IMPLEMENTATION OF ENTERPRISE RESOURCE PLANNING (ERP) ODOO ON THE FINANCIAL STATEMENTS OF DHUAFA SCHOOLS

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Abstract
The dhuafa school is a school that provides free school education for the dhuafa. The cost of education and operational expenses are dependent on donor contributions. However, due to unaccountable financial management, there are many obstacles faced by schools to obtain funding assistance because of the problems of donor confidence in financial management. The main problem with financial management is that the accounting/registration of transactions is still done manually. With the rapid development of technology, the author created the implementation of Odoo based on Enterprise Resource Planning. The results of this research are the use of some of the features in Odoo software, among them: financial account entry, student data entry, school service product entry, financial transaction entry and printing financial reports.
Keywords: *Dhuafa school, odoo, enterprise resource planning, financial report, accounting system*

INTRODUCTION

Education is one of the main pillars in the development of a nation. However, many schools, especially those in underprivileged communities, face challenges in efficient and transparent financial management. These schools, including dhuafa schools, play an important role in providing access to education to children from economically disadvantaged backgrounds. However, currently, dhuafa schools often face limitations in terms of adequate financial resources to support school operations effectively and efficiently.

The dhuafa school is a free school that is a great hope for children from dhuafa families, orphans, abandoned children, and street children, because those who initially have limitations to achieve their dreams still have the opportunity to obtain an education that can help improve their future and avoid the poverty experienced by their parents. However, the continuity of this free school is highly dependent on donations from donors (muzakki), because although there is BOS funding assistance from the government, the funds are not sufficient to cover all school operational costs, especially to fulfill the needs of facilities and infrastructure that are still inadequate.

The process of applying for and disbursing funds to schools requires the submission of a proposal and the submission of a report on the use of previous funds, which must be submitted to the Office of Education and Culture if the funds come from BOS, and to the Foundation if the funds come from the institution. Without an accountability report on the use of previous funds, the proposed disbursement of funds can be rejected by the Office of Education and Culture or the Foundation, potentially disrupting school operations and teaching and learning activities.

While the opportunity to obtain additional funding from various parties is still wide open due to the increasingly clear benefits of free schooling, especially with some students who have shown achievements at local, regional and national levels, the challenge lies in the manager's lack of ability to present reliable financial information. Currently, the financial management of both schools is still manual and simple, with the recording of fund receipts only done in a manual diary. However, with the current technological advances, dhuafa schools have the potential to improve the management of their financial systems, so that the financial information presented can be more professional, reliable and accountable. It is hoped that this can increase the trust of donors, government, and other parties, and increase financial contributions from them.

ERP (Enterprise Resource Planning) is a software or system created to help organizations or companies combine and manage various parts of their operations, including finance, human resources, production, and sales, into one integrated platform (Ramadhan & Zailani, 2023). ERP implementation is becoming increasingly important in the context of education, especially for dhuafa schools that need efficiency and transparency in their financial management. The use of ERP systems can reduce costs by increasing efficiency through automation, providing timely and accurate information to support decision- making, improving communication, and strengthening control over operations (Alienta, et al., 2023).

Odoo is one of the most popular and open-source ERP software, providing various modules that can be customized according to the needs of the organization or company. Odoo is known as the world's simplest all-in-one management software, covering a wide range of integrated business applications such as CRM, Accounting, Inventory, Marketing, E-Commerce, Project Management, HR, MRP, and others. Odoo's main advantage lies in its ease of use and comprehensive integration simultaneously (Aziza & Rahayu, 2019). However, although Odoo offers great potential, not many dhuafa schools have implemented it in the context of presenting financial statements. In addition, odoo also allows users to save costs and increase creativity. With the open-source model, users can access and adapt the Odoo source code as needed, providing great flexibility in addressing a variety of diverse needs.

Based on the presentation of the background above, the problem formulation in this study can be presented, namely how the implementation of Enterprise Resource Planning (ERP) Odoo on the presentation of financial statements of dhuafa schools. In addition, the purpose of this research is to provide guidance to dhuafa school employees on the implementation of Enterprise Resource Planning (ERP) Odoo on the presentation of school financial reports. Therefore, after studying this research, dhuafa schools have the opportunity to improve the presentation of their financial statements, making the presentation of financial information more skillful, reliable, and accountable. Hopefully, this will strengthen the trust of donors, governments, and other stakeholders, and increase financial donations from them.

RESEARCH METHOD

The approach used in this research is a qualitative approach with data collection techniques through observation and interviews. According to Moleong (2021), qualitative research aims to understand the phenomena experienced by research subjects, such as behavior, perceptions, motivations, and actions thoroughly using descriptions in the form of words and language, in a certain natural context, and by using various natural methods. This approach was chosen in order to provide an in-depth and specific description of the implementation of Enterprise Resource Planning (ERP) Odoo on the presentation of financial reports for dhuafa schools. Then according to Sugiyono (2018), observation is a data collection method that has special characteristics compared to other methods. Observation is not only limited to humans, but can also be done on other natural objects. Through observation, researchers can study behavior and the meaning of that behavior. In the context of this research, observation is carried out by making direct observations in the field to understand the actual conditions of how the financial records of the dhuafa school. Meanwhile, interviews are a data collection method used when researchers want to conduct preliminary research to identify problems that need to be researched, and also to gain a deeper understanding of things from respondents (Sugiyono, 2016). In this study, interviews can be conducted with parties involved in dhuafa school finance.

