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# PERSONALIZED APPLICATION OF CHATGPT IN BUILDING ADMINISTRATIVE ASSISTANTS FOR UNIVERSITY STUDENTS

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## ABSTRACT

*This study investigates the application of ChatGPT personalization in the development of administrative assistants for university students. With the increasing complexity of administrative tasks and growing student numbers, there is a need for effective and personalized solutions. ChatGPT, with its advanced natural language processing capabilities, offers a promising method for providing accurate, timely, and personalized support. We implemented a personalized ChatGPT system to assist students with various administrative tasks and conducted a survey with 76 students to evaluate its effectiveness. The results showed that 65.8% of students found the ChatGPT assistant easy to use, and 54% rated the information provided as accurate and useful. Additionally, 44.7% of students reported that the system saved significant time and effort, demonstrating the effectiveness of the system.*

*While feedback was positive, the study also identified some areas for improvement, such as increasing personalization, improving response times and ensuring greater accuracy of information. These findings indicate that although the ChatGPT assistant is effective, continuous optimization is needed to fully meet student needs. In conclusion, personalized ChatGPT-based administrative assistants have the potential to significantly improve administrative support for college students. However, there is a need to continue improving data accuracy, personalization, and user experience. This research provides valuable insights into the application of AI in education, contributing to the development of more efficient and personalized administrative solutions.*

**KEYWORDS:** *Chatbot AI, ChatGPT, Administrative assistant, University students, AI personalization*

## INTRODUCTION

University students often encounter many difficulties in carrying out administrative procedures, from registering for courses, paying tuition, to finding information about relevant regulations and support services. . These activities not only take a lot of time but also reduce satisfaction with the quality of the university, especially for new students or those who are unfamiliar with the university's administrative system. The complexity of administrative processes and lack of timely support can lead to students missing out on learning opportunities, missing tuition payment deadlines, or having difficulty tracking their academic progress. .

In addition, university administrative departments often face great pressure in handling a series of requests from students. This not only reduces staff productivity but also affects the quality of services provided to students. The development of technology and artificial intelligence, especially AI chatbot systems such as ChatGPT, offers great potential in improving administrative support efficiency. Building a virtual assistant can help address students' needs for consultation and direct guidance more quickly and accurately, reducing the workload for administrative staff and enhancing the student experience. student.

In this study, we evaluate the personalization capabilities of ChatGPT, especially when deployed through the ChatGPTs tool, which opens up great potential for improving administrative support for college students. ChatGPTs

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allow users to customize virtual assistants to their specific needs, ensuring that students receive feedback and support tailored to their individual situations.

By building a separate AI chatbot to act as an administrative assistant for students through ChatGPTs, universities can provide documents and training for ChatGPT to establish instructions for administrative procedures such as instructions. Use the training system, training programs allocated for each semester, semester registration process, tuition payment process, and provide information on regulations, policies as well as school services quickly and accurately. Furthermore, with the ability to learn from provided data and interaction history, the school's administrative virtual assistant can provide suggestions and reminders, helping students not miss important deadlines and Choose modules that suit their learning goals.

Personalization also helps increase student satisfaction by providing 24/7 support, reducing stress and enhancing user experience. Students will feel better supported and be able to focus on their studies and personal development without being interrupted by administrative issues. For schools, using customized administrative virtual assistants helps optimize management processes, reduce the workload of administrative staff and improve operational efficiency.
Thanks to the personalization potential of ChatGPTs, the application of this technology not only brings direct benefits to students but also contributes to building a smarter and more effective learning environment.

## LITERATURE REVIEW

Personalization of ChatGPT application to build administrative assistant for college students has been widely studied from various perspectives. Studies show ChatGPT's potential to enhance user experience through advanced natural language processing and large language modeling (LLM) capabilities.

Abdullah et al. (2022) highlighted the development of ChatGPT, an advanced NLP model that can support conversational AI applications such as virtual assistants and chatbots, and discussed the model's potential and social impact This. Another study by Jungherr (2023) discussed the challenges and opportunities of using LLMs like ChatGPT in academic assignments, along with guidelines for responsible use.

