Applying the UTAUT to Understand Factors Affecting the Use of Indonesia Public Administration

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Abstract. Decision-making will always be based on valid and reliable data. Information disclosure is a necessity for people in a country to know something. Through a system, a country will be greatly assisted in disseminating information to its people. The transparent public administration process is the hope of the citizen to the government. Innovation based on the use of the system plays an essential role in fulfilling government-owned social services. Claiming Old Age Security during the pandemic has forced the government to use a system that can run a fast and controlled administrative process. This study wants to evaluate a system used in the employees' social services of state-community administration using the UTAUT method. This study indicates that the performance expectancy, social influence, facilitating conditions, and behavior variables have a significant and positive effect. However, the effort expectancy variable does not influence behavior intention. The optimal system is a system that can be used easily by users; if the data processor cannot use the system, a system failure will occur because the data generated will be biased and invalid. Suppose the user has difficulty operating the system. In that case, it is best to immediately evaluate it in the form of input and training to improve further the skills of the user who uses it. Participants who process claims can be processed faster, increasing participant satisfaction.

1 Introduction

Public service organizations must provide the best service for the community; therefore, public organizations must continue to innovate to meet the community's expectations. The Korean government is trying to revitalize its public administration, making it more proactive, more efficient, more accountable, more service-oriented, and closer to the people by making innovations in mobilizing, disseminating, and utilizing human, material, information, technology, and human resources. Finance for service delivery to remote, disadvantaged, and challenged people [1]. [2] learned about the use of social media in government to improve public services and engagement and found that organizational factors, such as innovation, technological capacity, and external influences, predict the use of social media for different tasks; citizen satisfaction, trust in governance and the use of e-participation are found to be interrelated. The government needs to manage and analyze administrative data to achieve the government's mission. The increase in population from time to time and in line with documentation and data services, which are necessary, drives the government to provide fast and valid data in public services efficiency [3]. The data can design responsive public policies and services [4]. Open Point and One Government Data (O2GD) means that the public has the freedom to access the data, information transparency, one-stop service, and government-generated practices, and to evaluate the practice of O2GD [5-6]. The disclosure of information with the needs of the public who want to be clear both in terms of the process and final reporting requires the government to carry out a transparent administrative process [1]. Public organizations need to move faster than business activities and respond immediately to the rapidly growing need for the internet that is able to create interactions between communities, businesses and internally between government agencies [7].

However, a system sometimes does not work as expected in its implementation. With the use of information systems and providing many benefits, some organizations fail to implement. Many systems development projects have failed to produce usable systems. The reason for the failure to apply an information system is because of internal and external factors [8]. [9] and [10] explore and understand the cloud computing phenomenon in e-government. There are benefits related to cost reduction, security, flexibility, and scalability. In addition to the benefits of finding the challenges mentioned in another study, there is the security risk [11]. The future of technology depends on the hopes, opinions, attitudes, and thoughts of those who use it [12]. The government needs innovations in improving public services that can provide the right solution for the difficulties faced by the community. Collaboration with the community through social media will help answer social problems [4]. Implementing the system is a form of innovation in an organization to deal with global changes [6]. Focusing only on technology management yet providing appropriate answers for the successful implementation

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of e-government [13]. A relationship between humans and structures can adapt to a change [14].

At the beginning of the pandemic, it resulted in massive layoffs in Indonesia. Employees, laborers, and other workers lose their jobs where the work is, of course, to support their needs and their families. Workers who do not have a job or other business cause their income to stop. Employees, laborers, and workers whose companies are registered as Social Security (BPJS-TK) participants can withdraw their Old Age Protection funds (JHT), which can be used as business capital, and attend training to get better jobs in the future. However, the large number of workers affected by the termination of employment has resulted in many workers wanting to disburse the Old Age Security, making the queues at the office pile up and crowd. BP On June 10, 2020, more than 921,000 claims were filed with a claim value of IDR 11.9 trillion.

For this reason, BPJS remains committed to providing the best service in the current pandemic conditions by issuing service applications without physical contact, shortly as Lapak Asik online system, which has been implemented since March 23, 2020. From the beginning of the pandemic until August 2021, there were 1.49 million Old Age Protection cases, with the cause of claims being dominated by resignations and layoffs. In addition, most of the claimed nominal JHT balances are below Rp. 10 million, and the age range of participants is most under 30 years of working productive age. Apart from being a service solution during the pandemic, the government is also committed to avoiding illegal levies in managing BPJS Employment claims.

