

Communication Tools in Ordering Product

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Abstract. The study attempts to examine the utilization of Chatbot as a smart assistant in e-commerce. Nowadays, there are more than 80 million people in Indonesia actively shopping online. The e-commerce sector has produce more than \$12.2 Billion or equal with 45% digital economy in Indonesia. It makes retailers have to be more aggressive in doing the promotion and marketing. Employing descriptive method and interview, the research tries to describe the impact of the usage of the software. The result shows that by adapting the chatbot in the platform can become one of the strategies to increase the consumer satisfaction and brand loyalty. Chatbot can help the consumer to buy and order a product directly via a messaging feature anytime and anywhere. Chatbot can also act as a smart assistant for the consumer to simplify the existing workflow. Chatbot is a way for seller in e-commerce industry as a solution to be ready to serve and fulfil the consumer desires.

1. Introduction

In the era of globalization, the development of Information Technology (IT) is growing rapidly. research describes the advantages and disadvantages of using information technology in chatbots. A Chatbot-based customer service in e-commerce could allows buyers to do online shopping just by chatting with chatbot through a messaging app [1]. Cui stated that customer service acts as an important role in the organization to generate revenue. The customer service is often become the most resource-intensive department in the company, it can spend up to billions of dollars a year in order to change the entire perception customers hold [2]. Also, the e-business has completely changed the way of selling products. E-commerce is one of the e-business models which mostly do business over the internet [3].

E-commerce provides a breakthrough in how it is being conducted and managed, we only need to think how to assess the e-commerce major opportunities, limitations, issues, and risk [4]. A recommender system can be use by an E-commerce platform to help the consumer find the products they want to purchase [5]. Furthermore, there has been a raised in a speech-based search engines and virtual assistants such as Siri, a Google Assistant Natural Language Processing (NLP), the techniques can be applied to analyse speech, and intelligent response. It can be done by designing a system that can make an appropriate human like responses [6].

In this era, chatbots are a very interesting as the newest platform used by a lot of consumers worldwide this can happen because, it become parts to the commodity of NLS or natural language services, which can provide the developers with building blocks to create chatbots cheaply. However, it can be difficult for developers to build and deploy a chatbots. Developers need to handle a lot of stuff in the background, before the chatbot is ready to actually serves [7]. Therefore, this research was conducted to find out the use of Chatbot as an intelligent assistant in e-commerce, by using descriptive

methods and data collection using secondary data from journals and books related to chatbot and e-commerce objects.

2. Method

Descriptive method was used in this research to describe the impact of the use of Chatbot as a smart assistant in the e-commerce sector. To deepen this research, we also interview a few students from the Universitas Komputer Indonesia who do the online shopping at least once a month. The procedure in this study was conducted by providing a hands-on experience of the chatbot to each of the interviewee, and evaluate based on each feedback given by the subject.

3. Results and Discussion

Chatbot program is generally simulate a conversation and entertain the user. Furthermore, chatbots was created to assist a particular task, such as act as a customer service in an e-commerce platform. A chatbot in general that it will try to achieve is to pass the Turing test, which means it has to generate an indistinguishable conversation like a real person. Chatbots nowadays have not yet reached this goal, which makes become a chatbot developer is so interesting to dive in [8]. E-commerce is an application of the Internet. It has expanded exponentially and is expected to continue developing rapidly. As the e-commerce is developing, e-commerce could have a deep impact in almost all aspect of the economic performance and economic policies [9]. Nowadays, the high cost of gaining new customers as well as their brand loyalty is relatively difficult as an online vendors. Therefore, in the non-Online business, customer loyalty is primarily a superior service quality and the trust [10].

3.1 Main Menu

In this research, we try a chatbot from one of the e-commerce platform, Sephora. From this first page there's not much can be seen in the page, but actually consumer can ask anything they want, starting from a product, price or simply say hi to the chatbot. In this state, sometimes chatbot will suggest various menu that can be chosen by the consumer, or even an option where the chatbot will give a few questions to the consumer so the chatbot can suggest a best product suite to the consumer (See Figure 1).

