like, for example, finding the right content is not an issue right now. You know, AI has helped us find the right content, it's about how well we can apply that content and the metrics that we, on which we are judged, has to be updated. It's not about originality of thought, but the how well the thought is connected with other things that has to be seen and not impose your academic thoughts or basically, when I say academic terms, I mean, that you know, certain concepts have to be put in place while you are being graded, that has to be taken out of the grading thing. That is one of the challenges. You should give the right idea at the right time. It doesn't matter where it comes from, or you know, if it is borrowed is that it addresses all the concepts or not, but whereas in the pool so to speak, it takes that into account into the reading part. So I think there's a mismatch in that. And that has to be that's the major challenge that students are facing, according to me right now.

BASICALLY, I KNEW ABOUT AI TOOLS BEFOREHAND, AND I DID NOT SEE THE ALLOTMENT NOT CLOSELY, BUT I WAS, YOU KNOW, AS ENTHUSIASTIC AS I WAS, I WAS KEEPING AN EYE ON THOSE DEVELOPMENTS. BUT AS PART OF OUR CURRICULUM DURING GAMES DURING ONE MODULE THAT WE CALLED AS GAMIFICATION WEEK OR GAMIFICATION OF HR. WE WERE ASKED TO USE AN AI TOOL TO DO OUR ASSIGNMENT. SO THEY ASKED US TO USE WHAT WE CALL CHATGPT AND A TOOL THAT PRODUCES TEXT IMAGES -MIDJOURNEY, I ALSO USED AN AI TOOL, A SEMI AI TOOL BASED ON THE LEARNING ALGORITHMS. IT IS CALLED STORYSET AS WELL. SO IT GIVES ILLUSTRATIONS AND ALL TO BUILD MY STORY. AND YEAH, APART FROM THAT, I ALSO USE THE COPYAI AND YOU KNOW, TEXT AI, STUFF LIKE THAT. FOR OTHERS IN MY ACADEMY, THINGS, JUST TO FORMULATE THINGS AND I THINK SEMI AI ALSO LIKE GRAMMARLY USES AI ALGORITHMS TO PREDICT YOUR TONES. AND ALSO I'VE USED THAT, BUT I DON'T COUNT IT AS AN AI BECAUSE IT'S NOT FULLY HERE. SO I'VE USED IT AS PART OF THE CURRICULUM, THE MODULES AND DIFFERENT SETS.

I have actually not used many tools because I find ChatGPT to be, because it's improving. So algorithm wise, it's much end user friendly, because the work that I do is much more to get information and you know to call I try to correlate so that way the thing is changing is good for me, but I use CopyAI very extensively because now since you know, I struggled with putting words together, writing, it makes my writing even faster. I don't have to worry about whether it makes sense. I don't have to worry about that. I can put my keywords, I can put the general concepts around. And it gives me a structured thought. And obviously it has to be edited. It has to fit into the context of what I'm writing. But at least it gives me something and I don't have to start from scratch, I'd have to start from like 40-50%. And that's really helpful when you have to save time. And the deadlines are new.

SO BASICALLY, THE CHATGPT THAT I USED WAS BASICALLY, WE WERE ASKED TO ENVISION A FUTURE WHERE AI WAS THERE. AND IT WAS USED TO DESCRIBE A FEW CONCEPTS OF HOLACRACY THAT'S A MANAGEMENT WAY OF MANAGING PEOPLE, DIFFERENT MANAGEMENT THOUGHTS. SO WE WILL BE ASKED TO USE CHATGPT TO FRAME SUCH A WAY THAT YOU KNOW, HOW WILL YOU IMAGINE THE NEW FUTURE AND HOW WE WILL IMPLEMENT IT IN OUR COMPANY, HOW WILL YOU DO IT? SO I USED CHATGPT TO, YOU KNOW, KIND OF FORMULATE CONVERSATION BETWEEN TWO DIFFERENT, VERY CORPORATE EMPLOYEES AND, YOU KNOW, USE CHATGPT. AND ITS RESPONSES IN SUCH A WAY THAT IT BECOMES LIKE A CONVERSATION BETWEEN DIFFERENT CORPORATE EMPLOYEES. AND I TRIED TO FRAME THAT TOGETHER. AND I FOUND CHATGPT TO BE INTUITIVE, BUT IT HAS ITS LIMITS, IN THE SENSE AFTER A FEW INPUTS, A FEW PROMPTS, IT KIND OF BECOMES REPETITIVE, EVEN THOUGH ITS CHATGPT FOURTH VERSION IS WHAT YOU KNOW, IT'S KIND OF WORKING TOWARDS REDUCING THIS PART. BUT THE CHATGPT B GETS VERY REDUNDANT. AFTER LIKE FIVE OR SIX PROMPTS, YOU HAVE TO START FROM A DIFFERENT PROMPT ALTOGETHER, YOU CANNOT CUSTOMIZE YOUR PROMPT AND THEN VERY TECHNICAL ALGORITHM, THINGS THAT I FIND THAT ISSUES ARE THERE IN THE SENSE LIKE YOU CAN EVEN IF THERE IS A HARD KNOW, FOR CERTAIN THINGS THAT YOU CANNOT ASK CHATGPT, THERE'S ALWAYS WAYS TO GET AROUND. SO THAT BECAUSE CHATGPT LEARNS THAT PARTICULAR ALGORITHM, THEN IT BECOMES VERY DIFFICULT FOR US TO ACTUALLY FIND THE INFORMATION THAT WE'RE LOOKING FOR BECAUSE IT BLOCKS THE SIMILAR PROMPTS. SO YEAH, IT'S AN ISSUE BECAUSE CENSORSHIP IS COMING UP ON CHATGPT. BUT OTHERWISE, I FIND IT TO BE VERY INTUITIVE. AND YOU HAVE TO PUT A LOT OF THOUGHT INTO WRITING THE PROMPT.



YEAH, SURE. FIRST OF ALL, MY BACHELOR'S BACK IN INDIA WAS MUCH MORE THEORETICAL. AND THERE WERE NOT A LOT OF OPPORTUNITIES FOR ME TO PUT IT IN REAL LIFE AND USE IT, YOU HAVE TO PUT EXTRA EFFORTS TO ACTUALLY, YOU KNOW, FIND WAYS TO IMPLEMENT THOSE AND YOU KNOW, LEARN HOW IN REAL LIFE, IT WORKS. SINCE MOST OF THE FACULTY CAME FROM THE ACADEMY AS WELL, THEY HAVE NOT WORKED A SINGLE DAY IN THE CORPORATE WORLD, THAT'S THE MAJORITY OF THEM. SO IT WAS MUCH MORE BOOKISH KNOWLEDGE. AND IT WAS NOT THAT INTERESTING. AND, YOU KNOW, THE PATTERN USED TO GO FOR LIKE, YOU HAVE TO STUDY ONE PARTICULAR SUBJECT FOR THREE MONTHS, AND THEN GIVE EXAMS THAT WERE THEORY BASED, AND IT WAS A REGULAR SETUP. WHEREAS IN THE MASTERS, IT'S LIKE YOUR MODULE GETS OVER WITHIN ONE WEEK, IT DEPENDS SOMETIMES ON MODULES, YOU KNOW, ARE SPREAD ACROSS SIX MONTHS, IN THREE MONTHS, LIKE THAT. SO TO LEARN, YOU HAVE TO ADAPT TO THAT CORE STRUCTURE. AND SOMETIMES, YOU KNOW, IT'S VERY INTENSIVE, SOME COURSES ARE VERY INTENSE, IT'S VERY DEMANDING, WHEREAS OTHER COURSES ARE NOT THAT DEMANDING. YOU CAN, YOU KNOW, GLIDE THROUGH THEM. LEARNING WISE, THEY GIVE A LOT OF OPPORTUNITY, WHICH I DID NOT FIND IN THE PAST. AND SINCE THE MAJORITY OF THEM COME FROM THE CORPORATE WORLD, THEIR SCENARIOS ARE UP TO DATE. AND THEIR FRAME OF MIND IS BASED ON THE CURRENT REALITY RATHER THAN JUST SOME FICTIONAL REALITY.

