

Contextualizing Socio-Technical Design of Accounting Information Systems: Evidence from a Digital Startup in Indonesia's Sharing Economy

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Keywords: Accounting Information System; Sharing Economy; Socio-Technical Systems; ADDIE; Digital Startup

Abstract: This study designs a socio-technical accounting information system (AIS) for a digital startup operating within Indonesia's sharing economy. It aims to align technological components with organizational routines, human interactions, and the performance-based payroll structure used by online media platforms. Using the ADDIE development framework—Analyze, Design, Develop, Implement, and Evaluate—this research collects primary data through interviews and observations, supported by secondary company records. The system is developed into a contextualized AIS prototype that integrates socio-technical systems (STS) principles to ensure real-time revenue tracking, transparent payroll calculations, and improved coordination among the startup, its technology provider, and content creators. The results show that combining STS with ADDIE produces a flexible and human-centered AIS that supports performance-based compensation and collaborative digital workflows. This study offers originality by addressing the limited AIS design research for sharing economy-based digital startups in emerging economies, particularly in online media contexts. The findings provide practical implications for startups seeking adaptive, transparent, and resource-efficient financial systems aligned with decentralized business models.

Introduction

Digital transformation has reshaped how organizations manage financial and operational activities, positioning accounting as a strategic, technology-enabled function rather than a purely administrative one (Kelton & Murthy, 2023). For startups that operate in highly dynamic environments, accounting information systems (AIS) have become essential tools to support decision-making, enhance efficiency, and ensure transparency. These needs are even more prominent in platform-based digital businesses, where workflows are decentralized, collaboration is real-time, and performance is heavily data-driven.

In the digital economy, business processes are increasingly fluid and dynamic, influenced by rapid technological changes, data-driven decision-making, and evolving customer expectations. Multiple studies provide strong evidence for this transformation. Oleksandr Holovko et al., (2025) highlight that digitalization requires enterprises to revise traditional approaches and adopt innovative solutions, resulting in business processes that are far more adaptable. Similarly, Rudolf and Roszak (2025) found that integrating information technologies with managerial methods enhances operational flexibility, shortens lead times, and enables faster market responses. Wuttke et al., (2024) further note that digital ventures now intentionally design processes for easy adaptability, supported by increasingly flexible technological infrastructures. The successful organizations are leveraging digital platforms, data-driven decision-making, and customer-centric strategies to remain competitive in this rapidly evolving landscape.

Startups and small enterprises consistently operate in highly uncertain environments with significant resource constraints that demand adaptive scaling strategies. Multiple studies provide robust evidence for this claim. Rancic Moogk (2012) emphasize the conditions of extreme uncertainty that characterize technology commercialization, while Felzensztein and Bagheri (2024) found that startups must strengthen internal scaling capacity and develop external strategies to overcome systemic resource limitations. Taghvaei and Marjovi (2022) further revealed that startup leaders navigate uncertainty through two primary scaling paths, either avoiding high environmental turbulence or actively reshaping market structures. Complementing these insights, Karami et al., (2024) demonstrated that small firms increasingly adopt digital technologies to mobilize resources and create new opportunities amid uncertainty. Collectively, these studies, spanning technological, regional, and entrepreneurial contexts, consistently validate the challenging and resource-constrained landscapes in which startups must operate. Business process reengineering has therefore become essential for improving organizational responsiveness and operational efficiency, especially as financial, operational, and human resource activities become more tightly integrated in digital platforms.

Digital startups in Indonesia face significant accounting challenges characterized by unpredictable revenue streams, limited resources, and complex technological environments. Setyadi (2019) note that accounting in startups is inherently difficult because traditional valuation methods become ineffective, particularly when firms rely more on market potential than tangible assets. These difficulties are compounded by internal limitations, Darmawan and Putra (2025) highlight that many startups continue to use manual accounting methods, operate with tight financial constraints, and lack adequate accounting expertise within their teams. At a broader level, Judijanto (2024) observe that although digital startups are driving Indonesia's technological transformation, they simultaneously struggle with regulatory pressures, skill gaps, and restricted access to funding. In line with these findings, Bartolomeus Pradana, Ambarriani and Sunarni (2025) emphasize that integrating digital technologies and adapting accounting practices are vital when dealing with such complex operational environments.

One model that illustrates these complexities is the sharing economy, where value creation relies on distributed resources, digital infrastructure, and collaborative participation (Botsman & Rogers, 2010). Although the sharing economy has been widely discussed in innovation and business model literature, AIS studies tailored for sharing-based digital startups, particularly those in the media and content creation industries, remain scarce.

