150_JEME_SIMILARITY-REV

By Fajar Habib Zelani

WORD COUNT	1752	TIME SUBMITTED	28-JUL-2024 11:06PM
		PAPER ID	110720723

Journal of Economics, Management, and Entrepreneurship
Vol. 2 No. 1, June 2024, 64-73
ISSN Online: 3026-0906, https://doi.org/10.55208/jeme
Published by P3M, STIE Pasundan, Bandung, Indonesia.

Financial Application for the STMIK Mardira Indonesia Educational Institution

Fajar Habib Zelani[1], Nono Sudarsono[2], Yuda Purnama Putera[3], Solihin[4]
[1,2,3,4] *STMIK Mardira Indonesia, Bandung*
Email: fajarhabibzaelani@gmail.com[1], nono@stmik-mi.ac.id[2], yuda@stmik-mi.ac.id[3], solihin@stmik-mi.ac.id[4]

Abstract

The waqf asset management system is essential for maximizing and optimizing the managed assets to achieve the highest and most favorable outcomes. A professional waqf institution in Bandung possesses waqf assets dispersed throughout several regions in Indonesia, and its management has successfully reached the level of optimizing productive waqf. Nevertheless, waqf assets are managed manually, leading to slower and worse management practices. This research aims to address the issue of managing waqf assets by applying ISO 55001 to the waqf asset management system in a selected professional waqf institution in Bandung. The research approach employs descriptive analysis with the Object-Oriented Software Engineering (OOSE) system development process.

The results reveal eight functions based on 8 and 9 criteria that should be present in the asset management system according to ISO 55001. The program incorporates these eight functionalities and achieves a System Usability Scale (SUS) score of 84.6, signifying a B grade and outstanding acceptance. The ISO 55001 certification readiness level is 57.14%, as determined by the ISO 55001 Self-assessment conducted by the British Standard Institute (BSI). The researcher utilized Black Box testing to evaluate the program's functionality, and the findings indicate that all operations are functioning as anticipated.

Keywords: *Financial Aplication, OOAD, PostgreSQL, Laravel, Website*

Introduction

The swift progress of computer-based information technology has resulted in substantial transformations in human existence. This technology has enhanced the efficiency of work completion by leveraging electronic computers and computer software for data management. This has fundamentally altered the overall perception and understanding of higher education institutions. (Supriati & Supriatna, 2023) The importance of these organizations lies in their multitude of operational operations, which encompass financial management and financial reporting. (Megawaty et al., 2021; Zebua, 2020)

Information technology has facilitated financial data gathering, examination, and dissemination. Revenue sources can be easily collected and examined by examining income data, including tuition fees, grants, and contributions, to determine the primary sources of income. (Roikhan & Husada, 2019) Financial expenses can be optimized by improving the management of staff salaries, infrastructure payments, and investments in academic programs. (Rahmad Kurniawan et al., 2022)

Computer-based financial systems, driven by information technology, offer a promising future for the financial management of higher education institutions. (Kurniawati & Cahyana, 2014) They enable the automation of expenditure operations, mitigate the risk of human errors, and improve operational efficiency. Most importantly, they have the potential to secure the financial viability of institutions in the swiftly changing era of information technology, offering a beacon of hope in uncertain times. (Rachmawati et al., 2022)

As stated Septiani & Voutama, (2024) cited by Bagus Tri Mahardika, apps refer to software designed for specific functions, such as document processing, Windows management, gaming, and others.

As cited (Widodo et al., 2023) defines *finance* as the discipline and artistic practice of overseeing monetary resources that impact individuals and entities. Finance encompasses the procedures, markets, establishments, and tools that facilitate the exchange of funds among individuals, businesses, and governments.

To address this difficulty, STMIK Mardira Indonesia, as a higher education institution, can use a web-based financial program called "FINANCE APPLICATIONS FOR EDUCATIONAL INSTITUTIONS STMIK MARDIRA INDONESIA." By leveraging web-based technology and incorporating several elements of institutional finance, the aim is to enhance the efficiency and accessibility of financial management for authorized individuals.