Enterprise Resource Planning (ERP)

Enterprise Resource Planning (ERP) also known as enterprise resource planning, is the primary information system used by companies to integrate and coordinate information throughout their business sections, as well as support core business processes (Putri and Suhendi, 2021). According to Firlanda and Suhandi (2020) on Enterprise Ressources Planning, there are modules that are integrated based on operational functions in the business, such as accounting, finance, human resources, marketing, logistics, and so on.

Odoo

Odoo is a web platform developed using Python, XML, and JavaScript programming languages, as well as using PostgreSQL as a database management system. Odoo belongs to the category of Enterprise Resource Planning (ERP) software and was previously known as OpenERP. Odoo is used not only by large corporations, but also by small and independent companies. In addition, these applications can be applied in a variety of sectors, including trade, textiles, agriculture, and other fields. (Arfikriyana dan Suhendi, 2022).

Financial Statements

Financial statements are the final result of the financial accounting process that provides an overview of the company's financial performance in past periods. Generally, financial statements consist of the balance sheet and the calculation of losses as the main report, but often also include other reports to provide a more comprehensive overview, such as capital changes reports, working capital changes, commodity price calculations, and so on. The balance sheet provides information

about the financial position of a company at a given date, while the loss-loss calculation shows the results of the company's activity over a given period. Financial statements play an important role in providing financial information to the company leaders, investors, creditors, governments, and other interested parties. The two main reports that are the main focus are the balance sheet and the calculation of losses. (Firlanda dan Suhendi, 2020).

The Accounting and Finance Module

The Accounting and Finance module is a core module in many Odoo systems due to its ability to gather financial data from various functional departments and produce financial reports. Some of the main functions of the Accounting & Finance modulus are to manage all accounts associated with financial entries and their impact on the entire system as well as record all incoming financial transactions and identify the use of each financial part. With this module, a useful overview of the company's financial position is available, which greatly supports decision-making.

RESULTS AND DISCUSSION

1. System Design Analysis

System design analysis is a critical stage in system development that involves a deep understanding of user needs and technical specifications that must be met. At this stage, problem identification, needs analysis, and solution planning are carried out which will be implemented in the system to be developed. In this section, the steps to obtain information from the system to be implemented are explained based on the results of collecting the required data through observations of previously used systems and interviews with parties involved in the finance of dhuafa schools. The information and data that has been obtained will be analyzed and used to make it easier to identify a system problem that has previously been implemented. The data collected will be analyzed to identify existing system problems more easily.

This analysis process includes understanding existing business processes, identifying weaknesses and opportunities, and mapping the functional and non-functional needs of the system to be built. In addition, system design analysis also includes selecting the right technology, designing system architecture, and planning testing and implementation. By analyzing system design carefully, it is expected to produce solutions that are effective and efficient in meeting user needs and achieving predetermined business goals.

a. Problem Analysis

In the Odoo design process, problem analysis plays a crucial role in understanding the challenges faced by the organization and how best to address them through the implementation of the Odoo system. This problem analysis involves a thorough identification of the discrepancies or weaknesses in the existing business processes, as well as a deep understanding of the specific needs of the organization. It includes an assessment of the current business processes, including the identification of areas that require increased efficiency, automation, or integration. In addition, the problem analysis also takes into

account the needs of the end users, technical issues that may arise, and challenges that could potentially arise during the implementation and use of the Odoo system. By conducting a comprehensive problem analysis, organizations can identify the most suitable solutions and optimize the value of Odoo implementation in improving their operational performance and efficiency.

The problem contained in this research is quite interesting. The existence of free schools like Sekolah Dhuafa is needed by dhuafa children, orphans, abandoned children, and street children so that they still have the opportunity to get an education. However, the sustainability of free schools is highly dependent on funds raised from donors. The problem is that the financial management is still manual and very simple, making the manager unable to provide reliable financial information. If schools can provide accurate school financial information, it is expected to increase the trust of donors, government, and various other stakeholders, as well as increase the amount of financial contributions from various stakeholders.

Therefore, schools definitely need a good accounting information system. Current technological developments have enabled dhuafa schools to better manage their financial systems, thus enabling administrators to manage financial information in a more professional, reliable and accountable manner.

b. System Design

Various problems in this study are caused by the lack of effectiveness in the financial recording process to the lack of integration of procedures in the Dhuafa school environment. At this stage, the steps to obtain information from the system to be implemented are explained based on the results of data collection through previous system observations and interviews with related parties at Dhuafa School in the financial field. The data collected will be analyzed to identify existing system problems more easily.

The designed school financial information system aims to facilitate the implementation of administrative, financial and accounting tasks. In achieving this, the author wants to implement the Odoo ERP (Enterprise Resource Planning) concept which can automate and integrate all financial transaction business processes.

b.1. Actor Identification

In implementing an ERP system using Odoo, it is necessary to identify who is involved in the process. The following is a description of the identified actors:
1. Administrators
2. Financial manager
3. Cashier
4. Dhuafa school employees

