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# The Role of Using Gadgets in Facing the Existence of Information Systems in the Tourism Village Community in Cidadap Village Using TAM (Technology Acceptance Model)

M K Legiawan<sup>1\*</sup>, A Sutoni<sup>2</sup>, and Mujiarto<sup>3</sup>

<sup>1</sup>Program Studi Teknik Informatika, Fakultas Teknik, Universitas Suryakencana, Cianjur 43216, Jawa barat, Indonesia

<sup>2</sup>Program Studi Teknik Industri, Fakultas Teknik, Universitas Suryakencana, Cianjur 43216, Jawa Barat, Indonesia

<sup>3</sup>Department of Mechanical Engineering, Universitas Muhammadiyah Tasikmalaya, Indonesia

\*kany@unsur.ac.id

**Abstract.** Indonesia is one of the countries crossed by the "ringoffire", the positive impact of the region is to make the land fertile so that most of the regions in Indonesia are used as tourist attractions. Cidadap Village is in Campaka District, Cianjur Regency, which has the concept of a tourist village. That is located in an area of 969,699 Ha with a description of the potential of Natural Resources that can be used as tourist attractions, namely an area of 79 Ha, 25 Ha of Forest, 554,559 Ha of dryland, 6 rivers and 8 Fruit Springs. While the total population of approximately 5811 people who have an educational background from elementary schools to tertiary institutions is approximately 2715 people or about 47% of the community who have an educational background. In applying the concept to the Tourism Village, of course the role of technology is very important in this case is the use of gadgets to provide information to the wider community to find out this potential. But before implementing information system technology, it is of course necessary to know in advance how ready the community is in using gadgets in the management of the tourist village. To measure how big the role of the Cidadap Village community is in the use of gadgets to information systems using the TAM (Technology Acceptance Model) model by forming constructs according to the model so as to create a hypothesis that is adapted to the conditions of the community.

## 1. Introduction

The role of the use of gadgets is now very much developed with the support of an internet-based information system that is adequate to support human activities in various aspects, based on research by the Internet Service Providers Association (APJII) in 2018 that the use of the internet especially in the area of West Java is around 16.7% of the total the population in Indonesia is the highest number while the penetration of internet usage based on the total population in the province of West Java is 58.3% and the remaining 41.7% are not Internet users and this is a large number that has not been used compared to the provinces others such as DKI Jakarta and DI Yogyakarta. Based on the educational background based on the survey, it turns out that the highest number is those who are carrying out college studies,



namely 92%, while those who have graduated from elementary school are 33.9%, graduated from junior high school 63.5%, graduated from high school 80.6%, and more than 83% graduated from university level. The survey results from gadget users to access the internet were 93.3%, this means that the interest of the population in using the gadget is still very high[1].

Cidadap village which has an area of 969,699Ha is located in the Campaka sub-district of Cianjur Regency and is located at an altitude of 1167 above sea level which has an average temperature of 29°C. Cidadap Village will apply the concept of a tourism village. The concept of a tourism village has the support of the government, especially for a green tourism village which is a program of the Ministry of Cooperatives and SMEs (Small and Medium Enterprises) in collaboration with several ministries, one of which is the Village Ministry. To achieve this concept, a management is needed, one of which is applying appropriate technology, one of which is the use of information technology. Before implementing this technology, it is necessary to understand the manager in this case the Cidadap village community to use a gadget that is used to access an existing information system based on the internet and the intention to use the information system if an application is made to manage the tourist village in the Cidadap Village. To measure the role of gadgets used by the public in accessing existing information systems, a research model is needed, in this case the TAM (Technology Acceptance Model) model is used because this model is very suitable for measuring the acceptance of gadgets to access information systems. The expectation of using this model is that its acceptance can be significant, even if later it is not significant, then it is necessary to do intense counseling in the use of information technology.

