Application of the Online Dukcapil Service "PLAVON" Judging from the Cognitive Community Response (Case Study in Sidoarjo Regency)

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Abstract: This study aims to determine the application of the application of online services for Dukcapil "Plavon" in terms of the community's response (a case study in Sidoarjo Regency) and also to analyze the community's response to the service. This study uses a single variable, namely the response variable which consists of two aspects according to Naibaho (2016) namely, cognitive aspects and affective aspects. This study uses a quantitative method, using 100 respondents obtained from the Slovin formula in Ariola et al (2006). Based on the results of the research above, it can be concluded that the response of the people of Sidoarjo Regency to the Dukcapil Civil Service Registration Service (PLAVON) service in Sidoarjo Regency is quite good. This is indicated by the majority of respondents who think that the service is good and expect the development of better services in the future.

Keywords: Public Service, Population Administration Services, Cognitive Community Response, PLAVON

1 Introduction

In the current digital era, people are presented with various information, activities, and other things that can be done digitally. People who generally live in urban areas are already accustomed to doing their activities digitally, surfing the virtual world, interacting through social media, shopping, to ordering food and transportation online [1]. The ease of internet access has resulted in changes in people's lifestyles that are increasingly developing and without limitations of time or place, causing digitalization to be easily accepted by the community and providing convenience in doing anything[2].

Fig. 1. Graph of Number of Internet Users in Indonesia (2018-2022)

Based on Figure 1 above, the number of internet users in Indonesia reached 204.7 million users per January 2022. A significant increase has occurred since the last five years, compared to 2018 the number of internet users increased by 54.25% [3]. The most striking increase was in 2020 and 2021, in that year Indonesia was hit by the Covid-19 pandemic which affected the number of internet users because the education, business, and government sectors were almost entirely done online.

The Covid-19 pandemic also affects people's habits regarding digitalization, many activities are carried out online during the pandemic [4]. Likewise in public services, the Covid-19 pandemic has resulted in the transformation of services into digitizing services [5]. The Covid-19 pandemic has had major implications in creating digital public service innovations in both the public and private sectors [6].

Public service providers, in this case the government, have a big role in making service innovations. As stated in Article 1 paragraph (1) of the Regulation of the Minister for Empowerment of State Apparatus and Bureaucratic Reform of the Republic of Indonesia Number 30 of 2014 concerning Guidelines for Public Service Innovation which reads; in the context of accelerating the improvement of the quality of public services, it is necessary to develop and develop public service innovations at the Ministries/Agencies and Local Governments.

To respond to these regulations, the Governments in each region are competing to create public service innovations that can benefit the wider community. In Sidoarjo Regency, the need for fast service provision to
the community is very urgent. People in Sidoarjo Regency complain about the difficulty of managing Identity Cards (KTP), birth certificates, death certificates, legalization, and so on. The process of managing population documents is quite complicated and requires a short amount of time [7].

To answer this problem, the Office of Occupation and Civil Registration of Sidoarjo Regency created a service innovation called "PLAVON" or Via Online Service. Through PLAVON, people in Sidoarjo Regency do not need to come to the village or sub-district office to process population documents. Resident documents can be managed through the PLAVON website without coming to the village or sub-district office.

![Image](https://example.com/image.png)

**Fig. 2. Website PLAVON**

This research has an important value for the efforts of the Population and Civil Registration Office of Sidoarjo Regency in improving the quality of its services through PLAVON. This study on the application of PLAVON in terms of community responses is expected to bring new insights to the community regarding the application of PLAVON in Sidoarjo Regency. Furthermore, this research is expected to provide great support to the science of Public Administration and to public policy-making institutions. In addition, this research can provide input for policy makers in developing appropriate service socialization models for the community. The purpose of this research is to describe a survey of the implementation of the online Dukcapil Service "PLAVON" in terms of community responses in Sidoarjo Regency. The survey results were analyzed using response theory which is divided into two dimensions, namely affective and cognitive dimensions [8].

### 2 Literature Review

#### 2.1 Public Service

Before discussing public service as a whole, it is necessary to first understand the meaning of service. Service is an activity carried out with full awareness and intention to help others and give the best to others as part of an effort to make themselves and the institutions managed to be positive in the eyes of the people they serve so that they give birth to satisfaction. Serving is a person's willingness to provide services to others (Saleh, 2021).