First of all, I think it's an extension of each other rather than versus because sometimes if you don't know what you're looking for, you will never look towards that. So you need a guide, you need to have an overload of information, but you need to learn about the processes to simplify. Like, for example, I'm studying HR. There are too many things to know about HR. But if I Google all of them, and they get different sources of learning, that's very difficult for me to process. But if I put it in AI, I would get a very structured prompt response, at least something which I can learn structurally. But if I need a difference of opinions to see, then Google is good, but still, even if I learned the difference of opinion, I need it in a structured form to know it. So I believe, since we have come from an era where we have been bombarded with a lot of knowledge. AI has revolutionized the way that we're going to process that information overload, so that we will be becoming more efficient with the information that flows through us. And AI will make sure that we stay relevant to what we are today and the knowledge, what we ask, we get that only we do not get bombarded with advertisements or the agendas that are being pushed on us, we get accurate learning. So that way we would be you know, even though we'll get a lot of information, we'll be able to process it and customize according to what we want, what we want to know. And since there is a large spectrum to be known, the learning opportunities are endless, and not limited, like how Google limits or searches one particular narrow thing and it will take you to 10 Different things that way, these limits..

So traditional methods of learning, I do not find that convincing in the sense because, for example, we were supposed to write a paper on CSR and diversity if I'm not wrong about our journey where we felt displaced. So that's a very personal thing to write. Right. And there is no right and wrong, absolutely nothing right and wrong in that because someone can feel this place about the same thing and other may not in traditional sense, if I google this, have a fifth time nothing, but if I put it in AI, which later when I did not do that for part, that particular assignment, but later I did that, I found it a very structured answer, right. And even if I wanted to edit that part, I would have been able to do so. Right, even such personalized assignment, you know, personalized question was able to be generated in a form that I, you know, I felt connected to, so that way I feel that you know, traditional teaching methodologies, where they don't know they want to access certain things of your life, now, AI is able to crack that as well. So in that aspect, now, you cannot ask very general questions, you have to ask me certain in depth, certain aspects of the question. So what happens? That question evolves, so, does my understanding of something evolve, and AI has pushed the system to evolve? So, I find that, you know, AI is pushing the boundaries of learning.

YEAH, BECAUSE I FEEL THAT IT'S NOT CHEATING. IT'S NOT MY RESPONSIBILITY TO EVOLVE WITH THE INSTRUMENT. SO BASICALLY, THE SYSTEM HAS TO EVOLVE WITH THE LATEST DEVELOPMENTS. LIKE FOR EXAMPLE, IN THE PAST, SO DID GOOGLE. RIGHT? BECAUSE PRIMARILY, THE WHOLE ACADEMY WORLD WAS DEPENDENT ON FINDING THE RIGHT JOURNAL, GOING TO LIBRARY FINDING. BUT WHEN GOOGLE CAME, IT REVOLUTIONIZED THE INFORMATION PROCESSING THING. WHEN PEOPLE THOUGHT THAT THAT WAS CHEATING, AND THAT KIND OF THING. NOW, THIS PART HAS BECOME PART OF THE CURRICULUM. NOW IT'S NOT CHEATING, RIGHT? SO SIMILARLY, IT'S NOT ON THE STUDENTS' PART TO DEVELOP. BECAUSE IN THE REAL WORLD, WHEN I MOVE OUT OF THE COURSE, I WILL BE EXPECTED TO



KNOW HOW TO USE CHATGPT AND LEVERAGE THAT TO, YOU KNOW, FURTHER MY BUSINESS NEEDS OR WHATEVER I'M DOING, USE THAT AND LEVERAGE THAT, TO GAIN AN ADVANTAGE. AND NOT DOING SO WOULD BE STUPID. I'LL BE CONSIDERED STUPID AND RETURN IT TO THAT, RIGHT. SO IT'S NOT UP TO ME AND FOR THAT PARTICULAR EXAMPLE THAT YOU GAVE ME. YEAH, IN THAT PARTICULAR SCENARIO I THINK THAT WOULD BE CONSIDERED TO BE CHEATING, BUT IT DEPENDS, LIKE FOR EXAMPLE, A QUESTION IS VERY GENERIC. I CANNOT READ AND WRITE AN ESSAY ON THAT. AND YOU KNOW, EXPECT, LIKE, FOR EXAMPLE, THE EXAMPLE THAT I GAVE YOU BACK, YOU KNOW, WHERE I FELT DISPLACED, THERE'S NO RIGHT AND WRONG ANSWER TO IT. EVEN IF I DON'T USE CHATGPT SOMEONE ELSE WILL USE IT. AND THE STORY CAN MATCH, BECAUSE TURNITIN CONSIDERS SIMILARITY AS WELL. AND THE PROFESSOR HAS TO USE HIS OR HIS OR HER OWN JUDGEMENT TO MAKE SURE THAT THESE TWO ARE DIFFERENT. SO I THINK IT IS VERY SUBJECTIVE. BUT IN VERY PARTICULAR CASES, I THINK IT CAN BE CONSIDERED TO BE CHEATING VERY PARTICULAR CASES, BUT I THINK THAT WILL BE RARE.

No, no, not at all. Al is learning, it works on, how do I put it, So basically, I think it will never replace a teacher. Because teachers are the Als for example, they're the intelligence behind the Al. So their intelligence is leveraged by Al rather than people leveraging Als intelligence, because they have gone through certain, you know, pedagogy, certain life experiences, and they have experienced those things, and plus their wisdom comes from that. So it's like, technically, very technically, if Al had an offline version that would be a teacher. So I don't think so, it will replace teacher but yeah, obviously, it will force educators to you know, experience more, gain more and evolve rather than just you know, lean back on the knowledge that has been pre existing, it will force them to evolve, but I never see it replacing teachers at all,

FIRST OF ALL THE NUMBER OF TEACHERS WHO ARE NOT UP TO THE MARK, THEY WILL BE OUT OF BUSINESS EDUCATORS WHO ARE NOT SERIOUS ABOUT THEIR JOB, THEY WILL BE OUT OF BUSINESS IN EDUCATION SECTOR AS WELL, AND THE PEOPLE WHO ARE VERY SERIOUS ABOUT IT, THEY WILL OBVIOUSLY EVOLVE WHEN YOU KNOW, WE WILL SEE A SHIFT IN LEARNING PEDAGOGIES VERY SOON. AND THE NUMBER OF AI ALSO WILL MAKE SURE THAT CERTAIN JOBS BECOME REDUNDANT, BUT IT WILL REPLACE THOSE JOBS WITH CERTAIN OTHER JOBS THAT WILL FOR SURE BE THERE. AND INDUSTRY WISE IT WILL MAKE A MAN OR A WOMAN MORE EFFICIENT. SO, THE EFFICIENCY RATE WILL INCREASE AND CORPORATIONS HAVE TO, YOU KNOW, GAUGE CALIBRATE FOR THIS TO SEE WHETHER YOU KNOW THE EFFICIENCY, THAT PERSON IS IN YOU KNOW, CALIBRATE FOR THAT AND MEASURE WHAT KIND OF EFFICIENCY THAT PERSON IS GIVING AND YOU KNOW, ADJUST ACCORDINGLY. SO, THESE WILL BE THE THREE SHIFTS, THERE WILL BE LOSS OF SOME JOBS AND FORCING THE EDUCATORS TO EVOLVE AND OPERATE AND HAVE TO COME UP WITH A NEW PERFORMANCE MANAGEMENT SYSTEM.

