E-Commerce accompanied by Errand Mechanism for User Convenience

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ABSTRACT

Nowadays many families are dealing with the problem of fast and energy-saving delivery of groceries. Also, they can't purchase products from different sellers of their choice in a single buy. Thus, to overcome these problems, we are going to make an application called "SAHAYAK-Simplicity of life". It is providing solutions based on vocal for local and errand methods. SAHAYAK is trying to connect local vendors & buyers on a single platform and to implement an errand method for any normal person who wants to deliver their nearest ones' ordered products can deliver. They earn credit points for such delivery which can be helpful for them in their future shopping. In SAHAYAK, the customer has a choice to select various products from their selected vendors and pay for them all together, the system will request those items to the respective sellers and collect & deliver them all together. Easy process to buy the groceries which customers want, don't have to pay extra or pay differently at all places.

Key words: Essentials, Traders, Delivery service, Errand

INTRODUCTION

In this upgrading world of the electronic market, identifying the needs and wants of customers and understanding it is such a challenging task. In past years our country and many others are implementing basic pickup or choosing items while visiting store technique, from these relationships between shops and customers have been established well thus they might find whatever products they want just by asking the shop to provide them. But as technology evolved to such an extent that now you don't have to leave your home for anything, you can buy, sell or surf on the internet. Thus many companies implemented these ideas of buying and selling everyday items, food, other items, or some exclusive international items online. An average middle-class family deals with purchasing groceries, dairy products, fruits, vegetables, home,

and kitchen supplies every day. To date these things can be purchased physically easily as even though we have those top-notch technologies yet people prefer shopping personally from their favorite shops, approximately 30% of the population used to shop online groceries and others still prefer physical shopping, but this pandemic changed the scenarios of the shopping world. Without getting out from the house to buy groceries or any other essential items make people switch over online shopping but this affected those physical small scale store nearby us as they had started decreases in sales, Even though this pandemic might ends anytime soon yet the one who devours, online shopping will might not prefer those small shops over convenient shopping.

Thus to bring everything under control with the concept of "vocal for local" and helping small scale shops we have came across the idea of an errand system from which customer will get those phenomenal services without even visiting their once favorite shop and the seller who is facing the effects of these latest technologies and technique can also contribute and upgrade their business by selling their products online at near range.

But to understand our synopsis let's first recognize what does "Errand" means? The errand is a process of delivering or collecting something especially on someone else's behalf to embed errands with our somewhat similar idea is, helping local shops to connect with the customers by providing a local medium like how various food chain services provide their customers this amazing experience. We are willing to introduce a middleman concept too. As various services have only delivery service, then this middleman concept will help the one who is willing to pick up those items for themselves and others or just delivering others items. This is how errands will be implemented besides this concept like user convenience i.e. User's choices shops, user's choices products, etc can be avail. The local area will be covered so the delivery service would be fast not like those bigger e-commerce websites. Besides buying and selling one can also promote their products or shops on the website. Proper Convenience for both seller and buyer and job availability for delivery man, middleman's credit points, and concealed shops will be in the limelight.

For our idea to be executed we are planning to first make a website that is convenient for all beginners in which multi-layout will help the user to surf easily. Providing access to evaluate details of sales, customer details, employee details, etc from our website will be available. Various other techniques such as GPS via Google Maps API will be provided to the delivery man and user to check nearby orders with the convenient process of buying, customers don't need to pay extra for rent of transportation or unavailability of spare changes. So basically a process to simplify your lifestyle.

LITERATURE SURVEY

A. Case Study

With rising technologies and trends E-commerce is one of the fastest-growing buying or selling platforms in our country. According to the study, India has an approximate 627 million internet users as of July 2019, about 40% of the population (Economic times et al., Mar 06, 2019). Despite being the second-largest user base, the penetration of online shopping is low compared to markets such as the United State or France.

