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Exploring Private College Lecturers' Intentions and Strategies in using Generative AI Tools: A Case Study

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Abstract

In line with the rapid development of technology, lecturers in higher education institutions are expected to use technological tools such as Artificial Intelligence (AI) to enhance their teaching strategies and work productivity. This qualitative case study aimed to identify lecturers' perceptions on the usefulness and ease of use of generative AI tools for their academic work. Moreover, their long-term intention and strategies in relation to the usage of those tools were also investigated. Technology Acceptance Model (TAM) was applied in this study. The participants of this research study were three lecturers from a private college in Johor Bahru. They provided their responses individually in semi-structured interviews. The data was then transcribed and analysed with thematic analysis method. All the participants stated that generative AI tools were generally useful and easy to use. However, one of them explained that the tools may be more challenging to use for more complex usage. The three lecturers also expressed their intention to use the tools in the long term, and they provided some effective strategies in obtaining relevant AI output to complete their tasks. However, some participants explained that overdependency on the generative AI tools may become a concerning issue among lecturers. It is hoped that these research findings will be useful to educators and management in the higher education setting. Continuous professional development in relation to the usage of generative AI tools may be planned for equipping lecturers with skills to maximise the benefits of using those tools in the higher education field.

Keywords: Generative AI; Lecturers' Intentions; Strategies; Technology Acceptance Model

Abstrak

Selaras dengan perkembangan pesat teknologi, pensyarah di institusi pengajian tinggi dijangka menggunakan alat teknologi seperti Kercerdasan Buatan (AI) untuk menambahbaikan strategi pengajaran dan meningkatkan tahap produktiviti kerja mereka. Kajian kes kualitatif ini bertujuan untuk mengenal pasti persepsi pensyarah terhadap kegunaan dan kemudahan penggunaan alat AI generatif untuk menyelesaikan tugasan akademik mereka. Selain itu, niat untuk menggunakan alat generatif AI dan strategi mereka berkaitan dengan penggunaan alat tersebut turut disiasat. Model Penerimaan Teknologi (TAM) telah diaplikasikan dalam kajian ini. Peserta kajian penyelidikan ini adalah tiga orang pensyarah dari sebuah kolej swasta di Johor Bahru. Mereka memberikan respons mereka secara individu dalam temu bual separa berstruktur. Data tersebut kemudiannya ditranskripsi dan dianalisis dengan kaedah analisis tematik. Semua peserta menyatakan bahawa alat AI generatif secara amnya berguna dan mudah digunakan. Walau bagaimanapun, seorang pensyarah menjelaskan bahawa alat itu mungkin lebih mencabar untuk digunakan untuk penggunaan yang lebih kompleks. Ketiga-tiga pensyarah itu juga menyatakan hasrat mereka untuk menggunakan alat tersebut dalam jangka masa panjang, dan mereka memberi beberapa strategi yang berkesan untuk mendapatkan output AI yang relevan bagi menyelesaikan tugasan mereka. Walau bagaimanapun, sesetengah peserta kajian menjelaskan bahawa kebergantungan yang melampau terhadap alat AI generatif boleh menjadi isu yang membimbangkan dalam kalangan pensyarah. Hasil dapatan kajian ini diharapkan dapat memberi manfaat kepada para pendidik dan pengurus di institusi pengajian tinggi. Pembangunan profesional berterusan terhadap penggunaan alat AI generatif boleh dirancang untuk melengkapkan pensyarah dengan kemahiran bagi memaksimumkan manfaat untuk menggunakan alat tersebut dalam bidang pendidikan tinggi.

Kata kunci: AI generatif, Hasrat pensyarah, Strategi, Model Penerimaan Teknologi

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1.0 INTRODUCTION

Due to technological advancements, the field of education has experienced lasting impacts (Varghese & Chapiro, 2023). Generative AI (Artificial Intelligence) tools are popular educational tools used among lecturers and students in the higher education institutions. Artificial intelligence refer to computational techniques that can generate content that are seemingly new and meaningful based on trained data (Feuerriegel et al., 2023). Generative AI tools can be used to generate images, music and text through the analysis of patterns in the trained data (Ooi et al., 2023). Some examples of generative AI tools are ChatGPT, Microsoft Pilot and Gemini (Boyle, 2025). They can be used by lecturers to plan lessons, grade students' assessments, generate tutorial or revision questions.