b.2. Use Cases

The following image will explain the use case diagram in the implementation of Odoo ERP in dhuafa schools, where the use case itself acts as a representation of functions based on user needs.
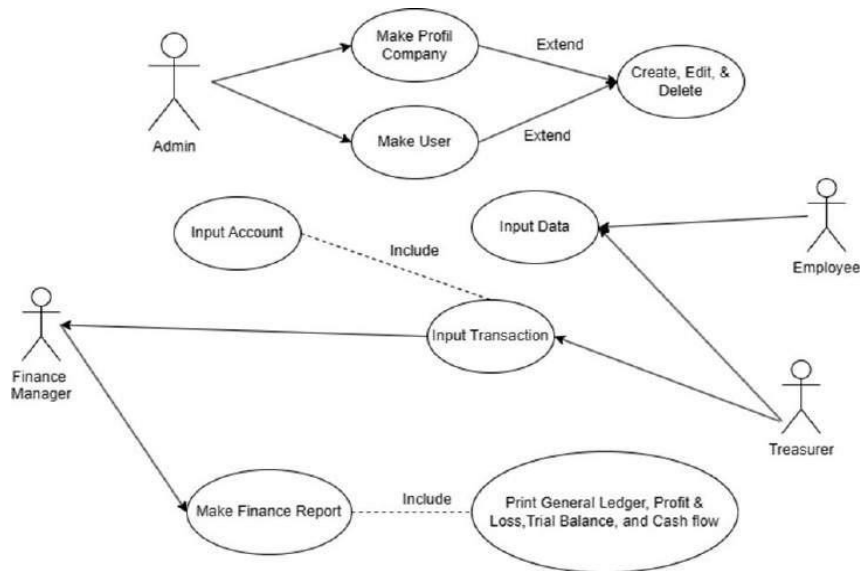
Figure 1. Use Case

2. Implementation

Next is the financial implementation stage, namely inputting financial transactions at dhuafa schools. This implementation uses Odoo version 16.0 which was released on October 13th 2022. The implementation stage involves inputting financial transactions at the Dhuafa School. Currently, they still follow the old procedures while using the new applications simultaneously, this approach is known as the parallel method. This approach was chosen to reduce the risk of new system failures that could disrupt daily activities. Apart from implementing Odoo ERP software, preparing guidelines for school accounting information system applications is also an important part of this stage.

Preparing guidelines for school accounting information system applications is another component of this activity, apart from implementing Odoo ERP software. Following are the results of implementing various Odoo modules:

1. Display school profile settings in company profile settings.
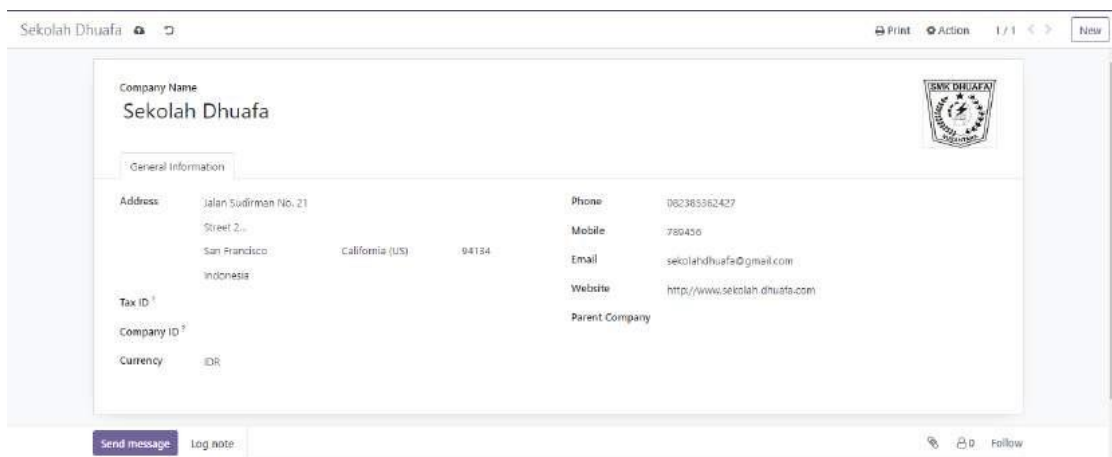
Figure 2. Company Profile Settings

2. Odoo apps display which is useful for installing modules which are useful for school activities.
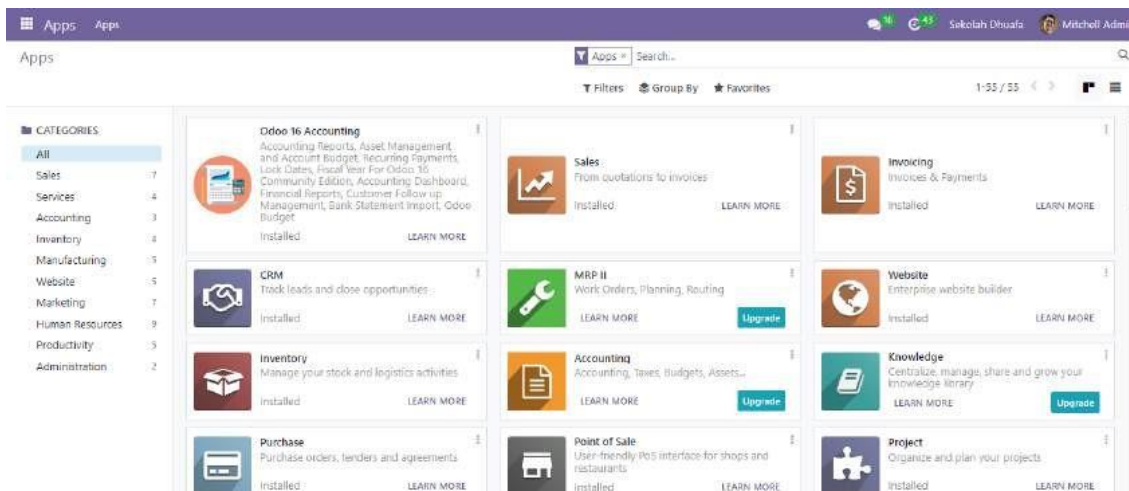
Figure 3. Odoo Apps

