

## **CHAPTER 3**

### **REQUIREMENT ANALYSIS**

### **3.1 FEASIBILITY STUDY**

A feasibility study evaluates the practicality, viability, and possible success of a project, commercial venture, or initiative by a thorough and methodical investigation. To decide if the project is worthwhile, a variety of issues, including technical, economic, legal, operational, scheduling, and environmental considerations, must be evaluated. The analysis offers insights into whether the project is in line with the organization's aims and objectives and assists stakeholders in making decisions by identifying potential problems, risks, and opportunities related to the project.

#### **3.1.1 Economical Feasibility**

Economic feasibility is the assessment of a project's prospective financial viability and profitability. It entails determining if the project's anticipated returns and benefits outweigh the expenses and hazards of carrying it through. In-depth financial analyses of initial investment, running costs, revenue estimates, pricing strategies, cash flow analysis, and return on investment (ROI) are all part of a full economic feasibility study. Based on the project's financial prospects and alignment with market trends and desires, stakeholders can decide whether to move forward with it, change its scope, or abandon it by undertaking an economic feasibility analysis.

The "Aqueon" project, a store selling imported and exotic fish, aquatic plants and its components, seems to be financially viable. The business seeks to provide ardent aquarists looking for exotic and alluring fish species. The shop can draw in a specialized consumer interested in unusual aquatic diversity by providing an exceptional range of imported fish from reliable vendors. Profitability is indicated by the initial outlay for store establishment, ongoing expenses, and anticipated sales revenue. The project has a good future for long-term financial sustainability and a respectable return on investment because to smart pricing tactics, competitive products, and growing consumer interest in exotic fish.

1. The cost to conduct a full system investigation?

The proposed system is developed as part of the project work, there is no manual cost to spend for the proposed system.

2. The cost of hardware and software?

All the resources are already available

### **3.1.2 Technical Feasibility**

Technical feasibility is the assessment of a project's or venture's ability to be effectively implemented technologically. In order to support the project's goals, it evaluates if the required technology, infrastructure, and technical resources are already in place or can be created. A feasibility study must include a project's technical feasibility, particularly if it involves substantial technology components or breakthroughs.

The technical feasibility of the online exotic store project “Aqueon” evaluates the viability of implementing the required technology and resources. A vital component of website development is choosing the suitable programming languages, and adequate web hosting options. To efficiently manage online transactions, we strive to build a user-friendly website with tools like product listings, a shopping cart, and secure payment gateways. In order to store user data, products data and reviews, database administration is also crucial. Ensuring data security and privacy is a priority to build trust with customers.

1. Is the project feasible within the limits of current technology?

Yes

2. Technical issues raised during investigation are:

Nothing

3. Can the technology be easily applied to current problem?

Yes

4. Does the technology have the capacity to handle the solution?

Yes

### **3.1.3 Behavioral Feasibility**

Behavioral feasibility, sometimes referred to as human or cultural feasibility, is the evaluation of how well a proposed project conforms to the attitudes, behaviors, and cultural facets of the individuals who will use or be impacted by the system. It concentrates on figuring out how people

orgroups will respond to the implementation of the new system and whether they will be ready to accept and adapt to it.

The "Aqueon" project's behavioral feasibility comprises determining how well the planned system for exotic fish stores fits with the attitudes and actions of aquarists and potential customers. Understanding user preferences, the system's interface's usability, the importance of customer evaluations and ratings, and the degree of customer interaction are the main areas of focus in the evaluation. Additionally taken into account are cultural factors and customer support systems. The project may be modified to suit client expectations, encourage interaction, and guarantee the success and acceptability of the exotic fish store by performing a thorough investigation.

1. Is there sufficient support for the users?

Yes

2. Will the proposed system cause harm?

No

### **3.1.4 Feasibility Study Questionnaire**

1. Are you currently selling exotic fish species or related products?

Yes

2. Would you be interested in providing additional information or images for your products?

Yes, for helping users to choose the correct product

3. How do you source your exotic fish inventory?

To ensure that our customers have the best selection for their aquariums, we only approve products from reputable vendors who are known for their high- quality and healthy fish.

4. What types of exotic fish species do you specialize in?

We are specialized in beta fishes.

5. Who can add and manage products in the system?

Sellers are authorized to add and manage their products in the system, including product details and images.

6. What is the purpose of the Sentiment Analysis module in the system?

The Sentiment Analysis module is used to rank products based on user reviews' polarity scores, providing better product recommendations for users.

7. What benefits do users gain from adding products to their favorites?

Users can easily access and refer to their favorite fish species for future purchases or considerations.

8. What is the primary target audience for the "Aqueon" project?

The primary target audience includes passionate aquarists seeking rare and exotic fish species.

9. Can users request for specific products that are not currently available in the store?

Yes, users have the option to request for specific products that are currently not listed in the store. The store management will consider these requests and, if feasible, may source and add the requested products to the inventory to fulfill customers' needs.

10. What features are available to Sellers in the system?

Sellers can add their products with price, description, and images, and they also have the ability to remove their products.