

Information Technology Training Towards Digital MSMEs (Collaboration with the Bangli District Cooperative and MSMEs office)

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Abstract – The transformation of information technology is so rapid that it spurs MSMEs to be adaptive to the transformation of digital MSMEs. The main problem of MSMEs in Bangli today is the less than optimal utilization of digital technology such as social media, e-commerce and the use of artificial intelligence. In fact, in the current era, everything becomes more practical if you are capable and adaptive in using these various platforms to support MSME business processes. Moving on to answer the challenges of this problem, the Bangli Regency Cooperative and MSME Office collaborated with STMIK Primakara to organize information technology training to provide insight and tips for MSMEs to do their business. Finally, based on the evaluation results of the Pre-Test and Post-Test, it shows an increase in insight and skills of MSME participants by 48% from 44% to 92%. It is hoped that this MSME advancement program can be sustainable to support the transformation of digital and adaptive MSMEs.

Keywords: Digital; Artificial Intelligence; Strategy; Training; MSMEs

1. INTRODUCTION

In the rapidly growing digital era, information technology is one of the most important factors in supporting business growth, especially on the scale of micro, small and medium enterprises (MSMEs). Digitalization is the process of transforming traditional businesses into digital forms, by utilizing information technology as a link between businesses and customers. Information technology provides many benefits for MSMEs in digitizing their businesses (Prananingrum et al., 2023). First, information technology makes it easier for MSMEs to introduce their products and services to the global market through digital platforms (Diansyah et al., 2017; Fujianti et al., 2019). By utilizing social media and websites, MSMEs can promote their products and services to potential customers around the world at a relatively lower cost compared to conventional means.

Secondly, information technology also helps MSMEs in improving operational efficiency. By using digital software and applications, MSMEs can speed up business processes such as financial recording, inventory management, production management, and delivery of goods (Abdurrahman et al., 2020; Anindia Putra et al., 2019; Kurniawan, 2020). This can speed up response time to customer requests, improve product quality, and lower production costs. Third, information technology also enables MSMEs to understand customers and markets better (Atmojo, 2022; Handayani et al., 2021; Mahpuz et al., 2021). By analyzing data from customers and markets, MSMEs can gain better insights into customer needs and preferences, as well as emerging market trends. This allows MSMEs to improve their marketing strategies and tailor their products and services to market demands. Overall, information technology is crucial for MSMEs in accelerating the business digitization process. By utilizing information technology well, MSMEs can improve operational efficiency, expand markets, and understand customers and markets better (Handayani et al., 2021). Therefore, the use of information technology should be one of the priorities for MSMEs that want to survive and thrive in the digital era.

The Bangli Regency Cooperative and MSME Service (DISKOP Bangli) is a regional apparatus organization that nurtures MSMEs in Bangli district. DISKOP Bangli has a moral

responsibility to provide facilitation, assistance, and promotion of MSMEs towards digitally capable and economically independent MSMEs. To realize this vision and mission, DISKOP Bangli organizes information technology training activities for MSMEs by collaborating with STMIK Primakara. On this occasion, STMIK Primakara was given full trust and opportunity to provide training to MSMEs in Bangli for four days. After DISKOP Bangli and STMIK Primakara discussed, it was found that MSMEs in Bangli were still struggling to use digital technology, be it using social media, utilizing e-commerce platforms, using artificial intelligence and market segmentation. In fact, Bangli district is an area that is very rich in natural resources. Bangli has natural beauty in the form of Mount Batur, Lake Batur, and abundant plantations. However, the potential of this natural wealth has not been able to be utilized properly and the scope of sales of these MSMEs is also limited to the local area which has not been able to penetrate the wider market.

This community service aims to provide insight and brainstorming on the utilization of information technology through this training. It is hoped that MSMEs will be able to utilize this technology to facilitate their processes in doing business. In addition, the rapid development of technology provides a wide range of space for MSMEs in marketing their products. Then, many tools can be used in creating content design, copywriting, and creative content through artificial intelligence.

