1. INTRODUCTION

The advent of the contemporary digital era has profoundly impacted various sectors of the economy, encompassing agriculture. The agricultural sector, traditionally characterised by its conventional practices, is currently transitioning towards adopting digital technology. The presence of ample natural resources does not necessarily ensure the prosperity of farmers if the products they produce require to be more competitive and effectively promoted to consumers (Paiva et al., 2020; Guaita-Pradas et al., 2020).
The inefficiency resulting from the extended distribution chain is attributed to the significant disparity between the selling prices set by farmers and the buying prices paid by consumers (Kenanoğlu, 2023).

The integration of technology within the agricultural sector is seen in the context of the ornamental plant industry. When compared to other agricultural commodities, ornamental plants exhibit promising prospects owing to their elevated market value (Leman, 2021) and the growing fascination of urban communities in cultivating them for decorative purposes (Haryanto et al., 2023; Khofifah et al., 2022). Depok serves as a prominent hub for cultivating and trading ornamental plants, with a particular emphasis on the Aglaonema species. The Aglaonema plant belongs to the Araceae family and is classified as a deciduous ornamental species originating from the taro-talasan tribe. Aglaonema is typically recognised for its primarily green foliage, making it the moniker “Chinese Evergreen” in international contexts. Aglaonema rotundum, a cultivar characterised by its red foliage, is documented as originating from Sumatra (Leman, 2021). The hybridisation of numerous Aglaonema varieties has resulted in several distinct species, including Moonlight, Pride of Sumatra, Widuri, Tiara, Krishna, Angelina, Minion, and Golden Hope.

The cultivation of Aglaonema in Depok is undertaken by ornamental plant growers who are affiliated with an association known as the Asosiasi Aglaonema Nusantara (ASA). The Aglaonema Nusantara Association (ASA) is a collective of individuals involved in cultivating, selling, or appreciating Aglaonema plants across the Indonesian archipelago. Certain agricultural practitioners have employed popular social media platforms, such as Instagram and Facebook, to enhance the visibility and marketability of their agricultural offerings. The utilization of e-commerce applications among farmers is rare despite their inherent suitability for facilitating buying and selling operations.

E-commerce refers to utilizing the internet and websites to conduct digital business transactions, enabling economic exchanges between persons and organisations or companies themselves (Lilavanichakul, 2021). The prevailing electronic commerce platforms in contemporary times encompass Shopee, Tokopedia, Blibli, and Lazada. Initially, these platforms were employed to sell fashion and household products. Nevertheless, the utilization of e-commerce in plant trade has been demonstrated by scholars such as (Jamaluddin, 2013; Su et al., 2021).

According to Putra (2014), the absence of payment transaction guarantees is a notable limitation in social media transactions. The distinguishing factor between this phenomenon and e-commerce is the utilization of shared accounts. However, farmers perceive using e-commerce platforms as problematic due to a necessary for more understanding regarding various features. Despite the potential benefits associated with these features, farmers require help effectively leveraging them to promote their products (Falah, 2020; Jamaluddin, 2013; Su et al., 2021). Live streaming in electronic commerce facilitates interactive and instantaneous connections between purchasers and vendors, engendering compelling promotional strategies that can significantly influence decision-making. According to Fitryani et al. (2021), empirical evidence suggests that implementing this particular method can stimulate impulsive buying behaviour, spur unplanned purchases, and lead to product substitutes at alternative retailers.

