UTM UNIVERSITI TEKNOLOGI MALAYSIA RESEARCH UNIVERSITY	**UNIVERSITI TEKNOLOGI MALAYSIA**

System Analysis and Design
(SECP 2613)

ASSIGNMENT 2

Project Planning: Feasibility Study Report

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1.0 Problem Definition

MyClient+ is a company that currently depends on the traditional basic tools such as spreadsheets, forms and emails to conduct and manage its workflows. During the initial stages of development of the company, the company is absolutely adequate for them to operate their works. However, with the rapid changes and development of technology, these traditional methods are no longer efficient. Since there is lots of duplication of work, the reports that spend a few hours to compile and support tickets are unable to be real time updated or followed up. These issues have a negative impact on productivity such as missed tickets and delayed reports generated. The lack of automation, real-time updates and proper client tracking has led it customer dissatisfaction and fall behind its competitors who have adopted modern CRM platforms. Hence, the company ought to solve these problems by improving the current system to optimize the workflow.

2.0 Objectives, Requirements and Constraints

The new system aims to improve the efficiency of current workflow without the duplication of tasks by implementing an automation system to ensure the workflows are able to be operated smoothly as well as minimizing errors. Additionally, utilizing these digitized tools with features of real-time tracking and management of support tickets which enable timely updates and reports generated accurately, it is expected to increase client satisfaction and maintain its competitiveness in the industry. To achieve these expectations, this system should include centralized client data management, real-time reporting capabilities with a user-friendly interface and automation. The overall integration with existing tools with all of the new features must provide secure and reliable access to sensitive client data. Hence, the system enhances client service. However, there are several limitations, such as a budget of RM150,000 and limited internal IT expertise. As a result, the solution must be cost-effective and scalable implemented using a commercially available CRM platform.

3.0 Feasibility

3.1 Technical Feasibility

Technical feasibility evaluates whether MyClient+ current technology capabilities and available resources can implement the proposed CRM system. This includes the availability of suitable technology, internal technical skills, system compatibility, and potential implementation challenges.

Although MyClient+ lacks the internal skills required to develop a custom CRM system, many Commercial Off-the-Shelf (COTS) platforms can meet the company's requirements. These platforms provide features such as automation, ticket tracking, real-time updates, and reporting tools, which align with the business needs of MyClient+.

Implementing a ready-made CRM system mainly requires system configuration, integration with current tools like email and calendars, and also training and support provided by the vendor. While it is necessary to have technical training and onboarding, it can be managed successfully with proper planning and external assistance.

3.2 Operational Feasibility

Operational feasibility evaluates whether the proposed CRM system can be integrated effectively into current MyClient+ workflows, staffing, and company culture. It measures how the solution fits with daily operations, and whether the organization is ready and willing to adapt.

From team interviews, it was found that the current manual system is dissatisfying due to duplicated work, missed support tickets, and report delay problems. The sales and support teams are supportive of improving the current system.

A CRM system has the potential to streamline workflows, focus on client management, and also automate daily tasks, which can lead to faster and more accurate service. However, the success of implementation needs proper change management, including training sessions and possibly redesigning internal workflows to align with the CRM system operations.

3.3 Economic Feasibility

Economic feasibility assesses whether the proposed CRM system is a financially sound investment for MyClient+. It involves evaluating whether the expected benefits of the system outweigh its costs over a

specified period so in this case, five years. This is done through a Cost-Benefit Analysis (CBA) which calculates the Present Value (PV) of all expected costs and benefits, adjusting for time and risk factors such as inflation and uncertainty.

Table 1: Estimated Cost, Estimated Benefits and Assumptions

Table 1.1: Estimated Cost

Estimated Cost	
Hardware	RM45,000
Software	RM10,000
Consultant	RM25,000
Training	RM20,000
Supplies	RM3,000 per year
IS Support	RM15,000 per year
Maintenance	RM3,000 per year

Table 1.2: Estimated Benefits

Estimated Benefits	
Weekly Cost Savings	RM2,000/week

Table 1.3: Assumptions

Assumptions	
Discount rate	8%
Sensitivity factor (cost)	1.1
Sensitivity factor (benefits)	0.9
Annual increase in benefits	5%
Annual increase in production cost	6%

In Table 1.1, the initial investment costs, including hardware, software, consulting and training, were adjusted using a sensitivity factor of 1.1 to reflect potential increases in actual costs. In addition, ongoing annual production costs such as maintenance, IS support and supplies were projected to grow by 6% annually. (Table 1.3)

On the benefits side, which is Table 1.2, the CRM system is expected to improve operational efficiency and reduce manual workload, leading to estimated weekly savings of RM2,000. This benefit was adjusted using a sensitivity factor of 0.9 to account for uncertainty and was projected to increase by 5% each year due to cumulative process improvements. (Table 1.3)

Table 2: Cost Benefit Analysis (CBA)

Costs	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Development Costs						
Hardware	49,500					
Software	11,000					
Consultant	27,500					
Training	22,000					
Total	110,000					
Production Costs						
Supplies		3,300	3,498	3,708	3,930	4,166

