

Hyperlocal E-Commerce App

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Abstract

Hyperlocal E-Commerce App is an idea to create such an application which will help the customers and sellers to meet on an online platform. This will reduce the whole marketing time and also bring equal opportunities to the small shopkeepers in front of big marketing companies and shops. We did an online research through google forms in 2021 on a bunch of people who generally use e-commerce apps to see what are the drawbacks and problems they are facing and also their reaction on a hyperlocal e-commerce application.

This led us towards the result that hyperlocal e-commerce application is a solution of many problems. We worked through data correlation and data visualization technique to study the survey and point out the aspects which shows better potential in Hyperlocal e-commerce app than a usual-commerce apps .

Introduction

Our project is hyperlocal e-commerce app. This is basically an idea to connect the local shops to the customers through online mode. Recently, when the whole country was going through pandemic it was difficult for everyone to buy daily use products like groceries, medicines, daily need essentials which can be made easily available through this app. Previously presented apps are available for big dealers which provide things in high price which are not affordable for various customers and delivery of products take much time. So, our app will let you connect to local shopkeepers and make available daily needs, urgent things at affordable price and get delivered at your home in little span of time.

Our app's interface is for both shopkeepers and customers. Shopkeepers can add their products to the app which will be stored in database created.

The customer will get an interface where they can search for the item they want and a related drop down list is provided with price, company name, shop name, shop address. This app is created with the help of Kotlin and flutter framework where database is created with the help of firebase. The project will be an android app in the first stage of it's development. We are using Flutter framework to develop the application. Flutter is a great framework for creating applications whether it is web application or mobile application. It is platform independent i.e., the same code can be used to create iOS applications and web applications. It can also adjust the application according to the screen size. Along with flutter we are planning to use Kotlin as an logic development language (Backend) and Firebase in backend to store data into the database. This application can be useful in daily life . First it will ease the shopping process, like you don't have to waste so much time in the local market just because it is cheaper and you can bargain or you know the shopkeeper and trust him/her for their product quality. The customer can easily search the products and search for the shop in the list and can order whatever they want. It will be easier to use the software as we have designed the UI of the application in such a way that even a newly user can easily find all the resources and can get the best experience. In the today's era the big e-commerce companies like Amazon and Flipkart trying their best to give the best service to the customers but their each effort is affecting the local small shops in our country.

PHASES OF HYPERLOCAL MODEL

A single phase is considered as a collection of several works done to accomplish a single task. Here in Hyperlocal model there are basically four phases which are Services, Communication, Transaction and Delivery. The study to understand these phases are truly important as our whole objective is based on the following phases. This study leads us to the realistic visualization of the Hyperlocal E-commerce app.

SERVICES

In this phase we will study about the services which will be provided to the customers through this application. This will include the study of demographic and survey to know the needs of customers and how to target those needs. The survey told us that the customers buy generally essential things in their local market instead of ordering it online. This is because the online ordered things take time to get delivered which is the most affecting drawback. The essential things like medicine, daily life objects, groceries are the common objects which are generally borrowed from the local markets by the customers. The study also says that the customers buy small and cheap things from the local area as the online platforms demands a big percentage of the objects price for delivery charges. There are also many customers who believe that local shopkeepers are more trustworthy than the online platforms and some of them are also victims of online robbery and some experienced the delivery of defective items too.

TRANSACTION

The transaction technique for marketing is always been the most important factor. The local market i.e. offline market generally uses physical money for transactions but now they are also preferring UPI transactions it is more efficient way of transactions. The E-commerce apps uses many types of transaction methods for the convenience of the customer like UPI, Bank transfer, Net banking and Cash on delivery. Our app will also provide all these methods of transaction so that the user can easily buy anything as his/her convenience.

There is another thing which came out during the survey that the customers like to bargain to the seller to get the products in minimum spent of money. So we worked on this idea of bargain and came out with another idea to provide a chat box in the app so that the seller and customer can chat and if they both get agreed the seller can provide a discount coupon to the customer and if he/she apply that they can have a discount on the product.

COMMUNICATION

As we added a chat box to the application we enhanced the communication method of this application. This function will not only provide a way for asking for discount but it has much more objectives. This will also provide a way to both the customer and seller to know each other and make a good and trust worthy relation so that they can make business in future also. Trust is so important when a lot of money is involved in any transaction. This is also essential because by this the customer and seller can discuss the method of delivery. As the shop will be generally close to the customer there is a great amount of chance that the customer will borrow their needs by himself from the shop. In case of any emergency the customer can ask to the seller to provide the needed items to their residence as soon as possible.