ACTUALLY I HAVE A VERY, I GUESS, YOU CAN, SORRY, EXCUSE ME, IF I TAKE A LOT OF TIME IN THAT. BUT I HAVE VERY DIFFERENT VIEWS ON THIS. FOR EXAMPLE, AI ITSELF, LIKE THE CHATGPT MODEL IT WORKS ON, IS BASED ON THE NUMBER OF BASICALLY THE INFORMATION THAT WE FEED AND THE TEST CASES IT HAS. SO IT'S A LEARNING MODEL SYSTEM. BUT ARTIFICIAL INTELLIGENCE IS ACTUALLY MOVING IN DIFFERENT DIRECTIONS AS WELL. FOR EXAMPLE, IT IS TRYING TO MIMIC HUMAN EMOTIONS AND YOU KNOW, OTHER STUFF, ROBOTICS IS COMING TOGETHER NEURAL LINKAGE IS HAPPENING. SO, THEY KNOW THAT ROBOTICS HAS ALSO MADE HUGE STRIDES, SO THEY WANT TO MAKE AN ARTIFICIAL, PERFECT HUMAN. AND I FEAR THAT BECAUSE RECENTLY, YOU KNOW, A PERSON WHO WAS A VERY SENIOR GUY, AI RESEARCHER, AND INDUSTRY LEADER HAS QUIT GOOGLE'S AI TEAM AND LEFT BECAUSE HE WAS SCARED OF THIS, WHILE OTHER INDUSTRY LEADERS LIKE ELON MUSK AND OTHERS ALSO HAVE SAID THE SAME THING. AND EVEN GOOGLE BEFORE CHATGPT SHUT OFF ITS AI PROGRAM. SO THERE IS A REAL THREAT OF FORMING ANOTHER HUMAN, WHICH IS NOT FLESH AND BLOOD. SO THAT IS WHAT I'M CONCERNED ABOUT, BUT LEARNING WISE, OF COURSE, THERE IS A PUSH THAT IS GOING TO BE HAPPENING, RIGHT. So, AT THIS POINT OF TIME, EITHER WE CHOOSE TO MOVE FORWARD OR NOT BE SCARED ABOUT THE POSSIBILITIES. But like, for example, any new technology has to have more realistic things set accordingly rules and regulation and A FRAMEWORK TO BE SET ACROSS AND IT HAS TO BE DONE VERY FAST. BUT THAT APPLIES FOR TECHNOLOGY IN GENERAL SOCIAL MEDIA AND STUFF. SO SIMILARLY, BUT AI IS CHANGING SO RAPIDLY, SO I THINK OUR LEGISLATION HAS TO CATCH UP WITH IT LIKE PRIVACY, ABOUT YOU KNOW, CREATION OF ARTIFICIAL INTELLIGENCE, AND WHAT TO DO WITH THAT, LIKE FOR EXAMPLE, IF AN ARTIFICIAL ROBOT COMES TO LIFE, WILL WE CONSIDER HIM TO BE A HUMAN? AND CAN WE SWITCH IT OFF, WILL THAT BE A MODEL OR NOT? LIKE SO, SIMILARLY, THERE ARE CERTAIN ETHICAL QUESTIONS THAT COME IN, THERE ARE CERTAIN ETHICAL CONSIDERATIONS THAT COME IN THAT HAVE TO BE KEPT IN MIND AND CONCERNED ABOUT THAT. COMING BACK TO THE QUESTION THAT YOU ASKED WHETHER I SHOULD BE CONCERNED ABOUT, YOU KNOW, LEARNING AND YOU KNOW, IN THE EDUCATION SECTOR IN THE JOB SECTOR, I GUESS ANY NEW TECHNOLOGY THAT COMES UP, LIKE, FOR EXAMPLE, EFFICIENT LIFTS, CAUSES THE JOB LOSS. THERE WAS A JOB IN THE TIME CALLED LIFT MEN. THERE WAS A PERSON WHO SAT IN THE LIFT, AND HE USED TO CLICK BUTTONS FOR US. THAT JOB DOES NOT EXIST ANYMORE. BUT WOULD YOU SAY THAT HE WAS NOT ABLE TO GET ANY OTHER JOB? NO, BECAUSE NOW WE HAVE GIG WORKERS, RIGHT? LIKE WE HAVE



FOODSERVICE DELIVERY GUYS, KIOSK MANAGERS. SO ANY NEW TECHNOLOGY THAT COMES, BRINGS NEW JOBS AS WELL. BECAUSE THAT HAS TO BE MAINTAINED, IT MEANS JUST THAT, YOU KNOW, THE EDUCATION SECTOR AND THE PEOPLE WHO ARE, YOU KNOW, HAVE TO RETRAIN THE JOB MARKET AND REORIENT PEOPLE. SO, I GUESS, DURING THAT PHASE, WHEN IT ACTUALLY ACHIEVES THAT REORIENTATION, THERE WILL BE SOME CHAOS. BUT IN GENERAL, I THINK IT'S A VERY, VERY BRIGHT FUTURE AHEAD. APART FROM THESE ALL QUESTIONS ABOUT EXISTENTIALISM ARE.

I DEFINITELY DO FEEL CHALLENGES. SO IN TERMS OF LEARNING IT IS BECAUSE I FEEL THAT SINCE I BELONG TO INDIA, I HAVE HAD A DIFFERENT WAY OF LEARNING. I'VE HAD A CERTAIN LEVEL OF ACADEMIA BEFORE THIS. SO, YOU KNOW, WHEN I STARTED ABOUT 9 TO 10 YEARS BACK, IT WAS A DIFFERENT WAY OF LEARNING. IT WAS MORE, YOU KNOW, JUST GOING THROUGH THE BOOKS AND YOU KNOW, MAKING NOTES, MEMORIZING THINGS, LESS OF PRACTICAL INCLINATION. AND A LOT OF IT HAS CHANGED NOW THAT I STARTED IN THE PAST ABOUT PSYCHOLOGY AND PHILOSOPHY, THAT HAS CHANGED. A LOT OF PRACTICAL QUESTIONS ARE RAISED INSTEAD OF JUST, YOU KNOW, TRYING TO MEMORIZE CONCEPTS. SO YEAH, IT HAS COMPLETELY CHANGED HERE.

