

Feasibility Study

This analysis is a critical stage in establishing if a project will satisfy the association's goals in proportion to the resources, effort, and time put in it. It assists the designer in establishing the project's prospective emphasis points and long-term consequences. To determine whether a given framework is feasible and advantageous for further research, all options must be considered, including the impact of the proposed system on the association, assessments of resource efficiency, client satisfaction, and capabilities to meet client requests. As a result, an achievability study is carried out on a regular basis. Recently, permission was granted for the development of a modern application. The scope's particular, monetary, and operational rationale is as it is.

Economic Feasibility

The economic feasibility analysis is a critical step in establishing the value of a new project in terms of cost and time investment. It entails a detailed examination of all elements that may impact the initiative's success. Economic analysis is the most commonly utilized approach for assessing the efficacy of a proposed system. Thus, the suggested system, Eyecare, has undergone cost-benefit analysis and is proven to be both practical and cost-effective given the project's presumptive cost.

To determine the system development cost, many cost categories were analysed, including labour expenses, computer costs, supplies and equipment costs, charges for implementing new software and computer equipment, system analysis, website coding costs, and database design costs. These are frequently one-time expenses that will be avoided after the project is completed. These cost categories may be extensively investigated to ensure that the system's development is economically viable and profitable.

In case of profit, decision is taken to design and implement the system.

The proposed system is financially feasible because of the following reason:

The proposed system is developed as a part of project so there is no manual cost to spend for proposed system.

There is no much hardware and software cost because all the resources are already available

The proposed system is economic, as it will reduce the time investment in running the daily transaction

Technical Feasibility

Technical feasibility is the process of determining if it is possible to manufacture and distribute an item or service using the technology and resources that are already available. The tools, materials, labour, logistics, and technology of the proposed plan are assessed as part of the technical feasibility analysis to determine how successful it will be. Before commencing the assignment, it is critical to identify and address any potential project issues. Making a flowchart of the product or service's development might assist in visualizing the system's process.

Eyecare is simple to use and doesn't need much instruction because it is self-explanatory. Even for first-time users, the application is simple to use. Based on the technical feasibility assessment, it is evident that the proposed Eye Hospital Management System aligns well with the hospital's existing technical infrastructure and meets the performance requirements. The system is deemed technically feasible, and its implementation is recommended with due attention to integrating with the legacy pharmacy management system

Once the system has been designed, there are several ways to run it.

- Is the project feasible within the limits of current technology.

- Yes

Technical issues raised during the investigation are:

- Nothing

- Can the technology be easily applied to current problems?

- Yes

- Does the technology have the capacity to handle the solution?

- Yes

Behavioural Feasibility

The examination of whether a proposed project or system corresponds with the organization's culture, current procedures, and the readiness of users to embrace and adapt to the changes brought about by the project is referred to as behavioural feasibility. It assesses the human and behavioural elements of project implementation and resolves possible difficulties linked to stakeholder and end-user acceptability, resistance, and support.

Two critical considerations have been taken to ensure the system's success:

- (1) if users will receive adequate support, and

- (2) whether the system will be damaging.

These challenges were thoroughly investigated to ensure that the system will be usable after deployment. Furthermore, all behavioural components were evaluated during the feasibility evaluation to ensure that the project is behaviourally feasible.

The behavioural feasibility assessment reveals strong acceptance of the proposed Eye Hospital Management System among hospital staff and patients. With comprehensive training, effective change management, and a focus on patient-centric features, the system is deemed behaviourally feasible and holds the potential to enhance patient care and operational efficiency.

Feasibility Study Questionnaire

1. How are patient eye records currently managed? Are they stored in physical files or documents? How are they organized?

Patient eye records are currently managed using physical files stored in cabinets, organized based on patient names and medical record numbers.

2. What are the key administrative tasks related to eye care currently performed manually, such as patient registration, appointment scheduling, billing, inventory management for eye medications, etc.?

Key administrative tasks include patient registration, appointment scheduling, billing and invoicing, prescription management, and basic inventory management for eye medications and supplies.

3. What are the main challenges or pain points experienced with the current manual system in eye care management?

The main challenges include time-consuming tasks, difficulty in quickly retrieving patient eye records, potential data loss or misplacement, and limited access to eye care information outside the hospital premises.

4. Are there any regulatory or compliance requirements that need to be considered for the new eye hospital management system?

Yes, the new system needs to comply with relevant medical regulations and ensure the security and privacy of patient eye care data.

5. Do you need integration with existing systems or third-party services (e.g., diagnostic imaging devices, pharmacy for medication orders)?

Yes, we would like integration with diagnostic imaging devices for viewing test results, and with the pharmacy for medication orders and inventory management.

6. How should the user interface and navigation be designed to ensure ease of use and efficiency in eye care management?

The user interface should be intuitive, with easy navigation and clear categorization of functionalities. It should be designed to minimize clicks and streamline tasks specific to eye care management.

7. How would you like the eye hospital management website to handle patient communication, appointment reminders, and follow-ups related to eye care?

We would like the website to support automated patient communication, appointment reminders, and follow-up notifications related to eye care through email or SMS.

8. What is the expected timeline for implementing the eye hospital management website?

We aim to have the eye hospital management website fully operational within nine months from the start of the development process.

9. How would you like the eye hospital management website to facilitate communication and collaboration among different eye care specialists and staff?

We want the website to include a secure messaging system to enable efficient communication and collaboration among eye care specialists and staff.

10. How do you currently manage appointments and patient scheduling? Is there a system in place for reminders and rescheduling?

Appointments and patient scheduling are managed manually through appointment books. There is no system for automated reminders or rescheduling.

SYSTEM SPECIFICATION

- Processor - 12th Gen Intel(R) Core (TM) i3-1240P 1.70 GHz
- RAM - 8 G B (7.68 GB usable)
- Hard disk - 1 T B
- Client on PC - Windows 7 and above.
- Technologies used - JS, HTML5, J Query, Python, CSS
- Front End – HTML, CSS, JS, J Query
- Back end – Python Django
- Database - MYSQL