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Information System Success Model for the Evaluation of E-Government Applications in the Public Sector (Case Study: Whole App – Bandung Super App)

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Abstract
This study examines the effectiveness of an e-government application implemented by the Bandung City Government, namely the Kabeh (Bandung Super App), in supporting public service delivery. The background of this research is driven by the gap between the government's objectives in providing digital public services and the actual user experience, which reflects low adoption, limited functionality, and user dissatisfaction. Therefore, this study aims to evaluate the success of the application using a modified DeLone and McLean Information Systems Success Model by incorporating Digital Literacy as an additional variable. This research employed a mixed methods approach, combining quantitative data through questionnaires and qualitative data through semi-structured interviews. The quantitative analysis measures relationships among variables such as System Quality, Information Quality, Service Quality, Digital Literacy, Intention to Use, User Satisfaction, and Net Benefit, while qualitative findings enrich the interpretation of user perceptions. The results indicate that Service Quality significantly influences Intention to Use, while Information Quality, Service Quality, Intention to Use, and Net Benefit significantly affect User Satisfaction. However, System Quality and Digital Literacy show no significant influence on both Intention to Use and User Satisfaction. Overall, the study concludes that the success of the application is primarily determined by service quality, information relevance, and perceived benefits, rather than technical aspects alone.

INTRODUCTION

Currently, people must be able to obtain connections to various public service facilities provided by the government such as access to education, health systems, government administration, and other public services (Aghust Kurniawan, 2021). The development of information technology has encouraged city governments to provide digital-based public services that are more accessible to the public. This transformation is in line with the concept of smart governance, where technology is used to improve the quality of government services, operational efficiency, and citizen involvement in urban development. The Bandung City Government (Pemkot) has launched various government service applications (e-government), one of which is Kabeh – Bandung Super App (formerly named Sadayana), an e-government designed to be a digital information and service center for Bandung residents to access various services and information digitally developed by the Bandung City Government. The Kabeh application is an android-mobile-based digital platform to share and disseminate information, programs, and services provided by the Bandung City government (Haryani et al., 2024a). However, this application has received criticism from various parties because it is considered

less effective and has minimal benefits for the people of the city of Bandung. According to a report by Republika (Taufik & Lukihardianti, 2024), the installation of the Whole app on the Play Store only reached 10,000 while some users reported some features not working, slow app loading, and other criticisms. The Kabeh application is recorded with a rating of 3.4 (41 reviews) lower than Nganjuk Smart City with a rating of 4.6 (565 reviews) and Jakarta Kini (Jaki) with a rating of 3.9 (12k reviews). This condition shows that there is a gap between the government's goals and the actual use of the application, so it is a motivation for this study to conduct this research.

With these facts and a fantastic budget, it shows that there is a gap between the goals and the facts that occur in the field so that it can cause the occurrence of the IT Productivity Paradox (Hajli et al., 2015). A comprehensive evaluation is needed based on these facts and problems. This study uses the Delone and Mclean IS Success Model to evaluate the success of Sadayana's application. This model is highly valued for evaluating information systems under various conditions, including in the context of the public sector (Mustafa et al., 2020). This model divides the success of information systems into six dimensions, namely System Quality, Information Quality, Service Quality, Intention to use, User Satisfaction, and Net Benefit, this model has been validated and widely used in various sectors (Saputro et al., 2015). In a study on e-government in Nganjuk, Indonesia, the Delone and Mclean IS Success Model was used to evaluate the quality and success of mobile-based applications. It was found that this model is effective in measuring the success of the Nganjuk Smart city Mobile Application (Anisya et al., 2021). By providing a structured framework for assessing the various aspects of the information system relied on by e-government based on the Delone and Mclean IS Success Model, it strengthens its suitability for assessing the success of information systems in the context of the public sector (Jami Pour et al., 2022). However, given the complexity of an e-government information system, the Delone and Mclean IS Success Model is considered insufficient to stand alone as a benchmark (Elazzaoui, 2023). A study found other factors that can influence the success or failure of information systems that are not detected by this model, so other variables are needed to refine this evaluation model (Van Cauter et al., 2017).

Therefore, the Digital Literacy variable will be added to this study, self-efficacy and computer competence indicators will also be added in this study. The Digital Literacy variable refers to the ability, knowledge, readiness and comfort of the community to use digital technology and services (Larsen, 2003). Each user has abilities, skills and cognitive capacities that vary from one to another in using information systems (Malodia et al., 2021), so the perception of benefits or information they receive will also be different (Jarupathirun & Zahedi, 2007). Therefore, the addition of the Digital Literacy variable was chosen because most e-government application services require users to have basic skills in using digital devices, navigating the system, understanding information, and utilizing service features independently. If this capability is low, then the quality of the system and the quality of high information are difficult to produce a high level of utilization (Nookhao & Kiattisin, 2023). Research by Aldholay et al. (2018) and Hameed & Arachchilage (2021) shows that self-efficacy and computer competence influence the adoption of technology. This is in line with the global trend that information system evaluation no longer only focuses on technical quality, but also on the digital capabilities of users (Maccani et al., 2019). Digital literacy is currently considered an enabler for the effectiveness of government digital services (Teubner & Stockhinger, 2020).

