

## Enhancing Digital Accounting Adoption: The Critical Role of Human Resource Competence and Infrastructure Availability

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### Abstract

*The reason of this consider is to find out how foundation accessibility and human asset (HR) capabilities influence the selection of computerized bookkeeping. The inquire about utilizes a overview technique with survey information gathering strategies, utilizing expressive and affiliated approaches. Within the Cimahi city locale, 9,087 MSMEs made up the investigate populace. The Slovin approach was utilized within the test choice prepare, yielding 98 respondents as a result. The study's discoveries demonstrate that the application of computerized bookkeeping in MSMEs in Cimahi City is essentially impacted by three variables: the accessibility of offices and framework, the capacity of human assets, and the accessibility of foundation. concurrently includes a favorable and critical affect on the Computerized Bookkeeping Usage. The usage of advanced bookkeeping is affected by human asset capabilities and the accessibility of offices and framework by 75.1%, with the remaining 24.9 ing impacted by components not included within the think about demonstrate (R Square esteem: 0.751).*

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## INTRODUCTION

Accounting is critical to the development of small businesses. This could be due to the MSME sector's reputed resilience to crises, its ability to protect the Indonesian economy, and its potential to drive financial recovery after emergencies (Sukmantari & Julianto, 2022). However, despite the fact that bookkeeping in financial statements is essential for trade development, many MSMEs are yet to realize its importance (Hakiki et al., 2020). This is often due to

the fact that the capacity of MSME characters on screen to successfully handle funds and bookkeeping is as important to the triumph of MSMEs as the capacity for entrepreneurial generation or creativity. Good accounting records, proper financial information, and efficient managerial management are the keys to success. Unfortunately, most MSMEs still have problems understanding basic accounting concepts and lack awareness of the importance of rapid and accurate financial records. (Ramadani et al., 2024)

The use of digital accounting can give precise, timely, and dependable information regarding money. Agreeing to a number of considerations, trade proprietors can enhance their daily transactions by utilizing data innovation. This presentation of accounting digitization frameworks has brought about almost numerous changes in the money keeping industry and the way business exchanges are done. In any case, these changes can't be diverted additionally giving a chance for workers to get unmistakable information from analog trades and higher level specialized information (Anjarwati et al., 2023).

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One of the calculations that adversely affect the execution of MSME employees is human resources. It is usually because everyone who is displayed when driving trade will be considered in the trade unit (Wahyudiati & Isroah, 2018). Human resources (HR) that are competent are fundamental to achieving organizational goals. When human assets have high quality human resources, both in terms of information, thinking, and development, MSMEs can run well. (Rapih et al., 2015). This requires solid human resources to be maintained in a company. Having assets with information, abilities, and skills will help MSMEs perform better. On the other hand, a company will not work well if there is no adequate support for high-quality individual assets. In order to organize to show and

oversee money-related information successfully and appropriately, financial reports must be made by human asset experts.

In line with considerations made by OCBC Indonesia for its Business Fitness Index in 2023, the vast majority of MSME players in Indonesia-about 80%-continue to record their company funds and stock utilizing manual strategies. Despite the fact that the development of digitalization gives more precise and feasible arrangements, these MSMEs appear to be taking their time to become more advanced. (Vauzi, 2024). One of the cities with a high concentration of MSMEs is Cimahi City. In the year 2022, there were 6,087 business units registered as MSMEs in Cimahi City, according to data from BPS West Java.

**Table 1. Results of survey on digital accounting implementation**

<b>Statement</b>	<b>Total</b>	<b>Percentage</b>
Have done accounting records digitally	3 MSMEs	20%
Have not yet made digital accounting records	12 MSMEs	80%
<b>Total</b>	<b>15 MSMEs</b>	<b>100%</b>

In line with the pre-survey table mentioned earlier, 3 out of 15 MSMEs, or 20%, are currently using digital accounting, while 12 out of 15 MSMEs, or 80%, have not yet implemented digital accounting.

Based on the interview results, it can be concluded that there are still parts of MSMEs that do not understand the use of Digital Accounting, as well as inconsistencies in preparing and breaking down data quality. Therefore, more organized efforts are needed to expand near-innovative information and advance information quality. One approach that can be taken is to plan training.

