

A STUDY ON ARTIFICIAL INTELLIGENCE IN CUSTOMER SERVICE

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Abstract

How the AI is redefining retail customer Service-Artificial intelligence, or AI, is slowly becoming a part of our daily lives. Siri and Alexa are now household names, and their users have grown accustomed to how easy they make it to access information. And while these types of virtual assistants are primarily for personal use, AI also presents huge opportunities for businesses, particularly for customer service. Some companies are already using AI to provide better, more efficient service, and this technology will likely play an increasingly significant role over the next few years. Artificial intelligence is still a relatively new concept for most businesses, but interest has increased dramatically over the past few years and shows no sign of slowing down. At this point, that interest has mostly been centered on marketing — and has proven to be a valuable addition for many of the companies who've added it to their strategies. In fact, 80% of marketing executives believe that AI technology will revolutionize the marketing industry by 2020. Automation already plays a role in many companies' customer service processes, and many on the forefront of adopting new forms of technology are also incorporating AI. This shift has the potential to help all types of businesses better serve their customers but holds a few unique advantages for those within the retail industry.

Keywords: Content, SEO, Customer Experience, Customer Service, Virtual.

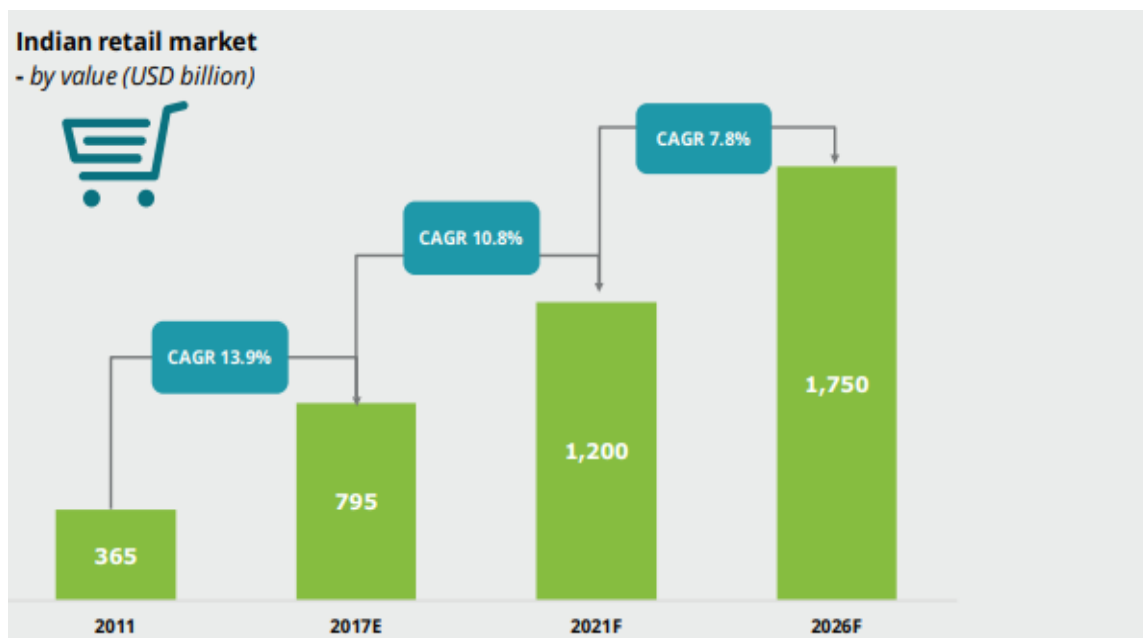
1. INTRODUCTION

Artificial Intelligence is widely used and practically applied to help business in informed decisions and improve customer experience. Artificial Intelligence is about acting in similar ways, using algorithms as to what humans would do but in a much more controlled, efficient and faster manner. It can be defined as information derived by applying a set of algorithms with little or no human intervention. In general terms, Artificial Intelligence is the machine's ability to think for itself. It aims to augment human capabilities and not replace it. It is about algorithms, processing data and recommendations to business to make decision for very specific problems at a greater speed, scale and velocity than what a human can do. Customers are the king of market. They are important part of any organization. It is very important for any business to understand the needs of their customers, satisfy that needs and retain them. Business can attract new customers and retain existing customers through bringing innovation in their product or services or making the after- sale service effective.

