

PAPER

Mobile Marketing Training towards Increasing Business: A Case Study of Agri-Food Micro-Enterprises

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ABSTRACT

Mobile marketing (MM) refers to marketing through mobile platforms and has become a phenomenon in the business world. Many sectors utilize online applications for various business activities, including promotion and marketing. However, small and medium-sized enterprises (SMEs), especially those in the agricultural sector, face numerous challenges in using and determining training that is appropriate to their level of ability. Therefore, the objective of this study is to discuss the use of digital marketing training management (DMTM) by agri-food micro-enterprises in Peninsular Malaysia. A total of seventeen participants took part in this case study, and data were collected through surveys and semi-structured interviews between March 2022 and December 2022. The results led to the development of a DMTM model for agri-food micro-enterprises.

KEYWORDS

agriculture product, digital marketing (DM), model, platforms, social media (SM), training

1 INTRODUCTION

Mobile marketing (MM) is a powerful strategy used by traders to increase their sales. It involves the use of digital platforms to reach potential and existing customers and engage with them. MM was especially beneficial during the coronavirus disease 2019 (COVID-19) pandemic, when face-to-face interactions were limited and online connections were essential [1]. A study by researchers found that during the pandemic, agri-food entrepreneurs who switched from physical stores to online platforms experienced higher sales and profits [2]. In addition, purchasing agricultural products through online platforms benefited both sellers and buyers by facilitating the purchasing process and subsequently accelerating the selling and buying processes [3]. However, most small and medium enterprises (SMEs) face challenges in adopting and utilizing MM technology. To address this issue, various organizations and stakeholders have provided SMEs with training on digital marketing (DM) and its techniques.

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According to [4], the concept of ‘training’ is defined as a systematic process to acquire and improve skills and knowledge and develop a positive attitude required to enhance the efficiency of an individual’s knowledge in a new field. The input obtained from a systematic training approach will directly improve an individual’s performance, leading to positive results for the entire system in the long term [5]. However, some training is conducted to gain a competitive advantage, such as acquiring new technologies or adopting new management innovations, providing short-term benefits to individuals [4]. Therefore, this study aims to develop a digital marketing training management (DMTM) model for agri-food micro-enterprises based on the experience gained in DM training management. This study indirectly contributes to enriching the field of training management, aiming to enhance the efficiency of training management and achieve the objectives of training program implementation. Additionally, the training management model developed in this study is tailored for Malaysian agri-food micro-enterprises. This study also identifies the level of satisfaction with the training conducted among participants from an agri-food micro-enterprise.

2 AGRI-FOOD MICRO-ENTERPRISES

Micro-enterprise entrepreneurs offer goods or services to the community. [6] defined a micro-enterprise as one that is primarily controlled by one person, owned by a family, located in a rural area, engaged in trading and production, subject to multiple rates of initiation and failure, and operated on a small scale with low profits. Microenterprises belong to the SME category. SMEs are vital for the growth of the Malaysian economy [7]. In 2019, SMEs contributed 48.4% of the country’s total employment, 37.9% of total exports, and 38.9% of the entire GDP [7]. Agri-food micro-enterprises are run by entrepreneurs involved in agricultural production, with products being either in fresh, raw, or processed form. In 2021, SMEs contributed as much as 37.4% to the country’s total GDP, with 55% of this being contributed by SMEs involved in agriculture, which led them to be ranked first compared to other sectors such as construction, services, and manufacturing [8].

Mobile marketing is a competitive business strategy that presents both large-scale and small-scale businesses with a great opportunity to improve their marketing effectiveness. It involves the use of digital platforms to communicate with and reach potential customers without boundaries [9]. Moreover, MM enables business entities to enter new markets easily. Some of the MM applications that have potential as marketing platforms for agricultural products are social media (SM) applications such as Facebook, Instagram, TikTok, and Twitter. MM is an integrated form of marketing communication that allows firms to market their products or services through mobile application platforms [9]. The internet is the fundamental means by which to develop DM, as it provides an effective way of promoting products and services that can be accessed easily by target customers. The Internet also facilitates online transactions and payments.

Several previous studies have shown that the use of MM can contribute to reducing transaction costs by eliminating intermediaries [10]. Therefore, an extensive study has been conducted to understand farmers’ behavior regarding mobile marketing, as demonstrated in the study by [10]. The study’s findings revealed that government agency training programs significantly aided in increasing farmers’ adoption of MM. [11] also highlighted the crucial role of extension agencies in facilitating knowledge transfer activities related to technology, particularly in the use of MM by farmers, through advising and training. [12] emphasized that the benefits of digital advancements should be leveraged not only for marketing activities but also for e-commerce and internet banking.

