**CHAPTER TWO**

**LITERATURE REVIEW / REVIEW OF RELATED SYSTEMS**

**2.1 Review of System 1: Fellowship One Church Management System**

**2.1.1 Description of System**

**Overview:**  
FellowshipOne is a cloud-based church management system (ChMS) designed for medium to large congregations. It provides tools for membership tracking, donation management, event scheduling, and communication.

**Models of the System:**

* **Context Model:** The system interacts with administrators, church members, and external financial platforms.
* **Interaction Model (Sequence Diagram):** A member donates → system records → finance officer approves → report generated.
* **Structural Model:** Centralized database stores member profiles, contributions, and attendance.
* **Behavioral Model:** Automated notifications and workflows handle donations, reminders, and announcements.

**Features:**

* Member and volunteer management.
* Online giving and contribution tracking.
* Event registration and attendance monitoring.
* Reporting and analytics dashboards.

**Development Tools & Environment:**  
Developed with **.NET Framework, Microsoft SQL Server**, and hosted on cloud infrastructure.

**2.1.2 Review of the Good Features**

* Scalable for large churches.
* Strong financial tracking and reporting.
* Cloud-based, hence accessible anywhere.

**2.1.3 Review of the Bad Features**

* High subscription costs.
* Complex interface requiring training.
* Limited offline access.

**2.1.4 Summary of the System Review**

FellowshipOne is powerful and suitable for large congregations, but its cost and complexity make it less favorable for smaller churches.

**2.2 Review of System 2: Church Community Builder (CCB)**

**2.2.1 Description of System**

**Overview:**  
Church Community Builder (CCB) is a web-based ChMS focusing on member engagement, communication, and volunteer coordination.

**Models of the System:**

* **Context Model:** Connects pastors, members, and volunteers.
* **Interaction Model (Sequence Diagram):** Pastor Posts announcement → system sends emails/SMS → members respond or register for events.
* **Structural Model:** Web portal with role-based access (admins, leaders, members).
* **Behavioral Model:** Automated workflows for reminders, small group communications, and scheduling.

**Features:**

* Member engagement tracking.
* Volunteer and small group management.
* Integrated messaging (SMS/email).
* Attendance and giving reports.

**Development Tools & Environment:**  
Developed using **PHP, MySQL, JavaScript**, and deployed in cloud environments.

**2.2.2 Review of the Good Features**

* Strong communication tools (email/SMS integration).
* Volunteer management and small group focus.
* Easy-to-use interface compared to FellowshipOne.

**2.2.3 Review of the Bad Features**

* Limited customization options.
* Requires stable internet.
* Reporting features less advanced than other systems.

**2.2.4 Summary of the System Review**

CCB excels at member engagement and group coordination but falls short on advanced analytics and flexibility.

**2.3 Review of System 3: Breeze ChMS**

**2.3.1 Description of System**

**Overview:**  
Breeze is a simple, affordable, cloud-based church management system designed for small to medium-sized churches.

**Models of the System:**

* **Context Model:** Provides direct interaction between pastors, administrators, and members.
* **Interaction Model (Sequence Diagram):** Member registers online → admin approves → data stored → automatic confirmation email sent.
* **Structural Model:** Cloud-hosted database with simplified user roles.
* **Behavioral Model:** Automated workflows for donations, attendance, and communication.

**Features:**

* Simple member database.
* Giving and attendance tracking.
* Mass communication (emails, SMS).
* Event registration.

**Development Tools & Environment:**  
Built using **Ruby on Rails, PostgreSQL**, and hosted on AWS.

**2.3.2 Review of the Good Features**

* Affordable pricing.
* User-friendly interface.
* Quick setup and deployment.

**2.3.3 Review of the Bad Features**

* Limited scalability for very large churches.
* Fewer advanced modules (finance, HR, etc.).
* No offline capability.

**2.3.4 Summary of the System Review**

Breeze is ideal for small and medium churches needing affordable, simple management but lacks enterprise-level scalability.

**2.4 Review of System 4: Elvanto ChMS (by Tithe.ly)**

**2.4.1 Description of System**

**Overview:**  
Elvanto is a cloud-based, all-in-one ChMS that provides tools for membership, worship planning, communication, and reporting.

**Models of the System:**

* **Context Model:** Interfaces with pastors, finance teams, worship leaders, and members.
* **Interaction Model (Sequence Diagram):** Worship leader schedules service → volunteers notified → attendance recorded → reports generated.
* **Structural Model:** Modular system with roles (admin, worship leader, finance officer, member).
* **Behavioral Model:** Automated notifications, giving reminders, and event workflows.

**Features:**

* Worship and service planning.
* Online giving and contribution reports.
* Member management with customizable fields.
* Multi-campus support.

**Development Tools & Environment:**  
Developed with **PHP, Laravel, MySQL**, and integrated with **Tithe.ly giving platform**.

**2.4.2 Review of the Good Features**

* Multi-campus and multi-role support.
* Integrated worship planning tools.
* Strong reporting and communication modules.

**2.4.3 Review of the Bad Features**

* Expensive subscription for small churches.
* Some features (like giving) require add-ons.
* Learning curve for new users.

**2.4.4 Summary of the System Review**

Elvanto is a full-featured solution best suited for medium to large churches, though it may be costly and complex for smaller congregations.

**2.5 Summary of Literature Review**

From the review of existing systems:

* **FellowshipOne** offers scalability and financial strength but is expensive and complex.
* **Church Community Builder** provides strong communication and engagement features but lacks customization.
* **Breeze ChMS** is affordable and simple but not scalable.
* **Elvanto** is robust and supports multiple campuses but is costly and has a learning curve.

This review shows the need for a **customizable, affordable, user-friendly Church Database and Communication System** that balances simplicity with scalability, specifically tailored to the needs of local churches.

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| Breeze ChMS |

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| Pastor | | Member | | SMS/Email |

| / Leader | | | | Gateway |

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Member Breeze ChMS Admin

| | |

|-- Register/Give Donation ----------->|

| | |

| |-- Store Data ----->|

| |-- Notify Admin --->|

| |<----- Confirmation-|

|<--- Confirmation Email/SMS ----------|

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| Member | | Admin |

+------------------+ +------------------+

| - MemberID | | - AdminID |

| - Name | | - Username |

| - Contact | | - Role |

+------------------+ +------------------+

| + Register() | | + ApproveReg() |

| + GiveDonation() | | + GenReports() |

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| Database |

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| - Members |

| - Donations |

| - Attendance|

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| Notification|

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| +SendEmail()|

| +SendSMS() |

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| Idle | -----> | Register Member | ----> | Record Attendance |

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| Process Donation |

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| Send Communication |

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