Challenges for Micro, Small, and Medium Enterprises Facing Digitalization in Accounting

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Abstract:

The labor market is not always able to meet the demand for workers who have competence in accounting. One of the sectors experiencing this condition is the owner of Desa tea shop in Semarang city. It certainly has an impact on the training and mentoring conducted by business owners to improve the competence of their employees. This study aims to look at the training and mentoring process carried out by the owner of the village tea shop employees in Semarang City. The research was conducted by surveying micro, small and medium enterprises (MSMEs) or 25 owners of Village Tea Shops. The results showed that the average time needed to train employees to perform work related to product presentation and transaction data input in the group of employees with low accounting competence (group 2) was longer than that of employees with medium and high accounting competence. In addition, the average time needed to assist employees to perform work related to product presentation and data input in the group of employees with low accounting competence is longer than that of employees with medium and high accounting competence. The results indicate that the lack of accounting competence of village tea shop employees has an impact on the owner's efforts to make employees have better work readiness. Further research can expand the population and research area so that the research results can be better generalized to provide an overview of the challenges of accounting digitalization in MSMEs.

Keywords: Adaptation, MSMEs Actors, Digitalization challenges.

Introduction

The job of an accountant relates to skills in completing the accounting cycle both manually and digitally (Hoffman, 2017). In practice, the implementation of the digitalization system is influenced using of technology and the competence of human resources owned by MSMEs. Based on Law Number 20 of 2008 concerning MSMEs, village teahouses can be classified as household industries and fall under the criteria of

individual (micro) businesses. For this reason, village teahouses need to present financial reports that can present information accountably, especially on the income statement obtained for each transaction period. However, the human resources available in the labor market do not always seem to have the competencies that can support the process.

Currently, accounting methods have developed linearly with technological developments (Kruskopf et al., 2020). Responding to these conditions, management must also adapt to digital processes. These conditions are experienced not only by large organizations but also by MSMEs.

The accounting digitization process includes the entire accounting process that needs to be adapted, changed, adjusted and transformed gradually. Some researchers believe that digitalization will replace the old methods used by many companies. These methods are often referred to as pencil and paper-based accounting systems. Furthermore, the right approach and practices through a linear process of adaptation to technological developments can lead to company development. In addition, the correct utilization of digitalization in the field of management accounting is believed to have an impact on business sustainability in the long term.

Information technology today is part of every business and company including MSMEs. The consequence of this condition is similar to natural selection where an entity that cannot keep up with new technological developments will slowly fade away and disappear. This is due to the very high inefficiency caused by accounting processes that are carried out slowly without the help of applications. In the literature review, the phenomenon falls into three waves of transformation. From the first wave of standardized processes based on pencil and paper to the second wave of automated processes including computers, information technology, databases, and software.

Furthermore, the third wave includes adaptive processes. This wave initiates new ways of doing business including accounting processes. Based on real-time data, these processes are more adaptive and flexible and provide the possibility to input data and process data in an innovative and more individualized manner. (Hoffman, 2017) suggests three technological innovations that primarily drive changes in current accounting practices, methods, and procedures and that can markedly modernize and improve accounting and auditing. These are other artificial intelligence application-based structured digital financial reporting as well as blockchain-based distributed ledgers.

Just like other business fields, MSMEs will benefit immensely when using digital processes to organize, process, and evaluate financial data that will increase productivity and save costs and time. These changes will essentially affect MSMEs because accounting is one of the important parts of a company. Some researchers believe that failures in this area have killed large companies. This condition

is due to the company's weak accounting information system and internal controls. Government intervention to continue to maintain MSMEs during of the digitalization of information systems has been carried out. Through the MSMEs Go Online program, MSMEs in 30 cities/regencies in Indonesia can further develop and adapt to technological changes. In addition, the emergence of cloud computing and business analytics has changed the way MSMEs report financial performance and make business decisions.