This particular community service initiative distinguishes itself from comparable initiatives by prioritising support for farmers in live streaming in e-commerce. Few other activities prioritise live streaming; instead, they emphasise web-based online marketing (Nugroho et al., 2022), social media (Yuliandhari et al., 2023), marketplace (Manalu et al., 2022), or e-commerce account registration (Wahidin et al., 2021). The focus of the service initiative is directed towards Aglaonema ornamental plant farmers residing in Depok. The primary issue addressed pertains to the limited comprehension and utilization of electronic commerce among affiliated agricultural producers, alongside the necessity for enhanced
capacity among farmers to provide products to consumers. The primary objective of this activity is to enhance the knowledge and proficiency of farmers in the online marketing their products, specifically focusing on ornamental plants. The objective of augmenting the participants’ knowledge is set at a rate of 25%. The proposed priority activities or solutions encompass two key aspects: firstly, the promotion of e-commerce to augment transaction volumes, and secondly, the use of live streaming elements inside e-commerce platforms to effectively engage prospective clients.

2. METHODS

The methods used are counseling, training, and mentoring. There are 2 materials presented in the counseling, i.e Sales of Ornamental Plants on Tiktok or Shopee Live, and Selling Techniques through Shopee Live. Training and mentoring were carried out to practice how to use the features on Shopee Live. The implementation process encompasses several actions, namely the commencement of preliminary surveys, the execution of the implementation phase, and the subsequent evaluation phase. Mentoring activities are assisted by student team members.

Problem Identification Stage

Preparation for the implementation of the Community Service programme as follows: (1) Internal Requirements Analysis. The evaluation of marketing development is being prioritised at the current stage. According to Haryanto et al. (2023), prior research indicates that farmers engaged in ASA (agricultural sustainable agriculture) exhibit elevated levels of education, are in their productive years, and possess a strong aptitude for technology. Social media platforms, such as Instagram, Facebook, and WhatsApp, are widely utilised in contemporary society. However, it is worth noting that several farmers only employ WhatsApp as a means of contact with potential clients. Directly serving orders by consumers can restrict the consumer base. The payment method is established on the foundation of mutual reliance between the involved parties without utilizing a shared financial account; (2) Visits to affiliated establishments. Visits were conducted to partner locations to discuss the planned activities, seek necessary permissions and address the primary issues that require resolution. Conversations were conducted with the chairwoman of ASA Depok, and these discussions will be further addressed and deliberated upon during the subsequent monthly community assembly.

Research on the partner situation revealed issues within the marketing and business management domains. Specifically, it was found that farmers require more awareness and expertise regarding e-commerce. Additionally, they must improve their technological skills in utilizing live e-commerce features.

Programme Implementation

The implementation of the programme includes: (1) Introduction and training on e-commerce. Socialisation refers to introducing people or groups within a community to new ideas, concepts, or practices (Manalu et al., 2022). The socialisation process commences by imparting knowledge pertaining to: (a) The composition of the implementation team; (b) The goals of the Community Service initiatives; and (c) The dissemination of information regarding the advantages of the activities and the anticipated results. The primary endeavour is leveraging e-commerce platforms for the purpose of enhancing sales through social interactions; (2) Live streaming assistance in e-commerce. The provision of live streaming help activities involves the utilization of Shopee videos to demonstrate effective communication.
Community service on marketing online training using Shopee Live for Aglaonema farmers in Depok  
Lorenta In Haryanto, Dessy Iriani Putri, Syifa Astasia Utari, Prisca Nurmalia Sari, Reza Firdaus, Aqila Karliyah Aziza, Deni Fadillah, Arif Muzahidin

techniques for farmers. Farmers are instructed in the utilization of the functionalities offered by Shopee live.

**Evaluation Stage**

The evaluation phase involves identifying outputs and assessing pre-test and post-test outcomes, participant self-reports, and partner satisfaction findings.

### 3. RESULTS AND DISCUSSION

The implementation of the project encompassed numerous components, such as counselling services, pre-test and post-test assessments, and support in establishing e-commerce accounts and facilitating live streaming activities. The programme description is delineated in several ways.