3. Odoo Apps store display which provides various free and paid modules according to user needs.
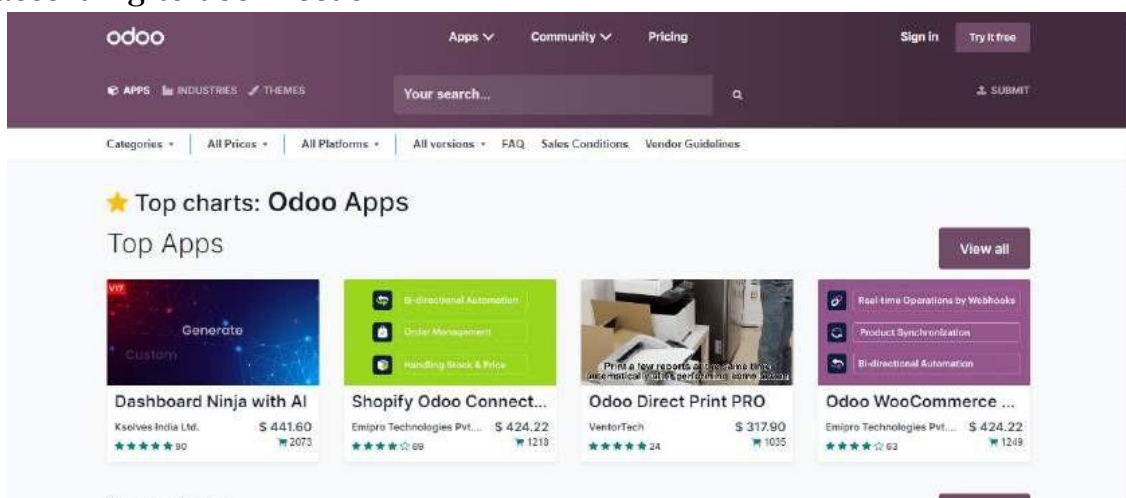
Figure 4. Odoo Apps Store

4. Display of contact list for donors, employees and students contacts module.
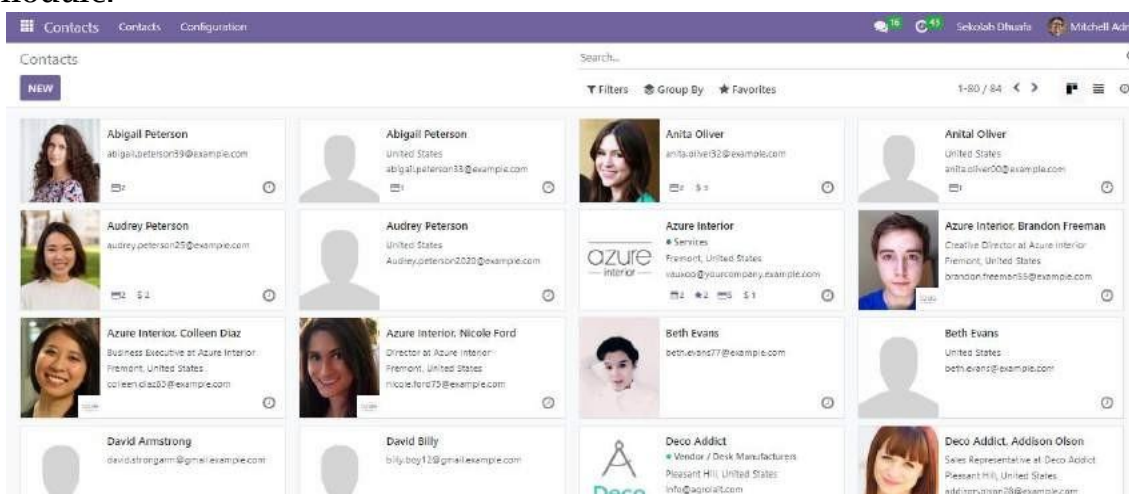
Figure 5. Contacts

A good contact list display in the Contacts module in Odoo provides a number of significant benefits for organizations. First of all, by having a centralized contact list for donors, employees, and students, organizations can easily manage their contact information without needing to store data separately. This helps in maintaining data integrity and minimizes the risk of losing important information. Additionally, an organized contact list view allows organizations to track interactions with each group, such as phone calls, emails, or meetings. This helps in building stronger relationships with donors, employees, and students, and increases effective communication. Additionally, by segmenting data based on certain criteria, organizations can conduct deeper analysis of each group and make more informed decisions. Thus, displaying a good contact list in the Contacts module in Odoo not only makes it easier to manage information, but also helps organizations increase efficiency, strengthen relationships, and make better informed decisions.

5. Display when taking employee absences using the attendances module.
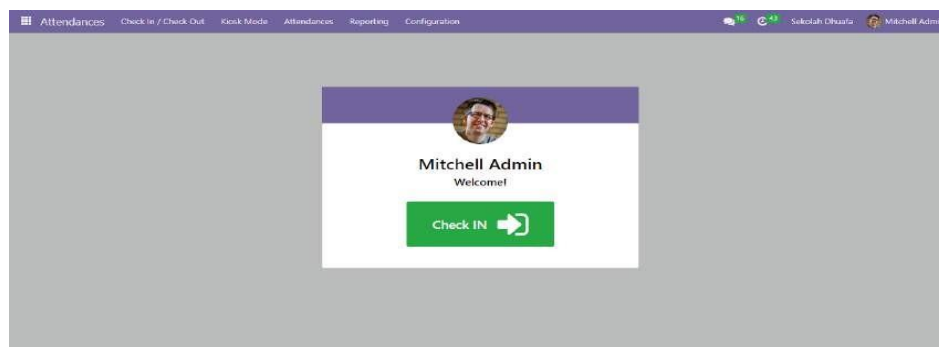
Figure 6. Attendances