Nevertheless, some researchers seem to have begun to highlight the shortcomings in the curricula at both secondary, vocational and higher education levels to prepare accounting students for advanced information technology knowledge and skills (Pan & Seow, 2016). Therefore, it is not surprising that some researchers have a global concern that the accounting curriculum fails to keep up with technological advances. This condition certainly requires adaptation by some MSME actors due to the competency gap owned by some of the employees they employ. Based on this background, this study aims to see how the adaptation process is carried out by business actors and employees who are hired through the different time needed to train and assist prospective workers. The results of the study are expected to provide an explanation of the vulnerability of the curriculum as well as possible decisions that can be taken to overcome the gap**.**

Literature Review

One of the literature studies relevant to this research is agency theory. Agency theory explains the relationship between owners (principals) and managers (agents) in a company (Eisenhardt, 1989). This theory states that the separation of ownership and management of a company can lead to the impact of mutual needs between owners (principals) and managers (Herbowo & Saputri, 2023) (Ningsih & Hajar, 2021). The owner has an interest in maximizing the company's profit and wealth so that it requires a variety of information that is ready to be accessed quickly and easily. For this reason, accounting digitalization has a very large role so that this goal can be achieved (Andini & Amboningtyas, 2020).

The company must incur agency costs so that the collaboration can run harmoniously. Some costs such as monitoring costs, as well as incentives may need to be included as an important operational component (Yogiswari & Badera, 2019). Corporate governance is often used as a mechanism to reduce these agency costs. This strategy can ensure that decision-making is consistent with the interests of the owners (Yogiswari & Badera, 2019).

The labor market cannot always meet the demand for workers who have competence in accounting. Moreover, the utilization of applications in the field of accounting is increasingly prevalent.

Responding to this phenomenon, owners of micro, small and medium enterprises (MSMEs) need resources to provide training and assistance (Rosnidah et al., 2018). Accounting digitization efforts can assist MSMEs in implementing an efficient internal control system. Furthermore, it is known that MSMEs in Indonesia generally face problems in bookkeeping and financial reports (Samuel P.D. Anantadjaya et al., 2023)(Hidayat & Raganata, 2022). for this reason, digitization of the accounting field in the form of using financial applications, has become a necessity.

The use of accounting applications on smartphones is considered capable of helping MSMES in recording business transactions digitally(Hidayat & Raganata, 2022). Although in practice, the application of digital-based accounting applications still requires an adaptation process for MSMEs actors. This form of adaptation occurs due to limited digital literacy among MSMEs, both by owners and employees (Mumdin & Soma, 2024). Therefore, efforts to increase the capacity of MSMEs through training and mentoring are important to encourage accounting digitalization in MSMEs. These efforts require collaboration between owners and employees to maximize the use of digital financial applications. The theory that can be used to explain this adaptation process is the theory of planning behavior, which explains attitudes, subjective norms, and perceptions of behavioral control that can influence a person's intentions and behavior.

The attitude of business owners who realize the benefits of using accounting applications (Rachma Dwiyanti & Sari, 2023) requires employee support to voluntarily accept training and assistance. Perceived behavioral control of business owners and employees who believe in their ability to use accounting applications (Mumdin & Soma, 2024) will strengthen intentions and accelerate the process of implementing accounting digitization in MSMEs.

Research Methodology

The research was conducted in the city of Semarang with the research subjects being MSMEs actors or owners of Village Tea Shops. The characteristics of respondents in this study are only based on the level of education and length of service of employees. Meanwhile, age, gender are not included in the criteria for both owners and employees.

The popularity of tea shops in Semarang city is one of the reasons behind the subject selection. Compared to areas around Semarang (e.g. Kendal) based on observations, the popularity of village tea in Semarang City is quite high. Data from google maps (figure 1) shows that the number of village tea shops in Semarang city reached 26 outlets spread across several sub-districts including Banyumanik (4 shops), Gajahmungkur (3 shops), Gayamsari (1 shop), Gunungpati (3 shops), Mijen (2 shops), Ngaliyan (2 shops),

