

SECP 1513 : TECHNOLOGY AND INFORMATION SYSTEM 2023/2024

SECTION: 04

LECTURER'S NAME: Ts. Dr. Muhammad Iqbal Tariq bin Idris

GROUP'S NAME: Tech Titans

GROUP LEADER: Samin Sarwat

STUDENT'S DETAILS:

- 1. Samin Sawat (A22EC4040)
- 2. Mariam Hanif (A22EC4034)
- 3. Mohammad Areeb (A22EC4035)
- 4. Ahmad Razan Alkhawarizmi (A22EC4024)
- 5. Ainnur Ashikin binti Asdar (A23CS0208)
- 6. Choong Chee Wah (A23CS5004)
- 7. Muhammad Nabil Kindangen (A22EC4038)

INTERVIEW

1. Do you have any experience in the medical industry, especially in roles related to medical technology and AI solutions?

Ans: Yes, currently I am working as a director in one the largest pharmaceutical companies in Bangladesh. And for Ai technology I have a little knowledge as we are planning to integrate Ai to check for basic symptoms regarding flu, cold for now.

2a. If yes, Can you provide an overview of your experience in medical industry related AI solutions?

Ans: Basically, Ai in the medical industry is quite difficult to implement as it is very sensitive, one wrong decision could end the life of others. So for our experience we have to train our AI model with a lot of data to make it more improved in a way we want. So, for us implementing AI is just training it more and more so that it can analyze the basic symptoms of a disease easily.

2b. If not, Can you share your understanding of the medical industry and your thoughts on how your skills and experiences, even outside the healthcare sector, could contribute to the successful integration of medical technology and AI solutions for basic disease management and first aid?

Ans: While I have practical experience in the medical industry, my extensive background as a director in one of the largest pharmaceutical companies in Bangladesh has equipped me with valuable insights into complex organizational structures, regulatory compliance, and the importance of precision and accuracy in decision-making. My leadership role involves managing diverse teams, strategic planning, and ensuring operational efficiency, which are transferable skills that can contribute to the successful integration of medical technology and AI solutions. I believe my experience in overseeing large-scale projects and navigating regulatory landscapes can be leveraged to facilitate the seamless integration of AI into healthcare solutions, especially in the context of basic disease management and first aid.

3. Can you share examples of successful AI-assisted healthcare solutions you have implemented or overseen in the past?

Ans: While I haven't directly overseen the implementation of AI-assisted healthcare solutions, my current role involves planning to integrate AI for analyzing basic symptoms of diseases like flu and cold. We are in the initial stages of exploring the potential applications of AI in our pharmaceutical company. However, I am actively engaged in steering our organization towards adopting innovative technologies, and I am committed to ensuring the successful implementation of AI solutions in the healthcare domain.

4. What do you think are the most significant challenges and opportunities in integrating AI solutions into basic disease management and first aid?

Ans: The primary challenge lies in the sensitivity of medical data and the need for utmost accuracy in AI predictions, especially in basic disease management and first aid. Ensuring the privacy and security of patient information is paramount. Additionally, a significant opportunity lies in the potential for AI to enhance diagnostic accuracy, speed up decision-making processes, and improve overall healthcare outcomes. Leveraging AI can lead to more efficient resource utilization, cost-effectiveness, and broader accessibility to healthcare services.

5. How would you develop an AI into our company's healthcare solutions, particularly in the context of basic disease management and first aid?

Ans: I would initiate a comprehensive assessment of our current healthcare infrastructure, identifying specific pain points and areas where AI could add significant value. Collaborating with medical professionals, data scientists, and technology experts, I would establish a robust training dataset for the AI model, ensuring it is tailored to the unique requirements of basic disease management and first aid. Continuous monitoring and refinement would be key, and I would foster a culture of innovation within the organization to encourage ongoing improvements in our AI-assisted healthcare solutions.

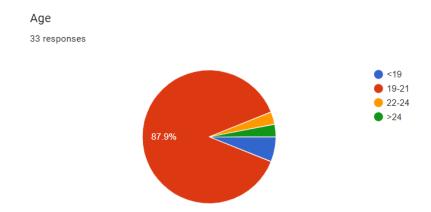
6. What strategies do you employ to identify and mitigate potential risks associated with AI-assisted healthcare solutions?

Ans: Identifying and mitigating risks associated with AI-assisted healthcare solutions involves a proactive approach. Regularly assessing data security measures, ensuring compliance with industry regulations, and conducting thorough testing and validation of the AI model are essential steps. Additionally, fostering transparent communication with stakeholders, including healthcare professionals and patients, is crucial. Developing contingency plans and staying informed about emerging risks in the healthcare and AI domains are strategies I employ to minimize potential challenges.

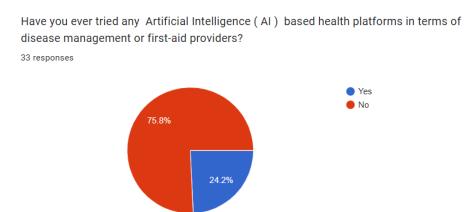
7. How do you inspire and lead a multidisciplinary team working on AI-assisted healthcare projects?