In India, 75% of the e-retail activities are done using Cash on Delivery. In 2017, the largest e-commerce companies were Flipkart, Snapdeal, and Amazon. In the year 2020, India observed a 76% increase in sales in the online grocery delivery market, reaching $3bn. As of COVID-19 lockdown and quarantine measures forced buyers to change habits and to use a platform like BigBasket, Amazon, JioMart, Grofers, etc(Prarthana Prakash et al., Aug 19, 2020). It is predicted that, By 2020 online grocery may become a $10 billion industry in India (Sanchita Dashnov et al., Nov 4, 2019).
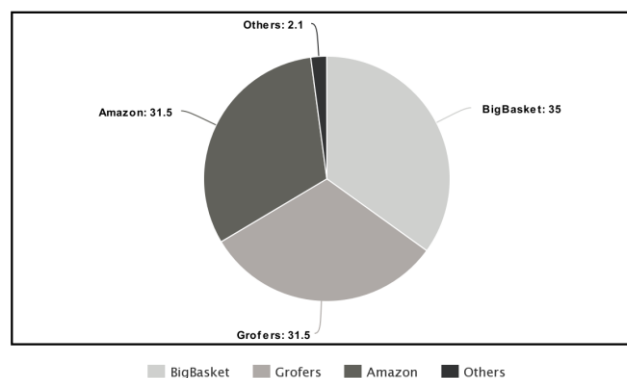

Figure 1 Market Share of Online Grocery Stores in 2019

B. Maintaining the Integrity of the Specifications

Factors influencing the growth of the Grocery e-commerce industry in India (Economic times et al., Mar 06, 2019):

1. Changes among customer's purchasing pattern

   Between switching from traditional buying patterns to technological evolution, changes in purchasing patterns play a very important factor in the 'Online grocery market'.

2. User Convenience

   Taking out time from busy schedules while working and buying items from stores is stressful and may lose energy and time, thus this process reduces

stress and provides a hassle-free purchasing environment.

3. Effect on Offline stores because of App or Web-Based services.

   Mega giants offline stores like D-Mart, Reliance store, BigBazaar, and others face huge issues as of gradual loss in sales, besides these local stores are next to forgotten and having almost no sales.

4. Internet Penetration

   As the rising needs of the internet for every purpose like e-commerce, social media surfing, online education, etc. Telecom industries are benefiting in large part from it.

5. Discounts and offers

   For years discounts, offers and coupons have been attracting customers a lot and those shining ads on websites or apps catch the user's eyes and thus maximum audience starts running over those while leaving local sellers.

6. Low-Cost management

   As compared to an offline store, costing of an online store is low and minimal manpower required, while no staff salary, no maintenance cost, no renting cost or other expense required thus many tries to go online with products.

7. No- Location Barriers

   As for offline stores, they have a limited range covered but at the same time online stores can reach to the next city, the next state, next country as of no geographical barriers. even though it requires a strong supply chain to maintain the reach, it is beneficial.

8. Other benefits

   Offline stores have certain time zones while online stores don't need a schedule as it is available 24 x7. Sometimes in offline stores, manpower is not available thus it affects sales but that is not an issue with online stores.
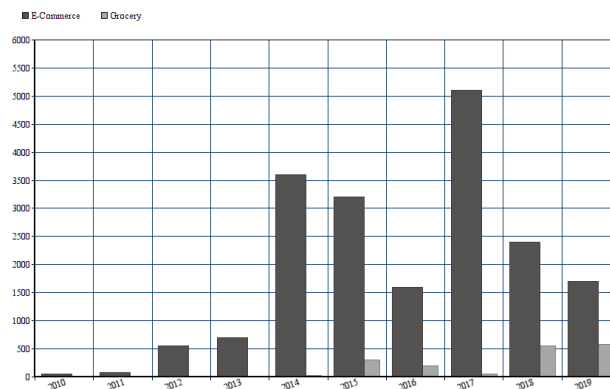
Figure 2 E-grocery funding from year in India

Gradual rise from e-commerce can be seen from the graph of how grocery e-commerce came into action while being shoulder to shoulder with other e-commerce sites. During this Covid 19 pandemic situation it overpowered e-commerce as of quarantine rules people started using grocery e-commerce more and thus it shows rises. With the rising power of e-commerces, cities like Delhi, Bangalore, Hyderabad, and Mumbai showed the result of key rises in the online grocery market.