According to Nazary (2024), the quality of AI prompts used by lecturers determine the quality of the AI-generated responses. Therefore, it is essential for lecturers to have the knowledge and skills to utilise generative AI tools effectively to complete their tasks. Thus, the aim of this research study is to identify lecturers' intentions of utilising generative AI tools in an education institution. Moreover, this study aimed to explore the lecturers' intention and strategies in using generative AI tools for their academic work.

Although there is a high interest among researchers to explore the usage of generative AI tools, especially on the benefits of utilising them, there is a lack of research on the strategies and challenges of AI prompting among generative AI users (ElSayary, 2025). Furthermore, there is a significant gap in the literature in relation to lecturers' competency in utilising generative AI tools. AI used to be a topic of research in the STEM (Science, Technology, Engineering or Mathematics) fields, where educators may be more familiar with the usage of AI tools for academic purposes (Shata & Hartley, 2025). However, there has been a greater interest among researchers to study how AI is used by lecturers in non-STEM fields. The lecturers who teach non-STEM subjects may use AI tools without having a deeper grasp of the strategies on how to use tools effectively and efficiently. The targeted participants in this study were business lecturers, and they were not teaching STEM subjects. In addition, there has also been a research focus on students' adoption of AI tools, and this may leave a research gap on educators' adoption of these tools (Miranda & Chamorro-Mera, 2025). Thus, this research paper aimed to close the research gap by exploring lecturers' intentions and strategies in utilising generative AI tools for academic purposes. This study also shed light on some challenges that lecturers may encounter in relation to the usage of generative AI tools in the education field.

■2.0 LITERATURE REVIEW

Some past studies have been conducted to explore lecturers' intentions to utilise generative AI tools in the higher education sector. Furthermore, some researchers conducted studies on lecturers' strategies of utilising those tools.

2.1 Intentions Of Utilising Generative AI Tools Among Lecturers

One of the past research studies was conducted by Krause et al. (2025). A comprehensive literature review was conducted by the researchers on the integration of generative AI tools into lecturers' teaching practices. Fifteen research articles were analysed in depth, and six areas related to lecturers' integration into their teaching practices were identified. The areas were personalisation and optimisation, advanced tools and technology, ethics and policy, integration and curriculum design, AI implementation and usage, and educator roles in relation to AI usage. According to Krause et al. (2025), the most emphasised area was 'integration and curriculum design'. This revealed that there is a trend for lecturers to integrate those tools into the curriculum in the higher education.

Another study was conducted by Abdullah and Mohd Zaid (2023). They applied Technology Acceptance Model (TAM) in their qualitative case study to explore lecturers' perceptions on potential benefits and ease of use of generative AI tools in a higher education institution. The lecturers' challenges of using those tools were also identified. The researchers collected data from 33 lecturers in the social sciences department in the institution through interviews and online surveys. Based on the research findings, some lecturers agreed that their work productivity was enhanced with the usage of generative AI tools. However, some lecturers were concerned that they might become overdependent on those tools. Most of the lecturers expressed that more trainings and resources should be provided to lecturers to enhance their effectiveness of using those tools in the higher education context.

Abdullah and Mohd Zaid's (2023) findings are in line with the research findings discovered by Lee et al. (2024). Based on Lee et al's (2024) study, trainings or workshops are crucial forms of support to equip lecturers with skills and strategies to utilise generative AI tools effectively. The researchers conducted a mixed method study in a university in Australia. Data was collected through survey and interviews. More than three quarters of the lecturers emphasised the importance of the management providing support such as trainings, and almost half of the participants expressed that they used those tools for modifying questions for students' assessments.

Apart from the studies above, Robinson's (2025) study also revealed that it is crucial for higher education institutions to provide trainings, ethical guidelines, and curriculum development strategies in relation to the usage of generative AI tools for lecturers. Quantitative correlational design was employed by Robinson (2025), who distributed an online questionnaire to 64 lecturers in Seminole State College in Florida. Based on the research findings, it was discovered that perceived ease of use influenced perceived usefulness among the lecturers significantly. This suggested that if lecturers perceived that it is easy to use generative AI tools, they would find those tools useful. However, the findings also showed that there was a negative relationship between perceived usefulness and attitude to use those tools; some lecturers expressed their concern about the pedagogical changes and academic integrity in relation to the implementation of those tools in the higher education field. Therefore, similarly to Abdullah and Mohd (2023) and Lee at al. (2024), Robinson (2025) emphasised that it is crucial for lecturers to attend trainings and receive guidelines on the ethical usage of generative AI tools. This would alleviate lecturers' concerns on the issues related to pedagogical changes and academic integrity in terms of the usage of generative AI tools.

