AI based Shopping App

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Abstract - *The project is about a shopping app. This app is different from other shopping apps as it has some additional features that will make online shopping more interesting and efficient. The app contains features like image search, speech search, price negotiator, chatbot, auto suggestions according to the customer's order. These features will make online Shopping easy and effective. As it will make decision making easier for the customers using its different AI based features. For this project we will use android studio and MySQL. It will use machine learning algorithms, different bots performing a particular task reducing the human intervention and making it more accurate and easier for customers.*

*Key Words***: Online shopping, AI based features, price negotiator, image search, advanced shopping application.**

1. INTRODUCTION

Considering the current situation it is very risky for all to get their required goods and it is also dangerous to shop from crowed places or to go out for shopping. So now a days people choose shopping online as it is convenient to get all the required goods at your door step. But shopping online can also be problematic to get all required goods at a single place. Sometimes finding a particular product can also be a problem. Even if we get the product we need may be the next problem is the price. As we know its easy to bargain when you shop in market but it is not possible in online shopping.

So our app consider all the problems come up while shopping online to be solved using AI.

This project is about a shopping app that has the feature of image search. Using AI the image uploaded by the customer will be scanned and matched by the similar products present in our database and the customer can easily search for what he exactly want using an image.

Also this project has the feature of voice search for those who are not able to type and search the products names easily. The bot will recognize the voice and search using the keywords exactly what the customer needs. As for bargaining our app will have a bot that will do bargaining with the customer. That feature will be price negotiator chatbot. Using this system customers will be able to negotiate the price accordingly. It also contains a chatbot that will help customers with there shopping like any queries will be sorted by chatbots, returning of any order or any complaints against the products will be handled automatically by chatbots.

The app also will have a secure login method to stay the info of consumers safe. It will use OTPs for login purpose that is double verification. As only password verification is not enough now a days.

1.1. Background and Literature review:

This topic will mainly discuss on the study that are done by previous research of other authors in the similar area of the present study. Throughout this chapter, there'll be comprehensive discussion on theoretical and practical views of previous studies wiped out online shopping and offline buying apparels. This study combines factors that other studies have done which may influence the consumer's purchasing decision in online and offline stores for apparels. It includes the worth attractiveness, time saving, perceived risk, enjoyment and excitement, tangibility and high interactivity. All of those factors will contribute to the study of customer's purchasing intention for apparels on both stores which incorporates online and offline shopping. Pan, (2007) defined purchasing intention because the eagerness of buying the merchandise. In online shopping, it's expected that shoppers are more likely to associate price attractiveness and time saving with their intention to shop for while in offline shopping, consumers are more likely to associate tangibility, high interactivity and delight with their intention to buy. As a result, online marketers or retailers should remember of the issues faced by the consumers and their perceived risk to extend their intention to buy in online. Designers must note of consumers' needs because the usability is that the beginning line to urge the arrogance and support of the consumers (Alzola et. al., 2006).

For the name of this app it is an inspiration from the ancient trading place in Greece. Agora means a place of assembly for the people in Greece. The name is selected as this app will also help many small shops to reach a high market. The shops will get connected to provide the best products to the customers and the products that are produce and processed in our country only. As we know using the products produced in our country can adversely help the economy of the country and also helps the small-town products reach a high place where their work will be valued and praised.

The willingness of the buyers to try to to shopping at the web stores is mentioned as their intention to buy online. Often, this factor is assessed by the willingness of the consumers to get and to return to an equivalent website for creating further shopping. This then also adds to the buyer's

faith on the actual website. The intention of the consumer to make a purchase through internet is greatly attached with their mind-set heading for buying from internet and makes an impact on their final choice making and buying behavior.

1.2 Objective:

Due to this feature of image search which allow users to buy the product of there wish. Hence it becomes more reliable for the user to use this application.

So, our app considers all the problems come up while shopping online to be solved using AI. This project is about a shopping app that has the feature of image search. Using AI, the image uploaded by the customer will be scanned and matched by the similar products present in our database and the customer can easily search for what he exactly wants using an image.

Also, this project has the feature of voice search for those who are not able to type and search the products names easily. The bot will recognize the voice and search using the keywords exactly what the customer needs. As for bargaining our app will have a bot that will do bargaining with the customer. That feature will be price negotiator chatbot. Using this system customers will be able to negotiate the price accordingly. It also contains a chatbot that will help customers with there shopping like any queries will be sorted by chatbots, returning of any order or any complaints against the products will be handled automatically by chatbots.

The app also will have a secure login method to stay the info of consumers safe. It will use OTPs for login purpose that is double verification. As only password verification is not enough now a days.

1.3. Hypothesis:

H0: AI based shopping applications are more complex compared to existing shopping applications.

H1: AI based shopping applications are more advanced compared to existing shopping applications.