Table 1. Table for Literature Survey (Application)

Key points	Applications of Literature Survey			
	JioMart (JioMart)	**Grofers** (Grofers)	**VFS** (VFS)	**All in one food** (All in one food)
Delivery Type	Courier	Courier	Worker	Courier
Vocal for Local	Semi	Semi	Own	Fully
Delivery Time and Area	2-3 days Fully covered	2-3 days Fully covered	1 day Certain part of city	2-3 days Various State
Product Type	Essential products app/ website	Essential products app/ website	Grocery app	Essential products app/ website
Category Selection	According to product	According to product	According to product	According to product
User Friendly Interface	Offers in main screen	Categories elaborated on the main screen	Categories and best selling in main screen	Have to select certain app in it.
Marketing	Country wide	Country Wide	City Wide	State Wide
Trust among Business	Traders and Customers	Traders and Customers	Traders and Customers	Multiple apps and customers
Employee Satisfaction	80%	80%	85%	75%
Delivery and Refund	Maximum week for refund	Maximum week for refund	On time	Maximum week for refund

Table 1. Table for Literature Survey (Website)

Key points	Websites of Literature Survey			
	OnlyDbest (OnlyDbest)	**Errand** (Errand)	**Big Basket** (Big Basket)	**Amazon Pantry** (Amazon Pantry)
Delivery Type	Courier	Courier	Courier	Courier
Vocal for Local	Semi	Fully	Semi	Semi
Delivery Time and Area	A day or more Selective	Few Hours Defined	2 or more Country Wide	2 or more Country Wide

Product Type	Grocery Website	Essential products app/ website	Essential products app/	Essential products app/ website
Category Selection	According to product	According to product	According to product	According to product
User Friendly Interface	Categories elaborated on the main screen	Stores mentioned on main screen	Products, Discounts & Categories elaborated on main screen	Products, Discounts & Categories elaborated on main screen
Marketing	Certain Region	Country Wide	Country Wide	Country Wide
Trust among Business	Traders and Customers	Supermarkets and Customers	Traders and Customers	Traders and Customers
Employee Satisfaction	85%	90%	80%	80%
Delivery and Refund	2-3 days	Frequent	Maximum week for refund	Maximum week for refund

C. Outcome of Literature Survey

From the above study we observed the following observations:

- Delivery method is either company tie up or handed over to another partner.

- Mostly partnered with big traders of supermarkets(Vocal for local).

- Delivery span is not as frequent as expected.

- Marketing focused mostly over the country.

- Dispute among vendors and company.

- Customer satisfaction is average because of unsatisfactory products sometimes and the refund process is long.

- Shops are not selected as what they want.

SYNPOSIS OF ERRAND

I've got some errands to run. 'Errand' term represents the journey taken or task done in place of someone else. It usually refers to doing someone else work or passing the items which require to be at a certain place. Usually used in everyday life. Group of friends hanging out and one of them is responsible to collect everyone's snacks for them, in society a certain person buys items for other neighbours, a person responsible for paying electricity bills of house owners of a certain building. a copier in a company prints documents of one or many departments. Errand has been used in many places, even in e-commerce but in a different way. what if that mechanism or noun we use in a different scenario.
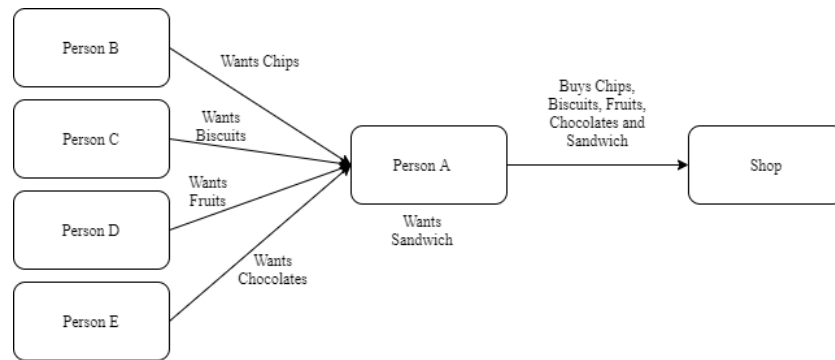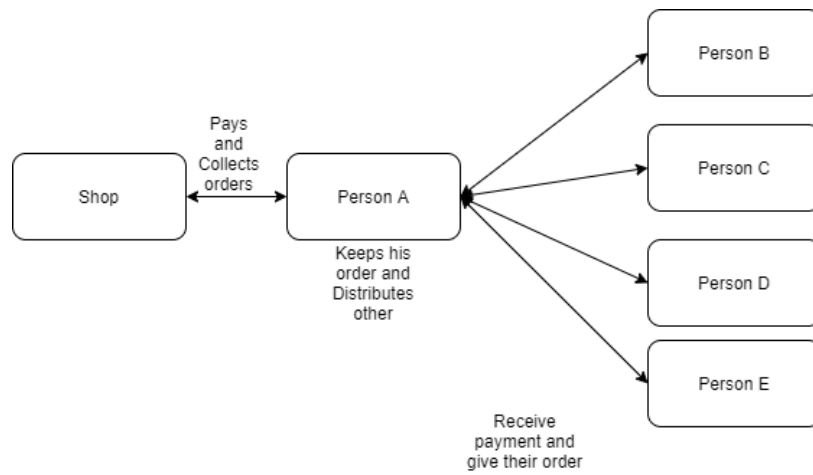
Figure 3 Buying Process of Errand