Now days businesses giving more focus on after- sale service than innovation because the Customers are not only interested in product or services they are buying, but also in add on elements they get. In future, customers will face any problem regarding products or services; they will connect with Retailer again for solution. So, every business tries to maintain good relation with customers after sale by making Customer service strong. Customer service is the process of providing assistance and advice by Retailer to customers who buy and use its products and services.

The Indian retail industry has emerged as one of the most dynamic and fast paced industries due to the entry of many new players. India is Asia's third largest retail market and world's fourth largest after US, China and Japan. In the retail market of India, Food and grocery accounts for majority shares followed by apparel and footwear, consumer durables and IT segments.

Growth of Indian Retail Industry



[Source: Unraveling the Indian Consumer-Deloitte]

The above graph shows the growth of the Indian Retail Industry. In 2011, the growth of the Indian retail industry was US\$365 and then it was increased to US\$795 in 2017. The growth of the industry will continue to increase in the future by US\$1200 and US\$1750 in 2021, 2026 respectively.

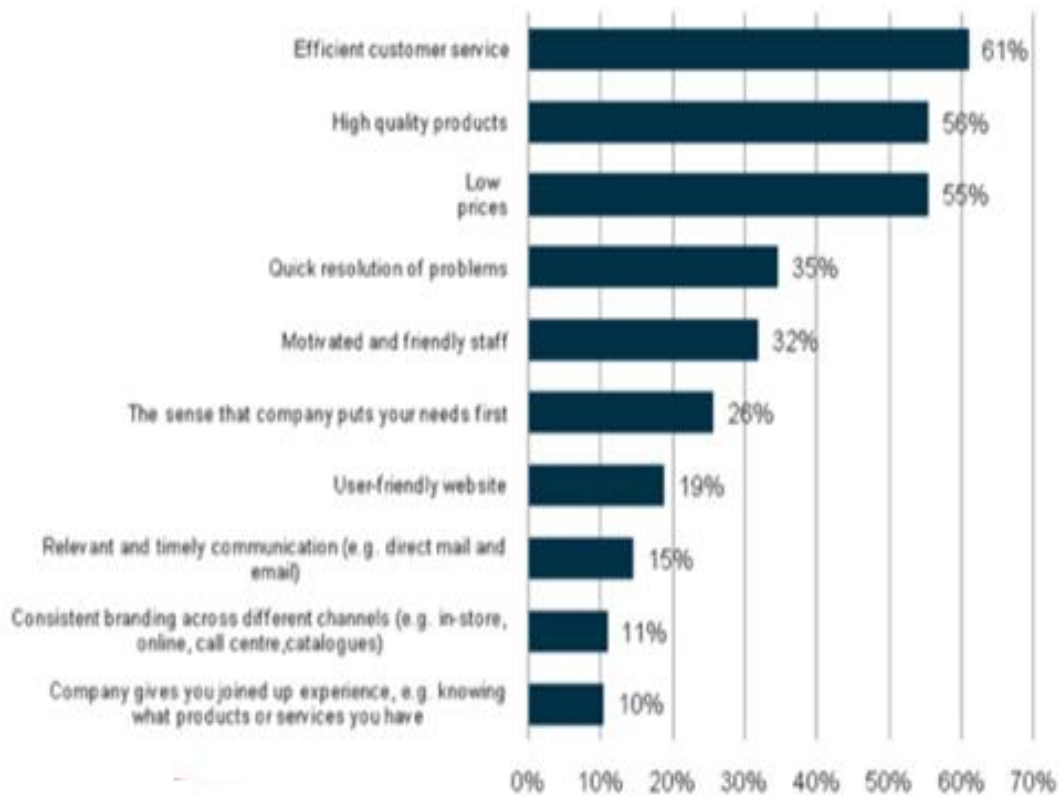
Retailers who have incorporated with digital transformation successfully are gaining a significant competitive advantage in an atmosphere where customer experience rules. Retailers are adopting digital technologies like internet of thing, augmented reality and virtual reality, artificial intelligence, machine learning to connect with customers.

