

The Gamification of Online Course to Increase Digital Marketing Skills of MSMEs in Sukabumi

ALDILA RIZKIANA¹, ZAHRA KHALISABIRA²

¹ Jurusan Teknik Industri, Institut Teknologi Bandung

² Jurusan Manajemen Rekayasa, Institut Teknologi Bandung

Email: aldila@itb.ac.id

Received 10 April 2023 | Revised 29 May 2023 | Accepted 31 May 2023

ABSTRACT

The various platforms and social media available for selling online create the need for MSMEs to study and analyze the most effective platforms or social media to sell online. The gamified online learning platform is one of the solutions to make learning more easily accessible and sustainable. We followed Gamification Service Framework Application Model, from problematization, building, intervention, and evaluation to design the gamified online learning platform. The gamified online learning platform we developed proved to increase MSMEs' digital marketing skills effectively. The participants have 82.8% of completion level and an average overall quiz score of 75.3 out of 100. The benefit of gamified digital marketing online course we held in Sukabumi includes gaining new digital marketing knowledge, building the network, increasing production capacity, and marketing reach. Some drawbacks to using gamified digital marketing online courses include lack of interaction, material variation, continuous guidance, and obsolete information.

Keywords: digital marketing, gamification, online learning

1. INTRODUCTION

MSMEs have an essential role in the Indonesian economy. Based on data from the Ministry of Cooperatives and Small and Medium Enterprises in 2018, there were 64.2 million MSMEs in Indonesia with a contribution to GDP (Gross Domestic Product) of 8,573.89 trillion rupiahs or 61.07% of Indonesia's GDP. In addition, MSMEs contribute to 97% of the workforce and 60.4% of the total investment (BKPM, 2021). The critical role of MSMEs in Indonesia's economy makes the government focus on developing MSMEs by making MSMEs the target of the National Economic Recovery program. The government has allocated 123.46 trillion rupiahs to implement several policies in the financial sector, such as loan interest subsidies, credit restructuring, providing working capital guarantees, and tax incentives (**Coordinating Ministry for Economic Affairs, 2021**). In addition to financial assistance, synergies are also needed to improve the performance of MSMEs, especially in the production, marketing, packaging, and quality of human resources.

One of the cities that focus on developing the potential of MSMEs is Sukabumi. Based on **Open Data Jabar (2022)**, there are 53,979 MSMEs in Sukabumi. One of the efforts to develop the potential of MSMEs in Sukabumi is to strengthen the digital marketing skills of MSMEs to cover

a broader market. Initially, digital marketing was defined as the projection of conventional marketing activities with the internet as the medium. However, digital marketing is more than just a conventional marketing projection. Today, digital marketing can be defined as combining customization and mass distribution to achieve marketing goals. A business unit needs to ensure that it has a digital presence and a distinctive impression in order to be able to compete with other business units **(Piñeiro-Otero & Martínez-Rolán, 2016)**. This digital presence can be built through online stores on e-commerce platforms and social media. E-commerce platforms commonly used in Indonesia include Blibli, Bukalapak, JD.id, Lazada Indonesia, Shopee, and Tokopedia. Then the social media commonly used in Indonesia are WhatsApp, Instagram, Facebook, TikTok, and Telegram. The various platforms and social media available make MSMEs need to study and analyze the most effective platforms or social media to be used as online stores for their businesses, including learning how to make the best use of each platform.

In general, training is used to fill the gap between formal education and the ability to apply knowledge to achieve specific goals. Training can be conducted in a variety of media, including using online learning platforms **(Urbancová et al., 2021)**. Based on historical data, in 2020, the Sukabumi City Government carried out e-commerce training for MSMEs. In the following year, 2021, an Economic Recovery Community Service activity was carried out to develop MSMEs' marketing competencies, which was attended by 28 MSMEs. The learning outcomes from the training showed positive results for MSMEs from the training participants. Then, in 2022, we will develop a gamified online learning platform to make learning more easily accessible and sustainable. Based on previous researches, gamification could change behavior **(Mulcahy et al., 2020)**, improve user involvement **(Kuo & Chuang, 2016)**, and enhance user positive emotion **(Mullins & Sabherwal, 2020)**.