Another research study was conducted by Walter (2024) in relation to lecturers' intentions of utilising generative AI tools. A conceptual discussion paper was written about lecturers' experiences of using generative AI tools in Kalaidos University of Applied Sciences (KFH) in Switzerland. The researcher collected data through informal and unstructured discussion. Based on the findings, some lecturers felt the fear of using generative AI tools incorrectly. Some research participants also shared the same concern that they were not able to guide students how to use those tools properly. As there were no workshops on the usage of generative AI tools or prompt-crafting techniques at that time, they expressed that they were not proficient users. Therefore, similarly to Robinson (2025), Abdullah and Mohd (2023), and Lee et al. (2024), Walter (2024) emphasised that it is vital for lecturers to receive trainings or workshops related to the utilisation of generative AI tools, so that lecturers would become proficient users of those tools. This would result in better work performance of lecturers in the higher education setting.

Mijan et al. (2025)'s revealed that there was a higher level of likelihood of AI adoption among lecturers in private institutions in Bangladesh, as compared to the lecturers in the public institutions. It was also discovered by the researchers that enhanced technological infrastructure is linked to higher AI adoption level among lecturers. Their study highlighted the importance for institutions to navigate challenges such as upgrading IT infrastructure, providing relevant training to academic staff, and establishing budgets for AI research and

development in education institutions. Similarly, a research study conducted by Huma et al. (2025) in Pakistan demonstrated that the faculty staff and administrators from private education institutions showed a greater readiness to adopt AI tools as compared to the staff from public education institutions. Huma et al. (2025) explained that the main constraint for public institutions in Pakistan is the financial and infrastructure resources. Moreover, more flexible administration at private institutions may lead to a higher AI adoption level among staff in private institutions. However, the researchers highlighted that there is a need for the staff in both private and public institutions to receive training to enhance their technical skills in using AI tools.

2.2 Lecturers' Strategies Of Utilising Generative AI Tools

One of the research articles written about lecturers' strategies of utilising generative AI tools was written by Lee and Palmer (2025). They reviewed and analysed 33 research articles on the role of prompt engineering among lecturers in the higher education. Twelve of the articles are case studies, which focused on the applications of prompt-crafting in the higher education sector. Some examples of the applications are assessment design, curriculum design, information retrieval, and informed decision-making.

Lee and Palmer (2025) also discovered that some effective strategies that lecturers applied when utilising generative AI tools are personification technique and active usage of feedback loops. Personification technique refers to stating the role in prompts in order to obtain relevant output (White et al., 2023; Park & Choo, 2024). The usage of feedback loops involves the process of refining prompts to obtain more relevant AI responses. Lee and Palmer (2025) concluded that lecturers who are knowledgeable about the strategies of utilising generative AI tools would be able to maximise the benefits of using those tools for curriculum development and enhancement of teaching strategies.

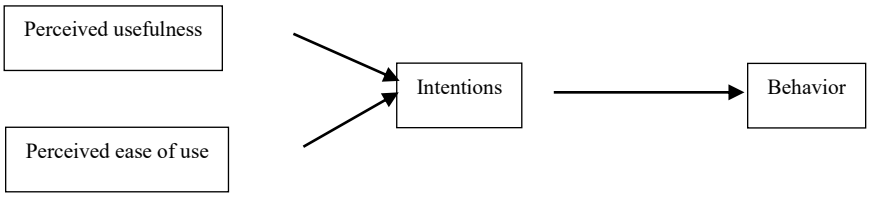
Another article that is related to lecturers' strategies of utilising generative AI tools was written by Eager and Brunton (2023). Similarly to Lee and Palmer (2025), Eager and Brunton (2023) emphasised that lecturers who have knowledge on prompt-crafting would be able to harness the benefits of using generative AI tools. Some effective strategies of utilising generative AI tools are defining the objectives, providing examples and format, including key details in the prompts, and iterating the prompts. Eager and Brunton (2023) explained that the process of utilising generative AI tools would enhance lecturers' critical thinking skills and understanding of their subject matter with respect to the courses that they teach at their institutions.