Pedurungan (4 shops), West Semarang (2 shops), North Semarang (1 shop), and Tembalang sub-district (3 shops).
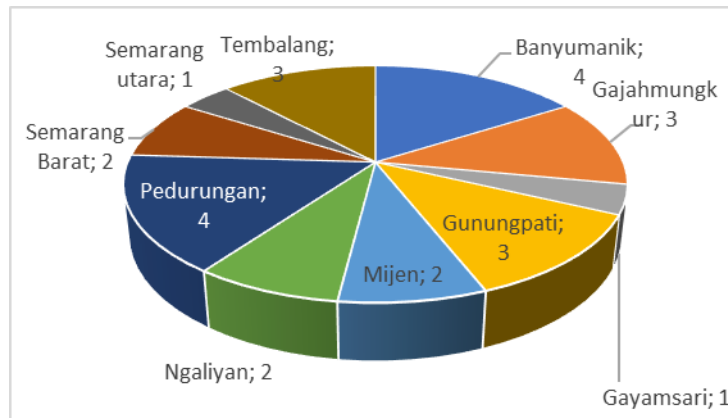

Figure 1. Distribution of Village teahouses in Semarang city
Source: Google maps (2024)

The use of digital applications by employees and tea business owners was also a reason for selecting the research subjects. In general, tea entrepreneurs use the "smart cashier" application to input, process transactions, and create financial reports. The process shows that digitalization in accounting has been implemented. The owners considered the app relevant for inputting and processing sales data. They also consider that the financial information generated can be used by the owners to make managerial decisions.

The study collected data on training and mentoring conducted by the owner to employees. These two efforts are considered as adaptive behaviors that are carried out to improve their abilities in accounting. Primary data came from the owner of the Village Tea Shop. Data collection methods were conducted through surveys and closed interviews. Both interviews and surveys were conducted directly (researchers filled out questionnaires) to the village tea shop owners. Training and mentoring conducted by the owner to employees related to the ability to carry out financial administration functions using the smart cashier application with units of days. Some of the questions asked for MSME owners were, (1) how many days does it take to train employees? and (2) how many days does it take to assist employees? Meanwhile, the questions for employees were whether you graduated from elementary school (SD), junior high school (SMP), senior high school (SMA) or vocational high school (SMK). The follow-up question for respondents (employees) who came from SMK is, what skill competency did you choose at SMK?.
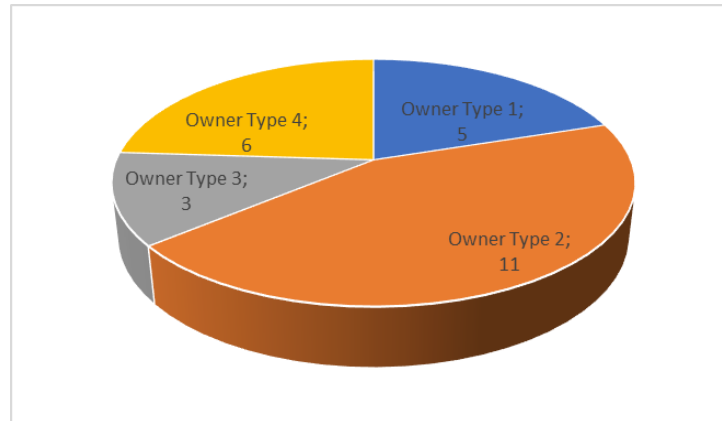
Figure 2. Distribution and classification of village teahouse owners
Source: Primary data from the survey (2024)

The classification was done to map the characteristics of business owners based on the employees employed. Type 1 owners (n=5) are a group of respondents (village teahouse owners) who employ group 1 employees (high school graduates who have received accounting subjects). Employees hired in this type are considered to have moderate level of accounting knowledge.

Type 2 owners (n=11) are the group of respondents who employ group 2 employees (elementary, junior and senior high school graduates who have never received accounting lessons). Employees hired in this type are considered to have a low level of accounting knowledge. Type 3 owners (n=3) are the group of respondents who employ group 3 employees (graduates of vocational schools with business and management competencies). Employees employed in this type are considered to have a high level of accounting knowledge. While type 4 owners (n=6) are the group of respondents who employ group 4 employees (graduates of vocational high school non-business and management skill competencies). Employees employed in this type are considered to have accounting knowledge at a low level or the same as employees employed by type 3 owners.

