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# IMPACT OF ARTIFICIAL INTELLIGENCE (AI) ON CUSTOMER SATISFACTION: A REVIEW

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#### Abstract

Artificial Intelligence (AI) opened remarkable doors in the fields of industry, especially in the marketing field. The consumer now can enjoy enhance experience through highly customised service and on-demand customer support while keeping timely and valuable processes reduced. This study will examine the role of using AI in the marketing field, more exclusively in the impact of such technology on the customer experience through customer service and after-sale customer support. Also, focus is on providing a consistent customer experience using IVAs. These intelligent machines can take a user-centric approach and work on a broader range of contact channels with the customers such as using apps, call centers, advertisements, and other channels. In conclusion it maybe stated that the implementations of such technology "are the way for insurers to realize the value of AI and seize the viable advantage from-enhanced customer experiences.

**Keywords:** Intelligence, Customer, Satisfaction, Impact, Review.

#### **INTRODUCTION**

In the service area, it seems that there will be a change due to an increase in service to customers to provide clear and fast information. Speedily developing tools for the better, smarter, and cheaper way will change almost all service sectors particularly due to the existence of artificial intelligent technology (AI). As with most changes in life, there will be positive and negative impacts on society as artificial intelligence continues to transform the world we live in. How that will balance out is anyone's guess and up for much debate and for many people to contemplate. As an optimist at heart, I believe the changes will mostly be good but could be challenging for some. Here are some of the challenges that might be faced (and we should be thinking about how to address them now) as well as several of the positive impacts artificial intelligence will have on society. Artificial intelligence can dramatically improve the efficiencies of our workplaces and can augment the work humans can do. When AI takes over repetitive or dangerous tasks, it frees up the human workforce to do work they are better equipped for tasks that involve creativity and empathy among others. Most of the banks have started embracing artificial intelligence worldwide to improve their operations. Banks are using AI for enhancing the customer experience by giving it a personalized touch. Fact about Artificial Intelligence-

### 1. The birth of the term 'Artificial Intelligence'

The term 'Artificial Intelligence' was coined in the year 1956 by John McCarthy – one of the founders of the AI discipline. The term was coined during a conference held at Dartmouth College and AI has now evolved to become a dedicated industry and a field of research.



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#### 2. AI becomes a doctor-

The utilization of AI in the medical field has led to effective implementation of digital technologies in healthcare. The healthcare industry has seen the integration of machine learning, deep learning, real-time data analyzing and various other AI solutions to diagnose various diseases.

#### 3. AI is smarter than humans

AI developed by Alibaba and Microsoft managed to gain better results than humans in a reading comprehension test – based on Stanford University's SQUAD test, a reading comprehension dataset consisting of questions based on a set of Wikipedia articles.

#### THE IMPORTANCE OF CUSTOMER SATISFACTION

Customer satisfaction is the key to creating a long-term relationship with your customers. If you think back to the dating analogy, going through the sales process is just like wooing your prospect to turn them into a customer. Businesses need money to survive. To make money, businesses need customers. Ideally, these customers are happy, tell their friends about you, and keep coming back. Ongoing satisfaction leads to loyalty. Once customers have placed trust in a company and are assured that the company will continue to deliver they will continue to do business with them. An unhappy customer has a decent amount of power over your brand's reputation. People are actively searching for unfiltered reviews and discussions before making their purchasing decisions. Filter in that fact that 88% of those people have been influenced by what they've found suddenly that a single negative encounter is greatly affecting whether or not you continue to gain new customers. Once your reputation takes a hit it's almost a dominos effect on sales.

#### HOW DOES ARTIFICIAL INTELLIGENCE IMPROVE CUSTOMER EXPERIENCE?

Artificial intelligence and chat-bots help in creating personalized experiences and enabling intelligent, accessible engagement with the customers. It assists the end-user to achieve their objective or offers solutions to their problems, thus, driving satisfaction and improving the overall customer experience. Artificial intelligence also enables businesses to gain insights into consumer behavior by sorting through a large amount of data generated and helps them to navigate, understand, and enhance the sales or customers' journey.

- Artificial intelligence allows us to leverage the data available and comprehend consumer behavior and traits through <u>customer analytics</u> to streamline the customer interaction process by making information available and accessible across several touch points.
- It leverages the overflowing and widely available consumer data through various devices and offers insights into consumer behavior and market trends. This helps businesses to incorporate personalization in customer experience by leveraging interactive applications such as chat bots e.g. Facebook messenger. These chatbots are advanced computer programs designed to simulate an online conversation with humans.
- Artificial intelligence enables conversational commerce, by piecing together individual touch points and completing customer journeys to enhance and re-design customer experiences

The use of artificial intelligence in customer service is not only revolutionizing the customer support function but also improving customer loyalty and its brand reputation. Thanks to the availability of tools like AI-powered customer service bots, companies in the B2C industry



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segment are increasingly entering an age of automated customer service that is boosting the brand experience for customers. Automated Customer Service and how it improves Customer Satisfaction with the use of artificial intelligence in customer service, automated customer service can be implemented in multiple ways including:

- Customer self-service: Why is this so important? Because most customers like to solve a problem or answer queries on their own. Among the leading lessons learned from customer service statistics, 73% of customers want to solve product or service-related issues on their own, while 64% try to solve their issues before contacting customer service. An example of customer self-service is the Frequently Asked Questions (or FAQ) page on business websites.
- Chat-bots: Among the major benefits of AI in customer service, small and large enterprises are scaling up their customer services (while keeping their costs down) through the deployment of intelligent chat-bots. The 2019 Chat-bot report predicts that the use of AI in banking customer service will automate 90% of customer interactions using chat-bots by the year 2022.