2.3 Theoretical framework

Technology Acceptance Model (TAM) was applied in this research study. This model was formulated by Fred Davis in the year 1989 (Davis, 1989). He explained that perceived usefulness and perceived ease of use are two variables that determine an individual's behaviour in using a technology. He described 'perceived usefulness' as the belief that a technological tool can be used to improve job performance, whereas 'perceived ease of use' refers to the effortless usage of a technological tool. Based on this model, it is more likely for an individual to use a technological tool if he or she believes that the tool can assist to perform work better, and the benefits of utilising the tool outweigh the efforts required to use the tool.

TAM can be used to explain lecturers' intentions to utilise generative AI tools for their academic work (Amir-Rudin et al., 2025). Lecturers would be more likely to use generative AI tools for their work if they perceive that these tools are useful, and they have the proficiency to use these tools (Kavitha & Joshith, 2025). However, due to some challenges, some lecturers may not fully embrace the idea of utilising generative AI tools (Abdullah & Mohd, 2023). For example, they may lack some knowledge on strategies to craft effective prompts to obtain AI-generated results to complete their academic tasks. Therefore, this study also aimed to explore lecturers' strategies in utilising generative AI tools.

The Technology Acceptance Model (TAM) provided by Burgess and Worthington (2021) is depicted in Figure 1 below:



Note. Technology Acceptance Model (TAM). From *Persuasion Theory in Action: An Open Educational Resource, by G. L, Burgess and A. K. Worthington, 2021, University of Alaska Anchorage.*

Figure 1 Technology Acceptance Model (TAM)

2.4 Research Objectives and Research Questions

The research objectives for this study are:

1. To identify lecturers' perceptions on the usefulness and ease of use of using generative AI tools in a private college.
2. To investigate lecturers' intentions of using generative AI tools for their academic work.
3. To explore lecturers' strategies in using generative AI tools.

The following are the research questions:

1. How do lecturers perceive the usefulness and ease of use of using generative AI tools in a private college?
2. What are lecturers' intentions of using generative AI tools for their academic work?
3. What are lecturers' strategies in using generative AI tools?

■3.0 METHODOLOGY

3.1 Research Design

Qualitative research was employed in this research study. A deeper understanding of a phenomenon could be gained with the use of this method (Lim, 2024). According to Schoch (2020), a case study is a study of a phenomenon in a real-life context. Thus, this study is a case study as the phenomenon is related to the usage of generative AI tools among lecturers in a higher education institution. A private institution in Johor Bahru was selected for this research study. Private higher education institutions may have different institutional characteristics as compared to public higher educations (Mijan et al., 2025). Some examples of institutional characteristics are innovation drive, financial resources, and autonomy in relation to AI integration, as compared to public higher education institutions. These characteristics may shape lecturers' experiences and intentions to use generative AI tools for their work in the long term. Hence, the institution was selected to provide insights related to lecturers' perceptions and practices of AI usage in a private education institution.

3.2 Research Participants

Three lecturers from a private college in Johor Bahru agreed to be research participants. They would be known as S1, S2 and S3 to protect their confidentiality. Purposive sampling method was used for this study. This method requires researchers to select participants based on certain criteria and characteristics (Stratton, 2024). The three participants were from the same department and were teaching business courses. As all the participants had attended a training session on the usage of generative AI tools at their institution, they were selected for this study. Moreover, based on the recommendation by a member of the innovation and technology improvement committee in the college, the three participants were selected because they were active users of generative AI tools among the lecturers in the business faculty. Thus, the lecturers could share their intentions and strategies in using the tools with greater depth.

For ethical reasons, the consent of the management was obtained before the research study was conducted. The three participants also provided their consent to be interviewed for this study. They expressed their consent by providing their signatures on the interview consent forms. The forms stated the participants' rights, and they were informed that they had the right to withdraw from the study at any time.

3.3 Research Instrument

For the purpose of gathering data, semi-structured interview was utilised. This type of interview may be adapted by the researcher based on the direction of the interview (Ruslin et al., 2022). Although the interview questions were prepared based on the research questions before the interview, the researcher added some new questions during the interview to gain deeper insights about the lecturers' intentions and strategies of using generative AI tools. The preliminary interview questions were reviewed by the innovation and technology improvement committee member, who examined the clarity and ability of the questions to elicit detailed responses from the participants. Some improvements were made to the questions before the interviews with the three lecturers. A copy of the interview questions have been appended in the appendix of this article.