2. IMPLEMENTATION METHOD

2.1 Place and Time of Implementation

The implementation of this community service is located at the Job Training Center, Tiga Village, Banjar Kayuamba, Handayani Street, Bangli Regency. The activity schedule was carried out for four days from April 11, 2023 - April 14, 2023 with a duration of eight hours per day starting from 09.00 - 16.00 WITA. The total number of participants was 50 representatives of MSMEs who have diverse business backgrounds such as culinary, fashion, crafts, tour guides, and others.

2.2 Community Service Methods

Institutional techniques, discussion approaches, participatory approaches, and training implementation are the strategies employed to carry out this community service (Nuraini, 2023). By speaking with partners, in this case DISKOP Bangli, the institutional approach is used to pinpoint the specifics of the issue that has to be resolved. The institutional approach emphasizes communication in solving problems together (Kisworo & Shauki, 2019). The following technique uses a discussion-based approach, where issues that have already been identified will be discussed and potential solutions will be offered. A participative technique is employed once the parties have accepted the proposed solution. According to Borman et al. (2020), the participatory method emphasizes partner participation in the execution of planned activities.

2.3 Stages of Community Service

This community service activity is in the form of training, starting from preparation to evaluating activities. The stages of the activity are shown in Figure 1 below:



Figure 1. Stages of Community Service

Based on Figure 1, the details of each stage are as follows:

a. Activity Preparation

1. Coordinate and discuss with DISKOP Bangli in terms of planning activities to be carried out in the form of materials, learning targets, learning outcomes and background of MSME participants.
2. Identify problems and determine the formulation of MSME problems to find solutions.
3. Carry out socialization and explain activity planning.

b. Activity Implementation

The materials provided during the activity:

1. Providing digital strategy material related to what strategies are effectively used.
2. Provide examples of relevant strategy case studies. For example, Karens Dinner restaurant went viral because of a strategy that cursed customers on TikTok. Thus, making customers curious to try the sensation of being cursed by Karens Dinner.
3. Introducing Artificial Intelligence tools such as ChatGPT to help create promotional captions and interesting copywriting on social media and introducing Steve AI in terms of creating promotional videos practically using AI with insert captions.

c. Monitoring and Evaluation

The implementation of monitoring is carried out by observing the activities of the training participants during the activity. For evaluation using Pre-Test and Post-Test, where participants before and after the activity were given questions related to knowledge about digital strategy and artificial intelligence. This test is conducted to determine whether this training has a positive impact in terms of increasing understanding of the material, skills in using technology and its sustainability.

d. Identifying Constraints

The last stage was carried out to identify problems experienced during the activity as suggestions for improving the implementation of the next training.

3. RESULTS AND DISCUSSION

3.1 Activity Preparation

Preparation begins with coordination and discussion with DISKOP Bangli as a community service collaboration partner. After both parties between DISKOP Bangli and STMIK Primakara agreed and agreed to the implementation of community service activities in the form of information technology training, then analyzed the problems and determined the formulation of problems to provide solutions. The main problem of MSMEs is that they have not maximized the use of technology, especially digital and artificial intelligence in their business processes. Therefore, this training emphasizes learning the use of digital technology such as social media (Instagram, TiktTok and Facebook), learning to use artificial intelligence tools such as ChatGPT (helps in the process of making interesting captions and copywriting) and Steve AI (helps in the process of making practical sales videos). Finally, the MSMEs were taught about market segmentation, so that they market their products more targeted and according to customer segments.

This training can be useful in terms of increasing the capacity and skill of utilizing technology to the fullest. This training also added to the participants' insight that now is the time to be practical. In the past, making designs was very difficult and took relatively long to learn, such as Photoshop and Corel Draw. But now there are platforms like Canva that are much more practical in creating attractive designs.

