



Research Paper

# Technology Acceptance and Civil Servant Attitudes Towards E-government at the Pakpak Bharat Regency Government, Indonesia

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**ABSTRACT:** The policy of implementing an electronic-based government system is carried out to realize clean, effective, transparent, and accountable governance as well as quality and reliable public services. This study aims to provide an overview to analyze empirically the acceptance of the technology on attitudes towards e-government for Civil Servants of the Pakpak Bharat Regency Government. This research method uses quantitative research with simple linear regression analysis techniques. Research data is generated through a Likert scale which is then processed and analyzed to draw conclusions. The number of samples used in this study was 255 Civil Servants of the Pakpak Bharat Regency Government. Acceptance of technology has a positive and significant effect on the attitude of acceptance of e-government in PNS Pakpak Bharat Regency Government. This means that the higher the acceptance of technology, the more positive the attitude of acceptance toward e-government.

**KEYWORDS:** technology acceptance, attitudes towards e-government, e-government, civil servants

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## I. INTRODUCTION

The Pakpak Bharat Regency Government as one of the Indonesian government institutions in the regions has implemented e-government. This is marked by the Pakpak Bharat Regent Regulation Number 25 of 2019 concerning the implementation of an electronic-based government system and information technology-based services which are also derivatives of Presidential Regulation Number 95 of 2018. E-government is a government administration that utilizes information and communication technology to provide services to the public. Based on the results of the SPBE evaluation by the Ministry of State Apparatus Empowerment and Bureaucratic Reform (Kemenpan RB) in 2020, three domains were assessed, namely the domain of internal policy, governance, and services. The results of the evaluation stated that the governance domain had not yet reached the target. Then the data from the Communications and Informatics Service for 2020 shows that the use of E-performance applications and E-letters from all existing agencies amounted to 700/month. Then for the use of the Sidahari application, the meeting attendance application is 80/month. This condition is influenced by Civil Servants who are used to the old work system, have not mastered the use of technology, and feel troubled by processing electronically (Personal Communications, 2020).

The theory of technology acceptance model (TAM) states that the individual's acceptance of technology is based on two things. First is the belief that a system improves its performance (perceived usefulness). The second is the belief that technology is easy to use (perceived ease of use) (Davis, 1989). This acceptance can be seen through the Unified Theory of Acceptance and Use of Technology (UTAUT). The UTAUT model is the result of the development of eight theories of technology acceptance that have been shown to explain up to 70% acceptance with variations in usage intentions. This model can also describe how the reactions and perceptions of technology users. This is seen through performance expectations, effort expectations, social influence, and facilitating conditions (Venkatesh, Morris, Davis, Davis, 2003). The study of Venkatesh, et al. (2003) revealed that UTAUT has a positive relationship to the use of information technology. A study from Maznorbalia and Awalluddin (2020) found that all UTAUT constructs were positively related to

user acceptance of e-government services. The hypothesis of this research is that there is a positive influence of technology acceptance on the attitudes towards e-government of civil servants of the Pakpak Bharat Regency government.

## II. MATERIAL AND METHODS

The study was conducted on civil servants who work at the Central Government Complex of Pakpak Bharat Regency and uses SPBE in carrying out their main tasks. The data were collected from the offices located at the center of the Pakpak Bharat government in the City of Salak. The participants were assured of the confidentiality of their personal information. Only participants who were willing to participate in this study were taken. The number of participants was as many as 255 civil servants.

### Scales Used

**Attitudes towards e-government:** This scale consists of 6 items that reveal the attitudes of SPBE users to civil servants of the Pakpak Bharat Regency Government. Attitude towards the e-government scale is based on three components in attitude according to Robbins and Judge (2013), namely cognitive, affective, and behavioral or conative.

**Technology acceptance:** This scale consists of 12 items that reveal the level of technology acceptance of employees. This technology acceptance scale is based on the dimensions proposed by Venkatesh et al (2003) namely, performance expectancy, effort expectancy, social influence, and facilitating conditions.