**Counselling or Providing Material**

Material 1 is about Sales of Ornamental Plants on Tiktok or Shopee live by Dessy Iriani Putri, S.P., M.Sc. The marketing and sales landscape undergoes annual fluctuations in the patterns and strategies employed for promoting and distributing products, items, and services. In recent times, there has been a notable shift towards online platforms in the domain of marketing and sales, as evidenced by the studies conducted by (Manalu et al., 2022; Nugroho et al., 2022; Yuliandhari et al., 2023). This phenomenon is evident through the proliferation of several online marketplaces, such as Shopee, Tokopedia, and Lazada. In addition to utilizing online markets for marketing and selling products, businesses are increasingly leveraging social media platforms such as Facebook, Instagram, WhatsApp, and TikTok. The proliferation of online marketing and product sales can be attributed to Indonesia’s substantial population of internet users. The number of Internet users in Indonesia accounts for 212.9 million individuals, which represents around 77% of the total Indonesian population. Furthermore, the country’s active social media user base amounts to 167 million people, equivalent to approximately 60.4% of the population. The substantial population of internet and social media users in Indonesia facilitates the ability of entrepreneurs to engage in marketing and sales activities through online marketplaces and social media platforms. According to Kemp (2023), TikTok is expected to experience significant growth in its marketing efforts, particularly in the realm of business promotion.

With the advancement of technology, the functionalities of online marketplaces and social media platforms are consistently expanding (Al Zarliani et al., 2021). One notable aspect is the “live” functionality. This interactive feature enables social media users to engage in direct video-based interactions. Merchants have the ability to employ this “live” functionality in order to present and promote their merchandise. Several social networking platforms and online marketplaces, such as Facebook, TikTok, Instagram, Shopee, and Lazada, offer live streaming capabilities. This interactive functionality enables vendors to transmit live video content directly to purchasers. In addition, the seller has the option to physically present the object, allowing potential purchasers to assess its condition firsthand (Fitryani et al., 2021). Buyers prefer sales that incorporate a “live” component due to their ability to circumvent product incompatibilities during live selling sessions. Prospective buyers can visually observe the seller’s demonstration of the product’s attributes and actively listen to the seller’s verbal description.

Live selling is a viable method for marketing various products, including ornamental plants. Ornamental plants are classified within the domain of recreational activities (Khofifah et al., 2022; Suwu, 2021). According to Kemp (2023), the toys and hobbies category had a significant surge in e-commerce
expenditure by Indonesian customers in 2022, amounting to 10.45 billion dollars. Ornamental plant vendors can leverage the “live” feature in e-commerce platforms to promote and sell their items.

Material 2 is about Selling Techniques through Shopee live by Prisca Nurmala Sari, S.E., M.Sc. The practice of live shopping is vital in the current digital world. This offers advantages to individuals engaged in business, particularly those involved in Aglaonema farming, by facilitating an increase in their sales. According to Fletcher & Gbadamosi (2022), for the optimal functioning and productivity of live shopping, Aglaonema farmers might adopt the subsequent techniques: (1) It is imperative to establish a suitable and accommodating venue or studio and a reliable and stable connection to facilitate a live event; (2) Develop a customised promotional campaign for live shopping events; (3) Presenting the product from multiple perspectives enhances clarity and comprehension; (4) Evaluate the product and present a visual representation of its physical manifestation; (5) Implement a systematic approach to conducting live shopping promotions in order to enhance the visibility of product brands; (6) This communication aims to update the timetable for live streaming and purchasing activities on various social media platforms; (7) It is advisable to be mindful of the optimal timing for live shopping sessions by strategically avoiding periods of high demand.

The visual element holds paramount importance in determining the efficacy of live shopping, thus necessitating the selection of a seller with an aesthetically appealing visual presentation. This phenomenon has prompted several firms to engage in endorsements or enlist the services of celebrities or artists/actors to assume the role of hosts. Below are a few strategies for enhancing one’s speaking style in the context of live shopping: (1) Voice, articulation, and intonation are distinct; (2) No necessary to communicate quickly; (3) Chatting with consumers to allow for questions; (4) Creates a favourable impression and a compelling delivery; (5) Using persuasive language (inviting/hypnotizing) and the language of spoken copywriting. The conditions pertaining to the provision of materials are depicted in Figure 1.

