Introduction:

With a vision to build a society where human dignity and human rights receive the highest consideration along with reduction of poverty, Bank Asia Ltd was established in the year of 1999. The bank's commitment is to provide a modern and value added banking services to all segment of the society by maintaining the very best standard in a globalized world, with the help of technological advancements. Conducting a feasibility analysis for Bank Asia Ltd is crucial to assess the viability, sustainability, and potential of the bank's operations. This study takes into account the constraints within which the system must function and evaluates the required resources, such as computing equipment, servers, and costs, based on user requirements. These estimates are then compared to the available resources. Feasibility, in this context, refers to the degree to which the proposed system can be effectively executed and implemented. When evaluating the system's feasibility, three main types are typically considered.

- **Technical Feasibility:** This form of feasibility evaluation examines whether the proposed project or system can be successfully developed or implemented with the existing technology and technical resources. It takes into account factors such as the availability of essential hardware and software, the proficiency of the development team, and potential technical obstacles during implementation. If the project is deemed technically feasible, it implies that the necessary technology and expertise are available to execute the solution effectively.
- **Operational Feasibility:** Operational feasibility pertains to the evaluation of whether the proposed project or system is compatible with the current business processes, operations, and organizational framework. It examines how easily the project can be integrated into existing workflows and how well it will be embraced and utilized by end-users. Key aspects such as staff training, potential resistance to change, and the impact on daily operations are taken into consideration to determine the project's operational feasibility.
- **Economic Feasibility:** Economic feasibility centers on assessing the financial viability of the proposed solution and whether the expected benefits justify the associated costs. This evaluation involves a comprehensive analysis of the projected expenses for development, implementation, operation, and maintenance, as well as the potential revenues or cost reductions resulting from the project. A cost-benefit analysis is frequently conducted to

compare the anticipated financial gains with the expenditures, determining the project's economic feasibility.

Objectives:

- To solve deficiencies of the current system
- To find broad alternative solutions keeping the constraints on mind
- To evaluate feasibility of the alternatives
- To suggest the best solution among the alternatives

Limitations of the current system:

- **Absence of digital payment gateway and online banking:** The bank lacks modern electronic payment facilities and online banking services, hindering customers' convenience and access to digital transactions.
- **Heavy paperwork in account opening process:** The account opening procedures involve excessive paperwork, leading to delays and inconvenience for customers during the registration process.
- **Inefficient user satisfaction evaluation:** The bank's methods for measuring customer satisfaction are ineffective, making it challenging to gauge and address customer needs adequately.
- **Slow processing time:** The bank experiences prolonged processing times, resulting in delays and frustration for customers in various transactions and services.

Proposed solutions:

We have two potential solutions to overcome the limitations and enhance customer satisfaction. During the analysis phase, we will assess the pros and cons of each proposal, taking into account technical, economic, and operational feasibility. This evaluation will help us choose the most appropriate solution for implementation. They are described below.

Solution A: Increase the number of employees

The first solution is to consider increasing the number of employees in the branch for customer convenience and better support.

Technical feasibility:

- No additional technology is required
- No software is required
- No additional training is necessary

Operational feasibility:

- No user training is required
- Preferable to rural and aged people
- As the system is already common no marketing is required

Economic feasibility:

Investment	**Amount of money (Tk)**
Hiring cost	1,50,000Tk
Furniture & decoration cost	1,30,000Tk
Storage document & management cost	60,000Tk
Human resource management cost	1,20,000Tk
Miscellaneous cost	1,25,000Tk
Total investment cost	5,85,000Tk

Cost per year	**Amount of money (Tk)**
Salary	35,000*2*12 = 8,40,000Tk
Incentives	40,000*2 = 80,000Tk
Utilities and Stationery	2*2,000*12 = 48,000Tk
Total recurring cost	9,68,000Tk

Payback Period:

Total Investment	5,85,000Tk
Total Recurring cost	9,68,000Tk
Total Income	12,50,000Tk
Net Benefit	(12,50,000-9,68,000) =2,82,000Tk
Payback period	5,85,000/2,82,000 = 2 years 27 days

Solution B: Integrated Banking System

Technical feasibility:

- Seamlessly integrable with the core banking system
- IT infrastructure available to support the system
- Technical manpower required
- Cross-platform compatible

Operational feasibility:

- Compatible with the current users
- User friendly and easy to use
- Reliance on heavy paperwork reduced

Economic feasibility:

Investment	**Amount of Money (Tk)**
Additional server & hosting cost	20,00,000Tk
Personal Computer	60,000*10 = 6,00,000Tk
Power and storage backup	2,50,000Tk
App development	60,00,000Tk
Marketing	10,00,000Tk
System Security	2,00,000Tk
Total	1,00,50,000Tk

Recurring cost	**Amount of Money (Tk)**
Server Maintenance	2,50,000Tk
Security Check	2,00,000Tk
Utility bills	15,000*12 = 1,80,000Tk
Tech Expert Salary	80,000*12 = 9,60,000Tk
Bandwidth	5000*12 = 60,000Tk
Total	16,50,000TK

Payback Period:

Total Income	88,00,000Tk
Total Recurring Cost	16,50,000Tk
Net Benefit	(88,00,000-16,50,000) = 71,50,000Tk
Payback Period	(1,00,50,000/71,50,000) = 1 year 4 months 28 days

Finding Optimal Solution:

Proposal	**Technical Feasibility**	**Operational Feasibility**	**Economic Feasibility**
A	Feasible	Feasible	Feasible
B	Feasible	Feasible	Feasible

In solution B, the payback period is relatively smaller. Thus, solution B i.e. Integrated system is more feasible.

Conclusion:

In conclusion, the feasibility analysis of a system is a crucial step in determining the viability and potential success of a proposed project or system. By evaluating technical feasibility, operational feasibility, and economic feasibility, we can assess whether the solution aligns with existing resources, processes, and financial constraints. This comprehensive assessment helps in making informed decisions about whether to proceed with the implementation or to explore alternative solutions. A well-conducted feasibility analysis provides valuable insights and sets the foundation for a successful and sustainable project. It allows stakeholders to make informed choices, minimize risks, and maximize the benefits of the system's implementation.