3 METHODOLOGY

This study used a qualitative method, specifically a case study involving two groups of respondents in Peninsular Malaysia. A total of seventeen participants from the targeted and open respondent groups participated in this study between March 2022 and December 2022.

During the first screening, eight (8) respondents from agri-food micro-enterprises were selected for this study. The target participants were farmers and small traders involved in agricultural products or services. The respondents were identified through a preliminary survey. This initial screening was essential to prioritize candidates with high interest and provide immediate assistance through small, limited grants. The selection criteria were as follows: (i) entrepreneurs must have an established product or service in agri-food micro-enterprises; (ii) the respondents must be selling their products or services online; and (iii) the respondents must have experience using SM platforms for mobile digital marketing.

The targeted respondents were interviewed in March 2022 to identify the challenges and obstacles they encountered while using DM platforms. Subsequently, a draft of the training content was compiled and discussed with the respondents. This interview input was crucial for developing a training module that could effectively address the challenges and obstacles faced by the participants in DM. This approach was essential for the successful organization of training sessions aimed at promoting the use of DM for marketing products, particularly among agri-food micro-entrepreneurs. Once the training content was finalized, the trainer, location, and team management were determined to facilitate the implementation of DM strategies.

The training instructors were three agribusiness lecturers from Universiti Teknologi MARA (UiTM) Melaka, Universiti Malaysia Kelantan (UMK), and Universiti Putra Malaysia (UPM). The training was organized through a collaboration between the Tanjung Karang Community Agency in Selangor and Universiti Utara Malaysia (UUM) in North West Malaysia. A poster promoting the workshop distributed by the community college piqued the interest of nearby entrepreneurs, who then applied to attend. Consequently, participation was open to the public, expanding the pool of respondents. These additional participants met the same criteria as the initial eight respondents. A total of seventeen participants engaged in the two-day workshop on October 18, 2022. Subsequently, the respondents completed a satisfaction survey via Google Forms to assess their training experience. Out of the 17 questionnaires distributed, only 12 were returned.

Lastly, targeted respondents were interviewed to identify in-depth whether the training they had participated in was helpful in improving skills and efficiency levels related to the use of DM for product promotion. They were also asked if the training lacked effectiveness in enhancing their DM skills, indicating a need for retraining. The data were collected, analyzed, and interpreted through descriptive analysis to establish a model for managing DM training.

4 FINDINGS

The sharing of the MM training delivered through this study aims to enhance the business skills of agriculture micro-enterprises. It can be divided into five phases or stages: (i) selection of agri-food micro-enterprises; (ii) identification of challenges and obstacles; (iii) identification of training needs; (iv) training implementation; and (v) training evaluation.

4.1 Selection of agri-food micro-enterprises

The first step was the selection of targeted respondents. In this case, farmers and small traders who had established agri-food micro-enterprises and sold agricultural products using mobile devices such as smartphones and tablets were chosen. At the beginning of the study, a total of eight respondents were targeted (see Table 1). The results revealed that all the respondents had experience using SM as a medium for marketing, promoting, and selling the products and services they offered. They utilized mobile devices to access Facebook and WhatsApp as digital media platforms, which were commonly used by the majority of the respondents. However, one respondent used Instagram and another used TikTok to digitally promote and sell the products they made. This aligns with [13], where the majority of micro and small enterprises utilize SM and WhatsApp for their DM practices. Furthermore, [14] stated that Facebook marketing has become one of the most popular online marketing tools. Many businesses, from SMEs to large-scale companies, rely on Facebook marketing because the results obtained are highly profitable for these businesses. Additionally, four respondents (R1, R2, R3, and R7) had experience using the electronic commerce platform Shopee.

Table 1. Demographic profile of targeted respondents

Respondent	Level of Education	Location	Social Media Platform	E-Commerce Platform
R1	Secondary school	Selangor	WhatsApp	Shopee
R2	Master’s	Selangor	WhatsApp	Shopee
R3	High school Certificate	Kedah	Facebook & WhatsApp	Shopee
R4	Undergraduate degree	Kedah	Facebook	None
R5	Certificate	Selangor	TikTok, Facebook, & WhatsApp	None
R6	Certificate	Selangor	Facebook & WhatsApp	None
R7	Degree	Kedah	Facebook & WhatsApp	Shopee
R8	Master’s	Kuala Lumpur	Instagram, Facebook, & WhatsApp	None

At the beginning of the fieldwork, the researchers noticed that none of the respondents had a specific business SM account. Therefore, they were instructed to create personal SM accounts. Such accounts are important for influencing potential buyers as well as branding the entrepreneurs themselves and their products or services. Moreover, personal SM account holders have a network of social friends, which facilitates their promotion and marketing activities. As such, the respondents were exposed to the use of SM, especially WhatsApp, Facebook, TikTok, and Instagram, in their promotion and marketing activities. Next, the second step was to identify the challenges or obstacles faced by these selected respondents when conducting digital marketing.

