System Study

System study is the process of analysing data, identifying issues, and using the data to suggest system improvements. It is the process of studying a procedure or business to identify its goal and purposes and create systems and procedures that will efficiently achieve them. It requires intensive communication between the system users and system developers. In order to identify the issue regions, the system is examined closely, the inputs are recognized, and the system is taken as a whole. The solutions are given as a proposal. On user request, the proposal is assessed and appropriate revisions are made. System analysis is a process of gathering and interpreting facts, diagnosing problems and the information to recommend improvements on the system. It is a problem-solving activity that requires intensive communication between the system users and system developers. System analysis or study is an important phase of any system development process. The system is studied to the minute's detail and analysed. The system analyst plays the role of the interrogator and dwells deep into the working of the present system. The system is viewed as a whole and the input to the system are identified. The outputs from the organizations are traced to the various processes.

System analysis is concerned with becoming aware of the problem, identifying the relevant and decisional variables, analysing and synthesizing the various factors and determining an optimal or at least a satisfactory solution or program of action. A detailed study of the process must be made by various techniques like interviews, questionnaires etc. The data collected by these sources must be scrutinized to arrive to a conclusion. The conclusion is an understanding of how the system functions. This system is called the existing system. Now the existing system is subjected to close study and problem areas are identified. The designer now functions as a problem solver and tries to sort out the difficulties that the enterprise faces. The solutions are given as proposals. The proposal is then weighed with the existing system analytically and the best one is selected. The proposal is presented to the user for an endorsement by the user. The proposal is reviewed on user request and suitable changes are made. This is loop that ends as soon as the user is satisfied with proposal. Preliminary study is the process of gathering and interpreting facts, using the information for further studies on the system. Preliminary study is problem solving activity that requires intensive communication between the system users and system developers. It does various feasibility studies. In these studies, a rough figure of the system activities can be obtained, from which the decision about the strategies to be followed for effective system study and analysis can be taken.

Existing System

The existing system requires a customer to visit the shop manually and choose items for their pets. As the system requires a manual visit of a person, it consumes time and is not a user-friendly process. The consumer must know about the product that he/she is decided to buy. Otherwise, it will be difficult to identify the product as these are various similar looking products available.

Drawbacks of Existing System

- Insufficient awareness of goods and services.
- Customers have to be physically present at the shop before choosing any item for purchase.
- Lack of adequate storage facility
- Difficulty in transaction process
- All documents need to be maintained manually
- A time-consuming process
- Manual analysis of sales
- Less user friendly
- Lack of real time query resolving system

Proposed System

PAWS' OWN focuses on developing a web application where the purchase of several pet case products and accessories takes place such that the customers need not go to the shop for buying products. The proposed system is especially designed for dogs and cats which makes it different from the existing system. The admin can manage products, manage the users of the system, get a summary of data related to products, sales, appointments and many other information related to the website using graphs or charts so that they provide a visual representation. The customers of the system can search across a variety of products, add products to cart, purchase products, view order history, book appointments, view appointment history, view pet health schedule and vaccination schedule. A customer can order the product they wish to buy through the application. The system allows the customers to find the appropriate products for their pets and to know about the right way to care them. It provides the users to book for vaccination for their pets from the comfort of their home and real-time answering of queries using artificial intelligence (Chatbot), which uses Artificial Intelligence (AI) and Natural Language Processing (NLP) to respond to the customer queries by training them with suitable algorithms. The customers can retrieve and verify information using QR code Technology by scanning.

Advantages of Proposed System

- Online shopping is possible from anywhere at anytime

- Customers get a wide range of products to choose from

- Resolving customer queries using AI powered chatbot

- No pressure, no crowed, simply convenient

- User friendly

- Easy analysis of data

- Retrieval of information using QR code technology

- Saves cost and time

Feasibility Analysis

A feasibility study is conducted to determine whether the project will, upon completion, fulfil the objectives of the organization in relation to the work, effort, and time invested in it. Feasibility study lets the developer foresee the future of the project and the usefulness. A system proposal's workability, which includes the influence on the organization, capacity to satisfy user needs, and efficient use of resources, is the basis for a feasibility study. Thus, when a new application is proposed it normally goes through a feasibility study before it is approved for development. 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

Cost and benefit analyses are required to support the emerging system. Criteria to make sure that focus is placed on the project that will yield the best results the earliest. The price that would be involved in developing a new system is one of the variables. 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.
- The easy analysis of data flowing throughout the system.

The proposed system was created as part of a project; hence, there are no manual expenses associated with it. Also, all the resources are already available, it gives an indication of the system is economically possible for development. The cost of the proposed system was broken down into three categories: system costs, development costs, and hosting costs. All calculations indicate that the project was created at a minimal cost due to the use of open-source software during the whole development process. The system is designed using resources which are cost efficient.

Technical Feasibility

The system needs to be assessed first from a technical standpoint. An overview design of the system requirement in terms of input, output, programs, and procedures must serve as the basis for the assessment of this feasibility. The inquiry must next advise the kind of equipment, necessary procedure for constructing the system, and means of operating the system once it has been designed after having identified an outline system.

Technical issues raised during the investigation are:

- Does the existing technology sufficient for the suggested one?
- Can the system expand if developed?

The project should be developed in such a way that the required performance and functionality are met within the limitations. The system may still be used even though the technology may become outdated after a while because a newer version of the same software still works with an earlier version. So, there are minimal constraints involved with this project. The system is developed using HTML, CSS in front end and MySQL in server in back end, the project is technically feasible for development. The System used was also of good performance which is of Processor Intel i7 core; RAM 8GB and, Hard disk 1TB.

Behavioral Feasibility

The proposed system includes the following questions:

- Is there sufficient support for the users?
- Will the proposed system cause harm?
- Can the proposed system resolve real time queries of the customer

The project would be advantageous because, when created and implemented, it would achieve the goals. The project is deemed to be behaviorally feasible after carefully weighing all behavioral factors. PAWS' OWN, GUI is user friendly so that users can easily use it without any training