Furthermore, according to Frank Jefkins (1995) in Sulistiani (2015), the public is a group of people who interact with an external or internal organization. In line with the opinion of Hermanto (2014), he argues that the public is a number of humans who are bound by a certain stimulus. Based on the above opinion, a common thread can be drawn, that the public is a group of individuals or groups of people who have direct or indirect relationships.

Then the notion of public service is a product of public bureaucracy that is accepted by users and society at large. Public services are defined as a series of activities carried out to meet the needs of users (Hadiwijoyo and Anisa, 2021). Meanwhile, according to Hayat (2017) describes public services as basic services in government administration. Public services as an important indicator in assessing government performance, both at the central and regional levels. The administration of government is said to be good if public services are oriented to the interests of the community.

The indicator of community satisfaction is a measure of the success of government administration. In providing public services to the community, services must prioritize the interests of the community and can provide benefits. According to Tjiptono (1996) there are eight dimensions of the quality of public services as follows:

1. Performance (performance), namely the main operating characteristics of the core product.
2. Additional features or features, namely secondary or complementary characteristics.
3. Reliability (reliability), which is a small possibility of damage or failure to use.
4. Conformance to specifications, namely the extent to which the design and operating characteristics meet the standards previously set.
5. Durability, which is related to how long a product can continue to be used.
6. Serviceability, namely speed of competence, convenience, easy to repair and satisfactory handling of complaints.
7. Aesthetics, namely the attractiveness of the product to the five senses.
8. Perceived quality, namely the image and reputation of the product and the company's responsibility to it.

#### 2.2 Community Response

Before discussing the community response, the following is the definition of response. Response comes from the word response, which means a reply or response (reaction). Response is a psychological term used to describe reactions to stimuli received by the five senses. The things that support and underlie the size of a response are attitudes, perceptions and participation. The response in the process is preceded by a person's attitude because attitude is a person's tendency or willingness to behave when faced with a certain stimulus. In general, it can be said that there are three factors that influence a person's response, namely:

1. The person concerned who sees and tries to give an interpretation of what he sees is influenced by his attitudes, motives, interests and expectations.
2. The target of the response, in the form of people, objects, or events. The characteristics of the target
usually affect the response of the viewer. In other words, the movement, sound, size, actions, and other characteristics of the response target also determine people's perspective.

3. Situational factors, the response can be seen contextually, which means in which situation the response arises gets attention. The situation is a factor that plays a role in the formation or response of a person.

Response is essentially a response behavior or attitude that becomes behavior back, which is also a process of organizing stimuli in which proximal stimuli are organized in such a way that there is a phenomenal representation of these proximal stimuli (Adi, 1994). The response in the process is preceded by a person's attitude, because attitude is a person's tendency or willingness to behave when faced with a certain stimulus. So attitude determines whether someone responds or does not respond to something.

Community response according to Dollard and Miller (1942) in Gondra and Miguel (2009) suggests that certain responses are tied to words, and therefore speech can serve as a mediator or determine which hierarchy works. This means that socialization that uses language, both spoken and written, is a strategic medium in the formation of community responses. Whether the response is in the form of a positive or negative response, depends on the socialization of the object to be responded to.

2.3 Service Via Online “PLAVON”

PLAVON or Via Online Service is an online web-based application service belonging to the Dukcapil of Sidoarjo Regency which has a function to make it easier for the public to manage population documents. PLAVON is effective in all administrative areas of Sidoarjo Regency on April 6, 2021. Since its launch this online service has replaced and terminated the previous Dukcapil service, namely Whatsapp Hotline 1 & 2. PLAVON has served the following population documents:

1. Birth Certificate
2. Death Certificate
3. ID card
4. MCH
5. Transfer Certificate/SKPWNI
6. Certificate of Arrival/SKDWINI
7. Marriage Certificate
8. Divorce

Eight services are available and can be accessed through the PLAVON website, http://plavon.sidoarjokab.go.id/. To manage the above residence documents, the applicant must first have a PLAVON account, for prospective applicants who do not yet have an account, they can register on the register page on the PLAVON website.

3 Research Methods

This research is quantitative research. Sugiyono (2000) states that quantitative research is research in which the type of data is in the form of numbers or qualitative data that is numbered. The choice of a quantitative approach in this study was due to adjusting the research objective, namely measuring the level of community response to the application of the "PLAVON" Dukcapil Online Service in Sidoarjo Regency. Based on this, it can be seen that in this study using independent variables which will then be described based on data taken using questionnaires distributed online to respondents (community). So, this study does not attempt to make comparisons or connect existing variables because it only describes independent variables.