### STATISTICAL ANALYSIS

This study uses quantitative methods using simple linear regression analysis to see the effect of technology acceptance on e-government acceptance attitudes. The Statistical Package for social sciences (SPSS 17.0) was used.

**Table 1: Demographics of Civil Servants of Pakpak Bharat Regency Government on Research Variables**

Demographics Variable	Domination Categorization	Total	Percentage
Gender	Female	166	71.4
Age	25-44 years (Establishment)	222	87.1
Working-age	0-2 years (Early)	102	40
Education	Undergraduates	144	56.5

Table 1 shows the demographic details of the civil servants of the Pakpak Bharat Regency government. that gender is dominated by women. For the age dominated by 25-44 years. The working age is dominated by workers who work for 0-2 years. Then the level of education is dominated by undergraduates.

**Table 2: The effect of technology acceptance on attitudes towards e-government ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	17.285	1	17.285	9.271	.003 <sup>a</sup>
Residual	471.771	253	1.886		
Total	488.996	254			

Table 4.5 shows that F count = 11.872 with a significance value of  $p = 0.000$  ( $p < 0.05$ ). While the value of the F table for  $N = 255$  and a significance of  $p = 0.05$ , the F table is obtained at 3.03. Thus the value of F count  $>$  F table ( $11.872 > 3.03$ ). So it can be concluded that psychological capital and technology acceptance have a joint and significant effect on attitudes towards e-government. Therefore, this research hypothesis is accepted, which means that technology acceptance has a positive and significant effect on attitudes towards e-government.

### **III. DISCUSSION**

The application of information technology is one of the important factors in organizations because of its great benefits for organizational effectiveness, including in government. This is done so that the organization can remain superior, survive the times, have quality, and be profitable (Hughes, 2012). One thing that is needed by organizations in implementing electronic systems is employee acceptance of the technology on an ongoing basis (Venkantesh, Morris, Davis, & Davis, 2003).

Basically, the use of technology begins with interest which is influenced by performance expectancy, effort expectancy, social influence, and facilitating conditions. In their explanation, Venkantesh et al (2003) stated that performance expectancy is a description of how the use of technology systems will provide benefits in working or not for users. Further explanation from Venkantesh et al (2003) is effort expectancy, that is, the level of individual trust in information technology can be easily understood. Then Venkantesh et al (2003) explained that social influence is how social influence encourages individuals to use technology. Another thing Venkantesh et al (2003) explains is that facilitating conditions are a view of the condition of facilities and infrastructure in using technology. When individuals accept technology, they will form a positive attitude toward technology

According to Robbins and Judge (2013), there are three components in attitude, namely cognitive, affective, and behavioral or conative. The cognitive component is a description of the individual's beliefs with what he thinks. This is the most important part of the individual attitude section. Trust and individual understanding that is formed will provide information and knowledge about something then the individual will form an attitude. Affective is an emotional picture or feeling of an individual when he sees a certain object. This relates to the individual's emotional subjectivity to something. Behavior or conative is a picture of the intention to bring up individual behavior towards something. This is a tendency to behave individually towards the object it faces. When individuals accept technology, they will form a positive attitude toward technology This is because the acceptance of technology relates to all components of attitude formation.

This can be seen from the policy of the Pakpak Bharat district government which creates government applications that are easily accessible through government websites so that users feel facilitated and accelerate the work of government administration tasks, Provision of facilities such as computers and wifi, and provides experts and training in the use of technology in the workplace.

### **IV. CONCLUSION**

The policy of implementing an electronic-based government system is carried out to realize clean, effective, transparent, and accountable governance as well as quality and reliable public services. Acceptance of technology has a positive and significant effect on the attitude of acceptance of e-government in PNS Pakpak Bharat Regency Government. This means that the higher the acceptance of technology, the more positive the attitude of acceptance toward e-government.

Pakpak Bharat government needs to strengthen socialization and assistance to strengthen attitudes to accept e-government so that e-government policies become effective. In addition, it is also necessary to strengthen facilities such as increasing the number of computers and expanding internet network access, continuously updating and innovating existing applications so that it is easier and faster to work.

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