Research Method

The investigation utilized descriptive analysis, a statistical technique employed to portray and examine data. Descriptive analysis offers a thorough and detailed summary of the attributes, trends, and dispersion of the observed data in the research. Patten M. Lynes (2020) defines *descriptive analysis* as a systematic statistical methodology employed to display data in a structured and comprehensible fashion. Data analysis includes utilizing tables, graphs, and descriptive statistics to comprehensively represent the data's distribution, patterns, and variations.

In terms of the approach applied, the researcher utilized many techniques to get data, specifically:

The research object, the STMIK Mardira Indonesia institution, is directly observed. Data was collected by firsthand observation of the things or events being studied. This observational method enabled the researcher to witness and document ongoing behaviors pertinent to the inquiry.

Interviews: Interview pertinent individuals inside the STMIK Mardira Indonesia institution, including Vice Chairman II, Head of BAUF, and Puslia. The interviews were conducted to gather comprehensive information about the current difficulties and expectations surrounding future application development.

Literature review: A scholarly investigation by the researcher to collect, assess, and examine diverse literature sources pertinent to the current research subject. This encompasses literature, online media, and other pertinent resources.

The researcher successfully collected extensive and dependable data for the research analysis by employing these methodologies.

Result and Discussion

a) Business Process Analysis

The subsequent sequence outlines the progression of business operations at the STMIK Mardira Indonesia educational institution, commencing with the administrative personnel's submission of applications.

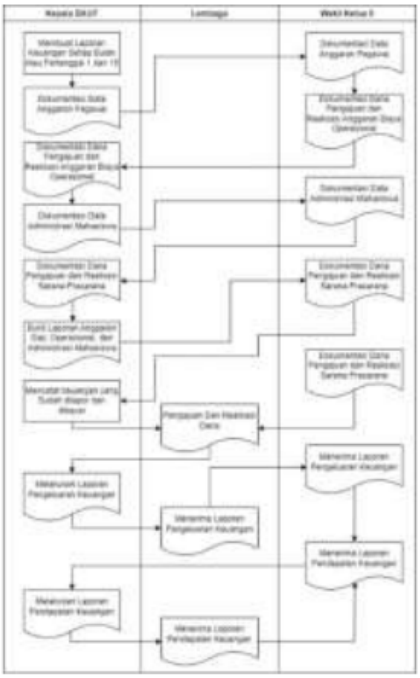

Figure 1. Business Process Analysis

b) SWOT analysis

For the STMIK Mardira Indonesia Institute, the SWOT analysis table is prepared with the following details:

Kekuatan (Strength)	Kelemahan (Weakness)	Peluang (Opportunities)	Ancaman (Threats)
Keselamatan data keuangan menjadi prioritas, karena tidak hanya disimpan secara manual, tetapi juga disimpan dalam berkas Microsoft Excel dan Google Drive.	Informasi keuangan yang kurang akurat, sering terjadi salah penginputan nominal, tidak memiliki fitur cetak laporan pdf, rendahnya tingkat keamanan karena tidak ada fitur login untuk membatasi orang yang mengakses dan mengatur keuangan tersebut, dan tidak ada sistem informasi keuangan yang terkomputerisasi.	Dari kelemahan yang ada, terdapat peluang untuk memperbaiki dengan adanya sistem yang dapat memberikan informasi keuangan yang akurat, mengoptimalkan waktu pencarian data keuangan, dan meningkatkan informasi pengelolaan keuangan di lembaga STMIK Mardira Indonesia.	Ancaman yang mungkin timbul adalah kerusakan sistem yang menyebabkan hilangnya data atau celah dalam sistem yang berpotensi terkena virus atau mengalami error.

Figure 2. SWOT analysis

c) Proposed New System

i. Use case diagrams

Figure 3. Use case diagrams

ii. Scenario Table

Nama *Use Case*	*Login*
Aktor	Admin, dan Wakil Kepsek II
Deskripsi	Semua layanan dapat diakses oleh user
Kondisi Awal	Membuka halaman *Login*
Kondisi Akhir	Layar Utama terbuka dan menampilkan halamannya
Skenario Utama	
Aksi Aktor	Aksi Tanggapan Sistem
1. Membuka halaman *Login*	2. Menampilkan halaman *Login*
3. Memasukkan *Username, Password*, dan Kode Verifikasi Aktor	4. Validasi *Username, Password*, Dan kode verifikasi
5. Menampilkan Validasi: a. Jika salah, menampilkan pemberitahuan "*Username, Password*, dan kode verifikasi yang anda masukkan salah!!!" dan kembali ke halaman *Login*. b. Jika benar, menampilkan halaman utama	
Kondisi Akhir	Halaman utama terbuka dan menampilkan halaman utama

