

## Digital literacy model to empower women using community-based education approach

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### Suggested Citation:

Sujarwo, S., Trisanti, T., & Kusumawardani, E. (2022). Digital literacy model to empower women using community-based education approach. *World Journal on Educational Technology: Current Issues*. 14(1), 175-188.  
<https://doi.org/10.18844/wjet.v14i1.6714>

Received from October 31, 2021; revised from November 15, 2021 accepted from; January 05, 2022.

Selection and peer review under responsibility of Prof. Dr. Servet Bayram, Yeditepe University, Turkey.

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### Abstract

Women have a strategic role in managing and exploiting environmental potential. However, women particularly in tourism still face many obstacles in terms of capital resources, transformation and information, as well as the knowledge and skills of managing local potential. Through the action research method, this activity attempted to investigate whether digital literacy-based information technology can be used as an empowerment model for women in tourist villages. The study showed that technology may be used by women in tourist villages to expose their culinary products. This action was community based and it was found that it could trigger a group of women to continue learning and adapting with the current trends of marketing. The technology used to increase women's skills in tourist villages was through the introduction and examples of several social media applications that can be used for tourist attraction. It can be concluded that women should be encouraged to be digitally literate and able to access a wide range of learning resources.

Keywords: community-based education, digital literacy, empowerment

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## 1. Introduction

Village tourism cannot be separated from the role of all components in the community. One of the figures who contribute significantly to the development of a tourist village is the women in the neighbourhood. Women have become figures who have a strategic role in the management and utilisation of environmental potential. Women and girls in comparison to their male counterparts mostly fail to benefit from the opportunities arising from the cultural economic prosperity (Uduji et al., 2020). Indeed, from preliminary studies, there are still many obstacles faced by women in exploiting the potential of the environment, often given the term local potential. Among these are the low access of women to capital resources, transformation and information to managing local potential, as well as the knowledge and skills.

The position of women from the gender perspective, essentially the reproductive role, is that a woman is stereotyped as a human who has the natural ability to conceive and be pregnant, take care of children and do domestic work. However, in terms of reproduction, women should also be able to work in producing goods or services. Then, in terms of the social role, women should be connected to the other women, and it is common that they share concerns to help each other. Data from the International Labour Organisation (ILO) (2016) provides an understanding that the total employment in the world is held by approximately 40% of women. Meanwhile, based on vulnerability in the workplace, women are a vulnerable group. In addition, female roles at the management level in a company are less represented in business ownerships and entrepreneurship (Sheikh et al., 2018). Some women are nicknamed as multitasking, because some of them are able to take on three roles simultaneously.

Women in tourism management also have a strategic role that can be pursued through opportunities that can be utilised in the provision of tourism businesses to increase capacity and develop relationships with both local and domestic tourists (Dermatoto, 2012). This condition is related to the problem of managing a tourist village, because of the limited knowledge and skills possessed and with the times that are increasingly developing with technological sophistication. It can be further explained that women still have limitations in terms of skills and business capital. As stated earlier, the condition of the community is still gender biased and lacks intensive coordination and collaboration between the related sectors.

Walby (2014) states that patriarchy is a system of social structure and practices that position men as dominating, oppressive and exploit females. The concept indicates that women are 'nothing' without the role of men. Anthropocentrism perspectives assert that men are more independent than women. Also, there is a religious doctrine which restricts the freedom of women in the public sphere. The fall of Soeharto's regime in 1998 created changes in the strategy and actions of women's political representation and participation in Indonesia (Kulsum & Badruddin, 2019). Country-level attitudes about gender discrimination – which may be a reflection of true gender numbers discrimination – appear to affect the well-being of people in the country (Napier et al., 2020).

