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IT Infrastructure Library Framework Approach to the Measurement of e-Government Maturity

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ABSTRACT

This research was conducted to improve E-Government services on the Manado smart city application to the smart city and determine the level of readiness and feasibility of the Manado smart city application using the ITIL method in the service design domain and transmission service using the Information Technology Infrastructure Library (ITIL) framework. The purpose of this study is to measure the level of marturity of the smart city and help the Manado city government in knowing the maturity level of Manado City towards a smart city. The research method used is the method of measuring the level of marturity using the ITIL framework. The results of this study show that this smart city application can be used at any time, especially at the Manado command center which can monitor the activities of each vehicle and various problems that cause congestion and can be seen from human resources for the usefulness of this application, there are still many who do not know and feel results, impact and benefits of this smart application. Many residents or residents of Manado do not use this smart city application technology.

Keyword : E-Government, Marturity, Smart City, Manado, Framework ITIL

INTRODUCTION

Most human activities are in urban areas, it is a consequence of various economic activities, trade and even education centered on the city. So that these conditions cause various problems, such as congestion, the increasing number of residents, increasing crime rates and many more problems that we can encounter in the city, of course this is the separate responsibility of the local government in finding a way out of the problems that exist in the city. .

It can be said that information and communication technology is experiencing high development. Even in the field of government, many have developed public services through information and communication technology, both in the central government and in regional governments. Through information and communication technology is expected to be the answer in solving existing problems.

Currently, the smart city concept is developing which is expected to facilitate the government in managing the city. A safe, conducive and comfortable city and even a country is estimated to be created through this smart city concept Reporting from the results of a survey by APJII in 2017 about internet users by region, the island of Sulawesi is ranked 3rd, this is a great opportunity for the government North Sulawesi, especially the city of Manado in order to realize a smart city. The Manado city government is currently in the preparation stage for a smart city, as evidenced by the launch of the Smart Command Center (C3) system. For this reason, in the context of developing Manado city government towards a smart city, it is necessary to measure the e-government level of Manado city government in the domain of service design and transmission service using the Information Technology Infrastructure Library (ITIL) framework.

What is the maturity level of Manado City in the development of Manado city governance. The purpose of this research is to assist the Manado city government in knowing the maturity level of Manado City towards a smart city.

METHOD

In this section, the stages or steps that were made and used as guidelines in this research using the ITIL method will be explained.

ITIL is built into five main components, namely:

1) Service Strategy, providing ITSM implementation guidance on how to views the ITSM concept not only as an organizational capability (providing, managing and operating IT services), but also as a company's strategic asset. This guide is presented in the form of the basic principles of the ITSM concept, references and core processes that operate throughout all stages of the ITIL Service Lifecycle.

2) Service Design, providing guidance to IT organizations systematically and best practices in designing and building IT services and the implementation of ITSM itself. Service Design contains design principles and methods for converting the strategic objectives of IT and business organizations into a portfolio/collection of IT services and service assets, such as servers, storage and so on. RoomThe scope of Service Design is not only to design new IT services, but also to change processes and improve service quality, service continuity and service performance.

3) Service Transition, providing guidance to IT organizations to be able to develop the ability to change the results of IT service designs, both new and modified IT services specifications into the operational environment. This lifecycle stage provides an overview of how a requirement defined in the Service Strategy is then formed in the Service Design to be effectively realized in Service Operations

4) Service Operation, is a lifecycle stage that includes all daily operational activities of managing IT services. It contains various guides on how to manage IT services efficiently and effectively and ensure the level of performance that has been promised with previous customers. These guides Covers how to maintain the stability of IT service operations as well as managing changes in the design, scale, scope, and performance targets of IT services

5) Continual Service Improvement, contains important guidelines in compiling and maintain the service quality of the design, transition and operation processes. CSI combines various principles and methods of quality management.

