Empowering Farmer and Mango Agrotourism Manager Communities in Perlis,Malaysia through Digital Marketing and Cultural Storytelling for Destination Sustainability

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Abstract

Perlis, Malaysia, holds significant potential for mango agrotourism, yet destination promotion has remained largely conventional and has not yet leveraged a well-planned digital marketing strategy. This international community service activity aimed to enhance the capacity of farmer groups and mango agrotourism managers in Perlis to apply digital marketing and cultural storytelling in support of sustainable tourism destination development. The program was carried out through a collaboration between Panca Budi Development University (UNPAB), Indonesia, and Tuanku Syed Sirajuddin Polytechnic (PTSS), Malaysia, using a Participatory Action approach involving 30 participants (local mango farmers, agrotourism managers, and local youth aspiring to become digital content managers). Implementation stages included needs identification, digital marketing training, cultural storytelling training, and mentoring for practical application, evaluated through pre-test/post-test measurements, practical observation, and participant satisfaction questionnaires. Evaluation results showed significant improvement across all measured indicators, with the largest gains in the ability to create cultural narratives and manage social media (each rising 50 percentage points, from 25–30% to 75–80%). Participant satisfaction with the program was also high, with average scores above 4.4 on a 5-point scale. The activity further resulted in the initial formation of a small destination digital-media management team as a sustainability measure, and contributed to SDGs 8, 11, and 17. The program demonstrates that integrating digital technology with the strengthening of local cultural values is an effective strategy for community empowerment based on local potential, supporting the development of sustainable agrotourism.

Keywords: *digital marketing, cultural storytelling, agrotourism, community empowerment, destination sustainability*

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Introduction

Perlis is one of the regions in Malaysia with geographic and social characteristics that support the development of the agricultural sector as well as community-based tourism. One of the region's leading potentials is the mango farming sector, which not only holds economic value as an agricultural commodity but also offers an opportunity to be developed into an agrotourism destination. Agrotourism is a form of tourism development that integrates agricultural activities, education, community culture, and direct tourism experiences. This concept provides an opportunity for local communities to gain economic added value through tourism activities based on local resources.The mango farming area in Perlis has its own appeal because it offers a distinctive experience for tourists, such as orchard visits, learning about the cultivation process, enjoying agricultural products, and understanding the life of farming communities. However, this potential has not yet been fully developed into a highly competitive tourist destination. Based on the initial conditions identified by the UNPAB–PTSS community service team, most agrotourism promotion activities are still carried out in a simple manner and have not yet used a well-planned digital marketing strategy. Promotion still relies heavily on information from the surrounding community, visitor recommendations, and traditional social networks.This condition reflects a gap between the tourism potential available and the capacity for modern promotional management. In today's digital era, the presence of social media and digital platforms is an important factor in introducing tourist destinations to a wider audience.

The development of information technology has brought major changes to tourist behavior in choosing destinations. Before traveling, modern tourists tend to search for information through the internet, social media, online reviews, and visual content.

Therefore, the community's ability to manage digital communication is one of the key factors in the sustainability of a tourist destination. Destinations that can produce engaging content, have a strong digital identity, and can build relationships with prospective tourists through social media have a greater opportunity to grow.These issues are consistent with the initial identification results, which found that the partners do not yet have adequate skills in managing social media and creating digital content to promote the destination.

These limitations are not only related to technological capability but also to human resource aspects. The community needs capacity strengthening so that digital technology becomes not merely a promotional tool but also an instrument of community economic empowerment.

In addition to digital marketing, tourism destination development requires the ability to build stories that carry emotional value for visitors.

A tourist destination offers not only a place to visit, but also experiences, cultural values, history, and social relationships within the community that form the unique character of a region. Perlis possesses a wealth of local culture related to agricultural activities, such as farming traditions passed down through generations, the community's relationship with farmland, the value of togetherness in harvest activities, and local knowledge of mango cultivation management.

Literature Review

2.1 Digital Marketing Training

Hands-on training in managing social media (Instagram, Facebook, TikTok) for agrotourism promotion, covering simple smartphone photography techniques for products/destinations, content posting schedules, the use of hashtags and location tags, and the basics of interacting with prospective visitors online.