The needs of rural women in increasing participation in the field of tourism development are quite diverse based on the potential characteristics of the village and its community (Astuti, 2008). The development of the tourism sector is influenced by several components, one of which is through efforts to empower women. Meanwhile, if it is associated with the United Nations Sustainable Development Goals, then achieving gender equality and empowering women is the fifth goal (Abou-Shouk et al., 2021). One way to see the level of population empowerment in the tourism sector is to develop a scale of tourism empowerment that is necessary. The scale developed should certainly relate to the three main dimensions of empowerment efforts, namely psychological, social and political. Psychological

efforts relate to the feelings of pride and self-esteem of the community towards local tourism. Social efforts relate to the links between people and their communities and promoting their involvement in tourism activities. Politics occurs when local community members are equitably involved in the decision-making process in tourism development. In relation to the statements above, this model can be developed based on social empowerment (Boley et al., 2017).

One of the core principles of sustainable tourism is to emancipate local communities; however, there is more effort to provide communities with capacity building and skills transfer, but the sustainability of the programme is compromised (Stone & Stone, 2020). Some of the needs in question include education and training, as well as counselling and guidance, in the field of increasing public interest, such as regional art performances or local culture and provision for homestay; knowledge and skills in the field of tourism business, such as souvenir-making, local product processing business, provision of telecommunications facilities and healthcare; and other tourism service business development. Then, the opportunities available for rural women to increase their participation in the field of tourism development are quite diverse. In line with this, strategies like peer training should be initiated through pre-existing structures for initiating discussion and negotiations for promoting small business development and empowerment among indigenous peoples in the Pacific (Movono & Dahles, 2017). Among these are the opening of accommodation services (lodging) in the form of homestays in tourist destination villages, packing agricultural products into typical souvenirs, cultivating ornamental plants as one of the specialties, presenting agricultural products as typical food products, opening food stalls with special food, making souvenirs and opening of kiosks, providing tour guides, forming art groups involving women, opening catering services and so on.

The preliminary studies conducted by researchers provide an understanding that rural women face several problems in increasing participation in the field of tourism development because of limited professionalism in the management of business activities that support tourism; production and marketing are still limited; cultural diversity and perceptions of some rural communities are still gender biased; provision of tourism facilities and infrastructure is still limited in funds; and less intensive cooperation and coordination between sectors or agencies (Sujarwo et al., 2017). Some of these things later made the suboptimal implementation of women's involvement in rural activities related to the management of tourism villages.

Developing human potential, as well as socialisation, values and skills, must be carried out through educational activities. The implementation of educational practices is directed at the efforts to uphold humanistic values into a solution to this global phenomenon (Sujarwo et al., 2021). Purnomo and Solikhah (2021) said that community-based education focuses on community empowerment. Community-based education starts from the perspective of critical education of those who want to oppose the hegemony of the government in education through the democratisation of education. To maximise the implementation of community-based education in empowering women in the management of tourist villages, it is necessary to introduce information technology. Information technology (IT) provides benefits for broader access to computers, the Internet and cell phones. Technology affects our daily lives, although many people do not have any specific knowledge or interest in it (Michaela & Bogner Franz, 2020).

Nowadays, with the rapid development of technology, many tourists choose tourist destinations through social media which are advertised online. Effective marketing and strong regional branding are important factors for tourism promotion (Tovmasyan, 2020). It can be concluded that the Internet has been attached to people's daily needs. People are starting to recognise that the Internet provides benefits in support of work, education, health and so on. Therefore, it adds that the concept of

community-based tourism management, emphasising community participation in tourism management being an effort to make the concept of tourism sustainable. The concept is predicted to be able to effectively improve the welfare of the community through improving the local economy. However, it seems likely that there are still some village management communities that have not been able to maximise their tourism potential in order to get more benefits (Ritchi et al., 2018).