4.2 Identify challenges and obstacles

The findings of the preliminary study showed that the main challenges faced by most of the small traders in this study were as follows: (1) the limited knowledge of the respondents; (2) defective products; and (3) human resources. Other challenges included logistics, poor internet coverage and infrastructure, attitudes, and

security [15]. The main challenge for the respondents was knowledge or education. In this context, knowledge refers to the methods or means used to promote and sell products or services online through SM. This aspect involved branding, how to create copyright text, keywords, advertisements, and interesting content; the use of infographics and pictures; and the lack of customers and SM followers. It is in line with [16], who stated that DM can especially improve the efficiency of marketing costs with the most used branding content elements. It plays an important role in company-customer interaction and well-preparedness for confronting future changes.

The next challenge involved products exposed to the risk of damage during delivery. A challenge often faced by agricultural entrepreneurs is the state of perishable and non-durable agricultural products. Indirectly, the changes in quality that occur in products sold digitally will have a negative impact. For group of entrepreneurs who plant paddy, it is very crucial for them to have enough stocks to meet their customer demand. Additional challenges faced by two respondents involved poor internet infrastructure, such as low speed and unstable or interrupted internet coverage, which affected the use of digital platforms for online marketing, sales, and promotion. In addition, logistical challenges were caused by shipping charges or postage costs that were not commensurate with the quantity. Such situations result in the selling price of a product being higher compared to traditional sales. For a microentrepreneur who only runs a small-scale business, this would result in respondents having to bear the cost of commission fees, which is considered very burdensome when the sales margin is low. A respondent stated that the most suitable delivery methods for the manufactured products would be self-delivery or delivery using e-hailing services. However, e-hailing services may be limited, especially in rural areas.

This interview input was crucial for developing a training module to address the challenges and obstacles faced by the targeted respondents when using DM. It will help in organizing training sessions to promote the use of DM for marketing products, particularly in suburban areas.

4.3 Identify training

In this study, the main problem faced by the majority of the respondents was related to their lack of knowledge and limited skills regarding the correct methods and techniques of using SM for promotional and DM purposes. The appropriate training was identified and summarized as basic training in DM for farmers, focused on SM. Among the exercises that could be identified were copyright writing, video editing, the preparation of interesting pictures and infographics, and basic training in using Instagram. The DM training covered theoretical and practical knowledge related to DM in general, including branding, Google business profiles, copywriting, Shopee and Facebook ads, Instagram, and TikTok. The selection of suitable training could also be obtained from various government agencies, universities, or private companies. In this case, training modules for management operations were prepared by a combination of researchers with experience in the field of expertise and in collaboration with community colleges.

Next, a suitable location near the respondents was identified for the training implementation. In this instance, cooperation was established with agencies: the Tanjung Karang Community Agency Selangor and UUM. Initially, the workshop targeted participants directly involved in the study. However, a workshop promotion poster distributed by the community college piqued the interest of other local

entrepreneurs, leading them to apply to attend. A total of 17 participants participated in the two-day workshop.

4.4 Training implementation

The training could be implemented either face-to-face or online, depending on the format that suits the organization, respondent, instructor, and location. The training organizer was Tanjung Karang Community Agency, a center of the community, so the training was also open to public registration. An additional participant also attended the training, as they met the same criteria as the eight respondents. In total, seventeen participants took part in the two-day workshop.

In this study, the DM training workshop, named DM, was held on August 18 and 19, 2022, at the computer lab at Tanjung Karang Community Agency and Computer Lab 4, School of Technology and Logistics Management, UUM. The training utilized a hybrid mode, combining physical and online components. Additionally, participants from various locations joined online through the Zoom application.

Appropriate places need to be chosen to facilitate easier communication between the targeted respondents and instructors, utilizing suitable facilities, and ensuring good internet coverage. This will also enable respondents to receive hands-on training. Two locations were selected based on participant proximity, and a hybrid approach was adopted.