2. OBJECTIVES OF THE STUDY

- To Identify the Scope of Artificial Intelligence in Customer Service Support
- To Identify the different ways of using Artificial Intelligence in Customer Service Support

3. DATA ANALYSIS AND INTERPRETATION

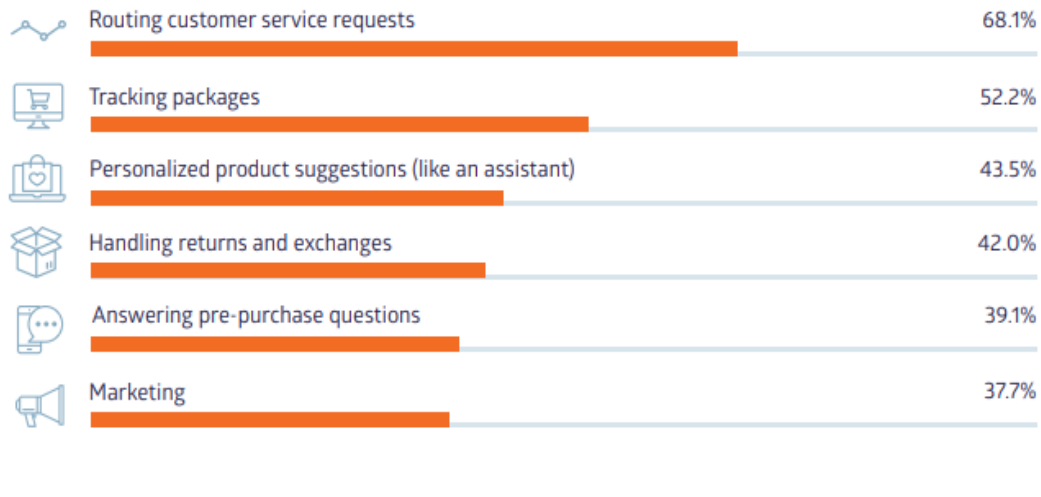
3.1. Important Areas for Retailers to Concentrate for the Best Customer Experience



[Source: superoffice.com]

The above graph shows that efficient customer service is most important area for retailers to concentrate because customer service plays tremendous role in retaining customers. Other areas are high quality products, low prices, quick resolution of problem, friendly staff, user friendly website etc. So, based on this data it can be said that retailers should provide great customer service.

3.2. Use of Artificial Intelligence in Different Activities of Retail

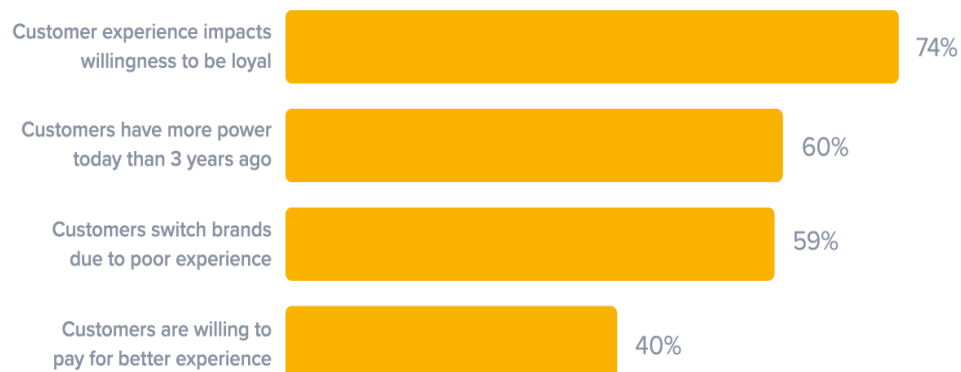


[Source: customer service and AI-BrandGarage]

Based on above data, Artificial Intelligence highly used in routing customer service requests followed by tracking packages, personalized product suggestions, handling returns and exchanges, answering pre purchase questions and in marketing. Artificial Intelligence helps customer service by automatically tagging customer tickets, by detecting urgency and prioritizing problems, customer data entry and their real time insights by giving auto response to routine queries.