Syarifuddin (2014) shows that the Internet really helps people in carrying out their work. In addition, cell phones used in this study to observe the use of IT showed that 83.68% of the respondents used it to call and 79.04% used it for sending short message texts (SMS). 26.08% of the respondents used it for entertainment and games, 12% used the Internet and MMS and 3.52% used the Internet for video calls. Increased productivity and community activity in developing the world of tourism can be pursued in various ways, by both the cultural community and the government. Some aspects such as managerial, funding and marketing and aspects of understanding technology need to be always close to the point of change. Kotler et al. (2018) add that the fulfilment of consumer needs is the essence of marketing. Marketing is a process where the seller creates value for the consumer, which then forms a relationship between the seller and the consumer, in return securing a value from consumers. Zeithaml et al. (2018) stated that the most fundamental concept in marketing is the marketing mix, which is defined as the elements controlled by the organisation that can be used to satisfy or communicate with consumers. So, it becomes very important for organisations and tourism destinations to use online marketing strategies. The use of technology and information is one of the efforts to eliminate limitations owned by the community. The availability of information that can be accessed by the Internet today is plenty and can provide inspiration and opportunities for business development. The Internet is not only an effective and inexpensive marketing medium, but can also provide information about interests and products that can be produced by the public.

The use of information and communication technology (ICT), especially computers, Internet and telephone, supports their work greatly and is very helpful in completing the work on time. These media are owned by almost all respondents in this study and even some have more than one cell phone. The social environment formed at this time is very good wherein there are several natural tourism potentials that can still be developed, including caves, panoramas and mountain nature. The investment base can be concentrated on the local community. Arintoko et al. (2020) showed that the sustainable tourism strategy is an effort in the concept of community-based tourism village development. An understanding arises based on the assumption that the sustainability of tourism depends on the conservation and development of resources used for tourism purposes and the various studies and models developed. The concept is directed at tourism activities that support the traditional way of life of the local community and help the community gain prosperity by protecting and maintaining sociocultural values and cultural resources and natural heritage. Therefore, it can be used as an approach to tourism development and become a global standard involving the concepts of participation, empowerment, transparency and justice.

This mechanism can be utilised optimally in order to disseminate various information and knowledge to the public more effectively and efficiently. Thus, based on these conditions in the empowerment of women, it is necessary to develop digital literacy models through community-based education. The purpose of this action programme is to study whether community-based education has an impact on the following: a) women have an attitude in managing their potential, especially in the field of culinary entrepreneurship; and b) increasing the participation of rural women in tourism by managing local potential and utilising IT.

## **2. Methods**

### *2.1. Research model*

The study was conducted in Bejiharjo, Gunung Kidul Special Region of Yogyakarta Regency, Indonesia. The preliminary study informed that Bejiharjo is among the tourism villages and the community leaders living in this area have the potential to be empowered through technological literacy; most of them are women and food is their main selling product. The research problem is how to empower these women by adapting current technology and, in particular, how can they create ideas to widen their sales, as well as attract tourists to their area.

This research focuses on one of the attractive natural caves in Gunung Kidul, also known as a tourism village. The Pindul Cave is one of the tourist attractions in the area which has unique natural scenery because Pindul Cave is famous for its rock structure. The access road to Pindul Cave is very easy and big cars, buses and trucks can be used for transport. Pindul Cave also has cave tubing tours in the river along the bottom of the cave using buoys to see the beauty of the rocks in the cave. The tourists visiting Pindul Cave can stimulate the growth of the people's income.

### *2.2. Participants*

The study used an action research method with the main subjects being the women in the community from selected tourism villages. Participants who were empowered in this action programme were the women who already had a culinary business and were part of a culinary group in the tourist village of Pindul Cave; as many as 25 people participated. These targets already had their own culinary groups and communication devices such as smartphones.

### *2.3. Data collection tools, data collection process and data analysis*

The action was carried out by designing a prototype model of digital literacy in empowering rural tourism women through community-based education. Initial observation showed that they used smartphones for daily communication; however, the usage was very limited, and hence a common social media application was chosen, such as Instagram. The researchers taught them by showing examples, i.e., example-based learning, which included photos of culinary products advertised or posted in social media. The worked example-based instruction has been shown to be effective by cognitive load theory research (Retnowati et al., 2010). The women with their community were encouraged to collaboratively explore their food products and develop new perspectives of the product image. So, in-depth interviews, documentation and observation were the techniques used to collect data. The resulting products were observed and described with qualitative analysis in this study.