Figure 4. Scenario Table

iii. Activity diagrams

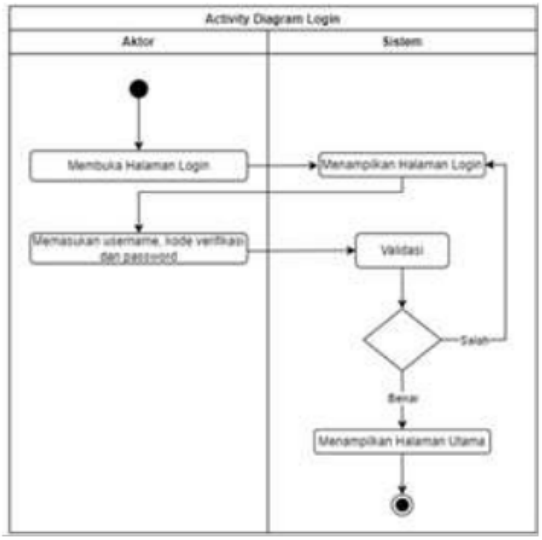

Figure 5. Activity diagrams

d) System planning

i. Database Design

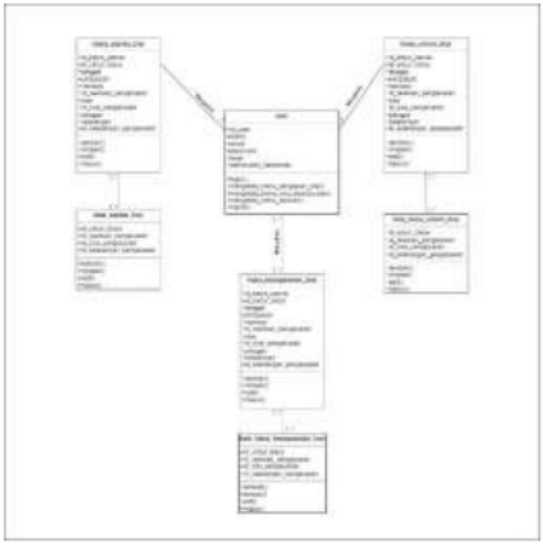

Figure 6. Database Design

ii. Interface Design

Figure 7. Interface Design

System Implementation

The system implementation stage involves the detailed description and preparation of an application system to ensure its readiness for operation.

Landing Page Display

Figure 8. Landing Page Display

Login Page Display

Figure 9. Login Page Display

Home Page/Dashboard Display

Figure 10. Home Page/Dashboard Display

Report Page View

Figure 11. Report Page View

Report Print Results Display

Figure 12. Report Print Results Display

Conclusion

Several significant conclusions can be derived from the study and debate presented in the preceding chapters. The thesis research has effectively led to establishing an integrated financial management system at STMIK Mardira Indonesia, facilitated by a user-friendly website. This solution has significantly enhanced the effectiveness of financial management activities within the institution. Furthermore, the financial reports and the web-based

system have been seamlessly integrated, ensuring precise and current financial information for the administration of STMIK Mardira Indonesia. Going forward, there are numerous helpful recommendations to take into account. Firstly, it is advisable to consistently enhance and expand the current software to keep up with the constantly increasing technical breakthroughs. Improvements can be implemented regarding functionality, user interface, and system security.

Furthermore, considering the vast range of financial management, it is imperative to enhance and optimize the system to meet the unique requirements of higher education institutions. This will guarantee enhanced financial management methods. Finally, it is recommended that financial information from multiple departments inside the institution, rather than just depending on the BAUF department, be incorporated to understand the institution's financial status thoroughly. By incorporating these recommendations, we can enhance the efficiency of the financial management system at STMIK Mardira Indonesia, guaranteeing its ongoing prosperity in the age of swift technological progress.