RESEARCH METHOD

In this study, the researcher used a mixed methods approach. This approach was chosen because it is in accordance with the main purpose of the research which evaluates the success model of information systems in Kabeh applications based on user perception, as well as testing the relationships between variables in the model. A quantitative approach is used to describe the characteristics of each variable in the model studied, such as System Quality, Information Quality, Service Quality, Digital Literacy, Intention to use, User Satisfaction and Net Benefit and test the hypotheses that have been formulated previously based on the theory and model used, namely the modified Delone and Mclean IS Success Model.

The qualitative approach is used as a support and complement to the data to avoid research bias. Qualitative data was obtained through a semi-structured interview process using selected respondents who had filled out questionnaires. The data obtained from this interview also adds to and enriches the results of the quantitative analysis that has been carried out, clarifies the context of the questionnaire answers, and avoids the potential for single perception of closed data. Therefore, this approach reflects an approach with a mixed methods strategy, which uses qualitative data as supporting data, and quantitative data as the dominant data. Using this approach, the study not only describes the statistical relationship between interrelated variables but also describes and provides a deeper understanding of user perceptions of the successful implementation of the Sadaya application.

RESULT AND DISCUSSION

a. *System Quality*

Based on the results of the *Matrix Coding Query* analysis on NVivo, all N1–N10 resource persons conveyed their experiences related to *System Quality* in the Sadaya application. However, the indicators highlighted differed between the speakers. Some speakers highlighted the *usability* aspect in the ease of use of the application, while others emphasized response *time, system reliability*, or *system flexibility*. This variation in focus suggests that system quality is a widespread concern, although the details of the user's perceived experience are not uniform.

- *Usability*

  A total of 10 speakers complained that the *usability* aspect of the Kabeh application was considered less intuitive and not user-friendly. The app's interface is considered too simple but not helpful, dominated by text that causes confusion when navigating. Statement excerpt:

  "*It's just a bunch of information with the same government service link and it looks very old-fashioned, a lot of writing makes me confused, reading it seems a bit* confusing." – Putri, N10

  "*It's better if there are pictures like that, make it easier to understand what it's for, so don't just write that is rich, there are lines like that, so you don't understand it, so you have to read the menu at length, it's a hassle*" – Nopa, N1

  "*If from the appearance, maybe it can be simplified more this time, so maybe the ones at the top can be protruded indeed menus that may be often accessed by users,*

so there is more quick menus for us to access menus that are often used by the public" – Dewi, N2

The findings show that the *usability* of the Kabeh application is not optimal, especially in terms of simplifying the interface, improving visualization, and designing more intuitive navigation for all user segments.

b. *Information Quality*

Based on the results of the analysis *of the Matrix Coding Query* on NVivo, all N1–N10 resource persons conveyed their experiences related to *Information Quality* on the Whole application. The indicators highlighted in this variable are *Accuracy, Completeness, Ease of Interpretation, Relevance* and *Timeliness.*

- *Accuracy*

  Based on the results of the interviews, users show diverse experiences. Some users feel *that the information presented is inaccurate or even far different from the actual conditions*. However, there are also users who consider the information on the application to be quite accurate and helpful in daily needs, especially in features that are often used. Statement excerpt:

  "*It's not suitable, because at that time I was checking the staples in the application, but when I came directly to the market, it was much different, I don't know how it could be different*" – Nopa, N1

  "*In my opinion, as far as I play the feature, it's quite accurate, yes it's quite accurate because I often use it too, for example, when I want to go to school*" – Dany, N3

  "*Information about public services, such as office operating hours, sometimes it is different from the one in the field, the schedule is also the same*" – Farah, N6

  Overall, the accuracy of the information in the app can be said to be inconsistent between features. Some features are considered accurate and useful, but others provide information that is not in accordance with real conditions, causing dissatisfaction and lowering user trust.

c. *Service Quality*

Based on the results of the *Matrix Coding Query analysis* on NVivo, all N1–N10 resource persons conveyed their experiences related to *Service Quality* on the Whole application. The indicators discussed in this variable are *Assurance, Competence, Empathy,* and *Responsiveness.*

- *Insurance*

  Based on the results of interviews, 9 out of 10 of the speakers expressed *concerns related to personal data security and information protection* when using the Sadaya application. Statement excerpt:

  "*Personally, I'm a bit hesitant because there is no explanation about our privacy policy or data encryption, if government applications at least have a disclaimer and strong SSL security, it seems that the security system is not very clear*." - Lita, N5

  "*If I'm a bit worried about tea, we're going to enter personal data like addresses, nik, sometimes I also don't know if it's safe or not*" - Putri, N10

"*Regarding some services that are directly directed to a third party, yes, it seems to be a bit less secure too, yes, sometimes the link can change, yes in the link in the third party, so later the link will become more of a cyber security thing, yes, things that do occur cyber threats and others*" - Fitri, N4

Referring to the definition of *Assurance* indicators in the *Service Quality* variable describes the extent to which users feel confident and confident in the application's ability to provide safe, reliable, and reliable services. However, from this statement, it can be concluded that users' perception of *Assurance* is still relatively low. The lack of information related to data protection and service security makes users feel less confident, thus affecting user confidence in the quality of application services.