## **3. Findings and Discussion**

### *3.1. Rural women community*

Bejiharjo village community is a community where majority of the farmers and labourers work, and so that the economic conditions of the majority are middle to lower. Educational background in the village of Bejiharjo consists of mostly those who graduated from elementary school or equivalent, although there are also some people who have continued their education up to the tertiary level. There are also many women of childbearing age who only stay at home and do not work because they do not have the competence to earn extra money, and only rely on the earnings of their husbands.

Before the formation of the tourist village, majority of the villagers of Bejiharjo only relied on the traditional agricultural sector as one of their livelihoods to meet their daily needs. The agricultural sector that they rely on to meet their daily needs is uncertain because the results of traditional agriculture depend on the season. The conditions are very minimal, making many parents unable to send their children to college. On the other hand, the rich potential of Bejiharjo village is its natural and cultural potential. Bejiharjo area has unique and special characteristics to be a tourist destination, which include a natural nuanced environment, the tradition and culture still held by the Bejiharjo people, special food, agricultural systems and kinship systems. Therefore, the idea to create a community-based tourist village arose. The concept of community empowerment is an important aspect in the development of Bejiharjo tourist village. This is because the development of tourist villages utilises many resources owned by the people around them.

The community plays an important role in supporting the success and development of the tourist village so that people who are powerless can be empowered to create independence and increase economic prosperity for both young and old; men and women participated in this programme. Since then, the village of Bejiharjo began to develop rapidly, and traditional people who thought that the agricultural sector could only be able to make ends meet had begun to change as a servant community of tourism services. The tourism service industry is a potential source of income in Bejiharjo village, which is able to make it a local, regional and even international commodity for tourism needs in the modern world today. Tourism is able to make a significant contribution to the economic improvement of the Bejiharjo village community. The development of tourism in Bejiharjo village is inseparable from the support of various parties, one of which is the support of the culinary service community.

### *3.2. Implementation of the technology literacy model*

The activities given to women culinary participants in the village of Bejiharjo aimed to increase their marketing skills through the use of gadgets by focusing on the need for culinary development in the village of Bejiharjo, namely product marketing. The activities provided were associated with social media that could be used as a forum to promote culinary products typical of the Bejiharjo village. The average woman who was active in the culinary field was mostly at the end of her productive age (55 years old). The results of the interviews and observations showed that the ability to adapt to technology was still limited. Most of the female culinary participants did not know about social media. They said that it was too complicated to understand the use of social media, even though most women already had gadgets with features that supported access to several social media applications. In addition, the awareness to develop processed products typical of Bejiharjo village was less motivated. This could be seen from the typical food and beverage offerings that were not served attractively in terms of performance and hygiene.

During the process, women culinary participants were given an understanding regarding the preparation of interesting social media contents. Some material were related to taking product photos, making interesting product reviews and how to advertise products at certain hours to get the attention of social media users, all in the format of worked examples. The enthusiasm of the women was very good when receiving some material at that time. However, after the researchers conducted an evaluation, a few days after the implementation, some women needed to repeat the stages in using social media for product marketing. Strengthening instructions were given by asking them to create small groups with women, who were much younger and who already acquired social media knowledge, to focus on marketing activities.



The availability of natural resources in the environment around the community had become a motivation for the women's groups in increasing their potential. The natural potential was in the form of spice plants that can be used as processed herbal medicine. This activity began with the initial product trials conducted on content experts and instructional material experts. From the results of the trial, we obtained guidelines for technological literacy in empowering women.

### *3.2.1. Programme socialisation*

The outreach was carried out at the Pindul Wirawisata Cave site by introducing the programme of activities and asking for input related to the programme implementation. The socialisation was carried out by involving: potential participants, village officials, tourism managers and resource persons (business people and experts). Event socialisation is a step to obtain participants in the community to be fully involved in implementing the technology literacy programme. The socialisation was also intended to hold an agreement related to the time and place where the training would be held. In this socialisation activity, the researchers worked with culinary groups in the tourist village of Pindul Cave.