IS Support		16,500	17,490	18,539	19,652	20,831
Maintenance		3,300	3,498	3,708	3,930	4,166
Annual Production Costs		23,100	24,486	25,955	27,512	29,163
(Present Value)		21,389	20,993	20,604	20,222	19,848
Accumulated Costs		131,389	152,382	172,986	193,208	213,056
Benefits						
Cost Savings		93,600	98,280	103,194	108,354	113,771
(Present Value)		86,667	84,259	81,919	79,643	77,431
Accumulated benefits (Present Value)		86,667	170,926	252,845	332,488	409,919
Gain or Loss		(44,722)	18,544	79,859	139,280	196,863
Probability Index	1.79					

Using a discount rate of 8%, the present value of both costs and benefits over five years was calculated. As shown in Table 2, the total PV of benefits was RM409,919, while the PV of costs (including both initial and production costs) was RM213,056. This results in a net gain of RM196,853.

The probability index which is greater than 1 indicates that the project is economically viable. In this case, a PI of 1.97 means that for every RM1 invested, MyClient+ would receive RM1.97 in return, making the CRM implementation a highly profitable and justifiable investment.

4.0 Work Breakdown Structure

1. CRM System for MyClient+

1.1. Requirements Gathering

1.1.1. Identify core project scope

1.1.2. Conduct stakeholder interview

1.1.3. Define functional and non-functional requirements

1.1.4. Obtain stakeholder sign-off

1.2. Design

1.2.1. Create system architecture and data flow diagram

1.2.2. Design UI/UX wireframes

1.2.3. Define database schema

1.2.4. API and Integration Planning

1.3. Development

1.3.1. Backend development

1.3.2. Frontend development

1.3.3. Database setup and configuration

1.3.4. Integrate third-party tools

1.4. Testing

1.4.1. Perform unit testing

1.4.2. Conduct User Acceptance Testing (UAT)

1.4.3. Bug fixing and performance optimization

1.5. Deployment

1.5.1. Deploy CRM system to production environment

1.5.2. End-user training

1.5.3. Post-deployment support and maintenance plan

5.0 Gantt Chart

Table 3: Duration of Activity in Work Breakdown Structure (WBS)

Activity	Description	Predecessor	Expected Time (weeks)
A	Identify core project scope	-	3
B	Conduct stakeholder interview	A	4
C	Define functional and non-functional requirement	B	5
D	Create system architecture and data flow diagram	C	5
E	Design UI/UX wireframes	D	7
F	Backend development	E	10
G	Frontend development	E	8
H	Perform unit testing	F,G	5
I	Conduct User Acceptance Testing (UAT)	H	4
J	Deploy CRM system to production environment	I	2

Gantt Chart

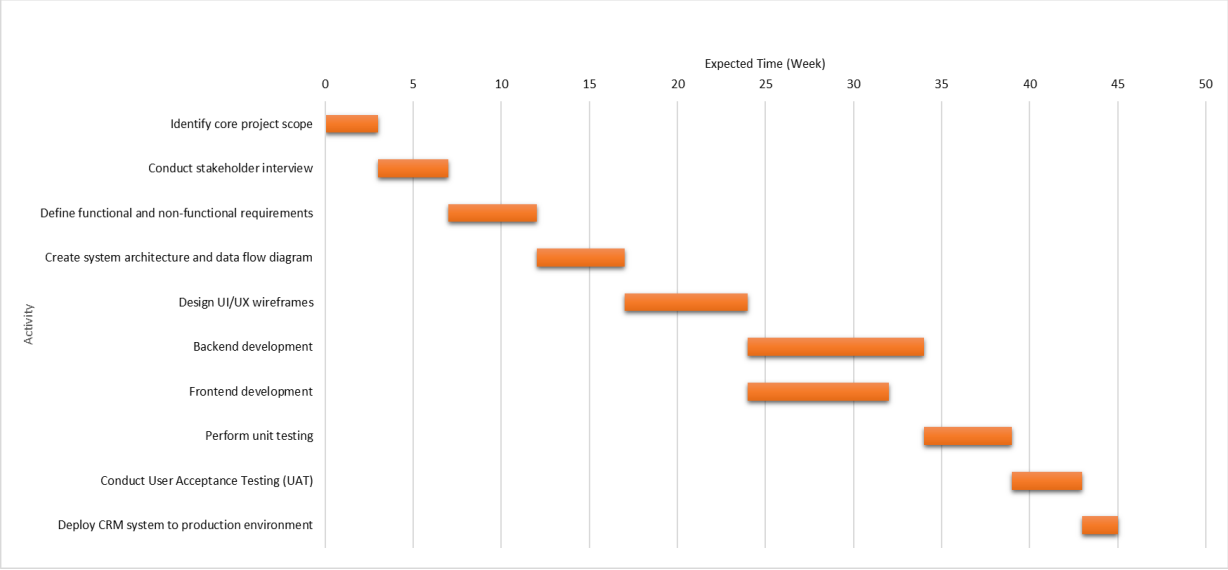

Figure 1: Gantt Chart