The application of the Lapak Asik online system certainly brings pros and cons for the workforce. How not? Some workers in Indonesia do not understand the internet. It was felt that the difficulty of using the online Lapak Asik system caused some workers to want to continue with the manual claim process. For workers already qualified with the internet, the Lapak Asik system dramatically facilitates the claim process without coming to the BPJS Employment office. They can save time and save costs. However, there are several problems in implementing the Lapak Asik online system. The system has not managed the schedule correctly, causing a build-up of claim queues. When a worker has successfully registered with the Lapak Asik system, a schedule notification will be verified via video call about two weeks after a successful registration. So many workers complain because it takes a long time to wait for the registration process for the claim. This phenomenon is contrary to the results of previous studies, which explain that an information system that increases the efficiency of time, effort, and resources to improve the quality of work [15].

In previous studies, researchers focused on citizen-users who are users of information systems, such as in the banking sector using the TAM model in e-banking adoption [3], UTAUT model in internet banking adoption [16, 17] and the marketplace sector using UTAUT 2 in Bukalapak [18]. There needs to be a lot of research that focuses on government employees using e-government applications which are also an essential part of providing public services. Different views from the side of citizens and government employees in using the system. Citizens are parties who need public services, while employees accept requests from public service actors who must carry out their duties, including adopting the existing system [14]. There needs to be the ability of workers to adapt to the system that is being run. In this case, the collaboration between active citizens and the government, run by government employees, will result in a system that provides a platform for achieving a vision of knowledge, focusing on users, distribution, and networking between the two parties [19].

For this reason, this study focuses on the use of e-government systems from the side of employees who carry out transactions. By understanding the system, one is expected to support the work. This research leads to the e-government sector by evaluating government employees using the UTAUT application, which has not been widely studied.

1.1 Mechanical ventilation determination

Based on the background explanation, the problems that will be discussed in this study are as follows:

1. Does Performance Expectancy (PE), Effort Expectancy (EE), and Social Influence (SI) partially have a positive impact on Behavioral Intention (BI) in using the Lapak Asik System?

2. Do the Facilitating Conditions (FC) and Behavioral Intention (BI) partially have a positive impact on Use Behavior (UB) in the Lapak Asik System?

Based on the formulation of the problem, the framework of thought in this study is:

![Research framework](image)

Fig. 1. Research framework.

2 Literature review

2.1 Knowledge-based theory

UTAUT is a technology acceptance model developed by [20]. This model describes the factors that influence individual acceptance of information technology. In the UTAUT model, four constructs/variables - PE, EE, SI, and FC are direct determinants that are significant in the acceptance and use of technology. PE is defined as how high a person believes using a system will help him gain benefits in his work performance, and EE is defined as the level of ease associated with using a system. PE is defined as how high a person believes using a system will help him gain benefits in his work performance, and EE is defined as the level of ease associated with using a system. If the system is easy to use, the effort made will not be too high, and vice versa. If a system is challenging, then a high effort is needed to use it. SI is defined as the extent...
to which an individual perceives the interests trusted by others who will influence him to use the new system. Furthermore, FC defined how a person believes that the organizational and technical infrastructure is in place to support the system. [21] state that the TAM helps explain the acceptance, applicability, relevance, and effectiveness of modern technology in information sharing among citizens and literacy public service level.

2.2 Lapak asik online system

In March 2020, BPJS responded to the impact of the pandemic by producing a service without physical contact called Asik. Asik is a public system used by the public to check JHT balances and process JHT online without going to the BPJS office. The existence of BPJS TK services aimed at participants who reach the age of 56 years, participants who experience permanent total disability, participants who die, participants who stop working (resigned or laid off), and a minimum membership of 10 years to claim part (partial or 30% withdrawal) and participants who leave the territory of the Republic of Indonesia forever (Indonesia Citizen or Foreigner). The process for the Asik claim is that Participants can upload mandatory documents on the https://lapakasik.bpjsketenagakerjaan.go.id/ portal into the system. Then participants will get an online interview session schedule sent via registered email and customer service verification data applicant will contact participants through video calls. After the process is complete, the JHT balance will be sent to the account that has been attached to the form. Figure 2 is a page of Lapak Asik Online System.

Fig. 2. Lapak asik portal system.