Taking employee absences using the attendances module in Odoo provides various significant benefits. First of all, this automated attendance system allows collecting absentee data accurately and in real-time. In this way, companies can monitor employee attendance more efficiently without having to rely on manual processes that are prone to errors. In addition, using the attendances module in Odoo makes it possible to track employee working hours more precisely, including absences, tardiness and early departure. This helps management manage time and identify attendance patterns that may require special attention. Apart from that, the attendances module in Odoo also simplifies the payroll and employee administrati-on process. With absence date recorded automatically, companies can calculate wages and benefits more accurately, and avoid errors in salary calculations. In addition, integration with the HR module on Odoo makes it possible to link absence data with other employee information, such as leave, permits, and performance evaluations. This allows management to make better decisions regarding human resource management and employee development.

6. Display of the discuss module used by distance users as a communication bridge for school activities.
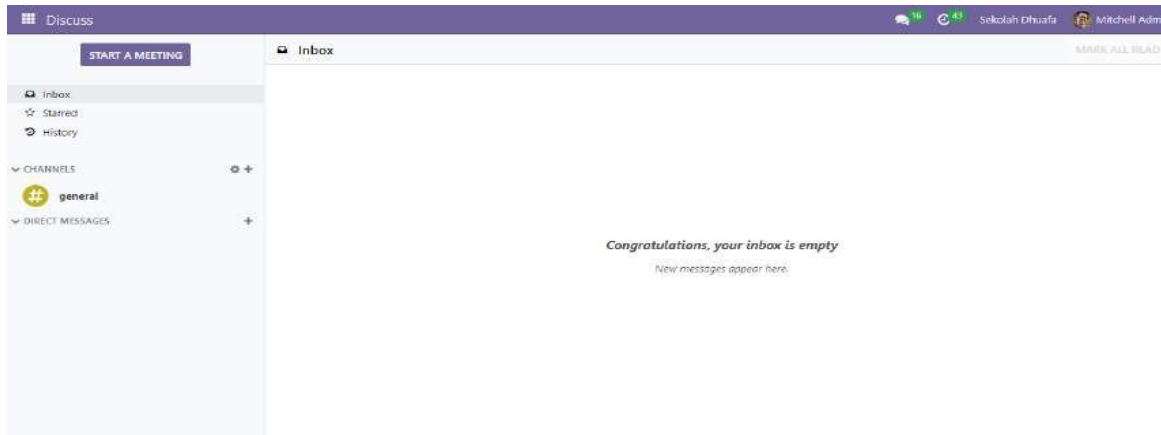

Figure 7. Discuss

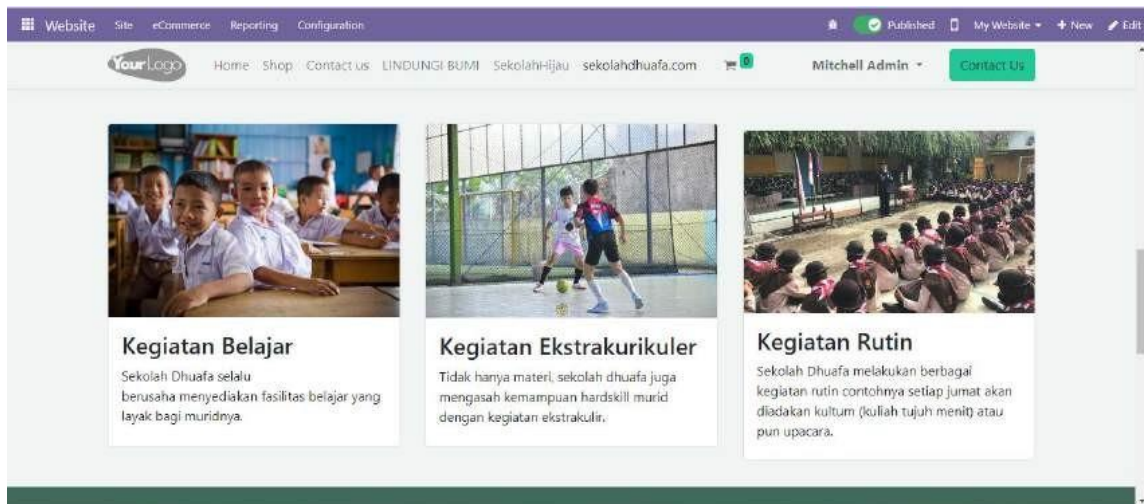7. Display of the dhuafa school website using website features.

