

# New Challenges in Accounting and Finance



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# The Influence of Accounting Information System Knowledge, User Satisfaction, and Internal Control on MySAP Implementation

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#### **ABSTRACT**

This research examines the influence of accounting information system knowledge, user satisfaction, and internal control on MySAP implementation on PT PH-El. The study utilized a survey approach, employing a questionnaire as the primary tool for collecting data. The research focused on employees who are directly engaged in the utilization of accounting information systems on PT PH-El. The researchers employed purposive sampling in selecting 100 respondents for the data analysis. The findings of the research demonstrate that accounting information system knowledge and user satisfaction positively and significantly impact the implementation of MySAP. However, the study indicates that internal control does not have a significant influence on MySAP implementation. In this context, companies can consider providing training and education related to accounting information systems and enhancing user satisfaction as efforts to improve MySAP implementation.

**Keywords**: Accounting Information System, User, Control and Enterprise Resources Planning

#### Introduction

During the pandemic, more people consider technology their primary necessity. Like a personal assistant, technology can easily assist us in completing various tasks. The wider community has

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embraced the rapid advancement of technology. Slowly, technology is being updated, giving rise to the term "information technology." Information technology focuses on simplifying information but making it accessible to all segments of society. Eventually, information technology can drive changes in business processes from conventional models to the business models of the Industry 4.0 era.

Accuracy, speed, and reliability of information are needed by company management, requiring a system that can integrate various parts. Therefore, Enterprise Resource Planning (ERP) systems are introduced as an alternative for implementing systems that can assist management, especially in complex organizations. In company management, systems aim to help make decisions. This becomes a demand in businesses to become more competitive and adapt to the digital era's developments, such as ERP systems.

ERP is a program in the form of electronic tools that can assist companies in managing finances. The benefits of ERP systems include improving company performance, increasing business growth, reducing working capital, improving customer service, and simplifying business processes.

Many companies have adopted ERP systems. When looking at manufacturing companies listed on the Stock Exchange in 2013, there were approximately 40 well-known companies that specifically used the MySAP system, including Surya Toto Indonesia Tbk, Holcim Indonesia Tbk, Krakatau Steel Tbk, Unilever Indofood Sukses Makmur Tbk, Indonesia Tbk, Astra International Tbk, and Mayora Indah Tbk.

Implementing a new system receives significant support from human resources (HR), who have been educated and trained, as well as the availability of company resources. One of the basic requirements for HR is the availability of users with knowledge of system technology, business processes, and accounting. Accounting Information Systems (AIS) are a way to implement information technology; we can start by learning the basics of information technology and AIS. AIS knowledge, whether learned academically or non-academically, needs to be mastered by users of the system, especially those in the working world.

System users are the most crucial factor in the success of a system. User satisfaction plays a vital role in the operation of this ERP system because if users are uncomfortable using it, their work will become burdensome, leading to laziness and ineffectiveness. Examples of user satisfaction in this case include infrequent or no errors, fast operation (no slowness), easy access, tight security, user-friendly ERP interface, and good integration between different divisions.

In addition to examining the influence of user satisfaction on the use of the chosen ERP system by the company, a company can also consider internal control factors in its implementation of the ERP system. This is related to internal control rules applied in the company, especially computer-based internal control.

Internal control factors include information about the division of work for each user, quick, accurate, and precise handling of ERP system problems, easy access to the ERP system, and the presence of an administrator to assist with system issues.

PT PH-El is the company chosen for this case study. This company operates in the oil and gas sector and implements the MySAP ERP system. PT PH-El has been using the ERP system since

2009, initially with SAP R3, which was later replaced by MySAP. The company expects this system to achieve efficiency and effectiveness in business processes, save the company's capital, and improve service quality to all employees. MySAP modules used in this company are quite numerous, including FICO, MM, Project System, Plant Maintenance, Human Capital, Sales, and Procurement.

Considering the background explained earlier, the author decided to use the title "The Influence of Accounting Information System Knowledge, User Satisfaction, and Internal Control on MySAP Implementation (A Study on Shared Service Finance PT PH-El)."