2.3 Performance expectancy and behavioral intention

[20, 22] define PE as the degree to which an individual believes that using the system will help in improving his performance. This concept describes the system's benefits for users related to perceived usefulness, extrinsic motivation, job fit, and relative advantage. PE is how a person believes that using the system will help him achieve gains in his job performance. PE is a strong contraction of intention to use, so it can conclude that someone who believes an information system can help his work will use the system for a longer time [22]. In this concept, a combination of variables is obtained from previous research models regarding the acceptance and use of technology models. H1: PE has a positive and significant effect on BI in using the Lapak Asik System

2.4 Effort expectancy and behavioral intention

The EE is a level of convenience that a person gets when using a system [20, 22] Business expectations are the level of convenience associated with system users. EE is the level of user convenience in using information systems. [8] identified that ease of use influences information technology. The ease of use of information technology will cause the individual to feel that the system has benefited, creating a sense of comfort in its use. Perceived ease of use is how a person believes that information technology is easy to understand [8]. The intensity of use and interaction between the user and the system can also indicate ease of use. [23] state that the key factors influencing user acceptance that are important in designing e-Government services are perceived ease of use and utilization by providing user-friendly interfaces, strengthening security mechanisms for e-Government services, and designing appropriate information systems.

Based on the above definition, it can conclude that perceived ease of use would reduce a person's effort (both time and effort) in learning information technology. The comparison of convenience indicates that people who use the new system work more efficiently than people who work with the old system. Users believe that information technology that is more flexible, easy to understand, and easy to operate (compatible) is a characteristic of ease of use. Indicators of perceived ease of use of information technology [8] are that the system is straightforward to learn and quickly does what the user wants. User skills increase by using the system, which is very easy to operate.

H2: EE has a positive and significant effect on BI in using the Lapak Asik System

2.5 Social influence and behavioral intention

The SI variable means an attempt to convince someone to believe in the importance of using the new system in their work [20, 22]. According to [20], SI impacts individual behavior through three mechanisms, namely compliance, internalization, and identification. It can conclude that an environment gives more influence to potential users of information technology to use new information technology. The greater the interest that arises from the personal potential of these users in using information technology because of the strong influence of the surrounding environment.

An individual will dare to use the system if he gets certainty that using the system to complete his work does not violate subjective norms that apply in society. The social factors identified have three varieties: compliance is when people agree with another person but still disagree. In their opinion, identification is when people are influenced by someone they like and respect, such as a celebrity or a favorite player. Internalization is
when people accept beliefs or behaviors and agree on public and private. When faced with something new, individuals tend to need support from others. SI was a significant factor in influencing an individual's BI to use a new information system [24].

H3: SI has a positive and significant effect on BI to use the Lapak Asik System

2.6 Facilitating conditions and use behaviors

FC are variables that explain an individual's belief that the existing technical and organizational infrastructure can support the use of technology [20, 22, 25]. FC are variables that directly influence the use of the system and are also defined as the extent to which a person believes that the organizational and technical infrastructure can support the use. Users with lower FC will generally have lower intentions to use technology. H4: FC has a positive and significant effect on the UB of using the Lapak Asik System

2.7 Behavioral intentions and use behaviors

The results of previous studies indicate that behavioral interest is the best predictor of technology use by system users. BIs are part of the TAM and TPB factors, unobserved variables requiring manifest variables in their measurements. According to [8], behavioral use is the tendency of a user to use a technology loyally. In this study, BI describes how much users want to continue using the Asik System to provide benefits to support work daily.

H5: BI has a positive and significant effect on the UB of using the Lapak Asik System

3 Methods

The object of the research is to evaluate the implementation of the Lapak Asik system in the payment process for BPJS employment old age security claims in the West Java region using the Unified Theory of Acceptance and Use of Technology (UTAUT) Model. This study uses a Likert scale with a score of 1, which symbolizes “Strongly Disagree,” and 5, “Strongly Agree.”

4 Data collection

The sample used in this study is the Service Sector which directly uses the Lapak Asik system to process old-age security claims. Respondents taken were employees of the Service Sector at the BPJS Employment in the West Java region. Researchers examine the entire population considering more accurate data from all online Lapak Asik system users. The questionnaire was distributed to employees at all levels of the bureaucracy from top to bottom who used the Lapak Asik online system in their work. It was done to reduce bias in this study. There are as many as 129 questionnaires that the criteria have filled out. Table 1 shows respondents' demographic information regarding gender, age, and education level. The demographics of the respondents seen below are that most of the respondents are the millennial generation or Generation Y users of the range of individuals born in 1982-1999 who is known as a generation that is technology literate and fast learners [26], dynamic, want to be fast-paced, open-minded, critical and courageous [27].