Results and Discussions

The results show that one of the factors affecting the time needed to train and assist employees is competence. Figure 3 shows that the average time needed to train employees to perform work related to product presentation and transaction data input in the group of employees with low accounting competence (group 2) is longer than that of employees with medium and high accounting competence. Figure 3 shows that the village tea shop owner takes an average of 1.6 days to train employees in group 1. Whereas for employees in groups 2, 3 and 4 the average training time required for each group is 2.6,

1.3, and 1.8 days. What is interesting about this finding is that the difference in days required by group 2 and group 4 employees is quite high (0.8). This difference is smaller than the difference in the number of days needed to train employees in groups 1 and 3 (0.3).
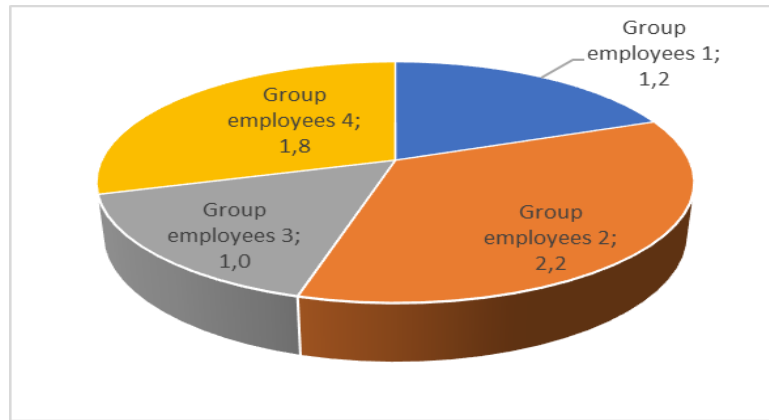

Figure 3. Time taken to train employees (days)
Source: Primary data processed (2024)

The statistical test results in table 1 show that the assumption of homogeneity is met (Sig. 0.883 or > 0.05) so that the difference test can be carried out. The aim was to see the difference in training time. The results of data analysis using One Way ANOVA show that the number of days needed (time) to train employees is significantly different (Sig. 0.003 or <0.05).

Table 1. Time required to train employees (days)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6,595	3	2,198	6,371	0,003
Within Groups	7,245	21	0,345		
Total	13,840	24			

Source: Primary data processed (2024)

The difference is significantly found in employees of group 1 with group 2 (0.031 or <0.05) and group 3 with group 2 (0.023 or <0.05).

Figure 4 shows that the average time needed to assist employees to do work related to product presentation and data input in the group of employees with low accounting competence (group 2) is longer than that of employees with medium and high accounting competence. Figure 4 shows that the village tea shop owner takes an average of 1.1 days to assist employees in group 1. Whereas for employees in groups 2, 3 and 4 the average assistance time required for each group is 2.2, 1.0, and 1.8 days. What is

interesting about this finding is that the difference in days required by employees in group 2 and group 4 is not very high (0.4). This is smaller than the difference in the number of days needed to mentor employees in groups 1 and 3 (0.2).
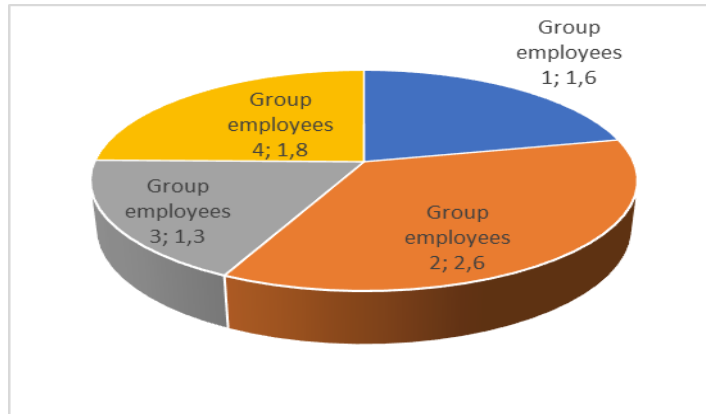