Ans: Leading a multidisciplinary team on AI-assisted healthcare projects requires a collaborative and inclusive approach. I believe in fostering an environment where team members feel empowered to share ideas and perspectives. Clear communication of project goals, providing continuous learning opportunities, and recognizing individual and collective achievements are key motivators. I encourage a culture of innovation and problem-solving, ensuring that each team member understands their unique contribution to the overall success of the project. By promoting a sense of shared purpose and accountability, I inspire the team to excel in their collaborative efforts.

SURVEY

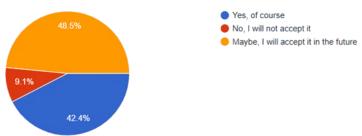


Most of the responses came from the 19 to 21 years old age group as the questionnaire was shared on various online groups that we are members of.

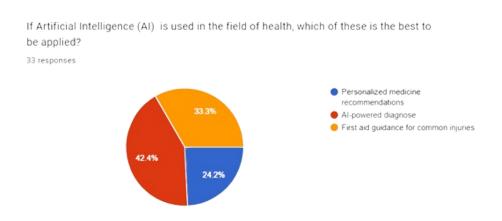


Based on the pie chart, we can conclude that most people on survey never try any AI for their disease treatment or first-aid.





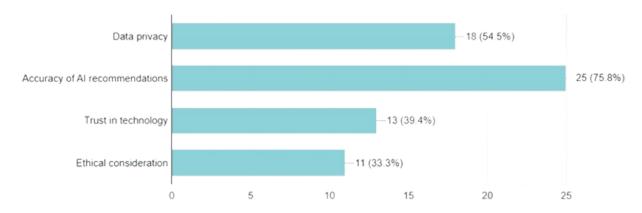
Based on the data obtained from the above questionnaire, we can know that the public still has doubts about AI's medication plans, but they do not strongly reject AI's medication plans. There are also a majority of people who are willing to accept the medication plan formulated by AI, while only a small number of people explicitly refuse to accept it.



From the pie above, 43% from 33 respondent think that AI-powered diagnose is the best option to be applied in the field of health if Artificial Intelligence (AI) is being used. Meanwhile only 24.2% think personalized medicine recommendation is the best AI to be applied in the field of health.

What concerns you the most when considering the adoption of Artificial Intelligence (AI)?

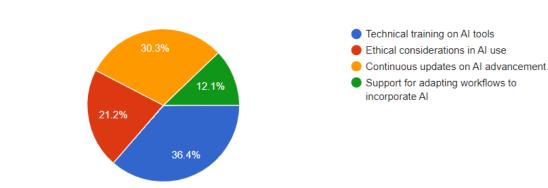
33 responses



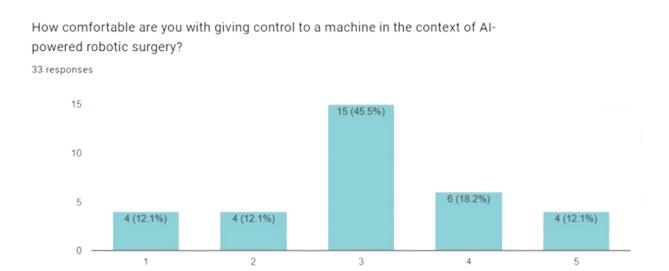
When contemplating the embrace of artificial intelligence in healthcare, the foremost concern resonates with the accuracy of recommendations, weighing in at a substantial 75.8%. Following closely is the pivotal issue of data privacy, capturing the attention of 54.5%. Trust in technology ranks third at 39.4%, and ethical considerations round out the spectrum at 33.3%, portraying a descending order of apprehensions among respondents.

What kind of training or support do you think healthcare professionals would need to effectively use Artificial Intelligence (AI) in their practice?

33 responses



The pie chart depicting healthcare professionals' responses to AI integration reveals key insights. Notably, 36.4% seek technical training, indicating a perceived lack of foundational AI skills. Another 12.1% prioritize support for workflow adaptation, highlighting concerns about seamless AI integration. Additionally, 30.3% emphasize the need for ongoing AI updates, reflecting awareness of the field's rapid evolution. Most strikingly, 21.2% underscore the importance of ethical training, reflecting apprehension about potential biases and privacy issues. In summary, the chart indicates a keen interest in leveraging AI for improvement, contingent on comprehensive training and support.

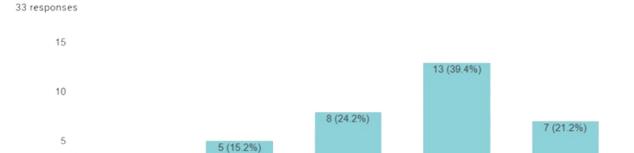


This shows the diversified opinions of the respondents. A considerable amount is neutral implying a fair mindset. Some respondents are comfortable with AI participation in surgical operations while others are not or would rather prefer human control. This wide divergence of opinions indicates that more dialogues about AI adoption for surgery and other related matters are still needed with assurances and convincing confidence among stakeholders.

In your opinion, how important is the use of Al-powered diagnosis and a first aid chatbot for immediate guidance in improving overall healthcare services?

2

0 (0%)



3

4

According to the results of this questionnaire, we get to know that most people still believe that it is very important to use AI to diagnose patients and use a first aid chatbot for immediate guidance in improving overall healthcare services in this era. Besides that, we can see that people in today's society are still very optimistic about the potential of AI in the medical field and are willing to accept it.