

SavvyMart

A Voice Assistant Smart Shopping Market

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Abstract - SavvyMart is a voice assistant e-commerce website which primarily focuses on meeting the customers' expectations. As today, customers not only want just a typical shopping website but a lot more than it. Keeping the same in our mind we have worked on this project and gave an amazing transition to the traditional online markets. The whole website of SavvyMart is animated which means whenever a user will click on something he/she will see a lovely animation which makes it interesting to use. Apart from animated user interface, we have also implemented a voice assistant named SAM with the help of which customers can listen to the description of the products instead of just reading it. We have also given importance to language barriers which means SAM can speak both in HINDI and ENGLISH providing a smooth and reliable customer experience. SavvyMart is a multi-vendor online market which means one can not only buy but also can sell their products using this platform.

Keywords - Online Market, Animated User Interface, Voice Assistant, SAM, Hindi, English, Text-to-Speech, Language Barrier, Multi-Vendor, Smart Shopping

I. INTRODUCTION

Online shopping is a process of selling and buying goods over the internet. There are a huge number of online markets which sell their products using the internet but what makes them different from one another is how they sell their products or what are the methods and techniques they use while recommending products to the users who visit their websites. Before starting this project we collected data and did a deep

analysis on what customers actually want and what are the parameters on which they decide which website is best for online shopping. On the basis of these parameters we had made our online market fully animated which will give customers a good experience on buying and selling products from our website and also they can experience a unique feature of SAM through which a user can listen to the description of the products instead of reading them. Through our research we also came to know not every person who buys online has good English because of which we implemented SAM in both English and Hindi so that language barriers don't ruin customers' experiences of online shopping.

II. DATA COLLECTION

We have collected data from a sample of population from our college on various aspects of online shopping. We have made different questions based on our analysis and then circulated them using google forms in different whatsapp groups of our college. After getting the numbers, we analysed them using different visualizations and came to certain points which we had implemented in SavvyMart.

A) Do you like online shopping ?

Answers	No. of People	Percent
YES	183	91.5%
NO	17	8.5%

Table 1 : Online Shopping Analysis

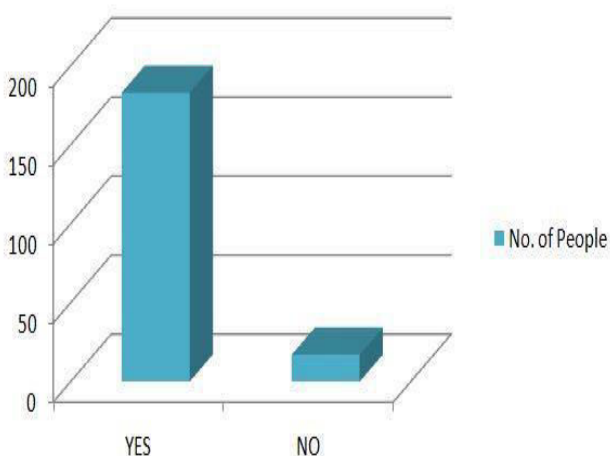


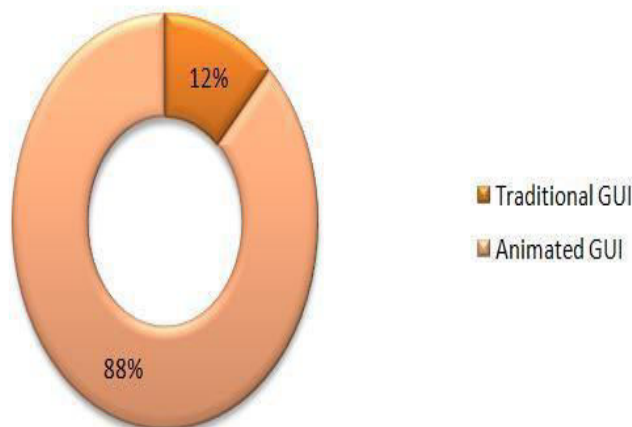
Figure 1 : Online Shopping Analysis

B) Do you like traditional shopping websites or fully animated websites ?

Answers	No. of People	Percent
Traditional GUI	24	12%
Animated GUI	176	88%

Table 2 : Graphical User Interface Comparison

Figure 2 : Graphical User Interface Comparison



C) Will you sell your products on a multi-vendor shopping website ?

