

# **The Role of Work Experience and User Capabilities in Improving Accounting Information Systems Effectiveness**

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## **Abstract**

Advances in technology have brought micro, small and medium enterprises (MSMEs) to market their products and sell them through various marketplaces. It is estimated that 32% of business actors in Indonesia use digital platforms to encourage product sales during the COVID-19 pandemic. The purpose of this study was to examine the effect of work experience, user ability, and incentives on accounting information systems effectiveness. The accounting information system in question is a web-based income statement preparation application. This study analyzed the responses of 41 owners and employees of the finance department of 13 MSMEs in Cilacap Regency, Central Java Province. This study found that MSME actors in Cilacap Regency were very satisfied with the incentives received, had work experience, user skills, and very high effectiveness in accounting information systems. The test results found that work experience and user ability had a positive effect on the effectiveness of the accounting information system. In contrast, incentives did not affect the effectiveness of the accounting information system.

## **Keywords**

Accounting information systems effectiveness, Incentives, User ability, and Work experience.

## **1. Introduction**

This study aims to determine and analyze the characteristics of MSME respondents in Cilacap Regency who use a web-based income statement preparation application. This study examines the role of work experience, user capabilities, and incentives on the effectiveness of accounting information systems. Researchers developed their own web-based income statement preparation application to help trade MSMEs who had difficulty distributing merchandise inventory and calculating business profits.

MSMEs in Cilacap Regency that can use accounting information systems effectively can certainly make better decisions, but the fact is that using accounting information systems is not easy and not effective yet. Based on the results of interviews with MSMEs that have used the marketplace, it was found that these MSMEs have difficulties in the form of recording financial statements, which are still done manually and inconsistently. MSMEs also have difficulty determining the amount of stock divided into each marketplace because monthly sales are uncertain between marketplaces. The distribution of the amount of stock is carried out evenly by the owner. Still, sometimes one marketplace experiences a shortage of inventory and accumulates in other marketplaces, or even products are no longer available in the warehouse. This condition can disappoint the customer, so they cancel the order. Lack of attention to stock taking is also a serious problem for MSMEs that use the marketplace due to lack of knowledge. Determining the selling price is sometimes confusing for MSMEs. Applying an accounting information system as a web-based income statement application aims to overcome these difficulties. Complete features to help record every transaction will increase sales and store ratings on every marketplace used by MSMEs in Cilacap Regency. MSME owners can access financial report data for decision-making and view sales and purchase data. Employees who work in the warehouse or stock department can view the amount of stock to adjust the amount in the warehouse and the application. Admin employees can enter sales and purchase data, view product sales and purchase data, also input and

view account receivable data. The admin section also can find out the amount of stock in the minimum stock number owned by MSMEs.

Factors that influence the effectiveness of accounting information systems are work experience, user capability, and incentives. Work experience is the level of mastery of a person regarding the knowledge and skills he has at work (Sari et al. 2021). The more experience in using accounting information systems, the more effective employee performance is in using accounting information systems (Hardani and Ramantha 2020). Sari et al. (2021), Anjani et al. (2021), and Hardani and Ramantha (2020) found that there was an effect of work experience on the effectiveness of accounting information systems. In contrast, Anggarini et al. (2021) found that work experience does not affect the effectiveness of accounting information systems.

User capability is one of the essential things for organizations to run accounting information systems effectively and efficiently (Wardani et al. 2020). User capability affects the effectiveness of accounting information systems in line with the research results of Wardani et al. (2020) and Putri et al. (2021). Manuari and Devi (2022) and Sari et al. (2021) did not find any influence of user capability on the effectiveness of accounting information systems.

Incentives are rewards obtained by employees who have carried out their duties well and have outstanding employees (Angraini 2019). Giving awards to employees can increase work ethic, both in the form of material and non-material rewards. Raharjono and Dharmadiaksa (2021), Angraini (2019), and Ernawatiningsih and Kepramareni (2019) found that incentives affect the effectiveness of accounting information systems. This result is different from Mega and Semara (2018) and Kristiani (2018) state that incentives do not affect the effectiveness of the accounting information system.

The following section discusses the literature review to develop hypotheses. The next section describes the research methods, data collection, results, and discussion. The last section presents the conclusions and research suggestions.