## 2. Literature Study

### 2.1 Cidadap Village Profile

Cidadap Village is one of the villages in the Campaka District of Cianjur Regency, West Java Province, which was formed in 1920 and stood on an area of 5,500 Ha at that time. The historical value of Cidadap Village was when the era before independence was used as an army headquarters, precisely in Legok Jengjen Village around 1942 while in Ciranca Village it was used as the Dutch headquarters. While the current area of land is 969,699 Ha due to regional expansion. The total population in the village of Cidadap is around 5811 people with various educational backgrounds graduating from elementary school 1201 people, graduating from junior high school 719 people, graduating from high school 757 people, and graduating from college 38 people which means that a total of 2715 people graduated or around 47% of people who have an educational background[2]. Potential list of natural resources is as in table 1. below:

**Tabel 1.** Potential List of Natural Resources Cidadap Village

No.	Potential Natural Resources	Wide/Qount
1	Settlements	64 Ha
2	Rice Fields	199,340 Ha
3	Plantation	79 Ha
4	Animal Husbandry	6 Ha
5	Office Space	0,8 Ha
6	Forest	25 Ha.
7	River	6 Object
8	Water Springs	8 Object
9	Field	554,559
10	Jalan	1,5 Ha
11	Others	39,5 Ha

Source: Medium Term Development Plan report Cidadap Rural Year 2016-2022

### 2.2 Tourism Villages

Tourism village according to Law No. 10 of 2009 and Nuryanti in 1993 are a tourist destination or tourism destination that integrates tourist attractions, public facilities, tourism facilities, accessibility, which are presented in a structure of community life that integrates with applicable procedures and traditions. The tourism sector has a very important economic role in Indonesia, because in 2014 tourism contributed to GDP (Gross Domestic Product) of 9.3% and to employment nationally by 8.4% or as much as 9.8 Million jobs, and in the same year in which foreign tourists recorded 9.4 million people visited the country's foreign exchange of USD 11.2 billion, while in 2013 archipelago tourists recorded travel costs of Rp. 177.8 Trillion[3].

The Ministry of Villages encourages provincial governments, district governments, village heads to the Tourism Awareness Group to support and at the same time start implementing e-ticketing at tourist sites. In addition to the application of e-ticketing, tourism digitalization is also carried out through digital tourism promotion or marketing. This is a marketing solution that has broad coverage and can attract as many local and foreign tourists as possible to tourist destinations in Indonesia, especially in disadvantaged areas[4].

There are 5 aspects in the development of tourist villages including holistic approach, participatory learning, empowerment of management, action research, and synergy and network [5]. Of the five aspects, one of them is action research which is a manifestation of an independent apparatus and institution, only tested if real action has been taken and is beneficial to the environment, and this is a program of assistance in institutional capacity.

The potential of natural resources in an area can be selected as the selected superior product in the area, using several criteria including abundant natural resources, government readiness, and the uniqueness of the products to be produced [6]. According to [7] The concept of innovation development in the village must involve the higher education with the village. The tertiary institution acts as a guide for village progress, and as a facilitator for other parties as needed. Some criteria in developing village potential are capital, availability of raw materials, product innovation, attractive packaging, promotion, sales system, and business management.

With the natural potential that exists in Cidadap Village, Cidadap Village will apply the concept of a tourist village which is currently being used as a tourist attraction is the "terekel" Waterfall and "Cibereum" Lake where both objects are icons of the Cidadap Village tourist destination that action research needs to be done so that everything can be managed well.

### 2.3 Gadget

The role of gadgets in public life is very important where it can be used as a means of communication, adding insight and knowledge, education and business. The positive effect of using a gadget is that it can provide convenience in completing tasks because with the ease of accessing various information makes people interested in using the gadget [8].

Many definitions that explain about gadgets, the most important is the difference in each of these gadgets especially in its function. Gadgets or smartphones are mobile devices that are supported by various applications such as video, mp3 players, television, cameras, which are supported by internet access [9].

According to Attewell (2005) in Iqbal and Bhatti (2015) that the increase in smartphone ownership specifically among young people is the main driving force for researchers coming up with research ideas about how to use smartphones in teaching and learning activities. M-learning can be considered as a further step in electronic learning (e-learning) where learning is transmitted through wireless modes and mobile devices such as cellphones / smartphones, laptops, personal digital assistants (PDAs), and tablet PCs [10].

### 2.4 Information System Technology

In durodolu research (2016) explains that trust in the use of technology can lead to increased personal control, flexibility, and the use of competent information. Therefore, increasing knowledge can result in better productivity [11].

In the use of information systems Sayekti and Putarta (2016) explain that the success of acceptance depends on the user's perception, if the user considers the information system easy to use and useful then they will be easy in their work [12].