Answers	No. of People	Percent
YES	133	66.5%
NO	67	33.5%

Table 3 : Online Selling Analysis

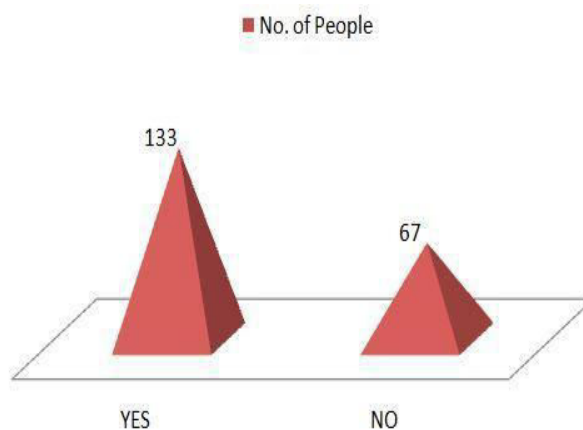


Figure 3 : Online Selling Analysis

D) Which type of payment option would you prefer ?

Answers	No. of People	Percent
Net Banking	72	36%
Credit Card	14	7%
Debit Card	27	13.5
COD	87	43.5

Table 4 : Payment Methods Comparison

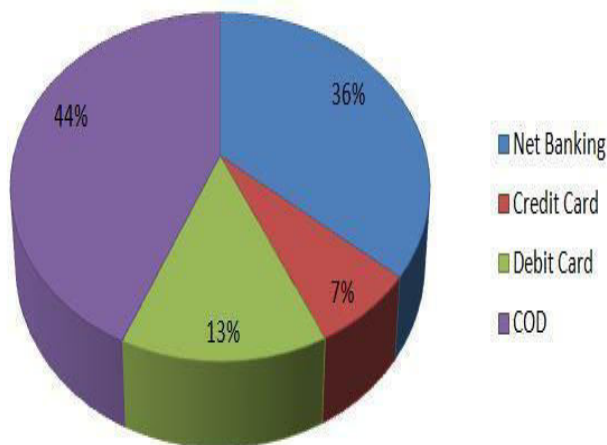


Figure 4 : Payment Methods Comparison

E) Would you like to have a voice assistant in your shopping market ?

Answers	No. of People	Percent
YES	191	95.5%
NO	9	4

Table 5 : Voice Assistant Analysis

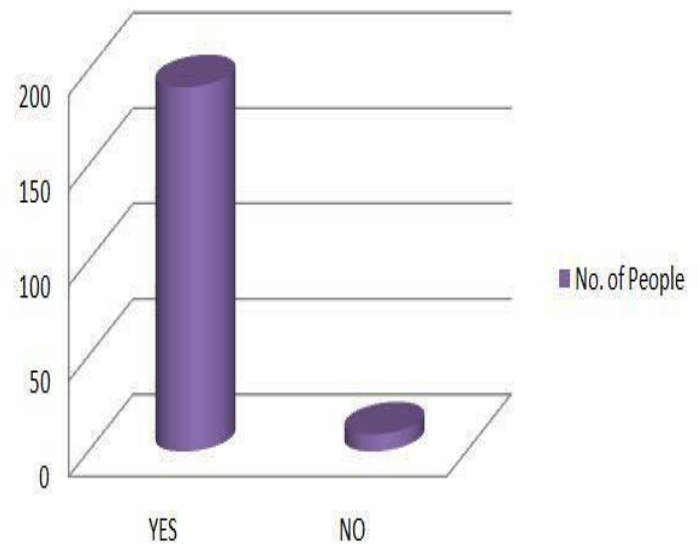


Figure 5 : Voice Assistant Analysis

III. TOOLS & TECHNOLOGIES

A) HYPERTEXT MARKUP LANGUAGE (HTML)

HTML is used for creating the basic layout of the web page. In this project, we have used HTML5 for creating the basic structure of the SavvyMart.

B) CASCADING STYLE SHEETS (CSS)

CSS is an add-on to the HTML. Where HTML is used for creating the layout of the web page, CSS is used for designing the web page. In this project, we have used CSS3 extensively for giving SavvyMart a modern look and for creating fully animated user interface.