Figure 8. Website

8. Display the Recruitment module to see available vacancies, the recruitment process and employee information.
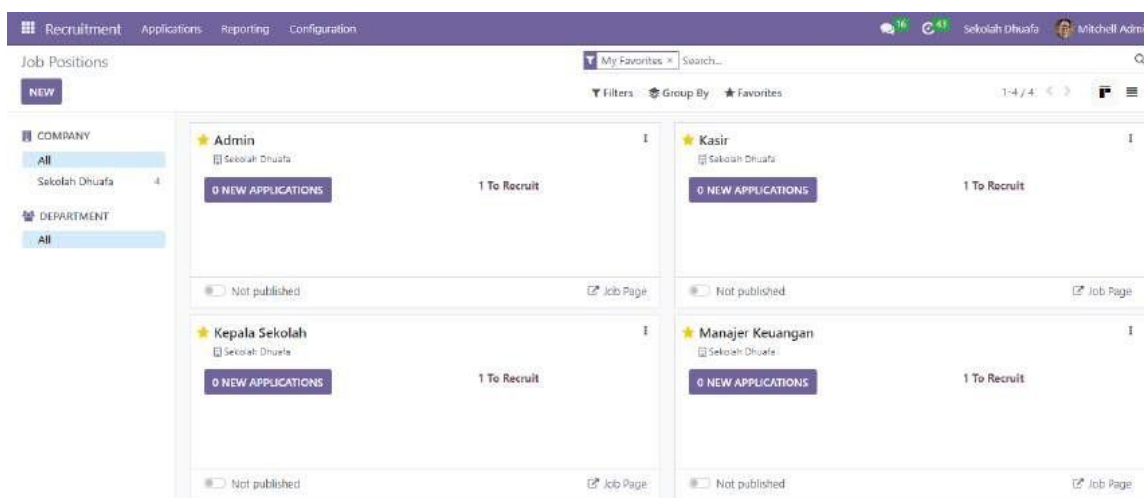

Figure 9. Recruitment

The Recruitment module in Odoo provides a number of significant benefits for users in terms of human resource management. First of all, this module allows users to easily view available job vacancies and manage the recruitment process efficiently. With a structured and intuitive display, companies can quickly find out details about each job opening, including the job description, required qualifications, and application deadlines. This helps in attracting the right candidates according to the requirements.

Furthermore, the Recruitment module in Odoo also simplifies the recruitment process with features such as applicant management, interview scheduling, and candidate evaluation. With the applicant management feature, users can track every stage of the recruitment process from application acceptance to final selection. This helps in maintaining consistency and transparency in the recruitment process. Additionally, integrated interview scheduling makes it possible to easily organize interview schedules and send invitations to candidates.

Apart from the recruitment process, the Recruitment module in Odoo also provides quick access to information on employees who have been recruited. This includes personal details, contact information, employment history, qualifications and other relevant documents. By having easy access to employee information, management can quickly view employee profiles and make informed decisions regarding career development, project assignments, or performance appraisals.

Overall, the Recruitment module in Odoo helps companies manage the entire recruitment cycle starting from viewing available vacancies, carrying out the recruitment process, to managing information on employees who have been recruited. With intuitive and integrated features, this module helps improve efficiency, transparency and quality in corporate human resource management.

9. Employee payslip input display in the payroll module.

Figure 10. Employee Payslips

10. Payroll module display which is useful for managing employee payslip/salary calculations.

Figure 11. Payroll

The Payroll Module display in Odoo provides a number of significant benefits for users in managing the employee payroll process. First of all, the structured and intuitive display makes it easy for users to access employee salary information quickly and easily. With the features provided, such as payroll, wage details, and payroll reports, users can quickly view the wage details of each employee, including salary components such as basic salary, allowances, and deductions.

In addition, the Payrol module in Odoo simplifies the salary calculation process with integrated automation. By connecting data on attendance, permits and other allowances, this system can calculate employee salaries accurately and efficiently, avoiding manual errors and saving time. Features like setting salary periods, bulk salary processing, and tax withholding management also help in managing the payroll process more effectively.

11. Display Invoice Receipt of donations from the government in the sales module.

Figure 12. Invoice - Sales

12. Display of company cash reconciliation when receiving donations with the accounting module
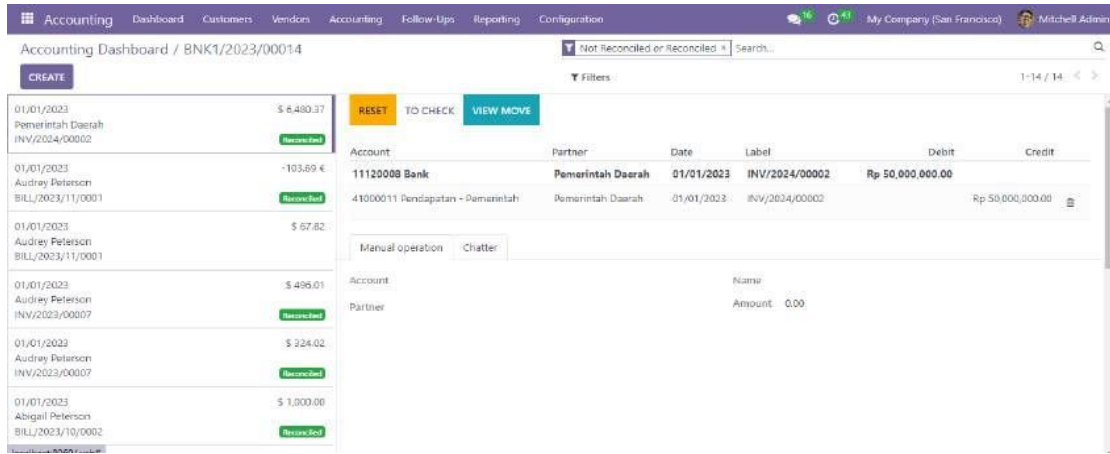
Figure 13. Reconcile – Accounting