The population of this research is the people of Sidoarjo Regency. It should be noted that Sidoarjo Regency consists of 18 sub-districts, 31 sub-districts, and 322 villages (out of a total of 666 sub-districts, 777 sub-districts, and 7,724 villages in East Java). The population in Sidoarjo Regency in 2020 based on the official news of Sidoarjo Regency Statistics in 2021 the population reaches 2,082,801 with a composition of 1,048,574 male residents and 1,034,227 female residents. With an area of 714.27 km² and a population distribution of 2,916 people/km².

The sample is a component of the population used to conclude or describe the population. Sample selection with the right method can be used to describe the actual population condition accurately. The sampling technique in this research is incidental sampling technique. Incidental sampling is a sampling method or technique based on chance, that is, anyone who coincidentally or incidentally meets a researcher can be used as a sample, if it is deemed that the person who happened to be met is suitable as a data source. The samples taken in this study were from several communities scattered from several sub-districts in Sidoarjo Regency. From this population, it can then be determined the number of certain samples developed by Slovin in Ariola et al (2006) the formula that will be used to measure samples from a known population is as follows:

\[ n = \frac{N \times (e)^2}{1 + N(e)^2} \]

\[ n = \frac{2,082,801}{1 + 2,082,801(0.1)^2} \]

\[ n = \frac{2,082,801 \times 0.01}{2,082,801} \]

\[ n = 0.0999 \]

rounded to 100

In this study, researchers determined the number of community samples incidentally scattered in Sidoarjo district as many as 100 peoples.
3.1 Variable and Variable Operational Definition
Understanding variables according to Sugiyono (2012) in his book, states that: "Variables are called variables because there are variations. For example, weight can be said to be variable, because the weight of a group of people varies from one person to another. Likewise, motivation, perception can also be said to be a variable because for example the perception of a certain group of people varies. So, if the researcher chooses research variables, both those owned by people, objects, and certain fields of activity and science, there must be variations. Variables that have no variation are not said to be variables. To be able to vary, the research must be based on a group of data sources or objects that vary.

As mentioned above, the variable of this research is the level of community response to the application of the "PLAVON" Dukcapil Online Service in Sidoarjo Regency. Because the nature of the level of responsiveness of the community is a trait that has a very high variation, the variation of the level of responsiveness shown by the community is the variable in the research conducted by the researcher.

The operational definition is a variable formulation that is used as a guide in data collection. As for the operational definition in this study, researchers There are many factors that affect a person's level of responsiveness. In general, these factors according to Naibaho (2016) are:
1. Kognitif Dimension
2. Afektif Dimension

From the two external and internal indicators above, to determine the level of community response to the implementation of the Online Dukcapil Service "PLAVON" Sidoarjo Regency, the research team used two indicators as described above.

3.2 Research Instruments
The research instrument is a media aid in conducting research to obtain the necessary data. In this study, the research team used a questionnaire in google form format as a tool in collecting data in the field. According to Sugiyono (2012), in principle, research is to take measurements, so there must be a good measuring instrument. Measurement tools in research are usually referred to as research instruments. In this case, the research instrument used refers to the Regulation of the Minister for Empowerment of State Apparatus and Bureaucratic Reform Number 14 of 2017 concerning Guidelines for Community Satisfaction Surveys on the Implementation of Public Services.

3.3 Data Analysis Technique
According to Sugiyono (2012) data analysis is an activity after data from all respondents or other data sources are collected. Activities in data analysis include: classifying data based on variables and types of respondents, tabulating data based on variables from all respondents, presenting data for non-variables studied, performing calculations to answer the problem formulation, and performing calculations to test hypotheses that have been proposed. For research that does not formulate a hypothesis, the last step is not carried out.

In this study, the data analysis technique used is quantitative analysis. This is in accordance with the purpose of this study, which is to describe a survey of community responses to the online Dukcapil service "Plavon" based on the results of the questionnaire. In this quantitative data analysis, it is divided into three stages, namely data processing, data organizing, and finding results. The explanation of the three stages is as follows:

3.3.1 Data Processing
In this data processing stage, the initial stage is the editing process. This editing process is carried out to check and correct the collected data regarding the completeness of filling out the questionnaire by the respondent; the readability of the writing; the clarity of the meaning of the answers; the suitability, and consistency between the answers to one question and another.