- *Competence*

  Competence in *Service Quality* measures the extent to which an application shows professional ability and expertise in providing effective, efficient, and complete services for its users. 6 out of 10 speakers conveyed the *limitations of the Whole application in meeting the needs of user services* optimally. Statement excerpt:

  "*The hope is that it can also cover the end-to-end process of the administrative process itself so it doesn't need to be directed to another website then later you have to access the website, so it's more about the use itself, so it should be that this app can cover the entire process from registration then we can monitor the process monitoring the process and where the status has reached then it can also be added to the payment system*" - Dewi, N2

  "*It's not practical, it's just a good look, right, what I said but you can't use it, it's not efficient, you should think about the function first, then the design*" - Farah, N6

  "*This is just like a catalog of information, which is also not very complete, so we can search on google as well*" - Mira, N8

  Thus, user perception of *the application*'s competence is still relatively low, limitations in functionality, process integration, and the provision of complete information make users feel that the application is not fully competent in supporting service needs.

d. *Digital Literacy*

Digital Literacy is an individual's ability to use digital technology effectively, including understanding, skills, and self-confidence in utilizing digital applications or systems. Based on the results of the analysis of *the Matrix Coding Query* on NVivo, 8 speakers conveyed their experiences related to *Digital Literacy* on the Sadaya application. The indicators in this variable are *Computer Competence,* and *Self-Efficacy.*

- *Computer Competence*

  The *Computer Competence* Indicator describes the user's technical ability in using the application, including the ability to navigate menus, understand features, and complete digital tasks effectively. 7 speakers provided relevant responses regarding the user's ability to operate the Kabeh application and other digital applications. Statement excerpt:

  "*So when I have applications like that, sometimes I like to be confused about which button to press first, so I just look around for a while and continue to do that on my*

cellphone, I also usually only use youtube wa facebook, camera or phone" - Akmal, N9

"*If I don't install it right away, if I'm easy, it's easy to adapt, it's not quite possible, I don't have to look at the guide or anything*" - Mira, N8

"*Usually, I just brainstorm my own tea, if you don't know it, just search on the internet. But if the application is not very informative, it is not a guide. So yes, I just learned on my own*" - Putri, N10

These findings show that users' *levels of Computer Competence* vary, ranging from limited abilities to being able to learn independently, which affects the effectiveness of users in using applications. Statement excerpt:

- *Self-Efficacy*

  Self-Efficacy assesses the user's self-confidence in the user's ability to use the application independently and complete the desired task. Of the 8 speakers, all showed a difference in the level of confidence in interacting with the application.

  "*I'm not too confident because I'm often afraid of hitting the wrong button and then in the future I'll be wrong or make an error later, I'm afraid I won't be able to use my cellphone anymore*" - Akmal, N9

  "*yes, I'm quite confident if I usually use social media like Instagram, YouTube*" - Dany, N3

  "*If I am personal, I am confident, because I work every day, but the problem is not in the literacy of the user, but in the quality of the system*" - Lita, N5

  This difference in the level *of Self-Efficacy* shows that user self-confidence is an important factor in the effectiveness of using applications. Users with high levels of confidence tend to be more comfortable and able to make the most of the app's features, while users with low abilities need additional support in the form of guides, tutorials, or other interventions to boost confidence.

e. *Intention to Use*

The *Intention to use variable* describes the extent to which users really use the Kabeh application in their daily lives, both in terms of initial intention and frequency of use. Based on the results of the analysis *of the Matrix Coding Query* on NVivo, 10 speakers conveyed their experiences related to *Intention to use* on the Sadaya application.

- *Behavioural Intention*

  Based on 10 sources, users have different initial intentions in using the application. Some users try the app out of curiosity, while others are motivated by the need for efficiency or ease in completing daily administrative matters. Here is an excerpt from the speaker:

  "*At first I knew about this application from social media so I just had a prank. I install, I open it to explore*" – Dany, N3

  "*Initially, the intention was actually to be efficient, so it was easier, you didn't have to go to the agencies or to the places directly*" – Farah, N6

  "*When I first opened the Sadaya application, I felt excited because I thought it would help with household chores such as paying taxes, paying PDAM bills, reports of damaged roads*" – Putri, N10

This shows that user motivation is influenced by the perception of the benefits of the app and the potential convenience it offers, which drives the user's intention to actively utilize the app.