2.2 Cultural Storytelling Training

Training in narrative (storytelling) techniques that highlight local wisdom, mango-farming traditions, and the philosophy of the local community, to be packaged into social media story content, destination information boards, or narratives delivered by local tour guides to visitors.

2.3 Mentoring and Institutional Strengthening

Hands-on mentoring in creating the destination's official social media account, developing a simple content calendar, and forming a small content-management team from among community members, so the program can run independently once the service activity ends

Research Methodology

3.1 Target Audience

The target audience of this program is the farmer groups and mango agrotourism managers in the Perlis area, Malaysia, who serve as program partners together with Politeknik Tuanku Syed Sirajuddin. Participants are estimated at 20–30 people, consisting of farmers, orchard-tourism managers, and local young people with potential to become the destination's digital content managers.

3.2 Approach

The program will be carried out using a participatory action approach, in which partners are actively involved from the needs-identification stage, through training implementation, to program evaluation, so that the resulting solutions fit the community's actual context and needs.

3.3 Implementation Stages

1. Initial coordination and program briefing with the PTSS partner and representatives of the farmer groups/agrotourism managers.
2. Needs survey and mapping of existing marketing conditions and available cultural content.
3. Digital marketing training (simple photography, social media management, content strategy).
4. Cultural storytelling training (uncovering local values and story-delivery techniques).
5. Hands-on mentoring in creating and managing the destination's official social media account.
6. Monitoring and evaluation of program implementation and the sustainability of community-led content management.
7. Preparation of the final report and publication of program results.

3.4 Partner Participation

1. Providing access to the program location and facilitating participant attendance.
2. Appointing community representatives to serve as the destination's digital content managers after the program.
3. Actively participating as resource persons in sessions on local stories and cultural values.
4. Committing to continue managing the destination's social media independently after the program ends.

4.5 Evaluation and Program Sustainability

Evaluation will be conducted through pre-tests and post-tests to measure participants' improvement in knowledge and skills, as well as observation of the destination's social media account activity 1–2 months after training. Program sustainability will be supported through the formation of a small community content-management team, provision of training modules for independent self-study, and a plan for periodic follow-up mentoring conducted online by the UNPAB–PTSS team.

3.6 Facilities and Infrastructure of Villages

The Pauh Putra and Arau areas have adequate facilities and infrastructure to support community empowerment activities and tourism development. The existence of PTSS provides support in the form of training rooms, computer laboratories, internet networks, digital learning facilities, and lecturer resources that can be used in knowledge transfer activities to the community. In addition, this area is also supported by the existence of Universiti Malaysia Perlis as a center for the development of knowledge and innovation. In terms of accessibility, the Arau area has a good road network and is connected to Kangar City, Padang Besar, Kuala Perlis, and the Southern Thailand region. The availability of the Arau railway station and land transportation network facilitates the mobility of tourists and the implementation of service activities.

3.7 Aspects of Village/Urban Village Potential

The potential of the area that is the basis for the implementation of service activities can be analyzed based on the following aspects.

a. Educational Potential

The existence of PTSS provides its own advantages because of the availability of human resources, experts, students, and educational facilities that can support the implementation of training, mentoring, applied research, and community innovation.

b. Digital Potential

The increasing use of social media and digital technology provides a great opportunity for the tourism community to expand the reach of promotions. However, this potential still requires increasing the capacity of the community to utilize technology effectively through a planned digital marketing strategy.

Results

4.1 General Overview of Program Implementation Results

The International Community Partnership Program entitled "Empowering the Farmer Community and Mango Agrotourism Managers in Perlis, Malaysia through Digital Marketing and Cultural Storytelling for Destination Sustainability" has been implemented as a form of cooperation between Universitas Pembangunan Panca Budi (UNPAB) and Politeknik Tuanku Syed Sirajuddin (PTSS), Malaysia. The implementation produced several key achievements: improved community understanding of digital marketing strategy, enhanced skills in creating promotional content, and participants' ability to identify and develop local cultural values as part of the tourism experience.