Li (2023) conducted a systematic review of the literature related to the application and impact of ChatGPT, highlighting the need for interdisciplinary research and customized integrations to address existing concerns and ensure responsible use of AI. Additionally, the study by Romero-Rodríguez et al. (2023) explored student acceptance of ChatGPT, showing that factors such as experience, performance expectations, hedonic motivation, and habits all influence intention to use the tool This.

A preliminary study of ChatGPT in personalized news recommendation was conducted by Li et al. (2023). This research focuses on three aspects: personalized news recommendation, news provider fairness, and fake news detection. In the context of consumption, Paul et al. (2023) discussed the potential benefits and risks of ChatGPT, providing a series of future research ideas in the fields of consumption and marketing.

Overall, personalizing ChatGPT to support administrative procedures for university students not only helps students quickly access information and process information effectively, but also improves the quality of operations. school management, moving towards forming a smart university in the near future.

## OBJECTIVES OF THE STUDY

The goal of the research is to survey and evaluate the applicability of ChatGPTs in building the university's own administrative assistant for students. The research will focus on developing a virtual assistant system based on ChatGPTs, capable of providing automated support for diverse administrative procedures. Specific objectives include designing and implementing the system, evaluating effectiveness and acceptance by students and schools, and recommending improvements to optimize the system in the future.

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## RESEARCH METHODS

This study will use an experimental research method to evaluate the effectiveness of administrative virtual assistants on college students. Specifically:
- Research subjects: University students of Vietnam-Hungary University of Industry, Vietnam.
- Research method: Using an online survey to collect students' opinions about administrative virtual assistants. Questions in the survey will be built based on goals and important factors related to the usage experience.
- Design virtual assistant: Use ChatGPTs to build an administrative virtual assistant for the university, meeting the information needs of students.

## RESEARCH IMPLEMENTATION PROCESS

- Step 1: Build an administrative virtual assistant based on ChatGPTs and train with data from school documents and administrative processes.
- Step 2: Develop an online survey for students.
- Step 3: Collect data from the survey and analyze the results.
- Step 4: Evaluate the effectiveness of the virtual assistant based on students' opinions and feedback from the survey.

**Process of building and personalizing the ChatGPT assistant system**

1. Data collection: Collect university documents, instructions, and administrative processes to use as training data for virtual assistants. The data also includes documents from students such as frequently asked questions and support requests.
2. Model training: Use collected data to train the ChatGPTs model. The model is refined to understand and generate responses appropriate to the administrative context of college students.
3. Test and Adjust: Conduct tests and adjustments to ensure that the virtual assistant operates correctly and effectively. Adjustments are made based on user feedback and system performance data.
4. Deploy and evaluate: Deploy the virtual assistant into a real environment and evaluate its effectiveness. Collect opinions and suggestions from users to improve the system during actual use.

## RESEARCH RESULTS AND DISCUSSION

During our research, we deployed the personalized ChatGPT administrative assistant to assist university students with administrative procedures. A brief survey was conducted on 76 students to evaluate the effectiveness of this assistant system. The results of the survey are analyzed as follows:
The ease of use of ChatGPT administrative assistant is evaluated quite positively. Of the 76 students participating in the survey, 20 students (26.3%) thought that ChatGPT administrative assistant was easy to use, and 30 students (39.5%) rated it as easy to use. Thus, a total of 65.8% of students feel satisfied with the ease of use of the system. However, 15 students (19.7%) said that the level of use was only average, while 8 students (10.5%) had difficulty and 3 students (3.9%) rated that the system was very difficult. use. These results show that although the majority of students felt the system was easy to use, a small percentage still had difficulties that needed to be overcome.

