

## CHAPTER II LITERATURE REVIEW

### 2.1 Introduction

This chapter explores terminologies, concepts, and concepts that are essential to understanding the topic associated with the proposed system through an in-depth study of the relevant literature. To provide a strong theoretical foundation, it carefully reviews a variety of scholarly articles, academic journals, and industry reports. To explain the study in the context of current information and to identify limitations and opportunities for innovation, this exploration is important.

In addition to the literature assessment, a comprehensive examination of the terminology pertinent to the subject will be carried out. This ensures precision and lucidity in the discourse surrounding the suggested framework, fostering productive dialogue. This section aims to bridge readers' knowledge gaps by giving definitions for key terms and concepts for those with diverse backgrounds.

The chapter also makes a comparison of similar present items to the proposed system. This comparative study explains where the system under evaluation fits into the current market, highlighting its unique characteristics and potential future advancements. A variety of criteria will be used to evaluate the products.

### 2.2 Explanation of Key Terms and Terminologies

### 2.2.1 Digitalization

Digitalization is part of the Fourth Industrial Revolution, characterized by the fusion of technologies that blur the lines between physical, digital, and biological spheres (Klaus Schwab, 2017). Processes are revolutionized by digitalization, which uses digital technology to replace analog ones. In a globalized society, it promotes efficiency, accessibility, and connectedness, revolutionizing industries and stimulating innovation.

### 2.2.2 Use Case Diagram

UML is one of the most reliable tools in world of object-oriented systems development, because UML provides the language Visual modeling makes it possible for system developers to create blueprints of their vision in a standard form, easy to understand, and equipped with effective mechanisms for sharing and communicating designs them with others (Munawar, 2018).

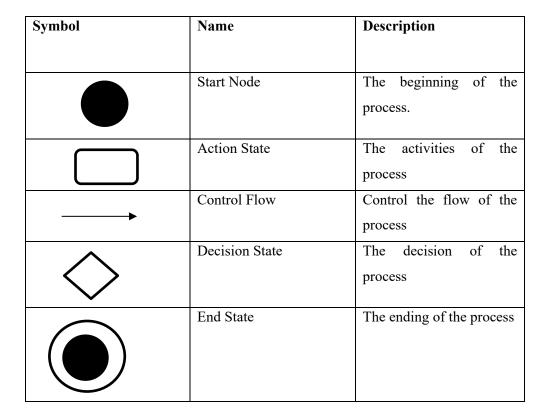
Use Case diagram is a sequence of mutual interactions relationship between systems and actors. Use cases are implemented by describing types of interactions between the user of a program (system). Use case through a story where a system is used. Use cases are also used to shape behavior. System to be created. A use case describes an interaction between users (actors) with existing systems (Ahmad, 2020).

Symbol	Name	Description	
Actor	Actor	In a use case diagram, an actor is any system or user that communicates with the topic. It could show the functions of human beings, other topics, or external gear.	
Use Case	Use Case	Use cases serve as a representation of the actor's ultimate objective and the system's capabilities.	
	Association	Actor-use case links	

**Table 2.1 Use Case Diagram** 

### 2.2.3 Activity Diagram

Activity diagrams show conditional logic for a sequence of activities systems needed to complete a business process. Activity Individuals can be manual or automatic. Next, each activity is responsibilities of specific organizational units (Valacich & George, 2016). Activity diagram is a diagram that resembles a horizontal flowchart chat that shows actions and events as they occur. Activity diagrams show a sequence of actions carried out and identify the results (Tilley & Rosenblatt, 2016). Activity diagram is a diagram that offers a flow mechanism control and data flow mechanisms that coordinate the actions that make up an activity (Seidl et al., 2015). activity diagram is a diagram that describes the main activities and relationships between activities in a process (Denni, Wixom, & Tegarden, 2015).



**Table 2.2 Activity Diagram** 



### 2.2.4 Class Diagram

Class Diagrams describe the structure system in terms of defining the classes that will be created to build the system. Class diagrams are created so that program makers or programmers can create classes according to the design in the class diagram so that the design documentation and software are in sync (Aldo D, 2020). Class Diagrams describe the system structure in terms of defining the classes that will be created to build the system (Rosa A.S. and M. Shalahuddin, 2018).

### 2.3 Related Literature and Technologies

A comprehensive review and analysis of relevant published studies is provided here. It provides a theoretical and empirical that supports the study, highlighting major findings, trends, and gaps in the literature.

# 2.3.1 The first research entitled "A theory about personal budgeting" has been conducted by Galperti, Simone (2019).

This overview of the literature summarizes the current theories around personal budgeting, highlighting the importance of an interdisciplinary strategy that incorporates knowledge from financial psychology and behavioral economics. Researchers and practitioners may create better financial well-being methods and treatments by comprehending the cognitive, emotional, and cultural aspects that affect personal budgeting.

# 2.3.2 The second research entitled "Personal Finance and Budgeting Mobile Application, "Cashsave""

Money management has changed as a result of the explosion of smartphone apps for budgeting and personal finance. Examining the literature and research that has already been done on the mobile application "CashSave," this study focuses on the app's capabilities, user interface, and effects on personal money management. This section looks at CashSave's features and how it may help with goal-setting, tracking expenses, and budgeting. Real-time updates, synchronization capabilities, and security precautions to safeguard financial data are all included in



the detailed research. Any mobile application's success depends on its user experience. In order to determine how people feel about CashSave, this section explores customer reviews, comments, and satisfaction ratings. Ease of use, usefulness, and the potency of the offered financial insights are frequently focal points of positive user experiences.