Nevertheless, at present, the previously mentioned preparing is done in Bandung; in contrast to Cimahi City, which is a neighbor of Bandung, currently has no preparing specifically planned to enhance the exercise of MSMEs digitally.

The study conducted by (Anjarwati et al., 2023) the performance of culinary MSMEs in South Denpasar District is positively impacted by the quality of Human Resources (HR) as revealed by the research. When employees have higher competence, it leads to better performance of MSMEs in various areas, including financial recording. This aligns with a study conducted by (Farhan et al., 2023),

which shows that Human Resource Competence has a positive effect on the performance of MSMEs. If the competence of human resources is getting better, the performance of MSMEs will increase, including in recording financial reports and using digital accounting. However, these results differ from research conducted by (Animah et al., 2020), which shows that human resource competencies have no effect on the quality of financial statements.

Aside from the skill level of the workforce, another element that can impact the implementation of accounting digitalization is the presence of facilities and infrastructure. Having comprehensive facilities and infrastructure will undoubtedly enhance the efficiency of MSMEs. Improved availability of facilities and infrastructure leads to a notable surge in the digitization of accounting information in MSMEs.

The findings in a study by (Dewi et al., 2022), indicated that the presence of facilities and infrastructure has a noteworthy positive impact on the digitization of accounting information. Furthermore, the results of research from (Lawita & Hardilawati, 2019), the results showed that there were factors that proved to be influential, namely top management support and formalization of information system development. Additionally, research conducted by (Mishra et al., 2018), highlighted the direct influence of HR capabilities on Digital Accounting Implementation. Conversely, the results of research by (Rahmawati, 2024), revealed that the availability of facilities and infrastructure did not impact accounting digitalization.

## **METHODS**

The methodology employed in this study is quantitative research with an associative and descriptive perspective. It is a cross-sectional research design, meaning that the study is carried out within a specific timeframe, such as a day, a week, or a month, in order to address the research queries. (Soedibjo, 2013: 8). The MSMEs in Cimahi City were the focus of the population in this study. According to data from BPS West Java Province in 2022, the number of MSMEs in Cimahi City was 6,087 business units. While the sample was carried out using a simple random sampling technique, where sampling was carried out randomly. In this study, the sample taken was 10% of the total 6,087 MSME actors in Cimahi

City using the slovin method:

$$n = \frac{6.087}{1 + 6.087 (0,1)^2} = 98,28$$

So, the minimum sample size required is 98.82 so that it is rounded up to 98 MSMEs. Questionnaires were distributed to collect data, and calculations were made using a Likert scale. The analysis of the data involved using descriptive and associative analysis along with classical assumption tests, multiple linear regression tests, determination coefficient tests, and hypothesis testing.

## RESULTS AND DISCUSSION

### Descriptive Analysis

According to Ghozali (2014:) Descriptive analysis involves presenting or explaining data, which could include the mean, standard deviation, variance, maximum value, and minimum value of each variable. The mean represents the average measurement of the data. The standard deviation indicates how much the data deviates from the average. The maximum value identifies the highest value in the data, while the minimum value identifies the lowest value in the dataset.

**Table 2. Descriptive Test Results**

	<b>N</b>	<b>Mean</b>	<b>Min</b>	<b>Max</b>	<b>Std. Deviasi</b>
Human Resource Competence (X1)	98	30.602	16.00	40.00	4.338
Infrastructure availability (X2)	98	23.061	14.00	30.00	3.493
Digital Accounting (Y)	98	22.581	14.00	30.00	3.921

- a. The descriptive statistical test results show that human resource capabilities have a smallest possible amount of 16.00 and a maximum value of 40.00. The average value of human resource capabilities of 30.602 is greater than the standard deviation of 4.338, so it can be

- concluded that there is good distribution.
- b. The availability of infrastructure facilities has a smallest possible amount of 14.00 and a maximum value of 30.00. The average availability of infrastructure facilities of 23,061 is greater than the standard deviation of 3,493, it can be concluded that there is good distribution.
  - c. Digital accounting has a smallest possible amount of 14.00 and a maximum value of 30.00. The average digital accounting value is 22.581 from the standard deviation of 3.921, it can be concluded that there is good distribution.

**Classic Assumption Test**

**1. Normality Test**

The normality test is utilized to establish if the data collected originates from a population with a normal distribution. The "Kolmogorov-Smirnov" test is employed to assess normality. Using this sample, the null hypothesis that the sample is from a normally distributed population will be compared to the alternative hypothesis that the population is not normally distributed.