2. Methods and Materials:

In this research, quantitative methodology was wont to collect and analyze the info obtained from all the respondents. The researchers developed the questionnaire finely before finalizing and distributing to the targeted group of respondents. As the questionnaire should be accordingly that the responses can make it easy to state the result and conclusion. For this research the info was taken through the Google forms. The data was been collected from different age groups of individuals. All the info collected from the respondents were gathered together to be analyzed using the spreadsheet generated on the responses given by the respondents. Different age group of people were considered as it is important to know that which age group is more

technology bond. And those the generations before are wont to this changing world of technology.

2.1. Data and Result:

According to the responses collected it is seem that many people now prefer online shopping(fig 1) or more specifically we can say they prefer online shopping using mobile applications(fig 2). Also we have considered the different age groups of people so to know the thinking of all the people respective to their ages (fig 3) and also we can know the technology related thoughts of people which are older to this generation.

Fig 1: People preferring online shopping.

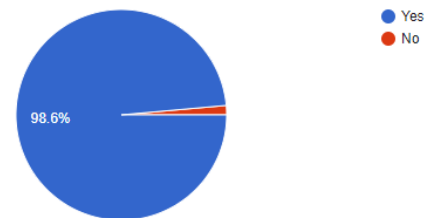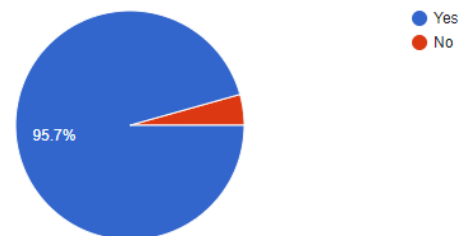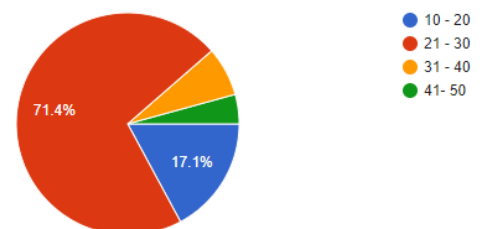Fig 2: People preferring shopping applications for online shopping.

Fig 3: The age groups that have responded.

But also while using this applications they are looking for some more specific features that will make this shopping more easier and comfortable. According the research they are mostly looking for 3600 rotating image i.e. a 3D image of

the products to get more specific idea of the products. Also they are looking for the price negotiating feature as this is the only thing that is not available currently(fig 4).
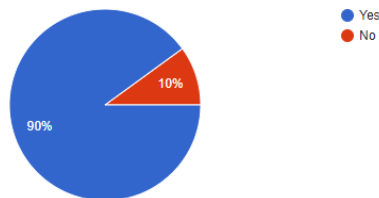

Fig 4: People willing to see price negotiator feature in shopping applications.

AI can help in creating this bot that can give audience an actual bargaining feature in a shopping application like they love to do while doing offline shopping.

Also we have noticed that people prefer buying clothes and electronics online (fig 5). As for that image search created using AI can help them more easily to find the products they are looking for and it also help them to get accurately there prefect brand and colour.
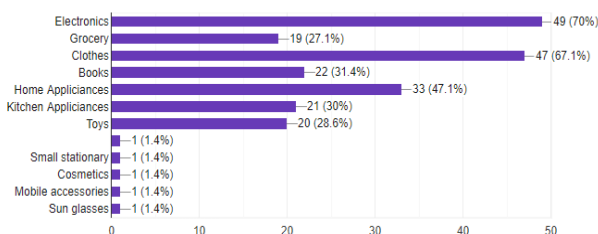

Fig 5: Goods people prefer more to buy online.

So far from the response it is clear that the shopping applications need more modifications that can done using the AI tools to create a more user friendly applications. This application will use AI to create this features such as price negotiator, image search, chatbots to provide 24*7 customer service and more filtration options to get the exact product.

2.2. Discussion:

The results of this study show that AI based shopping application is more easier to use and more advanced than currently existing shopping applications. This is because, using AI tools and equipment will prepare more features for the customers to shop online that will more likely to offline shopping. AI makes price negotiation possible in online shopping. The image search will also help in finding the products easily.

3. CONCLUSIONS

In conclusion, AI based applications are more time consuming and more customer friendly. Cash on Delivery which is exclusive to India is most preferred Payment Option. And the most of the purchasers choose an equivalent option once they make online shopping. Village respondents are easier to form shopping online thanks to unavailability of things in village. So it's an honest choice to them but if their pin codes also are getting coverage. Youth also as many other respondents are conscious of using Mobile Application. So it's an honest option for those that don't have facility of Desktop, PC, and Laptop. Also this new features that are produced using AI make it more user friendly application providing 24*7 service as bots are available all the time.

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