### *3.2.2. Implementation of action*

Training material and assistance with technology literacy activities in community-based women's empowerment included the following: a) motivation and culinary entrepreneurship attitudes by utilising IT; b) skills in using IT in marketing culinary products; c) worked examples on the application for tourism product marketing; and d) knowledge about food packaging and hygiene.

The strategy used in the implementation of this activity was in the form of training using the adult education approach. The adopted strategies included worked examples of culinary marketing, followed by problem-solving in their case. This study used the participatory approach, which aims to involve participants in learning by utilising the participants' experiences as a source of learning. In the implementation using individual and group work, they could carry out brainstorming, discussions, demonstrations, and practices.

The implementation of technology literacy activities utilising media was in the form of: laptops, screens and smartphones. The implementation of technology literacy activities required teaching material for guidance to participants in following training and practical implementation. The teaching material was in the form of technology literacy guidelines that were prepared based on the local characteristics and potential.

The implementation activity begins with the presentation of the material by the lead researcher, namely to foster motivation in running entrepreneurship. The ability of entrepreneurship must be balanced with the times, which is adjusting to the use of IT. The use of IT must be carried out wisely so that its utilisation does not cause negative impacts. Motivational strength consists of a) the strength of belief, the most basic strength in human beings; b) organisational strength, how someone performs tasks with good management; 3) intellectual strength, that is if a person has high intellectual abilities, then that person will be more motivated to do the tasks entrusted to him; 4) the power of technocrats is the relationship with technology where the stronger someone's mastery of technology will be more motivated in carrying out the task; 5) democratic power that is related to the attitude or style of a person in a team. The strength of the soul or piety is the power that mostly determines the five forces above and this power is a kind of command to do the job as well as possible. The next step is the general introduction to social

media. It was explained that social media is an online media that is used as a means of social interaction on the Internet. In social media, its users can communicate with each other, interact with each other and carry out various other activities.

Technology literacy activities are focused on women for various reasons, namely women have a low level of knowledge and skills about IT, so after conducting internet marketing training activities, the women are expected to (a) have high motivation and work ethic in managing IT-based culinary business; (b) master IT knowledge and skills; (c) have a consistent mental attitude that is realised in the field of work (professionalism); and (d) have enthusiasm and competitiveness (competence).

The women of the community were expected to master social media to help market the processed products they had made. The majority had smartphones, but they only used it to communicate via SMS and calls. Thus, it was important to carried out training to help the women in the community to learn to market their processed products on social media using their respective smartphones. The goal was that the women of the Pindul Cave community must have wider access to market their processed products, so that the income they get also increases. In addition, marketing through social media can also help show the general public that Pindul Cave's processed products have the characteristics that are different from other regions, and can also increase the existence of Pindul Cave's tourist attraction itself.

### *3.2.3. Result presentations*

In the following activity, the participating women were asked to do a presentation of the material with the help of social media in marketing the processed products they had. Various social media platforms were used to market a variety of products, which included Facebook, Instagram, WhatsApp, Blogger, WordPress and Twitter. After the implementation, they were able to expose their culinary products, for example, their product was Wedang Pindul. They had developed the following:

1. A status post: 'Pindul Cave traditional beverage is only IDR25,000 per bottle' (posted on a Facebook status).
2. Photo compilations of 'Wedang Pindul' as an advertisement (posted on Instagram).
3. Story writing: 'Wedang Pindul', which contained promotional sentences in the description column (posted on a blog page).

To support the literacy understanding for women, the actions taken do not only provide education related to the use of technology as advice for marketing but also provide education related to packaging, which is useful in supporting marketing activities. In the process of selecting the packaging, the trainer paid attention to the material of the package; the shape or model of the package; and the quality of the package, for example, hardness or not, easy to tear or not; besides that she also saw the practicality of the package, for example, light and easy to carry everywhere or not, and so on. In addition to paying attention to the packaging method, the trainer provided examples of the processed herbal products registered to the government to have a halal certificate, so that it can be consumed safely by the wider community. In the making of 'Wedang Pindul' products as souvenirs, training also included how to maintain the quality of the material and the cleanliness of the tools for food production.