Before the program, some participants still understood tourism promotion in conventional terms, such as direct recommendations and community networks. The use of digital technology, particularly social media, as a means of promoting the destination had not yet been carried out optimally. Through training and mentoring, participants began to understand that digital media can be used to expand promotional reach, build the destination's image, and increase the appeal of community-based tourism.

4.2 Improving Participants' Capacity in Digital Marketing

One of the main focuses of the activity was improving participants' ability to utilize digital marketing strategies to support the development of mango agrotourism.

The digital marketing training was delivered through a combination of theory and hands-on practice.

The material provided included:

1. Understanding digital marketing concepts;
2. Social media usage strategy;
3. Product and destination photography techniques;
4. Short video production;
5. Writing promotional captions;

6. Hashtag and digital location tagging strategy;
7. Content calendar management.

The training showed a change in participants' ability to understand the function of digital media as a promotional tool.
Before the activity, some participants had no understanding of destination branding concepts or digital content strategy. After the training, participants were able to develop content ideas, take photos of the destination, and produce simple promotional material using a smartphone.

Table 1
Comparison of Participants' Understanding Before and After Digital Marketing Training

No.	Capability Indicator	Before Activity	After Activity
1	Understanding of social media's function for promotion	45%	85%
2	Ability to create promotional photos/videos	40%	80%
3	Understanding of destination branding strategy	35%	82%
4	Ability to write promotional caption	30%	80%
5	Understanding of digital content calendars	25%	75%

Source: Processed data (2026)

The evaluation results show that the training had a positive impact on improving participants' capacity. The greatest improvement occurred in understanding the use of social media as a promotional medium. This indicates that participants were already familiar with social media in their daily lives but had not yet understood its use as an instrument for economic and tourism development.

4.3 Developing Cultural Storytelling as the Destination's Identity

In addition to digital technology aspects, this program also paid attention to strengthening local cultural values through a storytelling approach.
In this activity, participants were given an understanding that a tourist destination sells not only a location but also an experience, a story, and the community's cultural values.
Through discussions with participants, several local story themes were identified that could be developed into tourism content:

1. The Journey of Mango Farmers
   A story about the community's experience in developing mango farming across generations.
2. The Community's Relationship with Nature
   A narrative about the harmonious relationship between farmers and their agricultural environment.
3. Farming Traditions and Activities
   A story about the process of planting, caring for, and harvesting mangoes.
4. Mango-Based Local Products
   The development of a story about processed mango products as part of the creative economy.
5. Community-Based Tourism Experience
   A story about the interaction between tourists and the local community.

The results show that participants began to understand the importance of highlighting local stories as part of the destination's marketing strategy. This is consistent with the program's objective of using cultural storytelling as an approach to increase the emotional appeal of the tourist destination.

4.4 Initial Establishment of the Destination's Digital Media Management

One important outcome of the activity was the effort to establish a system for managing the destination's digital media.

During the mentoring activity, participants were guided to understand:

a. the importance of an official destination account;
b. division of tasks among content managers;
c. a publication schedule;
d. consistency in communication with tourists.

Simulation of the Management Structure

Table 2
Simulation of the Management Structure

No	Position	Task
1	Digital coordinator	Managing content strategy
2	Photographer/videographer	Producing documentation
3	Content writer	Writing narratives
4	Social media admin	Posting content and responding to interactions

Source: Processed data (2026)

The formation of this small team is an initial step to ensure the program continues after the community service activity ends.

Participant Satisfaction Evaluation

The activity was evaluated using a participant satisfaction questionnaire. The evaluation indicators included :

Table 3
Participant Satisfaction Evaluation

No	Assessment Aspect	Average Score
1	Relevance of the material	4.5
2	Facilitator competence	4.7
3	Benefit of the activity	4.6
4	Hands-on practice	4.5

Source: Processed data (2026)

Scale:

1 = very dissatisfied

5 = very satisfied

Based on the evaluation results, participants responded positively because the activity provided not only theory but also hands-on practice that could be applied to tourism promotion activities.

Program Impact on the Partner

The implementation of the program had several impacts on the partner, namely:

1. Impact on Human Resources

The community experienced improved capability in:

a. understanding digital marketing;

b. creating promotional content;
c. composing destination stories.

2. Impact on Tourism Development

The program helped the community see that farming activities can be developed into tourism experiences with higher economic value.