One company that illustrates these dynamics is PT. Kreasi Ngalam Media, the operator of AboutMalang.com, which collaborates with PT. Promedia Teknologi Indonesia for both technological infrastructure and advertising revenue generation. This partnership reflects a sharing of digital resources and creative capabilities; Promedia handles platform development, while AboutMalang.com focuses on editorial content production and distribution. Within this structure, the company adopts a performance-based compensation model, paying writers based on article page views rather than fixed wages. Such a model requires reliable, real-time tracking of engagement metrics and a transparent mechanism for converting them into payroll outcomes. However, the current workflow is constrained by non-integrated revenue reports, scattered documentation, and lengthy verification cycles, creating inefficiencies and increasing vulnerability to error. These challenges highlight the limitations of conventional AIS or generic ERP systems, which may not align with the agility and resource constraints typical of early-stage digital startups.

To offer a more holistic solution, this study applies the socio-technical systems (STS) perspective, which emphasizes that successful information systems must balance technical efficiency with human, social, and organizational considerations. Fox (1995) describe STS as an approach aimed at effectively blending the technical and social systems of an organization, noting that arrangements optimal for technical subsystems may not necessarily support the needs of human actors. Whitworth (2009) further argue that socio-technical design should close the gap between social requirements and technical performance, ensuring that systems function meaningfully for their users. Reinforcing this view, Sarker et al., (2019) highlight STS as a central “axis of cohesion” within the information systems discipline, underscoring its importance in understanding interactions between technology and human behavior. Building on this foundation, the ADDIE model is used as the development framework due to its iterative, user-centered characteristics, making it suitable for startups that require design flexibility and rapid adaptation. Through this integration, the study seeks to produce a contextualized AIS prototype that supports payroll, revenue management, and expenditure processes while maintaining transparency and alignment with the company’s sharing economy business model.

The literature consistently affirms the significance of Accounting Information Systems (AIS) in enhancing organizational performance, while simultaneously underscoring the initial assertion regarding the scarcity of research on AIS in sharing-economy digital startups. Ying Chen et al. (2022) partially addresses this context by showing how AI can strengthen platform trust and asset matching in sharing-economy environments, but the study does not focus on AIS design. Similarly, Isito (2025) emphasize AIS as a critical tool for supporting decision-making and strategic planning, further illustrating its centrality to organizational effectiveness. Other studies, such as those by Sow (2021) also highlight AIS’s role in enhancing internal controls and improving overall operational performance. However, despite these contributions, none of these works directly explore AIS designs tailored specifically for sharing-economy digital startups. This gap underscores the need for more targeted research aimed at addressing the distinctive financial, technological, and collaborative characteristics of startups operating within this emerging business model.

The provided sources partially validate the research statement, revealing significant gaps in existing Accounting Information Systems (AIS) literature regarding digital labor platforms and socio-technical design. Dedema and Rosenbaum (2024) offer the strongest support by identifying three core socio-technical themes shaping platform-mediated work, digital workplaces, algorithmic management, and ethical design, highlighting the complexity of

systems that blend technological infrastructures with human labor dynamics. Chowdhury et al., (2022) further reinforce this perspective by examining AI–human collaboration in creative industries, emphasizing the importance of knowledge sharing and collaborative digital work environments. Although these studies do not directly address AIS design, they collectively demonstrate a growing scholarly interest in understanding socio-technical conditions within digital and creative sectors. The literature therefore suggests an emerging recognition of the need for more nuanced approaches to analyzing platform-based work systems, particularly those shaped by flexible compensation structures and collaborative digital labor models.

Furthermore, studies integrating socio-technical systems (STS) principles with systematic development frameworks such as ADDIE remain scarce, particularly in the context of emerging economies and creative digital sectors. Existing work only provides partial indications of this emerging stream. Abuhassna et al., (2024) explored technology integration using the ADDIE model, demonstrating its adaptability for structured yet flexible system development. Complementing this, Ciriello et al., (2024) examined creativity in information systems development from an STS perspective, reflecting growing scholarly attention to socio-technical design in creative digital environments. In the context of emerging economies, Becker (2019) highlighted the relevance of STS considerations in the digital transformation of micro and small enterprises. Collectively, these studies suggest a nascent but expanding interest in integrated socio-technical approaches. Building on this trajectory, the present study addresses a notable gap by developing a socio-technical AIS tailored to the operational realities of a digital media startup, contributing to both theory and practice at the intersection of AIS, sharing economy models, and socio-technical design.

Therefore, this study aims to design and develop a contextualized accounting information system (AIS) that aligns with the socio-technical characteristics of a sharing economy–based digital media startup. By integrating the STS perspective with the ADDIE development model, the research offers a structured yet flexible approach to creating an AIS that enhances payroll transparency, improves revenue documentation, and supports operational efficiency. Theoretically, this study contributes to AIS literature by addressing an underrepresented context—digital startups operating under collaborative, performance-based business models. Practically, it provides a replicable system framework for early-stage companies facing similar financial and operational constraints. To guide the discussion, the next sections present the methodological approach, system design and development process, evaluation results, and the concluding implications for research and practice.

Research Method

The research method refers to the Research and Development approach using the ADDIE model, which consists of five stages: Analyze, Design, Develop, Implement, and Evaluate. This model is considered to be more rational and comprehensive than other product development models. The ADDIE model was developed by Dick and Carey (1996). The stages of research according to the ADDIE model are described by Branch (2009).