3.4 Data Collection and Analysis

The three participants were interviewed individually. The duration of each interview session was between 20 to 30 minutes. The researcher obtained the participants' consent to record the interviews. After the interviews, the responses were transcribed by the researcher for data analysis. During the data analysis process, the researcher invited the participants for follow-up interviews to provide clarifications related to their responses in their initial interviews. The follow-up interviews were also recorded and transcribed for data analysis purpose.

The method that was used to analyse the data was thematic analysis method proposed by Braun and Clarke (2006). According to Ahmed et al. (2025), themes can be identified from the interviews by using this method. Thematic analysis method attempts to identify and interpret themes in research data. By using Braun and Clarke's (2006) six-phase framework, the researcher familiarised with the collected data, generated initial codes, searched for sub-themes and themes, reviewed the themes, and defined and named the themes. The researcher then wrote a report based on the themes identified in the research findings.

■4.0 RESULTS

4.1. Demographic Details Of The Participants

All three participants were from the same department, and they were teaching business courses. The age range of the three participants was between 20 and 30 years old. S1 and S3 acquired masters' degrees, whereas S2 holds a doctorate degree. During the interviews, they expressed that they had used generative AI tools for at least one year and a half.

4.2 Research Findings

The findings of the research would be presented based on the three lecturers' responses. The following themes have been identified based on the research questions.

4.2.1 Research Question 1

The following Table 1 provides the quotes, codes, sub-themes, themes and explanations in relation to TAM for the first research question:

Table 1 The perceptions of lecturers on the usefulness and ease of use of using generative AI tools in a private college

Quotes, codes, sub-themes, themes	Technology Acceptance Model (TAM)
Quotes from the interviews: S1: *"...it's useful considering it has basically cut down a lot of my repetitive task..."* S2: *"I found that AI actually can help to cut down a lot of routine tasks, can help to make your life easier..."* S3: *"...it would be very helpful... to work on admin works... as in we have to doing a lot of paperwork as a lecturer as well like replying emails..."* **Codes:** useful, cut down repetitive tasks, helpful, easier life **Sub-theme:** Improve efficiency **Theme:** Enhance work productivity	All the three respondents perceived the AI tools to be useful. The usage of the tools has reduced their time spent on repetitive, routine and administration tasks. When the lecturers found the AI tools to be useful to complete their tasks, the lecturers would be more likely to use those tools at their college.
Quotes from the interviews: S1: *"I use AI to develop like a lesson plan... additional revision questions for the students..."* S2: *"... planning my content on what to cover and how to deliver the content... when we set questions for exam, or for revision, to get the idea on what type of questions to ask..."* S3: *"... it's very helpful for us to generate a lot of tutorial material..."* **Codes:** lesson planning, questions for tutorial, revision and exam **Sub-theme:** Generate lesson plans and questions **Theme:** Enhance work productivity	The three respondents expressed that the AI tools were used for developing lesson plans, crafting strategies to deliver the class content, and generating questions for tutorials and assessments. The wide range of usage of AI tools enhanced the lecturers' positive perceptions on the usage of those tools, and they perceived that the tools are useful for their work as lecturers.
Quotes from the interviews: S1: *"... it's also easy to use in the sense that... If I need certain information quickly... can be assessed with many many devices..."* S2: *"... it is easy if your goal is to get basic things done... you are beginner user but you plan to use it for advanced usage, then it would be difficult."* S3: *"Yes, it is. But as long as you have to understand that how to structure the prompts, then the more accurate of the outcome..."* **Codes:** easy to use, accessible, basic things done **Sub-themes:** Easy to use for basic usage **Theme:** Perceived ease of use may be different for users of different competencies	All the three respondents perceived the AI tools to be easy to use. However, one participant expressed that the tools may be challenging to use for advanced usage if the users are beginners. The third respondent added that lecturers may need to have an understanding on prompt-crafting in order to use the AI tools with ease. This reveals that perceived ease of use may differ based on the competencies and skills of lecturers. Moreover, this finding recognises the importance of providing professional development support such as training or workshops to lecturers.