Figure 4 Delivery Process of Errand

WORK FLOW MECHANISM

Understanding the flow of execution of the process which will undergo. Usually, what happens when we use an e-commerce website? First, we search for a certain product, buy it, pay for it according to over convenience and then it gets delivered through any delivery service organization. whereas here the process flow is slightly different as the Errand mechanism is used in a modest, unlike way. Here the process would be easy but in this sort of mechanism, every local level vendor and buyer has chances to regain all the conscience behind certain actions.

While buying one can choose whether they are willing to pick it up or they want it to deliver at home. Orders track will help the willing person to check whether there are any nearby orders which need to be delivered. Besides this one can achieve faster delivery and some credit points. Also, this mechanism can be a gateway breakthrough for local-level vendors, transportation services, and any normal person. Ordering a product, Selling it, delivering it can be easy. More job openings, more limelight to local sellers - Vocal for local.

Order placement: Usually many e-commerce sites provide options of buying from a certain store or certain products only but here as many local shops will be connected so the user may choose the product by comparing shops, comparing products, and comparing price values. Product searching, Shop searching and Review Wise searching are some of the features available underneath these.

Once the order is placed by selecting any of the methods it requires to be paid. for these various common methods will be used such as COD, Net Banking, Debit Card, Credit Card, etc. while delivery it will have two options namely, Pickup or Delivery, For Pickup we get a new term Middleman. Middleman is the one who is willing to pick and deliver their orders with nearby orders. Users have a choice to select one. Once they select their appropriate option they can work forward with it. for Middleman the next step would be checking nearby orders and collecting track of those particular orders. For Delivery, the customer will pay it and wait for it.

Delivery concept: for Middleman, Once they place their order and collect tracks of other nearby orders a certain timespan will be allocated after which they have to collect those orders and deliver them to desired places also they can achieve any credit score for it. For the Delivery person, they will receive input as picking up some orders from a few stores and then bifurcating with another delivery person if needed and delivering it.

Seller Concept: Once they Receive a request for orders they will fulfill it also by categorizing it with the desired customers so the delivery process would not be troublesome. The seller can also promote their shops, products, or any facilities. They can usually update their warehouse tracks in it too.