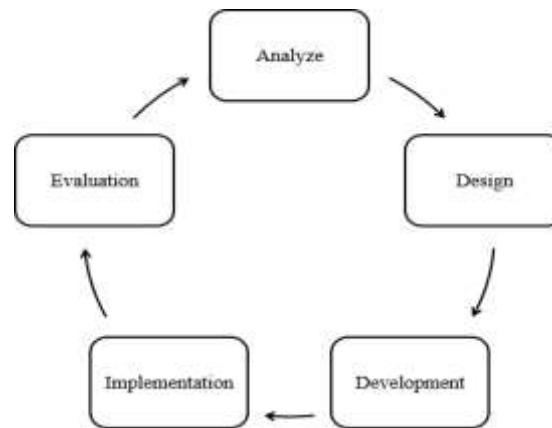


Figure 1. Flowchart of the ADDIE Model Stages

1. Analyze

In the analyze phase, several tasks were performed, including needs analysis at PT. Kreasi Ngalam Media, theoretical analysis, and industry analysis of online media companies. The needs analysis was conducted through in-depth interviews with the management of PT. Kreasi Ngalam Media to understand the challenges and specific needs of the expected system.

2. Design

Design is the phase where the accounting information system to be developed is planned. This phase involves mapping and creating an information design framework to find solutions to existing problems. Based on this, the system design is then created using Business Process Management System (BPMS) modeling to create a more structured and efficient business process.

3. Development

In the development phase, the conceptual framework is transformed into a product that is ready for implementation. The comprehensive design of the accounting information system to be created is developed into a prototype that includes the main functionality designed.

4. Implementation

Implementation is the final phase of designing a model/system/application. This phase includes the input of all data and information into the intended application prototype. This process also includes the development of a website to support the operation of the system, as well as the training of users to ensure that they can operate the system properly. Implementation was done in phases to minimize disruption to the company's operations.

5. Evaluation

This phase involves an evaluation or review of all system features created. The evaluation phase involves a review of all system functions that have been created. The evaluation involves several subjects as users of the developed system to get feedback. This review is used to assess the effectiveness and efficiency of the system and to provide a basis for further improvement and refinement. The prototype is then ready to be tested by users to get feedback that will be used as a basis for improving the system. Feedback is collected through interviews with prototype users to assess the extent to which the implementation of the developed application system meets the desired objectives.

This study uses the ADDIE model (Analysis, Design, Development, Implementation, Evaluation) along with the Socio-Technical Systems (STS) framework to guide the system development process. Thus, the resulting system design not only meets technical needs but

also considers the social dynamics in the digital startup work environment, including user needs, collaboration patterns, and informal organizational structures. This approach is expected to produce an accounting information system that meets the needs of PT. Kreasi Ngalam Media, as well as provide practical and theoretical contributions in technology-based financial management.

Result and Discussion

This section presents the findings and analysis resulting from the study conducted on the accounting information system implemented at PT. Kreasi Ngalam Media. The discussion aims to describe the current processes, identify challenges, and propose improvements aligned with the sharing economy-based accounting system framework.

1. Analyze

The analysis stage is carried out to map and understand the existing business processes, particularly those related to payroll and revenue reporting, as a foundation for system redesign.

Business Process Analysis of Payroll

The first analysis focuses on the accounting process at PT. Kreasi Ngalam Media. The process begins with the receipt of advertising revenue reports from PT. Promedia Teknologi Indonesia, which includes revenue from programmatic and direct advertising. PT. Promedia Teknologi Indonesia provides two types of reports, the estimated revenue report, which is received at the beginning of the following month (for example, the April advertising revenue report is received in early May), and the realized revenue report, which is received within approximately 60 business days. After receiving these reports, the Director calculates the income for each content creator and editor who receives a fixed salary. The Director then transfers the income to their respective accounts. The income statement is sent via the Telegram app and includes income data, number of page views, and proof of transfer.

The sharing economy business model requires a high level of transparency, especially since the payroll system is performance-based. Content creators receive 60% of the revenue, while PT. Kreasi Ngalam Media receives 40%. This transparency is important to maintain trust between business partners. However, the manual system used in this process has several drawbacks, such as the risk of human error and long processing time, especially since it takes 60 business days to report and remit revenue from partners. Manual systems across various industries consistently demonstrate significant drawbacks, particularly in terms of heightened human error risks and extended processing times. This pattern is well documented in the literature. Mamidi (2023) found that manual handling of patient data is significantly hectic and time-consuming, increasing the likelihood of errors, it can be noted that manual inspection processes tend to be slow, time-consuming and prone to human error. In response to these challenges, researchers increasingly recommend digital automation. Adrita et al., (2021) showed that digitization can substantially reduce human error and streamline workflows, with one case reducing manufacturing cycle time by 3.76%. Likewise, Pluzhnyk, Berezanska and Kotsur (2024) demonstrated that information systems improve document processing efficiency, lower operational costs, and accelerate processing speed. These indicate that the limitations of manual systems are not industry-specific but represent a widespread organizational

