



Implementation of E-Governance to Improve the Civil Administration Service Quality in Public Sector

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Abstract

The civil administration service as an important kind of public services becomes a demand of people as customers to gain an excellent service. The development of information and communication technology has offered an enabling way-out to improve the e-governance-based service performance in public sector. The research aims to qualitatively describe the e-governance implementation to improve the civil administration service quality in public sector. The result of the research concludes that the e-governance implementation indicates the good result by mean score 4.06. The people perceive all dimensions of e-governance implementation as good based on the transparency, accessibility and competence.

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Furthermore, the civil administration service quality indicates the good result by mean score 3.95. The people perceive all dimensions of civil administration service quality as good based on the tangibles, reliability, responsiveness, assurance, and empathy. Generally, the e-governance implementation to improve the civil administration service quality indicates the good result as perceived by people as customers.

Keywords: Civil Administration; e-Governance; Service Quality.

1. Introduction

The issue of bureaucratic reform has become an interesting topics since the massive reform to insist refinement in all sectors in Indonesia. People have demanded to gain better services from the government [6,10]. Law No. 25/2009 regarding Public Service stated public service as an activity or series of activities in order to fulfill service needs in accordance with the laws and regulations for every citizen and population on the goods, services and/or administrative services provided by public service providers [11]. The development of information and communication technology has offered an enabling way-out to improve the e-governance-based service performance in public sector. The readiness of human resources, regulations, funds, facilities and infrastructures becomes common requirements for the e-governance implementation. The goal of implementing e-governance is to improve the excellent service performance in public sector [5, 12]. In the context, a strong commitment of the government is needed to conduct the e-governance-based service in bureaucracy and becomes an alternative for reforming services in public sector [8, 9]. The e-governance implementation is accordance with the development direction and policy of Bogor City becoming Bogor as a smart city, including the utilization of information and communication technology to smartly provide the public service. The kinds of public services at the Local Office of Population and Civil Registration of Bogor City consist of the services of domicile letter and its legalization, certificates (birth, death, marriage, and divorce), electronic-Resident Identity Card (Indonesia: *Kartu Tanda Penduduk-elektronik/KTP-el*), and Kid Identity Card (Indonesia: *Kartu Identitas Anak/KIA*). The civil administration services, particularly *KTP-el* and *KIA*, are conducted through the Electronic Service of Civil Administration (Indonesia: *elektronik-Melayani Administrasi Kependudukan/e-MENANDUK*). Moreover, the informations regarding the civil administration are processed in the Information System of Civil Administration Data (Indonesia: *Sistem Informasi Data Administrasi Kependudukan/SITANDUK*). Based on the background, the research therefore aims to describe the e-governance implementation to improve the civil administration service quality at the Local Office of Population and Civil Registration of Bogor City, West Java, Indonesia.

2. Theoretical Framework

2.1. The e-Governance Implementation

By e-governance, Oakley considers as a technology-mediated service that facilitates a transformation in the relationship between government and citizen [3]. Abidin Zaenal defines e-governance as a system of information management and internet-based public service to record the public information and to provide the access to the public service by the government [1]. UNESCO defines e-governance as the public sector's use of

information and communication technologies with the aim of improving information and service delivery, encouraging citizen participation in the decision-making process and making government more accountable, transparent and effective [7]. The e-governance is briefly defined as the use of information and communication technologies in government in order to improve the service delivery. Bannister and Connolly state that the implementation of e-governance is relevant to visibility of information (transparency), being easy to do (accessibility), and development of human resource quality (competence) [2, 4]. The e-governance implementation is operationally defined as follows (Table 1).