## *Discussion*

The activity of empowering rural women in tourism through IT is a strategy that is suitable to the needs of women in terms of product marketing. In Bolivia, for example, using current technology has empowered these women; especially, the Internet resources have created a greater awareness of governance issues and technical forms of communication (Singh & Mathur, 2021). The actions taken need to also consider several aspects ranging from individual education, individual characteristics, abilities and other skills that may play an important role in determining the level of business performance (Koc, 2020).

The actions carried out are inseparable from adult learning strategies. This is because the target group can learn from each other based on experience, starting with the experience in cooking and the ability to use social media. However, it turns out that they have not been able to use social media to market their products. Therefore, it is important to empower women in tourism villages to improve their welfare. The tourism skills to tune into the lying ideas of power prevalent in different cultures and perhaps reverse power structures or at least level the playing field for traditionally marginalised groups (Boley et al., 2017). Programmes should be built to focus on increasing the role of women, broaden programmes to improve the family/community support and promote their participation in tourism as entrepreneurs (Panta & Thapa, 2018). Women's empowerment activities in tourist destinations have an impact on women, including the awareness of women to continue learning along with technological developments. So having skills in IT will make it easier for women to market or access IT related to the products produced and will improve their welfare in the economic field because of orders that are more often neglected by not utilising IT.

With the development of technology, it is easier to retrieve content. Therefore, compiling content certainly requires direction in perceiving what to do with the material that has been obtained through practical activities (Auberry, 2018). The above statement reinforces that technology provides several tools that can support the improvement of education and generate tension for change (Arikan et al., 2017). In addition, other research results show that tourism and financial factors drive several things, such as gender equality in higher education, in primary and secondary school enrolment, women's employment and women in non-agricultural paid work, while further supporting growth-driven tourism, financial-driven growth, growth-stimulating women's empowerment and women's empowerment hypothesis that tourism can drive national development efforts (Nassani et al., 2019).

On the other hand, the way to conceptualise technology is to place humans in three interconnected worlds – the natural world, the social world and the designed world. This relates how humans can always adapt well in the world that has been created by the creator – in short, everything that exists without human intervention or invention. In addition, it is inseparable from the values and norms that are believed to interact. Also, the designed world is a technological world which includes all the modifications that humans make naturally to fulfil their needs and desires (National Academy of Engineering and National Research Council of The National Academies, 2006).

The implementation of empowerment activities must involve full participation of the participants to provide maximum knowledge. Fandeli (2001) suggested that tourism development is basically community and territory-based development on: 1) advancing the level of community life while preserving identity, local culture and traditions; 2) increasing the level of income economically at once distribute evenly among local residents; 3) orienting towards the development of small and medium-scale entrepreneurs with a large workforce absorption and potential in technology comparative; and 4) making the most of tourism as a contributing agent to cultural traditions with the least possible negative

impact. Suggestions from other research results are as follows: empowerment must pay attention to sociocultural values, levels of empowerment and factors that influence women's views about empowerment itself (Aghazamani et al., 2020). The material provided in the implementation is the provision of IT-based entrepreneurship motivation, forming business groups, training in IT-based business management, managing businesses and assisting business groups. Motivation activities in empowering women are very important in providing entrepreneurial provisions in the target group. Lee et al. (2020) showed that empowerment efforts in the social hierarchy then show the role of a leader. Providing motivation is one of the keys to a leader who plays a close role in empowerment efforts to continue to be able to improve and develop the capabilities of the community group he is leading.