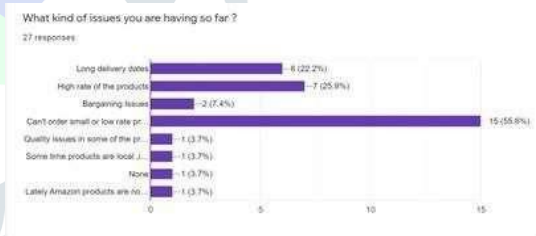


Fig.1 Issues faced by customers using normal e-commerce apps

DELIVERY

Delivery is the main aspect in this whole concept. Delivery time should be minimum and also the charges so this whole idea would stand straight on its path. As the stores are generally close to the customers the time will automatically get shorted same as the delivery charge.

It is considered that the delivery should be under the 24 hours in any case (worst case). Delivery charges should also be save. The method of delivery can easily be decided by the shopkeeper or by both shopkeeper and the customer i.e. , If shopkeeper have some way of delivering the orders they can use that otherwise the customer and shopkeeper can discuss through the chat box that how to transfer the order safely in customers hand.

METHEDODOLOGY

As we discussed before that their are four phases of the Hyperlocal E-Commerce Model, which are : Service, Transaction, Communication, and Delivery. In this paper, we are going to discuss the basic and important factors which are necessary in building a perfectly working Hyperlocal E-commerce company. Let us now consider the basic attributes which are generally used in nearly every e-commerce company that are , the no. of active users , no. of order placed and the no. of deliveries for the placed orders etc. Our primary technique will be to find out these necessary attributes which are required for the hyperlocal e-commerce company to expand. These attributes are required to determine the basic phases of Hyperlocal E-Commerce Models. We first seek to find out the inclination and vogue of these attributes in the modern world. After analyzing the trends we will relate these attributes to each other to see how it will affect the company. The study of these attributes can be based on defining the interdependence table and also by individually plotting the relational graphs for the same. At last, we relate these attributes with the hyperlocal e-commerce phases to find out any relationship between these phases.

We had studied through three different companies that work on a different domain or variety of demographic area and are based on the Hyperlocal model. These companies had various diversified attributes related to their works and domain. Our team examined these attributes separately with the time frame for these three companies and tried to find out the feedback of each attribute with time. After that, we scanned the data analyzed by the feedback to relate these attributes with each other to define any relation between them.

For this, we find the parallelism between each of these attributes and represent the parallelism values in the table. The compilation of this stage will bring us the paramount common attributes between these three companies in a single graph and terminate the other factors which can responsible for the diversity of these attributes. We can also relate these phases of the Hyperlocal E-Commerce Model which can affect the way of these important attributes. Apart from this, we can also compare the ratings given by the Employees of the companies taken out from the source which can give more clarity on the communication and interaction phase. These ratings are related to the governance purpose where employees express their views about the working environment of the company and career opportunities and the culture but these can be selected as an important directional way towards knowing the interaction within the company as interaction and communication is the important governance function.

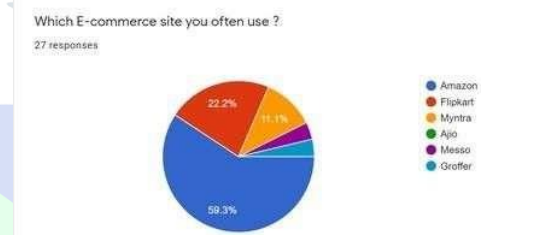


Fig .2 the frequent uses of e-commerce apps by the customers

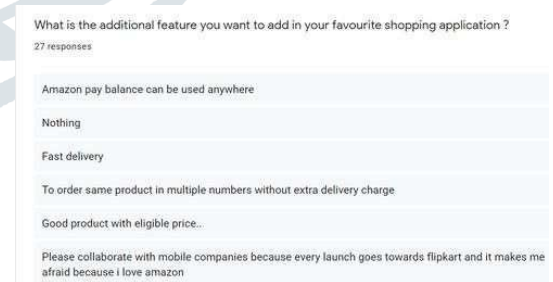


Fig.3 Suggestions given by the users in survey

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