The impact of AI on customer service in the business industry

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1. Introduction

Customer relationship management (CRM) plays an important role in every successful business in a competitive market. Meanwhile, Artificial intelligence (AI) is increasingly being used by companies to simplify and improve their customer service. Machine learning (ML) and natural language processing (NLP) as the offshoots of AI are widely applied in developing CRM software such as chatbots, enabling the company to provide a better service to its customers. The global market for CRM software increased by 15.6 percent in value to $48.2 billion between 2017 and 2018, and this number is expected to continue to rise (‘Customer relationship management', 2021).

The objective of this paper is to explore how AI is altering the way businesses manage their customer relationships. A Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis method is used in order to achieve the objective successfully.

2. Strengths

The current strength of AI is in applications that have already demonstrated their utility in the customer care industry. Businesses can benefit from combining AI with CRM, and their clients will enjoy a better user experience. Thus, companies are able to restructure the work and employment of their employees.

Customer service becomes hassle-free due to the involvement of AI. For instance, chatbots are capable of simulating conversations with users based on natural language processing, which can give customers predetermined answers based on keywords provided in their questions (Kritagya, 2019). In other words, resolving customer issues has been revolutionized. According to Simran (2020), around 50% of clients don't care whether it's a human or a robot that helps them as long as their queries are addressed. In general, most customers ask similar and repetitive questions, which is the ideal use case for chatbots. Compared with human, chatbots can handle questions more quickly and without fatigue, which not only reduces the waiting time for each user but also makes 24/7 service possible (Chris, 2018). What’s more, based on the impact of the COVID-19 epidemic, the government advocates contactless social interaction, while chatbots and virtual assistants have the advantages i.e. avoid person-to-person contact.

Moreover, customer relationships will also be greatly enhanced thanks to the integration of AI and CRM. Natural language processing (NLP) enables computers to "understand" the content of documents, including the contextual nuances of the language in the documents (‘Natural language processing’, 2021). CRM tools and platforms would be able to produce intelligent insights, allowing them to make well-informed decisions. By analysing textual content, AI-integrated CRM tools can provide precise responses to customer emails (ERP Solutions oodles, 2019). NLP-based semantic analysis can enhance CRM software's ability to reliably expose brand sentiment and increase marketing efforts. In addition, machine learning (ML) allows the CRM tool to continuously learn with each service, making the tool even intelligent.

3. Weaknesses

Artificial intelligence is still inhuman at this stage, which means that it has weaknesses. It is capable of communicating with users, but it cannot communicate emotionally with humans. In other words, it can have all the rational data at its disposal, but it cannot come up with answers that respond to different human emotions (Kiesha, 2019). Good customer service requires not only accurate answers to the questions asked by the customer, but it is also important to have empathy understanding towards users requests. For example, imagine the following scenario: a man purchases a bouquet of flowers on the Internet and books a delivery that it will be sent to his lover on Valentine's Day. However, it doesn’t arrive on time (i.e. after Valentine's Day) for some reason. At this point, live customer service can empathize and try to offer new solutions while comforting the man's emotions. While AI-enabled customer service system will only answer coldly with a pre-defined answer, or even fail to recognise the keywords in the man's emotionally charged statement, responding answers like "sorry I don't understand" may add fuel to the fire.

Another limitation of AI is the cost and maintenance are expensive (Chris, 2019). Since AI chatbots and artificial intelligence-driven customer service are complex, proper management necessitates the use of trained personnel. Bot installation, development, and "education" necessitate careful data management. This necessitates the use of staff or partners with specialised skill sets. This can be costly since it requires not only the expertise of trained personnel but also the upkeep of chatbots and artificial intelligence services. When using

third-party providers or contracts for the service, this capital will also skyrocket. While setting up a new department (IT department) is a very simple task for large companies, it is a very difficult task for small businesses or start-ups who may not be able to afford such high costs. This reminds us that it is important for universities to introduce technology, regardless of the subject, to help students explore the infinite potential that AI can have for the subject in order to respond to the needs of society. On the other hand, individuals should not only rely on school knowledge but also continue to improve themselves and learn about technology.

4. Opportunities

Opportunities for use of AI in customer service are focused on making big data more accessible as well as predicting users preferences in order to realise user personalization.

AI can analyse large amounts of data, especially data from a CRM platform, and turn it into reports that are easy to understand (ERP Solutions oodles, 2019). This makes it easier for company owners to reach and comprehend crucial information about their target market. This data is more trustworthy than knowledge gathered, stored, and analysed by humans. Instead of trying to find out what the data means, business owners have chances to spend their time making decisions based on it (Kritagya, 2019).

Big data along with the ML technology can be used to develop the recommendation system, which is a machine learning algorithm that analyses and studies the behaviour of customers to deduce their interests and preferences, then the system will recommend products or services based on their personal information (Natalie, 2018). It will improve customer experience since they are feeling understood so that the relationship between companies and customers is enhanced. Thus, recommendations become a targeted marketing tool. For example, based on what the users are searching, Amazon will recommend a variety of items and place certain products in front of you that you're most likely to purchase. To entice customers to buy the combo, there is a ‘frequently purchased together' choice at the bottom of the product page (Mitul, 2021). This personalised service gives the user a sense of being 'known', which increases user satisfaction and increases the time spent using the software, which in turn increases the company's sales.