Table 1: Dimension, Definition and Indicator of e-Governance Implementation

Dimension	Definition	Indicator
Transparency	The openness to gain the service informations by people/customers	Service information exposure shared by service provider
		Service informations being accessible to people/customers
Accessibility	The process of service through accessible digital system by people/customers	Convenient access to services by people/customers
		Availability of process, operation and database architecture
Competence	The capability to digitally provide the public service for people/customers	Availability of skilled public servant to provide the public service through digital system
		Public servant skill to digitally operate the public service

2.2. The Civil Administration Service Quality

The civil administration is included in the public service. The public service is carried out in an effort to fulfill the needs of people. Fulfilling the needs of people serves as a basis for the service quality [6, 8, 14]. Parasuraman, Zeithaml and Berry define the service quality as the difference between consumer expectations and perceptions of services received; if expectations are greater than performance, consumers will experience dissatisfaction. They suggest five attributes to measure the service quality, namely tangibles, reliability, responsiveness, assurance, and empathy [13, 14, 17]. Their perspective can be used to operationally define the civil administration service quality as follows (Table 2).

Table 2: Dimension, Definition and Indicator of Civil Administration Service Quality

Dimension	Definition	Indicator
Tangibles	Physical evidences including facilities, equipment, personnel and communication materials	Completion of facilities to provide the public service
		Availability of digital system to provide the public service
Reliability	Capacity of human resources to realize a reliable and accurate service just like the promise	Providing the public service based on the regulations
		Ability to serve quickly and satisfactorily
Responsiveness	Willingness to aid customers with a quick and satisfying service	Responsive to customer complaints
		Willingness to aid customers
		Punctuality and quality of service
Assurance	Knowledge, ability and politeness to gain the trust of customers	Knowledge and ability to serve responsively
		Attitude and attention to the customers
Empathy	Provision of caring and individualized attention to customer	Helping the service customers when experiencing difficulties

Therefore, the e-governance implementation through (1) accelerating the information process regarding the public service (*informatization*) and (2) creating methods to efficiently and effectively provide the public service (*transformation*) is conducted to improve the civil administration service quality (Figure 1).

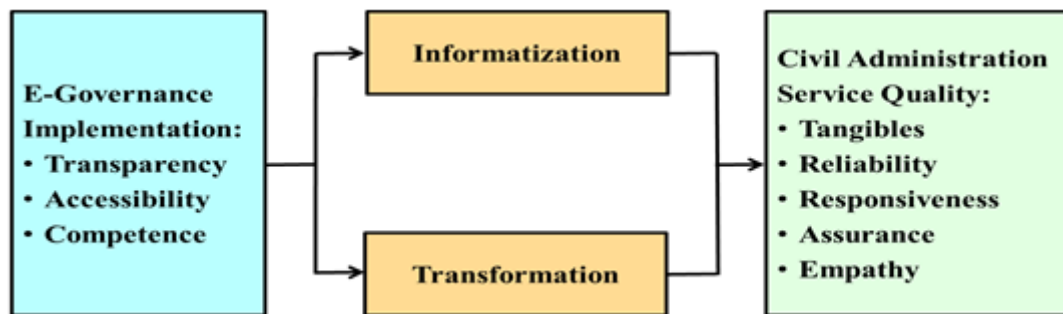


Figure 1: Framework of the e-Governance Implementation to Improve the Civil Administration Service Quality

3. Research Method

The research was located at the Local Office of Population and Civil Registration of Bogor City, West Java, Indonesia. It was conducted during one month (May, 2019). The respondents of the research were determined by 30 people as the customers gaining the civil administration services at the Local Office of Population and Civil Registration of Bogor City. The research is descriptively and qualitatively designed [15] and uses both primary and secondary data. The primary data are collected by the questionnaires distributed to the respondents. The secondary data are collected by desk study that uses literatures and documentations. The questionnaires of the research are designed into five options based on Likert's scale. The options range from "strongly agree" to "strongly disagree". If respondent chooses "strongly agree", the score is 5, "agree" (4), "undecided/neutral" (3), "disagree" (2), and "strongly disagree" (1) [14, 15, 16]. The questionnaires as primary data are analyzed by using the Weight Mean Score to count the mean of all choices of respondents. The mean score is interpreted on the following category: 1.00 – 1.79 (very bad), 1.80 – 2.59 (bad), 2.60 – 3.39 (moderate), 3.40 – 4.19 (good), and 4.20 – 5.00 (very good) [14]. The results of analysis are used to assess the e-governance implementation to improve the civil administration service quality.

