

Microsoft excel training to improve the ability of MSMEs in Ngagel Surabaya in managing financial data

Huki Chandra*, Paramaditya Arismawati, Ayu Endah Wahyuni, Afrienna Melani

*Department of Industrial Engineering, School of Industrial and System Engineering, Telkom University, Surabaya Campus, East Java, Indonesia 60231

ARTICLE INFORMATION

Article History:

Submission: 02-10-2024

Revised: 09-10-2024

Accepted: 02-11-2024

* Korespondensi:

Huki Chandra

hukichandra@telkomuniversity.ac.id

ABSTRACT

This Microsoft Excel training aims to improve the ability of MSMEs in Ngagel, Surabaya, to manage financial data efficiently and accurately. This activity focuses on using Microsoft Excel as a tool for recording and analyzing financial data to help MSMEs improve their financial administration systems. The training was held on September 25, 2024, and 47 participants participated, 92% of whom were MSMEs. The methods used included theory and direct practice sessions, as well as evaluation of effectiveness through pre-tests, post-tests, and participant satisfaction questionnaires. The evaluation results showed a significant increase from the pre-test to post-test scores, with the average score increasing from 66.9 to 76.2. The significance value of the Wilcoxon Sign Rank Test results obtained was 0.0001. This shows that Ms. Excel training participants' scores increased statistically significantly after training. In addition, the questionnaire results showed a high level of satisfaction, with an overall average score of 4 out of 5. These findings indicate that this training effectively improves participants' competence in managing finances using Excel. Based on these results, ongoing training with a longer duration is recommended to deepen participants' understanding.

Keywords: Financial data; microsoft excel trainings; MSMEs

1. INTRODUCTION

The increasingly sophisticated information and communication technology (ICT) requires every individual, especially business actors, to constantly update their skills to avoid being included [1]. One of the skills currently in great demand is computer proficiency, especially in data processing using Microsoft Excel. Microsoft Excel is a software commonly used on the Windows platform, especially for calculations and graphing, which is essential for business management [2]. Microsoft Excel is beneficial in supporting various administrative needs and data processing more accurately [3].

On the other hand, many MSME actors still face significant challenges in managing their finances. The inability to manage finances properly often leads to undetected losses [4]. Most MSMEs still rely on manual recording methods, which results in improper control of their financial operations [5]. In fact, in the modern era, MSMEs should have used tools such as Microsoft Excel to prepare faster, more efficient, and more accurate financial reports [6]. Using Excel, business actors can more easily report taxes and apply these reports to banks for credit [6].

MSMEs play a significant role in the Indonesian economy, especially since the majority of business units in this country are MSMEs. However, many of them have not mastered digital technology, which is one factor that inhibits business development [7]. The ability to manage and analyze data using Microsoft Excel can increase their productivity, especially when facing the



challenges of the significant data era [8]. Although Excel is a popular and easily accessible software, many MSMEs have not optimized it for their business evaluation and analysis [8].

As an illustration, more than 90% of Indonesia's total business units are MSMEs, but not all understand the importance of financial recording using applications such as Microsoft Excel. As a result, their business performance could be more optimal [9]. Microsoft Excel training is the key to increasing business capacity, especially in better financial management so that business finances can be controlled [10]. With manual methods, business actors often need help managing cash flow and face the risk of data loss, which complicates decision-making [10].

In addition, many MSMEs need to understand technology and proper financial management, which hinders their business development [11]. Therefore, Excel training can help them manage their finances more professionally and effectively [12]. Microsoft Excel also allows business actors to determine more accurate selling prices, which is crucial in business development [13].

This training provides a practical solution for MSMEs to use Excel efficiently and appropriately to create excellent and correct financial reports [14]. Regular recording will help MSMEs gain access to bank loans more quickly [14]. With the introduction of Excel, MSMEs can record transactions digitally, making their business operations more transparent and orderly [15].

The importance of Microsoft Excel training in Ngagel, Surabaya, is directly related to the needs of MSMEs to improve their financial management amidst the demands of the development of the digital economy. Many MSMEs in Ngagel still use inefficient manual recording methods, so they need this training to improve efficiency, accuracy, and transparency in financial management. Thus, this training is not only relevant but also crucial to help MSMEs in Ngagel compete in an increasingly digital economic ecosystem.

