

Developing A Digital Fundraising Web Platform To Enhance Social Impact Outcomes

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Abstract—The rapid advancement of digital technology has transformed fundraising practices by enabling wider outreach, improved transparency, and enhanced efficiency; however, many social impact programs continue to face challenges related to donor engagement, fund management, and accountability. This study focuses on the implementation of a digital fundraising web system aimed at enhancing social impact outcomes through optimized fundraising processes and strengthened stakeholder interaction. The system was developed using a web-based architecture and designed following the System Development Life Cycle (SDLC), encompassing requirement analysis, system design, implementation, and testing phases. Key features include donor registration, campaign management, secure online donation processing, real-time monitoring, and reporting dashboards that allow donors and administrators to track fund utilization transparently. System evaluation was conducted through functional testing and user acceptance testing involving system administrators and donors to assess usability, performance, and reliability. The results indicate that the implemented system improves operational efficiency, minimizes manual errors, and increases transparency in fundraising activities, which in turn enhances donor trust and participation. Moreover, the platform supports more effective allocation of funds toward social programs, contributing to measurable improvements in social impact outcomes. This research demonstrates that the adoption of a digital fundraising web system can serve as a strategic tool for social organizations to leverage information technology in achieving sustainable social impact. The study contributes to the multidisciplinary discourse on digital innovation and social entrepreneurship by providing an applicable model for technology-driven fundraising systems, while future research may explore the integration of advanced data analytics, mobile platforms, and

artificial intelligence to further optimize donor engagement and impact assessment.

Keyword : Digital Fundraising; Digital Fundraising; Web-Based System; Social Impact; Information System; Donor Engagement

I. INTRODUCTION

The rapid advancement of digital technologies has significantly transformed the way social organizations conduct fundraising activities. Traditional fundraising methods are increasingly being replaced or complemented by digital fundraising platforms that enable wider reach, real-time interaction, and improved transparency. In the context of growing social challenges—such as poverty alleviation, disaster response, and community empowerment—digital fundraising platforms play a crucial role in mobilizing resources efficiently and sustainably. Despite the increasing adoption of digital fundraising systems, many existing platforms still face limitations in terms of user engagement, donor trust, data integration, and the measurement of social impact outcomes. Most platforms primarily focus on transaction processing and campaign promotion, while the evaluation of social impact is often overlooked or inadequately supported by data-driven mechanisms. [2]. This gap reduces the ability of organizations to demonstrate accountability, assess program effectiveness, and build long-term relationships with donors. To address these challenges, this study proposes the development of a digital fundraising web platform designed to enhance social impact outcomes through

improved system architecture, user-centered design, and integrated data analytics. The platform is developed to support transparent fundraising processes, strengthen donor trust, and facilitate meaningful engagement between donors, administrators, and beneficiaries. By incorporating social impact indicators into the platform's design, the system enables organizations to monitor and evaluate the effectiveness of fundraising activities more comprehensively. This research contributes to the field of information systems and digital social innovation by demonstrating how web-based fundraising platforms can be strategically designed to not only increase fundraising effectiveness but also enhance measurable social impact. The findings of this study are expected to provide practical insights for social organizations, policymakers, and system developers in leveraging digital technologies to support sustainable and impactful fundraising initiatives.

II. METHOD

This study adopts the Waterfall model as the system development and research framework, consisting of requirements, design, implementation, verification, and maintenance stages. In the requirements stage, research variables are defined, where the digital fundraising platform acts as the independent variable, while social impact outcomes, donor trust, user engagement, and fundraising effectiveness serve as dependent variables, with user demographics and campaign types as control variables. [5]. The design stage focuses on modeling system architecture and features that support transparent fundraising and impact measurement. During implementation, the platform is developed and deployed for use by selected participants. The verification stage involves data collection and evaluation using purposive sampling, targeting donors and administrators of social organizations who actively interact with the platform.