3.3. Impact of Customer Experience on Customer Decisions

Customer Experience and Loyalty

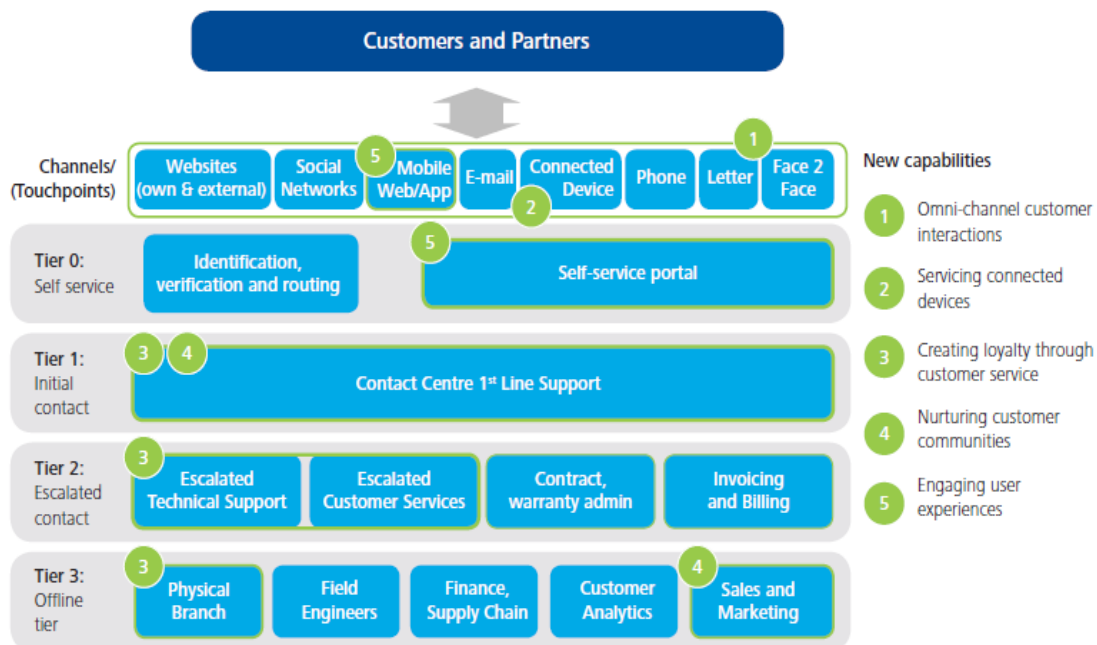


[Source: superoffice.com]

The above graph shows that customer experience impacts directly to customer decisions. Good customer experience impacts customers in good way and it turns into loyalty.

Currently, customers have more power than before in market and they are switching from one brands to another because of poor customer experience. So, retailers should provide good customer service for better experience to sustain into the market.

3.4. Service Delivery Model



[Source: Digital transformation of customer service- Deloitte]

Service Delivery model puts service operation into action. This service model is divided into four tiers. Such as Tier 0, Tier 1, Tier 2 and Tier 3. The first Tier (Tier 0) receives all incoming calls and tries to identify, diagnose and resolve query. If query not resolve by tier 0 then it is passed up to the appropriate second tier (Tier 1) operation that is made up of specialists.

If cannot resolve by second tier, it can be passed up to third tier (Tier 2) and which is even more specialized and so on. The artificial intelligence possibility is in tier 0 because at this tier all queries are being addressed and Retailers expect to resolve more and more queries at tier 0 itself.

Based on above information new capabilities in this service model are Omni channel customer interactions, servicing connected service, creating loyalty through customer service, Nurturing customer communities and engaging user experiences.