# 2.3.3 The third research entitled "Investigating the Importance of Creating a Personal Budget among Millenials, their Perception and Satisfaction: A Case Study of Eastern Mediterranean University"

This study of the research examines the importance of creating a personal budget for Millennials, with an emphasis on their satisfaction and perspectives. The Eastern Mediterranean University case study offers insightful information on this demographic's financial attitudes and practices. This section identifies obstacles that Millennials have while establishing and preserving personal budgets and looks at ways to make improvements. A comprehensive grasp of the distinct elements impacting budgeting habits may be obtained by addressing concerns including financial stress, student debt, and employment worries.

The details of the case study carried out at Eastern Mediterranean University are covered in detail in the literature review. It examines the study's methodology, main conclusions, and ramifications in order to shed light on Millennials' financial habits in the context of universities.

#### 2.4 Review of Related Product

### 2.4.1 Money Manager

The Money Manager provides a complete and user-friendly solution for efficient money management. The app's straightforward layout simplifies budgeting and cost monitoring, making it accessible to users of all financial levels. Its notable feature is the ability to customize budget categories, which allows users to personalize their financial plans to their own needs. A good money manager application should serve as a reliable and efficient tool for users to take control of their finances. It should provide a holistic view of their financial situation,

encourage responsible spending, and help users work towards their financial goals. It's important to explore and compare different applications based on your specific needs and preferences. Additionally, check for user reviews and ratings to get insights into the experiences of others using the same application.

Security is a primary priority, and Money Manager uses strong encryption techniques and secure connections to protect sensitive financial information. The application's cross-platform interoperability improves user convenience by enabling smooth synchronization across many devices. What distinguishes "Money Manager" is its focus to assisting customers in meeting financial objectives with features such as goal setting, frequent reminders, and extensive statistics. Regular upgrades and prompt customer assistance add to its dependability, making it an invaluable tool for anybody looking for efficient and safe cash management on the road. Overall, "Money Manager" is a comprehensive solution that allows customers to confidently manage their funds.

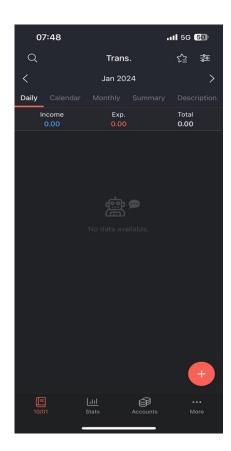


Figure 2.1 Money Manager

#### **2.4.2** Sribuu

"Sribuu" suggests that it is a comprehensive and adaptable application. Assuming it includes creative work or freelancing, it most likely provides a platform for clients to interact with independent workers. The success of such programs is frequently dependent on user-friendly interfaces, fast job matching algorithms, and secure payment methods. The program may empower freelancers by providing a platform for them to demonstrate their abilities and connect with potential customers, while clients get access to a varied pool of talent for their projects.

It's advised to look up the most recent evaluations and ratings on app stores and use the application yourself to give a more thorough and accurate assessment. This guarantees that the information is current and accurate, reflecting the user experience and features available in the most recent version of "Sribuu."

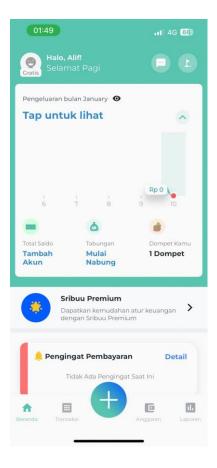


Figure 2.2 Sribuu



### 2.4.3 GoodBudget

The personal financial software Goodbudget succeeds at giving customers an easy-to-use but effective tool for managing their spending and creating budgets. The app's fundamental technique is an envelope budgeting system, which is a tried-and-true approach. With Goodbudget, users may assign money to virtual envelopes that stand in for different spending categories. In addition to emphasizing financial discipline, this method raises awareness of spending patterns by giving a concrete and visible depiction of one's budget.

Because of its clear and simple user interface, the program is usable by users with different degrees of financial knowledge. It is simple to create budgets, keep track of spending, and track advancement toward financial objectives thanks to the uncomplicated interface. Goodbudget is notable for its dedication to the envelope system, which motivates users to distribute funds according to priorities and discourages excessive spending in particular areas. To ensure that users can easily access their budgeting information on a smartphone, tablet, or web browser, the app also allows synchronization across several devices.

Any financial application must take security into the utmost importance, and Goodbudget maintains strict guidelines in this area. The program uses secure connections and encryption technologies to safeguard users' private financial information. Goodbudget provides a free version that includes all the necessary functionality. However, for those who need more sophisticated budgeting tools, the premium version gives limitless envelopes and account history, among other things. To sum up, Goodbudget is a great option for anybody looking for a useful, safe, and easy-to-use tool for managing their spending and creating a budget. Its dedication to the envelope system and focus on user-friendly design enhance the user experience and make it an invaluable resource for those aiming to reach their financial objectives.

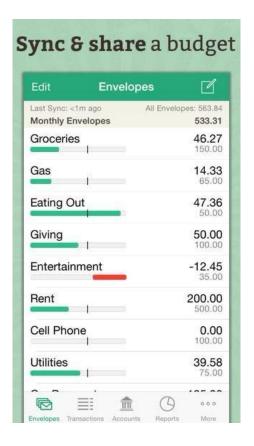


Figure 2.3 GoodBudget

### 2.5 Comparison Table

Features	Money Manager	Sribuu	Goodbudget	Proposed Application
Login/Sign	✓	<b>✓</b>	✓	✓
up				
Expense	✓	✓	✓	✓
Tracking				
Notifications	✓	×	×	✓
Financial	×	×	×	✓
Goal Setting				

**Table 2.3 Comparison Table** 



### 2.6 Chapter Summary

This second chapter discusses literature reviews, where the discussion this time focuses on comparing and analyzing the content of previously existing applications to be used as references or comparison material to support the creation of application projects.