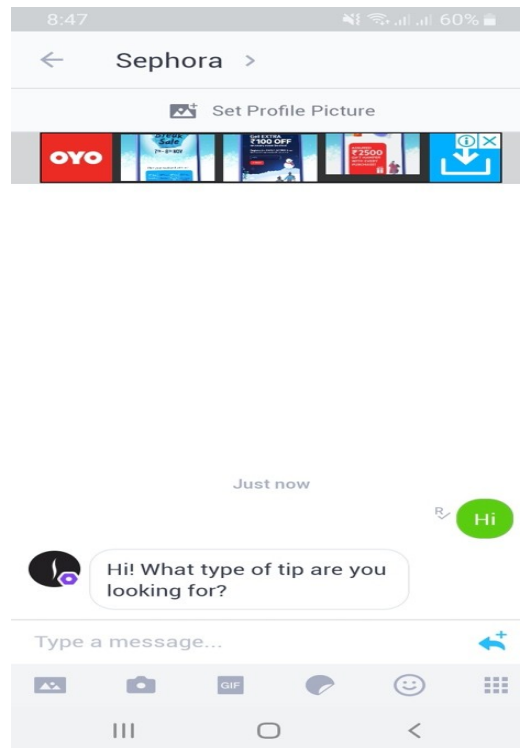


Figure 1. Main menu

3.2 Basic Menu

The next step we just need to choose the particular menu that we're interested in. The response from the chatbot is really fast, it will response to the request in just a matter of second. And as we can see the chatbot is using a very light conversation so the experience is really the same as we're just talking to a human customer service. Usually the menu that displayed is around 4-5 menus that we can choose freely depending on the category that we choose in the previous step (See Figure 2).

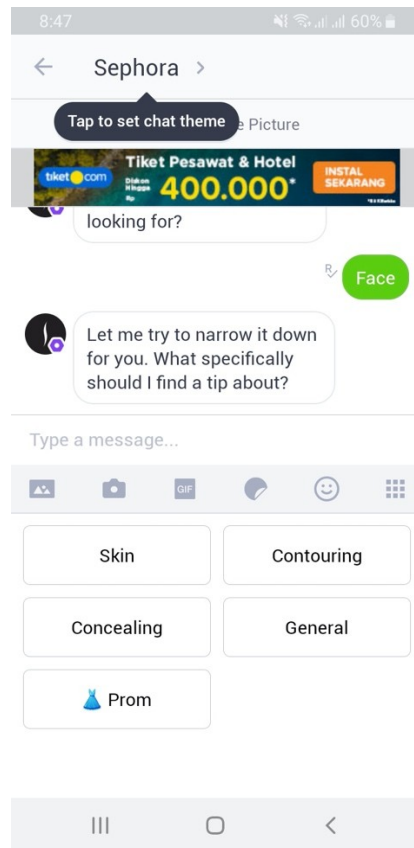


Figure 2. Basic Menu

3.3 Product Search Menu

In this section, we can simply type a product search in the chat room and the chatbot will automatically ask for sorting the product base on category that we like, such as top-rated, popular, etc. If the product is not available in the chatbot database, the chatbot will provide us the link to the product that we were requested (See Figure 3).