4. Result and Discussion

The research presents and discusses the results based on two variables, namely the e-governance implementation and the civil administration service quality.

4.1. The e-Governance Implementation

The research conducted at the Local Office of Population and Civil Registration of Bogor City presents the results and discusses them based on the e-governance implementation, namely: (1) transparency, (2) accessibility, and (3) competence.

Firstly, transparency. Transparency of the e-governance implementation is related to the openness to gain the service informations by people/customers. The mean score of the transparency of e-governance implementation at the Local Office of Population and Civil Registration of Bogor City is shown below (Table 3).

Table 3:Transparency of e-Governance Implementation at the Local Office of Population and Civil Registration of Bogor City

No.	Indicator	Mean	Category
1	Service information exposure shared by service provider	4.13	Good
2	Service informations being accessible to people/customers	4.03	Good
	Transparency	4.08	Good

Table 3 presents that the transparency of the e-governance implementation at the Local Office of Population and Civil Registration of Bogor City indicates the good result by mean score 4.08. Perception of people to the e-governance implementation measured by the transparency finds a good response as shown by the mean score 4.08. As presented in table, the e-governance implementation based on the transparency is generally perceived well by the people as the service customers through *e-MENANDUK* and *SITANDUK*. **Secondly, accessibility.** Accessibility of the e-governance implementation is related to the process of service through accessible digital system by people/customers. The mean score of the accessibility of e-governance implementation at the Local Office of Population and Civil Registration of Bogor City is shown below (Table 4).

Table 4: Accessibility of e-Governance Implementation at the Local Office of Population and Civil Registration of Bogor City

No.	Indicator	Mean	Category
1	Convenient access to services	4.06	Good
2	Availability of process, operation and database architecture	4.03	Good
	Accessibility	4.04	Good

Table 4 presents that the accessibility of the e-governance implementation at the Local Office of Population and Civil Registration of Bogor City indicates the good result by mean score 4.04. Perception of people to the e-governance implementation measured by the accessibility finds a good response as shown by the mean score 4.04. As presented in table, the e-governance implementation based on the accessibility is generally perceived well by the people as the service customers through *e-MENANDUK* and *SITANDUK*. **Thirdly, competence.** Competence of the e-governance implementation is related to the capability to digitally provide the public service for people/customers. The mean score of the competence of e-governance implementation at the Local Office of Population and Civil Registration of Bogor City is shown below (Table 5).

Table 5 presents that the competence of the e-governance implementation at the Local Office of Population and Civil Registration of Bogor City indicates the good result by mean score 4.07. Perception of people to the e-governance implementation measured by the competence finds a good response as shown by the mean score

4.07. As presented in table, the e-governance implementation based on the competence is generally perceived well by the people as the service customers through *e-MENANDUK* and *SITANDUK*.

Table 5: Competence of e-Governance Implementation at the Local Office of Population and Civil Registration of Bogor City

No.	Indicator	Mean	Category
1	Availability of skilled public servant to provide the public service through digital system	4.02	Good
2	Public servant skill to digitally operate the public service	4.14	Good
	Competency	4.07	Good

The e-governance implementation at the Local Office of Population and Civil Registration of Bogor City measured by three dimensions, namely transparency, accessibility, and competence, generally indicates results showed below (Table 6)

Table 6: The e-Governance Implementation of the Civil Administration Service at the Local Office of Population and Civil Registration of Bogor City

No.	Dimension	Mean	Category
1	Transparency	4.08	Good
2	Accessibility	4.04	Good
3	Competence	4.07	Good
	The e-Governance Implementation	4.06	Good

As presented in Table 6, the e-governance implementation at the Local Office of Population and Civil Registration of Bogor City indicates the good result by mean score 4.06. The people perceive all dimensions of the e-governance implementation as good based on the transparency, accessibility, and competence. Therefore, the e-governance is conducted to improve the civil administration service quality at the Local Office of Population and Civil Registration of Bogor City.