In practice, these issues were also evident in the payroll process of the company. Each content creator's page views and revenue data had to be entered manually, followed by

attaching screenshots of the data and individual remittance proofs. This manual approach was highly inefficient and made it difficult to maintain data accuracy, particularly as the number of contributors increased. The literature reflects similar challenges. Islami et al., (2023) found that manual payroll systems often lead to recurring errors in absenteeism and salary calculations, it also can create operational problems that ultimately reduce employee performance. These findings reinforce the need for digital transformation in payroll systems to enhance both efficiency and accuracy. With these issues identified, the next section analyzes the company's business process for revenue reporting.

Business Process Analysis of Company Revenue Reporting

The second analysis focuses on the company's revenue reporting business process, which involves a series of activities in reporting revenue from programmatic and direct advertising. PT. Kreasi Ngalam Media's revenue reporting process is significantly different from a typical service company. PT. Kreasi Ngalam Media receives programmatic and direct advertising revenue reports from PT. Promedia Teknologi Indonesia, a partner that acts as both a technology provider and a marketing agency. PT. Promedia Teknologi Indonesia offers clients the opportunity to place ads on its partner platforms, including AboutMalang.com.

The revenue generated is manually recorded by the company. For programmatic and direct ads originating from PT. Promedia Teknologi Indonesia, the revenue report will be provided by the partner. However, for direct ads sourced directly from PT. Kreasi Ngalam Media, the company is required to provide a profit share of 70% for PT. Kreasi Ngalam Media and 30% for PT. Promedia Teknologi Indonesia in exchange for providing the technology.

Multiple studies confirm that current manual revenue reporting systems have significant weaknesses that compromise financial data integrity and operational efficiency. Ikaputri and Fatima (2023) found that manual revenue processes frequently lack standardized recording procedures and structured control activities, creating inconsistencies in financial documentation. Similarly, Meiryani, Hidayat and Sitanggang (2022) noted that many companies still rely on manual systems, preventing optimal fulfillment of business process requirements. Kinasih, Kusmintarti and Ekasari (2024) further highlighted the risks associated with manual reporting, including difficulties in tracking revenue, inefficient data management, and increased vulnerability to human error during transaction recording. Supporting these findings, Maiwan (2023) emphasized additional issues such as process inefficiencies, work errors, delays in information flow, and heightened risks of data loss. Across these studies, the recommended solution is the adoption of integrated, web-based, or enterprise information systems that enable real-time reporting, reduce human error, and enhance data security and accessibility.

These limitations are also evident in the company's existing revenue reporting process. One of the major drawbacks of the manual system is restricted access to financial data, which complicates monitoring and timely decision-making. Maintaining the confidentiality of financial information is crucial because such data plays a vital role in business operations, yet manual documentation exposes the company to risks of unauthorized access, loss, or corruption. In addition, the company requires continuous monitoring and updating of revenue performance, which becomes increasingly difficult when relying on traditional, paper-based, or screenshot-based records. Thus, manual records not only reduce efficiency but also compromise the reliability and security of the company's financial information.

Business Analysis of Financial Expenditure Reporting Process

The next analysis focuses on the company's expense reporting business process. Cash expenditure is a common transaction in company operations. PT. Kreasi Ngalam Media allocates funds for various purposes, such as maintenance costs, employee salaries/wages, and other expenses. However, the current expense reporting system still has a number of weaknesses.

The expense reporting process is not integrated with other business processes, which can lead to human error. In addition, transaction records, such as memos and receipts, that are not digitally documented are at risk of being lost or damaged. This makes it difficult for companies to maintain the accuracy and integrity of financial data. In the context of the sharing economy, transparency and consistency are important elements that can build trust. This trust is based on a company's reputation, expertise, and responsiveness (Pelgander et al., 2022). Therefore, a more secure and integrated system is needed to ensure better expense data management.

2. System Design

Based on the results of the business process analysis, this section outlines the design of an improved accounting information system that supports the sharing economy model adopted by PT. Kreasi Ngalam Media. The system design aims to address the identified inefficiencies and enhance transparency, accuracy, and accessibility in financial processes.

Payroll System Design

Multiple studies confirm that payroll business models that integrate accounting information systems (AIS) can substantially enhance the efficiency and effectiveness of accounting processes. Putri, Riwayat and Eltivia (2024) demonstrated a significant reduction in payroll processing time, from 337 minutes to just 41 minutes, following AIS implementation. Similarly, Zaman and Pratama (2023) noted that AIS is designed to collect, process, and present accounting information in ways that support faster and more accurate decision-making. The point is further reinforced by Frantika, Ekasari and Afandi (2023) who showed that web-based AIS improves data management and reporting quality. Complementing these findings, Begum (2024) emphasized that successful AIS adoption requires strong integration between technological tools, managerial oversight, and organizational structure. Collectively, these studies highlight AIS as a powerful mechanism for streamlining payroll workflows, minimizing manual errors, and improving operational efficiency.

