

Digital Democracy and Public Service in Indonesia

Effectiveness Analysis of e-Sewaka Dharma in Denpasar City

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Keywords: Digital Democracy, Public Service, Smart City, Indonesia, e-Sewaka Dharma.

Abstract: In the city of Denpasar, public services based on information and communication technology are built based on the Balinese cultural philosophy named e-Sewaka Dharma. In this philosophy, public service is a liability based on a spirit of devotion known as yadnya term. The application of information and communication technology in public service is expected to allow for the realisation of a transparent and accountable service in addition to improving the quality in terms of efficiency and effectiveness. The focus of this research is to measure the effectiveness of e-Sewaka Dharma's implementation in Denpasar City Government Office. This study used a sample of 100 respondents determined through non-probability sampling technique, which is an incidental sampling type. The analytical technique used was descriptive statistics. The variable used was effectiveness with 3 dimensions; production, efficiency and satisfaction. As many as 51.625% of the respondents stated effective in the dimension of production, 54.687% of respondents stated effective in the dimension of efficiency and 53.861% of respondents stated effective in the dimension of satisfaction of e-Sewaka Dharma.

1 INTRODUCTION

The utilisation of Information, Communication, and Technology (ICT) has changed the human activities in various sectors, as well as the public service sector operated by the government [1]. Government tasks that have been regulated by Law no. 25 in the year 2009 on Public Service in Article 1 intend to provide services to its citizens with quality service standards that are fast, easy, affordable and measurable [2]. Developing government-based electronic government services, often called Electronic Government (e-Government), is a way to improve the quality of public services.

Efforts to improve public services to excellent service were declared by Denpasar City Government on the 14th Anniversary of the City of Denpasar in 2006. In 2007, the commitment of excellent service to the community was further improved by applying information and communication technology to the public service sector. Especially now that the world is entering the era of globalisation, the application of information technology becomes a necessity, including in the field of government. Despite applying modern technology, the rich values of the Balinese culture and philosophy can still be applied

in public services based on information and communication technology.

Public services based on information and communication technology are built based on the Balinese cultural philosophy that is named e-Sewaka Dharma. The concept of e-Sewaka Dharma is extracted from the noble values of the culture that have been applied to the predecessors of Balinese society. In this philosophy, public service is a duty based on the spirit of devotion. The spirit of devotion commonly called yadnya is the noble values of the Balinese community in carrying out activities. The determination of this cultural philosophy is also not separated from the vision of the city government mission in realising the City of Cultural Insight. The application of information and communication technology in the public service is expected to better realise a transparent and accountable service in addition to improving the quality in terms of efficiency and effectiveness. Information and communication technology is a demand of globalisation that makes services transparent and accountable. The licensing process is one manifestation of information and communication technology applications in the city of Denpasar. Information and communication

technology means that each applicant better know the requirements, the length of the process and the cost required.

Even in the system itself, the applicant can register online permits and check the progress of the permit via the internet. The same ease can also be reached through the SMS service in cooperation with telecom operators. ICT applications for licensing also improve the efficiency and effectiveness of the services offered to the community. ICT in licensing ensures information certainty, which eliminates illegal pungli and costs (high-cost economy) so it is then expected to be more of an attraction for investors. In addition, responding to the demands of the community will be more agile and professional regarding the bureaucracy in providing the services that Denpasar City Government has built and offered in the context of e-Government.

In the e-Gov, all units / technical agencies are integrated into ICT networks. Through e-Gov, the coordination and communication between agencies or leaders with agencies can be more quick and efficient. The development of e-Gov is expected to cut down on the bureaucratic administrative procedures that often seem slow and complicated. The head unit can utilise the chat facility to coordinate better so then the handling of public services can be quicker and more efficient in turn, reducing administration. Globally, the design of e-Government of Denpasar started at the launch of the official website www.denpasar.go.id in 2001, and in 2007, the official website of Denpasar City changed to www.denpasarkota.go.id in accordance with the Minister of Communication and Informatics. Efforts to improve the ICT-based public services developed on the website won several awards. Among others, the Warta e-Gov award, Warta Ekonomi and Bubu Award up to the World Summit Award (WSA) at the international level. The entire network of public services based on ICT is integrated through the official website of the municipal government of Denpasar. All public services and information about Denpasar City Government and its staff are on the official website. In the population sector, the application of ICT is built into the Information System of Population Administration (SIAK).