2. METHOD

Figure 1 shows the stages of activities in this community service. The first stage of this community service activity was to conduct observations in Ngagel, Surabaya. At this stage, the main focus was to identify and interact with local MSMEs to understand their interests and needs related to financial management training. By directly engaging with MSME actors, the team explored the challenges in managing finances, which would later become the basis for compiling training materials. After the observation stage, a community service team was formed. This team then submitted a community service proposal containing objectives, methods, and expected results. This step ensures that the project has precise planning and adequate resource support to be implemented.

The next stage is a comprehensive preparation for the community service event. This preparation includes creating training materials tailored to the needs of MSMEs, registering training participants, arranging schedules, and preparing the necessary facilities. In addition, the team also checked the condition of the training location and ensured that the computers to be used during the training were available and ready to use.

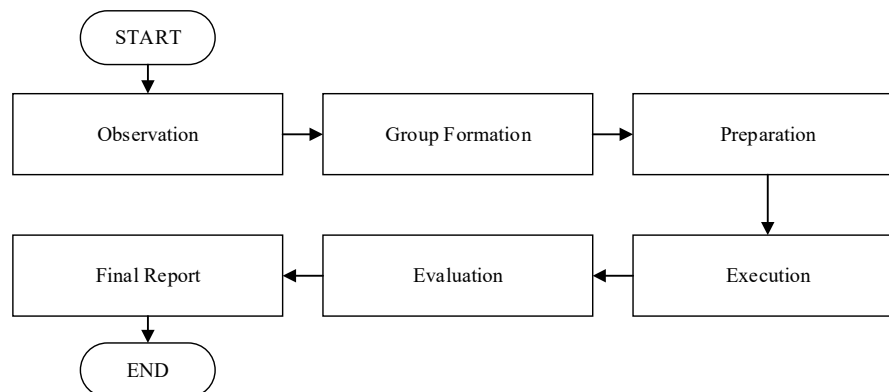


Figure 1. Stages of activities

The core of this community service activity is implementing training and practice. Training sessions involving students, lecturers, and laboratory assistants were carried out on a predetermined

schedule. This training combines theoretical material with practical exercises, including financial data management simulations. After the training, participants can ask questions and do hands-on practice to deepen their understanding.

After the training, the effectiveness of the activity is evaluated. This stage aims to assess the implementation of the training and the level of understanding and satisfaction of the participants. Feedback from the evaluation results is significant in identifying areas for improvement in future training programs. The last stage of this community service is preparing a comprehensive final report. This report includes the results of the entire series of activities, including a detailed evaluation of success and areas that need to be developed in future community service activities.

3. RESULTS AND DISCUSSION

Microsoft Excel training was held at the Telkom University Surabaya Laboratory on September 25, 2024. This training has been completed and attended by 47 MSME participants from 53 registrants. The Excel training that was carried out aims to improve competency in terms of financial data management. This activity is one of the solutions to the problems partners face, namely the need for more competence to manage finances using the Microsoft Excel application. Of the 47 participants who attended, 39 took the pre-test and post-test and filled out the satisfaction questionnaire. Of the 39 participants, 92% came from MSME backgrounds and 8% from students' backgrounds. The average age of the training participants was 41.3 years. Figure 2 shows a visualization of the characteristics of the respondents. Table 1 shows the results of descriptive statistics, namely the average and standard deviation of the participants' pre-test and post-test scores. Table 3 depicts the percentage of correct answers in the pre-test and post-test.

Based on the questionnaire results, the average pre-test score was 66.9, with a standard deviation of 12.0, while the average post-test score was 76.2, with a standard deviation of 11.5. The normality test found that the data were not normally distributed. Therefore, the Wilcoxon Sign Rank Test method was used to determine whether there was a significant difference in the pre-test and post-test scores.