#### Definition and purpose of accounting information systems

Romney and Steinbart (2017, p. 3) define a system as a set of interrelated elements working together toward a common goal. A system typically begins with input as the starting point, followed by processing in its own way, and finally results in a complete part that has gone through the system's process. It is mentioned that information refers to data that has been processed and managed to provide specific meaning and facilitate decision-making processes. Data refers to the information collected, recorded, stored, and processed by a system. On the other hand, information refers to the value contained within the data, which involves the usefulness of that information in a specific context, along with the cost required to produce it.

He also explained that accounting is the process of collecting and storing data, refining, measuring, and communicating information. Therefore, accounting is part of information systems, especially AIS. Accounting information systems (AIS) consist of collecting, recording, processing, and storing financial and accounting data to ensure the integrity of the data and serve the information needs of the decision-maker. AIS is part of the overall management information system (MIS) that covers all aspects of the organization's management.

#### Internal control in accounting information systems

Internal control is a crucial aspect of accounting information systems. It refers to the policies, procedures, and practices an organization implements to ensure the reliability of financial reporting, safeguard assets, and comply with laws and regulations. Internal control measures aim to prevent fraud, errors, and misstatements in financial data. The Committee of Sponsoring Organizations (COSO) framework defines internal control as a process designed to provide reasonable assurance regarding the achievement of objectives in the following categories such as an effectiveness and efficiency of operations, reliability of financial reporting, compliance with laws and regulations, and internal control consists of five interrelated components.

## User satisfaction in information systems

User satisfaction is a critical factor in successfully implementing and using information systems. It refers to the level of contentment and fulfillment experienced by users when interacting with a system or technology. In the context of ERP systems like MySAP, user satisfaction plays a vital role in system adoption and utilization. User satisfaction is often measured through surveys,

feedback, and user experience assessments. High user satisfaction is associated with increased system adoption, productivity, and positive outcomes for the organization.

The influence of accounting information system knowledge on system implementation

User knowledge of the accounting information system, such as MySAP ERP, is crucial to successful implementation. When users understand the system's functionality, features, and how it aligns with their roles and responsibilities, they are more likely to use it effectively. Knowledge of the accounting information system can encompass various aspects, such as a) Technical Knowledge, in which users should understand the technical aspects of the system, including data entry; b) Business Process Understanding, i.e. the knowledge of how the system supports and integrates with the organization's business processes where users should comprehend how their actions within the system affect overall operations; c) Accounting and Financial Knowledge, the knowledge where users in finance and accounting roles should have a solid grasp of accounting principles and financial reporting; d) Security Awareness, in which users should be aware of security protocols and best practices to protect sensitive data within the system, and e) Training and Education, to be provided by the organizations to enhance user knowledge of the system.

#### **Theoretical Framework**

Figure 1 explains the theoretical framework to prove whether variables Accounting Information Systems, user satisfaction, and internal control separately and simultaneously have a significant effect on the implementation of MySAP,

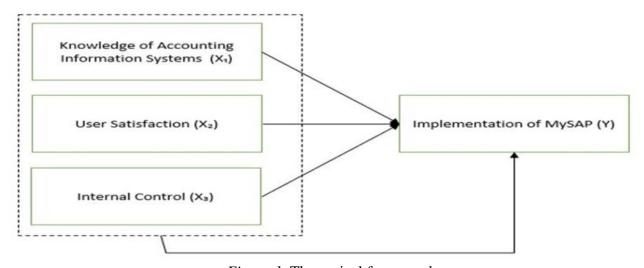


Figure 1. Theoretical framework

Referring to the theoretical framework, the hypothesis of this research are:

H0<sub>1</sub>: Accounting Information System Knowledge has no influences on Implementation of MYSAP

H<sub>02</sub>: User Satisfaction has no influences on Implementation of MYSAP

H<sub>03</sub>: Internal Control has no influences on Implementation of MYSAP

H0<sub>4</sub>: Accounting Information System Knowledge, User Satisfaction, and Internal Control have no influences on Implementation of MYSAP simultaneously.

### Methodology

This research adopts a qualitative approach by collecting data through questionnaires of a descriptive research type.

The population in the current study comprises employees in the finance department at PT PH-El, totaling 169 workers. The sample consists of employees from the Finance Subsidiaries Support (FSS), Order to Cash (OTC), and Invoice Payment (IP) functions within the finance division of PT PH-El, and 96 filled questionnaires were obtained. The author also obtained specific information directly from its sources.