- *Frequency of Use*

  The frequency of application use also varies, depending on the needs and benefits perceived. Some users access the app regularly, while others only open it when there is a specific need. Here is an excerpt from the speaker:

  "*If I use the Lahat application, it's not too often, it's like once a month, usually if for example I want to pay the PBB or just check the PDAM bill*" – Putri, N10

  "*Maybe once a week or maybe if you count it per month it can be 4-5 times because actually I use this application to see more information on tourist attractions and then list places to eat, yes, maybe I usually use this application to monitor CCTV*" – Dewi, N2

  "*For applications, it's rare. At least if someone wants to find out about the problems related to the agencies in Bandung that have recently been successful*." – Didit, N7

  These findings confirm that the frequency of application use is highly dependent on user needs, ease of access, and perceived benefits in daily life.

f. *User Satisfaction*

The *User Satisfaction variable* shows the level of user satisfaction with the Kabeh application from the perspective of the overall experience, quality of information, and technical aspects of the application. Based on the results of the analysis *of the Matrix Coding Query* on NVivo, 10 speakers conveyed their experiences related to *User Satisfaction* on the Sadaya application. The indicators highlighted in this variable are *General Satisfaction, Information Satisfaction,* and *Technology Satisfaction*

- *General Satisfaction*

  Based on interviews with 10 interviewees discussing this indicator, users feel that the benefits of the Whole application are still limited. Users consider the application not to help much with daily administrative activities or the settlement of affairs in the community. Here are the quotes from the speakers:

  "*It is said that you are not satisfied, it is more about ordinary tea, it's just normal. The problem is that the benefits may not be too much for me.*" – Didit, N7

  "*If it's from personal satisfaction, maybe 6 times, yes, it's from satisfaction because in my opinion, with the existence or absence of this application, the administrative and operational process in the community is still running like that*" – Dewi, N2

  "*yes, I don't feel satisfied because I don't get anything from the application*" – Akmal, N9

  Based on the results of this interview, it shows that the satisfaction of general users is still limited. Some feel that the benefits of the application have not been maximized, so that the overall satisfaction is only moderate or low, and the need to improve the service so that the application is more useful for users.

g. *Net Benefit*

Net Benefit measures the extent to which the Kabeh application provides real benefits to users in their daily lives, both in terms of improving decision-making skills, work effectiveness, and time and cost efficiency. This indicator reflects users' perceptions of the

practical value of an application, particularly whether it is able to help solve administrative matters, facilitate interaction with public services, and provide significant convenience compared to traditional methods. In this study, all speakers discussed the *Net Benefit* aspect with different indicators, this was analyzed through three main indicators, *namely Enhanced Decision Making, Job Performance,* and *Time and Cost Saving.*

- *Enhanced Decision Making*

  Based on 9 out of 10 speakers, they discussed *the Enhanced Decision Making* aspect. Users feel that the Kabeh application has not helped users much in making decisions or determining the right steps related to administrative and public service affairs. Current applications only display information passively without allowing direct access to services or suggestions that guide users in decision-making. Here is an excerpt from the speaker:

  "*I think it's not reliable, it's reliable, yes, but if it's just for information, it's not bad, even though the information is also available everywhere, you don't have to install this application, but if you want a fast response service or the government administration is not reliable*." - Putri, N10

  "For the benefits earlier, I feel that there is still no one, for those of us who can directly direct to the city government or the provincial government, yes, for related services available here because yes this is the system like we are really just a single view" - Fitri, N4

  "*mmm... It doesn't feel like there is a service that can really be used for the community or residents, it seems like they just display information without being able to directly take care of something from there, it should be possible so that it can reduce the queue in the government*" - Farah, N6

  Based on this, the app's ability to support faster, more precise, and more efficient decision-making is still limited. Users hope that there will be interactive features or direct access to services so that applications can play a real role in helping users determine the necessary steps.

h. *System Quality* has a positive effect on *Intention to use*

Based on the results of the *analysis of the Matrix Coding Query* on NVivo, there were 11 *co-occurrences* between *the System Quality* indicator and the Intention to use *variable* from 6 sources. These findings show that the quality of the system perceived by users has a fairly moderate connection with the user's decision to use the Sadaya application. Although contrary to the hypothesis test results regarding the influence of *System Quality* on *Intention to use,* the qualitative findings provide a deeper understanding of this condition. Here are the quotes from the speakers:

"*...Sometimes it's fast, but sometimes it's long. When you try to open the check-in section, it goes back to the drawing board... So I gave up and closed the app. I like to make mistakes for no reason, so in the end, I don't use the application because I'm lazy...*" – Putri, N10