The parties involved in this system are PT. Promedia Teknologi Indonesia, the administrator and director of PT. Kreasi Ngalam Media, and the company's content creators. In addition to the administrators and directors who have system accounts, content creators also receive individual accounts that allow them to view their page views, estimated income, and the IDR/PV value used in revenue calculations. With this system, the company no longer sends monthly pay slips via Telegram; instead, content creators can directly access their pay slips through their respective accounts. This design aims to enhance transparency and provide content creators with more direct control over their income information.

However, none of the provided sources directly confirm the specific mechanisms described, such as mandatory account creation or monthly earnings monitoring. While existing literature discusses broader concepts of transparency in digital content platforms, it does not substantiate these operational details. Ma and Kou (2023) come closest by showing

that creators expect transparent moderation systems that can “explain decisions profoundly” and “afford communication effectively.” Prior studies also emphasize the importance of providing creators with clear information about decisions that affect them. These works demonstrate a general scholarly recognition of creators’ need for transparency, yet they do not validate the specific processes of account registration and real-time earnings tracking described in this system. Therefore, more targeted research is needed to fully support these particular design features.

The accounting workflow begins when the administrator receives the revenue realization report from PT. Promedia Teknologi Indonesia. The administrator then inputs the revenue and page-view data into the system, which automatically calculates each content creator’s earnings. The director subsequently reviews the calculated data; if the information is accurate, the director proceeds to transfer the payments to the creators. If discrepancies are identified, the administrator revises the data accordingly. Once the transfer is completed, the director uploads the proof of payment to the system, after which the administrator verifies it. The system then automatically generates the pay slip and makes it accessible to each content creator through their account, completing the payroll process.

In this context, PT. Kreasi Ngalam Media, PT. Promedia Teknologi Indonesia, and the content creators collectively form a sharing-economy model by utilizing an accounting information system that integrates four key resources: online platform technology, digital reputation mechanisms, coordination among the three parties, and transaction database management. The proposed accounting business process can significantly enhance operational efficiency by streamlining and optimizing the development and implementation of the accounting system. The idea is consistent with findings by Feriyanto et al., (2024), who demonstrated that applying a structured System Development Lifecycle (SDLC) enables companies to manage accounting data more effectively, increase accuracy, reduce errors, and accelerate accounting procedures. Sapinah et al., (2024) further support this view, reporting that accounting digitalization improves operational efficiency through process automation and the reduction of human error. Based on these insights, an accounting information system can be expected to strengthen the company’s financial information management by improving data accuracy, reducing operational costs, and accelerating decision-making processes. Although the existing literature does not quantify specific time reductions in revenue reporting, the overall evidence indicates that systematic redesign and digital integration of accounting processes consistently lead to substantial operational improvements. Figure 2 presents the proposed design of the system developed in this study.

Revenue System Design

The proposed revenue reporting system will allow revenue summary reports to be submitted periodically to the company director for final approval and archived in the accounting information system. This innovative business process approach will significantly improve the effectiveness and efficiency of PT. Kreasi Ngalam Media's business processes. One of the main benefits of this system is the time savings in reporting procedures. This time optimization in the financial reporting process has a positive impact on subsequent business processes.

Effective time management plays a crucial role in enhancing employee productivity and overall organizational performance. Well-structured time management practices, such as setting clear schedules, prioritizing essential tasks, and minimizing time-wasting activities, help employees work more efficiently and stay focused on their core responsibilities. Obodo

(2018) emphasize that planning activities, prioritizing tasks, and adhering to schedules significantly increase productivity. It ultimately improves the overall quality of corporate performance. Within the sharing economy model, these productivity gains relate to the efficient use of both physical and human resources. Productivity not only reflects enhanced knowledge and skills but also the more comprehensive and effective utilization of company resources in primary activities that rely on shared platforms, as well as in supporting processes. Such improvements strengthen the organization’s capacity for innovation and entrepreneurship in today’s rapidly evolving technological landscape.

In addition, the new business process model provides more systematic control over the revenue reporting workflow. Management has direct access to the accounting information system, allowing real-time monitoring of financial data transmission and ensuring greater accountability throughout the reporting process.