**Table 3. Normality Test**

<b>One-Sample Kolmogorov-Smirnov Test</b>		
		Unstandardized Residual
N		98
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	3.50756124
Most Extreme Differences	Absolute	.080
	Positive	.080
	Negative	-.052
Test Statistic		.080
Asymp. Sig. (2-tailed)		.131 <sup>c</sup>

According to the information provided, the Kolmogorov-Smirnov table shows a significant value (Sig) of 0.131. As per the guidelines, if the Kolmogorov-Smirnov value exceeds the alpha value of 0.05, then the data is considered to be normally distributed.

## 2. Multicollinearity Test

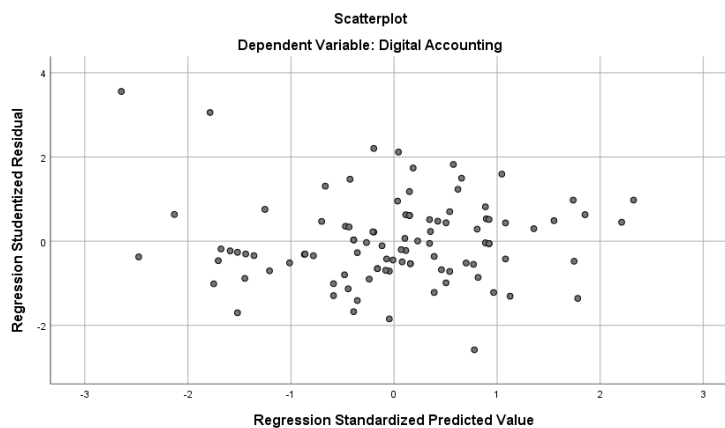
The purpose of the multicollinearity test is to determine if there is a relationship between the independent variables in the regression model. An ideal regression model should not exhibit any correlation among the independent variables.

**Table 4. Multicollinearity Test Using the Tolerance Variance Inflation Factor (VIF) Method**

Coefficients <sup>a</sup>			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Human Resource Competence	.825	1.211
	Infrastructure Availability	.825	1.211

The table's multicollinearity testing results show that the tolerance value exceeds 0.01, and the Variance Inflation Factor (VIF) value is below 10, indicating the absence of multicollinearity among the independent variables in this study. Additionally, there is no significant presence of multicollinearity.

## 3. Heteroskedasticity Test



**Figure 1. Heteroscedasticity Test Using the Scatterplot Method**

The scatterplot indicates that there is no discernible pattern, with points scattered both above and below the value of 0 on the Y axis. Therefore, it can be inferred that there is no heteroscedasticity present in the regression model.

**4. Autocorrelation Test**

The purpose of the autocorrelation test is to determine if a linear regression model exhibits a correlation between residual errors in period t and the preceding period t-1. If such a correlation exists, it indicates the presence of an autocorrelation issue. An ideal regression model is one that does not suffer from autocorrelation. To identify the presence of autocorrelation, the Durbin Watson test (DW test) is employed.

**Table 5. Autocorrelation Test Results**

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.866 <sup>a</sup>	.751	.183	3.54429	1.758

Based on the table above, it is between du and 4-du, namely 1.758 > 1.7128 < 2.2872 so it is proven that there is no autocorrelation and can be used for further analysis.

**Hypothesis Test**

**(T test)**

**Table 6. Multiple Linear Regression Analysis**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.491	2.946		2.882	.005
	Human Resource Competence	.202	.091	.224	2.214	.029
	Infrastructure Availability	.342	.113	.305	3.021	.003

a. Dependent Variable: Digital Accounting

The multiple linear regression equation in this study is:

$$Y = 8,491 + 0,202 X_1 + 0,342 X_2$$

**1. The Effect of Human Resource Competence on Digital Accounting in MSMEs in Cimahi City**

From this equation, it can be explained as follows:

- a. The constant value  $\beta_0 = 8.491$  means that it shows the amount of



digital accounting variables that are not influenced by human resource capabilities or it can be interpreted that when the value of human resource competence is equal to zero (0) or does not change, the value of digital accounting is 8.491.