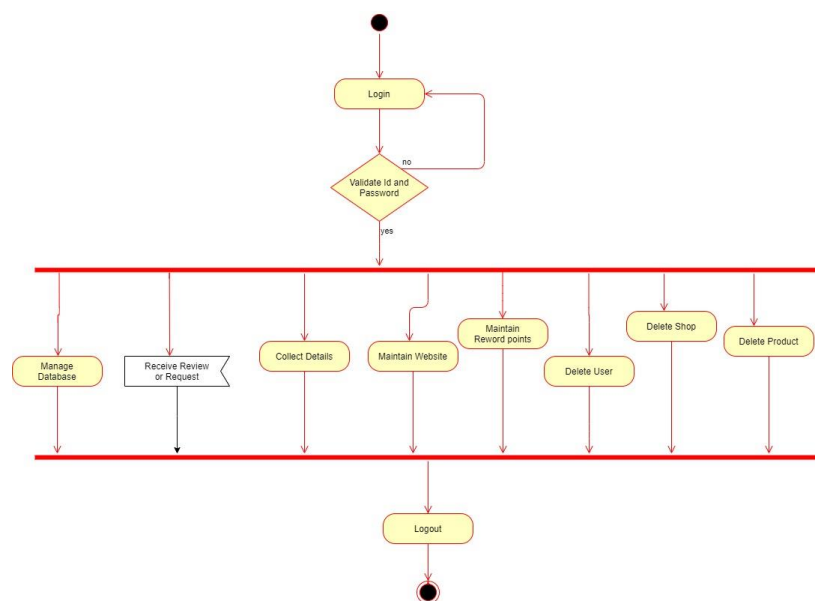Below is the representation of workflow which might occur at various stages.
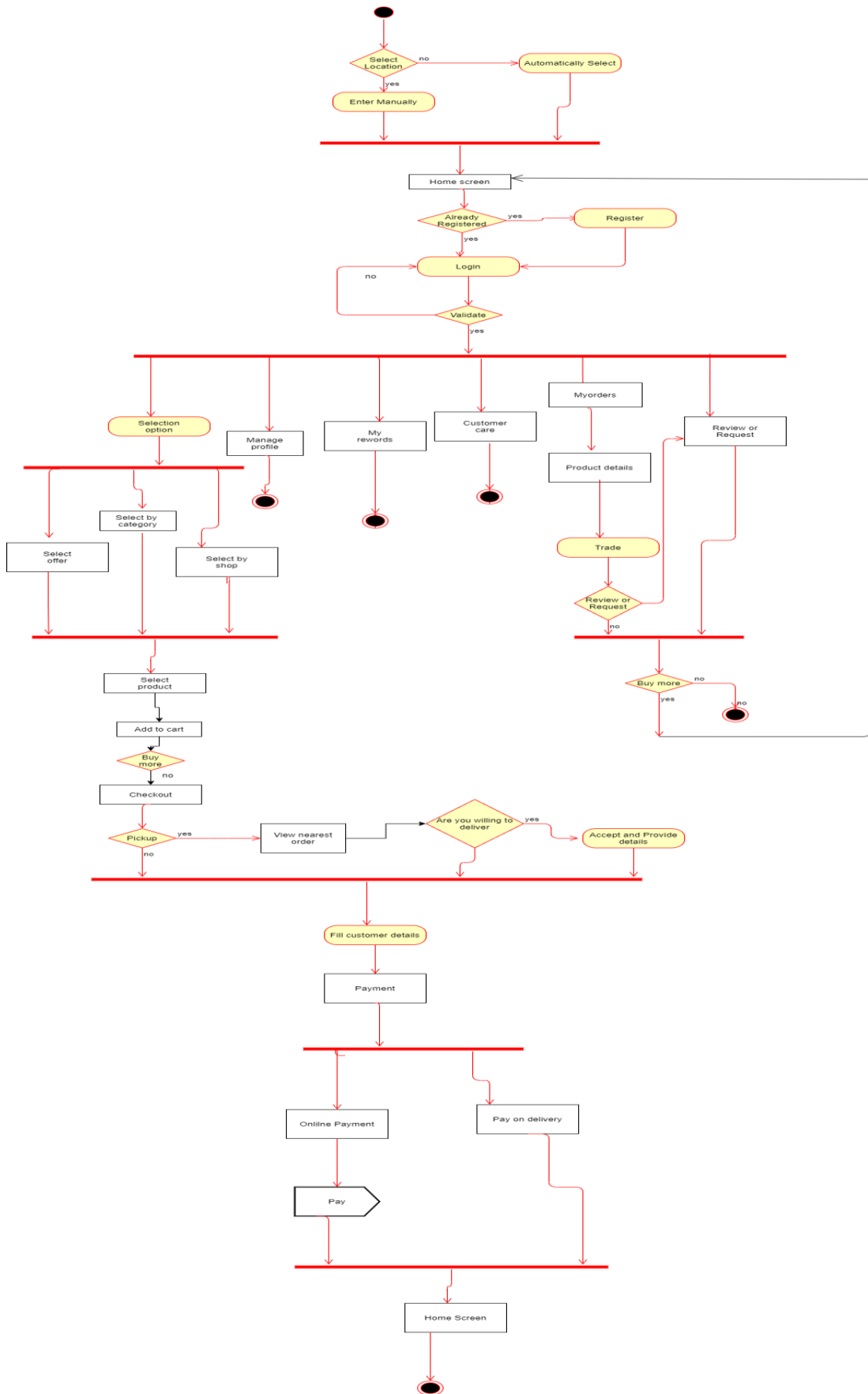