13. Sales module display.
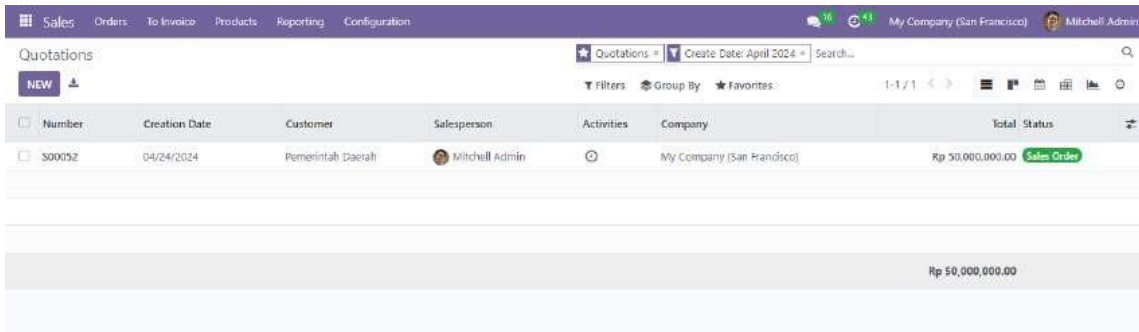
Figure 14. Sales

14. Display when purchasing one of the ATK in the purchase module.
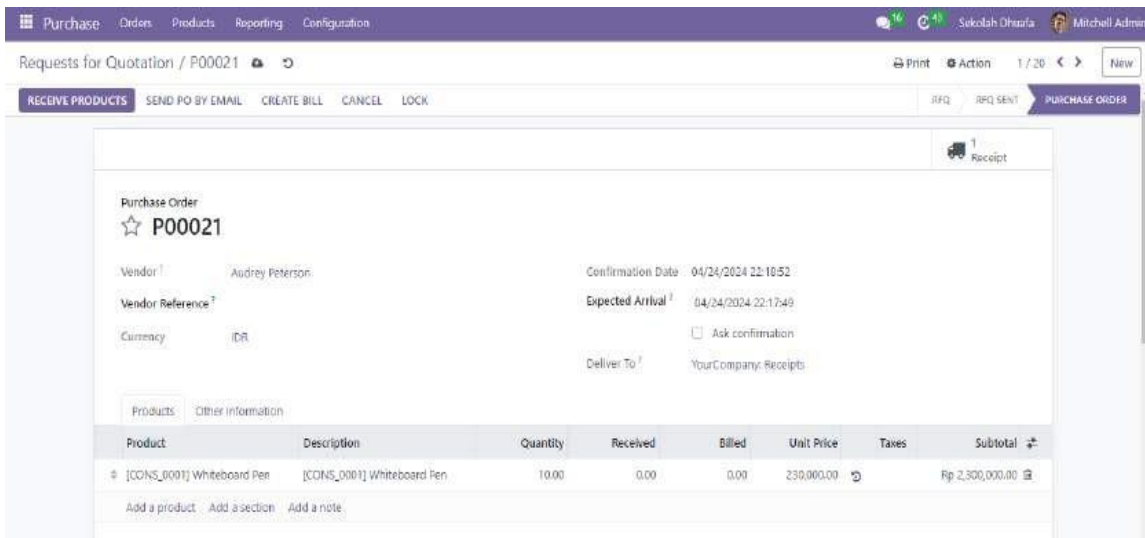
Figure 15. Purchase Order - Purchase

15. Display of projects that occur at dhuafa schools using the projects module.
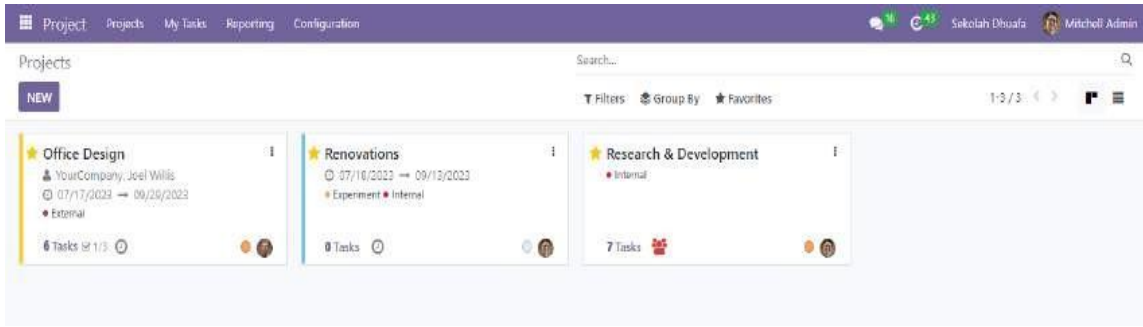
Figure 16. Projects

16. Display the expenses module to apply for reimbursement for personal expenses used for dhuafa school activities.

Figure 17. Expenses

17. Time off module display which is useful for viewing available leave hours and applying for leave.
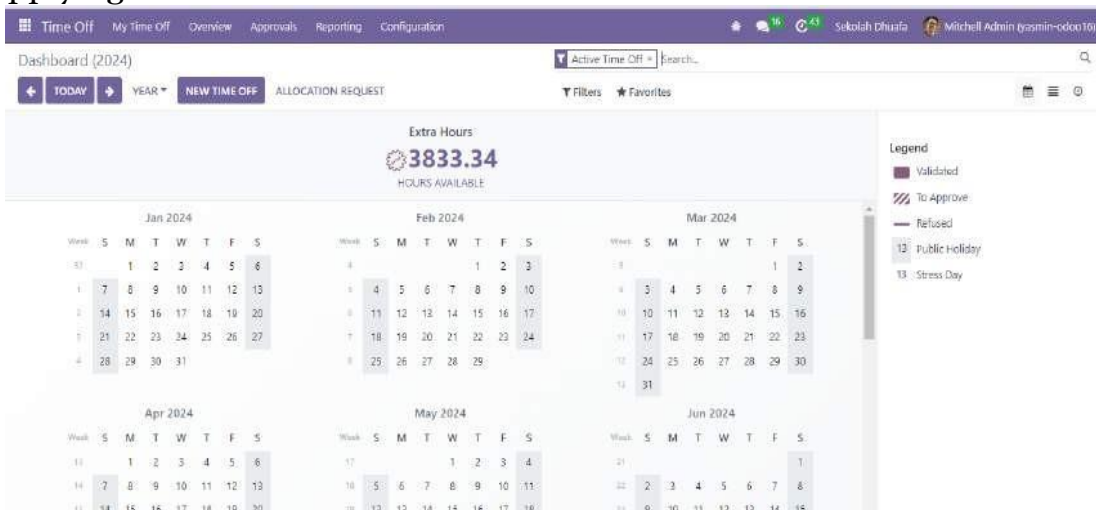
Figure 18. Time Off