- b. The regression coefficient for the human resource capability variable (X1) is 0.202, meaning that human resource competence have a positive or unidirectional relationship with digital accounting.
- c. The t test with an  $\alpha = 5\%$  level,  $n = 98$ , and  $df = n-2$ , or  $df = 96$ , obtained a t value of 1.98498. The effect of human resources on computerized bookkeeping can be seen from the tcount value of  $2.214 > t$  table 1.98498 with a probability of human resources (X1) of 0.029. In accordance with the criteria, if the significance value is  $< 0.05$ , then  $H_0$  is rejected and  $H_1$  is accepted. This shows that human resources have a significant influence on advanced bookkeeping in MSMEs in Cimahi. In other words, if human resources become more profitable, then advanced bookkeeping will experience development.

## **2. The Effect of Infrastructure Availability on Digital Accounting in MSMEs in Cimahi City**

- a. The constant value  $\beta_0 = 8.491$  means that it shows the amount of the digital accounting variable that is not influenced by the availability of infrastructure facilities or it can be interpreted that when the value of the availability of infrastructure facilities is equal to zero (0) or has not changed, the value of digital accounting is 8.491.
- b. The regression coefficient for the variable availability of infrastructure facilities (X2) is 0.342, meaning that the availability of infrastructure facilities has a positive or unidirectional relationship with digital accounting.
- c. The t test with the  $\alpha = 5\%$  level, known  $n = 98$ , with  $df = n-2$ , namely  $df = 96$  is 1.98498. The effect of the availability of infrastructure on digital accounting obtained a tcount value of  $3.021 > t$  table 1.98498 with a significance probability of the availability of infrastructure (X2) at the level of 0.003. In accordance with the criteria if the significance value  $< 0.05$ , then  $H_0$  is rejected and  $H_2$  is accepted,

which means that the availability of infrastructure partially has a significant effect on digital accounting in MSMEs in Cimahi City.

**3. The Effect of Human Resource Competence and Availability of Infrastructure Facilities on Digital Accounting in MSMEs in Cimahi City**

**(F Test)**

**Table 7. F Test (Simultaneous Test)**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	447.174	2	223.612	65.960	.000 <sup>b</sup>
	Residual	328.826	97	3.493		
	Total	776.000	100			

After analyzing the table, it was found that the Fcount is 11.879. The Ftable value for a significance level ( $\alpha$ ) of 5% with degrees of freedom  $V1 = k$  and  $V2 = n - k - 1 = 98 - 2 - 1 = 95$  is 3.09.

**Table 8. Conclusion of Simultaneous Testing**

Fcount Value	Ftable Value	conclusion
11.879	3,09	Significant

Based on the provided table, the statistical calculations show that the Fcount value exceeds the Ftable value. With a significance value lower than 0.05, the H0 hypothesis is rejected, and the H3 hypothesis is accepted. This suggests that both human resources' capability and the availability of infrastructure facilities have a significant collective impact on digital accounting in MSMEs in Cimahi City.

**Coefficient of Determination**

The coefficient of determination shows how much variations in the independent variable impact the variability of the dependent variable.. In essence, this coefficient measures the effectiveness of the independent variable in explaining the variations in the dependent variable. The findings of the coefficient of determination in this research are as stated below:

**Table 9. Coefficient of Determination**

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.866 <sup>a</sup>	.751	.745	3.54429	1.758

a. Predictors: (Constant), Infrastructure Availability, Human Resource C

b. Dependent Variable: Digital Accounting

The correlation coefficient in table 9 above indicates a strong relationship between human resource capabilities (X1) and infrastructure availability (X2) when considering their combined impact on digital accounting (Y), with a value of 0.866.

Within the given table, it is evident that the coefficient of determination (R<sup>2</sup>) equals 0.751. This implies that 75.1% of the influence on digital accounting can be linked to the capabilities of human resources and the presence of infrastructure facilities. The remaining 24.9% can be attributed to other factors that were not examined in this research.

## CONCLUSION

After analyzing the data, it is evident that:

1. The competence of human resources has a partial but significant impact on the adoption of digital accounting in MSMEs in Cimahi City.
2. The presence of infrastructure also has a partial but significant influence on the adoption of digital accounting in MSMEs in Cimahi City.
3. Both the competency of human resources and the presence of infrastructure facilities concurrently have a significant impact on the adoption of digital accounting in MSMEs in Cimahi City.

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