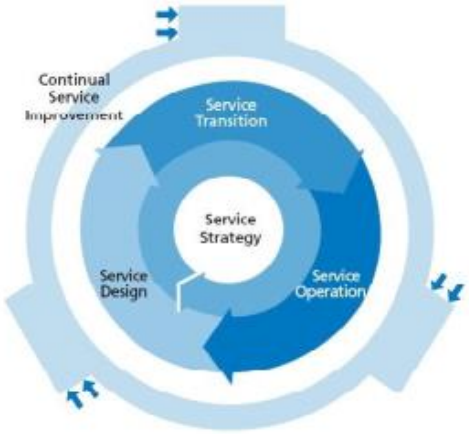


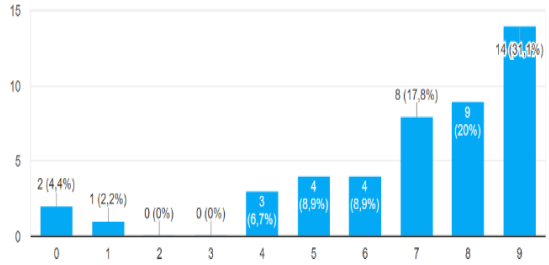
Figure 1. Service Lifecycle

RESULTS AND DISCUSSION

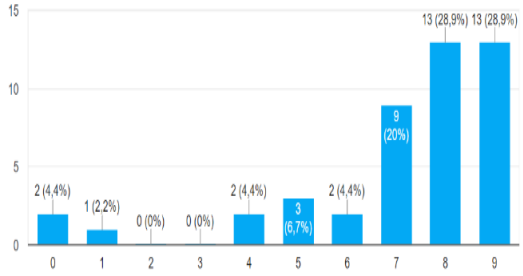
In this section, the results of the measurement of the level of marturity level of e-government in Manado City will be seen in the service design and transmission service domains using the Information Technology Infrastructure Library (ITIL) framework.

The characteristics of the respondents can be seen in the following diagram:

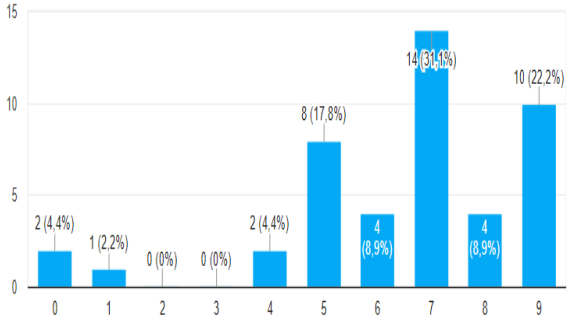
a. Respondent : This Smart City application helps me to be more effective



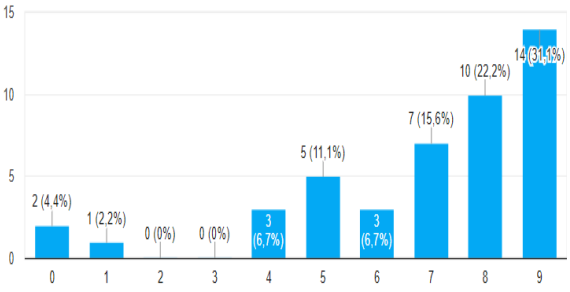
b. Respondent: This Smart City application is useful



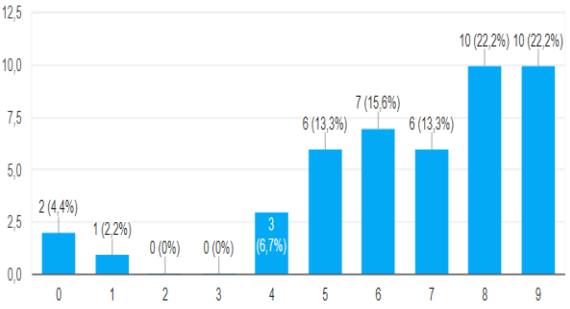
c. Respondent : This Smart City app does everything I expect it to do



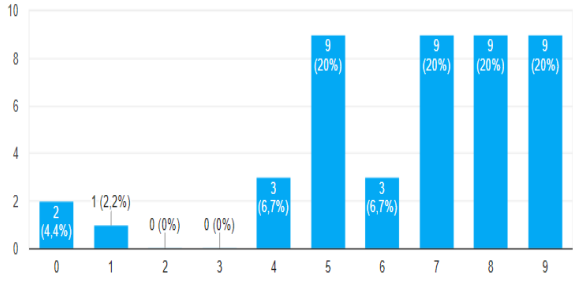
d. Respondent: This Smart City application is very easy to use



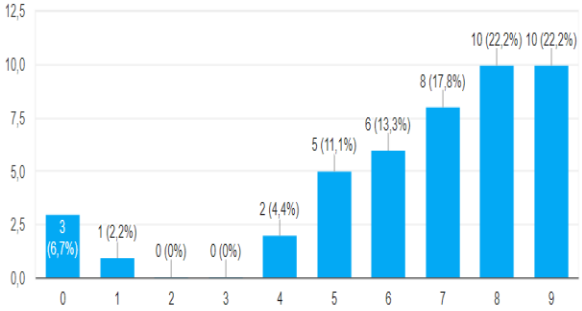
e. Respondent: I can use it without written instructions