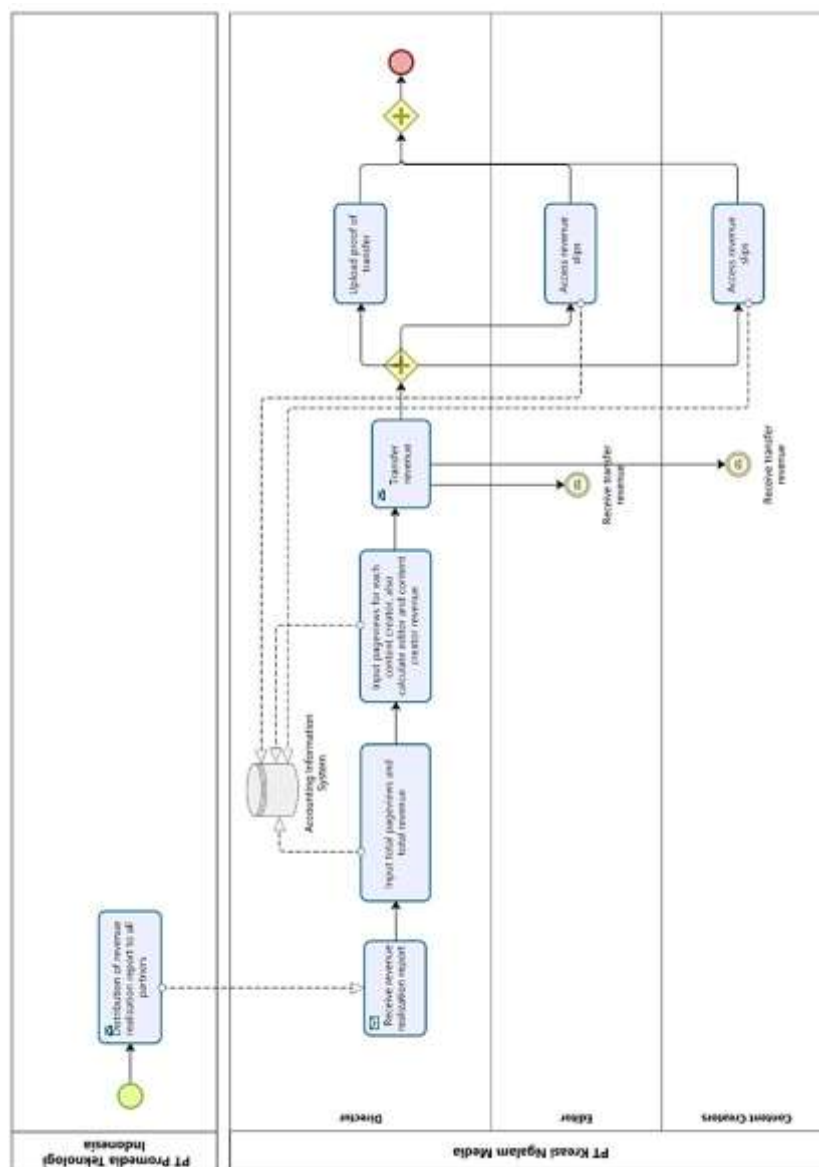


Figure 2. Proposed Improvement of Payroll Business Process (To Be Model)

The next benefit is the consolidation of the company's database into a single system. Using the database in the financial system in this new business model improves the quality of

the company's financial data and information management. This eliminates errors in the storage and retrieval of financial data that may have occurred in manual processes in the past. The final and most significant benefit of this new business model is the improvement of the quality of the company's management decisions. The system helps companies to better determine future economic policies and decisions based on integrated and reliable financial data. Figure 3 depicts the proposed design.

Expenditure System Design

The proposed expense business model uses an accounting information system to document the company's expenses. The system is designed to help improve the overall business process. Expense summary reports can be submitted periodically to the company director for final approval before being archived in the accounting information system. In this model, the director has the authority to monitor the company's financial development in real time through the accounting information system.

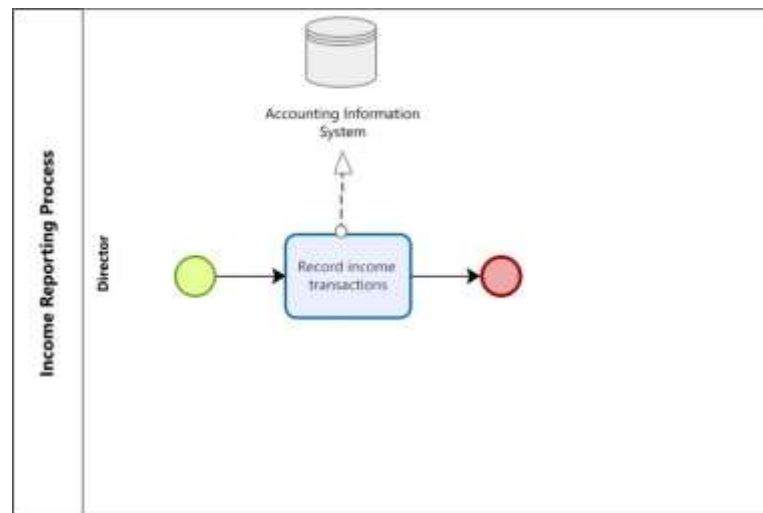


Figure 3. Proposed Improvement of Income Reporting Business Process (To Be Model)

This new business process model significantly improves the efficiency and effectiveness of PT. Kreasi Ngalam Media's business processes. One of the main benefits is the time saved in the reporting process. In addition, the creation of digital proofs of transactions helps prevent the loss or damage of proofs of transactions. By implementing this new business model through the Accounting Information System, the entire company database will be managed in one integrated system.