5 Results and discussion

5.1 Descriptive statistic results

Descriptive statistics are used to see an overview of the data that has been collected in this study. For each respondent's answer, to facilitate the assessment of the average, then the interval of the average rating criteria can be interpreted: Very Bad (VB): 1.00 – 1.79, Poor (P): 1.80-2.59, Fairy Good (FG): 2.60-3.39, Good (G), Very Good (VG).

Table 2. Descriptive analysis of variables.
Based on Table 3, it can conclude that:

1. The PE variable is very good because it has an average of 4.29, which is in the interval 4.19 - 5.00, meaning that the assessment interval is in the very good category. It can say from the average respondents' answers that employees believe that using the Asik online system will be very helpful in improving their performance.

2. The EE variable is very good because it has an average of 4.41, which is in the interval 4.19 - 5.00, which means the interval rating is in the very good category. It can conclude that the average respondent's answer states that it is very easy for employees to use the Lapak Asik online system.

3. The SI variable is very good because it has an average of 4.47, which is in the interval 4.19 - 5.00, meaning that the assessment interval is in the very good category. It can conclude that the average respondent's answer states that it is very easy for employees to use the Lapak Asik online system.

4. The FC variable is good because it has an average of 4.05, which is in the interval 3.40 - 4.19, meaning that the assessment interval is in a good category. Based on the average respondent's answer, it can be concluded that the West Java branch of BPJS has good organizational and technical infrastructure for employees who run the Asik online system.

5. The BI variable is very good because it has an average of 4.24, which is in the interval 4.20 - 5.00, meaning that the assessment interval is in the very good category. Based on the average respondents' answers, it can be concluded that employees have an interest or desire to continue using the Lapak Asik online system.

6. The UB variable is good because it has an average of 3.95, which is in the interval 3.40 - 4.19, meaning that the assessment interval is in a good category. Based on the average respondent's answer, it can be concluded that employees can use the Lapak Asik online system to support their work well.

### Table 3. Validity test result.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's Alpha</th>
<th>N of items</th>
<th>Result &gt;0.60</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE</td>
<td>0.917</td>
<td>7</td>
<td>Reliable</td>
</tr>
<tr>
<td>EE</td>
<td>0.932</td>
<td>5</td>
<td>Reliable</td>
</tr>
<tr>
<td>SI</td>
<td>0.876</td>
<td>3</td>
<td>Reliable</td>
</tr>
<tr>
<td>FC</td>
<td>0.774</td>
<td>5</td>
<td>Reliable</td>
</tr>
<tr>
<td>BI</td>
<td>0.767</td>
<td>2</td>
<td>Reliable</td>
</tr>
<tr>
<td>UB</td>
<td>0.611</td>
<td>3</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Table 4. Reliability test result.

Based on Table 3 and Table 4 show the results of the validity test and reliability test for all variables.
5.3 Multiple regression test result

Table 5 shows that the result of regression analysis showed that PE and SI partially impact BI, and FC and SI partially impact UB, but only EE has no impact on BI.

Table 5. Multiple regression analysis tests.

<table>
<thead>
<tr>
<th></th>
<th>Beta</th>
<th>Std. Error</th>
<th>t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.425</td>
<td>0.637</td>
<td>0.667</td>
<td>0.506</td>
</tr>
<tr>
<td>PE → BI</td>
<td>0.139</td>
<td>0.23</td>
<td>6.046</td>
<td>0.000</td>
</tr>
<tr>
<td>EE → BI</td>
<td>0.71</td>
<td>0.37</td>
<td>1.915</td>
<td>0.058</td>
</tr>
<tr>
<td>SI → BI</td>
<td>0.179</td>
<td>0.64</td>
<td>2.817</td>
<td>0.006</td>
</tr>
<tr>
<td>FC → UB</td>
<td>0.141</td>
<td>0.062</td>
<td>2.272</td>
<td>0.025</td>
</tr>
<tr>
<td>BI → UB</td>
<td>0.972</td>
<td>0.136</td>
<td>7.170</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The PE has a positive impact on BI. We can say that the higher the level of trust of users who trust that the system has significant benefits to support their work. It can conclude that the service sector employees believe that using the Lapak Asik System helps complete their work and improve their work performance. Before there was a system, the claim process for disbursement of old-age insurance used a manual system where the system was not yet integrated with other fields, so the process took longer. In addition, the existence of this online system has advantages for users. After all, it can access anywhere and anytime without requiring direct document checking because it is already in the digital document system. The result shows that the user's readiness to perform certain behaviors so that users continue to want to use this system so that they are the future can improve performance and effectiveness at work. Studies have shown that PE significantly impacted behavior intention ([14], [30, 31]).