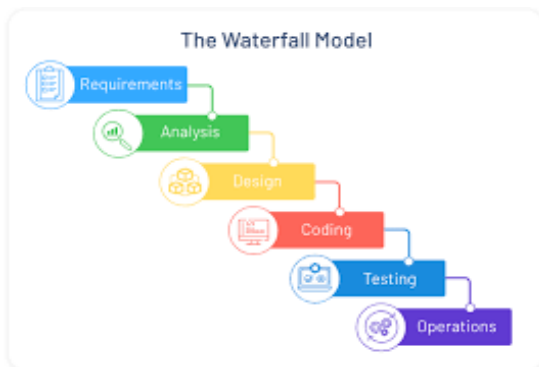


Figure 1. Waterfall Model

This study employs the Waterfall method, a sequential software development approach in which each phase is systematically completed before proceeding to the next. The Waterfall model consists of five interrelated and interdependent stages, as described below.

1. Requirement Analysis

This initial stage focuses on identifying and analyzing system requirements. The analysis is conducted to

Identify applicable funding agency here. If none, delete this text box.

determine both data requirements and user requirements, ensuring that the system meets the functional needs of stakeholders involved in the digital fundraising process.

2. Analysis and System Design

Based on the results of the requirement analysis, the system design is developed. This stage includes the design of the database structure, Data Flow Diagrams (DFD), Entity Relationship Diagrams (ERD), Graphical User Interface (GUI), and the network architecture required to support the system.

3. Implementation

In this stage, the system design is translated into computer-readable code. The implementation process involves developing system functionalities according to the predefined design specifications.

4. Coding and Testing

System testing is conducted to verify that the developed application operates according to the specified requirements and procedures. This stage aims to ensure that the system functions correctly and is free from errors or defects.

5. Maintenance

After the system has been tested and confirmed to meet its objectives, it is deployed for user operation. Maintenance activities are carried out to ensure system stability, address potential issues, and support future improvements as needed

III. RESULTS AND DISCUSSION

The development of the digital fundraising web platform resulted in a functional system that integrates campaign management, secure online donations, and social impact reporting. The platform enables organizations to manage fundraising activities more efficiently while providing donors with transparent information regarding fund usage and campaign progress. The results of system testing and pilot implementation indicate improved transparency and user engagement. Donors can easily access real-time fundraising updates and social impact indicators, which increases trust and encourages continued participation.

3.1 Use case Diagram

A use case diagram is a graphical representation of some or all actors, use cases, and the interactions between them that describe and introduce a system.

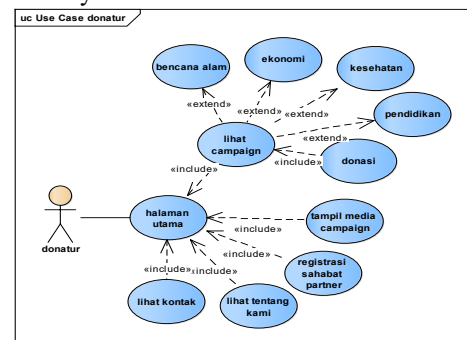


Figure 2. The Donor Use Case Diagram illustrates

Figure 2 presents the donor use case diagram, which explains the interactions that can be performed by donors in the Share Your Care application. Donors are able to access the home page, view program displays categorized by each campaign, explore campaign media, and obtain information about the organization, including the “About Us” and contact sections.

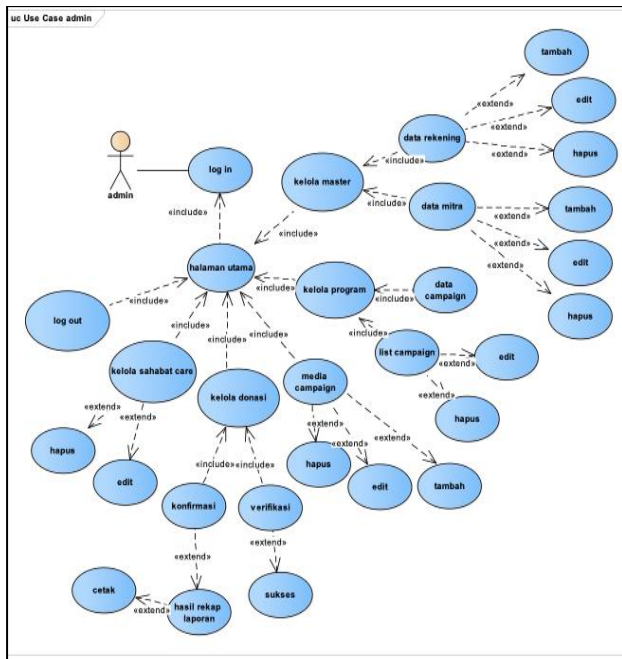


Figure 3 The Donor Use Case Diagram illustrates

Figure 3 presents the admin use case diagram, which explains the interactions that can be performed by the administrator in the Share Your Care application. The administrator is able to access the master management menu, manage programs, manage campaign media, manage donations, manage “Sahabat Care,” and perform the logout process.

