Financial Management System Integrated by Web-Based Payment Cash Link Solution to Invent Smart Reconciliation

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Abstract

The latest information should be able to do things efficiently and quickly. Accounting has an essential role in a company that is financial and administrative reports. This requires accurate data and real-time financial reports between cashier data and bank statements. It is called Reconciliation. However, there were 2 (two) problems identified in the University of Raharja, the Reconciliation, which is conventional, and the report was not real-time. The problem can lead to errors and requires very high accuracy. To expedite an accurate report also data to superiors, a feature in online accounting software that Invents smart Reconciliation is needed. The existence of innovation resolves these problems by automatically activating the online accounting software's reconciliation feature using Cash links. Cash links are automatically smart reconciliations. There are 7 (seven) literature reviews as the research method used in this study to solve the problems. Smart Reconciliation is expected; accountants can collaborate with the disruptive era to significantly impact the company. So, financial reports can be published in real-time and accurately and motivate the accountants to improve administrative reports.

Keywords

Financial, Reconciliation, Cash Link, Online Accounting.

1. Introduction

A financial system company or called administration is often considered a hassle (Aini, Riza Bob, et al., 2020b; Williams & Dolan, 2020). The difficulty of manual reporting is also quite difficult for accountants to complete the report. The existence of leadership styles, competencies, work motivations, and good performance from university impact (Henderi et al., 2020) on the success of accreditation (Aini et al., 2020; Supriagi et al., 2020). Various kinds of findings are supported by evolving innovations from technology that have led to development (Sudaryono, Rahardja, & Lutfiani, 2020). Not only that, the cause and effect of periodic, integrated, and structured evaluations are then carried out continuously in University (Yaniaja et al., 2020). The need for an information system that is designed to be mutually integrated is undoubtedly needed more with the development of time (Sokibi et al., 2020). It has a sensitive administrative scope in a company or University, especially about finance, which is very risky in privacy. Then it takes a presentation of information that can display concisely, effectively, and efficiently so that it is easy to understand (Aini, Riza Bob, et al., 2020a). There is a need for system development and relevant data for learning and work experience (Sudaryono, Rahardja, & Masaeni, 2020). The thing that is done by accountants regarding the Higher Education transaction adjustment process is critical because, with the existence of Higher Education (Sudaryono et al., 2019), transaction records can monitor the list of incoming and outgoing money by adjusting it to the checking account to minimize losses to the company (Aini, Badrianto, et al., 2020). The transaction adjustment process, both out and in, is called reconciliation. Reconciliation is a process of financial adjustment or matching of transaction data processed with several different systems based on documents from the same source. Reconciliation can also be interpreted as an activity detailing the differences in bank transaction records as transaction managers and records held
by the company with the Bank in the form of a checking account (Mardiana et al., 2019). All transactions that have been carried out during the specified period will be seen in the reconciliation process. If a difference is found, the accountant will make an adjustment journal using evidence that is considered (Chandra et al., 2020) valid and valid. With the accountants' reconciliation, the company can view and adjust the Bank's bank statement with the company's bank account. However, at the University, the reconciliation process still uses a conventional system (Yetmi & Ahdiyatuningsih, 2020), where the accountant must check the Bank's checking account one by one to be equated with the company's current report. The bank statement obtained is still to be downloaded from m-banking (Alam, 2020)(Prawira et al., 2019). This is undoubtedly very ineffective because it can hamper the performance (Rahardja, Lukita, et al., 2020) of its accountants. The hindered reconciliation process will cause an accountant's performance to be not optimal (Kusnadi et al., 2020), (Lukita et al., 2020). The performance of an accountant who is not optimal will make the whole job of an accountant fall apart. However, with Online Accounting Software, these problems can be resolved. In Online Accounting Software where there is a feature called Cash Link. Cash Link is a feature found in the Online Accounting Software used in conducting reconciliation per transaction recorded in the Journal, such as payment for sales and purchases. Cash Mapping can be used to reconcile all cost transactions in Bank transfers that have not been recorded in the Bank so that the reconciliation process can be done online and efficiently and improve accountants' performance. In this Online Accounting Software, automatic bank reconciliation is between a newspaper account and a Receive payment (received payment) included in the Online Accounting Software.

2. Literature Review
This study uses an observation method to collect data by observing or reviewing directly at the research location. Research carried out at University, which converged the accounting department that carried out the reconciliation process by a manual method by downloading a checking account from m-banking, thus hampering the accountant's performance in the reconciliation process and doing other work. So we need a system that facilitates the completion of performance (Rahardja, Kosasi, et al., 2020). The existing and related researches become a reference for the achievement of this research. There are 7 (seven) literature studies that researchers use as information for this study, including:

1. This study discusses that the current era of globalization requires a computerized online system to reduce the risk of losing important data and facilitating the reconciliation process so that it is virtually in the process of accounting for the company's financial statements (Sunarya et al., 2017).
2. The research entitled "IMPLEMENTATION OF RECONCILIATION TRANSACTIONS IN THE SECOND GENERATION STATE RECEIPT MODULE" in this study discusses the process of transaction reconciliation through the reconciliation portal resulting in 4 types of data criteria, namely match, CA Only, SA Only, and failed. With these four criteria, the reconciliation process can run efficiently and effectively and be recorded in the settlement system. The research conducted by (Sumantri & Ni’ma, 2018).
3. The next research entitled "ANALYSIS OF RECONCILIATION PROCESSES ON BANJARMASIN STATE TREASURY SERVICE OFFICE (KPPN) BANJARMASIN" was carried out by Saifhul Anuar Syahdan and Jarir Al Amjad. This study aims to analyze the reconciliation process which is part of the General Accounting System implemented by the Banjarmasin State Treasury Service Office (KPPN) and assesses compliance with the regulations that form the basis of creation. (Syahdan and Al Amjad 2016)
4. This study performs asset management with an online accounting system to obtain an updated and real-time report on accumulated depreciation of assets. The import feature on the system makes it easier for companies to input large amounts of asset data. The final result is that the company's entire asset management data is recorded correctly and synchronously on the input and output (Supriati et al., 2017).
5. The study Monitoring the performance of admin student financial services on an agency's Web-Based Accounting Online must be done so that its performance can be seen. Dashboards on Web-Based Accounting Online can be used to monitor admin performance. With this research, to monitor employee performance as admin on Web-Based Accounting Online, it is expected that they can work optimally and not make mistakes that harm both parties. This study conducted by (Aini, Rahardja, et al., 2020)
6. At PT. Arbunco Wira Pandega found no system could accommodate all sales activities and financial reports in an online system. According to company expectations, a website-based sales plan is created that links from one process to another to produce fast and useful reports. Was researched by (Saputro et al., 2020),
7. The research with the title "ANALYSIS OF E-RECONSTRUCTION APPLICATION ON RECONCILIATION OF FINANCIAL STATEMENTS IN THE REGIONAL OFFICE OF THE DIRECTORATE GENERAL OF STATE PROVINCE OF THE STATE PROVINCE" explained that to realize an effective, efficient Central
Government Financial Report, accurate, accountable, and transparent, Online Reconciliation System is needed to facilitate the Regional Government, State Ministry / Institution and Regional Office of the Directorate General of Budget Financing. This study aims to investigate the reconciliation process using electronic reconciliation applications (e-Rekon-LK). The research conducted by (Oflagi et al., 2018)

Of the 7 (seven) literature reviews, that reconciliation is very influential on financial statements. Experience reconciliation can be done easily, quickly, and accurately. Moreover, the University implements an online payment system (Aini et al., 2019). In the follow-up to the research described above, the researcher researched automatic reconciliation with Online Accounting Software at Universities.

3. Methods

Based on 2 (two) problems in presenting financial/administrative reports manually and the timeliness of reports to the leader. So the flow of the organizational structure is not good. Besides that, it allows for a long time to match data. However, at the University, the above has not been achieved. The manual process is still done and involves many people to run long and challenging (Pranata et al., 2020).

The Accountant also has a long time to match the bank book with the financial statement data every day (Dwi et al., 2020). Thus, the Accountant's performance is not optimal in completing the report of every month, apart from the nature of a service that requires IT to increase effectiveness and productivity towards more important than the reach of business globalization (Watini, Aini, Khoirunisa, et al., 2020).

There needs to change, including presenting information forms, starting from conventional ways to being modern to facilitate and be understood by readers in understanding the information presented (Aini et al., 2020) , (Watini, Aini, Hardini, et al., 2020).

![Flowchart of the reconciliation process](image)

**Figure 1. The reconciliation flowchart is running**

The Above picture is a flowchart of the reconciliation carried out by the Accountant manually, namely by looking at bank book mutations with data that has been inputted into the Online Accounting Software.
4. Results and Discussion

The problems explained in the flowchart above can be minimized by issues such as Cash Activation Link on Direct Feeds feature in the Online Accounting Software, which is integrated or connected with an online Bank Book. So that with the Cash Link Reconciliation is done automatically by the Online Accounting Software with the Cash Link Reconciliation is done automatically by the Online Accounting Software.

Figure 2. Flowchart the proposed system

The proposed system in Figure 2 explains that the reconciliation is done automatically or called smart reconciliation. That is by activating the direct feeds feature in Cash Link on online accounting software so that accountants' work becomes more comfortable.

Figure 3. Register Account in online accounting software

The Cash Link on the Online Accounting Software is to minimize the problems, i.e., the time in reconciliation by the Accountant.
Figure 4 is Cash Link that has the Direct Feeds feature active in Online Accounting Software. This feature is connected between Bank Books and Direct Feeds features on Online Accounting Software as Automatic Reconciliation.

The activation of the Direct Feeds feature, referred to as Cash Link, can provide significant benefits to Accountants in monthly financial administration reconciliation. Also, the reconciliation time does not need to take a long time because it has been automatically so that the report to the manager/leader can be on time.

