CHAPTER III:

COST-BENEFIT ANALYSIS

Technical Feasibility

The proposed F&M Law Firm Case Management System is technically feasible due to the availability of skilled developers, UI designers, and system analysts who possess the required expertise to design and implement the system. The system will be developed using modern programming languages and frameworks compatible with web browsers.

- Front-End: HTML5, CSS3 (Bootstrap/Tailwind) and JavaScript (ES6+), with FullCalendar integrated for dynamic, drag-and-drop scheduling of appointments and court dates.
- Back-End: PHP (or Node.js) with MySQL (or PostgreSQL) for secure data storage and fast queries.
- Notifications: EmailJS API handles automated email alerts (appointment confirmations, document upload notices) directly from the client side, eliminating the need for a dedicated mail server.
- Hosting & Security: Cloud hosting (AWS/Azure/DigitalOcean) provides auto-scaling, daily backups, SSL/TLS encryption, and 24×7 monitoring.
- Team Expertise: One Project Manager, two Developers, two UI Designers, one System Analyst, and four Researchers have the necessary skills in web development, API integration, and database design to build and deploy the system on schedule.

Operational Feasibility

The system is expected to operate efficiently within the existing environment of the law firm. Staff will be trained on how to use the system, ensuring minimal disruption during the transition. The system is designed with ease of use in mind, allowing administrators, lawyers, and clients to interact seamlessly with its features.

1. Training & Onboarding: Half-day workshops and user guides for administrators, lawyers, paralegals, and support staff.

2. Role-Based Dashboards: Tailored interfaces for each user type (case lists for lawyers, appointment calendar for reception, client portal for external users).

3. Support & Maintenance: 90-day post-launch helpdesk, weekly office hours, and in-house IT monitoring.

4. Data Migration: ETL scripts to import legacy case records and calendar events, with nightly backups of both database and FullCalendar data.

Economic Feasibility

Economically, the proposed system presents significant long-term benefits that outweigh the initial development costs. By streamlining processes such as case tracking, client information management, and appointment scheduling, the system is expected to save the law firm time and resources, leading to improved service delivery and client satisfaction

Cost - Benefit Analysis

Cost - Benefit Analysis of the proposed System

Table 3.1:

Personnel Salary

Personnel	Number	No. of Working Days	Hours Per Day	Rate Per Hour	Daily Salary	Monthly Amount	Annual Amount
Project Manager	1	22	8 hrs	₱180.00	₱1,440.00	₱31,680.00	₱380,160.00
Developer	2	22	8 hrs	₱170.00	₱1,360.00	₱29,920.00	₱359,040.00
UI Designer	2	22	8 hrs	₱150.00	₱1,200.00	₱26,400.00	₱316,800.00
System Analyst	1	22	8 hrs	₱160.00	₱1,280.00	₱28,160.00	₱337,920.00
Researcher	4	22	8 hrs	₱100.00	₱800.00	₱17,600.00	₱211,200.00
						Total	₱1,605,120.00

Table 3.2:

Software

QUANTITY	PARTICULAR	PRICE	TOTAL PRICE
1 year (12 mo)	EMAILJS API	₱2,250.00/mo	₱27,000.00
1 year (12 mo)	FULL CALENDAR	₱26,990.00/mo	₱323,880.00
		TOTAL	₱350,880.00

Grand Total (Year 1): ₱1,605,120.00 (Personnel) + ₱350,880.00 (Software) = ₱1,956,000.00

Projected Annual Benefits:

- Time Savings (25% admin reduction): ₱240,000
- Error Reduction & Rework Avoidance: ₱50,000
- Additional Billable Hours: ₱200,000
- Total Benefit: ₱490,000

Return on Investment:

- Payback Period ≈ ₱1,956,000 / ₱490,000 ≈ 4.0 years
- Ongoing Annual Savings post–payback: ₱490,000 – (Subscriptions ₱350,880 + hosting ₱30,000) ≈ ₱109,120