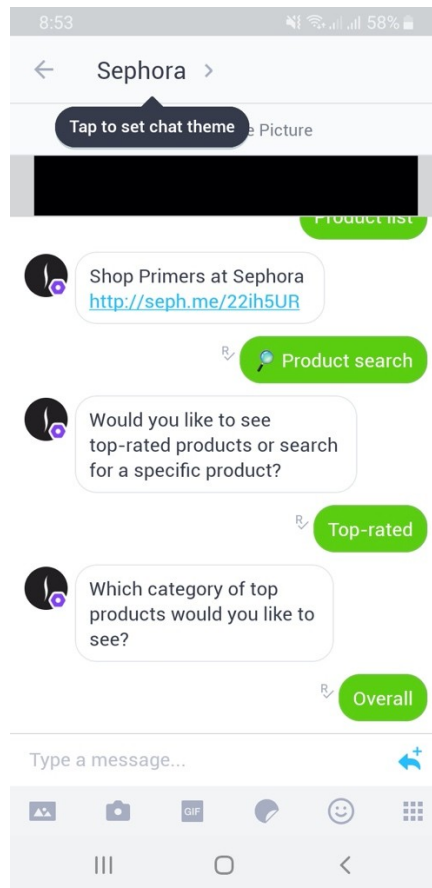


Figure 3. Product Search Menu

3.4 Product Detail Menu

In this menu, customers will be provided by a short detail about the product that they were requested. If the product is suitable with what the customers wanted, the customer can tap on the image or link, and then they will be directed to the website for that detailed product. Furthermore, they still can interact with the chatbot to request another product if the product is not suitable for them. (See Figure 4).

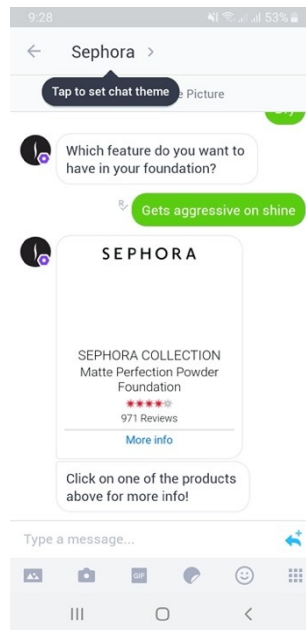


Figure 4. Product Detail Menu

3.5 Tips Menu

In the tips menu there are several sub menus, where the customers can choose based on their interest. The tips given by the chatbot is quite simple and short, if the customers need more detail about the tips, the chatbot is providing the link for more detailed tips as requested (See Figure 5).

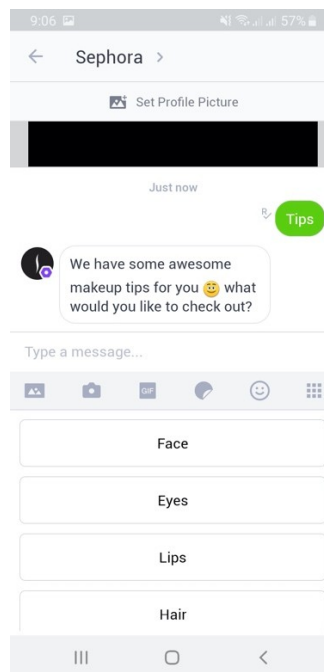


Figure 5. Tips Menu

3.6 How to interact with the chatbot

To interact with the chatbot, Customer needs to download a messenger's app called Kik, after signing-up the user's only need to scan the code to add the chatbot as a friend. After the scanning process is done, customers can utilize all the benefits from the chatbot. Not only Sephora, there are a lot of International e-commerce platform that assigned their chatbot on Kik (See Figure 6).