The next stage is the coding process or coding. The coding process itself according to Hasan (2002) is the stage of giving or creating codes for each data that belongs to the same category.

In this study, the data obtained from filling out the questionnaire by the respondent after being edited then the data will be included in the presentation of the data in the form of a frequency table which is intended to clarify in viewing the data categories. as for the categories of data from the questionnaire results are based on 3 (three) categories, namely:
1. A score of 1 (one) is given to the answer Less
2. A score of 2 (two) is given to the answer Enough
3. A score of 3 (three) is given to the Good answer

3.3.2 Organizing Data
After the data processing stage, the next step is organizing the data. The activities carried out in organizing the data include:

3.3.3 Counting Score
After the results of the questionnaire have been entered in the frequency table that corresponds to the 3 (three) categories above, the next step is to perform calculations from each category, where the calculation is based on the respondent group using the following formula:

$$P = \frac{f}{N} \times 100\%$$

$$P = \frac{100}{100} \times 100\% = 100\%$$

P : Percentage of respondents
f : Frequency of respondents' answers
N : Number of samples processed
3.3.4 Making Interval Class

Interval class is useful for determining the value level of the measured variable results. In this study, the value of the interval class is expressed in percentages. Interpretation criteria for interval class scores in this study are shown in the following table:

<table>
<thead>
<tr>
<th>Class</th>
<th>Score Interpretation Criteria</th>
<th>Category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>66.6% - 100%</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>33.4% - 66.5%</td>
<td>Enough</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>0% - 33.3%</td>
<td>Deficient</td>
<td>1</td>
</tr>
</tbody>
</table>

3.3.5 Calculating Respondent's Answer Score

In calculating the answer scores from respondents, the formula used by researchers is as follows:

\[
Score = \frac{\text{Total score of research} \times 100\%}{\text{Total ideal score}}
\]

\[
= \frac{\Sigma \text{respondents each item} \times \text{item questions score}}{\text{highest score \times total respondents}} \times 100\%
\]

\[
Score = \frac{\Sigma (100 \times 831)}{4 \times 3 \times 100} \times 100\%
\]

Score = 69.25

3.3.6 Tabulate Data

Tabulating data is an activity to create tables containing data that has been coded according to the required analysis. So, at this stage the researcher will enter the data that has been processed and coded into the tables.

4 Results and Discussion

4.1 Respondents Characteristics

Respondents consisted of 100 residents of Sidoarjo Regency with an age range of 17 years to 58 years. According to Hurlock in Naibaho (2016), human maturity in thinking and working has an impact on the results of one's thinking and work. So that the more mature respondents, the results of this study can be more accurate. Of the 100 respondents, two of them have a secondary education background, 38 respondents have a high school education/equivalent, 13 respondents have diploma education, 43 respondents have undergraduate education and four respondents have postgraduate education. According to Koentjoroningrat (1997) education is defined as the ability to absorb knowledge. The more educated a person is, the easier it will be to receive new knowledge. So that the higher the respondent's education has an impact on understanding the questions asked in the questionnaire so that it can increase the accuracy of the research. A total of seven respondents work as entrepreneurs, 20 respondents work in the private sector, seven respondents work in the government sector, both civil servants and PPPK, as many as 39 respondents are students, nine respondents are housewives and the remaining 18 are not/not yet working.

4.2 Response Distribution

First, it is important to know what is meant by “community response”. Response according to Skiner in Annur (2018), describes behavior as a person's response or reaction to a stimulus (stimulus from outside). In general, there are three classifications of responses according to Naibaho 2016, namely cognitive, affective, and conative responses. However, this study only shows two dimensions of response, namely cognitive and affective. Cognitive responses relate to knowledge, experience and impressions. While the affective response is related to awareness and hope. In essence, the response is a response behavior or attitude that is converted into a response behavior or attitude again. Response is also a process of regulating stimuli in such a way that proximal stimuli are represented phenomenally (Adi, 1994). So, in conclusion, the community response is the behavior or response of the community as a result of a stimulus related to the community's assessment of certain phenomena or circumstances.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dimension</th>
<th>Indicator</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>Cognitive</td>
<td>Knowledge</td>
<td>19.31</td>
</tr>
<tr>
<td></td>
<td>Affective</td>
<td>Awareness</td>
<td>32.36</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hope</td>
<td>27.32</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

In table 1 the distribution of responses includes two dimensions, namely cognitive and affective. The cognitive dimension with a score distribution of 40.32% is divided into three indicators, namely 19.31% knowledge, 10.48% impression indicator and 10.53% experience indicator. The second dimension, namely the affective dimension, covers 59.68% of the total score which is divided into two indicators, namely the awareness indicator 32.36% and the expectation indicator 27.32%.