The instructor, staff, and facilitators were selected through collaboration among researchers from UUM, UPM, UMK, and UiTM, as well as the management teams of the Malaysian Agroecology Association (SRI-Mas) and Tanjung Karang Community Agency. The training was interactive, with the assistance of a facilitator. The training instructors included three agribusiness lecturers from UiTM Melaka, UMK, and Universiti Putra Malaysia.

4.5 Training evaluation

In this study, two assessment methods were used, namely a brief survey and periodic monitoring. Through the first evaluation, which was a Google form issued after the training, it was found that all the participants were very satisfied overall, and they were content with the topics discussed during the basic DM course to enhance their knowledge and skills in DM. Additionally, periodic monitoring through the participants' SM accounts was conducted for three months, revealing that the targeted respondents had made changes and improvements to their SM information after attending the training. After three months, the participants were contacted to assist them in identifying the next relevant training, if needed. Overall, this exercise provided the participants with information they could utilize to assess their potential and ability to navigate the DM environment.

Survey of participating respondents. To enhance the quality of the workshop, the topics and presentations that the instructor would deliver were shared with the participants in advance through an online questionnaire form. Twelve participants responded to this questionnaire. The satisfaction level was assessed using a five-point Likert scale, ranging from strongly dissatisfied to strongly satisfied.

To sum up, based on the level of participant satisfaction with the course content (see Figure 1), out of the 12 participants surveyed, eight (66.7%) were very satisfied with the content of the basic DM course, and four (33.3%) were satisfied. None of them (0%) expressed dissatisfaction with the content.

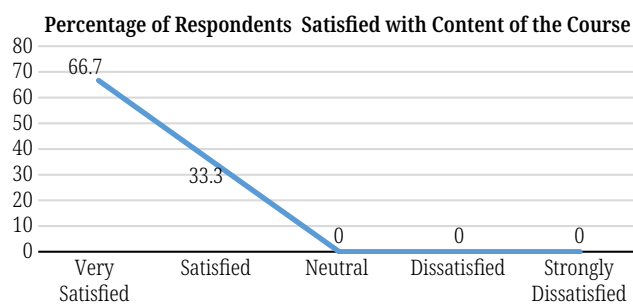


Fig. 1. Level of participant satisfaction with course content

Based on the overall content of the course, as shown in Figure 2, most participants (75%, or nine out of 12) were very satisfied with the course journey, while the remaining participants (25%, or three participants) were satisfied with it. Notably, none of them (0%) expressed dissatisfaction with the entire course, indicating a satisfactory outcome.

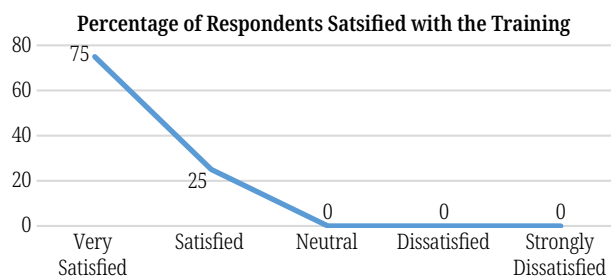


Fig. 2. The overall content of the course is satisfactory

Table 2 lists some suggestions that participants made for improving the workshop in the future. One idea was that some attendees would prefer a class that focused solely on one digital application. The participants who suggested this stated that this would allow for a more detailed and in-depth discussion of the topic at hand, making it easier for them to understand the subject matter as it would be taught more comprehensively. Participants who followed the course online also provided feedback, suggesting that the materials should be displayed more effectively on the screen. Another suggestion was to avoid scheduling the training on Fridays.

Table 2. Suggested improvements to the digital marketing basics content

No.	Participants Response
1	Create a special workshop for a specific app, such as Facebook. Therefore, in one day [we] only talk about Facebook in more detail and comprehensive.
2	The courses I've attended for each topic took two days. This course gathers all the topics in two days and the next practical result from the lecture input cannot be evaluated directly. Anyway, this course is very good.
3	Avoid Friday class.
4	This course really helped me to switch to digital marketing.
5	Need to continue.
6	Screen display [improvements] and speaker improvements for virtual parties. Thank you.
7	This course is very interesting and, on my part, there are no improvements to be made. Thank you.
8	Good for beginners, [but] it needs to be deepened for a special workshop to master each social media platform.
9	Add participants.