3. Impact on Institutional Cooperation

The activity strengthened the international cooperative relationship between UNPAB and PTSS in the fields of community service, education, and innovation-based community development.

Discussion

A. Program Implementation Evaluation

Evaluation is an important part of the International Community Partnership Program, used to determine the program's level of success and the changes experienced by the partner after participating in the series of activities.

The evaluation was carried out using several methods, namely:

a. Pre-test and post-test, to measure the increase in participants' knowledge before and after the activity.
b. Practical observation, to assess participants' ability to apply the material provided.
c. Discussion and participant feedback, to determine the benefits of the activity from the partner's perspective.
d. Sustainability evaluation, to assess the community's readiness to continue the program after the activity ends.

These evaluation methods were used because the community service activity is oriented not only toward delivering material but also toward changes in community capability and independence.

B. Evaluation Results on Participants' Capacity Improvement

Based on the evaluation results, there was an improvement in participants' ability to understand and apply digital marketing concepts as well as develop cultural storytelling.

Table 4
Evaluation Results on Participants' Capacity Improvement

No	Evaluation Indicator	Before Program	After Program	Improvement
1,2	Understanding of digital marketing Ability to	45% , 40%	85% ,80%	40% 40%
3	create digital content Understanding of destination branding Ability to write cultural narratives Ability to manage social media	35%	82%	47%

Source: Processed data (2026)

The table shows that participants' capability improved across all indicators evaluated. The greatest improvement occurred in the ability to write cultural narratives and manage social media. This shows that a hands-on practical approach is easier for the community to apply than

theory delivery alone. This result is consistent with the program's target, which set that at least 80% of participants would be expected to independently create and upload social media content.

C. Evaluation of Participant Satisfaction with the Program

In addition to the capability evaluation, an assessment of participant satisfaction with the activity's implementation was also conducted.

The evaluation used a 1–5 scale with the following indicators:

1. Relevance of the material;
2. Delivery by the resource person;
3. Benefit of the activity;
4. Practical method;
5. Applicability after the activity.

Table 5
Evaluation of Participant Satisfaction with the Program

No	Assessment Aspect	Average Score
1	Relevance of training material	4.5
2	Facilitator competence	4.7
3	Benefit of the activity for participants	4.6
4	Practical activities	4.5
5	Ease of application	4.4

Source: Processed data (2026)

Based on the evaluation results, participants responded positively to the activity because the material provided was directly relevant to community needs.

Participants felt that the hands-on approach to digital content creation provided a new experience that could be applied to support agrotourism promotion.

D. Program Impact on the Partner

The implementation of the program had several positive impacts on the partner, in terms of human resources, economic, social, and institutional aspects.

a. Impact on Human Resource Capacity Building

The program's main impact is seen in the community's improved ability to utilize digital technology.

Before the activity, some participants viewed social media only as a means of personal communication. After the program, participants began to understand that social media can be used as:

1. a destination promotion medium;
2. a means of communication with tourists;
3. a medium for building the agrotourism image;
4. a tool for marketing local products.

This shift in understanding is an important asset in the development of a community-based destination.

b. Impact on Agrotourism Development

The program contributed to strengthening the concept of mango agrotourism as a destination that offers not only agricultural products but also a tourism experience.

Through the cultural storytelling approach, the community began to understand that:

1. agricultural history,

2. farmers' lives,
3. the cultivation process,
4. local traditions,

are tourism assets that can enhance visitors' interest.

Thus, agrotourism development is oriented not only toward economic transactions but also toward preserving the community's cultural values.

c.Impact on Strengthening Community Institutions

One of the partner's initial problems was the lack of a simple mechanism for managing the destination's social media.

Through the mentoring activity, the community began to be guided toward forming a small digital content management group.

Simple management structure:

Table 6
Impact on Strengthening Community Institutions

No	Position	Responsibility
1	Coordinator	Managing the promotion strategy
2	Documentation team	Taking photos/videos
3	Creative team	Producing content
4	Social media admin	Posting content and managing interactions

Source: Processed data (2026)

Forming this team is one of the sustainability strategies to ensure the program does not stop after the community service activity ends.