According to Haag and Keen (1996) in Darmaningtias and Suardana (2017) that information technology has a very important role in conducting business activities, this supports the speed, ability, and connectivity of computers to the internet can produce efficiencies in the business processes that are run. Information technology is a device or tool to assist in facilitating the implementation of tasks through the information process [13].

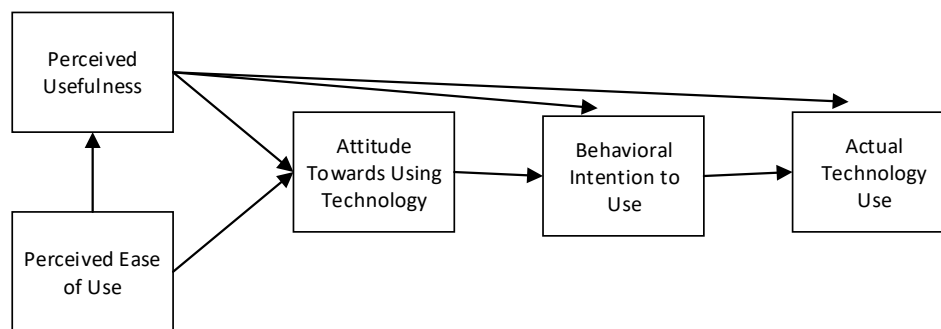
### 3. Research Model

#### 3.1 Technology Acceptance Model (TAM)

In research measuring the acceptance of information system technology among the Tourism Village communities in Cidadap Village is to use the Technology Acceptance Model (TAM) model. TAM is a system acceptance model that uses information technology used by users. TAM can be applied because there is a decision on the individual in terms of acceptance of information system technology where the user has an awareness that is explained by the intention of his behavior. TAM argues that individual acceptance of information technology systems is determined by two constructs namely Perceived Usefulness and Perceived Ease of Use developed based on Theory of Reasoned Action (TRA) by Davis et al (1989) [14].

Perceived Usefulness and Perceived Ease of Use have an influence on Behavioral Attention. Technology users will have the intention to use if they feel the technology system has benefits and ease of use. Following are the specific forms of TAM shown in Figure 1.

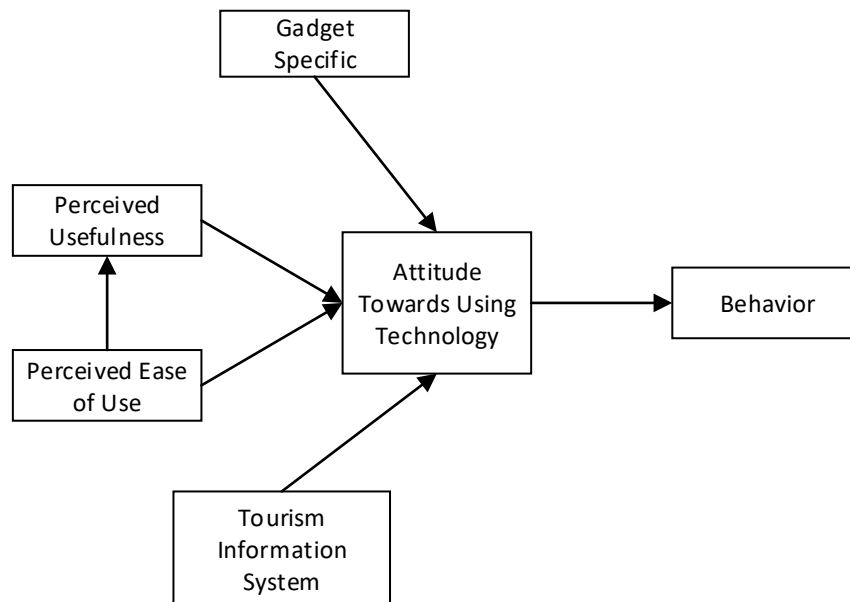
Some text.



**Figure 1.** Specific Technology Acceptance Model in which Behavior as the Use of Technology (Jogiyanto, 2007)

In a previous study conducted by Firdaus (2013) [15], where applying a model by adding two exogenous constructs to Attitude, namely Brand Image and Community (young entrepreneurs) which had the result that the use of gadgets was very important in business activities, besides smartphones that had a system design that user friendly can make it easier for its users.