"*...didn't think to go directly to the Sadayana application... Because it does not provide features that can be done directly from the application... And so it is still separated... many features I don't use because I don't know what they do... experience becomes less good so it is used less often...*" – Dewi, N2

"*...Too many mistakes... go out on your own... Loading continues... And sometimes it opens up again... if the application is complicated or slow, it will definitely not be used anymore...*"– Didit, N7

Users said that unstable system performance is the main reason users rarely use applications. In addition, *errors* that appear suddenly, long *loading* processes , and dependence on network quality make users choose not to continue using the application when experiencing problems. Thus, the lower the quality of the system that the user receives, the lower the actual usage rate of the application.

i. *Information Quality* has a positive effect on *Intention to use*

Based on the results of the analysis *of the Matrix Coding Query* on NVivo, there were 24 *co-occurrences* between the *Information Quality indicator and the* Intention to use *variable* from 9 sources. In the results of the hypothesis test, which states that *Information Quality* has an effect on *the intention to use* is rejected, so that statistically the quality of information does not show a significant relationship with the actual use of the Sadaya application. However, qualitative findings showed strong results that were opposite, as many as 9 speakers consistently conveyed narratives that supported the relationship between these variables. Most of the speakers stated that using this application was due to the need to access certain information related to public services. The resource person emphasized that the more information is considered relevant, easy to find, and updated, the higher the motivation to open the application. Here are the quotes from the speakers:

"*At first I was curious... but because the features are irrelevant and the data is not up to date, it has never been opened again until now*." – Lita, N5

"*If you are relied upon to find exact information... other platforms provide more information with a more attractive appearance as well, so you don't have to use the Sadaya app*." – Mira, N8

"*There are many features that I have never tried because I also don't know what this function is for... so the experience is not good and it is very rare to open the apps... because the information only provides a shortcut link... is not interactive*." – Dewi, N2

The findings indicate that in practice in the field, information quality still has a contribution in encouraging actual use, especially in public service applications whose main goal is to provide fast and accurate information to the public.

j. *Service Quality* has a positive effect on *Intention to use*

Based on the results of the *analysis of the Matrix Coding Query* on NVivo, it was found that there were 10 *co-occurrences* between *the Service Quality* indicator and *the Intention to use* variable from 6 sources. The results of the hypothesis test stating that *Service Quality* has an effect on *Intention to use* are also accepted. This shows the alignment of the results of quantitative and qualitative analysis. The findings show that the better the quality of services provided by the Sadaya application, the higher the actual usage rate of users. Here are the quotes from the speakers:

"*I want this application to be really useful to help residents... It's not just about providing information... If the feature is easier and faster, there will be many people who want to use it... the point is to make it easier to use*." – Farah, N6

"*If the application is complicated or slow, it will definitely not be used again... I wish there was a quick response service like CS chat... Because if you have to go straight away, it's a little difficult...* " – Didit, N7

"*I want this to be like JAKI... The process is not convoluted... You will be notified so that the steps can be followed... we can save time and money*." – Mira, N8

The resource person said that the decision to use or not to use the application is greatly influenced by the extent to which the application is able to provide services that really help the daily needs of residents. When an app doesn't provide a helpline, quick response, or public service feature that users can use, it's more likely to stop usage. Thus, the data shows that service quality has an important and tangible role in driving the actual use of the application.

k. *Digital Literacy* has a positive effect on *Intention to use*

The results of the quantitative hypothesis test show that *Digital Literacy* does not have a significant effect on *Intention to use*. However, qualitative findings indicate that there are a small number of users who feel that digital capabilities also affect the ease of operating the application. Based on the results of the *analysis of the Matrix Coding Query* on NVivo, there were *8 co-occurrences* between *Digital Literacy* and *Intention to use* from 3 sources. Some users with low literacy levels have difficulty understanding the app's navigation so that the use of the app is minimal. Here are the quotes from the speakers:

"*It's rare, yes, I also don't understand the application, so I rarely open it, only a few times when I want to open it, I open it*." – Nopa, N1

"... When I opened it, I was very confused because I was also in elementary school, so when I had applications like that, sometimes I was confused about which button to press first, so I just looked at it for a while and then I started to do that..." – Akmal, N9

On the other hand, there are users who show exploratory behavior. The quote below shows that the user is not afraid to try out the app's features, shows initiative to explore on their own, and is motivated to use it. Here are the quotes from the speakers:

"*Yes, because when the application first appeared, yes, I was a bit curious about the content and when I knew there was a feature about it, I just did it because it was fun to see*" – Dany, N3

However, because these findings were not evenly distributed across all sources, this relationship was considered weak and not strong enough. Only a small number of interviewees (3 people) showed that the user's ability to use the application contributes to the actual use when operating the application. The majority of the speakers did not associate *Digital Literacy* with *Intention to use*, so the relationship between these two variables was also not qualitatively supported.