The result of this study is EE has no impact on BI. So, it proves that Lapak Asik System, for some users, is hard to use it. The online system is more difficult for some users than the manual system. The emergence of perceptions about the usability and convenience of a system from users related to users' ease of use. Although the system is hard to use for some users, it is still used because it is related to work. The easy use of information technology can lead to the perception that the system is useful for him and create comfort when using it. However, if this system is difficult to use, then the feeling of comfortable working with the system will not appear, and the intention to use the system will decrease, according to [24].

Social factors and environmental factors users impact BI the use of Lapak Asik. The higher the environmental influence on new users with new technology, the higher the interest of new users because of the strong influence of the surrounding environment. The work environment influences users to use the online system, so all employees are directed to become users of Lapak Asik. The influence of the work environment in question is that there is a direction from the center using the system, both easy and difficult. A system with this pandemic condition requires companies to better address one of them on information technology that supports. The process does not guarantee the day will continue even though it is face-to-face. Studies have shown that social factors significantly impacted BI in e-government systems [31-33]. [32] states that the environment is the main challenge and issue in implementing a system. It shows that the environment is a driving factor for user behavioral intentions in using the system.

Facilitating conditions also affect user behavior. We can say that the Lapak Asik online system users say that the Lapak Asik system is a necessity to support work, coupled with the existence of a special section or related unit that handles the Online Asik System. When users have difficulty using the system, there will be directions from a special section that will help the results of the previous study shows that the variables that facilitate conditions for user behavior that financial, technical, structural, and political support [14], the availability of facilities [32] and perception control [30] can influence the user's intention to use a system.

Furthermore, the BI has an impact on UB. Users of the online system assume that the online Lapak Asik system is a necessity to support work, coupled with the existence of a special section or related unit that handles the online system. When users have difficulty using the system, there will be directions from a special section that will be helpful. Users of the Lapak Asik system want to continue using the system. UB is used to explain users' level of awareness in using the Lapak Asik, which will provide benefits in supporting daily work. It means that users willing to use the online system will impact the behavior of using the service in the future. If the user's motive is higher to continue using the system, the system will continue to be used. Although the online Lapak Asik system is mandatory, requiring users to use it to do work, users believe that using the Lapak Asik online system is profitable and can support the work being done to make it even better.

6 Conclusion

Technology brings a human to move into a world of advanced digitization that offers convenience and speed in everything. Interaction with technical support is expected to support the fulfilment of public needs, especially in the interaction of government and citizens. Asik is an innovative product from the government that is a solution for the community in administrative management related to claims for disbursement of JHT. This research shows that PE, SI, and FC significantly affect BI employees. The regression coefficient leads positively to BI, but the EE variable has no effect. The benefits of the Lapak Asik online application influence employee’s attitudes to continue using the system. But for some users is difficult to operate or use the Lapak Asik System. The results stated that a small number of them experienced difficulties because they were previously used to the manual system. The problem in adopting new technology in government agencies is how human resources are ready to accept and adapt to new technology used daily in their work. For this reason, the system needs to be designed as user-friendly as possible to understand and run and continuously
evaluate the system for users to find out the problems of implementing the system. From this research, users of the Lapak Asik system need to understand better and learn the use of a system to become more effective. We hope that the Lapak Asik System users will continue to support the existence of this system to support the work being done even better. Good for users because of the quality of work, increasing effectiveness in work, and the system from one field to another becomes more quickly integrated. Of course, the claim process can be processed faster to increase participant satisfaction for participants who process claims. For some users who have difficulty operating Lapak Asik, it is hoped that they will be willing to learn the system. The government needs to ensure the successful implementation of this system by evaluating the users. At the same time, users need to immediately understand the use of the system with the mindset that the system helps users in their work and provides feedback on the use of the system. Since government employees have an initial position in providing public services, it is hoped that the system can be run effectively and efficiently for administrative management.

Furthermore, the authors hope that managers will provide more convenience to the system for the managers. The existence of directives from managers regularly is very useful for users. For example, conducting training or conducting further studies on users where it is difficult to use it to be the basis for updating the system to make it easier for employees as users of the Lapak Asik stall system because some users find it difficult to operate or use the Lapak Asik Online System. Using the online system can increase work effectiveness, improve the quality of work, and, of course, increase the chances of successful claims. Further research can use UTAUT 2 for Lapak Asik to increase the higher accuracy level and the latest, which contributes to science.

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