I USED THAT DURING THE GAME AFTER THE GAMIFICATION WEEK, I CREATED A GAME WITH THE HELP OF MIDJOURNEY. MIDJOURNEY IS A PICTURE TOOL. IT'S AN AI TOOL. SO WE HAD A LOT OF HELP FROM IT TURNED INTO THIS PART OF OUR PROGRAM, WE HAD TO USE THAT. SO I WAS ABLE TO MAKE CERTAIN BECAUSE YOU HAVE TO PROMPT, I THOUGHT THAT WAS A CHALLENGE, BECAUSE YOU HAVE TO KNOW THE RIGHT PROMPT, OTHERWISE, YOU GET RANDOM IMAGES. SO I LEARNED HOW TO DO PROMPTS WELL, WITH THE AI, BECAUSE A LOT OF PEOPLE ARE GETTING SCARED. AND YOU KNOW, THEY'RE LIKE, OKAY, IT'S JUST, YOU KNOW, IS THE NEXT THING, BUT I FEEL THAT YOU NEED TO KNOW HOW TO CONVERSE, HAVE A CONVERSATION WITH AI, BECAUSE WE STILL DON'T KNOW SOMETIMES THAT HOW TO ASK THE RIGHT QUESTION, YOU KNOW, HOW WE, WHEN WE ARE USING IT. SO I REALIZED THAT WHILE I WAS USING MAYBE NOT SO MUCH WITH GPT, I THINK CHATGPT IS MUCH HIGHER, WHEN IT COMES TO RESPONSE, YOU KNOW, IT UNDERSTANDS EVEN IF IT'S A TYPO, BUT WITH OTHER AI SMALLER TOOLS, WHICH ARE STILL, YOU KNOW, ON THE DISCOVERY PHASE, AND THEY'RE STILL GOING AHEAD, I FELT THAT THEY WERE NOT ABLE TO SOMEWHAT UNDERSTAND THE PROMPT, SO YOU HAVE TO BE VERY SPECIFIC, YOU HAVE TO GIVE THE RIGHT DIRECTIONS, THAT'S WHEN YOU, YOU KNOW, COME TO A CERTAIN RESULT THAT YOU'RE LOOKING FOR. SO IN THAT SENSE, YES, I FEEL THAT OVERALL, THEY WERE VERY GOOD. AND I DID USE THAT TOOL, IT HELPED ME MAKE ONE OF THE GAMES, IT WAS PART OF OUR PROJECT. SO YEAH, IT WAS USEFUL. I THINK AI CAN BE USEFUL, IF YOU KNOW HOW TO USE IT CORRECTLY. FOR SURE.

I know obviously, ever since we have Google and other platforms, obviously use the online platforms or I still go BACK TO SOMETIMES GOING TO THE LIBRARY AND YOU'RE NOT GOING TO PHYSICAL BOOKS. I'M OLD SCHOOL LIKE THAT. I DO REFER TO THAT. BUT I FEEL WITH AI SOMETIMES WHEN YOU'RE CONFUSED AND YOU NEED AN INSTANT RESULT. YOU DON'T KNOW WHAT TO DO. I THINK THAT'S WHEN IT'S GOOD TO GENERATE IDEAS. FOR ME IT WOULD BE A GOOD PLACE TO GENERATE IDEAS WHEN YOU'RE, YOU KNOW, YOU'RE STUCK. YOU DON'T KNOW. OR YOU'RE LIKE, YOU KNOW, NOT FEELING LESS CREATIVE. THAT HAPPENS TO ME ALL THE TIME WHERE I FEEL LIKE I'M LESS CREATIVE TODAY. SOME DAYS I'M JUST TOO CREATIVE. SOME DAYS I'M LIKE, THERE IS NOTHING I CAN COME UP WITH. SO I THINK IDEA GENERATION IS A REALLY GOOD WAY YOU CAN USE AI. IN TERMS OF TECH TEST, I THINK IT'S STILL NOT THERE. IT HAS A LOT OF INFORMATION, BUT IT'S STILL YOU KNOW, IT'S LIKE A, IT'S A HUMAN TELLING YOU LIKE A BOOK, YOU KNOW. SO YOU SHOULD BE ABLE TO SORT OF, I WOULD SAY, WE SHOULD BE ABLE TO GO AHEAD WITH, AS IN, YOU KNOW, YOU STILL HAVE TO GET THE TEXT FROM IT. YES, OF COURSE, IT SPECIFIES THE TEXT THAT YOU'RE LOOKING FOR, FOR EXAMPLE, I WANT SOME NEW HR POLICIES. I'M TRYING TO THINK ABOUT WHAT ARE THE GOOD HR POLICIES? SO I CAN DO YOU KNOW, PROMPT THAT AND YOU DON'T GET THAT, BUT THEY CAN BE CHALLENGED WITH, YOU KNOW, WHAT DOES IT REFER TO? DOES IT GO WITH THE INTERNATIONAL LABOR LAW? DOES IT GO AS PER SPECIFIC TO SOME COUNTRY? IS IT REFERRING TO ONE COUNTRY? IS IT REFERRING TO SOME CONTINENT? SO YOU NEED TO KNOW THAT FIRSTHAND TO UNDERSTAND WHAT AI IS EXACTLY GIVING YOU THE INFORMATION? SO THE AWARENESS HAS TO BE THERE. FIRST OF ALL, YOU NEED TO CROSS CHECK, WHAT IS AI THROWING YOU? BECAUSE IT'S GONNA THROW YOU LIKE A GOOGLE SEARCH? A LOT OF IT IS LIKE GOOGLE SEARCH, YOU GO ON IT, YOU PROMPT SOMETHING, IT GIVES YOU LIKE A, LIKE ONE PAGE OR TWO PAGE SUMMARY OF HOW YOU KNOW, YOU WOULD GET SOMETHING FROM GOOGLE AS WELL, ON THE FIRST PAGE. YEAH, THAT'S THE ONLY THING. IT'S JUST THAT IT JUST HIGHLIGHTS MAJOR POINTS FOR US. I THINK THAT IS THE MAIN THING.



I have mainly used ChatGPT for idea generation, because in the past, twice, we had to use it for the gamification week, that was the only time that I liked extensively using it. I think it was great. In terms of idea generation, where I was not getting some good ideas. It was really helpful there.

OBVIOUSLY, THIS IS A BETTER WAY TO LEARN, BECAUSE I AM ALSO MOVING TOWARDS IT. I WOULD SAY THAT I'M A VISUAL LEARNER, I LIKE TO HAVE MAYBE A VISUAL DESCRIPTION OF THE THINGS, MAYBE A CARTOON OR DIAGRAM OR SOME SORT OF VISUAL REPRESENTATION OF WHAT I'M DOING. SO I THINK THAT REALLY HELPS. THAT, OF COURSE, IS NOT SOMETHING WE HAVE A CHANCE AT. BUT WITH OTHER AI TOOLS, YOU CAN STILL GET SOME VISUAL LEARNING. I WOULD SAY CERTAIN THINGS WHICH ARE CHATGPT, OR, YOU KNOW, THE NEW AI TOOLS OR ONLINE LEARNING. IN TERMS OF COMPLETE LEARNING, I WOULD SAY YOU DO MISS OUT ON UNDERSTANDING HUMAN HUMAN INTERACTION. WITH THIS, YOU GET SOME SORT OF, YOU HAVE YOUR TEXT, YOU HAVE YOUR AUDIO, YOU HAVE TO SOME EXTENT YOUR VISUAL LEARNING, RIGHT. BUT THERE IS A LOT OF LEARNING AS HUMANS WE NEED, WHICH IS UNDERSTANDING THE BODY LANGUAGE, UNDERSTANDING THE TONE OF THE PERSON. SO THE SUBTLE LEARNING IS SOMETHING WHICH OBVIOUSLY I CAN'T AT THE MOMENT AT LEAST, CAN DO. SO I THINK THAT'S WHERE MOVING TO A CLASSROOM OR YOU KNOW, TRADITIONAL LEARNING STILL HAS TO BE THERE. LIKE IT CAN'T BE COMPLETELY IGNORED. YEAH.