l. *System Quality* has a positive effect on *User Satisfaction*

Qualitative findings show that there is a connection between *System Quality* and *User Satisfaction*. This can be seen from the results of *the Matrix Coding Query* on NVivo which displays 36 *co-occurrences* between *System Quality* and *User Satisfaction* from 8 sources. In other words, although based on the results of quantitative hypothesis testing this relationship is not significant, the qualitative data findings are quite moderate and reveal a different picture. The resource person stated that aspects of system quality such as optimal

functionality, ease of use, and *modern interface* are important factors that affect user satisfaction in using the Sadaya application. When the application is able to provide relevant features, can be used efficiently, and supports the needs of fast and practical digital administration, then users will feel more satisfied, and vice versa. Here are the quotes from the speakers:

"*Okay, if from your own satisfaction, maybe 6 times... The main goal of presenting this application as a smart city platform should be more than this... So it is further improved so that administrative activities and information... it is more pronounced. Innovationally, it is highly appreciated... It's just that it might be even more improved in terms of functionality*." – Dewi, N2

"*It looks interesting but it's not practical to use... It's a good idea, but it's not practical, it's not efficient. The important thing is that the function first... If it can be easier and care about the residents, there will be many people who want to use it*." – Farah, N6

"*When it opened... It looks so ugly... A lot of the writing is confusing... Not in accordance with reality, many features don't work... so I can't say I'm satisfied*." – Putri, N10

It can be concluded that based on the findings of qualitative data, it is shown that system instability, limited feature functions, and confusing interface design are one of the sources of user dissatisfaction in utilizing applications.

m. *Information Quality* has a positive effect on *User Satisfaction*

Based on the results of the *analysis of the Matrix Coding Query* on NVivo, there were 35 *co-occurrences* between *Information Quality* and *User Satisfaction* from all sources (10 people). This is in line with the results of hypothesis testing which states that the two variables have a significant relationship. The majority of the speakers said that accuracy, updating, relevance, and ease of understanding are important aspects in assessing satisfaction with the application. However, in practice, users still find various obstacles related to information quality, so satisfaction has not been fully met. The resource person said that the information provided was less relevant to the actual needs of residents, and the uncertainty of accuracy and updating of information also contributed to reducing user trust and satisfaction. Here are the quotes from the speakers:

"*I don't think so, because... After using it, not feeling the information provided is important... I can still search on the internet or social media which maybe is much more accurate... so this is not in accordance with our needs as citizens*." – Mira, N8

"*Of course there must be... constraints... Our desire to use this app has also decreased because... We don't have a sense of trust because... No update... we don't know the accuracy... maybe more attention should be paid to the existing services*." – Fitri, N4

"*When I first opened the Sadaya application, I felt excited... But when it comes down to it, it's just a bunch of information that doesn't have the same level of information as the Democrats. A lot of the writing is confusing... It reads a bit confusing*." – Putri, N10

Overall, qualitative data illustrates that when information is irrelevant, not *up-to-date*, or difficult to understand, user satisfaction decreases, and conversely, improving the quality of information has the potential to boost satisfaction levels. Thus, these

findings support the quantitative results that information quality is an important factor in shaping user satisfaction with the Sadaya application.

n. *Service Quality* has a positive effect on *User Satisfaction*

Based on the results of the analysis *of the Matrix Coding Query* on NVivo, there were 17 *co-occurrences* between *Service Quality* and *User Satisfaction* from 6 sources. This finding is in line with the findings of quantitative data that the better the quality of services provided by the Sadaya application, the higher the level of user satisfaction tends to increase. Users said that the inability of the application to provide functional services is the main factor in low user satisfaction, the findings confirm that immature services reduce the user experience even though the development idea is considered positive. Then the instability and slow *response of* digital services also affect the perception of satisfaction. Here are the quotes from the speakers:

"*It's normal to be dissatisfied... I hope that I can help the local residents... but it turns out to be just a display app and has no function in my opinion*." – Farah, N6

"*The concept is very okay but in terms of implementation it has not been... The community can be greatly helped, for example for the administrative process... so for the concept, it's actually very okay but in terms of implementation it hasn't*." – Dewi, N2

"*If in the future the application can be more stable, the features are really running, more complete and the service is fast, I will definitely want to use it again... But if it's still like it is now, people will still choose another way*." – Didit, N7

These findings reinforce that user satisfaction is heavily influenced by the app's ability to deliver a truly usable public service, rather than just displaying information. The quality of the services provided has a great influence on user satisfaction, if the services in the Kabeh application are improved, especially related to the functionality of public administration services, the level of satisfaction has the potential to increase in the application.

o. *Digital Literacy* has a positive effect on *User Satisfaction*

The results of the hypothesis test show that *Digital Literacy* does not have a significant effect on *User Satisfaction* in the Whole application. This insignificance is also reinforced by qualitative findings, which show that a user's readiness to use the app does not automatically make them feel satisfied. This indication can be seen in the *Matrix Coding Query* which only shows 3 *co-occurrences* from 2 sources, this shows an uneven relationship between all sources, and indicates a weak relationship.