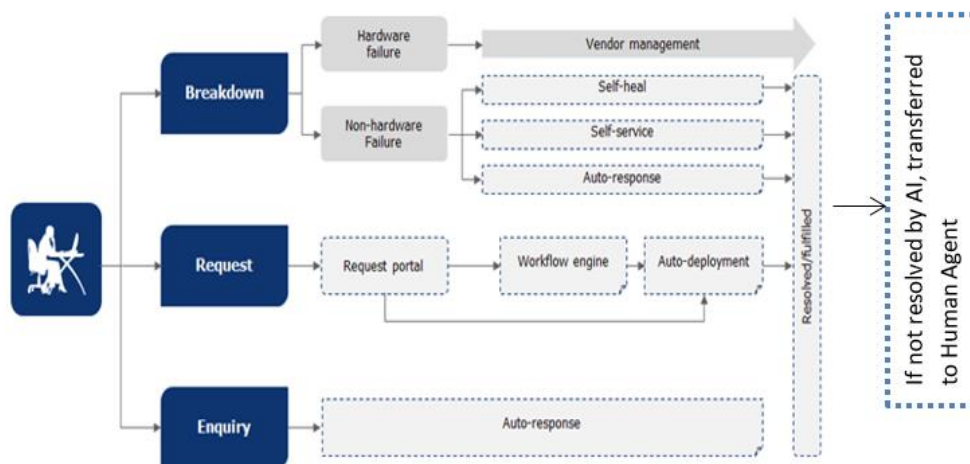
3.5. Preferred Channels by Customers for Customer Service



[Source: techseen.com]

The above data shows that only 20% people preferred online chat and 3% people preferred social media for customer service. 45% people preferred to talk with live representative. It means most of the people preferred to connect with customer service via phone and only 15% people preferred to go respective store of company. 14% people have no specific preference of channel to connect with customer service and 3% people not using any mention channels for customer service. Thus, most preferred channel used by customers is phone for customer service. Artificial intelligence can help in making conversation convenient with low cost.

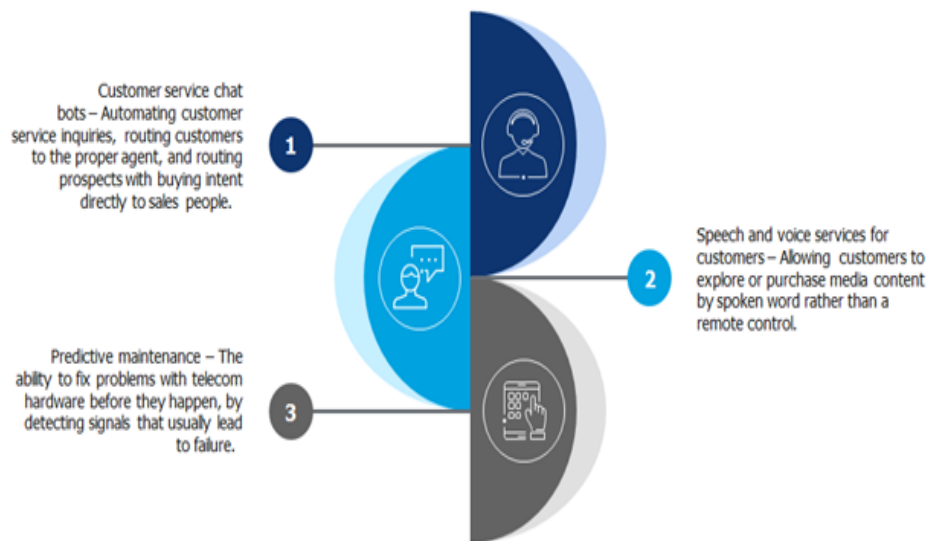
3.6. Tasks Handled by Artificial Intelligence in Customer Service Support



[Source: Wipro Limited]

The above diagram shows that there are mainly three types of tickets arises from customers. Out of this three types of tickets enquiry and request types of tickets can be handle by Artificial Intelligence. A breakdown type of tickets includes hardware failure and non-hardware failure. From these two tickets, Non-hardware failure type of tickets can be handling by Artificial Intelligence. So, most of the tickets handle by artificial intelligence and no more human intervention required for that. This type of tickets will be solved by artificial intelligence using historical data, manuals, frequently asked questions etc. If artificial intelligence is not able to solve customer query, then it will be send to human agents for resolution. So, ultimately cost of Retailer will reduced and productivity of addressing unsolved tickets will increased by human agents.