3.2 Activity Implementation

The training materials were prepared by adjusting the needs of MSMEs based on the analysis and identification of needs that had been carried out previously with DISKOP Bangli. The implementation of activities, activity materials and learning outcomes are presented in Table 1.

Table 1. Activity Schedule

Implementation Time	Training Materials	Learning Outcomes
First Day Training April 11, 2023 09.00 - 16.00	Digital Mindset and Brainstorming	Fundamentally understand digital marketing and its importance.
Second Day Training April 12, 2023 09.00 - 16.00	Digital strategy	Tips for an effective digital strategy hack; reflecting on case studies of Toyota, Karens Dinner, MIXUE and regional specialties; mapping customer segmentation.
Third Day Training April 13, 2023 09.00 - 16.00	Copywriting	Learning AI tools with ChatGPT to help create promotional caption narratives on social media.
Fourth Day Training April 14, 2023 09.00 - 16.00	Optimizing the use of social media and e-commerce platforms	Creating AI-assisted content such as Steve AI that can create practical promotional videos; fully understanding the use of social media such as Instagram, Facebook and TikTok to maximize advertising and sales; and effective e-commerce selling tips.

Table 1 shows the implementation of community service training conducted. Community service activities were carried out at the Job Training Center, Bangli with a resource person of 1 lecturer and assisted by 2 students. The first day of training explained about digital mindset material. This material begins by explaining what digital transformation is and what is the importance of using digital technology. On this occasion, MSMEs were also given a fundamental understanding of digital and its benefits. For example, people will be more efficient selling using social media rather than brochures. Brochures consume so many resources, such as the cost of printing brochures to have to stand on the side of the road. Then the MSMEs were taught about the use of Search Engine Optimization (SEO) to maximize sales at the top of the search rankings.

After the presentation of the digital mindset, it was continued with digital strategy material. This material teaches MSMEs to choose the right strategy. There are so many marketing strategies such as viral marketing, email marketing, content marketing, and others. In this session, participants were also given various case studies to further sharpen their understanding of digital strategy implementation. For example, Karens Dinner. People do not focus on the taste, but the curiosity when cussed by Karens Dinner employees. Karens Dinner's strategy is to cuss out customers who make this restaurant viral on TikTok, so that people flock to Karens Dinner just because they are curious about being cussed out, not because they are curious about the taste. Figure 2 shows the activities of MSME participants participating in the training.



Figure 2. Training Implementation

Then, for the second day of training, MSME participants received material on digital strategy. On this second day of training, participants were taught various digital strategies that are appropriate for the promotion of MSMEs. For example, using a trend marketing strategy. This strategy is intended to optimize sales when there is a booming trend. For example, the G20 event in November 2022 yesterday, MSMEs with a background in crafts, souvenirs, and fashion can take advantage of this opportunity to sell their products. Moreover, Bali was visited by a group of heads of state in the world. On the other hand, during the training, the participants were very enthusiastic in discussing and listening to the material.

On the third day, the participants were taught about copywriting material using AI tools, namely ChatGPT. Initially, many participants were curious about this AI application, after practicing and trying, the participants were surprised and felt happy that there was an AI application like this that made it easy for them to create interesting promotional captions without thinking for a long time. The participants also explored independently according to their needs and met the expected expectations.



Figure 3. Tutorial on using GPT Chat to request for caption creation.



Figure 4. Tutorial on using Steve AI to create practical promotional videos.

Finally, on the fourth day, participants were taught about optimizing the use of social media and e-commerce. The participants were taught to utilize social media for promotional advertising, responding to customers and posting business content. They were also taught to use Reels on Instagram and create short videos on TikTok. In addition, the participants were also equipped with optimizing the use of e-commerce as a widely used sales platform, so that the market reach becomes wider.

3.3 Monitoring and Evaluation

During the training activities, monitoring was carried out through direct observation. Based on observations, the participants were enthusiastic in participating in the training. Even in the discussion session, many participants showed their seriousness in participating in the training by discussing in depth.