Table 1
Respondent characteristics

| Position         | FSS | %   | IP | %   | OTC | %   |
|------------------|-----|-----|----|-----|-----|-----|
| Manager          | 0   | 0   | 0  | 0   | 0   | 9   |
| Asistant Manager | 0   | 0   | 0  | 0   | 1   | 2   |
| Senior Analyst   | 1   | 4   | 2  | 15  | 2   | 4   |
| Analyst          | 4   | 15  | 3  | 23  | 6   | 11  |
| Junior Analyst   | 1   | 4   | 2  | 15  | 2   | 4   |
| Partners         | 18  | 67  | 5  | 38  | 44  | 79  |
| Intern staff     | 3   | 11  | 1  | 8   | 1   | 2   |
| Total            | 27  | 100 | 13 | 100 | 56  | 100 |

For data analysis, this research employs descriptive statistics, data quality tests including data validity and reliability, and classical assumption tests, which encompass normality, multicollinearity, autocorrelation, and heteroscedasticity tests. All of these steps are taken to conduct multiple linear regression analysis. Hypothesis testing with t-statistics and F-statistics is conducted independently by the author using SPSS version 26, with the initial step of converting data from ordinal to interval to meet the requirements of parametric analysis.

#### **Results**

As shown in Table 2, the mean knowledge of AIS score was 44.145 (SD = 4.20, range: 50-32), and the mean score for user satisfaction was 41.593 (SD = 5.687, range: 50-25). The mean for internal control also was 42.895 (SD=4.263, range: 50-26).

Table 2

Descriptive statistics (N=96)

|                        | Minimum | Maximum | Mean   | Std. Deviation |
|------------------------|---------|---------|--------|----------------|
| Knowledge of AIS (X1)  | 32.00   | 50.00   | 44.145 | 4.200          |
| User Satisfaction (X2) | 25.00   | 50.00   | 41.593 | 5.687          |
| Internal Control (X3)  | 26.00   | 50.00   | 42.895 | 4.263          |
| Valid N (listwise)     | 29.00   | 50.00   | 42.447 | 6.438          |

The t-test results of the influence of Accounting Information System knowledge on MySAP implementation, through significance testing or t-test, show a significance level of 0.000 < 0.05. This signifies that the null hypothesis H0<sub>1</sub> is rejected, while the alternative hypothesis is accepted, meaning that Accounting Information System knowledge influences MySAP implementation.

Table 3.

Results of prediction of implementation of MYSAP

| Coefficients <sup>a</sup> |                                |            |                           |        |      |  |  |
|---------------------------|--------------------------------|------------|---------------------------|--------|------|--|--|
|                           | Unstandardized<br>Coefficients |            | Standardized Coefficients |        |      |  |  |
| Model                     | В                              | Std. Error | Beta                      | t      | Sig. |  |  |
| Constant                  | -18.492                        | 4.812      |                           | -3.843 | .000 |  |  |
| Knowledge of AIS (X1)     | .922                           | .114       | .602                      | 8.101  | .000 |  |  |
| User Satisfaction (X2)    | .237                           | .083       | .209                      | 2.850  | .005 |  |  |
| Internal Control (X3)     | .242                           | .100       | .160                      | 2.424  | .017 |  |  |

a. Dependent Variable: Implementation of MYSAP (Y)

The influence of user satisfaction on MySAP implementation also shows a significant result with a level of 0.005 < 0.05, which implies that the null hypothesis H0<sub>2</sub> is rejected, and the alternative hypothesis is accepted, indicating an influence of user satisfaction on MySAP implementation.

The results of the influence of internal control on MySAP implementation suggest that internal control affects MySAP implementation with a significance level of 0.017 < 0.05.

Table 4
Regression results for model prediction

| Model      | Sum of Squares | df | Mean Square | F      | Sig.              |
|------------|----------------|----|-------------|--------|-------------------|
| Regression | 2630.140       | 3  | 876.713     | 61.684 | .000 <sup>b</sup> |
| Residual   | 1307.600       | 92 | 14.213      |        |                   |
| Total      |                | 95 |             |        |                   |

The F-test results of the influence of Accounting Information System knowledge, user satisfaction, and internal control on MySAP implementation have a 0.000 significance level. This

means that the null hypothesis H04 is rejected, and Ha4 is accepted, signifying an influence of AIS knowledge, user satisfaction, and internal control on MySAP implementation.