Regarding the accuracy and usefulness of the information provided by the ChatGPT administrative assistant, the survey results also showed high appreciation from students. There were 25 students (32.9%) who rated the information as very accurate and useful, and 16 students (21.1%) rated the information as very accurate and useful. In total, 54% of students appreciated the accuracy and usefulness of the information. On the other hand, 20 students (26.3%) thought the information was only average, 10 students (13.2%) felt the information was less accurate and useful, and 5 students (6.6%) thought the information was very little accurate and useful. This shows that although the majority of students are satisfied, there are still some students who encounter problems with the accuracy and usefulness of information, requiring improvement.

The effectiveness of ChatGPT administrative assistant in saving time and effort is also evaluated quite well. Specifically, 22 students (28.9%) thought that administrative assistants helped save a lot of time and effort, and 12 students (15.8%) rated it saved a lot of time and effort. In total, 44.7% of students appreciated this effect. However, 22 students (28.9%) only rated it at an average level, 12 students (15.8%) thought that the assistant helped save little

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time and effort, and 8 students (10.5%) thought that the assistant Reasoning helps very little. This shows that although ChatGPT administrative assistant has achieved certain effectiveness, it still needs to continue to improve to increase efficiency in saving time and effort for students.

Regarding the level of personalization of ChatGPT administrative assistant, 24 students (31.6%) said that the level of personalization was high, and 12 students (15.8%) rated it very high. In total, 47.4% of students were satisfied with the level of personalization. However, 20 students (26.3%) only rated it as average, 14 students (18.4%) rated the level of personalization as low, and 6 students (7.9%) rated it very low. These results indicate that although the level of personalization has been positively evaluated by students, there are still a number of students who feel they are not really satisfied and need further improvement.

Finally, system improvement suggestions from students showed that 35 students (46.1%) had suggestions for improvement. Of these, 12 students suggested improving information accuracy, 8 students wanted to increase personalization features, 6 students suggested increasing response speed, 5 students wanted to improve the user interface. used and 4 students had other suggestions. This indicates that although the system has achieved many successes, there are still aspects that need to be improved to better meet the needs of students. The number of students without suggestions for improvement was 41 (53.9%), indicating that a large portion of students were satisfied with the current system.

Overall, the survey results show that ChatGPT administrative assistant has achieved certain effectiveness in supporting students, but there are still many aspects that need to be improved to optimize the user experience.

## SUGGESTION

To improve the effectiveness of the ChatGPT administrative assistant, several important improvements need to be made. First, data collection and processing need to be optimized to ensure the information provided is always accurate and up to date. Increase personalization by learning from student interactions and tailoring recommendations to individual needs.

In addition, the user interface needs to be redesigned to become more user-friendly and easy to use. Integrating the ChatGPT administrative assistant into the university's existing information systems also needs to be done smoothly to ensure seamlessness during use.

Finally, continuing to gather feedback from students and administrative staff, homeroom teachers, or academic advisors will help identify problems and make timely improvements. These developments not only help improve the efficiency of the ChatGPT administrative assistant system but also contribute to improving the learning and living experience of students, thereby improving the quality of university education.

## CONCLUSION

This study implemented and evaluated the effectiveness of the personalized ChatGPT administrative assistant system in supporting college students. A survey of 76 students showed that the majority of students appreciated the ease of use, accuracy, and usefulness of the information provided by the assistant. Specifically, 65.8% of students thought the system was easy to use, and 54% of students rated the information provided as accurate and useful. Furthermore, 44.7% of students feel the system effectively saves time and effort.

Despite the positive results, the study also shows that there are many areas that need improvement. Some students had difficulty using the system and felt that the level of personalization did not meet expectations. Suggested improvements include increasing information accuracy, enhancing personalization, increasing response speed, and improving the user interface.

These results point to the great potential of applying personalized AI technology such as ChatGPT in administrative assistant systems. However, to optimize user experience and better meet student needs, continuous improvement and improvement of the system is necessary. This research contributes to providing a theoretical and practical basis for the

application of AI in education, while also opening up new research directions to develop smarter administrative support solutions in the future.

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