The proposed Accounting Information System includes a periodic archiving function. Any data entered and processed is automatically stored in the system, making it easier to trace and verify data if needed. The efficiency and effectiveness of this system is expected to increase, benefiting the company and the parties involved in the sharing economy model, including PT. Kreasi Ngalam Media, PT. Promedia Teknologi Indonesia and the content creators.

In this model, PT. Kreasi Ngalam Media can continue to exist by sharing materials created by content creators using the technology provided by PT. Promedia Teknologi Indonesia. This integrated digitization process not only improves the quality of data management, but also strengthens trust and cooperation among parties in the sharing ecosystem. The design proposal for the expenditure system is presented in Figure 4.

User Interface (UI) and User Experience (UX) Design

UI and UX are used to ensure that the Accounting Information System (AIS) design generated not only aligns with the previously specified ideal functions but can also be used optimally based on the company’s needs. This aligns with Tyoso et al., (2022) who found that users play a crucial role in system strategy, conceptual design, and system selection to ensure that the AIS operates effectively. A relevant and functional Accounting Information System will only materialize when there is a clear alignment of understanding between system designers and the users who operate it. Harmonizing both perspectives ensures that the system being developed truly reflects operational realities, minimizes mismatches between design and practice, and supports more effective decision-making. Ilham, Wijayanto and Rahayu (2021) reinforce this view by noting that poor UI/UX design may lead to input errors, incomplete information, and operational difficulties. Collectively, these studies demonstrate that user-centered UI/UX design is fundamental to developing an AIS that performs optimally and supports organizational decision-making.

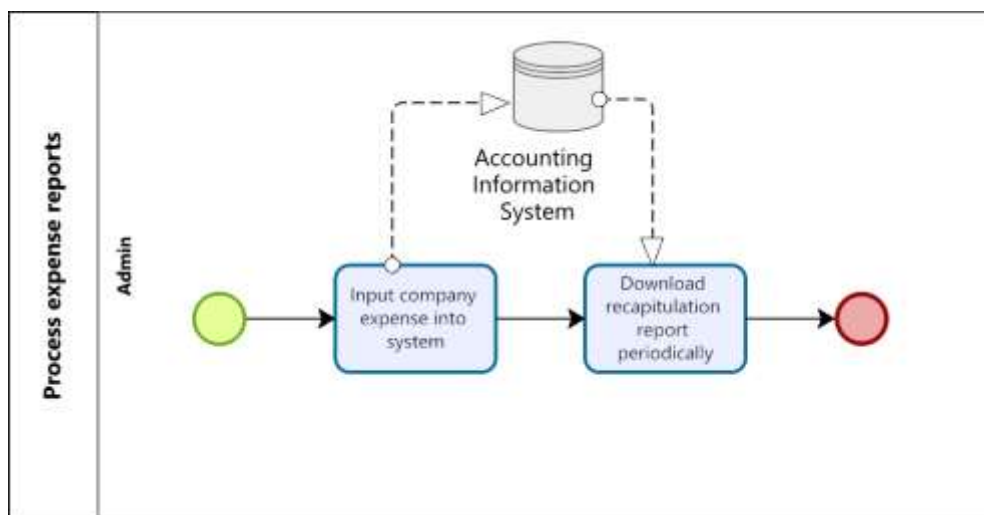


Figure 4. Proposed Improvements to the Expenditure Reporting Business Process

3. System Development

At the development phase of the accounting information system for payroll, income and expenses, all the results of the model design - including the design of the user interface (UI) and user experience (UX) - are used as a basis for the design of the information system. This research developed a web-based enterprise information system. The results of the analysis will help solve the company's business process problems. This research created a web-based accounting information system as follows:

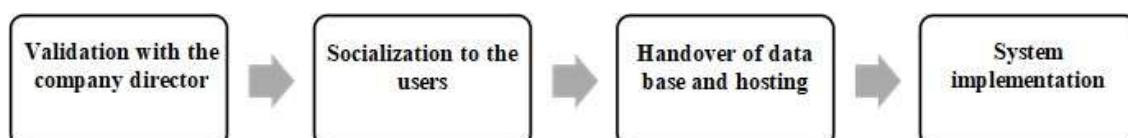


Figure 5. Website-Based Information System Development Process

At the system design stage, the design is implemented in the form of a web-based system. The form and visual appearance of web-based accounting information system users is determined by UI and UX design. The Accounting Information System in this study was

created using a shared hosting environment. As the name implies, shared hosting allows for shared use by multiple users.