4.3 Cognitive Dimension

Quoting the opinion of Jones and David in Faudah (2011) which states that studying oneself and the environment as well as interactions between environments is commonly studied in the cognitive dimension. According to Naibaho (2016) the response dimension consists of two indicators namely knowledge, impression and experience, as follows:

4.3.1 Knowledge Indicator

Knowledge is the result of human understanding, knowledge that is systematic, organized, methodical and
universal (Notoatmojo, 2018). This indicator provides information related to the level of the cognitive dimension of the knowledge indicator. This knowledge indicator explains how respondents answered questions about their knowledge of the application of the "Plavon" Dukcapil Online Service.

Table 3. Respondents' Responses to Knowledge Indicators

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Respondents Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>Enough</td>
</tr>
<tr>
<td>1.</td>
<td>How do you know about services at the Dispendukcapil Sidoarjo Regency?</td>
<td>25 (25%)</td>
</tr>
<tr>
<td>2.</td>
<td>How do you know about services via online Dukcapil &quot;PLAVON&quot;</td>
<td>26 (26%)</td>
</tr>
</tbody>
</table>

Based on the table above, it is shown that the community's response to the knowledge indicators regarding the application of the Online Dukcapil Service "PLAVON" Sidoarjo Regency, in the table it is known that from 100 respondents who participated, the average respondent chose to answer "Enough" from two questions related to the knowledge indicator. The highest percentage of answers, namely 48 or 48% of all respondents considered themselves aware of the services at the Dispendukcapil Sidoarjo Regency and the application of the Dukcapil Online Service "PLAVON" Sidoarjo Regency.

4.3.2 Impression Indicator

An impression is a memory experienced by a person when he or she has gone through a certain event and made an impression on him (Annur, 2018). Impressions can be in the form of liking or disliking an experience that someone has gone through. The table below will describe the indicators of the impression of the response to how the application of the "PLAVON" Dukcapil Online Service in Sidoarjo Regency.

Table 4. Respondents' Responses to Impression Indicators

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Respondents Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>Enough</td>
</tr>
<tr>
<td>1.</td>
<td>How do you feel about the service at the Dispendukcapil Sidoarjo Regency?</td>
<td>29 (29%)</td>
</tr>
</tbody>
</table>

Referring to the table above, the majority of respondents think that their impression of the service at the Dispendukcapil Sidoarjo Regency is quite good, as evidenced by the choices of respondents who chose "Good" as many as 29 and "Enough" as many as 58 respondents.

4.3.3 Experience Indicator

Experience can be interpreted as an event that is recorded by the five senses and stored in memory. A person's experience is based on what happened or what happened in the past. Experience can happen to anyone who can turn into a guide or lesson (Notoatmojo, 2012). So basically experience is an event that has been experienced by someone, where the event can be a lesson or guide for the life of the human being and other humans. The table below will describe the experience indicators of the response to how to implement the "PLAVON" Dukcapil Online Service in Sidoarjo Regency.

Table 5. Respondents' Responses to Experience Indicators

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Respondents Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>Enough</td>
</tr>
<tr>
<td>1.</td>
<td>How was your experience with the online service for the Dukcapil &quot;PLAVON&quot; Sidoarjo Regency?</td>
<td>32 (32%)</td>
</tr>
</tbody>
</table>

Referring to the table above, it can be interpreted that most respondents consider their experience when using PLAVON services to be "enough", namely 53 respondents or 53% of all respondents. Meanwhile, there are 15 respondents or as much as 15% consider their experience when using PLAVON services "less" good.

5 Conclusion

Based on the results of the research above, it can be concluded that the response of the people of Sidoarjo Regency to the Dukcapil Civil Service Registration Service (PLAVON) service in Sidoarjo Regency is quite good. This is indicated by the majority of respondents who think that the service is good and expect the development of better services in the future.

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