Feasibility Report Submission

Student name: Chathushi Jayarathna

Student ID:

Centre name: Lithan (JISC)
Mentor: MS. Aravinder Kaur

Unit: 13 Computing Research Project

Date: 22/02/2023

Project TITLE: E commerce

Section one: Explain the feasibility study and type of feasibility study

Feasibility Study

A feasibility study is an assessment of the practicality of a project or system. Feasibility looks at targets to objectively and rationally discover the strengths and weaknesses of an existing commercial enterprise or proposed project, opportunities and threats present inside the herbal environment, the assets required to carry through, and in the end the possibilities for fulfillment. In its most effective phrases, the two criteria to judge feasibility are cost required and fee to be attained.

A properly-designed feasibility study should offer a historical background of the business or assignment, a description of the product or service, accounting statements, details of the operations and control, marketing research and regulations, economic information, legal necessities, and tax responsibilities. generally, feasibility studies precede technical development and venture implementation. A feasibility look evaluates the jumpstart project's potential for success; therefore, perceived objectivity is an important factor in the credibility of the study for potential investors and lending establishments. It has to consequently be performed with an objective, impartial approach to offer records upon which selections may be primarily based

TELOS framework TELOS framework Technical feasibility Is the project technically possible? Conomic feasibility Does it make financial sense? Legal feasibility How can legal limitations affect the project? Technical feasibility Can we keep up with realistic deadlines?

Technical Feasibility

This assessment is based totally on an outline design of machine requirements, to determine whether the business enterprise has the technical expertise to handle the completion of the jumpstart project. Whilst writing a feasibility document, the following must be taken into consideration:

- A short description of the enterprise to evaluate more viable factors which can have an effect on the study
- The part of the business being examined
- The human and financial factor
- The feasible solutions to the hassle

At this stage, the concern is whether the suggestion is technically and legally feasible (assuming mild value)

The technical feasibility assessment is targeted on gaining knowledge of the existing technical assets of the agency and their applicability to the anticipated needs of the proposed system. it's far an evaluation of the hardware and software program and the way it meets the need of the proposed device

• Hardware Requirements

No	Hardware			
	Туре	Server	Client	
1	Processor	Intel(R) Core(TM) CPU@ 2.60GHz	Intel Core i5	
2	Memory	32 GB	8 GB	
3	Hard Drive	4 TB	1 TB	
4	Network	SLT Fibre Network	SLT Fibre Network	
5	Monitor	Monitor 24"	Monitor 24"	
6	Keyboard	USB Keyboard	USB Keyboard	
7	Mouse	USB Optical Mouse	USB Optical Mouse	

• Software Requirements

No	Software	Functionality
1	Windows 10	Operating System
2	Bootstrap, CSS, Spring Boot	Web Creation
3	MySQL	Database Server
4	Tomcat	Web Server
5	Axure	Design
6	Google Chrome, Microsoft Edge	Web Browser

Network Requirements

No	Network Device	Functionality
1	Switch	Cable connecting network from workstation
2	UTP Cable	Connecting Medium
3	RJ 45 Connector	Cable connecting network with LAN Card

- Cloud Requirements
 - + AWS
 - + Azure
- Skills & Human Resource

No	Requirements	Skills
1	UI/UX Designer	Axure
2	Web Developer	HTML, CSS, JavaScript, Bootstrap, Spring Boot Java, MySQL.

Economic Feasibility

Feasibility has a look at additionally encompasses a financial analysis of the jumpstart project. The cause of economic evaluation is to determine whether or not there is an economic case for the funding choice. This evaluation is going past the gadgets generally protected in an economic evaluation. economic feasibility is interested in:

- The financial advantages of the mission
- The economic charges of the project
- The balance of these expressed in present value terms (the net monetary benefit)

Monetary charges and blessings aren't always similar to monetary prices and blessings. financial analysis includes project impacts that do not have a market rate and tremendous and bad influences which can be experienced by folks who aren't the

direct users of the services. it's miles in this way that financial analysis casts a broader internet than an economic assessment. Accounting gear which includes depreciation and capital fees ought to now not be blanketed in a financial evaluation.