## **2. Literature Review**

### **Technology Acceptance Model Theory**

Technology Acceptance Model Theory is an information system theory that describes how users understand and apply information technology (Davis 2013). Technology Acceptance Model is one of the models developed to analyze and understand the factors that influence the acceptance of the use of technology (Fahlevi and Dewi 2019). The Technology Acceptance Model is considered very influential and often used to explain the individual acceptance of technology. Technology Acceptance Model aims to explain and estimate user acceptance of technology.

### **Work Experience and Accounting Information System Effectiveness**

Work experience is the level of mastery of a person regarding the knowledge and skills he has at work (Sari et al. 2021). Work experience is the knowledge and skills a person possesses in mastering his work based on the duration of a person's work. The knowledge gained from previous work experience certainly brings individuals to an understanding of the benefits and ease of using accounting information systems. The experience and basic skills of operating a computer can help individuals operate accounting information systems because the longer the individual works, the better the level of computer proficiency. Sari et al. (2021) and Anjani et al. (2021) state that work experience positively affects the effectiveness of accounting information systems. Thus, the proposed hypothesis is as follows:

H1: Work experience positively affects accounting information system effectiveness.

### **User Capability and Accounting Information System Effectiveness**

The user's capability is the skill to run an accounting information system effectively and efficiently (Wardani et al. 2020). User ability is a person's expertise in using information systems to run effectively and efficiently. User ability can be defined as operating information systems to perform tasks. The more proficient the user's ability to operate the accounting information system will be, the more effective it will be, and the information produced will be faster, more accurate, and precise to use in decision-making. Wardani et al. (2020) found that user capability positively affects the effectiveness of accounting information systems. Thus, the proposed hypothesis is as follows:

H2: User capability positively affects accounting information system effectiveness.

### **Incentives and Accounting Information System Effectiveness**

Incentives are rewards obtained by employees who have carried out their duties well and have achievements (Anggraini 2019). Incentives are a form of motivation for employees, which is realized in the form of money (Raharjono and Dharmadiaksa 2021). Incentives are encouragement organizations give to their employees, which are recognized through money and non-money, such as promotions. Employees at work certainly have a goal to get rewards and meet needs. Providing rewards or incentives can encourage increased employee performance to achieve organizational goals. Providing incentives can motivate employees to use accounting information systems effectively and efficiently to help each employee complete their work and make higher quality decisions. Raharjono and Dharmadiaksa (2021) found that incentives positively affect the effectiveness of accounting information systems. Thus, the proposed hypothesis is as follows:

H3: Incentives positively affects accounting information system effectiveness.

### **3. Methods**

This study uses quantitative methods with primary data sourced from questionnaires consisting of 26 items. Positive statements were measured using 5 Likert scales (5 = Strongly Agree, 4 = Agree, 3 = Normal, 2 = Disagree, 1 = Strongly Disagree). In contrast, negative statements were measured using a 5 scale (1 = Strongly Agree, 2 = Agree, 3 = Normal, 4 = Disagree, 5 = Strongly Disagree). The analytical technique used is descriptive statistical analysis and multiple linear regression analysis. Samples were obtained based on two sampling criteria. First, the owners of trading MSMEs in Cilacap Regency use a web-based income statement preparation application with a minimum of 2 employees. Second, the employees of MSME trade in the admin and warehouse sections in Cilacap Regency that use a web-based income statement preparation application with sales methods that are carried out offline and online or online with two or more marketplaces. Based on these criteria, this study obtained a sample of 15 MSMEs with 41 respondents.

The dependent variable in this study is the accounting information system effectiveness. The effectiveness of the accounting information system is an output that can provide an overview of the achievement of targets or goals that can be achieved by the organization well with an output orientation (Manuari and Devi 2022). The effectiveness of the accounting information system is measured using 6 statement items. The accounting information system's effectiveness is estimated based on the ability of the information system to complete tasks, the availability of data in the accounting information system, and the ability to accurately display all related transactions in financial statements (Manuari and Devi 2022).

The independent variables in this study are work experience, user capability, and incentives. Work experience is mastery of the knowledge and skills possessed at work (Sari et al. 2021). In this study, work experience was measured using 6 statement items. Work experience can be seen based on the time and period of work, level of knowledge and skills possessed (Sari et al. 2021). User capability is the skill to run an accounting information system effectively and efficiently (Wardani et al. 2020). This study measured the user's capability using 10 statement items. User capabilities can be seen based on application benefits that users easily understand, applications can be run efficiently by users, applications can meet user needs, product information can be found by users quickly, and users can easily find stock distribution information (Wardani et al. 2020). Incentives are rewards for carrying out their duties well and for excellent employees (Anggraini 2019). In this study, incentives were measured using 4 statement items. Incentives can be seen based on material and non-material incentives (Anggraini 2019).