I feel that It depends on the generation because I personally feel that I am, you know, being a millennial, I deal with boomers, I deal with the different generations, Gen Z or X or I do know, the next one. So I feel I don't know, which is the next one,

YEAH. SO YEAH, THERE IS ALPHA, YOU'RE RIGHT. SO I FEEL THAT SINCE I HAVE INTERACTION WITH THEM, I FEEL THERE'S GOOD AND BAD OF BOTH. BUT IT DEPENDS WHAT BECAUSE I'M ALSO A PSYCHOLOGY STUDENT. I FEEL THAT IT DEPENDS ON THE PERSON BECAUSE HOW WERE YOU INTRODUCED TO LEARNING? SO IF YOU'RE ALREADY INTRODUCED TO TRADITIONAL LEARNING, YOU WILL ALWAYS LIKE THAT BETTER, YOU WILL BE INCLINED TOWARDS TRADITIONAL LEARNING. IF YOU WERE INTRODUCED TO MORE OF, YOU KNOW, A MIX OF BOTH. IT WOULD BE LIKE THAT, FOR EXAMPLE, FOR A LOT OF PEOPLE WHO, LET'S SAY, WERE IN HIGH SCHOOL, AND THEY WERE GRADUATING DURING THE TIME OF COVID. AND THE COLLEGE WAS INTRODUCED ONLINE. SO FOR THEM, MAYBE COLLEGE IS JUST ONLINE, YOU NEVER KNOW. SO I THINK IN THAT CASE, IT DEPENDS ON YOU KNOW, HOW THIS HAS BEEN INTRODUCED TO THE PERSON? HOW DO THEY TAKE IT? IT'S ALSO PERSONALITY TYPES, I REALLY GO WITH THIS. THE TRADITIONAL CLASSROOMS ARE GREAT. BUT YES, FOR A LOT OF PEOPLE, IT MIGHT NOT BE THAT GREAT.

I would say it depends. Because, see, it depends on the, it's not just personality, it also depends on the capacity of the, of the student, because certain students need hand holding, they need a teacher to explain them, then they go home or you know, sometimes they take out some time and we rely on it, but some are there, okay, without the you know, human interaction and they can just go online, see something on YouTube Hello, in that. So, in that way, I feel it depends on you know, how is the personality of the person as well as in their what is their level of, you know, intellectual level that you know, they are able to grasp?

I AM COMPLETELY AGAINST PLAGIARISM ON THIS, I WOULD SAY THAT, I WILL NOT RECOMMEND ANYBODY USING AI. UNLESS IT'S BEEN ALLOWED. IN CERTAIN AREAS LIKE FOR, FOR US, IT WAS ALLOWED THAT, YOU KNOW, YOU HAVE TO MAKE SOMETHING FROM AI. SO THAT'S WHY WE CAME UP WITH THIS PROJECT. BUT IN CASE YOU FEEL THAT YOU'RE STUCK SOMEWHERE, IF YOU NEED IDEAS, THAT'S OKAY. IF YOU WANT TO GET SOME IDEAS, IN THAT SENSE, YES. BUT TRYING TO COPY PASTE YOUR ENTIRE ASSIGNMENT OR TRANSCRIPT OR ANY OTHER THING THAT YOU WANT TO DO IS COMPLETELY OFF. I PERSONALLY WOULD NEVER LIKE THAT. AND I WOULDN'T DO THAT.

I do feel that, to some extent, yes, AI will be able to, you know, change the way we perceive learning, it will be able to, because maybe AI may not change the entire learning process, but it will definitely be included about you know, 30 to 40% in the next two, three years. I wouldn't say to completely take it over. But I feel when it comes to elementary learning of basic things. That's when AI can, you know, be in an area where, you know, it can take up for example. You know, for example, language courses, you know, we have online language courses, we may have some crash courses online. So, yeah, in that case, I feel yes, that will be a challenge.

I PERSONALLY FEEL THAT THEY SEE DIFFERENT WAYS OF LEARNING. SO I'VE ACTUALLY HAD THAT IN CALIFORNIA, I TRIED THAT SOMEWHERE, I DON'T REMEMBER THE MUSEUM, I TRIED THAT IN A MUSEUM WHERE THERE IS AI, BEFORE COVID, SOMETIME IN



2019. So AI already has visual audio and text learning, okay, which we can see. So these three areas learn the last one of them an extra one will be like, you know, learning through different cues of a human and, you know, that's something, you know, probably the last AI can, you know, learn, for example, human body language, and all those things, which is also something that, you know, recruitment teams have started using, it's getting there. But I would still say it's not 100% Perfect, because I personally feel they're still very primitive, like, you know, there are some, you, I'm sure you're aware that there are some tools, which can be used during recruitment. When you're on a video, it does, you know, read through your physical expressions, and, you know, how you feel and

OKAY, SO THERE IS, THERE IS SOME TOOLS, IT'S STILL VERY, VERY, VERY NEW, IT'S NOT, NOT MANY PLACES, IT'S BEEN USED, BUT SOME COMPANIES HAVE TRIED THIS, THIS IS STILL ON A TRIAL BASIS, THAT WHILE YOU CAN, YOU KNOW, INTERACT, THERE IS SOME CUES, WHICH THE AI CAN PICK UP, IF YOU SEEM TO BE HAPPY PERSON OR SAD PERSON, OR MAYBE YOU'RE AN ANXIOUS PERSON, YOU'RE HYPER PERSON, OR YOU'RE LIKE VERY QUIET, OR MAYBE, YOU KNOW, MAYBE THIS IS YOUR CERTAIN TONE THAT WE TALK IN, OR MAYBE THIS IS NOT THIS NOT THE WAY YOU TALK, YOU KNOW, MAYBE YOU KNOW, IF THERE'S A SLIGHT VARIATION. SO IT'S STILL VERY PRIMITIVE, IT'S NOT A VERY ADVANCED TOOL AT THE MOMENT, IT'S STILL GOING, YOU KNOW, THEY'RE STILL TRYING TO PERFECT THAT. BUT I THINK IN THE COMING YEARS, IT WILL BE. SO THAT WILL BE OBVIOUSLY ONE OF THE THINGS AND COMING BACK TO, I WOULD SAY THAT THIS, OF COURSE IS BEING TAKEN CARE OF. BUT AS HUMANS, WE WANT SOMETHING WHICH IS PHYSICAL, WHICH WE CAN TOUCH. SO I THINK THE WHOLE, YOU KNOW, TRADITIONAL LEARNING, MAYBE A TEXTBOOK, A PEN OR PENCIL, OR YOU KNOW, GOING BACK TO THAT, I THINK THAT WILL BE YOU KNOW, SOMETHING THAT WILL EVEN LET'S SAY IT'S A FASHION, LET'S SAY EVEN IF IT COMES BACK AS FASHION, IT STILL BE THERE, I REALLY DO FEEL THAT BECAUSE I PERSONALLY STILL PREFER LIKE READING BOOKS, WHICH ARE PHYSICAL, INSTEAD OF EBOOKS. SO I FEEL THAT EVEN THOUGH THIS WILL, YOU KNOW, THERE WILL BE A WAVE OF AI GOING UP AND YOU KNOW, EVERYTHING GOING ONLINE, BUT STILL THE TRADITIONAL WAY, THAT IS STILL A VERY LONG WAY BEFORE YOU KNOW, AI CAN COMPLETELY CHANGE THAT.