4.1 How to activate Cash Link
Reconciliation is one of the keys to the effort to develop credible financial statements. Reconciliation is also a process to ensure that both parties have correctly recorded all transactions before preparing financial statements.

Cash Link is a feature found in the Online Accounting Software used in reconciliation per transaction that has been recorded in a journal such as payment for sales and purchases. The first stage of Cash Link activation is the activation of Direct Feeds on Bank Accounts that will be integrated.

Figure 5 explains the initial steps by installing direct feeds in the intended Bank account.
In the Direct Feeds configuration, you choose the bank that you want to reconcile automatically.

Figure 6. Configuration to choose the destination bank

Can be seen on the bank account menu, there is the bank logo and bank mutations will be automatically active.

Figure 7. Registration Form
Figure 8. The Display of a Bank Account with details of the data of the income transaction.

Figure 8 is the transaction data that has made payments and entered into the Bank Account as the receipt. The description in the picture explains one settlement of several payment details from the Receive Payment.

Figure 9. Connected Account Book Movements

Figure 9 is the Account book mutation that has been connected during Direct Feeds activation. To adjust during the reconciliation process.

Figure 10. Reconciliation
The picture above is a process when you want Reconciliation. Bank Book mutation data with transaction data in online accounting software will be matched according to the same data.

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**Figure 11. Cash Mapping**

Figure 12 is the transaction data that has been reconciled, meaning that the transaction is the same as the bank book mutation in the account.

The implementation results are activated directly feed on the Online Accounting Software from the accountant's side to match the income and expenditure finances. Collaboration development will support by improving the quality of infrastructure, connectivity, and integrity (Setiawan et al., 2018). The infrastructure without technology and a dissertation on resources will not run well, even optimally, which will be used optimally (Adiyarta et al., 2018).

The convenience for accountants in reconciliation using direct feeds or cash link features with just one click match without downloading a checking account and then manually match it to the Online Accounting Software. Also, data that has been reconciled cannot be accurately filtered, like the use of Google sheet in which there are mathematical and statistical operating formulas that can reduce calculation errors and accurate accuracy. One of the benefits of the internet's existence as an unlimited source of information. Besides, there is support regarding improving the quality of an organization that can enhance the organization's development.

5. Conclusion

From this research, there are 2 (two) problems; the problem is solved using 7 (seven) research methods so that 2 (two) conclusions can be drawn, i.e., Cash Link is a smart reconciliation on Online Accounting Software by automatically matching bank book mutations. Moreover, the Cash Link on online accounting software can help accountants in the reconciliation process reduce errors and work effectively and efficiently, as well as reports on financial management to leaders can be done in real-time, accurate, and able to motivate the accountant itself.

References


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Biography / Biographies

Untung Rahardja or often called UR is a graduate of the University of California Berkeley in America, followed by the Information Technology Masters Study Program at the University of Indonesia. UR has completed his Master of Management education at the Persada Indonesia University YAI. He is an example of a formidable figure, with his daily activities in education and preparing as a teaching lecturer and a supervisor in Information Management by teaching 15+. During his 25 years as an educator, he has had a lecturer certification with an available head lecturer position. At Tridarma Research, he is active in writing scientific papers published in national and international reputation. There are 10+ book creations published in Gramedia and Andi Offset, 200+ scientific journals indexed by Google Scholars, and <30+ journals indexed by SCOPUS and have also been a reviewer in 10+ scientific journals. There are 10+ Patents & Copyrights and 10+ Awards that have been obtained, one of which is receiving an award.
from the Minister of Research and Technology of the National Innovation Research Agency (Ristek-Brin) of the Republic of Indonesia as the 500 Best Researchers based on the Science and Technology Index (SINTA) Years 2020.

**Qurotul Aini** is a lecturer in the field of information technology. Obtained a master's degree from University of Raharja in 2016 and is currently pursuing a doctoral program in computer science at the University of Technology Malaysia. To date, she has 125 research studies in Gamification Blockchain, Business Intelligence, Internet, and E-Commerce, which have been published around the world. She is an active speaker for various national and international conferences.

**Nuke Puji Lestari Santoso** is a Master of Information Technology student from University of Raharja. Currently she has 16 scientific articles in Google Scholar, and 4 journal Scopus. The research fields he is interested in are Blockchain, Gamification, Accounting, Business Intelligence, Cloud Computing which have been published several times.

**Marviola Hardini**, who is often called Vio, has earned her S.Kom degree by taking a Bachelor degree (Strata One) at one of the universities in Tangerang City, namely Raharja University and taking an IT (Informatics Engineering) study program with a concentration of MAVIB (Multimedia Audio Visual and Broadcasting). Currently, he has conducted 13 research studies, including 7 international research studies, discussing Blockchain technology

**Aulia Edliyanti** is a graduate of Diploma 3 in Computerized Accounting in 2021 at University of Raharja. During her study, Aulia was active in writing scientific articles, as evidenced by three scientific publications that have been indexed by Sinta and 1 Scopus. In google scholar, Aulia has H-index 1. She was having an interest in accounting, gamification, and e-commerce.