4. System Implementation

Once the system is ready to use, the next step is to implement it. At this stage, the system will be fully integrated into the company's business processes. The goal of this stage is to guarantee that users are ready to implement new business activities and processes using the Accounting Information System. The director and content creator carry out the implementation process. The implementation of this information system follows the stages described in the figure below:

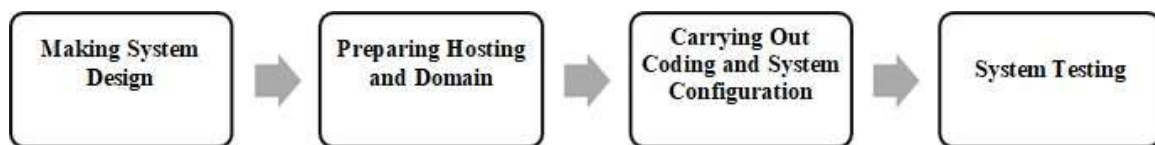


Figure 6. Implementation Stage

5. Evaluation of the Accounting Information Systems Implementation

The evaluation stage is the end of this research. After the information system is implemented at PT. Kreasi Ngalam Media, the evaluation is conducted through interviews with employees who are users of the system. The results of the interviews were compiled and analysed to draw conclusions according to the research objectives. Some important points from the evaluation results are

Standardization

The results of the director's interview show that the new system creates a more standardized business process standard. This standardization is important to ensure that each process has measurable quality from input, through processing, to output. With this new standard, business processes can be run by anyone without relying on specific individuals and still produce consistent results. The new system provides direction as data is entered to meet required information needs. Report generation, such as petty cash data, revenue financial reports, and petty cash reports, is done automatically in the system, resulting in standardized reports. "What is clear is that it is standardized and encourages us to improve the SOPs that the company already has. Because the output is consistent," said the director.

Error prevention

The implementation of the information system has minimized the risk of errors in data entry and documentation. Previously, the data entry process was done manually with a communication model between individuals that was prone to errors. In the new system, all information is entered directly into a financial system that can be monitored by management. In terms of documentation, data was previously archived using desktop folders and manual methods that were prone to loss or damage. The new system relies on a cloud-based digital database, which improves data security and accessibility.

Automation and Mechanization

The implementation of the web-based information system has automated many of the company's business processes. Payroll, revenue, and expense processes are now handled by

the system so that reports are updated in real time without manual intervention. Web-based technology with Internet access also allows for easier and more efficient integration of business processes.

According to the director, "It used to take a long time to manage, starting with employees coming and going, recording revenue that was susceptible to loss, and creating revenue slips. Now it is very easy and more thorough with the system". Meanwhile, a content creator said, "It's also better because it's not complicated. It's easy to use, so you just check it right after the receipt comes out. No need to wait for the admin.

The design of the Accounting Information System that was produced has benefits for society. This has to do with the two elements of the sharing economy model: easily integrated and managed income flows and engagement media (Dewi & Sundiman, 2022). This income flow element is a value record that displays several revenue sources that can be utilized to record the economic value created by offering products, services, and information (Curtis & Mont, 2020). The system design results show that the integration between technical components such as platform-based transaction recording features and social components such as active and participatory user engagement represents an applicable STS approach. The designed system is not only automatic and efficient but also strengthens the collaborative and adaptive values that are the main characteristics of the sharing economy in the local startup environment.

Conclusion

This study underscores the urgent need to strengthen business process quality within digital startups operating in the online media and sharing economy environment. The problem analysis revealed four essential components, technology, techniques, materials, and human resources, which collectively shape the foundation of efficient, transparent, and reliable operations. In response, this study introduced the integration of a sharing economy business model into the design of a new Accounting Information System (AIS) tailored to the dynamic and decentralized characteristics of such startups.

The proposed AIS was developed to support performance-based payroll, income management, and expenditure tracking, incorporating UI/UX design, paper prototyping, website deployment, and iterative testing. Implementation proceeded through several strategic stages, including system validation with the company director, user orientation, database configuration, hosting, and full operational rollout.

The findings indicate that adopting an AIS guided by socio-technical systems principles and sharing economy logic enhances transparency, fosters trust, and supports sustainable operational performance for platform-based startups. This integration not only strengthens the accuracy and fairness of compensation mechanisms but also aligns financial processes with collaborative and distributed business models.

This research contributes to the literature on accounting information systems, socio-technical systems (STS), and sharing economy studies, an intersection that remains underexplored, particularly within Southeast Asian startup contexts. It expands existing discourse by demonstrating how STS can inform AIS designs that balance technological complexity with human-centred values.

Practical Implications

For practitioners, especially startup founders and system developers, the study offers a structured roadmap for designing adaptive AIS solutions that reflect organisational

demands, sociocultural dynamics, and platform-based business models. The implementation model may serve as a reference for similar digital startups seeking to strengthen performance accountability and stakeholder engagement.

Future Research Directions

The study is limited to a single case in the Indonesian digital media sector. Future research could examine cross-industry comparisons, evaluate adoption across other emerging economies, or explore the integration of strategic management accounting tools within performance-based and decentralised business models. Longitudinal studies are also encouraged to assess scalability and long-term impacts of AIS implementation grounded in STS and sharing economy principles.

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