|  |  |  |
| --- | --- | --- |
| Feasibility Report Submission | | |
| **Student name: Wildan Luqmanul Hakim** | | |
| **Student ID: BDSE-0322/STTB** | | |
| **Centre name: EduClaas** | | |
| **Mentor: Arvinder Kaur** | | |
| **Unit:** 13 Computing Research Project | | |
| **Date: 16 February 2023** | | |
| **Project TITLE: Research on Inventory Management for Jumpstart** | | |
| Section One: explain feasibility study and type of feasibility study | | |
| **Feasibility study** is a process used to determine whether a proposed project or idea is possible and practical. The goal is to identify any potential problems that could affect the project's success. The process includes defining the project, analyzing the market, evaluating the technical feasibility, examining the financial aspects, assessing operational feasibility, and identifying risks. The results of the feasibility study are used to make informed decisions about whether to move forward with the project or not. It is an essential tool for evaluating the viability and potential of a project before investing significant resources in it.  **Type of Feasibility Study:**  Technical feasibility study: The feasibility of the proposed project is investigated by this kind of study. It evaluates the tools, expertise, and technology needed to finish the project successfully.  Economic feasibility study: This kind of study assesses the proposed project's financial viability. It involves examining the project's potential costs, advantages, and risks.  Operational feasibility study: This kind of study examines how the proposed project will affect current workflows and procedures. It looks at the equipment, people, and facilities needed to carry out the project.  Schedule feasibility study: This kind of study assesses how long it will take to successfully complete the suggested project. It evaluates the project schedule and decides if it is possible to finish the project by the deadline.  Legal feasibility study: The legal and regulatory requirements connected to the proposed project are examined by this kind of study. It determines any potential legal or regulatory obstacles and evaluates whether the project complies with all applicable laws and regulations. | | |
| **Section Two: Feasibility study Check List** | | |
| **Technical Considerations**   1. Data management: A robust data management system is required to store, track, and analyze inventory-related data, such as stock levels, orders, and shipping details. 2. Inventory tracking: Jumpstart will need to implement an effective inventory tracking system to ensure they can manage stock levels across all their stores and distribution centers. 3. Technology infrastructure: Jumpstart will need to have a reliable technology infrastructure to support their inventory management system. This includes hardware and software components like servers, storage devices, and network equipment. 4. Automation: Automating certain processes within the inventory management system, such as reorder points and replenishment orders, can help optimize inventory levels and reduce costs. 5. Real-time visibility: Real-time visibility into inventory levels is crucial to making informed decisions about stock levels, sales forecasting, and order fulfillment. 6. Mobile access: Providing mobile access to the inventory management system can help store employees quickly check stock levels, make orders, and update inventory data. 7. Integration with other systems: The inventory management system should integrate with other key business systems, such as the point of sale system, to ensure that stock levels are always up-to-date and orders are accurately fulfilled.   **Market survey**   1. On a scale of 1-10, how satisfied are you with Jumpstart's current inventory management system? 2. How often do you experience product unavailability or stockouts at Jumpstart stores? 3. Have you ever chosen to shop at a competitor's store because the product you wanted was not available at Jumpstart? 4. How important is it to you that Jumpstart has a seamless inventory management system across all channels (in-store, online, etc.)? 5. Would you be willing to pay a slightly higher price for products if it meant that Jumpstart's inventory management system would ensure that products were always in stock? 6. How satisfied are you with Jumpstart's current return and exchange policy for products that are out of stock? 7. How important is it to you that Jumpstart provides real-time inventory information (such as availability and estimated restock dates) for its products? 8. How satisfied are you with the overall shopping experience at Jumpstart, taking into account product availability and inventory management? 9. Have you ever encountered any issues with Jumpstart's inventory management system that affected your shopping experience? If so, what were they? 10. How likely are you to recommend Jumpstart to a friend or colleague based on your experiences with its inventory management system?   **Operational feasibility study**   1. Existing processes and procedures: The study will review the current inventory management processes and procedures at Jumpstart to determine whether the proposed solution can be integrated with the existing processes or whether there will be a need to develop new processes. 2. Human resources: The study will assess whether there are sufficient skilled personnel within Jumpstart to manage the proposed inventory management solution. The study will also evaluate the training needs of the existing personnel and recommend the necessary training programs. 3. Technical resources: The study will review the technical resources available at Jumpstart, including hardware, software, and network infrastructure. The study will determine whether the proposed solution requires any additional technical resources and if so, whether they are available. 4. Data and information: The study will evaluate the availability and quality of data and information needed to support the proposed inventory management solution. The study will recommend any improvements needed to ensure the availability and quality of data and information. 5. Legal and regulatory considerations: The study will consider any legal and regulatory requirements that may impact the implementation of the proposed inventory management solution. The study will ensure that the proposed solution complies with all relevant laws and regulations. 6. Financial considerations: The study will evaluate the financial feasibility of the proposed inventory management solution. The study will consider the costs associated with the implementation and maintenance of the solution and ensure that they align with Jumpstart's budget. | | |
| **Section Three: Step to conduct feasibility study** | | |
| **Economic Feasibility**  Economic feasibility refers to the evaluation of a project's potential profitability and the estimation of its costs and potential returns on investment, to determine if it is financially viable. By assessing the economic and financial aspects of a project, stakeholders can make informed decisions about the project's feasibility and take necessary steps to ensure its success.  Financial Analysis:  Assets:    Long-term assets:    **Total assets: $725,000**  Liabilities and Shareholders' Equity:  Current liabilities:    Long term liabilities:    Shareholders' equity:    **Total liabilities and shareholders' equity: $725,000**  Assumptions:   * Gross profit margin of 60% * Projected revenue of $1,000,000 * Operating expenses of $500,000   Cost of goods sold: With a gross profit margin of 60%, the cost of goods sold would be 40% of the projected revenue, which is $1,000,000 x 40% = $400,000.  Projected profit:  Projected revenue - Total expenses = $1,000,000 - ($400,000 + $500,000) = $100,000.  Based on this financial analysis, the projected profit for the inventory management project is $100,000. | | |
| **Comments and agreement from tutor:** | | |
| I confirm that the project is not work which has been or will be submitted for another qualification and is appropriate**.** | | |
| **Agreed:** | **Name:** | **Date:23-Feb 2023** |
| **Comments and agreement from project proposal checker (if applicable):** | | |
| I confirm that the project is appropriate. | | |
| **Agreed:** | **Name:** | **Date:** |