SIAK is expected to improve its services in terms of ease and speed. The public can extend KTP / KK online by simply going on the official website www.denpasarkota.go.id and clicking on the online ID card service. SIAK also aims to realise the validity of the population database required in development planning. Information and

communication technology in the education of Denpasar has been done through a cyberschool program (www.cyberschooldps.net). In the cyberschool, all junior high, high schools and vocational schools in the city of Denpasar share a connected ICT network. School communities, students, and teachers can enjoy free internet service. The use of the internet in the form of e-Learning and education centre is expected to increase their insights and knowledge. Information and knowledge on the internet can seem to be without limit. The internet also trains educational society members accustomed to ICT, as it is one of the main tools of globalisation. As a communication technology, cyberschool connects the school community in a discussion forum that can be used for efficiency. Mapping all schools in Denpasar City also offers cyberschool content that acts as a guide for parents and prospective students.

In terms of security and emergencies, ICT is implemented in the Safe Community program. The safe community network connects emergency and disaster management units with call centres with Radio City RPKD 91.45 FM as the mediator. If there are emergency conditions and/or disasters such as fire, floods and fallen trees then an individual can call the call centre at 0361-223333 or Radio Pemkot at 0361-244444. To speed up the service, Denpasar City Government has prepared an emergency unit of PMKs and ambulances in all four corners of the city area. In addition to handling emergency and disaster conditions, the call centre and RPKD 91.45 FM have also become a mediator of citizen complaints about Denpasar public services through the Halo Denpasar service. If there are facilities and public services that do not work, people can submit it to Halo Denpasar. RPKD and the call centre will contact the relevant agencies to allow them to immediately handle it. Reports of complaints and handling are submitted through RPKD and Nusa Bali daily. The implementation of IT technology improves public services while also targeting the economic field. Through e-Commerce, Denpasar Municipal Government builds an information network system including promotions and market access for industry players and SMEs in Denpasar City. The www.balidenpasartrading.com site is managed by the Department of Industry and Trade (Disperindag). Denpasar presents a variety of craft products, SMEs and small industries in the city of Denpasar. The site, since its launch in February and up to August 2007, has been accessed by 28,500 people.

The application of ICT in the field of the community economy is a function of government to

better facilitate SMEs in terms of technology acceleration, promotion, and the expansion of market access. In the field of health services, Denpasar municipal government has applied SIK (health information system) at health centres in Denpasar City. Through the SIK database, the poor population of Askeskin have been recorded so then they can enjoy basic health services without a convoluted process. Through this, the SIK is expected to service the patient in a manner that is more effective and efficient. From the point of registration through to receiving the drugs, the patient has been served through their involvement with the information system so as to facilitate the service. In addition to the SIK database population, there are maps that can be used to describe public health. Based on the background of this research, the research problems have been formulated as follows:

- How big is the effectiveness of the production indicator on the implementation of e-Sewaka Dharma in Denpasar City?
- How much effectiveness does the efficiency indicator show that there is in the implementation of e-Sewaka Dharma in Denpasar City?
- How much effectiveness is present in the indicator of satisfaction in the application of e-Sewaka Dharma in Denpasar City?

2 THEORITICAL REVIEW

‘Smart city’ literally means the concept of development and implementation of technology in a region that is divided into six dimensions, namely: smart economy, smart people, smart governance, smart mobility, smart environment and smart living. E-Government, according to UNDP (United Nations Development Program) in Indrajid, is an ICT-based service provided by the government. Effectiveness does not include stating how much has been spent to achieve the goal, as effectiveness only sees whether a program or activity has achieved its intended purpose. In line with this case, Badeni said that effectiveness implies the determination of the achievement of the expected goals or the suitability of what should be done. To measure the achievement of the goal, according to Tampubolon, there are five indicators in the effectiveness measurement criteria with three-time measurement divisions, i.e. for the short-term (production, efficiency, and satisfaction), for the medium-term (adaptation) and for the long-term (development).

In the era of digital broadcasting, however, those three rights need to be granted separately to different players within the broadcasting value chain, as “the broadcaster is not necessarily the frequency licence holder” anymore. There are now multiplex operators who are granted the spectrum of rights and who are therefore responsible for managing their particular defined part of the radio spectrum to carry out the programmes or services produced by broadcasters or content providers. As for digital broadcasters, they need to obtain broadcast licences and access multiplexing services and broadcast permits for every programme that they aim to broadcast (ITU, 2012; p.30).