Periodic monitoring. The findings revealed that respondent R4 had a private Facebook account primarily dedicated to selling toys, but he never utilized it to sell his agricultural products. The main reason for this was the limited quality of his agricultural products. He believed that online sales were not appropriate for agricultural products, stating that they were not worth it due to the shipping costs, which render them unsuitable for agricultural products. In the interview, R4 was in the process of relocating from his old farm to a new, larger one.

Unlike the previous respondent, R5 had a TikTok account before attending the training. He typically creates content to raise awareness and share his experiences. This could also be seen as an initial step in self-branding. Post-training, he remained keen on pursuing this endeavor. However, R5 encountered challenges due to limited infrastructure tools and technological capabilities, as he only had access to 3rd generation (3G) phone connectivity, and the coverage was consistently poor.

R6 and his daughter stated that they needed a computer to manage their business online. In addition, R6 emphasized the necessity of and commitment to continuously monitoring SM for 24-hour surveillance. R6 agreed that SM marketing had good potential, especially in extending to the global world, but R5 stated that his family was not ready to face such a situation, saying, “We are not yet ready.”

R7, on the other hand, faced similar agricultural land issues as R4 and was planning to relocate to a new area, so he was initially not interested in promoting his work through Facebook. However, after the training, he updated his personal Facebook profile by sharing pictures of chili plants.

All the respondents agreed that online marketing through SM has benefits but requires preparation in terms of infrastructure (respondents R5 and R6) and a stable product in terms of output stock (respondents R4 and R7).

Table 3. Agri-food microenterprises case in mobile marketing training

<p>Phase 1: Selection of Agri-Food Micro-Enterprises Entrepreneurs</p> <ul style="list-style-type: none"> • Participants are screened and following predetermined criteria: <ul style="list-style-type: none"> ◦ They have agricultural products such as rice, chili, cucumber and vegetables. ◦ They are interested in selling their products or services through online platforms; and ◦ They have accounts on social media example: Facebook, WhatsApp, Instagram, and TikTok.
<p>Phase 2: Identify Challenges and Obstacles</p> <ul style="list-style-type: none"> • Main Challenges through interviews: <ul style="list-style-type: none"> ◦ Limited basic knowledge of digital marketing. ◦ The need to deliver quality and fresh products quickly and cost-effectively. ◦ Limited availability of human resources with technological expertise. ◦ Infrastructure and internet coverage.
<p>Phase 3: Identify Training Needs</p> <ul style="list-style-type: none"> • The training program aligns with the identified challenges: <ul style="list-style-type: none"> ◦ Training Skill: Basic Digital Marketing Training. ◦ Location: Specific area of participants with support infrastructure and internet coverage.
<p>Phase 4: Training Implementation</p> <ul style="list-style-type: none"> • Hybrid Training: <ul style="list-style-type: none"> ◦ Physical sessions held in computer labs at: <ol style="list-style-type: none"> i. Community Center Agency ii. Computer lab UUM (Universiti Utara Malaysia). ◦ Online sessions conducted via Zoom.
<p>Phase 5: Training Evaluation</p> <ul style="list-style-type: none"> • Post-training surveys • Periodic monitoring

The sharing of the MM training delivered through this study can be concluded in Table 3. This experience is the basis for determining appropriate training, especially for agriculture micro-enterprises or small traders who aim to start developing mobile or DM skills. This basic information constitutes the formulation of a strategy for starting planning in mobile marketing. Furthermore, MM skills are important for firms to formulate a strategy that enables them to be more competitive. Therefore, entrepreneurs with digital skills will be more relevant in the business world, and a model related to the management of DM training is required. [17] Highlight the importance of enterprise development training programs in Malaysia for micro-entrepreneurs to increase their competencies.

5 SUMMARY AND DISCUSSION

Therefore, to serve as a foundational framework for widespread use in digital or MM training, the DMTM (Pengurusan Latihan Pemasaran Digital, or PsLPmarDt) model was suggested (see Figure 3). The objectives of the PsLPmarDt model are to: (i) offer a preliminary grasp of the concept and analysis of training management prior to commencing DM training; and (ii) pinpoint suitable training based on an entrepreneur's existing level and challenges.