4.2. *The Civil Administration Service Quality*

The research conducted at the Local Office of Population and Civil Registration of Bogor City presents the results and discusses them based on the civil administration service quality, namely: (1) tangibles, (2) reliability, (3) responsiveness, (4) assurance, and (5) empathy.

Firstly, tangibles. Tangibles of the civil administration service quality are related to physical evidences including facilities, equipment, personnel and communication materials. The mean score of the tangibles of civil administration service quality at the Local Office of Population and Civil Registration of Bogor City is shown below (Table 7).

Table 7: Tangibles of Civil Administration Service Quality at the Local Office of Population and Civil Registration of Bogor City

No.	Indicator	Mean	Category
1	Completion of facilities to provide the public service	4.00	Good
2	Availability of digital system to provide the public service	3.96	Good
	Tangibles	3.98	Good

Table 7 presents that the tangibles of the civil administration service at the Local Office of Population and Civil Registration of Bogor City indicates the good result by mean score 3.98. Perception of people as the customers of the civil administration service measured by the tangibles finds a good response as shown by the mean score 3.98. As presented in table, perception of the civil administration service quality based on the tangibles indicates the good result by mean score 3.98. It means that the completion of facilities and the availability of digital system to provide the public service are well fulfilled. **Secondly, reliability.** Reliability of the civil administration service quality is related to the capacity of human resources to realize a reliable and accurate service just like the promise. The mean score of the reliability of civil administration service quality at the Local Office of Population and Civil Registration of Bogor City is shown below (Table 8).

Table 8: Reliability of Civil Administration Service Quality at the Local Office of Population and Civil Registration of Bogor City

No.	Indicator	Mean	Category
1	Providing the public service based on the regulations	4.10	Good
2	Ability to serve quickly and satisfactorily	4.06	Good
	Reliability	4.08	Good

Table 8 presents that the reliability of the civil administration service at the Local Office of Population and Civil Registration of Bogor City indicates the good result by mean score 4.08. Perception of people as the customers of the civil administration service measured by the reliability finds a good response as shown by the mean score 4.08. As presented in table, the civil administration service quality based on the reliability is generally perceived well by the people as the service customers. **Thirdly, responsiveness.** Responsiveness of the civil administration service quality is related to the willingness to aid customers with a quick and satisfying service. The mean score of the responsiveness of civil administration service quality at the Local Office of Population and Civil Registration of Bogor City is shown below (Table 9).

Table 9 presents that the responsiveness of the civil administration service at the Local Office of Population and Civil Registration of Bogor City indicates the good result by mean score 3.93. Perception of people as the customers of the civil administration service measured by the responsiveness finds a good response as shown by the mean score 3.93. As presented in table, perception of the civil administration service quality based on the responsiveness indicates the good result by mean score 3.93. It means that the responsiveness of the civil administration service officers to serve the civil administration service customers is perceived as good. In fact,

many civil administration service customers satisfy to the responsiveness of the civil administration service officers.

Table 9: Responsiveness of Civil Administration Service Quality at the Local Office of Population and Civil Registration of Bogor City

No.	Indicator	Mean	Category
1	Responsive to customer complaints	4.10	Good
2	Willingness to aid customers	4.16	Good
3	Punctuality and quality of service	3.53	Good
	Responsiveness	3.93	Good

Fourthly, assurance. Assurance of the civil administration service quality is related to the knowledge, ability and politeness to gain the trust of customers. The mean score of the assurance of civil administration service quality at the Local Office of Population and Civil Registration of Bogor City is shown below (Table 10).

