

Department of Computer Sciences

ENTERPRENEURSHIP

BS (CS)-4B

ASSIGNMENT NO. 2

The Champions

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QUESTION:

Prepare feasibility report for your final business idea according to the template we discussed in class

ANSWER:

Feasibility Analysis

The objectives of the feasibility Analysis are to find out that project can be done and to suggest possible alternate solutions. Feasibility Study is done to check whether the proposed system will be able to work within available resources (hardware, software, other equipment), it is also used to determine whether there is enough financial budget to develop and implement the proposed system, and whether the proposed system will work as per the expectation of the user or not.

Feasibility Analysis of E-Mechanic Service App.

Product/Service Feasibility

A. Product/service desirability:

As Internet tends to be the backbone of all the technologies. The foundation of the business venture "**E-mechanic service** "is to provide nearest service centers or mechanic locations to the user using an android application. It is designed to ease the access of the nearest mechanic locations who have registered through us. This direct connection of the user with the service centers and mechanics will have a huge impact with regards to the costing of the service as we will be able to offer it to the users at a discounted price, making it more appealing to them.

This app consisted of features like giving user car info, locating, and mapping of service centers, etc. References of above applications and additions of some extra features are made in the proposed system.

Extra features include-

- (1) Navigation to the service center and mechanic shops using GPS services.
- (2) Accessories chart.
- (3) Spare part sales
- (4) Towing Service

One of the innovative features of this app is that it can get the GPS location of the user and sends to the mechanic chosen (according to his rating and work experience), then that mechanic can get the exact position of the user anywhere and at any time. Any car user can make use of such app to locate and communicate with the service centers or mechanics in the vicinity. The proposed system can be used by any automobile user

B. Product/service demand:

There is a high demand of this kind of app for the user specially to provide them our services even at Nightfall(Mid-Night). There are already very less than few websites that offer these kinds of services and features like giving user car info, locating and mapping of service centers, etc.

And those of which who offer some of the above features, they do not facilitate customer at late night So, to meet this demand, we should be prepared by knowing the market, that is to ensure the protection of the user and the mechanic by knowing their exact location and being in contact with both the user and the mechanic in real-time. So that the user Experience is always positive.

Now that we know our products demand level, we will also meet the demands with our type of service. A high demand ought to have a high-quality service as well. Apart from this, entrepreneur starts from small, so initially, we will also be limited to few cities, so users from same cities are able to take advantages from our platform. And mainly we target to the audience, "whose ride breaks down at night on the way". We will be there to provide our services for the customers for always.

Industry/Target Market Feasibility

A. Industry attractiveness

My idea is also viable for industry as well because there is no any competitor in this field and there is no any competition in industry as well. As a potential customer of a business, one of the most critical factors that will determine profitability is the industry that one buys into, so profit margin is also very good in my idea. Why? Because when, somebody is going to his destination, Suddenly on the way to destination, When his car is breakdown, at this moment my app will proof very helpful for him, so mechanic from nearer area will go and fix his vehicle problem and after fixing his problem then take handsome amount of money from customer and take slightly more money comparatively normal mechanic's and customer will easily pay this amount because at that time, destination is important for customer rather than money and there is no option in front of customer, not to give money because there will no any mechanic's at that location or at that time as well. so, when customer pay to the mechanic then we will take commission of 5%-10% from every mechanic, like fiver etc., so in this way we also generate good money as well.

There are a lot of incidents happening daily in certain areas and there is no any mechanic or services, which entertain the affected peoples so there is very much potential in customers as well. Industry and affected peoples also attract with our services and this idea is really problem-solving idea.

B. Target market attractiveness:

Targeting an **attractive market** is considered as one of the **marketing** strategies used by companies to concentrate on number of people and a certain kind of business to gain profit. **Market** strategy is the plan that the company designs to create customer value and achieve customer profitability relationship.

So, we also use different types of marketing strategies for growing our business, first of all we identify the major affected areas where such type of incidents like car breakdown occurs, commonly so first of all we **target** such type of areas because there is very high *customer potential*, and *targeting attractive market* will help us in growing our business very quickly when we help multiple customers at the start by targeting attractive market, When our mechanic fix the problem of customer then customer will also be happy and then this customer also become a source of *marketing* for us. How? Well, basically when our mechanic will resolve customer problem then this customer also share information about our platform to his relatives, friends etc., when they will be in trouble or facing any incident at late night then they use our platform and our mechanic will satisfy him or her then they also promote our platform, and so forth and so forth. In this way marketing chain will begin. We also use more marketing strategies for targeting attractive market like, Facebook Ads, Google Ads, Instagram Ads etc. And target the interested or attractive audience with specific areas because such big platform like Facebook, Instagram, Google provide facility to target specific, interested audience according to your product or services. So, we use

such type of marketing strategies in start for growing our business by targeting attractive audience and then gain profit.

Organizational Feasibility

A. Management prowess:

Our Idea is managed by a solid group of individuals with a passion in the App Development and Coding and excellent skill set bound for success. It is founding partner Mr. Shahzaib is a Software application **developer** and Managing Director Mr. Zohaib is a Full stack **developer &** IT security specialist. That is a reason why out team is devoted to Hard work so to avoid any flaw in the system. Its co-founders are also dedicated men and women who shares the same vision with the Leaders. They possess solid entrepreneurial experience and with technical expertise in information technology field. Combining these attributes will do good for the team and the project.