3.2 Activity Diagram

The activity diagram illustrates the workflow of the digital fundraising web platform, starting from user access to the completion of donation-related activities. The process begins when users access the system and select the desired fundraising campaign. Donors can view campaign information, review campaign media, and decide whether to proceed with a donation. If the donor chooses to donate, the system guides the user through the donation process, including inputting donation details and selecting a payment method. After the transaction is completed, the system validates the payment, records the donation data, and generates a confirmation for the donor. All transaction data are stored in the database and can be monitored by the administrator for reporting and social impact evaluation purposes. This activity flow ensures a structured, transparent, and efficient fundraising process within the platform.

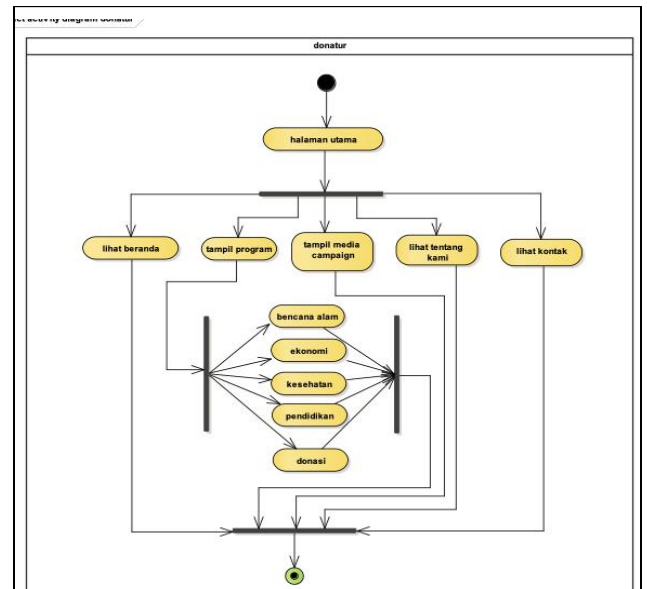


Figure 4 Activity Diagram Donation

Figure 4 illustrates the activity diagram of the donor within the Share Your Care application. The process begins when the donor accesses the main page of the system. From the homepage, donors can perform several activities, including viewing the homepage content, browsing available programs, accessing campaign media, viewing the “About Us” section, and checking contact information. When exploring programs, donors can select campaign categories such as natural disasters, economy, health, and education. After selecting a campaign, donors may proceed to the donation process. Once the donation activity is completed, the process ends. This activity flow demonstrates how the system facilitates donor interaction by providing structured access to campaign information and donation services in a clear and user-friendly manner.

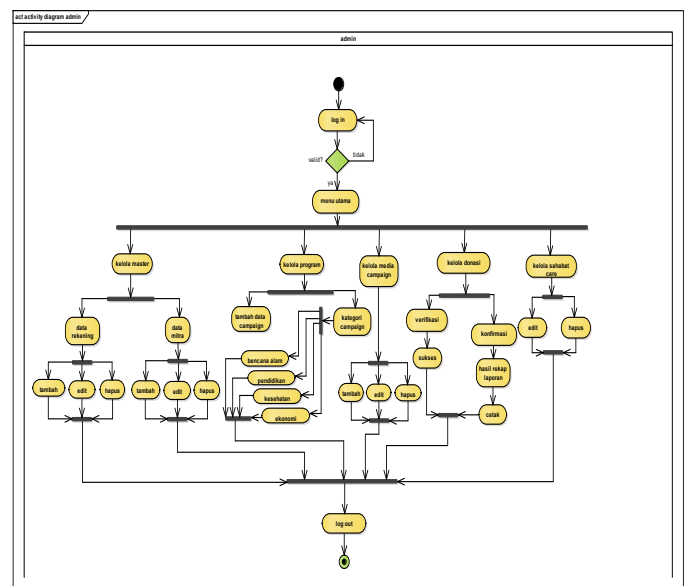


Figure 5 Activity Diagram Admin

The admin section begins with the login process to access the system. The system validates the login credentials; if the login is valid, the system displays the main dashboard, whereas invalid login attempts will redirect the user back to the login form. The main interface provides access to several management features, including master data management, program management, transaction management, and partner management. After completing the required administrative tasks, the admin can log out of the system.