3.7. Different ways of using Artificial Intelligence for Customer Service Support



[Source: Wipro Limited]

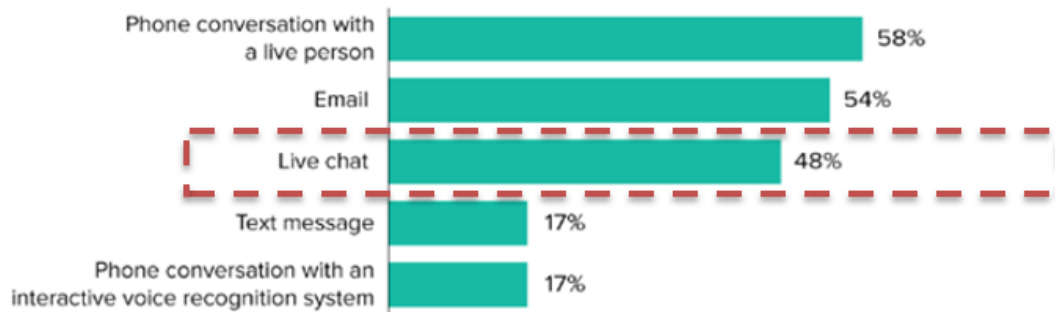
As per the above information, in three ways Artificial Intelligence can helps customer service support in serving customer best possible way to increase customer experience. The three different ways of implementing Artificial Intelligence are follows:

- **Chat bots**

The chat bots help in automating customer service inquiries, transfer customer call to the proper agent and routing prospects with buying intent directly to sales people. This process happens automatically with 24*7 supports to customers. Chat bots can help businesses to save on customer service costs by speeding up response times and answering up to 80% of routine questions.

Live chat is nearly as popular as phone and email

When you have a question or problem you need help with, how do you like to connect with a company's customer service group?



(Source: blog.hubspot.com)

As per the above graph, it can be said that customers now days moving more towards live chat because they are very active on mobile phone. It means using chat boat most of the customers can be handled effectively and customer experience can be increased.

• **Speech and Voice Services**

This is widely used by most of the companies for customer service support. This type of system enables voice for conversation. Voice agent permits customers to use the same conversational speech they would use with a human agent. This system is integrated with backend system to personalize the calls with information about customers and their previous conversations. It can also interact with customers via SMS. It can quickly and easily transfer less routine cases to human agents at the same time to solve unexpected problem with empathy. This system decreases frustration of callers, keeping them engaged and less likely to ask for help from human agents and especially voice agent learns from customer interactions to improve its response over time.

• **Predictive Maintenance**

Artificial Intelligence helps in predictive maintenance and it has ability to fix problem with telecom hardware before they happen and by detecting signals that usually lead to failure. So, there will be no challenges for customers to engage with customer service support of company.

4. DISCUSSION

- Artificial Intelligence helps customer service by automatically tagging customer tickets, by detecting urgency and prioritizing problems, customer data entry and their real time insights, by giving auto response to routine queries.
- Efficient customer service is main focus area for retailers.
- Artificial Intelligence mainly use in retail industry for routing customer service request.

- Customer experience directly impact to customer decisions.
- In Artificial Intelligence, chat bots, speech and voice recognition services are latest technology used in customer service support.
- Artificial Intelligence handled customer queries based on historical data, manuals and frequently asked questions.
- Most of the people preferred phone call to connect with customer service.
- Artificial Intelligence can handle 50% problems of Customer Service and it has 57% ability to learn new things. It means in future there are chances of increasing percentage of handling customer service problems.

5. LIMITATIONS

- This study is based on secondary data only.
- This study deploys limited data.

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