### **4. Data Collection**

Questionnaires were distributed from July 22, 2022, to July 25, 2022. A total of 58 questionnaires were successfully distributed to MSME owners and employees who use the application for preparing income statements in Cilacap Regency. The number of questionnaires collected and processed is 41, which means the response rate is 71%.

Figure 1 shows the characteristics of respondents by type of business. Most respondents have types of online and offline trading businesses, namely 31 respondents, and online trading businesses with more than two marketplaces, as many as ten respondents. Figure 2 shows the characteristics of respondents by age. Most respondents are 25 years old (30%), and the rest are between 20-45 years old. Figure 3 shows the characteristics of respondents by education level. Most respondents have undergraduate education, as many as 24 people (59%), while the rest have high school education totaling 14 people (34%), and diplomas, amounting to 3 people (7%). Figure 4 shows the characteristics of respondents by gender. There were 22 female respondents (54%) and 19 male respondents (46%). Figure 5 shows the characteristics of respondents based on work experience. Most respondents have work experience of 1-5 years, namely

20 people (49%), less than one year of work experience, namely 18 people (44%), and work experience of more than five years, namely three people (7%).

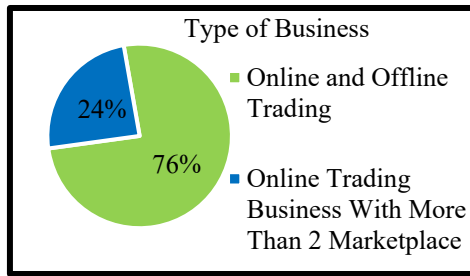


Figure 1. Type of Business

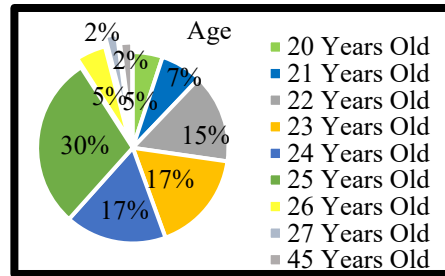


Figure 2. Age

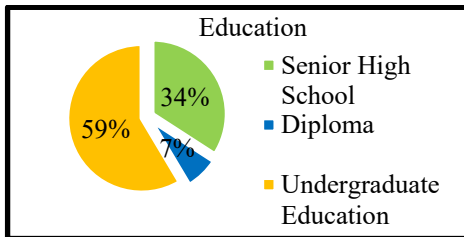


Figure 3. Education

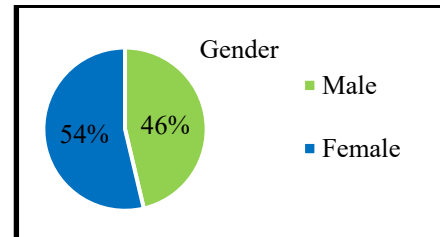


Figure 4. Gender

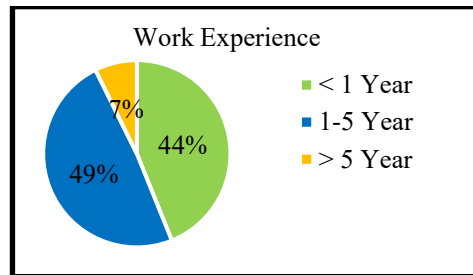


Figure 5. Work Experience

Table 1 presents the responses given by respondents to the statements in the questionnaire. The effectiveness of the accounting information system on MSMEs using the application for preparing income statements in Cilacap Regency is 88%. This value indicates that the effectiveness of the accounting information system on MSMEs is excellent. Employee responses to work experience have a score of 84%. The score shows that the employee has excellent work experience. Respondents have the knowledge and skills to carry out their work. The user's capability of web-based income statement preparation applications is 86%. The score indicates the user's capability is excellent. The ability of information system users to operate computers in software and hardware to process data into the quality and reliable information. Employee responses to incentives provided by MSMEs have a value of 92%. This value indicates that the provision of incentives is excellent. Employees have received both material and non-material incentives to motivate work.

