FEASIBILITY STUDY

Feasibility refers to the practical extent to which a project can be successfully developed, implemented, and maintained. A feasibility study is conducted to evaluate whether the proposed software solution is workable, cost-effective, technically achievable, and beneficial to the organization. It examines resource availability, required technology, development cost, benefits after deployment, and long-term maintenance requirements.

The purpose of this feasibility study is to determine whether it is worthwhile to proceed with the development of AutoCare Connect – Car Workshop Management System, a system intended to digitalize vehicle service booking, pickup & delivery management, service status tracking, and workshop workflow operations.

If a system does not align with business objectives, it has little or no real value. Many organizations build systems that fail to support their goals because the objectives are unclear, requirements are not properly identified, or organizational politics influence decisions. Therefore, this feasibility study ensures that the proposed system meets user expectations, supports business needs, and aligns with established standards.

Objectives of the Feasibility Study

- To analyze whether the proposed system fulfills the operational needs of workshops and customers.
- To determine whether the system can be implemented using available technologies within the given timeline and budget.
- To assess whether the system can integrate effectively with existing digital tools or workflows.
- To verify that the software will be adaptable to future changes and user requirements.

Information Assessment Phase

1. How would the organization cope if this system was not implemented?

2. What problems exist in the current process and how would the new system improve them?

3. What direct benefits will the system provide toward business objectives?

4. Can information be transferred between this system and other organizational tools?

5. Does the system require new or unfamiliar technology?

6. What features must be supported by the system and which ones are optional?

Types of Feasibility

Below are the three major feasibility assessments conducted for AutoCare Connect:

1. Technical Feasibility

Technical feasibility evaluates whether the tools, platforms, and expertise required to develop the system are available and adequate.

Assessment:

- The project uses PHP, MySQL, HTML, CSS, Bootstrap, and JavaScript, which are well-established technologies.
- The system can be built on a XAMPP environment, which is easily accessible and beginner-friendly.
- The development team possesses the technical skills required to implement CRUD operations, authentication modules, dashboards, and workflows.
- All technologies involved are stable, widely used, and supported by a large community.

2. Operational Feasibility

Operational feasibility evaluates whether the system will function effectively once implemented and whether users will accept it.

Assessment:

- The system directly addresses high-priority problems in workshops such as booking inefficiency and lack of service transparency.
- Users (customers, drivers, mechanics, and admin staff) are likely to adapt easily because the system provides intuitive dashboards.
- The workflow of the new system fits well with the existing operational structure of automobile workshops.
- The system simplifies tasks rather than complicating them, increasing chances of adoption.

3. Economic Feasibility

Economic feasibility considers whether the project is cost-effective and offers long-term benefits.

Assessment:

Costs involve:

- Basic development setup (XAMPP, code editor) — no major cost
- Hardware required (laptop/PC) — already available
- System development time and effort
- Testing and maintenance

Benefits include:

- Reduced manual workload
- Better customer management
- Organized data and automated workflows
- Long-term savings due to digitalization
- Higher customer retention and satisfaction

Overall Feasibility Decision

Based on the technical, operational, and economic evaluations, AutoCare Connect is fully feasible and practical to implement.
The system meets organizational objectives, uses commonly available technology, and provides substantial long-term benefits.