In this way, digital television migration is a critical step for both the broadcasting and telecommunication sectors. Through the technological transformation, broadband services can possibly be improved and the diversity of media ownership can be potentially increased.

However, besides the benefits, digital television migration tends to be perceived as a threat to broadcasting incumbents due to its potential to alter the ownership structure present within the industry. The main challenge that is a part of regulating digital television migration is, therefore, to prevent anti-competitive business conduct by either incumbents or new players, especially if they are granted the position of multiplex operators.

3 RESEARCH METHODS

This research used a quantitative method for the data collection, using a questionnaire as the primary data and a journal and books as the secondary data. This research was a descriptive research study conducted using a descriptive statistical analysis technique. The sampling technique used was non-probability sampling with the incidental sampling type proposed being the people of Denpasar City. We determined the sample size using the Bernoulli formula as follows: $n \geq 96,04 \approx 96$. From the Bernoulli formula, the minimum sample that can be used is 96 respondents, rounded up to 100 respondents.

4 RESULT AND DISCUSSION

The results of the questionnaire have been presented in Table 3.1 as follows:

- The response of the respondents on the dimensions of production was 51.62%,

indicating the effectiveness of the application of e-Sewaka Dharma.

- The response of the respondents about the dimension of known efficiency was 54.68%, indicating the effectiveness of the application of e-Sewaka Dharma.
- The responses of the respondents about the dimension of satisfaction had a total value of 53.37%, which indicates the effectiveness of the application of e-Sewaka Dharma.

4.1 Results of Comparative Technique Analysis Before and After Application of e-Sewaka Dharma

This research used exposure to a snake diagram because this can help with the elaboration of the effectiveness flow channel before and after the application of e-Sewaka Dharma, leading to the dominant value of the respondent's answers. The exposure has been described in Table 3.2 below.

- For the availability of the required mail, the dominant community on the "effective" scale is worth 47.250%, so the point illustrated leads to the condition after applying the e-Sewaka Dharma and Referring to the availability of the file completeness information, the dominant community is on an "effective" scale of 56,000%, so the point illustrated leads to the conditions after applying e-Sewaka Dharma;
- To fit the service of e-Sewaka Dharma into the expectations of the respondent; the dominant response on the "effective" scale was 51,500%,

so the point described leads to the condition after applying e-Sewaka Dharma;

- For clarity in the process of issuing letters, the dominant societies are on an "effective" scale of 45.250%, leading to conditions after applying the e-Sewaka Dharma;
- For time savings, the dominant societies landed on an "effective" scale of 59,500%, which points to conditions after applying the e-Sewaka Dharma;
- For ease of use concerning the e-Sewaka Dharma service, the dominant community was on an "effective" scale of 62,500%, which leads to conditions after applying the e-Sewaka Dharma;
- For the satisfaction of the respondents in using e-Kelelahan, the dominant society on the "effective" scale was worth 53,500%, leading to the condition after applying e-Sewaka Dharma;
- For the e-Sewaka, the Dharma service can be more personally accessible - the dominant community was on an "effective" scale of 59,000%, leading to conditions after applying the e-Sewaka Dharma;
- For the availability of adequate queue waiting for facilities, the dominant societies' response was on an "effective" scale of 51.250%, leading to conditions after applying the e-Sewaka Dharma and
- To get confirmation of a letter that takes a long time of manufacture, the dominant society was on an "effective" scale of 49.750%, leading to the condition after applying the e-Sewaka Dharma.

Table 3.1: Respondent's Response to Effectiveness of e-Sewaka Dharma.

| Effectiveness Dimensions | Question to- | Total Value | Average Total Value | Satisfaction Level |
|--------------------------|--------------|-------------|---------------------|--------------------------------|
| Production | 1 | 47,25% | 51,62% | After Applying e-Sewaka Dharma |
| | 2 | 56,00% | | After Applying e-Sewaka Dharma |
| Efficiency | 3 | 51,50% | 54,68% | After Applying e-Sewaka Dharma |
| | 4 | 45,25% | | After Applying e-Sewaka Dharma |
| | 5 | 59,50% | | After Applying e-Sewaka Dharma |
| | 6 | 62,50% | | After Applying e-Sewaka Dharma |
| Satisfaction | 7 | 53,50% | 53,37% | After Applying e-Sewaka Dharma |
| | 8 | 59,00% | | After Applying e-Sewaka Dharma |
| | 9 | 51,25% | | After Applying e-Sewaka Dharma |
| | 10 | 49,75% | | After Applying e-Sewaka Dharma |