Table 1. The Respondents' Responses

No	Variables	Response	Ideal Score	Percentage	Category
1.	Accounting Information System Effectiveness	1088	1230	88%	Excellent
2.	Work Experience	1034	1230	84%	Excellent
3.	User Capability	1754	2050	86%	Excellent
4.	Incentives	757	820	92%	Excellent

Source: Processed data (2022)

## 5. Results and Discussion

A validity test was applied to 26 statement items. The test results show that all statement items on the questionnaire are declared valid and feasible to use. The reliability test was applied to all research variables. The Cronbach alpha value for the accounting information system effectiveness is 0.847, work experience is 0.838, user capability is 0.680, and incentives are 0.873. The test results show that the value of Cronbach's alpha is greater than 0.6, which means that the respondents' answers to each statement item in each research variable have been consistent and stable. This study also conducted a data normality test, heteroscedasticity, and multicollinearity test. The test results show that all results pass. Furthermore, this study conducted a hypothesis test with the results presented in Table 2.

Table 2. Hypothesis Testing Results

Variable	Coefficient	Std. Error	t-Statistic	Probability	Decision
C	0.024	0.619	0.038	0.970	
WE	0.339	0.156	2.178	0.036	H1 supported
UC	0.619	0.190	3.266	0.002	H2 supported
IN	0.105	0.143	0.736	0.466	H3 not supported
F-statistic	17.090			0.000	
Adjusted R <sup>2</sup>	0.547				

Source: data processing results (2022)

This study's first objective was to examine work experience's effect on the effectiveness of accounting information systems. The test results show that H1 is supported, meaning that work experience positively affects accounting information systems effectiveness. These results indicate that the more experience in doing the task can complete the more work. The process of learning and developing potential can improve understanding in doing assignments. The longer a person operates a computer, the more proficient and skilled in accounting information systems will be so that the information produced will be of higher quality. These results support the research conducted by Sari et al. (2021) and Anjani et al. (2021).

The second research objective is to examine the effect of user capability on the effectiveness of accounting information systems. The test results show that H2 is supported, meaning that user capability positively affects accounting information systems effectiveness. This finding indicates that the user's ability to complete tasks quickly and accurately can increase the effectiveness of accounting information systems. User capabilities are also needed to avoid errors in the information generated. The more proficient the user's ability to operate accounting information systems will be, the more effective the use of accounting information systems will be, and the information produced will be more reliable for making decisions. These results align with the research conducted by Wardani et al. (2020) and Putri et al. (2021).

The third research objective is to examine the effect of incentives on the effectiveness of accounting information systems. The test results do not support H3, which means that incentives do not affect accounting information system effectiveness. These results indicate that the provision of material and non-material incentives has not motivated employees to maximize the use of accounting information systems. This finding is presumably because MSME owners provide incentives as an obligation, such as holiday allowances, not because of innovation, creativity, or achievement. The results of this study are not in line with research conducted by Raharjo and Dharmadiaksa (2021).

## 6. Conclusion

This study identifies the characteristics of MSME respondents in Cilacap Regency, Central Java, Indonesia. Most respondents, 31 people (76%), have offline and online trading businesses, 22 people (54%) were women, and 11 people (29%) were 25 years old. Respondents have a bachelor's level of education, as many as 24 people (59%). Most respondents have work experience of 1-5 years, 20 people (48%). Respondents suggest that work experience, user capabilities, incentives, and the effectiveness of accounting information systems at MSMEs in Cilacap Regency that use the income statement preparation application are excellent. This study investigates the effect of work experience, user capability, and incentives on accounting information systems effectiveness in MSMEs using an income statement preparation application. The results suggest that work experience and user capability positively affect accounting information systems effectiveness. On the contrary, incentives do not affect accounting information systems effectiveness.

This study has not found the effect of incentives on the effectiveness of accounting information systems. Further researchers can use other indicators such as the amount, type, and frequency of incentives. This study found that work experience, user capability, and incentives can explain accounting information systems effectiveness only 54.7%, the rest is explained by other variables that have not been studied. The next researcher can add other variables such as task complexity, user age, and education level. Based on the research results, which state that a web-based income statement preparation application is effectively used, MSMEs that utilize the marketplace is expected to continue to use the application and make improvements following the development of business needs. The Department of Cooperatives and MSMEs are expected to be able to guide by providing business and digital finance training to improve the user's ability to operate accounting information systems.