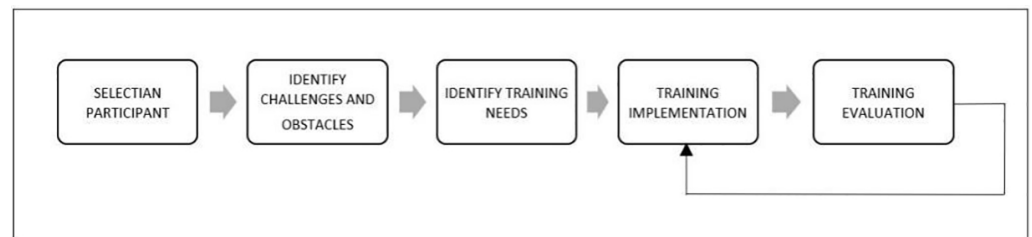


Fig. 3. Digital marketing training management (PsLPmarDt) model

In addition, a digital marketer model [18] can also be a reference to highlight the key competencies and skills needed by an excellent digital marketer. Besides that, the attention, interest, desire, and action (AIDA) model is suitable to guide new entrepreneurs on online marketing strategies. Referring to both models, the difference and uniqueness of the PsLPmarDt model is that it emphasizes more on DM training management. The PsLPmarDt model can also be used by individuals, communities, or training bodies to determine training appropriate to the level of a small trader. Additionally, the PsLPmarDt model examines the potential and challenges of individuals or small traders in terms of viability through the use of DM and subsequently venturing into the country's SMEs. Therefore, the PsLPmarDt model directly gives the target group the opportunity to assess their ability to match technological advancements either through community cooperatives or collaboration with related agencies (such as search engine optimization (SEO) consultants) to formulate a DM strategy plan.

Five (5) general phases are involved in the PsLPmarDt model for entrepreneurs' participants, as summarized in Figure 4: (i) selection of entrepreneurs; (ii) identification of challenges and obstacles; (iii) identification of training needs; (iv) training implementation; and (v) training evaluation.

In summary, this model targets individuals interested in exploring the field of DM and enhancing their existing knowledge to stay competitive in the modern business world. Uniquely, this model provides advantages to individuals or small communities located outside urban areas, far from logistics and information technology infrastructure access.

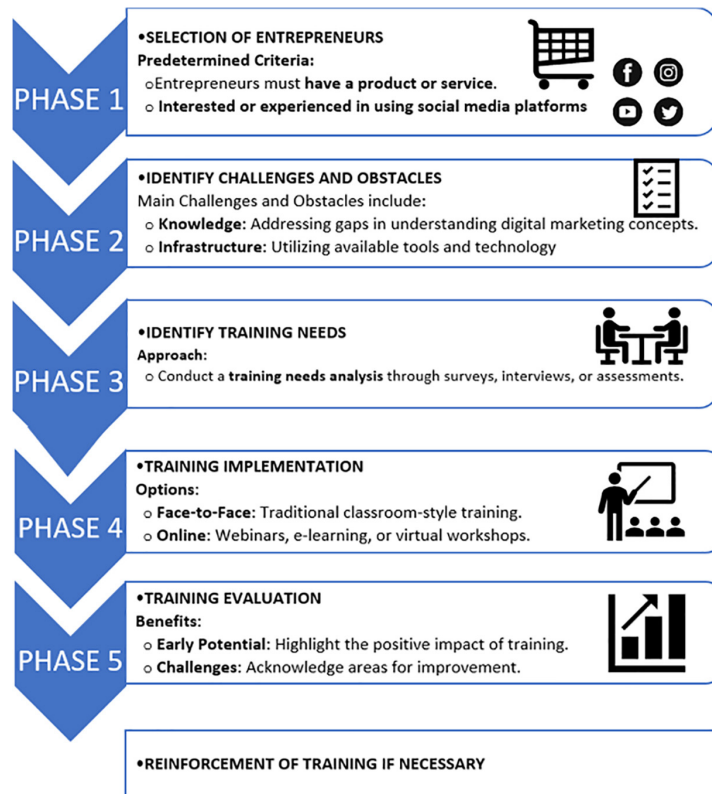


Fig. 4. General phase digital marketing training management (PsLPmarDt) model

6 CONCLUSION

Digital marketing has promising future prospects in Malaysia [19]. The utilization of DM has been rapidly expanding since the COVID-19 outbreak, and small businesses must transition to remain competitive [20]. The study focuses on a small group of microenterprises in the food and agriculture sectors. The study introduced a model called the DMTM model (PsLPmarDt model), designed to equip entrepreneurs with essential DM skills to address their specific challenges and promote business growth. The results indicated that participants who utilized the model were satisfied with the training content and its quality. They also improved their MM skills, including creating images, content, graphics, and posts related to their products. The PsLPmarDt model is a component of DM, emphasizing training management. It is essential to enhance the PsLPmarDt model for future studies to make it applicable to a broader target audience with diverse characteristics.

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