2. METHODS

We follow Gamification Service Framework Application Model from **Klapztein and Cipolla (2016)** to design the online website (Figure 1). This framework has four main steps: problematization, building, intervention, and evaluation.

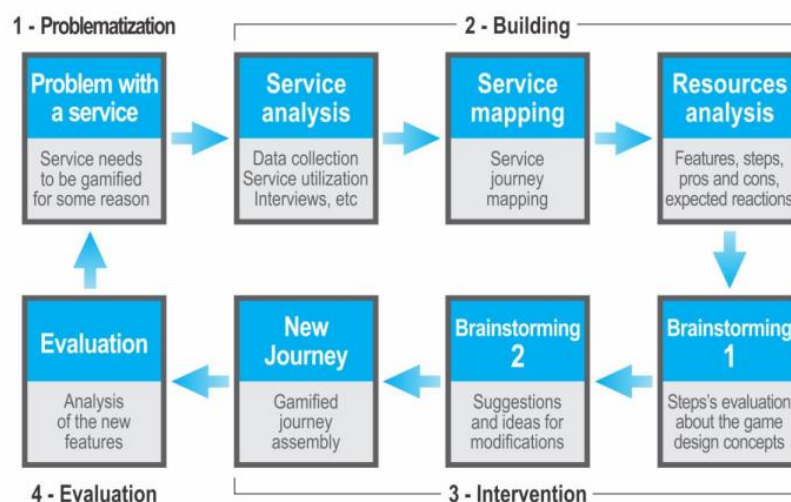


Figure 1. Gamification Service Framework Application Model (Klapztein & Cipolla, 2016)

2.1 Problematisation

In this step, we identify the service that needs to be gamified. We want to gamify the online learning website that MSMEs can use to learn digital marketing. Online learning is used instead of offline learning because we want the learning materials to be easily accessible by MSMEs anytime they have free time and anywhere they are located. Online learning also enables MSMEs to access learning materials at low or no cost. The online learning website's gamification allows us to increase participants' motivation and engagement to complete the learning materials (**Antonaci et al., 2019**).

2.2 Building

We build the website using WordPress, using two main plugins, LearnDash for building an online learning platform and MyCred for gamification. The website can be accessed through www.umkm.citraleka.id. The website's interface (all in Indonesian because it is designed for MSMEs in Indonesia) can be seen in Figure 2 and Figure 3.



Figure 2. Homepage of Online Learning Website

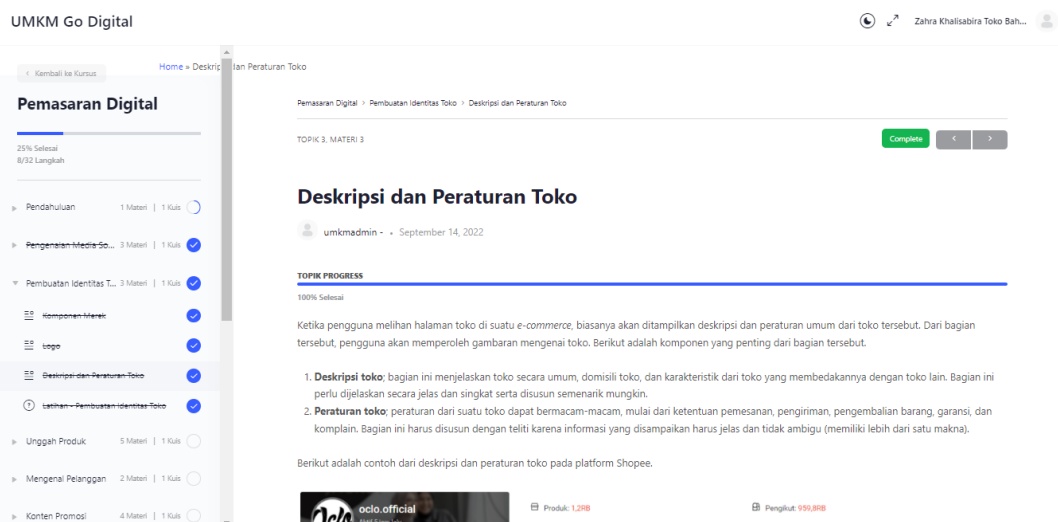


Figure 3. Content of Online Learning Website

The online learning platform consists of 8 topics and 22 subtopics, accompanied by a quiz on each topic. The details for the topics and subtopics can be seen in Table 1