The model proposed in this research is to prioritize the concept of using gadgets and information systems which are addressed as two different things. In terms of gadgets can be measured in terms of ease of use such as the operating system and gadget technology (gps, gyroscope, internet, browser) used. While in terms of information systems, several types of information systems that will discuss tourism in Indonesia will be divided in two, the first is the transaction / sales information system such as tourist tickets and accommodation service providers and the second is the best tourism information system in Indonesia. Following are the models proposed in the study as shown in Figure 2.



**Figure 2** TAM research model in the Proposed Tourism Village

*3.2 Construct Measurement*

In table 2 construct measurements where what will be measured in general are the original form of TAM such as Perceived Usefulness (PU), Perceived Ease of Use (PEU), Attitude Towards Using Technology (ATUT), and Behavior (B). whereas the construct made more specific in the introduction of gadgets and tourism information systems is contained in the Specific Gadget (GS) and Tourism Information System (TIS) constructs where both constructs can be used to test more detailed knowledge on the use of these technologies.

**Table 2.** Construct Measurement

Construct	Construct Measurement
Perceived Usefulness	PU1 : Use of gadgets to access applications can be fast
	PU2 : The use of gadgets can improve the ability to use information technology
	PU3 : The use of gadgets can be more effective and efficient in supporting daily activities
Perceived Ease of Use	PEU1 : With the gadget being used it can facilitate daily activities
	PEU2 : Understand and be clear with all the features available in the gadget
	PEU3 : With the gadget all activities can be more flexible
Attitude Towards Using Technology	ATUT1 : Feel happy to use a gadget with existing features
	ATUT2 : Feel comfortable when accessing applications with an attractive Graphical User Interface (GUI) display
	ATUT3 : Feeling saturated when using Gadgets

<b>Construct</b>	<b>Construct Measurement</b>
Behavior	B1 : Always use the gadget in any condition B2 : Try to solve all problems as possible with the gadget B3 : Plan of action ahead with the gadget features B4 : Following the development of gadget technology
Gadget Specific	GS1 : Get to know the Global Positioning System (GPS) features found in the gadget GS2 : Get to know internet technology in the gadget you have GS3 : Get to know the gyroscope's features well on your gadget GS4 : Know the operating system specifications in the gadget well
Tourism Information System	TIS1 : Ever accessed a tourism information system TIS2 : Eever used a transaction application/ ticket sale/ accommodation provider service

3.3 Respondent Profile

Based on the available literacy sources, the respondents' profiles are presented as listed in table 3.

**Table 3.** Required Respondent Profile

<b>Item Responden</b>	<b>Classification</b>
Gender	1. Male 2. Female
Age	1. Less Than 17 Years 2. Ranging From 17 Years to 35 Years 3. Up To 35 Years
Educational Background	1. Graduate Elementary School 2. Graduate Junior High School 3. Graduate High School 4. Graduate from College
Gadget Type	1. Tablet (Windows/ Ios) 2. Laptop (Windows/ linux/ IoS) 3. Handphone (Android, Symbian, Apple)
Gadget Features	1. GPS (Global Positioning System) 2. Gyroscope

Item Responden	Classification
Information System That Has Ever Been Accessed	3. Internet (3G/ 4G)
	1. Go Indonesia
	2. Iwata Tour and Travel
	3. Smailing Tour
	4. Avia Tour
	5. Ticket
	6. Valado
	7. Traveloka
	8. PegiPegi
	9. Tokopedia
	10. Grab
11. Gojek	

#### 4. Conclusion

The Cidadap village concept to develop a tourism village certainly has the support of the central government in this case the village ministry. The village apparatus of Cidadap took advantage of this opportunity by developing the concept of a tourism village, although the tourism destinations for the village are still small, but nothing is impossible if done seriously and concentration can make the village become much more advanced, especially in the field of tourism. The use of technology that is changing so fast is making opportunities that can be used as input in the business process of the concept of a tourist village in Cidadap Village. By using the Technology Acceptance Model (TAM) model, researchers can measure how much the village officials and the community involved in the formation of this tourism village actively use gadgets in using several information systems related to tourism. It is expected that when measurements are made, significant results can be obtained to further further research such as the creation of a special tourism information system for Cidadap villages equipped with GIS (geographic information system) technology or other applications that can support the concept of the tourist village. Even if in the future get less significant results, of course this will be a big task for researchers so that the community is ready to take advantage of the technology by providing counseling about the great benefits of the role of gadgets and information technology in supporting the concept of rural tourism.

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