

4.0 Proposed Solutions

1. **Online Platform for Supervision Management:** Create a web-based platform using Laravel that allows postgraduate students to efficiently handle their supervision schedules, appointments, progress reports, and communication with their supervisors.
2. **System Integration:** Guarantee compatibility and easy data interchange with pre-existing university systems, including student databases, academic calendars, and email services.
3. **Automated Notifications and Reminders:** Apply automated reminders for upcoming deadlines, meetings, and submission dates to help students stay organized.
4. **Feedback Mechanism:** Implement a system that allows students to contribute feedback on supervision sessions, thereby enhancing the overall quality of supervision.

Feasibility Study

1. Technical

- **Security System:** Make sure provides good measure of security such as password hashing.
- **Integration:** Determine whether the platform can be fully integrated with the current systems and databases of the university.
- **Performance:** Performance testing is needed to make sure that the platform can handle multiple users, data gathering, and processing at the same time without any major delays or downtime.

2. Operational

- **Users Adapting:** Look at how ready postgraduate students and lecturers are to use the new system. Give training and help to make sure the change goes smoothly and that everyone gets along.

- **Maintenance and Support:** Evaluate the necessary resources to ensure continuous platform maintenance, updates, and technical support.

3. Economical

- **Development Cost:** Calculate the projected expenses related to the creation of a platform, including software development, infrastructure, and manpower.
- **Operational Costs:** Determine the continuous costs associated with operations such as hosting, maintenance and user support.
- **Profitability Index (PI):** Evaluate the PI value based on gain or loss and development cost to show it is a good investment or not.

CBA

COSTS	YEAR 0	YEAR 1	YEAR 2	YEAR 3
DEVELOPMENT COSTS	Hardware - RM 15000 Software - RM 15000 Manpower - RM 10000			
Total	RM 40000			
Operation Costs 1. Hosting 2. Maintenance 3. User Support		RM 194.40 RM 500 RM 2000	RM 208 RM 535 RM 2140	RM 222.56 RM 572.45 RM 2289.80
Annual Prod. Costs		RM 2694.40	RM 2883	RM 3084.81
Present Value		RM 2449.45	RM 2382.64	RM 2317.66
Accumulated Costs		RM 42449.45	RM 44832.09	RM 47149.75
Benefits 1. Time Saving 2. Resource Efficiency 3. Industry Partnership		RM 5000 RM 10000 RM 25000	RM 5250 RM 10500 RM 26250	RM 5512.50 RM 11025 RM 27562.50
Total		RM 40000	RM 42000	RM 44100
Present Value		RM 36363.64	RM 34710.74	RM 33132.98
Accumulated Benefits		RM 36363.64	RM 71074.38	RM 104207.36
Gain or Loss		(RM 6085.81)	RM 26242.29	RM 57057.61
Profitability Index	RM 57057.61 / RM 40000 = 1.43			

As calculated above, the profitability index(PI) is 1.43. The system is economically feasible as the PI value is above 1.