Legal Feasibility

Legal feasibility observation is to realize if the proposed project conforms the legal and moral requirements. it's far critical that the project or business is following the necessities had to begin a business or a project along with business licenses, certificates, copyrights, business insurance, tax number, fitness and protection measures, and many more.

There are a few matters to consider in prison feasibility take a look at which include moral troubles and a few social troubles. those problems are privacy, nepotism, and duty.

legal feasibility study proposed device should determine if it has a conflict with criminal requirements for instance if the records processing device is complying with the local facts protection Act.

- Privacy Policy
- Licenses
- Copyrights

Operational Feasibility

Operational Feasibility approach that a qualified professional or operational expert rationalizes that a purpose can be finished without unreasonable issues, without using useless ways and without incurring severe fees to gain the same outcome with the aid of getting rid of the thing to be able to require said issue, pointless way and incurring excessive charges. An intergovernmental technique will occur whilst operational feasibility is used as a reason to adhere to an end result or strategy.

Scheduling Feasibility

This assessment is the most critical for jumpstart project success; in the end, a jumpstart project will fail if no longer completed on time. In scheduling feasibility, an organization estimates how much time the challenge will take to finish.

When these regions have all been examined, the feasibility evaluation allows become aware of any constraints the jumpstart project may additionally face, inclusive of:

- Internal challenge constraints: technical, technology, price range, resource, and many others.
- Inner company constraints: economic, advertising and marketing, export, etc.
- External constraints: logistics, surroundings, laws, and regulations, and so forth.

Section Two: Feasibility study checklist

Most feasibility studies are structured in a comparable way. Developing a clear feasibility study allows jumpstart project stakeholders for the duration of the decision-making procedure.

A feasibility study contains:

01) Executive Summary

An executive summary is an overview of a file. The period and scope of your govt precis will differ relying on the record it's summarizing, but in general, an executive summary may be anywhere from one to two pages long.

The main four parts to the executive summery;

- Begin with the problem or need the document is fixing.
- Outline the advocated answer.
- Provide an explanation for the answer's fee.

• Wrap up with a conclusion approximately the importance of the work

02) Description of the product or service

The reproduction or content used to explain a costly proposition to potential clients. It explains the features, traits, and benefits of the product or service in a manner that informs customers and presents encouragement for them to make a buy

03) Technical Consideration

Technical considerations of feasibility assist determine the efficiency of a jumpstart project by examining the information of the intended system, along with the substances and labor, elements, and generation concerned in producing, distributing, and monitoring products or services. The technical thing of a feasibility study helps determine the efficacy of the jumpstart project by analyzing the details of the meant system, which include materials and exertions, logistics, and era associated with generating, delivering, and monitoring the goods or services would like to develop.

04) Market Survey

The duplicate or content material is used to provide an explanation for a value proposition to capability clients. It explains the features, tendencies, and advantages of the service or product in a way that informs customers and affords encouragement for them to make a buy

05) Operational Feasibility Study

Operational feasibility takes a look at evaluating whether or not or not the jumpstart agency is capable of finishing the jumpstart project and this includes staffing necessities, organizational shape, and any relevant legal necessities. on the give up of the operational feasibility looking at, whether or not the resources, competencies, and capabilities are available to complete the task is also vital.

06) Project Timeline

A project control timeline is an in-depth agenda for jumpstart mission. It spells out all the duties worried and a deadline for every in order that jumpstart whole group can see whilst individual steps will take area and when the whole project will be wrapped up.