The evaluation was carried out by comparing the results of the Pre-Test and Post-Test, where each participant before and after attending the training was given questions about the material at each meeting. This was done in order to know the increase in knowledge and insight of the participants. The questions asked were related to the materials that had been delivered for four days, totaling 40 questions. The results of the participants' answers were then made in percentage form and the average percentage value was sought. The results of the percentage of the average value of the Pre-Test and Post-Test are presented in Figure 5.

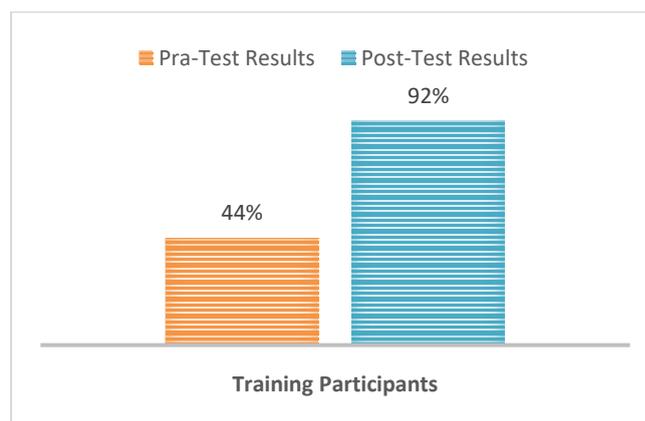


Figure 5. Test Results

It can be seen in Figure 5 that the results of the Pre-Test average score was 44% while for the Post-Test the average score was 92%. This shows that there was an increase in the knowledge and insight of the participants by 48%.

3.4 Identifying the Problem

The obstacles encountered during the training were the distance between the projector and the participants, which made it difficult for the participants to see the powerpoint slides, so the resource person had to read and explain. The next obstacle was the operator. Initially, the resource person would display the tutorial using a personal laptop that had been prepared, but it could not be connected to the projector, so the resource person switched to using the operator's laptop, which made the resource person rush to prepare materials on the operator's laptop. However, despite these obstacles, the training was able to run smoothly, filled with the enthusiasm of the participants.



Figure 6. Group photo with DISKOP Bangli and MSMEs

4. CONCLUSION

Community service activities for MSMEs in Bangli district have been carried out well followed by the enthusiasm of the participants. The Bangli Regency Cooperative and MSME Office collaborates with STMIK Primakara to have the same vision and spirit to encourage the advancement of MSMEs into digital MSMEs. The MSMEs have received a lot of material and practice related to the digitalization of MSMEs during the four-day training, both on digital mindset, digital strategy, copywriting and optimization of social media and e-commerce. They were also taught to utilize artificial intelligence tools that make it easier for them to create promotional content. Based on the results of the Pre-Test and Post-Test with a significant increase from 44% to 92%, it shows that there is an increase in participants' insights and understanding regarding the digitalization of MSMEs. We hope that this community service collaboration will continue. STMIK Primakara as a campus with IT excellence always contributes to the community as a form of devotion from the *Tri Dharma Perguruan Tinggi*.