Table 1. Content of Online Learning Website

Topics	Subtopics	Details
The Introduction of social media and E-commerce	Selling through social media and e-commerce	What is an example of social media and e-commerce platforms for selling the products
	Creating e-commerce account	How to create a Shopee account
	Creating social media account	How to create an Instagram account
Designing store identity	Brand	What are the brand components
	Logo	How to design a memorable store logo
	Store description and rules	How to write store descriptions and rules
Product Upload	Product Photo	How to make a great product photo
	Product Description	How to write a good product description
	Product Category	How to make a good product category
	Product Price	How to determine product pricing and discount strategy
	Product Upload	How to upload product in shopee
Know Your Customer	Identifying target market	How to identify market segments and determine the target market
	Product buying process	How to develop the product buying process in e-commerce
Promotion content	Choosing promotion content topics	How to choose relevant information for marketing content
	Designing promotion content	How to develop promotional content based on market needs
	Scheduling promotion content publication	How to develop a publication schedule for promotion content
	Writing promotion content	How to write attractive promotion content to engage the customer
Selling management and product delivery Product Packaging		How to sell and deliver the product from shopee
	Product packaging components	What product packaging components attract customer
	Product packaging design	How to design product packaging effectively
Customer service	Customer response	How to response customer questions and complaints
	Customer refund	How to make a refund due to the seller's mistake

To implement gamification in the online course, we use points, badges, and leaderboards, the widely used and researched gamification elements **(Tondello & Nacke, 2016)**. Points are

numerical values used to evaluate individual performance (**Alomari et al., 2019**). Badges are a visual representation of achievement that can be achieved and collected (**Seaborn & Fels, 2015**). The leaderboard is an electronic board display to show user ranking in competitive situations (**Seaborn & Fels, 2015**). For every activity done by the user, such as completing reading activities, uploading the assignment, answer questions in the forum, they will be rewarded with points which will be converted to badges and a leaderboard.

2.3 Intervention

The participants for the online training are provided by the Regional Planning & Development Agency of Sukabumi (BAPPEDA). There are a total of 163 MSMEs who registered for the training. The registered participants are asked to make an account on the website and enroll in the course. There are several activities that participants need to complete,

- Complete the pre-training questionnaire to identify the MSMEs profile before the intervention
- Watch and read the learning materials from the website
- Complete the quiz and assignment related to the learning materials
- Complete the post-training questionnaire to evaluate the training effectiveness.

All the activities are self-paced, so the participants can schedule their time to learn from the website. Participants are considered to have completed the course when they finish all the course activities and received an e-certificate.

2.4 Evaluation

To measure the effectiveness of the intervention, we used the completion level of the participants, the quiz's total score, and the answer of pre- and post-training questionnaires as the evaluation tools.

3. RESULTS AND DISCUSSION

Out of 163 registered participants, only 87 participants enrolled in the course. Then, from the enrolled participants, only 72 participants completed the course. (see Figure 4)