Main steps:

- Create a jumpstart project brief
- List to-dos
- Estimate how long each step will take
- Map out dependencies
- Create timelines
- Share it with stakeholders
- Manage and adopt

07) Financial Projections

Financial projections use current or estimated financial facts to forecast jumpstart enterprise's future profits and prices. They often encompass unique situations so you can see how modifications to at least one issue of jumpstart finances (together with better sales or decreased operating costs) would possibly have an effect on jumpstart profitability

Section Three: Steps to conduct a Feasibility study

01) Prepare a preliminary analysis

A preliminary evaluation allows you to decide whether or not jumpstart project is well worth embarking on potentially luxurious and time-ingesting activities before the money and time are spent

02) Create a projected income declaration

If preliminary analysis determined that the product or service will satisfy a need, assume the profits that may be generated and compare it to the prices of manufacturing jumpstart offerings, paying jumpstart money owed, and preserving normal business operations. If expected net profits are fine, retain the following phase in observation.

03) Conduct a marketplace survey

An excellent market survey is essential. If the planner cannot perform this survey, an outdoor firm ought to be employed. The number one objective of a market survey is a realistic projection of revenues. The predominant steps consist of:

- Define the geographic effect on the market.
- Evaluation of population tendencies, demographic features, cultural factors, and purchasing energy inside the network.
- Examine competing offerings in the community to decide their major strengths
 and weaknesses. Factors to bear in mind include pricing, product lines,
 resources of referral, vicinity, promotional sports, high-quality of provider,
 consumer loyalty and satisfaction, and sales.
- Decide the total extent in the marketplace location and estimate the expected market proportion.
- Estimate marketplace expansion opportunities.

04) Make a business plan

A business plan describes services or products offerings in detail, outlines a production schedule, and offers motives related to start-up expenses, price of ongoing operations, and specific planning

An extensive attempt is necessary to develop particular plans for:

- Equipment
- Merchandising techniques
- Facility location and design
- Availability and price of employees
- Supply availability

05) Prepare a balance sheet

A day-one balance sheet has to show the assets and liabilities of the mission at the time of the jumpstart project's final touch or the beginning day before profits are generated

06) Review the information and make a choice

When carried out all of jumpstart research and compiled jumpstart records and estimations, a very last evaluation is essential. This very last evaluation serves to revisit the preliminary evaluation and examine it to the data you've acquired on account that then for the cause of determining whether jumpstart task continues to be feasible. This mirrored image lets you greater surely investigate the risks and prices related to this challenge and make a final choice on whether to start production

Economic Feasibility - Cost & Benefits

Costs	Year 0	Year 1	Year 2	Year 4	Year 5	Total
Development Cost						
Hardware	20000.00					20000.00
Software	20000.00					20000.00
Consultant	12000.00					12000.00
Training	12000.00					12000.00
Total Development Cost	64000.00					64000.00
Operational Costs						
Labor: Maintenance Programmer	50000.00	50000.00	50000.00	50000.00	50000.00	250000.00
Labor: Staffs	7500.00	9500.00	9500.00	9500.00	9500.00	45500.00
Software Upgrade	2000.00	10000.00	10000.00	10000.00	10000.00	42000.00
Software Licenses	10000.00	15000.00	15000.00	15000.00	15000.00	70000.00
Hardware Upgrades	10000.00	5000.00	5000.00	5000.00	5000.00	30000.00
Supplies and Miscellaneous Item	4000.00	4000.00	4000.00	4000.00	4000.00	20000.00
Total Operational Costs	83500.00	93500.00	93500.00	93500.00	93500.00	457500.00
Total Costs	147500.00	93500.00	93500.00	93500.00	93500.00	521500.00
Benefits						
Paperless Operations	0.00	20000.00	19000.00	25000.00	40000.00	104000.00
Equipment Allowance	0.00	120000.00	120000.00	120000.00	120000.00	480000.00
Total Benefits	0.00	140000.00	139000.00	145000.00	160000.00	584000.00
Total Benefits - Total Costs	147500.00	46500.00	45500.00	51500.00	66500.00	62500.00
Cumulative Net Cash Flow		101000.00	102000.00	96000.00	81000.00	380000.00

Benefits

S. No	Resource Name	Benefits
1	Ontime expenses	Increase Profit
2	Business user Time cost	Improve the organizational process efficiency
3	Hardware	Error Reduction
4	Software	Increase Speed reduction
5	Training	Reduction in Human
6	Outsourcing	Error reduction.
7	Facility	Increase in speed of activity.