MOSTLY TO GENERATE IDEAS, MAYBE GET SOME INFORMATION ON CERTAIN THINGS THAT I DON'T KNOW, BECAUSE I WAS READING ABOUT SOME POLITICAL PARTIES IN INDIA, JUST GOING THROUGH SOMETHING. SO I WAS HAPPY TO HAVE THAT QUITE CONCISE IN A SMALL SUMMARY, INSTEAD OF ME GOING THROUGH LIKE FIVE PAGES ON THE WALL, YOU KNOW. SO THAT'S SOMETHING THAT, YOU KNOW, IT GIVES YOU SPECIFIC INFORMATION OF ONE PAGE TWO PAGE THREE PAGE. SO IT'S EASIER FOR SOMEBODY TO LEARN FROM INSTEAD OF YOU GOING THROUGH, LIKE, SIX PAGES, BECAUSE SOMETIMES IT'S NOT HUMANLY POSSIBLE, ESPECIALLY IF YOU YOURSELF ARE DOING RESEARCH AND I'VE DONE RESEARCH AS WELL. WHEN YOU'RE IN THAT RESEARCH, IT'S GOOD FOR YOU TO SOMETIMES HAVE SOMETHING CONCISE, EASILY AVAILABLE, INSTEAD OF, YOU KNOW, GOING THROUGH 10 PAGES.

YEAH, SO I WAS COMING TO THAT. THE, THE, ANOTHER BYPRODUCT OF, YOU KNOW, HAVING AI TOOLS AVAILABLE ALL THE TIME, IS BECAUSE THAT YOU HAVE NO MEMORY RETENTION, WE DON'T REMEMBER THINGS LIKE I REMEMBER, MY PARENTS WOULD REMEMBER, PHONE NUMBERS OF EVERYONE THEY KNEW, LIKE, YOU KNOW, THEY WOULD MEMORIZE AT LEAST A FEW NUMBERS, THESE DAYS, WE DON'T EVEN KNOW OUR OWN CELL PHONE NUMBERS AT TIMES, BECAUSE WE DON'T PAY ATTENTION TO IT. YOU KNOW, SO I FEEL THAT, YOU KNOW, ALWAYS HAVING THAT YOU HAVE READY INFORMATION, THERE'S ALWAYS SOMETHING READY AVAILABLE, THAT KIND OF DECREASES SOME FUNCTIONS OF OUR BRAIN, YOU KNOW, THAT WE SHOULD MEMORIZE, WE WILL LOSE THAT PART THAT, YOU KNOW, MEMORY IS REQUIRED. THAT IS ONE SECOND, I WOULD SAY AS YOU SAID THAT, YOU KNOW, I DIDN'T NEED TO DO HISTORY. NO, I FEEL THAT, YOU KNOW, ESPECIALLY IF YOU ARE, YOU KNOW, IN A DIFFERENT COUNTRY, AND YOU KNOW, YOU LIVE SOMEWHERE ELSE, OR YOU'RE MOVED OR YOU KNOW, THERE IS SOME OTHER NEWS GOING ON, WHETHER YOU BELIEVE THIS OR NOT CERTAIN THINGS THAT WE LEARN, IT ALWAYS COMES IN HANDY, MAYBE LATER IN LIFE, MAYBE NOT INSTANTLY. SO I FEEL THAT NO, A CERTAIN TRADITIONAL WAY OF LIKE IT IS THAT A CERTAIN LEVEL OF INFORMATION HAS TO BE SHARED WITH EVERYBODY. SO THAT IT CREATES AN ENVIRONMENT THAT WHERE DO I COME FROM? WHAT AM I DOING? IT CREATES THAT BECAUSE AS A CHILD, WHEN YOU'RE MUCH YOUNGER, YOU'RE BLANK, THERE'S NOTHING IN YOUR BRAIN, RIGHT? YOU'RE BLANK. SO CERTAIN THINGS HAVE TO BE TOLD SO THAT THEY UNDERSTAND THAT WHERE DO YOU COME FROM. YOU KNOW, SO IF THEY HAVE HISTORY, THEY UNDERSTAND WHY THIS IS HAPPENING TODAY? YOU know, there is something to look back to. So I really do feel that, you know, that needs to be there. And second, as YOU SAID, THERE IS NO EXPERIENCE SHARING, THIS IS MY NEGATIVE POINT FOR CHANGING EQUITY. USUALLY, WHEN YOU TALK TO A Professor, a human professor, they would give you certain acts, some suggestions, maybe charge you but he can't BECAUSE THEY HAVE COME FROM EXPERIENCE. YOU KNOW, LIKE A 50 YEAR OLD OR 60 YEAR OLD WILL HAVE A DIFFERENT WAY OF TELLING YOU THAN CHATGPT. SO WHEN IT COMES TO COMPLEX HUMAN SITUATION, THERE'S CERTAIN WAYS ONLY HUMAN PERSON CAN



GIVE YOU EXPERIENCE SHARING, YOU KNOW, SO CHATTY, WE DON'T KNOW, THEN YOU CAN'T USE THAT IF YOU'RE IN A DILEMMA OF CERTAIN LIFE CHANGE NO, THEN CHATGPT, I DON'T THINK SO CAN BE HELPFUL.

I would say we've gone completely digital, because back in the day, I used to be still had, like, you know, it was still, even 10 years ago, I was in a college, which was completely digital. We had portals like this we have today, we would have online pages where you know, you get access to so in that way, no, I don't think so. A lot has changed because I think at least in India, this digitalization for you know, education system was done like a while back. So, during my time, I have always been introduced to digital learning. But in school, yes, we were still doing the traditional way of making notes by hand, learning by going through books, and you know, it was all physical and memorizing and you know, the same way giving examples and all that. Yeah. But yeah, college onwards, it's always been ditched.

I WOULD SAY THAT I DO LOOK UP FOR SUGGESTIONS. FOR EXAMPLE, I WAS JUST LOOKING AT SOME CERTIFICATIONS. SO I WAS SO PROMPTED BY THE AI, THAT WHAT SHOULD I DO WITH MY EXPERIENCE? SO I WAS LOOKING FOR CERTAIN HR CERTIFICATIONS. SO I WAS THINKING THAT I SHOULD TRY AND WORK ON THEM. AND APART FROM THAT, I USUALLY GO TO CHATGPT OR AN AI TO WHERE I NEED SOME IDEAS, WHERE I FEEL LIKE YOU KNOW, I'M GONNA BRAIN BLOCK WHEN I'M NOT ABLE TO THINK CLEARLY, THAT'S WHEN I USUALLY USE IT. FOR ME, SOLELY I USE IT AS A PLATFORM, YOU KNOW, WHEN I AM BLOCKED WITH IDEAS, I USE IT OR IF I NEED SOMETHING SPECIFIC, YEAH.