Figure 5 Activity Flow of Admin
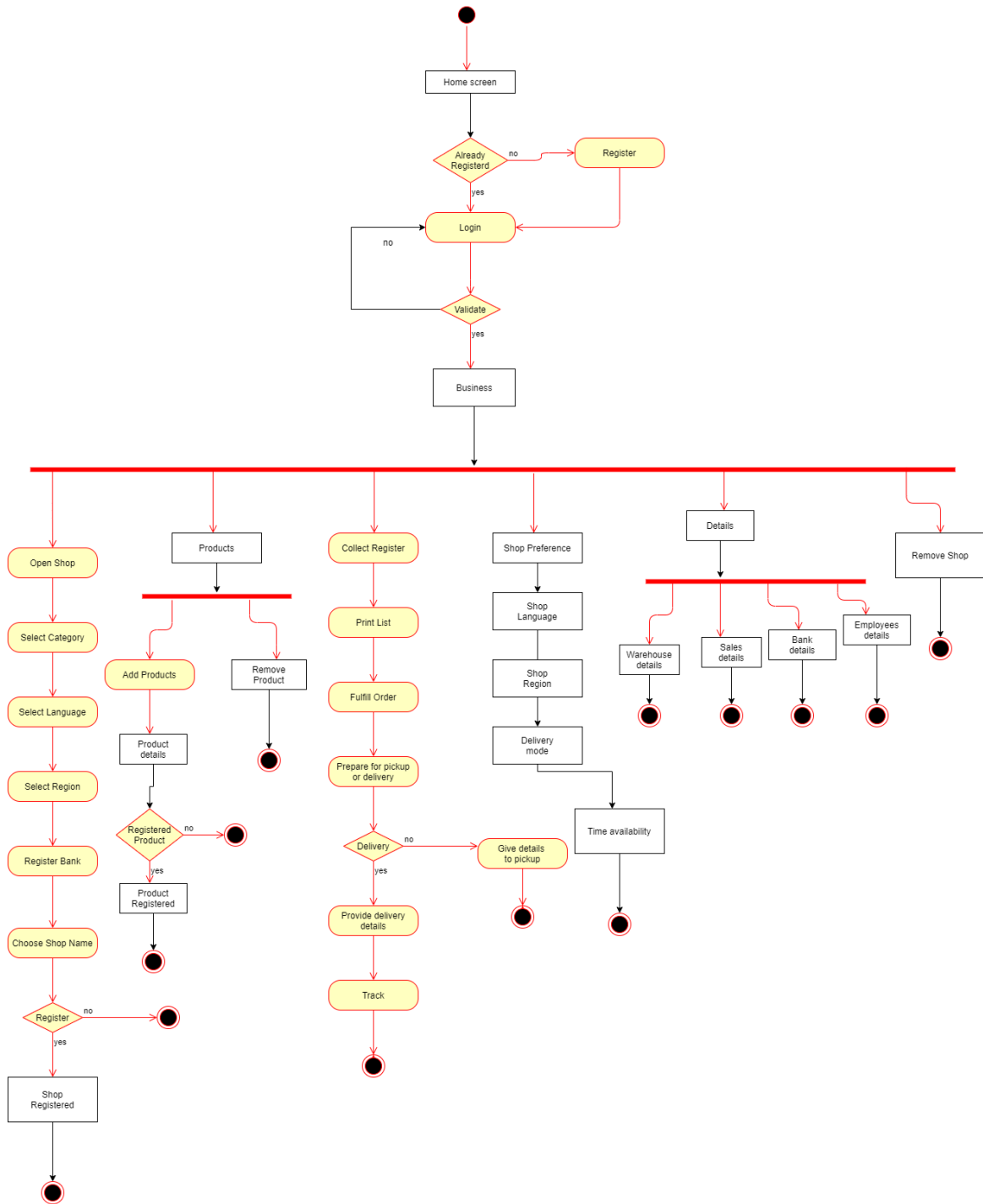
Figure 6 Activity Flow of Customers
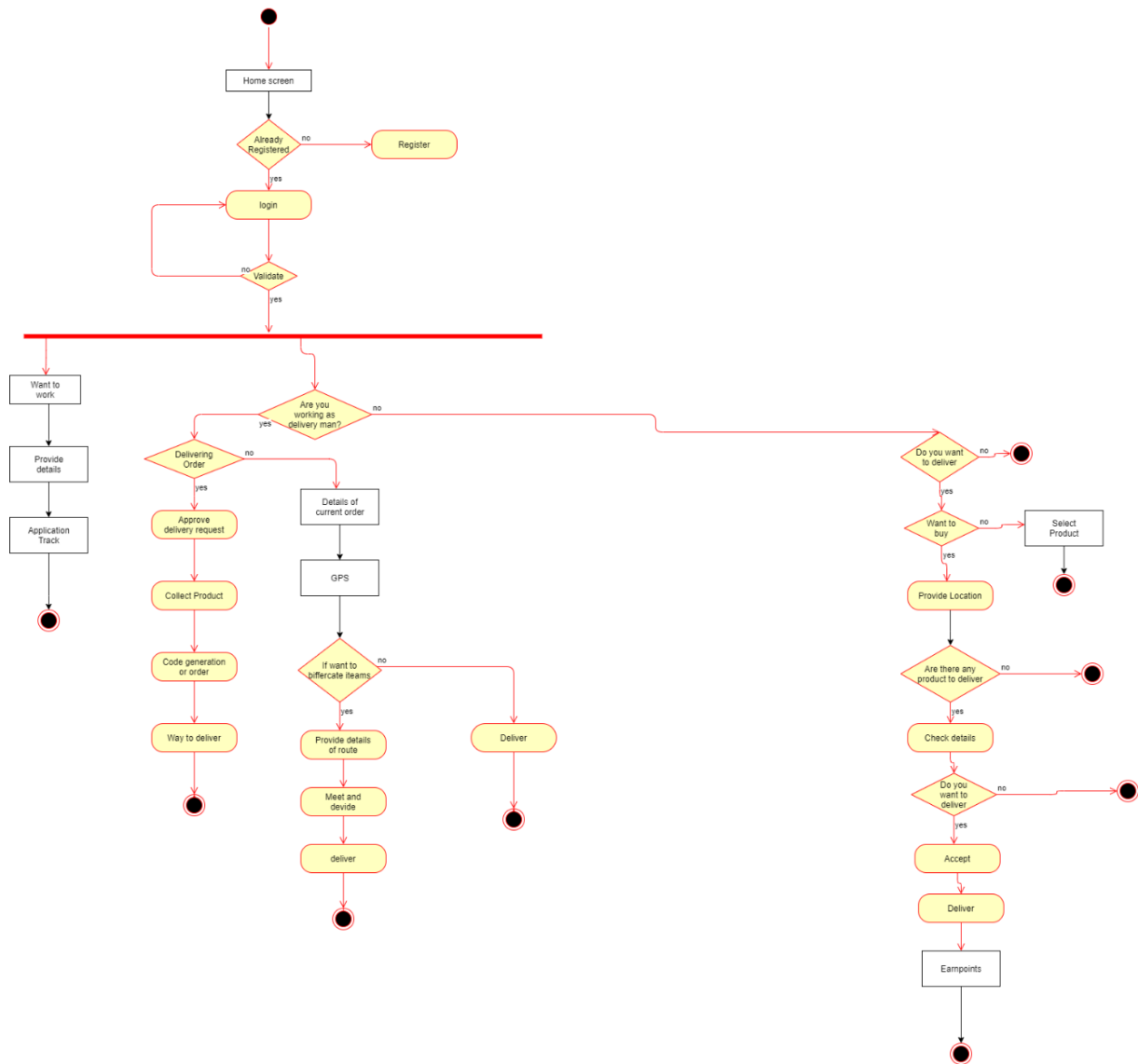
Figure 7 Activity Flow of Vendor

Figure 8 Activity Flow of Delivery Man and Middleman

CONCLUSION AND FUTURE WORK

This mechanism may help to eradicate the lost persona of local shops and provide them limelight to evolve. also, it may provide convenience and various advantages to many related or non-related to this field.

Currently, the major focus is to implement this concept upon local level mainly city level, in future days we are desiring to progress it to maybe state level and cover more local shops which are buried in 21'st century's modernized mega marts.

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