The next activity is the formation of group works, and it was found that a group consisting of five members worked well, in which each group had young women who were more knowledgeable about social media. Women worked more optimally if they work in groups or communities. The grouping of the roles of women and men in life actually starts from human thoughts that are still very simple in nature, where people learn from what they see in their lives. Socialised by their environment, women's lives tend to be in groups, managing food and medicine. This is different from men who work outside freely, the environment of men socialising their nomadic life (Probosiwi, 2015).

Women who have been considered as second class in Bejiharjo area have begun to shift their existence to being empowered women. There is evidence that women have a culinary business which can provide additional economic needs for the family. Thus, women have the same role as men and also have the same opportunities as men in managing tourist villages. The same opportunity means that both have the same active participation in managing tourism villages. These findings are in line with the goal of women's empowerment to improve the status, position and condition of women in order to achieve progress that is equal to men (Sujarwo & Wibawa, 2013). It showed that the overall suitability of tourism personnel in terms of gender has not been investigated previously. However, empirical research may be carried out in the future to explore the strengths of females in service jobs from a wide variety of perspectives (Koc, 2020). The tourism sector, namely at the management level, presents specific characteristics that work as an impediment to women's career progression (Carvalho et al., 2018).

Marketing in the business world is the key in developing satisfying relationships with customers that benefit both consumers and producers. Today, digital marketing is very important, regardless of the size of the business sector. It is, therefore, very important to not only upload to the website but also carry out other efforts towards marketing, because marketing is a social process by which individuals get what they need and need through creating and exchanging things and motivating forces with others. As Forbes points out, 82% of the clients conduct direct investigations on the web, and (Tech Crunch) certified in one of their reports that 79% of the people shop on the web; and as a real example of US digital marketing spending will rise to around \$332 billion by 2021. All this leads to the fact that the closer one is to the customer, the more connected one is to the customer, the more one has to consider the digital dimension of one's own marketing strategy.

Especially in tourism, culinary is one of the supporting aspects. The results of the research from the culinary industry show that it is undergoing major changes to the foundations of globalisation and sustainable urbanisation and in satisfying the growing need for individual products (Lee et al., 2015). From culinary tourism, offering experiences for tourists to communicate with what is unique and original is related to the history and distinctive culture of each place (Buhalis et al., 2011), Nowadays, new tourism is better known as food and beverage tourism, and this type is mainly based on exploring food and drink for a particular culture. In addition, learning how to prepare food and drinks is an

interesting activity in the development of culinary tourism today, apart from trying the original taste of the dish (Verhoef et al., 2021). Culinary tourism includes cooking classes and serving food and drinks, in both local restaurants and bars or farms and manufacturing sites, as well as wrapped with culinary festival activities (Matt et al., 2015).

Digital marketing operation designates all marketing actions passing through one or more digital channels more precisely by commercialising services and products through digital technologies using the internet (Nguyen et al., 2015). In this context, one approach to move towards computerised culinary tourism and their conduct is to observe the advanced exercises that they can carry out according to their tourist exercises. The exercises that e-tourists can complete with advanced devices could be IT (Eller et al., 2020). Distinguishing the advancement of ceaseless learning is necessary for building digital computerised strategies (Sadiku-Dushi et al., 2019).

#### 4. Conclusion

The needs of rural women in increasing participation in the field of tourism development vary considerably based on the potential characteristics of the village and its community. To reach the development stage of tourism villages, the community must have high involvement in the management of tourist villages. The use of ICT implemented in Bejiharjo shows that giving an explanation of something new makes women more interested in being able to continue learning. These development activities support their work greatly and are very helpful in completing the work on time. The use of investment bases in the village of Bejiharjo, in the form of Pindul Cave management, can be concentrated on the activities of women, on the other hand, as well as efforts to empower women. This development effort is carried out by organising information and knowledge dissemination to the public more effectively and efficiently. Technology is an attraction for women in tourist villages, which indirectly triggers women to continue learning. The IT used in increasing women's empowerment in tourist villages is through the introduction of several social media applications that can be used as a trigger for tourist attraction. Based on the observations of the developed model, it can be concluded that the use of IT can facilitate women in accessing learning resources from anywhere.

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