3.3 Diagram Sequence

The sequence diagram illustrates the interaction flow between the user, the system interface, and the database during the donation process. The sequence begins when the user accesses the system and selects a fundraising campaign. The system then displays campaign details and processes the user's donation request. After the donation information is submitted, the system validates the data, records the transaction in the database, and generates a confirmation response to the user. This sequence of interactions demonstrates how the system ensures data consistency, transaction accuracy, and effective communication between system components.

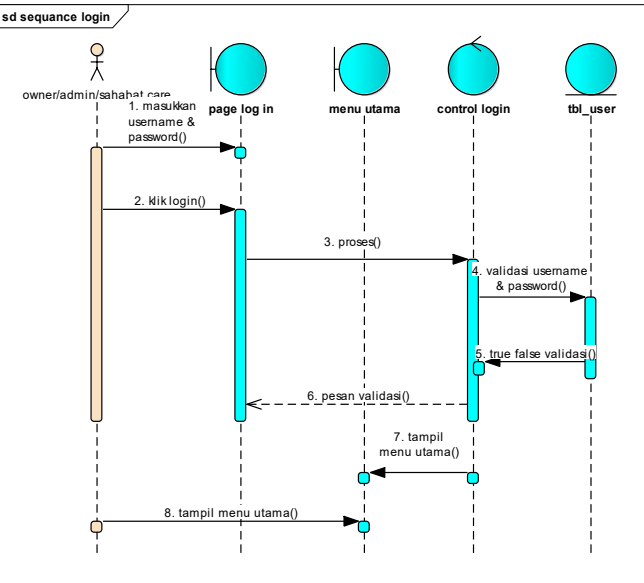


Figure 5. Diagram Sequence For admin

3.4 Diagram Class

The class diagram illustrates the structural design of the system by defining the main classes, their attributes, methods, and the relationships among them. The primary classes in the system include User, Admin, Donor, Program, Campaign, Donation, Transaction, and Partner. Each class represents a core entity within the digital fundraising platform and encapsulates relevant data and operations. Relationships such as associations and dependencies describe how users interact with programs and campaigns, while inheritance is used to define shared characteristics between user roles. This class structure supports data integrity, system scalability, and efficient management of fundraising activities.

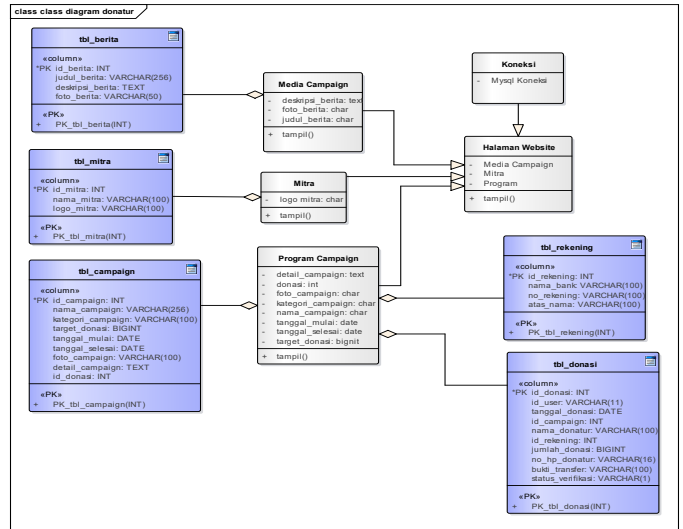


Figure 6. Diagram Class for Donation

The class diagram illustrates the data structure and relationships of the donor module in the digital fundraising system. The diagram consists of several main classes, including Campaign, Program Campaign, Donation, Bank Account, News, Partner, and Media Campaign, which are connected to the website interface through a database connection. Each class defines specific attributes to manage campaign information, donation details, partner data, and related media content. The relationships between classes support the integration of campaign programs with donation transactions and media displays, enabling donors to access campaign information, view partner and media details, and perform donation activities. This class structure ensures organized data management, system consistency, and effective interaction between the donor module and the web-based fundraising platform.