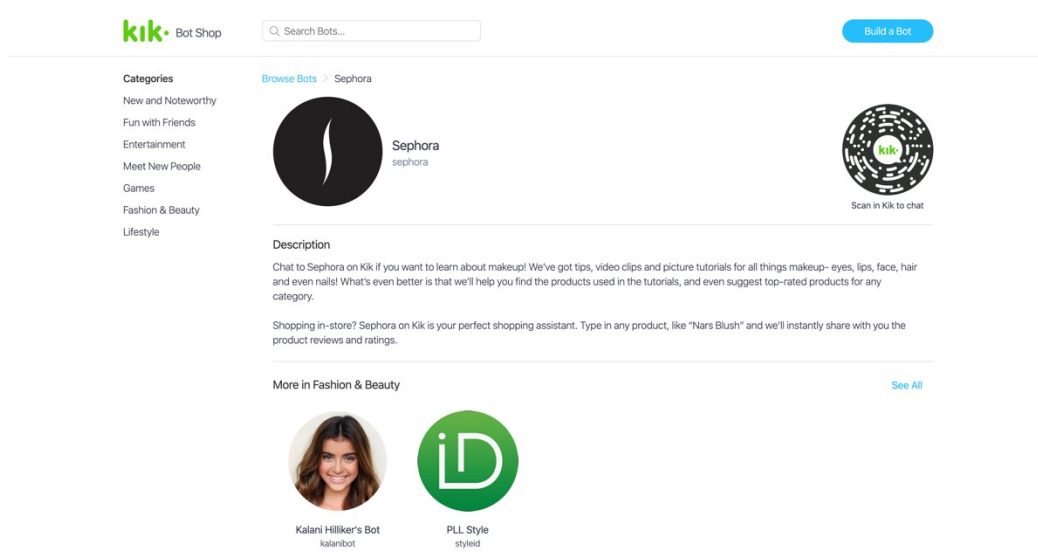


Figure 6. How to interact with the chatbot

4. Conclusion

The adaptation of chatbot as a smart assistant in the e-commerce sector can simplify the shopping workflow of an e-commerce platform. Chatbot can provide various relevant information as the customer requested, starting from a question regarding a product, complaint, or even order and tips just through a chat text. Besides, access to the chatbot will always be available 24/7 so the consumer doesn't have to wait in queue in the working hour to get served by the customer service. From the platform perspective, with chatbot, the service quality will be increased drastically that affected to a better consumer satisfaction and brand loyalty.

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References

- [1] Pricilla, C., Lestari, D. P., & Dharma, D. 2018. Designing Interaction for Chatbot-Based Conversational Commerce with User-Centered Design. In *2018 5th International Conference on Advanced Informatics: Concept Theory and Applications (ICAICTA)*, pp. 244-249. IEEE.

- [2] Cui, L., Huang, S., Wei, F., Tan, C., Duan, C., & Zhou, M. 2017. Superagent: A customer service chatbot for e-commerce websites. In *Proceedings of ACL 2017, System Demonstrations*, pp. 97-102.
- [3] Thomas, N. T. 2016. An e-business chatbot using AIML and LSA. In *2016 International Conference on Advances in Computing, Communications and Informatics (ICACCI)*, pp. 2740-2742. IEEE.
- [4] Turban, E., Outland, J., King, D., Lee, J. K., Liang, T. P., & Turban, D. C. 2017. *Electronic commerce 2018: a managerial and social networks perspective*. Springer.
- [5] Park, Y. 2016. Personalized Recommendation: Approaches and Applications. In *Encyclopedia of E-Commerce Development, Implementation, and Management* (pp. 1078-1087). IGI Global.
- [6] Almansor, E. H., & Hussain, F. K. 2019. Survey on Intelligent Chatbots: State-of-the-Art and Future Research Directions. In *Conference on Complex, Intelligent, and Software Intensive Systems*, pp. 534-543. Springer, Cham.
- [7] Yan, M., Castro, P., Cheng, P., & Ishakian, V. 2016. Building a chatbot with serverless computing. In *Proceedings of the 1st International Workshop on Mashups of Things and APIs* (p. 5). ACM.
- [8] Shawar, B. A. 2017. Integrating CALL systems with chatbots as conversational partners. *Computación y Sistemas*, **21**(4), pp. 615-626.
- [9] Sim, J., Poh, L. H., & Tay, C. 2016. Do Retail MFN Clauses Lead to Softening of Competition?. *Asian Journal of Law and Economics*, **7**(1), pp. 101-145.
- [10] Kuem, J., Ray, S., Siponen, M., & Kim, S. S. 2017. What leads to prosocial behaviors on social networking services: A tripartite model. *Journal of Management Information Systems*, **34**(1), pp. 40-70.