![Figure 1. Providing material on live sales in e-commerce](image)

**Shopee Account Creation and Live Streaming Assistance**

The mentorship exercise was conducted by students of Community Service Programme with Reza Firdaus, an agricultural student specialising in millennial farming at the Faculty of Agriculture UMJ. Farmers are provided with support in the form of a series of instructions for establishing a Shopee seller account, which are outlined as: (1) The process of enrolling or signing up for the Shopee mobile application; (2) Including details about the store; (3) The process of selecting a shop delivery service on the webpage; (4) The act of transferring or submitting a compilation of product listings; (5) The process of confirming account identity to participate in the free shipping programme; (6) Establish shipment
arrangements using the shipping services endorsed by Shopee; (7) In order to initiate the withdrawal of profits, it is necessary to provide the bank account details; (8) Verify and retrieve profits from the sales balance.

The procedure for adding products to the shop is as: (1) Include product information (photo or video of the product, product name, category, and description); (2) Notate specifications (including brand and attribute information); (3) Fill in sales information (product variety, price, stock, etc.); (4) Complete shipping details (weight, dimensions, and shipping service); (5) Add additional details (free order, condition, and presentation).

Figure 2 depicts a photograph capturing the Shopee live demonstration on the left, accompanied by screenshots showcasing the various Shopee social media accounts that have been established. The student team supported photographing the Aglaonema plants available for sale and aided the farmers in updating their Shopee accounts with relevant information.

![Figure 2. Shopee live demonstration (left); Shopee account output (right)](image)

**Basic Overview of Community Service Target**

The individuals involved in this Community Service activity consist of farmers or enthusiasts of ornamental plants with membership within the Aglaonema Nusantara Association, located in Depok. Figure 3 illustrates that the majority of the participants (60%) possess entrepreneurial experience, whereas a smaller proportion consists of government officials (20%) and individuals primarily engaged in farming activities (20%). The individuals involved in the study are currently within the age range of 30 to 49 years. This age range is categorized by ILO to be prime working age (range 25-54 age group) (Irawan et al., 2000).

![Figure 3. Participant’s profile by job (left) and by age group (right)](image)
Figure 3 implies that Aglaonema farmer’s in Depok classified as educated and prime farmers, which means farmers are currently at their physical peak and have better knowledge than common types of farmers. Several participants reported that their revenue ranged from 10 million to 20 million due to selling ornamental plants. However, there were others who could not provide such statistics as they engaged in ornamental plant cultivation solely as a pastime. In addition to the participants’ profiles, a set of fundamental questions was administered as a control measure. The data demonstrated in Table 1 illustrates the proportions of affirmative responses, including “yes,” “never,” or “agree.”

### Table 1. Participants’ condition before the training

<table>
<thead>
<tr>
<th>Question</th>
<th>Percentage of affirmative answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you ever engaged in marketing activities utilizing online media platforms?</td>
<td>87%</td>
</tr>
<tr>
<td>If such is the case, which media do you utilise?</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>13%</td>
</tr>
<tr>
<td>Instagram</td>
<td>73%</td>
</tr>
<tr>
<td>Facebook</td>
<td>80%</td>
</tr>
<tr>
<td>Tik tok</td>
<td>27%</td>
</tr>
<tr>
<td>Shopee</td>
<td>7%</td>
</tr>
<tr>
<td>Tokopedia</td>
<td>20%</td>
</tr>
<tr>
<td>Have you ever utilised the “live” feature</td>
<td>60%</td>
</tr>
<tr>
<td>Has there been any prior training conducted on the subject of online marketing within the context of ASA-Depok?</td>
<td>20%</td>
</tr>
</tbody>
</table>

According to the data revealed in Table 1, a significant majority (87%) of the participants employed online media as a means to advertise and market their products. The majority of participants utilise the social media platforms Facebook and Instagram. The adoption rate of e-commerce on the Shopee platform is a mere 7%, while on the tokopedia platform, it reaches just 20%. Nevertheless, it should be noted that over 60% of farmers have actively engaged with the live feature available on various online media platforms. The data presented in the table suggests that most farmers have yet to undergo any form of online marketing training.

