Initiative AI Chatbox

FOR THE ACTIVE STUDENT

February 29th 2024



Introduction

In an era where digitization plays an increasingly important role in our society, it offers boundless opportunities for progress and development. As a university, we stand at the forefront of this digital transformation, recognizing its potential to enhance our mission of education, research, and societal engagement. The Tilburg University website is one of the primary sources of information, serving our current students and staff while also acting as the face for potential new students and employees. Therefore, it is crucial that information is easily and quickly accessible.

Currently, we often hear from students that the website is confusing and requires many steps to find the right information. From experience, we know that the search bar on the website does not function optimally as it is linked to Google.¹ In an effort to make information retrieval easier, we have explored the possibilities of an Al-driven Chatbox. This innovative tool acts as a virtual assistant, enabling users to quickly and efficiently find answers to their questions.

Proposal

The purpose of the chatbox is to lower the barrier for asking questions. Currently, contacting Tilburg University is possible through a contact form that requires several questions to be filled out beforehand, increasing the threshold to ask a question. Additionally, it takes approximately three working days to receive an answer. If the student's question is not fully answered or if they have a follow-up question, it takes additional time.

^{1.} See appendix 1



With the current advancements in AI, the existing contact form is outdated. Students, especially potential ones, want quick answers.² An AI Chatbox can provide a solution to this.

In cases where a question becomes too complex or requires personal advice, the user will be directed to the appropriate contact person or the student desk. Therefore, the chatbox will not replace the student desk but will complement the current information channels. The student desk is only open on Monday, Tuesday, and Thursday between 10:00-16:00. The phone number is only available on weekdays between 10:00-15:30.³ The chatbox can provide users with information when other support lines are not available, thus improving information provision on the website.

Motivation

The AI Chatbox not only makes it easier for students and staff to find information but also for potential new students. New students can easily ask their practical questions. If the information they seek is easily accessible, it might increase their choice to study at Tilburg University. Currently, questions can be asked via a contact form, but it often takes at least three working days to receive a response. With the current developments, a three-day response time is relatively long when questions can be answered more quickly. When a student is looking for a university to study at, information provision can play a decisive role. With increasing competition from other universities, Tilburg University can gain an advantage in this.⁴

^{2.} Dijksterhuis, H., Kengen, M., & Bos, I. (2013). Nieuwe generatie, oude vormen: Hoe young potentials willen leren, p. 11. https://www.kimteamontwikkeling.nl/wp-content/uploads/Hoe-young-potentials-willen-leren.pdf

https://www.kimteamontwikkeling.nl/wp-content/uploads/Hoe-young-potentialswillen-leren.pdf

^{3.} https://www.tilburguniversity.edu/nl/studenten/student-desk

^{4.} Strategie op weg naar 2027. (januari 2022). Tilburg University.

https://www.tilburguniversity.edu/nl/over/bestuur-en-beleid/strategie



Furthermore, the pace of technological development is very high. As Tilburg University, we should try to keep up with these developments to avoid falling behind other universities. With digitization as one of the pillars of Front, we see the importance and necessity of this. The Chatbox would be a step in the right direction towards modernizing our university.

Moreover, the Chatbox increases accessibility for students with support needs. Not all students are able to physically come to campus due to illness or other personal circumstances. To adequately support them when they have a question, the Chatbox offers possibilities to answer questions remotely at any time of the day.

Lastly, language proficiency can be a challenge in our diverse university environment. An AI Chatbox can support multiple languages, effectively assisting students with different backgrounds, contributing to an inclusive learning environment.

Conclusion

Through this AI driven Chatbox, we can not only improve the accessibility of our university information but also enrich the user experience and provide the support necessary to enhance the success and engagement of our community. Digitizing our services is not only a step forward in terms of efficiency and effectiveness but also a step forward in remaining relevant in a rapidly changing environment. For these reasons, we would like to ask the Executive Board to explore the possibilities of implementing an AI-driven Chatbox on the Tilburg University website.



Other relevant sources on the operation of AI driven Chatboxes at universities

Lalwani, T., Bhalotia, S., Pal, A., Rathod, V., & Bisen, S. (2018). Implementation of a Chatbot System using AI and NLP. International Journal of Innovative Research in Computer Science & Technology (IJIRCST) Volume-6, Issue-3. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3531782

Yang, S., & Evans, C. (2019, November). Opportunities and challenges in using AI chatbots in higher education. In *Proceedings* of the 2019 3rd International Conference on Education and E-Learning (pp. 79-83). \rightarrow par. 4.3 <u>https://dl.acm.org/doi/pdf/10.1145/3371647.3371659</u>



Appendix 1: website connection to Google

Zoeken



Studentenportal

Krijg ik mijn geld terug als ik in januari start en mij voor de zomer uitse ×

Q

About 10 results (0.18 seconds)

Tilburg University Een rechtsvergelijking tussen de Nederlandse en ...

research.tilburguniversity.edu > files > 2018_05_01_Definitief_Pr...

File Format: PDF/Adobe Acrobat

31 Mar 2018 ... De wortels van onze huidige winstbelasting van lichamen (net als overigens die van de inkomstenen loonbelasting) gaan terug naar de Duitse ...

Archief tips van de maand | Tilburg University Tilburg University) advies) archief

ing University (advies) archief

Zondag 19 januari zai Chiara van Voorst in gesprek gaan over Mijn identiteit als mens. ... Als deelnemer aan de digitale retraite krijg je een dagelijkse e-mail ...



Invoeren in Vieren: Ritueel liturgische Strategieën

research.tilburguniversity.edu > files > Dun_Invoeren_07-12-2011

File Format: PDF/Adobe Acrobat



7 Dec 2011 mij gestelde vertrouwen. Met de publicatie van deze studie beschouw ik mijn onderzoeksopdracht als afgerond. Mijn dank geldt vooral ook mijn ...

Tilburg University Jaarverslag 2021

annualreports.tiburguniversity.edu > media > tiburg_university_j...

File Format: PDF/Adobe Acrobat



online of op de campus) maakt mijn werk als docent afwisselender. ... Hopelijk ervaart Zainab minder praktische en internetproblemen als ze terug is in Tilburg.



Appendix 2: sample questions that can be posed to the AI Chatbox

- I want to go on an exchange, where can I find more information?
- How do I arrange my internship?
- Is it possible to do 2 pre-masters at the same time at Tilburg University?
- When can I take a 3rd resit if I want to graduate this year but did not pass 1 subject?
- Where is LIS support located?
- How do I organise my course schedule?
- How do I contact the marketing department?
- How do I link my university schedule to my regular schedule?
- How does the enrollment process work for new students?
- Can you tell me more about the support for international students?
- Are there special programs for students with special needs or disabilities?
- Is there a vacancy available for position X?
- I am looking for an expert on topic x, who are they?
- Can you tell me more about the areas of study and programs available?
- What are the admission requirements for this university?
- I am having problems with my study progress, who can I contact and how?
- Are there side job opportunities for college students?
- I am having problems with my login information, who should I contact?
- When is the deadline for master applications? (If I want to start in February?)

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