4.2.2 Research Question 2

The following Table 2 provides the quotes, codes, sub-themes, themes and explanations in relation to TAM for the second research question:

Table 2 Lecturers' intentions of using generative AI tools for their academic work

Quotes, codes, sub-themes, themes	Technology Acceptance Model (TAM)
Quotes from the interviews: S1: *"I will say I will continue to use... But in the same time, sparingly... not to the point of over-relying on it to do my task... sometimes they may hallucinate or they may misinterpret information."* S2: *"In the long time, I definitely see myself using it... Sometimes there is the issue of overdependency... when the server crashes, then*	The participants expressed that they had the intention to utilise those AI tools in the long term. This is in line with the TAM; users who perceive technological tools to be useful and easy to use would be more likely to use those tools for a long period of time. Moreover, a participant stated that lecturers could not evade from utilising AI tools for work. This may be because as there is an advancement of AI technological tools, more people would use them to enhance their productivity at the workplace.

I become frustrated…" S3: *"I would say absolutely. The AI are really transforming. This is something that we couldn't erm… escape."* **Codes:** continue to use, overdependency or over-relying, couldn't escape **Sub-themes**: Continuous usage without being too reliant **Theme:** Lecturers' intention to use AI tools in the long term with moderation	However, a few participants explained that it is crucial not to be overdependent on those AI tools, which may have some limitations such as hallucination and server crash. This revealed that while the lecturers expressed their intention to use the AI tools continuously for academic work, they were aware of the risks of becoming overdependent on those tools.
Quotes from the interviews: S1: *"…it also gives me better output to students, and students are also able to develop much more critical thinking, rather than just use it as use AI at a surface level. Or basically just memorise the content."* S2: *"Because by definition, the AI tool, it generates something unique and likely it will be original. However, the issue of plagiarism can come up if the AI tool is learning from someone else's source material without proper credit, and then it uses their ideas and then it gives it to the students as an original idea, and the students don't double check and verify that this is an idea…"* S3*: "If you come with your original idea, and then you interact with AI, so that you are trying to polish your idea, you catch up with your idea. All of them, we consider as, oh, it is still your original idea. Yeah, but in the past, we won't say so… you get something from a third party or resources, then this is not yours anymore."* **Codes:** critical thinking, plagiarism, original idea **Sub-themes:** idea generation, academic integrity, originality of work **Theme:** Impact of AI tools on students' academic learning	Some of the respondents also shared their concern about the plagiarism issue in relation to the usage of generative AI tools. They expressed that the usage of generative AI tools to obtain ideas or polish original ideas may not be considered as plagiarism. One of the respondents mentioned that it may be considered as a form of plagiarism if there is no proper credit given to the original contributor of the idea. Another respondent shared a different perspective; his response provided an insight that generative AI tools may be used by lecturers to develop students' critical thinking skills. The responses by the lecturers showed that there may be a need for higher education institutions to establish policies or provide trainings on the ethical usage of AI tools for lecturers. This would provide clarity to lecturers on how they should guide students on utilising generative AI tools to complete assessments, while still upholding the academic integrity in higher education. Moreover, lecturers may need to learn how AI tools may be used to enhance students' critical thinking skills in solving problems for class activities or assessments.

4.2.3 Research Question 3

The following Table 3 provides the quotes, codes, sub-themes, themes and explanations in relation to TAM for the third research question:

Table 3 Lecturers' strategies in using generative AI tools

Quotes, codes, sub-themes, themes	Technology Acceptance Model (TAM)
Quotes from the interviews: S1: *"…to give it a role… what kind of output I expected. In what format should it be? And then I will also include examples… I will give it my context."* S1: *"… it takes about 5 minutes of trial and error before I can get the final output I need."* *S2: "… either by re-prompting, or by editing the prompt, or by giving it a direction, or more specific direction…"* S2: *"… you have to trial and error, and then you modify it."* S3: *"So if you would like to have different of a format… you want to input as a table. But if doesn't mention it, so still they will give you point form."* S3: *"So first of all, you really have to express yourself very clearly... If not, then you have to trial and error…"* **Codes:** role, format, context, direction, trial and error **Sub-themes**: Strategies of using generative AI tools **Theme:** Adoption of generative AI tools in higher education	As the lecturers expressed their intention to use generative AI tools in the long term, they were asked about their strategies to use those tools. All the participants expressed that it is crucial to provide the AI tools with the role, context, format or direction in the prompts related to the responses that they seek. Moreover, the lecturers stated that their usage of AI tools involved trial and error when giving prompts to those tools. This showed that the lecturers were willing to spend time interacting with those AI tools while obtaining the AI responses for their work purpose in the higher education. This is because they recognised the usefulness of generative AI tools, and they were willing to spend time or effort in crafting their prompts on AI tools.