18. Balance Sheet display in the Accounting Module.

Figure 19. Balance Sheet Report - Accounting

19. Profit and Loss Display in the Accounting Module.

Figure 20. Profit & Loss Report – Accounting

20. Display of report information available in the accounting module.
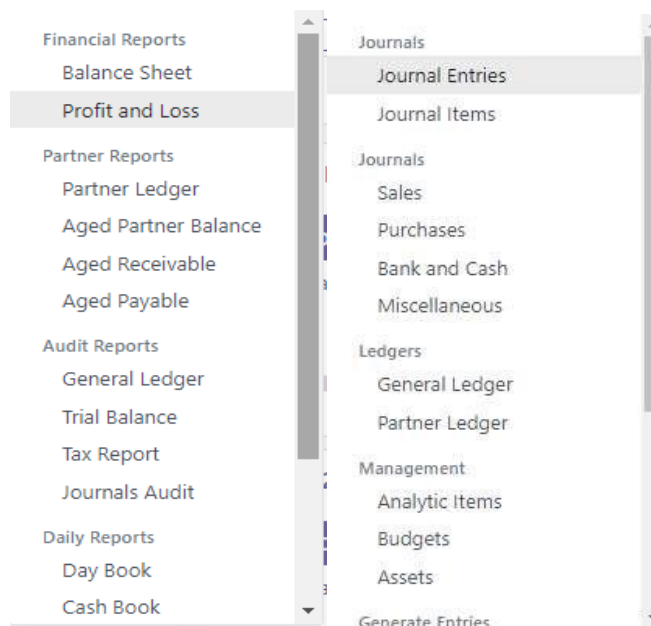

Figure 21. Reporting – Accounting

21. The Dashboard display is a summary of School Activities based on records in the system.
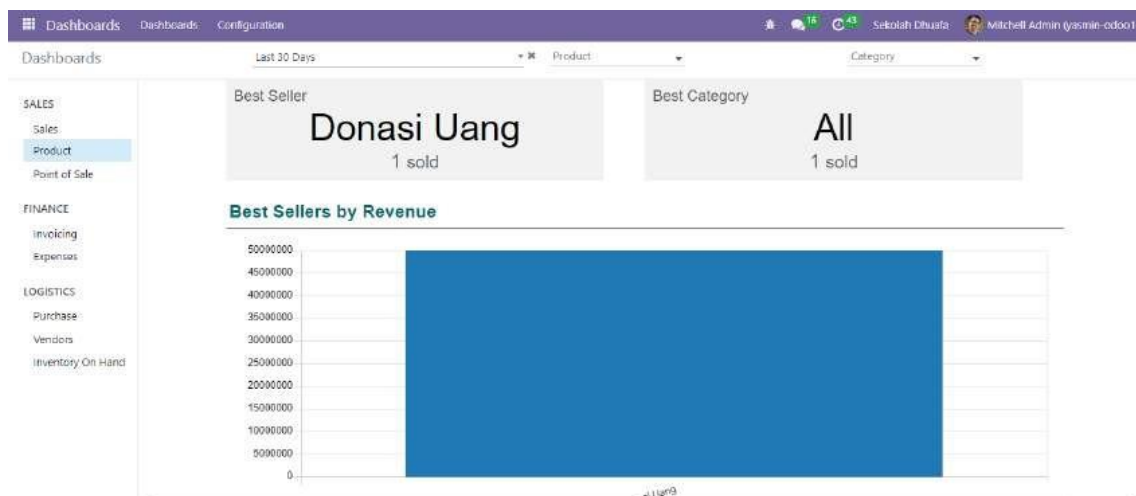

Figure 22. Dashboards

CONCLUSION

Dhuafa school provides access to free education to underprivileged children, but the sustainability of the program depends on donor contributions. Financial constraints such as lack of funds and lack of effective financial management cause disruptions in the school's operations. This paper highlights the need for improvement in the information and financial systems of the dhuafa school, as well as the importance of implementing Odoo Enterprise Resource Planning (ERP) to increase donor trust and financial management efficiency. With the implementation of Odoo ERP, it is expected to improve the school's administrative and financial processes, as well as increase transparency and accuracy in the presentation of financial reports, so as to support the growth and sustainability of this school in providing educational services for children in need.

Future researchers are advised to complete the paper with a more in-depth analysis of the impact of Odoo ERP implementation on the operational and financial efficiency of Dhuafa schools. The research can expand the scope and can quantitatively measure the impact of Odoo ERP implementation on improving the accuracy and speed of presenting financial reports, as well as saving costs and other resources. As such, future research can provide a more comprehensive understanding of the benefits and challenges of Odoo ERP implementation in the context of Dhuafa schools, as well as provide valuable guidance for similar institutions planning to adopt similar technology in their financial management.

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