References

Kurniawati, R., & Cahyana, R. (2014). Perancangan Program Aplikasi Transaksi Pembayaran Iuran Untuk Lembaga Pendidikan. *Jurnal Algoritma*, *11*(1), 19–26. https://doi.org/10.33364/algoritma/v.11-1.19

Megawaty, D. A., Setiawansyah, S., Alita, D., & Dewi, P. S. (2021). Teknologi dalam pengelolaan administrasi keuangan komite sekolah untuk meningkatkan transparansi keuangan. *Riau Journal of Empowerment*, *4*(2), 95–104. https://doi.org/10.31258/raje.4.2.95-104

Rachmawati, S., Amalia, H., & Retnasari, T. (2022). Efektifitas Pemanfaatan Aplikasi Zahir Accounting Dalam Pembuatan Laporan Keuangan Pada Rumah Tahfidz & TPQ Sakinah. *Jurnal Abdimas Ekonomi Dan Bisnis*, *1*(1), 26–32. https://doi.org/10.31294/abdiekbis.v1i1.252

Rahmad Kurniawan, Jefry Tarantang, Wahyu Akbar, Sofyan Hakim, Enriko Tedja Sukmana, & Riza Hafizi. (2022). Literasi Pemanfaatan Aplikasi Keuangan Digital Bukukas Pada Umkm Di Kota Sampit, Kalimantan Tengah. *Jurnal Pengabdian Masyarakat Formosa*, *1*(1), 35–52.

https://doi.org/10.55927/jpmf.v1i1.342

Roikhan, R., & Husada, Z. J. (2019). Aplikasi Metode Balanced Scorecard dalam Pengukuran Kinerja Lembaga Pendidikan Tingkat Menengah. *Jurnal INTECH Teknik Industri Universitas Serang Raya*, *5*(2), 93–99. https://doi.org/10.30656/intech.v5i2.1788

Septiani, A., & Voutama, A. (2024). Aplikasi Kegiatan dan Urusan Keuangan (Akunkeun) di Lembaga Layanan Pendidikan Tinggi Wilayah IV. *J-SISKO TECH (Jurnal Teknologi Sistem Informasi Dan Sistem Komputer TGD)*, *7*(1), 49. https://doi.org/10.53513/jsk.v7i1.9537

Supriati, H., & Supriatna, H. (2023). Designing A Web-Based Credit Application Information System. *Journal of Economics, Management, and Entrepreneurship*, *1*(1), 49–69. https://doi.org/10.55208/jeme.v1i1.93

Widodo, T., Muhammad, I., Darmayanti, R., Nursaid, N., & Amany, D. A. L. (2023). Manajemen keuangan pendidikan berbasis digital: Sebuah kajian pustaka. *Indonesian Journal of Educational Management and Leadership*, *1*(2), 146–167. https://doi.org/10.51214/ijemal.v1i2.548

Zebua, A. M. (2020). Aplikasi Eletronik Manajemen Keuangan DIPA pada Lembaga Pendidikan Islam Negeri di Tengah Pandemi Covid-19 Sebagai Upaya WFH. *FIKROTUNA*, *12*(02). https://doi.org/10.32806/jf.v12i02.4086

150_JEME_SIMILARITY-REV

ORIGINALITY REPORT

5%
SIMILARITY INDEX

PRIMARY SOURCES

1	journal.lemlit.org Internet	57 words —	4%
2	Dadang Iskandar Mulyana, Abdurrahman A. Albahy, Muhammad Khalid, Muhammad Hafiz Siregar, Muhammad Umar Arib Sadid. "Implementation of An Android-Based Mobile Application for Real-Time Student Learning Reports at SMP IDN Jonggol, West Java", International Journal Software Engineering and Computer Science (IJSECS), 2024 Crossref	12 words —	1%
3	Dadang Iskandar Mulyana, Sodik, Ahmad Syahran Zidane, Riza Hidayat, Fatchur Rochman. "Implementation of Academic Information System at Al-Inayah Pamulang Quran House, South Tangerang", International Journal Software Engineering and Computer Science (IJSECS), 2024 Crossref	6 words —	< 1%

EXCLUDE QUOTES	ON	EXCLUDE SOURCES	OFF
EXCLUDE BIBLIOGRAPHY	ON	EXCLUDE MATCHES	OFF