■5.0 DISCUSSION AND RECOMMENDATION

The first research question sought to explore the lecturers' perceptions on the usefulness and ease of use of utilising generative AI tools. All three participants expressed that the tools are useful and easy to use. The tools were mainly utilised for completing administrative tasks, crafting lesson plans, and generating tutorial and assessment questions for students. This finding aligns with the findings revealed through the research studies conducted by Abdullah and Mohd Zaid (2023) and Robinson (2025); lecturers in higher education institutions found that generative AI tools are generally useful and easy to use.

However, a few participants in this research study added that the tools may be more challenging to use for beginner users if the tools are utilised for advanced usage. This highlights the need for professional development efforts that focus on enhancing lecturers' skills in utilising generative AI tools to maximise the benefits of using those tools. As highlighted in the studies conducted by Lee et al. (2024), Walter (2024) and Robinson (2025), it is vital for institutions to provide trainings and workshops on the usage of generative AI tools for lecturers, especially if they are less proficient users. When lecturers in higher education institutions have the right skills to use those tools effectively and efficiently, they would be able to enhance their productivity and focus on improving students' achievement of learning outcomes. Besides, the findings of this study provided additional insights into TAM that the perceived usefulness and ease of use of AI tools may not be understood solely by evaluating lecturers' ability to utilise the tools for their academic work; the usefulness and ease of use of AI tools may be competence-dependent. Hence, lecturers may find the AI tools are useful and easy to use if they have relevant prompting skills for completing their academic tasks at the workplace.

The aim of the second research study was to investigate lecturers' intentions of using generative AI tools for their academic work. All the three participants expressed that they had the intention to utilise those tools in the long term. However, two of them shared a concern that while the tools are useful for completing their tasks such as developing lesson plans and preparing questions for students, they might become over-dependent on those tools if they did not use them sparingly. This is in line with the study conducted by Abdullah and Mohd Zaid's study (2023); some lecturers in the higher education felt concerned that they might become over-reliant on generative AI tools for their work. Lecturers may feel worried that this may lead to a loss of critical thinking skills or compromise ethical standards in higher education setting. This is in line with Robinson's (2025) research findings, which revealed that some lecturers were concerned about eroding academic integrity if they utilise generative AI tools for their work.

The respondents in this study also remarked that students may not verify the accuracy of the AI-generated output. Students may also rely on AI tools to obtain ideas without acknowledging the usage of AI tools for their assessments. Thus, it may be necessary for higher education institutions to provide trainings or workshops on proper and responsible usage of generative AI tools for both lecturers and students. This would reduce the anxiety level among lecturers, who may have concerns about academic integrity or over-reliance in relation to the usage of those tools. In relation to TAM, this finding provides an insight that although lecturers may perceive AI tools to be useful and easy to use, this does not eliminate their concerns on over-dependence on those tools. Therefore, the positive perceptions of usefulness and ease of use of AI tools among lecturers may co-exist with their concerns about responsible and ethical use of those AI tools.

The third research study aimed to investigate lecturers' strategies in utilising generative AI tools for their work at the higher education institution. Based on the interviewee's responses, they utilised some strategies in order to obtain relevant AI output that would assist them to complete their work. Some techniques that they used were stating roles in the AI input, providing the desired context or format, or giving more details in their prompts. A few lecturers also explained that they may need to refine their prompts through trial and error. These strategies were also highlighted in the research articles written by Eager and Brunton (2023) and Lee and Palmer (2025); some of the recommendations are specifying roles, providing details such as settings and styles, and reiterating AI prompts. Based on this research study, it was found that the three participants are familiar with the strategies to obtain relevant responses from AI generative tools that would assist them with their work. It was also noted that the participants were willing to spend time and effort on obtaining better output from generative AI tools because they acknowledged the usefulness of those tools. Based on this research finding, it is recommended that lecturers in higher education institutions are provided with more support, such as trainings and resources, that highlight some effective strategies that lecturers may use to enhance their productivity in the higher education field.

■6.0 CONCLUSION

In this era of rapid technological advancement and innovation, it is vital for lecturers to embrace the idea of utilising generative AI tools in higher education institutions. Lecturers who are competent and confident with the usage of those AI tools would be able to complete their academic and administrative tasks efficiently. This research study aimed to identify lecturers' perceptions on the usefulness and ease of use of generative AI tools in a private college in Johor Bahru. Moreover, the lecturers' intention to use those tools in the long term, and their strategies of their usage were also investigated in this study.

