

FEASIBILITY STUDY

DineEase Hub

Date: 01-08-2023

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Feasibility is defined as the practical extent to which a project can be performed successfully. To evaluate feasibility, a feasibility study is performed, which determines whether the solution considered to accomplish the requirements is practical and workable in the software. Information such as resource availability, cost estimation for software development, benefits of the software to the organization after it is developed and cost to be incurred on its maintenance are considered during the feasibility study.

The feasibility study for the DineEase Hub website is a comprehensive analysis conducted to determine the practicality and viability of developing and implementing the website. It aims to assess various aspects of the project, including economic feasibility, technical feasibility, and behavioral feasibility. The study provides valuable insights and data that enable stakeholders, such as restaurant owners and managers, to make informed decisions about whether to proceed with the project or not.

The feasibility study assesses the practicality and viability of the project from different perspectives. It is conducted to determine whether the website can be successfully developed and implemented to meet the restaurant's objectives.

1. Technical Feasibility

Technical feasibility assesses the current resources (such as hardware and software) and technology, which are required to accomplish user requirements in the software within the allocated time and budget. Technical feasibility analyses the technical skills and capabilities of the software development team members, determines whether the relevant technology is stable and established, ascertains that the technology chosen for software development has a large number of users so that they can be consulted when problems arise or improvements are required.

The DineEase Hub website, which aims to streamline restaurant processes and enhance customer service, is technically feasible based on the decision to use Python Django as the web framework. With its feature-rich framework, including an ORM system, templating engine, user authentication, and security measures, Django provides a strong foundation for building the desired functionalities. The framework's flexibility and extensibility allow

developers to create custom components and integrate additional features seamlessly. This adaptability is essential for tailoring the website to meet the unique needs of the restaurant, such as online ordering, table reservations, catering booking, and dish uploading.

2. Operational Feasibility

Operational feasibility assesses the extent to which the required software performs a series of steps to solve business problems and user requirements. This feasibility is dependent on human resources (software development team) and involves visualizing whether the software will operate after it is developed and be operative once it is installed. Operational feasibility determines whether the problems anticipated in user requirements are of high priority, determines whether the solution suggested by the software development team is acceptable, analyses whether users will adapt to a new software, determines whether the organization is satisfied by the alternative solutions proposed by the software development team.

The DineEase Hub website demonstrates operational feasibility through its practicality and viability in several aspects. First and foremost, the website aims to streamline and automate various restaurant processes, such as ordering, reservation, staff scheduling, and reporting. By providing a centralized platform for these operations, it reduces manual efforts and improves overall efficiency in managing restaurant activities. This streamlining of processes can lead to reduced operational costs and improved resource utilization. The DineEase Hub website exhibits operational feasibility through its process streamlining, customer convenience, early table reservation, employee management, data-driven decision-making, and technical capabilities. Implementing this website within the restaurant's existing environment offers numerous benefits, including improved efficiency, enhanced customer service, and increased business opportunities.

3. Economic Feasibility

Economic feasibility determines whether the required software is capable of generating financial gains for an organization. It involves the cost incurred on the software development team, estimated cost of hardware and software, cost of performing feasibility study, cost incurred on software development to produce long-term gains for an organization, cost required to conduct full software investigation (such as requirements elicitation and requirements analysis), cost of hardware, software, development team, and training.

The DineEase Hub website appears to be economically feasible due to the potential benefits it offers to the restaurant's financial performance. The website's online ordering and table reservation features can attract more customers and increase revenue. DineEase Hub website has the potential to be economically feasible, benefiting the restaurant with improved efficiency, increased revenue, and enhanced customer satisfaction.

The convenience of ordering food online and making advance reservations appeals to modern consumers, potentially leading to higher customer engagement and retention. The availability of prebooking options can also lead to increased customer footfall during off-peak hours, thus maximizing the restaurant's seating capacity and revenue potential. Moreover, the ability of the website to offer promotional discounts, vouchers, and loyalty programs through coupons can help attract new customers and retain existing ones. These incentives can boost customer engagement, encourage repeat visits, and foster customer loyalty, positively impacting the restaurant's revenue and overall profitability.

The use of Python Django as the development framework also contributes to the economic feasibility of the project. Django is an open-source and free-to-use framework, eliminating the need for expensive software licenses and reducing development costs.