#### **POWER OF AI IN CUSTOMER SERVICE**

Artificial Intelligence (AI) is fundamentally changing the way we work across several different industries. Customer Service has formed part of those sectors for many years, where it be in retail, finance, manufacturing or law. Experts believe that in the forthcoming years, we may reach a point where it will be impossible to tell the difference between a human and AI agent. Early applications of AI in customer service have shown its ability to reduce costs, improve staff retention and loyalty, increase revenue and drive customer satisfaction. Given all of those amazing benefits, a full adoption of the technology industry-wide seems almost inevitable.

AI is developing and supporting customer services and why business leaders must invest in the technology.

#### **Bot/Agent messaging**

Solutions like those offered by CommBox, realize that AI needs to augment conversations. The AI solution will nurture leads with a human-like bot that pops up at the right time to ask the right questions. For much of the time, the bot will be able to resolve the query but in situations where it cannot, customers are seamlessly passed to the agent best suited to help them. The aim of this is to negate the frustration some people face when dealing with a bot only solution that hasn't yet gained enough experience to solve the problem. Many companies will attempt to deploy generalized bots with the goal of solving everything but CommBox finds the right solution for each customer.

#### 24/7 availability

We are in an era where messaging is overtaking social networking or any other form of communication as the preferred choice for consumers. One of the key benefits of AI is that it never needs to sleep. If a customer has a query at 3am, AI can be there to help resolve it. This could be vital in companies that operate globally and are looking to provide better customer support. At a more local level, food companies like Dominos, Pizza Hut and McDonalds can now provide a full online service. Customers who need to call them usually have a problem, outside of purely ordering food which doesn't require human involvement. You can order a pizza 24/7 without ever speaking to a person.

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#### Faster decisions

AI platforms have unlimited memory capacity and can find answers quickly without the need for research or typing a response. For example, pre-set and machine learnt decisions ensure better customer satisfaction through shorter interaction lead times.

#### AI for the Call Centre

As a customer, whilst there is recognition that data protection is important, it is incredibly frustrating when you call a customer service representative and they don't know anything about you. Personalization across every channel has become something of a customer expectation rather than simply something that is nice to have.

#### Digital IVR

We have all been in a situation where we desperately need to get through to a call center but get stuck in a queue. "You are caller number 3 in the queue." Many call centers are overlaying their traditional IVR platform with a digital one, designed to encourage customers to choose self-service rather than needing agent assistance. Customers will see visual cues on their mobile and instead of holding on their phone, may be transferred to live digital agents or self-service options. This has been shown to improve customer satisfaction and loyalty whilst reducing mid-call dropout rates.

#### **Voice Analytics**

Real-time conversation analytics platforms within call centers are being deployed to assist with customer service. The AI listens to conversations, taking in both the content and tone. It will analyses changes in how the customers speak to gain insight into their potential emotional state. Service representatives are then provided with guidelines for how to deal with the customer. The insurance company Human has reported a 28% improvement in net promoter scores having used voice analytics as agents are better equipped to handle calls.

#### **AI for Efficiency**

As a rule, call centers tend to have many manual and inefficient processes. These can be very time consuming for the business as well as costly. Platforms such as CommBox provide ways to improve or even eliminate many of the typical problems. Some of the most common efficiency barriers come from identification, knowledge and document sharing.

#### Virtual Identification

In some situations, such as loan provisions, call centers will ask to see the customer to verify their identity. Using a Smartphone, customers can send this straight to a customer service representative for instant validation of their identity. Services that might have previously been very time consuming can now happen in real-time.

#### Knowledge Base

If a customer asks an agent a question, they sometimes must review several process documents and manuals to work out how to resolve the query. In the same way AI tools can be used to provide customer self-service, agents can benefit from finding answers quickly. For example, an agent can use bot technology to find are answers matching a customer question, finding the information quicker than ever before.

#### **Document Sharing**

Customers can be enabled to send photocopied documents straight from their smart phone through to the contact center. As well as reducing internal paperwork, the data is immediately digitized allowing faster decisions and better auditing of information.

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#### **AI for Innovation**

One of the most important reasons for using AI in the call center is that it can help drive different behaviors. If humans can free up their time in answering and administrating simple queries, they have a greater opportunity to think smart. Businesses will then change their focus to resolving the root cause of why customers are having to call in to begin with, rather than simply handling the queries.