IF YOU DON'T KNOW ABOUT IT, I THINK,

Understood. So I've signed up for the World Economic Forum. So I think I read about it there. They have a newsletter. I first started there. And I think then I read on LinkedIn. Yeah, okay. It's fairly recent, yeah, it was the first week of December.

I THINK IT WILL DEFINITELY INCREASE, BECAUSE YOU WILL FEEL MORE CONFIDENT THAT YOU CAN, YOU KNOW, LOOK UP FOR ANSWERS OR, YOU KNOW, MAYBE, QUICKLY, YOU KNOW, GO ON YOUR PHONE, OR MAYBE ON YOUR LAPTOP QUICKLY LOOK FOR ANSWERS OR EXAMPLES. YOU KNOW, FOR EXAMPLE, WE NEED SOME, IF PROFESSOR ASKS YOU FOR A SPECIFIC THING THAT THEY DISCUSSED, AND YOU JUST KNOW WHAT THE TOPIC WE'RE DISCUSSING, THEY CAN EASILY GO THROUGH AND, YOU KNOW, QUICKLY COME UP WITH SOME ANSWER SOLUTIONS THAT YEAH,

Not really not really, maybe it's because it's very recent, maybe because of that. I wouldn't say there's any difference that way.\$

I FEEL I COULD BE WRONG, BUT I FEEL WITH CHATGPT, YOU CAN GENERATE IDEAS. BUT WHEN IT COMES TO IT'S A BASIC ACADEMY WRITING ISSUE WHERE YOU KNOW, YOU NEED TO KNOW YOUR SOURCE. YOU KNOW, YOU JUST CAN'T WRITE ANYTHING YOU FIND. YEAH, SO, YEAH, SO ACADEMY SOURCE LACKS WITH CHATGPT AT TIMES, AS CHATGPT ITSELF IS AN ACADEMIC SOURCE, IF YOU THINK ABOUT IT, THAT YOU GOT IT FROM CHATGPT, BUT IT'S STILL VERY VAGUE. YOU KNOW, THERE IS NOTHING SPECIFIC HERE. SO IN THAT SENSE, I THINK THAT CAN BE A CHALLENGE. I WOULD SAY THAT, EVEN IF CHATGPT HAS GIVEN YOU A SOLUTION, OR AN ANSWER ON AN IDEA, YOU SHOULD CROSS CHECK WITH THE SOURCES BEFORE YOU GO AHEAD. AND YOU'RE NOT MENTIONED ANYWHERE. I PERSONALLY WOULD SAY THAT.

IT SHOULD BE A SOURCE LIKE WHEN YOU GIVE ANY ASSIGNMENT WE GIVE A REFERENCING THAT SHOULD BE A SOURCE.

OKAY. I'M AN ERASMUS STUDENT, CURRENTLY DOING MY MASTERS IN CYBERSECURITY. I'M STUDYING IN UNIVERSITY DE BRETAGNE SUD, LORIENT, FRANCE. SO I'M IN MY FIRST YEAR BECAUSE THE MASTERS IS SUPPOSED TO BE TWO YEARS. SO I'M IN MY FIRST YEAR. SO ONE OF THE COURSES I'VE STUDIED ARE CYBERSECURITY AND PROGRAMMING COURSES, FOR EXAMPLE, NETWORK OPERATING SYSTEM, SECURITY, SECURE ADVANCED PROGRAMMING. SO THEY'RE BASICALLY SECURITY COURSES ON PROGRAMMING COURSES.



Okay, the workload is too much for my program. So, most times I go to class by eight o'clock in the morning then come back by 6pm in the evening, so, the workload is much for us and we have lectures and sometimes we have labs also. We are taught through lectures through labs. We are given projects, sometimes you are given a topic to go and research on and do a presentation on it. So, that is the mode of learning. Sometimes, there are some courses that when we start the lecture, you will never understand. I want to understand what is going on. It will be boring. So boring until we get to the practical aspects. So, it depends, some courses are interesting at the beginning, some are not interesting at the beginning, so it depends on the course.

LIKE I SAID EARLIER, WE DO MORE SECURITY AND PROGRAMMING COURSES. AND FOR ME, I DON'T HAVE A PROGRAMMING BACKGROUND. SO I HAVE BASIC KNOWLEDGE OF PROGRAMMING LANGUAGES. SO THAT IS THE MAIN CHALLENGE. ANY PROGRAMMING RELATED PROBLEM CAUSES A PROGRAMMING RELATED PROBLEM. IT'S ALWAYS DIFFICULT FOR ME. SO THAT'S ONE OF MY MAIN CHALLENGES.

The only AI tool I have used is ChatGPT. And I use it too, if you're given a project, I used to do my research. Also. If I'm troubleshooting an issue, I also use it and I'll just type what I want on ChatGPT. Also, sometimes if I'm stuck maybe I'm trying to work on something. Okay. For example, you are trying to install an application and the application is giving you an error or you're trying to run a command and the command is not working. So I can just go to ChatGPT and just type it, for example, Linux command for so so thing, then it will just give me. That's what I use it to do.

My undergraduate, I just use Google, just type it on Google. And there'll be different opinions on Google. There'll be different forums, for technical related issues, different forums, where we can get through, we have different ideas. So you have to try different, different, maybe, for example, you're working on something, and maybe you need a command. And you have to try different commands because people have different opinions. So that's why I type it on ChatGPT. It even gives me the steps, how you are supposed to use it. So using ChatGPT is faster for me. That's different from Google, because Google, you have to search search, search. This one is faster.

I WILL SAY CHATGPT IS A SMART, REALLY SMART TOOL TO USE, OKAY. YEAH, IT MAKES YOUR WORK EASIER OR FASTER.

OKAY. FOR MY UNDERGRADUATE EDUCATION, AFTER WE ARE TAUGHT IN CLASS, I READ THE NOTES. I READ THOSE BOOKS. AND I ALSO DO LITTLE RESEARCH ON GOOGLE. OKAY. IT TAKES TIME TO GATHER ALL THOSE INFORMATION. SO WITH CHATGPT, IT IS MORE SPECIFIC. YOU GET WHAT YOU'RE LOOKING FOR IMMEDIATELY. YOU DON'T HAVE TO READ ALL OVER READ ALL OVER. SO OKAY, FOR EXAMPLE, SOMETIMES YOU NEED A COMMAND TO DO SOMETHING OR YOU ARE TRYING TO TROUBLESHOOT SOMETHING. ON GOOGLE, YOU HAVE TO SEARCH MULTIPLE TIMES. BUT WITH CHATGPT, YOU GET WHAT YOU WANT IMMEDIATELY.

There's really been, in terms of the professor there's, really no difference because the professors only give you what they have. You still have to go back and do the assignments. Like it's you have to go back and do more research and read more. So there's really no difference in terms of the professor between the undergraduate and postgraduate.