REFERENCES

- Abdurrahman, G., Oktavianto, H., Habibie, E. Y., & Hadiyatullah, A. W. (2020). Pelatihan Digital Marketing Pada UMKM Sebagai Penunjang Kegiatan Promosi Dan Pemasaran. *Jurnal Pengabdian Masyarakat Manage*, 1(2), 88–92. <https://doi.org/10.32528/jpmm.v1i2.3981>
- Anindia Putra, I. N. T., Kartini, K. S., & Dewi, L. G. K. (2019). Sentuhan Digital Bisnis (Teknologi Informasi) pada UMKM Studi Kasus : Pemasaran Produk Adi Upakara. *International Journal of Natural Science and Engineering*, 3(2), 79. <https://doi.org/10.23887/ijmse.v3i2.22225>
- Atmojo, M. E. (2022). Pemberdayaan UMKM Melalui Pemanfaatan Teknologi Informasi. *Dinamisia : Jurnal Pengabdian Kepada Masyarakat*, 6(2), 378–385. <https://doi.org/10.31849/dinamisia.v6i2.8214>
- Borman, R. I., Yasin, I., Darma, M. A. P., Ahmad, I., Fernando, Y., & Ambarwari, A. (2020). Pengembangan Dan Pendampingan Sistem Informasi Pengolahan Pendapatan Jasa Pada PT. DMS Konsultan Bandar Lampung. *Journal of Social Science and Technology for Community Service*, 1(2), 24–31.
- Diansyah, R., Syahril, S., Aryanto, A., Arribe, E., & Winarso, D. (2017). PENGUATAN UMKM MELALUI PELATIHAN BLOG. *Jurnal Pengabdian UntukMu NegeRI*, 1(2), 1–7. <https://doi.org/10.37859/jpumri.v1i2.223>
- Fujianti, L., Wulandjani, H., & Susilawati. (2019). Peningkatan Keterampilan Akuntansi Berbasis Teknologi Informasi Bagi UMKM Batik Cirebon. *SULUH: Jurnal Abdimas*, 1(1), 21–27. <https://doi.org/10.35814/suluh.v1i1.947>
- Handayani, E., Sari, P. P., & Islami, M. J. (2021). Pemanfaatan Teknologi Informasi dan Komunikasi (TIK) oleh UMKM pada Masa Pandemi COVID-19. *Jurnal Komunika: Jurnal Komunikasi, Media Dan Informatika*, 10(2), 113. <https://doi.org/10.31504/komunika.v10i2.4622>

- Kisworo, J., & Shauki, E. R. (2019). TEORI INSTITUSIONAL DALAM PENYUSUNAN DAN PUBLIKASI LAPORAN TAHUNAN SEKTOR PUBLIK (STUDI KASUS PADA KEMENTERIAN DAN LEMBAGA NEGARA DI INDONESIA). *Indonesian Treasury Review Jurnal Perbendaharaan Keuangan Negara Dan Kebijakan Publik*, 4(4), 305–321. <https://doi.org/10.33105/itrev.v4i4.157>
- Kurniawan, P. S. (2020). Sosialisasi dan Pelatihan Penyusunan Laporan Keuangan Berbasis Teknologi Informasi bagi Pelaku UMKM di Desa Belatungan, Pupuan, Bali. *E-Dimas: Jurnal Pengabdian Kepada Masyarakat*, 11(4), 440–446. <https://doi.org/10.26877/e-dimas.v11i4.3981>
- Mahpuz, M., Bahtiar, H., Fathurahman, F., & Nur, A. M. (2021). Pelatihan pembinaan UMKM berbasis Teknologi Informasi untuk meningkatkan SDM pelaku UMKM. *ABSYARA: Jurnal Pengabdian Pada Masyarakat*, 2(2), 212–219. <https://doi.org/10.29408/ab.v2i2.4206>
- Nuraini, R. (2023). Pelatihan Pengenalan Teknologi Informasi dan Komunikasi Untuk Meningkatkan Pengetahuan dan Wawasan Pada SMPN 7 Purwakarta. *Journal of Social Sciences and Technology for Community Service*, 4(1), 112–118.
- Prananingrum, L., Agustin, S. K., Sugiarti, R., & Suryansyah, I. (2023). Pendampingan Dan Pelatihan Pada Umkm Dapur Ummu Yahya Berbasis Teknologi Informasi Dan Komunikasi. *ABDI MOESTOPO: Jurnal Pengabdian Pada Masyarakat*, 6(1), 37–45. <https://doi.org/10.32509/abdimoestopo.v6i1.2361>