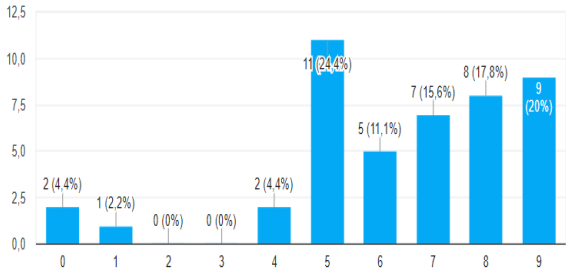
f. Respondent : I can use it successfully any time



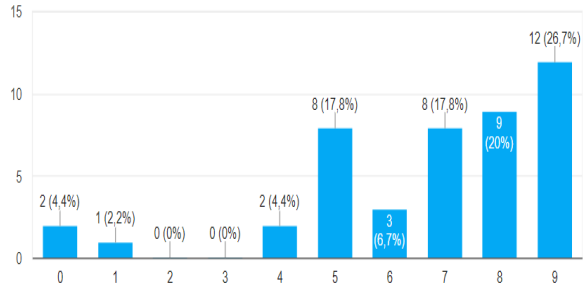
g. Respondent: I learned to use the Smart City Application quickly



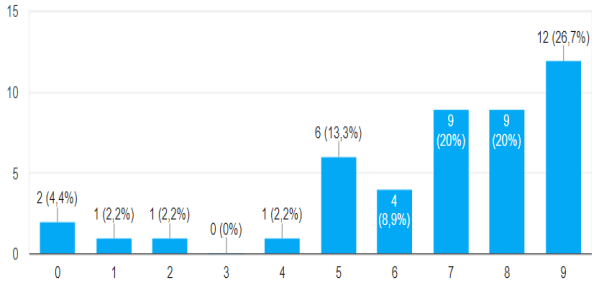
h. Respondent: I easily remember how to use it



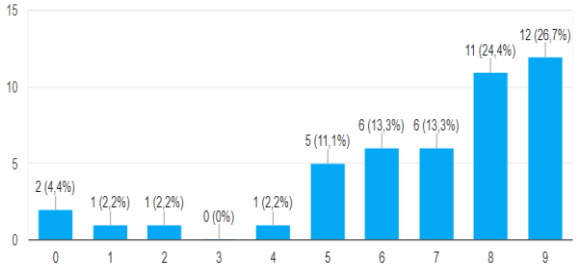
i. Respondent: Very easy to learn to use



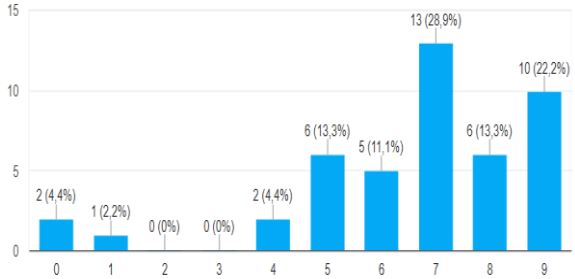
j. Respondent: I am satisfied with this application



k. Respondent: I will recommend to my friends



l. Respondent : It works the way I want



No.	Pertanyaan	Rata-rata
1	This Smart City app helps me to be more effective	6.91%
2	This Smart City app is useful	7.11%
3	This Smart City app does everything I expect it to do	6.51%
4	This Smart City application is very easy to use	6.91%
5	I can use it without written instructions	6.49%
6	I can use it successfully every time	6.40%
7	I learned to use the Smart City App quickly	6.60%
8	I easily remember how to use it	6.58%
9	Very easy to learn to use	6.73%
10	I am satisfied with this application	6.76%
11	I will recommend to my friends	6.80%
12	It works the way I want	6.62%

This section shows that the results of data collection by distributing questionnaires to 45 respondents will show the feasibility of the Manado smart city application. In these results it can be seen that this smart city application can be used at any time, especially at the Manado command center which can monitor the activities of each vehicle and various problems that cause congestion and can be seen from human resources for the usefulness of this application, there are still many who do not know and feel results, impact and benefits of this smart application. Many residents or residents of Manado do not use this smart city application technology.

CONCLUSION

To achieve E-Government is a necessity, even though there are so many weaknesses and implementations, this situation does not mean that it should not be done, but rather to increase E-Government services on the Manado smart city application towards a smart city.

For this reason, we conducted a service study of the Manado smart city application by distributing 45 respondents who used and felt the usefulness of the smart city application to help the Manado city government know the maturity level of the smart city application. The thing that arises when conducting this research is the lack of understanding and utilization of Smart City Application technology by the occupation or the people of Manado City. Suggestions for the Manado government and the existing community to be more active in using and feeling the impact of utilizing the Manado Smart City application to go to Smart City.

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