5. Threats

Several external factors hinder the wider implementation of AI techniques in customer service. First of all, the adoption of AI will result in job losses (Kiesha, 2019). For example, many supermarkets no longer have a large number of cashiers, but instead, have autonomous checkout machines that require only a few employees to intervene when problems occur. This is an example of AI taking over basic human tasks while often eliminating work opportunities. Many people with low literacy levels would lose their jobs as a result of the displacement of a large number of routine jobs, which may cause significant social unrest.

On the other hand, customer privacy is also a huge threat. In the case of the recommendation systems and chatbots mentioned above, the entities interacting with consumers will analyse and even store personal information about their interests, location, etc., which will create anxiety among consumers. In a 2018 global survey, 71% of respondents said that even though AI could improve their user experience, they did not want companies to use it once the technology would invade their privacy, while 63% of survey respondents were concerned that without their knowledge, AI is still likely to make decisions for them (Sarah, 2020).

To cope with these, the job market will need to evolve. Humans will need to work alongside AI, not be replaced. The combination of self-learning robots and human control can reduce these risks. Companies can be confident that their bots are using user data and reacting to user needs in a predictable, trustworthy, and legal manner thanks to human content curation. For brands and their consumers, combining human feedback with self-learning provides a secure self-service solution. At the same time, government regulations should be put in place to set industry standards to avoid these issues, and companies will receive penalties for breaching service level agreements.

6. Conclusion

Artificial intelligence generates endless possibilities for businesses to handle and enhance customer service, which helps the businesses improve customer experience and retain their customers; on the other hand, AI frees up employees, allowing them to pay attention to more important tasks. From answering user questions to analysing thousands of user data, we are already experiencing the benefits of using artificial intelligence in the customer service

industry. I believe that as technology continues to evolve, the shortcomings of AI will be overcome and addressed, and new greater opportunities will be created. It is worth mentioning that AI is not perfect and if left alone may pose some threats, however, the combination of human intelligence with the potential of AI is likely to eliminate these threats and make better use of AI. To be more specific, governments, companies and individuals should respond positively to the trend of AI development. In the future, AI is going to play a greater role in service delivery continuously, while new business models will be created for service companies or organisations.

References

Chris, N. (2018). ‘Pros and Cons of AI in Customer Support’, *Tmcnet*, 12 November. Available at: https://www.tmcnet.com/topics/articles/2018/11/12/440241-pros-cons-ai-customer-support.htm (Accessed: 11 May 2021).

‘Customer relationship management’ (2021). *Wikipedia*. Available at: https://en.wikipedia.org/wiki/Customer_relationship_management (Accessed: 13 May 2021).

ERP Solutions oodles. (2019). ‘Enhancing Customer Relationships with AI and CRM’, *Medium*, 26 August. Available at: https://erpsolutionsoodles.medium.com/enhancing-customer-relationships-with-ai-and-crm-75ec432db3e2 (Accessed: 12 May 2021).

‘Natural language processing’ (2021). *Wikipedia*. Available at: https://en.wikipedia.org/wiki/Natural_language_processing (Accessed: 14 May 2021).

Kiesha, F. (2019). ‘SWOT Analysis of Artificial Intelligence’, *Pestleanalysis*, 09 May. Available at: https://pestleanalysis.com/swot-analysis-of-artificial-intelligence/ (Accessed: 08 May 2021).

Kritagya, P. (2019). ‘Role of AI and Big Data in Customer Service Industry’, *Becominghuman*, 30 October. Available at: https://becominghuman.ai/role-of-ai-and-big-data-in-customer-service-industry-d0946442b2aa (Accessed: 12 May 2021).

Mitul, M. (2021). ‘Explained – Working and Advantages of a Recommendation Engine’, *CustomerThink*, 03 February. Available at: https://customerthink.com/explained-working-and-advantages-of-a-recommendation-engine/ (Accessed: 14 May 2021).

Natalie, S. (2018). ‘An Introduction to Recommender Systems (+9 Easy Examples)’, *Iterators*, 06 November. Available at: https://www.iteratorshq.com/blog/an-introduction-recommender-systems-9-easy-examples/ (Accessed: 14 May 2021).

Sarah, O. (2020). ‘Data privacy risks to consider when using AI’, *FM Magazine*, 01 February. Available at: https://www.fm-magazine.com/issues/2020/feb/data-privacy-risks-when-using-artificial-intelligence.html (Accessed: 10 May 2021).

Simran, T. (2020). ‘How Artificial Intelligence is Transforming Customer Service Industry’, *readwrite*, 15 October. Available at: https://readwrite.com/2020/10/15/how-artificial-intelligence-is-transforming-customer-service-industry/ (Accessed: 12 May 2021).