From the side of users who have higher digital literacy, there is dissatisfaction because expectations for the quality of government digital services are greater. Users consider the appearance and features of the application not yet in accordance with the standards of modern digital platforms. This is evident in the following statement:

"*I'm pretty confident... but it's very unfortunate that it turns out that Bandung can only provide applications of this quality*." – Mira, N8

Meanwhile, in users with low digital literacy, dissatisfaction arises due to difficulties in operating the application and the incompatibility of features with their needs:

"*The tea app even makes it confusing... I'm not that smart... So yes, that's it. I think it's normal... I don't really need that.*" – Akmal, N9

These two seemingly contradictory findings result in the same pattern in the end, users feel dissatisfied, both when digital literacy is high and low. This means that the user's *Digital Literacy* ability is not a determining factor for satisfaction. Thus, quantitative and qualitative results support each other that *Digital Literacy* is not the main factor that drives user satisfaction.

p. *Intention to use* has a positive effect on User Satisfaction

Based on the results of the analysis *of the Matrix Coding Query* on NVivo, there were 23 *co-occurrences* between *Intention to use* and *User Satisfaction* from 9 sources. This shows a clear pattern of relationship between the experience of using the app and the level of user satisfaction. These findings are in line with the findings of quantitative analysis which shows that the more often the Kabeh application is used and the greater the benefits that users feel in their activities, the level of user satisfaction with the application will increase. Here are the quotes from the speakers:

"*In terms of using this application, I am quite satisfied with the updated and up-to-date information from CCTV services, call center services... that's already quite satisfying... The convenience offered by this application will definitely be more and more often used...*- Scott, N4

"*So there are actually a lot of menus that are still confused... making the experience when using this app less good... So the application is used less frequently.*" - Dewi, N2

"*Yes, again, it is my intention to make it easier as a Bandung community, but there is not much I can do... And when it comes down to it, it's rare... I uninstalled it again* eventually." - Mira, N8

Thus, the results found in the qualitative data reinforce the quantitative results that user satisfaction is strongly influenced by the real benefits obtained from using the app. When use results in a positive and relevant experience to the needs of citizens, satisfaction is formed, and vice versa.

q. *User Satisfaction* has a positive effect on *Intention to Use*

Based on the results of the analysis *of the Matrix Coding Query* on NVivo, it was found that there were 23 *co-occurrences* between user satisfaction *of User Satisfaction* and *Intention to Use* from 9 sources. A number of citations were found that users who are satisfied with the benefits of the app are likely to have a desire to continue using the app in the future, while dissatisfaction or feature limitations can lower usage intent, but still open up opportunities if improvements are made. Here are the quotes from the speakers:

"*My hope in the future, yes, I want this application to be much more useful to the residents... If you have all of them together, it's easier*." – Putri, N10

"*... So I don't deny that in the future I won't use this application anymore because I hope there will be improvements from the government... hopefully in the future it can be much better*." – Didit, N7

"*...if it is repaired later... maybe I'll wear it again...*" – Lita, N5

These findings are in line with quantitative results that show that the hypothesis of a relationship between *User Satisfaction* and *Intention to Use*. This confirms that user satisfaction is an important factor that influences users' decisions to continue using the Sadaya application. In other words, the higher the user's satisfaction with the quality of the

service and the relevance of the information provided, the more likely the user is to maintain or increase the intention of using the application in the future.

r. *Intention to use* has a positive effect on *Net Benefit*

Based on the analysis of *the Matrix Coding Query* in NVivo, 28 quotes from 9 speakers were found that related the relationship between *Net Benefit* and *Intention to Use*. These findings show that the real benefits felt by users from the Kabeh application encourage users to continue to intend to use the application. The more relevant and useful the app's features in supporting daily needs, the greater the user's intention to access and use the app. This is in line with the results of the hypothesis test which shows that the effect of Net Benefit on Intention to Use is significant. Here are the quotes from the speakers:

"*It seems like that, because yes, as a user, yes, even though it's not used very often, but this may be my proposal as well, it's more of a research on what the residents of Bandung need, yes, for the existence of this smart city application to make everything easier, right... Maybe you can also ask people who use it a lot, that's it. Are there any inputs or suggestions that will really be able to users that make users interested in using this application?*- Scott, N4

"*For me, why is that feature the most useful... The problem is that I usually check bills... Then I also check the bill, I check the street CCTV... Because it is directly related to my home, to my environment*." - Putri, N10

"*If it can be developed again, yes, tea for the application and its use and function is also in the application, I want the Bandung Sadayanya application to really be useful to help local residents, not just display information... So the application really feels close to us, and it's not just a formality*." - Farah, N6

Based on the results of the interviews, it shows that when users feel the real benefits of the application, both in terms of efficiency, ease of access to information, and public services, users are encouraged to maintain or increase their intention to use it.

