Feasibility Study for Voice Based Automated Transport Enquiry System

Feasibility study is made to see if the project on completion will serve the purpose of the organization for the amount of work, effort and the time that spend on it. Feasibility study lets the developer foresee the future of the project and the usefulness. A feasibility study of a system proposal is according to its workability, which is the impact on the organization, ability to meet their user needs and effective use of resources. Thus, when a new application is proposed it normally goes through a feasibility study before it is approved for development. There are some questions and answers that are important in feasibility study of this project.

1.How would be organization scope if this system was not implemented?

In the present sytem,we have experienced in waiting to a transport terminals for transport controllers to get the information about the transport facility. We encounter so many times there will be no person for providing these information which significantly wastes the time just to know whether there is any facility or not. Here is one solution for such a problem which lessens the human intervention in providing such information in the transport terminals.

2. What are the problems with current processes and how would a new system help alleviate this problem?

In the current system ,enquiry sytem is available only in Bus stands.there is no facility in any bus stands,the proposed system provide a system in bus stop for enquiring details by just giving the voice command.

3.What direct contribution will the system make to the business objectives and requirements?

A Customer or User can easily get service with the help of this system. It saves the time and effort of the User.user can ask the details by giving command to the system.system will provide the details in the form of voice.

4. Does the system require technology that has not previously been used in the organization?

Voice Based Automated Transport Enquiry System is developed for providing the information for the enquiry in transport terminals. Security is provided by using SHA512 algorithm. Speech-To-Text (STT) system takes a human speech utterance as an input and requires a string of words as output.The proposed system is implemented using Mel-Frequency Cepstral Coefficient (MFCC) feature extraction technique and Minimum Distance Classifier, Support Vector Machine (SVM) methods for speech classification

5. What must be supported by the system and what needed to be supported?

This website is a great platform that provides faster and easy customer service online/offline. If he/she want to know about the transportation.

The document provides the feasibility of the project that is being designed and lists various areas that were considered very carefully during the feasibility study of this project such as Technical, Economic and Operational feasibilities.

The following are its features

ECONOMIC FEASIBILITY

The Voice Based Automated Transport Enquiry System must be justified by cost and benefit. Criteria to ensure that effort is concentrated on project, which will give best, return at the earliest. One of the factors, which affect the development of a new system, is the cost it would require.

The following are some of the important financial questions asked during preliminary investigation:

• **The costs conduct a full system investigation.**

• **The cost of the hardware and software.**

• **The benefits in the form of reduced costs or fewer costly errors**.

Since the Voice based Automated Enquiry System is developed as part of project work, there is no manual cost to spend for the proposed system. Also, all the resources are already available, it gives an indication of the system is economically possible for development.

TECHNICAL FEASIBILITY

The system must be evaluated from the technical point of view. The assessment of this feasibility must be based on an outline design of the system requirement in the terms of input, output, programs and procedures. Having identified an outline system, the investigation must go on to suggest the type of equipment, required methods for developing the system, running the system once it has been designed.

Technical issues raised during the investigation are:

• **Does the existing technology sufficient for the suggested one?**

• **Can the system expand if developed?**

The proposed Voice Based Automated Transport Enquiry System has more features available than the existing systems that are currently used. This system is available in bus tops for enquiry. The system can be expanded if more requirements are available in future. The system has been developed using HTML as front end, Php as Connectivity and MySQL in back end, for the website and also to develop app for this using android studio, the project is technically feasible for development.

OPERATIONAL FEASIBILITY

This includes the following questions:

• **Is there sufficient support for the users?**

• **Will the proposed system cause harm?**

The solutions suggested by the proposed system such as satisfying the user requirements, time management etc. are acceptable. The users can easily adapt to the proposed system as it is more convenient and user friendly. The Voice Based Automated Transport Enquiry System uses simple user interfaces for ease of use with the user.