

An Improved Structure for Academic Information Services through AI Chatbots

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Abstract

Academic information service is the most critical factor that must be considered in a university. Service quality is an important indicator affecting all academics' satisfaction and loyalty. Improvement of information services on campus has been a lot of research focusing on academics. Meanwhile, the software aspect has received less attention. Researchers have previously discussed information service frameworks but have not accommodated future needs. Software that must be considered can quickly respond to the user, one of which is a chatbot. Chatbots can be used to solve problems related to question-and-answer services, especially for academic institutions that do not have specific resources to handle this work. With chatbots, redundant user questions can be handled automatically. Chatbots are increasingly being offered as an alternative source of customer service. For a user to use a chatbot for this purpose, the user must trust the chatbot to provide the necessary support. To overcome this knowledge gap, a framework can integrate software, stakeholders, and academics in higher education. Therefore it is necessary to conduct new research to help answer future needs.

Keywords: AI chatbot, reliability, academic services, technology influence, artificial intelligence conversations, framework

1. Introduction

Currently, most universities use a web information system to convey information related to student registration information, academics, scholarships, tuition fees, and others. In terms of educational services, of course, universities need to provide the best service so that the campus academic community, the community get satisfaction with the services provided. To get satisfaction from the community and the campus academic community, besides the quality of education and buildings, universities must also provide consulting and information services for the community and campus academic community. The use of web-based information service systems and social media is one of the facilities that is often used to meet information needs.

Along with the increasing development of web technology, there have been many recent innovations in website development. Various services are used to serve campus academic needs, such as using the telephone, chatting, and others. All of these services aim to communicate between the campus and the community outside and within the campus. The rapid development of computer-based information technology has made many changes in human life, one of which is Artificial Intelligence technology. With AI technology, computers can perform specific tasks like humans, one of which is a chatbot. A chatbot is a system that adopts knowledge like human nature. So that computers can have the ability to understand conversations with users using natural language. Chatbot technology is beneficial when applied in education, especially in universities. This aims to serve or answer questions from students and prospective students. This chatbot technology can also improve the quality of service and

increase the attractiveness of prospective students to register at the university.

Academic leaders are stressed by the increased workload and amount of academic information demands on campus. The increase in students in each study program, as well as plans for more study programs, causes academic staff to become exhausted and sluggish to work because they are unable to deliver timely and suitable services to students and the academic community. A service that provides educational information to students, such as course schedules, study plans, study results, student data, processes, and other administration, is known as an academic information service. [1]. Academic information must be obtained from the Academic and Student Administration area of the institution. There is also another option, which is to access instructional websites, so students do not need to go to campus. [2]. Academic services provided through the website have been operational for some time, but they are still not practical or effective. [3]. Because there are several stages that students must go through on the website in order to access this information, such as logging in and then selecting the menus provided, such as study plans, study results, and others. Furthermore, the interface that appears has been unable to adapt to devices and technology platforms that have emerged on mobile phones and tablets [4]. When selecting menus or available links, students struggle and make mistakes [5]. Along with the development of web technology [6], there are many innovations in website development [7]. Academic services, such as telephone use, chat, and others, are used today. All of these types of services aim to communicate between the campus and the community outside and inside the campus, but each has its limitations.

In terms of academic services, universities must provide the best service [8], so that the campus academic community and the community get satisfaction with the services offered [9]. The author has an idea to overcome the above problems

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