Respondents' Profiles

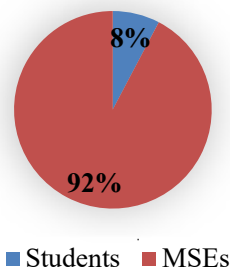


Figure 2. Respondents' profiles

Table 1. Descriptive statistics

Variable	Mean	St. Deviation
Pre-Test Score	66.9	12.0
Post-Test Score	76.2	11.5

Table 2. Percentages of correct answers

Correct Answers (%)	Frequency	
	Pre-test	Post-test
40	3	0
50	3	3
60	9	0
70	12	18
80	12	6
90	0	12

Based on the questionnaire results, the average pre-test score was 66.9, with a standard deviation of 12.0, while the average post-test score was 76.2, with a standard deviation of 11.5. Based on the normality test, it was found that the data were not normally distributed. Therefore, the Wilcoxon Sign Rank Test method was used to determine whether there was a significant difference in the pre-test and post-test scores. The significance value of the Wilcoxon Sign Rank Test results obtained is 0.0001. This shows that Microsoft Excel training participants' scores increased statistically significantly after training. Therefore, this Microsoft Excel training can dramatically improve participants' ability to process financial data. Table 4 shows the satisfaction survey results based on responses from participants who took Microsoft Excel training.

Table 3. Wilcoxon signed rank test

Hypothesis	Gap	Sig.	Decision
H1: There was a significant difference between the participants' initial and final test scores	4.73	<0.0001	Reject H ₀

Table 4. Results of Ms. Excel training satisfaction survey

Questionnaire Items	Rating
1. Activity materials are in line with the needs of partners/participants	4
2. The time for implementing this activity is relatively appropriate and sufficient.	3.1
3. The material and activities presented are clear and easy to understand.	4
4. The committee provided good service during the activity	4.2
5. The community accepts and hopes that activities like this will continue in the future.	4.7
Overall Satisfaction Rating	4

Based on 39 respondents who have provided feedback on the satisfaction questionnaire from the Microsoft Excel training, the overall result satisfaction score obtained is 4 out of 5, which means that participants agree that this community service provides benefits to the partners involved and feel quite satisfied with the training that has been carried out. Improvements that can be made for the next program are to increase the duration of the training. According to the questionnaire results, participants felt that the training was done according to their needs and that ped training activities could be carried out again. The training was also delivered in a language that was easy for participants to understand so that they could easily apply the skills implemented by the training participants according to their respective needs. Overall, the committee has provided the best service for the participants, as seen from the satisfaction results, which average above 4.

4. CONCLUSION

Microsoft Excel training for MSMEs in Ngagel successfully achieved its primary objective: to improve participants' ability to manage financial data digitally. The training results showed a significant increase in participants' abilities, as evidenced by the substantial difference in pre-test and post-test scores. In addition, the level of participant satisfaction was also high, with most stating that this training was relevant to their needs. For future development, it is recommended that the training duration be extended and that this program be held continuously to strengthen the implementation of technology-based financial management among MSMEs.

5. ACKNOWLEDGEMENT

We want to thank Telkom University for funding and supporting the community service activity in Microsoft Excel training to MSMEs so that this training activity can be carried out well.