#### **Predicting Customer Needs**

AI and machine learning tools use big data platforms to predict the needs of the customer. A chatbot can proactively reach out to customers wo appear to be stuck on a specific website page for example. The bot will learn from every interaction and become more accurate with the predictions over time. Machine learning platforms like this mean that customers are handled before they realize, they need help!

#### Being on brand

AI that uses machine learning and natural language processing (NLP) such as Facebook Messenger and IBM Watson are ensuring that businesses stay on brand through their customer service. For example, you can book flights via Facebook Messenger and also proactively reach out to customers via the same channel, something which an agent generally doesn't have the capacity to do. CommBox offers an omni-channel experience in the same vain. Even if the customers switch from phone to SMS or email, it is fully tracked whilst staying on brand throughout.

#### **RESOURCE SAVINGS**

Arguably top of the list for most businesses is the huge resource saving potential of AI. Research by the analysis firm Juniper Research has said that chat-bots on their own are expected to reduce business costs by over \$8 billion per year by as soon as 2022 through operational and labor expenses. These savings can be reinvested back into technology and keep creating better solutions for the customer. As we've already noted, this isn't suggesting that AI will replace human agents but by augmenting them, it negates the need for employing more people as the business grows whilst ensuring the retention of those who are already there.

#### **SATISFIED CUSTOMERS**

This is quite hard to quantify but with constant availability, fast response times and the ability to provide the right answers, AI should enhance the overall customer experience. There are arguments that suggest nothing beats traditional customer service but in a fast-paced online world, the consumer is starting to become more accepting of automated solutions as an overall experience.

#### THE FUTURE OF CUSTOMER SERVICE: ARTIFICIAL INTELLIGENCE

Artificial intelligence is quickly transforming the way businesses operate and people interact

with the world around them. It's also fundamentally changing how companies approach customer support.

#### **CONCLUSION**

Even when talking to human representatives, AI can be used to improve the customer service experience by automatically pulling up information and suggesting solutions so that the agent



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can deliver answers to the customer much quicker. By automating routine tasks, AI is enabling customer service agents to spend more time on the most complex issues that can only be solved by human agents as opposed to repeating the same simple answers to the same basic questions that a chatbot could do for the agent. It will probably take a decade or more for the full potential of AI in customer service to be realized, but its power and potential are undeniable, and its path is inevitable.

#### **REFERENCES**

- 1. Belás, J., Korauš, M., Kombo, F., & Korauš, A. (2016). Electronic banking security and customer satisfaction in commercial banks. Journal of security and sustainability issues BV, S. E. (2013).
- 2. Electronic banking: The ultimate guide to business and technology of online banking. Springer Science & Business Media.
- 3. Ekienabor, E., & Oluwole, O. S. (2018). Reliability of Timeliness in Financial Reporting in Nigeria.
- 4. Farquhar, J. D., & Panther, T. (2008). Acquiring and retaining customers in UK banks: An exploratory study. Journal of Retailing and Consumer Services, 15(1),
- 5. Gurjar, Y. S., & Rathore, V. S. (2013). Rebalancing the IT equation with cloud computing to drive business agility. International Journal of Innovative Technology and Exploring Engineering, 2(3), 123-129.
- 6. Herath, H. M. A. K., & Herath, H. M. S. P. Impact of Green Banking Initiatives on Customer Satisfaction: A Conceptual Model of Customer Satisfaction on Green Banking.
- 7. Zendesk. (2018), 5 Customer Experience Trends for 2018. Available from: <a href="https://www.zendesk.com/blog/5-customer-experience-trends-2018">https://www.zendesk.com/blog/5-customer-experience-trends-2018</a>.
- 8. Bentley, P.J., Brundage, M., Häggström, O., Metzinger, T. (2018), Should we fear artificial intelligence? (Rep.) In-depth analysis. European Parliamentary Research Service. DOI: 10.2861/412165.
- 9. CXPA. (2018), Artificial Intelligence (AI) An Introduction: What Every Customer Experience Professional Should Know [White Paper]. Available from: https://www.cxpa.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=f6cc83e5-67f9-ec07-450c-e336cf8e1a76. [Last accessed on 2018 Nov 12].
- 10. Dahlhoff, D., Bender, S., Cerovina, I., Mak, E., Mat, B., McFeely, O., Weseman, K. (2018), Artificial Intelligence: Touchpoints with Consumers (Rep). Available from: https://www.pwc.com/gx/en/ retail-consumer/assets/artificial-intelligence-global-consumer-insights-survey.pdf. [Last accessed on 2018 Nov 11].
- 11. Dcomisso. (2018), Risks and Limitations of Artificial Intelligence in Business. Available from: https://www.nibusinessinfo.co.uk/content/ risks-and-limitations-artificial-intelligence-business. [Last accessed on 2018 Nov 10].
- 12. Debecker, A. (2016), The Advantages of Chatbots in Marketing. Available from: https://www.blog.ubisend.com/discover-chatbots/advantages-of-chatbotsmarketing#channel. [Last accessed on 2019 May 23].