OKAY. STUDENTS MIGHT BECOME LAZY BECAUSE YOU KNOW THAT YOU'RE NOT GOING TO STRESS YOURSELF, YOU KNOW, YOU KNOW, YOU CAN'T FIND THE ANSWER, YOU KNOW, YOU HAVE TO STRESS TO GET THE ANSWER. SO YOU JUST TYPE IT IN THE CHAT BOX AND GIVE IT TO YOU, SO THAT MIGHT MAKE STUDENTS BECOME LAZY. WHEN IT COMES TO RESEARCH ON PROJECTS, YOU KNOW, THEY WOULD MOVE ON TO READ MORE. FOR EXAMPLE, WE'RE WORKING ON A TOPIC NOW MAYBE FOR EXAMPLE, RESEARCH, RESEARCH WORK, OR YOU ARE GIVEN A SMALL PROJECT, YOU KNOW, YOU HAVE TO READ WHAT HAS BEEN DONE BEFORE READ FROM DIFFERENT PEOPLE'S OPINION, FOR EXAMPLE, THESE ARE ACADEMIC PAPERS THAT ARE PUBLISHED, YOU HAVE TO READ DIFFERENT PEOPLE'S OPINION FROM THERE, YOU CAN COME UP WITH SOMETHING, BUT JUST TYPE IT FOR CHATGPT, IT WILL JUST GIVE YOU ITS OWN ITS OWN IDEA WHICH IT HAS BEEN PROGRAMMED TO DO.

I can't say one is more effective than the other. Because it's what you are taught in class that you will go back home and use, if you want to use ChatGPT, it is whatever you are taught in class, that you will go back home and use ChatGPT to maybe research more on it. Okay. So they are complementing each other for me.



If I'M GIVEN AN ASSIGNMENT, EVEN WHEN THERE IS NO CHATGPT, I WILL STILL GOOGLE IT, WHICH IS AN ASSIGNMENT THAT IS NOT AN EXAM. SO I WILL DEFINITELY STILL GOOGLE IT AND COME UP WITH SOMETHING FROM WHAT I GOOGLED. OKAY, IT IS STILL THE SAME THING. I THINK CHATGPT IS JUST ANOTHER FORM OF GOOGLING. THAT'S WHAT I WILL SAY. SO, INSTEAD, IT IS STILL THE SAME THING, JUST THAT CHATGPT IS FASTER FOR ME AND IT'S NOT CHEATING.

HMM. I DON'T THINK AI CAN REPLACE TEACHERS. BECAUSE, YOU KNOW, ARTIFICIAL INTELLIGENCE IS ABOUT TRAINING A MODEL. IT'S ALREADY PROGRAMMED TO DO WHAT IT'S SUPPOSED TO DO. BUT OUR TEACHERS, OUR PROFESSORS, THEY HAVE A LOT OF THEORETICAL, PRACTICAL BUSINESS EXPERIENCE. SO IT CAN'T REPLACE OUR TEACHERS.

This is not about ChatGPT, but it's about another use of AI called Deep fake. Where you use someone's face, or someone's voice or someone's video, it will appear as if it's the person but it's not the person. So for example, now a video of it's mostly common amongst celebrities, where they released their porn video, but then actually they are not the ones in the video. Why do you look as if it's them because it will be their face. So deep fakes, so it's also an example of AI. So I feel it will be very, very difficult to track cyber crimes. With that, it's very, very difficult to attribute, like to say, this is the actual person that did it. So attribution will be very, very difficult when it comes to cyber crimes. So, that's one example.

OKAY, ARE YOU SAYING IF AI WILL TAKE THE JOB OF CYBERSECURITY PROFESSIONALS? NO, NO, NO, NO, AS MORE DEVICES ARE CONNECTED, MORE DEVICES ARE BEING CONNECTED TO THE INTERNET EVERY DAY. SO CYBER CRIMINALS ARE ALSO INCREASING, THE THREAT LANDSCAPE IS ALSO INCREASING. SO CYBER CRIMINALS ARE CREATING NEW METHODS TO LEARN FROM CYBER ATTACKS. SO YOU CAN'T JUST SAY THIS PATTERN, THERE ARE SO MANY PATTERNS, THERE ARE SO MANY PATTERNS. SO YOU CAN'T PROGRAM, YOU KNOW, AI IS ABOUT A MODEL, YOU PROGRAM A SYSTEM TO LEARN SOMETHING. AND IT GIVES FEEDBACK BASED ON WHAT IT HAS LEARNT. SO THERE IS NO ONE PATTERN FOR CYBERATTACKS. THERE ARE DIFFERENT PATTERNS FOR DOING IT. AND THERE ARE DIFFERENT TYPES OF ATTACK. SO AI WILL NOT REPLACE CYBERSECURITY PROFESSIONALS,

OKAY, I STILL USE GOOGLE AS MY FIRST RESEARCH TOOL. OKAY, SO WHEN I USE GOOGLE AND I SEE I HAVE A LOT OF THINGS TO READ, I HAVE A LOT OF PEOPLE'S OPINIONS. AND I HAVE A LOT TO READ. SO THAT'S WHEN I GO TO CHATGPT. SO GOOGLE IS STILL MY FIRST GO TO.

OKAY. FOR ME, I DON'T THINK SO. BECAUSE MOST OF THE THINGS I'VE CHECKED ON CHATGPT. FOR EXAMPLE, IF I CHECK A COMMAND NOW, I JUST TYPE IT ON MY COMMAND LINE. AND IT WON'T MAKE THEM RETAIN OR LEARN MORE INFORMATION. I DON'T TAKE IT FOR RETENTION. I JUST USE IT TO SOLVE MY PROBLEM AT THAT MOMENT. SO I DON'T THINK IT WILL MAKE PEOPLE LEARN.

No, there's been no change in my academic performance since I started using ChatGPT.

 $Y_{\text{ES}}$ , one of my professors told us about it in class.

YES, I RECOMMENDED IT TO SOMEONE.

I have not, I've not adjusted my learning methods like that. I still use my normal learning method. I go back to my notes after class. I read my notes, I do more research using Google. Then, if I have a lot of information, I just want to have maybe, maybe I just want to have a quick answer or a quick overview of what I'm looking for. Then I use ChatGPT so my studying method is still the same.

No, no, no, no, no, I just use it to get my work done. I use it to solve my problem. Okay, it has not really changed, it doesn't change anything like that.

I don't know. Oh, you know, when you're in class. It's not as if you are going to be using ChatGPT to answer the questions. You're not going to do that. So it doesn't really have any effects. For me.



Al cannot be trustworthy, for example, for the deep fake example I gave, even though the video is looking like the person is the person you understand, for example, I think there was one video of I think Obama, it looks like he was the one talking. It was his voice, but he was not actually the one talking. So it cannot be trustworthy,

It depends. It is what it has already been programmed to do, so if you are using it to make research. It will, it will give you what it has been programmed to do, it will give you the knowledge it has. So in that case, it's okay. When it comes to examinations or assessments, I will say it is not ethical. And it's not fair. Because you can be using ChatGPT during your examination, right and I don't think that's fair.

OKAY. WE ALL KNOW THAT THERE IS NOTHING THAT IS GOOD. AND THAT DOESN'T HAVE ITS BAD SIDE. SO I THINK IT DEPENDS ON HOW WE USE IT, WITH HOW WE USE THE TOOL OR WHAT WE USE THE TOOL FOR. BUT WE CAN'T SAY THIS THING IS BAD, SO WE DON'T WANT IT. IT ALSO HAS HIS GOOD SIDE. SO IT DEPENDS ON HOW WE USE IT. SO THAT'S NOT WHAT I WANT TO SAY.