Table 3.2: Comparative Outcomes Before and After the Implementation of e-Sewaka Dharma.

| No | Questions | N | Total Value | | | Percentage of Total Value | | | Effectiveness Leads to Condition |
|----|--|-----|-------------|-------|-----|---------------------------|---------|---------|----------------------------------|
| | | | Before | After | GAP | Before | After | GAP | |
| 1 | The letter I need is available at Denpasar City Government Office | 100 | 2 | 189 | 187 | 0,005% | 47,250% | 47,245% | After Applying e-Sewaka Dharma |
| 2 | I already know the completeness of the file for the letter I need. | 100 | 0 | 224 | 224 | 0% | 56,000% | 56,000% | After Applying e-Sewaka Dharma |
| 3 | The e-Sewaka Dharma service I use suits my expectations. | 100 | 8 | 206 | 198 | 0,020% | 51,500% | 51,480% | After Applying e-Sewaka Dharma |
| 4 | With e-Sewaka Dharma service process clear letter issuance. | 100 | 9 | 181 | 172 | 0,022% | 45,250% | 45,228% | After Applying e-Sewaka Dharma |
| 5 | With my e-Sewaka, Dharma service can save time. | 100 | 12 | 238 | 226 | 0,030% | 59,500% | 59,470% | After Applying e-Sewaka Dharma |
| 6 | The e-Sewaka Dharma service is very easy to use. | 100 | 3 | 250 | 247 | 0,007% | 62,500% | 62,493% | After Applying e-Sewaka Dharma |
| 7 | I am satisfied with the service e-Sewaka Dharma. | 100 | 7 | 214 | 207 | 0,017% | 53,500% | 53,483% | After Applying e-Sewaka Dharma |
| 8 | I hope e-Sewaka Dharma service accessible to the public personal. | 100 | 7 | 236 | 229 | 0,017% | 59,000% | 58,983% | After Applying e-Sewaka Dharma |
| 9 | I feel the facility for waiting for the queue is adequate. | 100 | 6 | 205 | 199 | 0,015% | 51,250% | 51,235% | After Applying e-Sewaka Dharma |
| 10 | I get confirmation if the letter of a certain type (such as inheritance) in need a long time has been completed created. | 100 | 2 | 199 | 197 | 0,005% | 49,750% | 49,745% | After Applying e-Sewaka Dharma |

5 CONCLUSION

Based on the results of research that has been done on the effectiveness of the use of e-Sewaka Dharma in Denpasar City, it can be concluded that:

- The effectiveness level of the production dimension before applying the e-Sewaka Dharma was 0.002% and was included on the "Not Effective" scale. For the condition after applying e-Sewaka Dharma, it was 51.625% and included on the "Effective" scale. When viewed as the dimension of production, the dominant percentage of society says that it is effective after applying e-Sewaka Dharma.
- The effectiveness level of the efficiency dimension for the condition before applying the e-Sewaka Dharma was 0.019%, included on the "Not Effective" scale. For the condition after applying the e-Sewaka Dharma, it was 54.687% and included on the "Effective" scale. When viewed as the dimension of efficiency, the dominant percentage of society says that it is effective after applying the e-Sewaka Dharma.

- The effectiveness level of the dimension of satisfaction before applying the e-Sewaka Dharma was 0.013%, included on the "Not Effective" scale. For the condition after applying e-Sewaka Dharma, it was 53.861% and included on the "Effective" scale. When viewed as the dimension of satisfaction, the dominant percentage of society says that it is effective after applying the e-Sewaka Dharma.

6 SUGGESTION

Based on the results of research, there have been a proposed constructive suggestions created for the Government of Denpasar as the object of the research.

- The results of this study found that the dimension of production had the lowest rating compared to other dimensions. Therefore, the Denpasar City Government is advised to clarify the flow of letter issuance process and its requirements.

- The dimension of efficiency also has a low rating, so the Government of Denpasar City is suggested to socialise the e-Sewaka Dharma service to the community in Denpasar City, especially related to the purpose of applying e-Sewaka Dharma.
- The satisfaction dimension also has a low appraisal rating, so it is suggested to the Denpasar City Government to provide feedback support facilities concerning the use of e-Sewaka Dharma service so then the community can give constructive suggestions for the Denpasar City Government so then the effectiveness of e-Sewaka Dharma's implementation can be improved.

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