C) JAVASCRIPT (JS)

JS is the main tool of any shopping website without which adding products in the cart is not possible. In this project we have used JS for adding products in the wishlist and shopping cart.

D) BOOTSTRAP

We have used BOOTSTRAP in our project for making the website responsive so that it can work on multiple screens of different sizes. SavvyMart can properly work in Laptops, Mobiles and Tablets screens.

E) WORDPRESS

Wordpress is the state of the art framework which is used mostly for blogging websites but we have used wordpress for our shopping website. Wordpress is very rich in plugins and we have used advanced plugins of wordpress for making SavvyMart user friendly.

F) MySQL

Wordpress uses MySQL as a database for storing data. In this project we have stored data of customers who buy products from us and also sellers who sell products through us using MySQL.

G) ARTIFICIAL INTELLIGENCE

To make SavvyMart more user friendly we have introduced SAM using the concept of ARTIFICIAL INTELLIGENCE. SAM is a voice assistant system which helps customers by telling them the description and details of each and every product sold on SavvyMart. One of the best features of SavvyMart is obviously SAM and one of the best features of SAM is that it can speak both in HINDI and ENGLISH breaking the language barrier.

IV. ALGORITHMS & CODE SNIPPETS

A) FEATURED PRODUCTS

This algorithm showcases the featured products marked by the sellers on the home page.

```
[ products limit="8" columns="4" visibility="featured" ]
```

B) LATEST PRODUCTS

This algorithm showcases the newly arrived products on the home page.

```
[ products limit="8" columns="4" orderby="id"
order="DESC" visibility="visible" ]
```

C) TOP SELLING PRODUCTS

This algorithm tells the customers about best selling products on the home page.

```
[ products limit="8" columns="4" best_selling="true" ]
```

D) VOICE ASSISTANT (SAM)

1) **In English** : We have implemented a voice assistant system which is known as SAM to make SavvyMart more user friendly. To implement SAM in english language we have used the *UK English Female* voice.

```
[ responsivevoice voice=" UK English Female"
buttontext="Hi, I am SAM !!" ] [ responsivevoice ]
```

2) **In Hindi** : To remove the language barrier we have implemented SAM in Hindi also to provide reliable customer experience. For implementing SAM in hindi language we have used the *Hindi Female* voice.

```
[ responsivevoice voice="Hindi Female" buttontext="Hi,
I am SAM !!" ] [ responsivevoice ]
```

V. MODULES

A) FOR GENERAL USERS

- ❖ HOME
- ❖ ABOUT US
- ❖ BLOG
- ❖ CONTACT US
- ❖ REGISTER

B) FOR CUSTOMERS

- ❖ MY ACCOUNT
- ❖ SHOP PAGE
- ❖ QUICK VIEW
- ❖ PRODUCT DESCRIPTION
- ❖ RATINGS
- ❖ REVIEWS
- ❖ WISHLIST
- ❖ FILTERING
- ❖ SEARCH
- ❖ ADD TO CART
- ❖ ONLINE PAYMENT
- ❖ SHIPPING
- ❖ TRACK MY ORDER

C) FOR VENDORS

- ❖ ADD NEW PRODUCTS
- ❖ PAGEVIEW
- ❖ COMPLETED ORDERS
- ❖ PENDING ORDERS
- ❖ REFUNDED ORDERS
- ❖ CANCELLED ORDERS
- ❖ NO. OF SALES
- ❖ TOTAL EARNING

VI. CONCLUSIONS

After researching and implementing this project *SavvyMart* we can conclude that now-a-days mostly people prefer to buy goods online as it saves their time and they can buy or sell their products on just one click. We have also concluded that there are several online markets available on the internet and to increase traffic on your online shop you should implement some advanced modules on your website which will attract customers to buy from your market. Considering these points in *SavvyMart* the advanced modules which we have implemented to increase traffic are *Animated User Interface* and *Voice Assistant* which is known as *SAM*. We have implemented *SAM* both in *English* and *Hindi* language and in future we are planning to implement *SAM* in *SANSKRIT* language too. Through this research work we can surely say that *Voice based E-commerce Websites are the future of Online Shopping*.

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