# **Conclusions and implications**

The Enterprise Resource Planning (ERP) system used at PT PH-El, namely MySAP, is running well. This is supported by knowledge of Accounting Information Systems, user satisfaction, and internal control, which have a significant influence on the implementation of MySAP, both separately and simultaneously. The results support previous studies which explains these variables and other variables, such as accounting data systems, human energy source competence, organizational commitment influencing ERP systems (Akram et al., 2017; Firios, 2016; Hla, 2015; Indrayani and Niar, 2017; Ramadhani, 2022). The results also supports the study by Salehi (2011) which explained that to eliminate the barriers of implementation of accounting information system, management, financial managers and staff must be trained practically by experienced teachers in accounting information systems.

However, the coefficient of determination or R squared value of 0.668 or 66.8% indicates that there are other variables that can influence the implementation of MySAP. The author proposes further research and adds several features that can support the work of the users, such as the inclusion of a history or error log feature. Additionally, a task assignment feature on the MySAP homepage could be added so that users can see the tasks assigned to each individual and other users. This way, if they have questions about a specific task, they can direct them to the appropriate user.

#### References

- Akram, A., Animah, A., & Basuki, P. (2017). Pengaruh kualitas sistem informasi, kualitas informasi, kepuasan pengguna, dan kompetensi sumber daya manusia terhadap penggunaan sistem erp (enterprise resource planning) berbasis tam (technology acceptance model). *Jmm unram master of management journal*, 6(3). <a href="https://doi.org/10.29303/jmm.v6i3.235">https://doi.org/10.29303/jmm.v6i3.235</a>
- Fitrios, R. (2016). Factors that influence accounting information system implementation and accounting information quality. *International Journal of Scientific & Technology Research*, 5(4), 192-198. <a href="https://www.ijstr.org/final-print/apr2016/Factors-That-Influence-Accounting-Information-System-Implementation-And-Accounting-Information-Quality.pdf">https://www.ijstr.org/final-print/apr2016/Factors-That-Influence-Accounting-Information-System-Implementation-And-Accounting-Information-Quality.pdf</a>
- Hla, D., & Teru, S. P. (2015). Efficiency of accounting information system and performance measures. *International journal of Multidisciplinary and Current research*, *3*(2), 976-984. <a href="https://www.sap.com/about/company/whatis-sap.html">https://www.sap.com/about/company/whatis-sap.html</a> diakses pada 28 Juni 2022.
- Indrayani, I., & Niar, M. (2017). Pengaruh penerapan sistem informasi akuntansi terhadap kualitas output sistem informasi akuntansi dan sistem pengendalian internal pada perusahaan bumn pengguna sistem enterprise resource planning (erp) di kota lhokseumawe. *Journal telaah dan riset akutansi*, 10(2), 119-138. <a href="http://repository.unimal.ac.id/id/eprint/3374">http://repository.unimal.ac.id/id/eprint/3374</a>
- Romney, M. B., & Steinbart, P. J. (2017). *Accounting Information System. Pearson Education Limited.* Jakarta: Salemba Empat.
- Salehi, M. (2011). A study of the barriers of implementation of accounting information system: Case of listed companies in Tehran Stock Exchange. *Journal of Economics and Behavioral Studies*, 2(2), 76-85. <a href="https://doi.org/10.22610/jebs.v2i2.224">https://doi.org/10.22610/jebs.v2i2.224</a>

Ramadhani, D. (2022). Pengaruh Sistem Informasi Akuntansi, Sistem Pengendalian Internal, Pemanfaatan Teknologi Informasi, Kompetensi Sumber Daya Manusia dan Komitmen Organisasi Terhadap Kualitas Laporan Keuangan Pemerintah Daerah (Studi Empiris Pada OPD Kabupaten Klaten). Other thesis, UPN 'Veteran' Yogyakarta. <a href="http://eprints.upnyk.ac.id/id/eprint/29966">http://eprints.upnyk.ac.id/id/eprint/29966</a>

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#### **Conflict of Interests**

No, there are no conflicting interests.

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