Table 10: Assurance of Civil Administration Service Quality at the Local Office of Population and Civil Registration of Bogor City

No.	Indicator	Mean	Category
1	1. Knowledge and ability to serve responsively	3.96	Good
2	Attitude and attention to the customers	3.90	Good
	Assurance	3.93	Good

Table 9 presents that the assurance of the civil administration service at the Local Office of Population and Civil Registration of Bogor City indicates the good result by mean score 3.93. Perception of people as the customers of the civil administration service measured by the assurance finds a good response as shown by the mean score 3.93. As presented in table, perception of the civil administration service quality based on the assurance indicates the good result by mean score 3.93. It means that the assurance of the civil administration service officers to serve the civil administration service customers is perceived as good. Many civil administration service customers satisfy to the assurance of the civil administration service officers. The service provider gives the assurance in accordance with the existing procedure. **Fifthly, empathy.** Empathy of the civil administration service quality is related to the provision of caring and individualized attention to customer. The mean score of the empathy of civil administration service quality at the Local Office of Population and Civil Registration of Bogor City is shown below (Table 11).

Table 11: Empathy of Civil Administration Service Quality at the Local Office of Population and Civil Registration of Bogor City

No.	Indicator	Mean	Category
1	Helping the service customers when experiencing difficulties	3.83	Good
	Empathy	3.83	Good

Table 11 presents that the empathy of the civil administration service at the Local Office of Population and Civil Registration of Bogor City indicates the good result by mean score 3.83. Perception of people as the customers of the civil administration service measured by the empathy finds a good response as shown by the mean score 3.83. As presented in table, perception of the civil administration service quality based on the empathy indicates the good result by mean score 3.83. It means that the empathy of the civil administration service officers to serve the civil administration service customers is perceived as good. The civil administration service quality at the Local Office of Population and Civil Registration of Bogor City measured by five dimensions, namely tangibles, reliability, responsiveness, assurance, and empathy, generally indicates results showed below (Table 12).

Table 12: The Civil Administration Service Quality at the Local Office of Population and Civil Registration of Bogor City

No.	Dimension	Mean	Category
1	Tangibles	3.98	Good
2	Reliability	4.08	Good
3	Responsiveness	3.93	Good
4	Assurance	3.93	Good
5	Empathy	3.83	Good
	The Civil Administration Service Quality	3.95	Good

As presented in Table 12, the civil administration service quality at the Local Office of Population and Civil Registration of Bogor City indicates the good result by mean score 3.95. The people perceive all dimensions of the civil administration service quality as good based on the tangibles, reliability, responsiveness, assurance, and empathy. Therefore, the improvement of the civil administration service quality is conducted by implementing the e-governance at the Local Office of Population and Civil Registration of Bogor City. The research however indicates the e-governance implementation that gains the good result by mean score 4.06 and the civil administration service quality that gets the good result by mean score 3.95. Based on the results of the research, the implementation of e-governance to improve the civil administration service quality finally gains the mean score 4.01 that means the good result as perceived by people as customers.

5. Conclusion

Based on the results of the discussion, the research qualitatively describing the implementation of e-governance to improve the civil administration service quality draws some conclusions.

1. The e-governance implementation indicates the good result by mean score 4.06. The people perceive all dimensions of e-governance implementation as good based on the transparency (mean score 4.08, good), accessibility (mean score 4.04, good) and competence (mean score 4.07, good).
2. The civil administration service quality indicates the good result by mean score 3.95. The people perceive all dimensions of civil administration service quality as good based on the tangibles (mean

score 3.98, good), reliability (mean score 4.08, good), responsiveness (mean score 3.93, good), assurance (mean score 3.93, good), and empathy (mean score 3.83, good).

3. The e-governance implementation to improve the civil administration service quality as perceived by people (customers) generally indicates the good result (mean score 4.01, good).

6. Recommendation

Based on the conclusion, the research suggests some recommendations in order:

1. To continually enhance the e-governance implementation based on the transparency, accessibility and competence.
2. To continually improve the civil administration service quality based on the tangibles, reliability, responsiveness, assurance and empathy.
3. To improve the civil administration service quality by effectively conducting the e-governance implementation.

The research partially discusses the implementation of e-governance to improve the civil administration service quality. It also uses the limited samples. The next research will explain and test the relation of the e-governance implementation to the improvement of civil administration service quality. It will take the larger samples in order to further and deeper explore the implementation of e-governance to improve the civil administration service quality in public sector.

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