Figure 4. Time taken to assist employees (days)
Source: Primary data processed (2024)

The assumption of homogeneity was met (Sig. 0.187 or > 0.05) so that the difference test could be carried out. The aim is to see the difference in mentoring time. The results of data analysis using One Way ANOVA show that the number of days needed (time) to assist employees is significantly different (Sig. 0.008 or <0.05).

Table 2: Time required to assist employees (days)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5,290	3	1,763	5,094	0,008
Within Groups	7,270	21	0,346		
Total	12,560	24			

Source: Primary data processed (2024)

The results of data analysis using One Way ANOVA show that there is a difference in the number of days needed (time) to assist employees. The difference was significant between group 1 and group 2 employees (Sig. 0.045 or <0.05).

The lack of accounting competence of village tea shop employees has an impact on the owner's efforts to make employees have better work readiness (Rijal & Sopiah, 2023). The results showed that business owners need more time in providing training and assistance to employees who have never received knowledge about accounting (group 2). In addition, vocational high school graduates who come

from accounting majors have an advantage where the training and mentoring time carried out by the owner to them is relatively shorter than other groups (Fitriyani et al., 2023).

The competencies possessed by vocational high school graduates majoring in accounting are certainly influenced by the curriculum taught at school. vocational high school majoring in accounting generally adopt the Indonesian National Work Competency Standards or SKKNI (Destyawan & Handoyo, 2023). The decree of the minister of labor and transmigration of the Republic of Indonesia Number 182 of 2013 concerning the determination of SKKNI in the field of accounting illustrates that entry-level accounting work aims to produce accounting information that is accountable, correct, and reasonable. At the initial level, the achievement of this goal is highly dependent on skills in completing the accounting cycle both manually and with the help of technology (Husin, 2021).

Some of the units of competency that need to be mastered at this stage are (1) applying the Principles of Professional Practice in Work, (2) applying health and safety practices in the workplace, (3) processing journal entries, (4) processing general ledgers, (5) compiling financial reports, (6) operating number processing/spreadsheet program packages, and (7) operating accounting computer applications. The 7th competency unit in the SKKNI shows that the government has intervened in the application of digitalization in accounting (Aryanto et al., 2024). Based on this discussion, it is very natural that vocational high school graduates majoring in accounting have better competencies even though the number is not large. Further research is expected to provide an explanation of this phenomenon.

The results showed that with relatively similar accounting knowledge, vocational high school graduates tend to be more adaptable to work compared to SD, SMP and SMA graduates). This condition may be influenced by the vocational high school curriculum and differences in academic culture. At school (Hidayati et al., 2021). In terms of curriculum and learning, vocational high school graduates are directed to work immediately. So that in the learning process, the practical approach is emphasized. This condition may trigger adaptive behavior for certain types of work. The narrowness of the research area and the limited population are things that need attention in this study. For better results, further research can expand the population and research area so that the research results can be better generalized to provide an overview of the challenges of accounting digitalization in MSMEs.

Conclusion

The average time taken to train employees to perform work related to product presentation and transaction data input in the group of employees with low accounting competence (group 2) is longer than that of employees with medium and high accounting competence. Furthermore, the average time

needed to assist employees to perform work related to product presentation and data input in the group of employees with low accounting competence (group 2) is longer than that of employees with medium and high accounting competence. The number of days needed (time) to train employees between each group was significantly different. the number of days needed (time) to assist employees between each group was significantly different. The results showed that the lack of accounting competence of village tea shop employees had an impact on the owner's efforts to make employees have better work readiness through intensive training and mentoring. The limitation in this study is that the research subject is limited to the village tea shop. These limitations can have an impact on the limitations of generalization. Therefore, the recommendation for further research is to investigate other MSMEs so that generalization can be more accurate.

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