As Figure 4 shows, the Aglaonema planted by farmers is very diverse, both in variety and name. Aglaonema is cultivated in the front yard of the house in a greenhouse built using paranet. Farmer’s community relationship is strengthened every month by regular meetings. Figure 4 displays the Aglaonema profile, whereas Figure 5 presents the farmer’s photograph.

![Figure 4. Aglaonema plant profile](image1)

![Figure 5. Photo with ASA Depok community farmers](image2)
Indicators of Success

The assessment of the effectiveness of community service initiatives involves the utilization of a pre-test, post-test, and an evaluation of farmers’ adoption of e-commerce accounts and live streaming. Pre-tests and post-tests are typically employed in educational settings to assess the comprehension and proficiency of participants both prior to (pre) and subsequent to (post) the dissemination of instructional content. As in Falah’ (2020) research, this research employed a single-group pre-test and post-test design, namely the One Group Pre-test - Post-test Design, which involved a sole set of participants and did not include a control or comparison group. The test results for all participants, indicating the total score, are presented in Figure 5, and the test results for each question can be observed in Table 2.

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-Test Average</th>
<th>Post-Test Average</th>
<th>Percentage Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products that cannot be sold online are ...</td>
<td>8.67</td>
<td>8.67</td>
<td>0</td>
</tr>
<tr>
<td>Online buying and selling activities or transactions are called ...</td>
<td>7.33</td>
<td>7.33</td>
<td>0</td>
</tr>
<tr>
<td>The most widely used online marketing media in 2023 is ...</td>
<td>3.33</td>
<td>5.33</td>
<td>60</td>
</tr>
<tr>
<td>The requirement to sell on TikTok live is ...</td>
<td>8.67</td>
<td>9.33</td>
<td>8</td>
</tr>
<tr>
<td>The initial stages of selling on shopee live after having a shopee account are ...</td>
<td>8.00</td>
<td>8.00</td>
<td>0</td>
</tr>
<tr>
<td>The initial stage of selling on tik tok live is ...</td>
<td>4.67</td>
<td>7.33</td>
<td>57</td>
</tr>
<tr>
<td>Which social media provides live shopping features?</td>
<td>9.33</td>
<td>10.00</td>
<td>7</td>
</tr>
<tr>
<td>What online media provides live shopping features?</td>
<td>3.33</td>
<td>4.67</td>
<td>40</td>
</tr>
<tr>
<td>What is currently the most popular promo?</td>
<td>6.67</td>
<td>8.67</td>
<td>30</td>
</tr>
<tr>
<td>What are the most important factors when it comes to live shopping?</td>
<td>6.00</td>
<td>7.33</td>
<td>22</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>6.60</td>
<td>7.67</td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

In Table 2, the question that exhibited the most significant percentage of change was question number 3, indicating that this question became more comprehensible with the introduction of supplementary materials. A percentage change was still observed in questions 1, 2, and 5. This observation suggests that the participant maintains confidence in the accuracy of the response provided during the pre-test despite its lower level of precision.

The observed percentage change exhibits a positive value of 22%, indicating a discernible augmentation of participant knowledge, quantitatively equivalent to a 22% gain. The observed value closely approximates the anticipated output objective of 25%. The challenges encountered in attaining: (1) This objective included the requirement for attentiveness among specific individuals towards the provided material. While a physical copy of the content has been made available, utilizing a projector may enhance participants’ level of engagement. The decision to refrain from using the projector was made in light of prior discussions, which highlighted the constraint of restricted research space; (2) Temporal limitations. The prioritisation of time allocation can be attributed to the community members’ agenda.
Out of the total cohort of 32 extended invitations, 20 individuals participated in the designated activities. However, it is noteworthy that only 15 individuals successfully fulfilled the requirement of completing both the pre-test and post-test assessments. The assessment was not included as an average of the pre-test and post-test since the remaining participants completed a single test. Picture 5 illustrates the progression of knowledge for each participant.