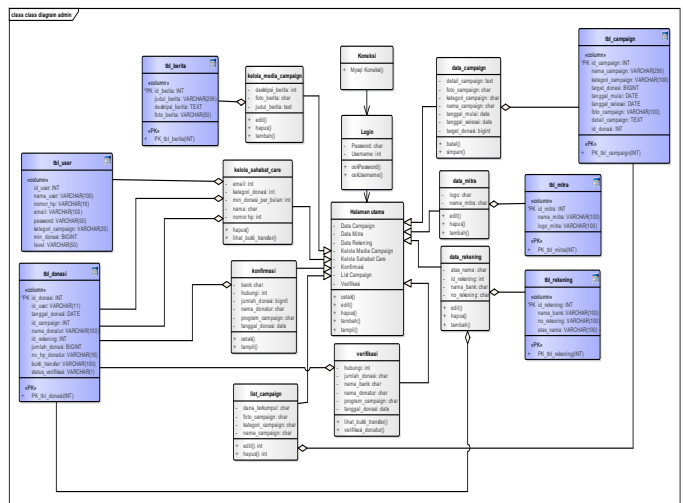


Figure 7. Diagram Class for Admin

The website homepage serves as the main interface that provides initial access for users to the system. It displays key information such as featured fundraising campaigns, campaign categories, and navigation menus that allow users to explore programs, campaign media, and organizational information. The homepage is designed to be user-friendly and informative, enabling users to easily understand the purpose of the platform and access donation services efficiently. The homepage is designed to be user-friendly and informative, focusing on ease of navigation and clarity of content. By providing clear visual elements and direct access to donation features, the homepage enables users to efficiently interact with the system, participate in fundraising activities, and support social initiatives through a seamless digital experience

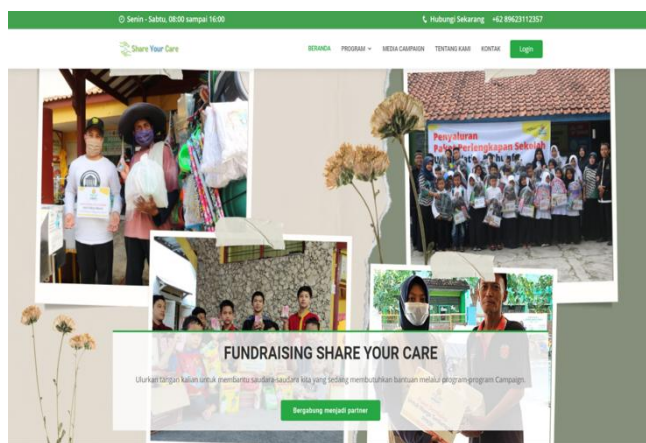


Figure 8. Dashboard View

The figure shows the homepage of the Share Your Care website, which serves as the main entry point for users.

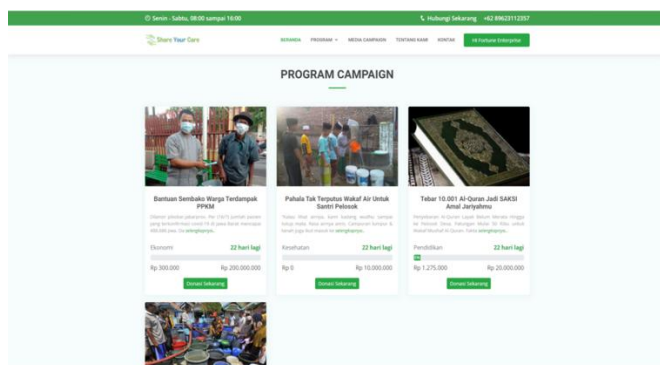


Figure 9. Campaign View Page.

Based on figure 9. This page display the ongoing fundraising campaigns available on the platform. Sahabat Care users can

view detailed information about each campaign and directly make a donation by selecting a campaign listed on the website

IV. CONCLUSIONS

This study concludes that the development of a digital fundraising web platform with integrated transparency and social impact reporting can effectively enhance fundraising performance and accountability. The platform not only simplifies donation management and campaign monitoring but also strengthens donor trust through clear visualization of fundraising progress and impact outcomes. By aligning technological design with social objectives, the proposed system supports sustainable fundraising practices and demonstrates the potential of digital platforms in maximizing measurable social impact.

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