B. Resource sufficiency:

As I have told before. We will first limit ourselves to a few cities in beta version of the app, so users from same cities are able to take advantages from our platform. We must tap more of them so that our service will meet the level of demands from consumers. One of our tasks going forward is to determine the number of users and their requirements on daily basis to calculate the average use of the app to enhance the availability of our user-friendly platform to our customers. The purpose of this project is to provide car or any other automobile servicing and nearby mechanic shops more effectively than the existing system. There are some disadvantages of the existing service center finding systems. These disadvantages are overcome by the E-mechanic servicing and it can be made handily available to every person. Previously people could not get help or locate the service centers conveniently in case of their car break-down or any other emergencies. Thus, EMS is proposed to assist people and fulfill their requirements easily. First the user must select what he needs and then the app will show him suggestions according to his needs. So, what is good about this is the resource availability and less network congestion so to make the required resource or service available to user on one click rather than keep him waiting.

Financial Feasibility

A. Total start-up cash needed:

Now here, the investment money will depend on the scale of the business and the location and local government requirements.

Also, it depends on the average tax of service in the area we will conduct business in. But this is just a broad projection and assumptions: (all the assumptions are in PKR)

Development costs:

Care is taken by us to make sure that our system is developed using all available technology and resources. So, to provide a user-friendly platform. Front end should be well developed as well as the backend development. So, we need to purchase official themes Application Themes = Rs. 12,000

Other Expenses(Developer's Fees) = Rs. 70,000

Operational costs:

Our system is developed in such a way that user of the system requires only interaction with system to totally understand and use it flexibly.

For Operational Costs we just need to pay tax to Government of Pakistan to provide our services in an area legally and without any trouble.

Business permits and Taxation = Rs. 18,000

Security Licenses= Rs. 40,000

Maintenance and support costs:

The user of the application only needs a good internet connection (if possible, than 3G internet connection) to work with the application so only their network cost is the factor. Expenses of Some Other Factors like major server updates= Rs. 10,000 So Total start up cash needed = Rs. 150,000

B. Financial performance of similar businesses:

There are many websites in the market who are offering similar services, but they don't provide enough security to the user as well as their services have negative reviews so most of the people do not prefer them. Also, the ratio analysis (net profit ratio and the return on assets ratio) on each company's financial statements such as net profit or total expenses Show that they are going in loss which is a good point for us as the competition will be reduced. Also, our services and guaranteed security will give our business positive reviews and hence boosting our Financial performance as compared to similar businesses.

C. Overall financial attractiveness of the proposed venture:

With the people already in need of such a system in Islamabad where we will be implementing our system, we see a vast potential for our business to thrive as well. We have an advantage in terms lo location as we are strategically located in such a way that in this area if a vehicle breaks down the mechanics are far away, and similarly other services also take a lot of time in the area. This will prove favorable to us in terms of customer traffic and therefore, more success. With our services being provided at a lower cost but with a high-quality and security, consumers will be attracted to purchase their needs from us. We do not see us competing with the others already doing business in the area. What we see is the influx of more customers, and an increase in the marketing of our services. What we mean, in the financial side is that we will be making a good profit from this venture. Thus, the business has the potential to gain profit in the business stance, while making good impact to the environment in the social aspect. It will be satisfying the customers' needs, helping the environment, and providing us with income decently.

D. Overall Assessment:

The planned business is a potential to hit big in the market. It not only meets social responsibility as it helps the environment, but it also satisfies the needs of the consumers. The business is making the lives of the consumers better, the environment safer and the business proponents earn modest sum of money. Therefore, the business is well planned, the execution must then be shown, and success will most likely be achieved sooner than the owner's project.

Other Details.

Technical Feasibility:

Technical feasibility is necessary to check whether the system which is to be developed is technically feasible or not. i.e., whether the technology used to develop the system is feasible. Our application requires internet connection. The technologies which can help to develop such an application are Java, MySQL, PHP, and Android Environment. The supporting tools for above technologies are Android Studio, MySQL, and Android phone. All the above technologies are available. Although few of above require training for some amount of time, but it feasible enough to cope-up with the time allotted for the project. So, it is technically feasible.

Operational Feasibility:

Once the system will be deployed whether the System or application will work in the environment of the Client? Or will it be User-Friendly? Or will it adjust according to Operating System and other resources of the Client? Etc., questions are needed to be checked. The systems should hold good GUI facilities which will attract the user to use the system. The system will be developed using version of android that is very easily available in all android mobiles.

Time Feasibility:

The Proposed System is a mobile application so it will take some duration of time to satisfy the objective of completing the system (Application). The duration that is allotted to develop the system is quite feasible in respect to time.

Functional Requirements

- Admin authentication using user id and password.
- RS 232 Serial communication mode
- Power generator.
- RFID receiver.

Non-functional Requirements

- 24 X 7 availability.
- Better component design to get better performance.
- Flexible service-based architecture will be highly desirable for future extension.
- Ease of Use-flexibility, performance.
- Security- Privacy, Confidentiality, Integrity, Authentication.
- Comprehensiveness- Transferability, Divisibility, Standardization.
- Maintenance.

Conclusion(Future Scope)

The goal of this project is to produce an interactive and entertaining application for the Android marketplace-Mechanic Service is composed of two main components: a client-side application which will run on Android handsets, and a server-side application which will support and interact with various client-side features. The system is designed to provide spare parts of all types of vehicles, services provided by mechanics at various places, locations of all the service centers in the vicinity etc. The above proposed model is easy to implement considering the available technology infrastructure. The models are simple, secure, and scalable. The proposed model is based on serial communication. But for future scope in enlarging the system we can use connectionless system. We can even start online for registration and information-based website