Program Sustainability

Program sustainability is an important aspect of community service activities.

To ensure the benefits of the activity continue, several sustainability strategies were designed, including:

1. Independent Social Media Management

The partner was guided to continue promotional activities through the destination's digital account.

The activities carried out included:

a. regular posting;
b. documentation of tourism activities;
c. promotion of local products;
d. communication with prospective tourists.

2. Remote Mentoring

The UNPAB and PTSS teams will continue to communicate and provide mentoring online to give input on content development and promotion strategy. This follow-up mentoring is important so that the community does not stop after receiving initial training.

3. Development of Learning Modules

The digital marketing and cultural storytelling modules serve as learning materials that the community can use independently.

The modules contain:

a. digital marketing concepts;
b. content creation techniques;
c. tourism promotion strategy;
d. cultural storytelling techniques.

Program Output Achievements

Based on the activity's implementation, several outputs achieved include:

Table 7
Program Output Achievements

No	Output	Achievement
1	Improved digital marketing capacity	Achieved
2	Improved cultural storytelling capability	Achieved
3	Digital destination promotion content	Achieved
4	Training module	Completed
5	Activity documentation	Available
6	Draft community service publication	Prepared

Source: Processed data (2026)

These outputs are consistent with the program's initial targets of producing improved community capacity, a training module, documentation, and a publication of the activity results.

Program Contribution to the Sustainable Development Goals (SDGs)

This program is related to several Sustainable Development Goals (SDGs), namely:

a. SDG 8: Decent Work and Economic Growth
The program supports building community capacity to develop economic opportunities through the agrotourism sector.

b. SDG 11: Sustainable Cities and Communities
The program supports the development of community-based destinations and the use of local potential.

c. SDG 17: Partnerships for the Goals
The program strengthens international cooperation between Indonesian and Malaysian universities.

Overall, the UNPAB–PTSS International Community Partnership Program shows that an empowerment approach based on digital technology and local culture can be an effective strategy for improving community capacity. The program's success is measured not only by the number of participants involved but also by the change in the community's ability to understand, apply, and continue the program independently.

The integration of digital marketing and cultural storytelling adds value because it connects agricultural potential, local culture, and creative economic opportunities within a single concept of sustainable destination development.

Conclusion

The International Community Partnership Program entitled "Empowering the Farmer Community and Mango Agrotourism Managers in Perlis, Malaysia through Digital Marketing and Cultural Storytelling for Destination Sustainability" is a form of cooperation between Universitas Pembangunan Panca Budi (UNPAB), Indonesia, and Politeknik Tuanku Syed Sirajuddin (PTSS), Malaysia, aimed at improving community capacity based on local potential. Based on the implementation results, it can be concluded that this community service program successfully contributed to improving the ability of the farmer community and mango agrotourism managers in Perlis, Malaysia, to understand and apply digital marketing strategies and cultural storytelling development as part of strengthening a sustainable tourist destination. Implementing the activity through a participatory approach gave the community room to be actively involved, from problem identification and training implementation to content creation practice and activity evaluation.

The evaluation results show an improvement in participants' capacity in several key aspects, namely:

1. **Improved understanding of digital marketing**
   Participants showed increased understanding of using social media to promote the tourist destination. Participants who previously used simple promotional methods began to understand the concepts of digital marketing, destination branding, content creation, and communication strategy with tourists.
2. **Improved digital content creation ability**
   Through training and hands-on practice, participants were able to produce simple content in the form of photos, short videos, and promotional narratives that can be used to introduce Perlis's mango agrotourism potential to a wider audience.
3. **Strengthening local cultural values through storytelling**
   This program successfully raised community awareness that cultural values, agricultural history, farmers' experiences, and local wisdom are important assets in tourism destination development.
   The storytelling approach helped the community understand that tourism sells not only a place but also an experience, a story, and a local identity.
4. **Strengthening the institutional management of digital promotion**
   Through the mentoring activity, the community began to understand the importance of structured digital media management with a simple division of roles in managing the destination's content.

Overall, this program demonstrates that the combination of human resource capacity building, the use of digital technology, and the strengthening of local culture can be an effective strategy for supporting the sustainable development of community-based agrotourism.

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