6. REFERENCES

- [1] N. D. Qadarsih and Maimunah, "Pelatihan Komputer MS Office Bagi Remaja Karang Taruna RW 010 Rorotan," *J. Pengabd. dan Keberlanjutan Masy.*, vol. 1, no. 2, pp. 85–90, 2024, doi: <https://doi.org/10.62383/bersama.v1i2.146>.
- [2] and H. A. H. Hartini, E. Apriyanti, "Pelatihan Microsoft Office kepada Remaja di Desa Kindang," *PakMas (Jurnal Pengabd. Kpd. Masyarakat)*, vol. 2, no. 1, pp. 57–62, 2022, doi: [10.54259/pakmas.v2i1.815](https://doi.org/10.54259/pakmas.v2i1.815).
- [3] F. F. Addini and D. Haryanto, "Pelatihan Microsoft Excel Untuk Remaja di Desa Segara Makmur," *J. Pengabd. Masy. Multidisiplin*, vol. 6, no. 3, pp. 307–314, 2023, doi: <https://doi.org/10.36341/jpm.v6i3.3310>.
- [4] and H. W. R. A. Zunaidi, A. E. Wahyuni, R. D. Prihardianto, F. Tajtibra, D. D. P. Setiawan, Y. M. Ardianto, R. Nurhalissa, "Urgensi pencatatan keuangan digital berbasis ponsel pada UMKM di kota surabaya," *BEMAS J. BERMASYARAKAT*, vol. 3, no. 2, pp. 141–147, 2023, doi: [10.37373/bemas.v3i2.330](https://doi.org/10.37373/bemas.v3i2.330).
- [5] K. P. Pamungkas and R. S. R. A., "Penerapan aplikasi " Si Apik " dalam penyusunan laporan Keuangan UMKM Kecamatan Regol Kota Bandung," *BEMAS J. BERMASYARAKAT*, vol. 5, no. 1, pp. 15–22, 2024, doi: [10.37373/bemas.v5i1.1012](https://doi.org/10.37373/bemas.v5i1.1012).
- [6] and N. H. I. Wulandari, D. Zaman, M. I. Kurniawan, "Digitalisasi Keuangan UMKM : Pelatihan Pembuatan Laporan Keuangan Praktis dengan Microsoft Excel untuk Daya Saing yang Lebih Baik," *J. Abdi Masy. Nusant.*, vol. 2, no. 1, pp. 20–25, 2024, doi: <https://doi.org/10.61754/jusdiasra.v1i1.48>.
- [7] R. Wahrini and Hasbi, "Financial Bookkeeping Training with Microsoft Excell for Chicken Farming UMKM in Parepare," *COMMUNITY J. Has. Penelit. dan Pengabd. Masy.*, vol. 3, no. 1, pp. 25–32, 2024, doi: <https://doi.org/10.61166/community.v3i1.74>.
- [8] and R. P. P. Yuningsih, L. Andriani, L. Firdaus, D. Nugroho, "Improving SMEs Business Productivity with Microsoft Excel Training in the Big Data Era," *J. Soc. Sci. Technol. Community Serv.*, vol. 5, no. 2, pp. 448–459, 2024, doi: <https://doi.org/10.33365/jsstcs.v5i2.4720>.
- [9] and A. P. A. T. Adriyanto, W. Saddewisasi, "Pelatihan Pembukuan Sederhana Berbasis Microsoft Excel Pada Usaha Mikro Kecil Dan Menengah (Umkm) Kota Semarang," *J. Pengabd. Kpd. Masy. Radisi*, vol. 03, no. 02, pp. 46–52, 2023, doi: <https://doi.org/10.55266/pkmradisi.v3i2.308>.
- [10] and D. M. F. Rizal, A. R. Y. Mamase, "Pelatihan Penerapan Microsoft Excel Sebagai Usaha Untuk Meningkatkan Pengelolaan Keuangan Pada Usaha Kecil Menengah dan Mikro (Umkm) Kedai Papa Krenyeszzz di Kota Pontianak," *JPKMM J. Pengabd. Kpd. Masy. Manaj.*, vol. 2, no. 1, pp. 13–17, 2022.
- [11] and S. K. D. S. Wulandari, N. Yuningsih, E. Widayanti, "Pelatihan Penyusunan Laporan Keuangan Berbasis Microsoft Excel Menuju UMKM Naik Kelas," *MENGABDI J. Has. Kegiat. Bersama Masy.*, vol. 2, no. 1, pp. 75–84, 2024, doi: <https://doi.org/10.61132/mengabdi.v2i1.347>.
- [12] W. I. Sari and D. Sunarsi, "Pelatihan Penyusunan Laporan Keuangan Berbasis Ms Excel Bagi UMKM Mochi Musa," *J. PADMA Pengabd. Dharma Masy.*, vol. 3, no. 2, 2023.
- [13] and S. M. R. E. Siska, N. E. P. Lestari, L. Elvira, "Pelatihan Ms . Excel untuk Pricing Decisions pada Koperasi UKM Tajurhalang Makmur Bogor di Masa Pandemi Covid-19," *JPKMI (Jurnal Pengabd. Kpd. Masy. Indones.)*, vol. 2, no. 1, pp. 63–72, 2022.
- [14] and H. N. Azuwandri, Gustini, M. B. E. Putra, S. Akmal, "Pelatihan Pembuatan Laporan Keuangan UMKM Menggunakan Aplikasi Microsoft Excel Di Desa Selebar Jaya Kecamatan Amen Kabupaten Lebong," *J. Semarak Mengabdi*, pp. 41–46, 2024.
- [15] and N. R. F. Santi, J. R. Sari, "Pengenalan Pembukuan Sederhana Secara Manual dan Microsoft Excel Pada Pelaku Usaha Mikro Kecil Menengah (UMKM) di Kelurahan Talang Ulu," *J. Pengabd. Masy. Ekon. dan Bisnis Digit.*, vol. 1, no. 1, pp. 14–22, 2024.