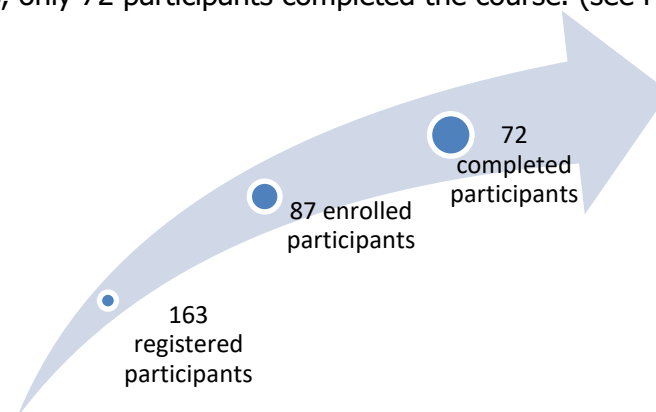


Figure 4. Number of Participants

The completion level of learning for all enrolled participants reaches 82.8%. Majority of participants who complete the courses is female (70%), 34-49 years old, reseller, and have operated the business for about 1-5 years. Participants' average overall quiz score is 75.3 out of a maximum score of 100. The histogram of participants' overall quiz scores is shown in Figure 5.

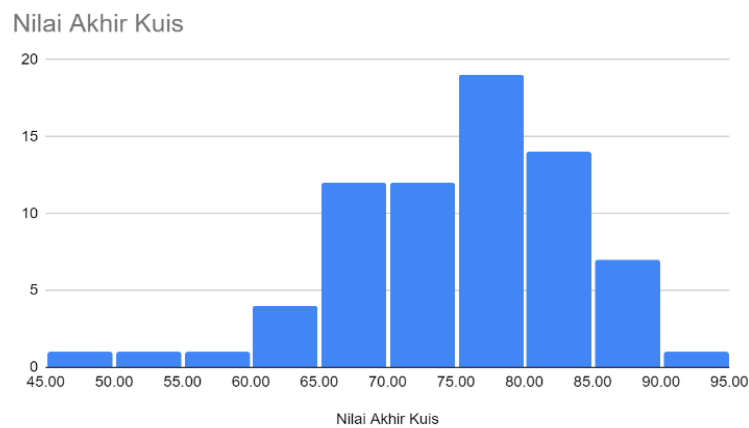


Figure 5. Quiz Score Histogram

Based on the pre-training questionnaires filled out by the online training participants, they expect the online training will increase their knowledge about digital marketing so they can implement it in their MSMEs to increase sales volume. Then, based on the post-training questionnaire, the following are the benefits obtained by participants:

1. Gaining new knowledge, especially in digital marketing
2. Building a network among MSMEs and regional government
3. Increase production capacity
4. Increase marketing reach

These benefits are a measure of whether or not participants' expectations are met by completing the online training. On the other hand, online training still has many shortcomings, as follows:

1. Lack of interaction and practice

Participants thought offline, practice-focused training would be easier to understand than online training. This is because there is a direct interaction between the lecturer and the participants. In addition, participants also want to be able to implement the material directly after understanding the training.

2. Material variation

Participants thought online training could provide more varied material and cover various aspects of a business.

3. Continuous guidance

Participants need ongoing guidance, such as mentoring and regular supervision. Mentoring and regular supervision are needed to ensure the implementation is done correctly. In addition, participants also need to repeat the material at a later date which a supervisor or assistant can do.

4. Not updated information.

Participants need updated information about the training in WhatsApp groups and other social media.

4. CONCLUSION

Digital marketing is essential for MSMEs to reach a broader market and increase their sales volume. Unfortunately, digital marketing skills-building efforts are met with many obstacles, such as limited access and monotonous content delivery. By using a gamified online course to deliver the digital marketing lesson, those obstacles can be eliminated, and MSMEs will be able to learn digital marketing at their own pace and needs. The participants have 82.8% of the completion level and an average overall quiz score of 75.3. The benefit of gamified digital marketing online course we held in Sukabumi includes gaining new digital marketing knowledge, building the network, increasing production capacity, and marketing reach. There are also some drawbacks to using gamified digital marketing online courses, such as lack of interaction, material variations, continuous guidance, and obsolete information. Unfortunately, this method of gamified online course is only suitable for MSMEs who are able to access the internet. We hope that in the future, the website we designed will be used by more MSMEs and include more courses, such as financial management, business process improvement, or strategic planning for MSMEs. To ensure the program will be sustainable in the future, we plan to register for intellectual property rights.