Based on the findings of this qualitative case study, it was discovered that all the three lecturers agreed that generative AI tools are useful and easy to use, especially for tasks related to planning their lessons and preparing questions. They also stated that they were planning to use those tools in the long term. Some strategies that they provided in relation to the usage of those tools are specifying roles, providing more details, and identifying the required format or style in the AI prompts. However, a few participants expressed their concern of becoming over-reliant on the usage of those tools for their work. One participant expressed that the tools may be challenging to use for more advanced or complex usage. This highlighted the need for higher education institutions to provide continuous professional development in relation to the usage of AI tools for lecturers. This would provide the necessary digital skills to the lecturers, who may also guide their students on the effective and responsible usage of generative AI tools in the future.

In relation to TAM, the ease of use and usefulness of AI tools may depend on the competency of lecturers utilising those tools at their workplace. Moreover, lecturers may perceive those tools to be useful and easy to use, but this does not remove their tension that they may become overdependent on those tools. Hence, lecturers may still perceive AI tools to be useful and easy to use, while exercising caution so that the usage of these tools augment their decision-making and problem-solving skills, instead of replacing these essential

human skills. Educators in the higher education may also have a crucial role to play by ensuring that their students use the AI tools ethically and responsibly, and at the same time, their students' critical thinking skills are enhanced and not eroded by the usage of the tools.

There are a few limitations in this study. Firstly, the age range of all the research participants is between 20 to 30 years old. Thus, their experiences and views related to the usage of generative AI tools may not reflect the perceptions of lecturers in the other age ranges. Therefore, it is recommended that lecturers whose age is more than 30 years old may be invited to participate in a future research study. In relation to this recommendation, the diffusion of innovation theory proposed by Everett Rogers could be applied for this proposed research study. Moreover, due to time constraint, only three lecturers from the same faculty were interviewed in this study. All the participants were from the business department. This would limit the ability to generalise the result findings to the lecturers in the other faculties in the institution. Therefore, another recommendation for future research endeavour is lecturers from different faculties, especially in STEM (science, technology, engineering, and mathematics) specialisation, may be involved as participants for future research studies. A comparison that focuses on the usage of AI tools among lecturers from non-STEM and STEM fields may be studied further in the future. The research finding would shed light to academicians and administrators on the effective usage of generative AI tools that would help students to achieve learning outcomes for different fields of study.

In relation to the research topic, a potential research topic may focus on the institutional policy related to the plagiarism concerns of lecturers, particularly towards students' assessments. This was highlighted by some of the research participants in this study. Moreover, there may also be a need to study AI-based curriculum, as more students adopt AI tools in completing their assessments. Lecturers may need to equip students with the digital skills to use AI tools ethically and responsibly, as these skills would be transferrable to the students' future careers. When students are guided on the effective and ethical usage of AI tools, they would become competent users in using those tools to execute tasks at their future workplaces.

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Conflicts of Interest

The author(s) declare(s) that there is no conflict of interest regarding the publication of this paper

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Appendix

Questions about respondents' profiles:

1. What is your age range?
2. What is your educational background?
3. What is your subject area?
4. How long have you used generative AI tools in your teaching practice?

Interview questions:

1. Can you please share why you intended to use generative AI tools as a lecturer?
2. Which AI tools that you have used in your teaching practice? Why did you select these AI tools?
3. What types of tasks that you use AI tools for in your teaching practice?
4. Can you describe your initial feelings or thoughts at the idea of using generative AI tools for your teaching practice?
5. Do you find generative AI tools useful?
6. Do you think that the generative AI tools are easy to use?
7. Does the usage of generative AI tools improve your teaching practice?
8. Has the usage of generative AI tools enhanced your work as a lecturer?
9. Can you describe your experiences of using prompts in generative AI tools to create educational content for your teaching practice? Are your experiences generally positive or negative, and why?
10. How accurate were the AI tools (in response to your prompts) in generating output and suggestions?
11. Did the AI tools understand your prompts, or on average how many prompts that you need to get your desired responses?
12. How long does it take in order to obtain the desired responses?
13. Did you have a specific strategy for crafting these prompts to obtain the outcome that you wanted?
14. Do you have the intention to use generative AI tools in the long term? Why, or why not?
15. How has your experience of using generative AI tools and prompts influenced your attitude towards the usage of generative AI tools in education?