## References

- Anggarini, Ni Putu Tania, Arizona, I Putu Edy, and Ernawatiningsih, Ni Putu Lisa. Pengaruh pemanfaatan teknologi informasi, pengalaman kerja, pelatihan, skill dan partisipasi pemakai terhadap efektivitas sistem informasi akuntansi, vol. 3, no. 1, pp. 380–90, 2021
- Anggraini, Nindi Putri. Pengaruh insentif, usia, pengalaman kerja, pelatihan, tingkat pendidikan dan kompleksitas tugas terhadap efektivitas sistem informasi akuntansi (studi pada koperasi pengguna sistem informasi akuntansi di Yogyakarta), *UMY Repository*, 2019.
- Anjani, Ni Luh Wahyu Setia, I Putu Edy Arizona, and Ni Putu Lisa Ernawatiningsih. Pengaruh pemanfaatan teknologi informasi, kemampuan teknik personal, pengalaman kerja, dan pelatihan terhadap efektivitas sistem informasi akuntansi pada kantor badan pengelolaan keuangan dan aset daerah (BPKAD) di Kabupaten Karangasem. *Karya Riset Mahasiswa Akuntansi (KARMA)*, vol. 1, no. 1, pp. 355–363, 2021.
- Fred D. Davis. Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. Computer and Information Systems Graduate School of Business Administration University of Michigan Ann Arbor, vol.13, no. 3, pp. 319–40, 2013.
- Ernawatiningsih, Ni Putu Lisa and Kepramareni, Putu. Effectiveness of accounting information systems and the affecting factors. *International Journal of Applied Business and International Management (IJABIM)*, vol. 4, no. 2, pp. 33-40, 2019.
- Fahlevi, Pahri, and Dewi, Athanasia Octaviani Puspita. Analisis aplikasi IJATENG dengan menggunakan Teori Teknologi Acceptance Model (TAM), *Jurnal Ilmu Perpustakaan*, vol. 8, no. 2, pp. 103-108, 2019.
- Hardani, K N R, and Ramantha, I Wayan. The effect of age differences, work experience and education levels on the effectiveness of using accounting information systems. *American Journal of Humanities and Social Science Research*, vol. 4, no. 5, pp. 183–89, 2020.
- Manuari, Ida Ayu Ratih and Devi, Ni Luh Nyoman Sherina. Efektivitas sistem informasi akuntansi pada usaha kecil dan menengah di kota Denpasar di masa pandemi Covid-19. *Accounting Profession Journal (APAJI)*, vol. 4, no. 1, pp. 1–18, 2022.
- Putri, Desak Made Dewi Saktika, I Putu Edy Arizona, and Ni Luh Putu Lisa Ernawatiningsih. Pengaruh keterlibatan, kemampuan teknik personal, dan pendidikan pelatihan terhadap efektivitas penggunaan sistem informasi akuntansi pada lembaga perkreditan desa di Kecamatan Kerambitan. *Karya Riset Mahasiswa Akuntansi (KARMA)*, vol. 1, no. 3, pp. 1099–1108, 2021.
- Raharjono, Muhammad Abyzard Akbar, and Ida Bagus Dharmadiaksa. The effect of incentives and employee empowerment on the effectiveness of accounting information systems, *American Journal of Humanities and Social Sciences Research (AJHSSR)*, vol. 5, no. 6, pp. 149–153, 2021.
- Sari, Komang Ayu Desvira Permata, Suryandari, Ni Nyoman Ayu, and Putra, Gde Bagus Brahma. Pengaruh pemanfaatan teknologi, partisipasi pemakai, kemampuan teknik pemakai, pengalaman kerja dan jabatan terhadap efektivitas sistem informasi akuntansi. *Kharisma*, vol. 3, no. 1, pp. 1–11, 2021.
- Wardani, Dea Ayu Kusuma, Titisari, Kartika Hendra, and Yuli Chomsatu S. Faktor yang mempengaruhi keefektifan sistem informasi akuntansi penjualan berbasis aplikasi alfacart pada PT Sumber Alfaria Trijaya Tbk, *Upajiwā Dewantara*, vol. 4, no. 1, pp: 27–40, 2020.

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