ACKNOWLEDGEMENT

Researcher would like to thank the community service team, Ilham Reza Prasetyo and Zahra Khalisabira from ITB and Institute of Research and Community Services Institut Teknologi Bandung (LPPM ITB) for funding this activity through "Hibah Pengabdian Masyarakat Pemulihan Ekonomi 2022". In addition, the team also would like to thank the head of the Regional Planning & Development Agency of Sukabumi (BAPPEDA) and the team who made the activities successful. Also, we would like to thank the Mayor of Sukabumi City for his support.

LIST OF REFERENCES

- Alomari, I., Al-Samarraie, H., & Yousef, R. (2019). The role of gamification techniques in promoting student learning: A review and synthesis [Article]. *Journal of Information Technology Education: Research*, 18, 395-417. <https://doi.org/10.28945/4417>
- Antonaci, A., Klemke, R., & Specht, M. (2019). The effects of gamification in online learning environments: A systematic literature review [Article]. *Informatics*, 6(3), Article 32. <https://doi.org/10.3390/informatics6030032>
- BKPM. (2021). *Upaya Pemerintah Untuk Memajukan UMKM Indonesia*. Retrieved 10 November from <https://www.bkpm.go.id/id/publikasi/detail/berita/upaya-pemerintah-untuk-memajukan-umkm-indonesia>

- Coordinating Ministry for Economic Affairs. (2021). *Dukungan Pemerintah Bagi UMKM Agar Pulih di Masa Pandemi*. Retrieved 10 November 2022 from https://www.ekon.go.id/unduh/info_sektoral/358/dukungan-pemerintah-bagi-umkm-agar-pulih-di-masa-pandemi
- Klapztein, S., & Cipolla, C. (2016). From Game Design to Service Design: A Framework to Gamify Services [Article]. *Simulation and Gaming*, 47(5), 566-598. <https://doi.org/10.1177/1046878116641860>
- Kuo, M.-S., & Chuang, T.-Y. (2016). How gamification motivates visits and engagement for online academic dissemination – An empirical study. *Computers in Human Behavior*, 55, 16-27. <https://doi.org/10.1016/j.chb.2015.08.025>
- Mulcahy, R., Russell-Bennett, R., & Iacobucci, D. (2020). Designing gamified apps for sustainable consumption: A field study [Article]. *Journal of Business Research*, 106, 377-387. <https://doi.org/10.1016/j.jbusres.2018.10.026>
- Mullins, J. K., & Sabherwal, R. (2020). Gamification: A cognitive-emotional view. *Journal of Business Research*, 106, 304-314. <https://doi.org/10.1016/j.jbusres.2018.09.023>
- Open Data Jabar. (2022). *Jumlah Usaha Mikro Kecil Menengah berdasarkan Kabupaten/Kota di Provinsi Jawa Barat 2016-2021*. Retrieved 10 November 2022 from <https://opendata.jabarprov.go.id/id/dataset/jumlah-usaha-mikro-kecil-menengah-umkm-berdasarkan-kabupatenkota-di-jawa-barat>
- Piñeiro-Otero, T., & Martínez-Rolán, X. (2016). Understanding Digital Marketing—Basics and Actions. In *Mba* (pp. 37-74). https://doi.org/10.1007/978-3-319-28281-7_2
- Seaborn, K., & Fels, D. I. (2015). Gamification in theory and action: A survey [Article]. *International Journal of Human Computer Studies*, 74, 14-31. <https://doi.org/10.1016/j.ijhcs.2014.09.006>
- Tondello, G. F., & Nacke, L. E. (2016). Gamification research: A 50-years retrospective from pbls towards conscious evolution. 2016 Workshop on Fictional Game Elements, FGE 2016,
- Urbancová, H., Vrabcová, P., Hudáková, M., & Petrů, G. J. (2021). Effective Training Evaluation: The Role of Factors Influencing the Evaluation of Effectiveness of Employee Training and Development. *Sustainability*, 13(5). <https://doi.org/10.3390/su13052721>