According to Figure 5, it is evident that there was a collective growth in knowledge among all participants. The participants that achieved the highest marks were Participant 3 and Participant 8. The individuals involved in this study are characterised by their young age and proficiency in utilizing social media platforms, which facilitates their ease in accessing the offered content. The absorption of farmers in introducing new technology is influenced by age and experience, as demonstrated by the studies conducted by Muhammad-Lawal et al. (2012) and Al Zarliani et al. (2021).

Participants also offer self-statements highlighting the sound effects of the Community Service activities. Figure 6 depicts the alterations in scores after completing the training programme. The self-statement value for nearly all statements is 1, indicating that all participants (100%) possess comprehension and enthusiasm for including live shopping on their social media platforms. The third aspect’s score of 0.93 indicates that despite attending the training, the participant still requires a comprehensive understanding of the technical aspects of live shopping. As mentioned earlier, the age

Figure 5. Change in Community Service each participants’ knowledge score

Figure 6. Change in Community Service participants’ knowledge score based on the categories
variable (Al Zarliani et al., 2021) and proficiency in technology (Yuliandhari et al., 2023) may serve as contributing factors.

The chairperson of the ASA also assessed a statement made by the partner representative. According to the partner satisfaction sheet, the score obtained is 4.7 out of 5, indicating a high level of satisfaction categorised as “very satisfied.” The participants expressed that they had a sense of assistance from engaging in this training session. Positive responses were provided to multiple inquiries, wherein all participants expressed the significance of life sales. Furthermore, the participants demonstrated comprehension of the supplied material and expressed their intention to utilise the acquired knowledge from the training. The findings of this study further demonstrate that training interventions can enhance farmers’ comprehension of technology utilization and boost sales, as evidenced by the research conducted by Fitryani et al. (2021), Wahidin et al. (2021), and Yuliandhari et al. (2023).

4. CONCLUSION AND RECOMMENDATIONS

The community service endeavour was executed successfully and accomplished the intended objectives. Indicators of success can be observed by several metrics, including the tangible outcomes produced, the percentage change in knowledge acquisition, and the favourable ratings obtained from the abdimas partner satisfaction evaluation. The outcome of the endeavour is establishing a Shopee seller account specifically designed for farmers. The presentation value of the adjustment closely approximates the anticipated aim of 22% of 25%. The results collected from the partner satisfaction questionnaire indicate that the partners express high satisfaction with the training they have received. Based on the findings of this study, it is anticipated that the provision of support would be sustained for an extended period, thereby enabling a more significant number of farmers to leverage online marketing platforms that incorporate e-commerce functionalities effectively. Program constraints were the limitation of team resources in providing assistance and the lack of farmers’s ability to understand the program. This activity is recommended to be carried out at the sub-district level so that assistance can be more intense for small-scale farmers. Scheduling of mentoring activities should be prepared and carried out periodically. It is also recommended that further activities be equipped with facilities and equipment such as LCDs to make it easier for farmers to learn.

ACKNOWLEDGEMENTS

The authors express our gratitude to the Institute for Research & Community Service of Universitay of Muhammadiyah Jakarta (LPPM UMJ) for providing financial support for this endeavour under contract number 240/R-UMJ/VII/2023.

REFERENCES


Community service on marketing online training using Shopee Live for Aglaonema farmers in Depok
Lorenta In Haryanto, Dessy Iriani Putri, Syifa Astasia Utari, Prisca Nurmayl Sari, Reza Firdaus, Aqilah Karliyah Aziza, Deni Fadillah, Arif Muzahidin