s. User Satisfaction has a positive effect on *Net Benefit*

Based on the results of the analysis of the Matrix Coding Query on NVivo, it was found that there were 31 *co-occurrences* that showed the relationship between *User Satisfaction* and *Net Benefit* from 9 sources. Qualitative findings show that user satisfaction levels have a direct influence on users' perceptions of the benefits that applications provide. This finding is in line with the results of the hypothesis test which shows that the relationship between these two variables is significant. Here are the quotes from the speakers:

"*When I first wore it... It looks less modern... Then when it was opened, it turned out that the content was just news and information, not those who could do the service... So that's the first impression when using the app*." – Mira, N8

"*At that time, yes, I was just curious... but after I checked the contents, that's it, so yes, I deleted it again from my cellphone because it was just to fill up the memory*." – Didit, N7

"*Application-wise, this is a very good innovation... A lot of information can be accessed in real time... just in terms of the main goal it should be able to be more than this... so maybe it will be even better*." – Dewi, N2

Based on the results of the interview, this can be seen from the statements of the resource persons who felt that the application only contained basic information and

did not provide the service functions they needed, so the perceived benefits were low. There are even users who choose to delete the app after trying, because they don't find enough use value to maintain. However, some of the speakers still admitted that the application has potential benefits, especially in terms of providing *real-time* information on certain features. Thus, user satisfaction is proven to shape the way users use and assess the real benefits of the Sadaya application.

t. *Net Benefit* has a positive effect on *Intention to use*

Based on the results of the *analysis of the Matrix Coding Query* on NVivo, it was found that there were 28 *co-occurrences* between *Net Benefit* and *Intention to Use* from 9 sources. These findings suggest that the perceived benefits of the Kabeh app contribute to users' desire to continue using the app in the future. Users tend to have higher usage intentions when the Kabeh application is considered to be able to save time, simplify the administrative process, or provide added value in daily activities. Conversely, when the expected benefits have not been fully met, usage intent may weaken, although some speakers still expressed a willingness to reuse the application if there are improvements and feature development. Here are the quotes from the speakers:

"*In the past, I liked to call directly to the office. Now I try it first through applications provided by the government because it saves me time. But if it doesn't work, then I will come back to the office for a long time, join the queue if there is a missing file, I have to go back again, actually, if indeed the application can't run smoothly, that's why I come to the office*." – Putri, N10

"*It's very unfortunate that there is no administrative service because it must be very helpful for me, especially since I am a housewife... So for example, if this administrative service is available, of course we will find it easier for us to get the inputs that are needed online. So when it comes, it's really fast, that's the process. So it will reduce the queue that is too long*." – Fitri, N4

"*Personally, yes, I want this app to be like Jaki... So if we can save time, money, and energy, that's what we want if the government provides an application, so the application really helps, especially in administrative services, if I think that's the case*." – Mira. N8

These findings are consistent with quantitative results showing that the hypothesis regarding the relationship between *Net Benefit* and *Intention to Use* is significant. Thus, the perceived benefits are one of the key factors that encourage the sustainability of using the Sadaya application. The greater the benefits provided, the higher the user's intention to continue using the application as part of their daily public service activities.

u. *Net Benefit* has a positive effect on *User Satisfaction*

Based on the results of the analysis *of the Matrix Coding Query* on NVivo, it was found that there were 31 *co-occurrences* that showed the relationship between *Net Benefit* and *User Satisfaction* from 9 sources. These qualitative findings show that the extent to which the Todo application is able to provide real benefits to user needs greatly affects whether or not users feel satisfied with the experience of using the Todo application. The more relevant the perceived benefits, the higher the level of satisfaction that emerges. Conversely, when benefits are considered limited or even not felt at all, user satisfaction tends to be low. Here are the quotes from the speakers:

"*If I think it's not bad, it's pretty easy for me. But it's only for certain features, not all of them. There are only a few who help me like that. Like I said earlier, it's like checking bills, CCTV. That's not what* helps." - Princess, N10

"*No, I don't think there is any change because it's still the same, everything still has to be manual. So this application doesn't make it easier for me, it makes it a bit more complicated and confusing as well*." - Farah, N6

"*It's not too bad for me. At least that's the only feature that I like, it's just that it's like that, it doesn't have too much effect on me*." - Dany, N3

Based on the results of the interview, the interviewee said that the benefits of the application are only felt in certain features so that the satisfaction is partial, then the lack of benefits that are felt directly makes the level of satisfaction low, and the benefits that are only felt by a small part of the features cause limited satisfaction. Thus, the concrete and relevant benefits so that they can be felt directly by users are one of the factors to encourage the emergence of user satisfaction with the Whole application.

CONCLUSION

The study concludes that the success of the Kabeh (Whole) app is primarily driven by Service Quality, Information Quality, and User Satisfaction, rather than System Quality or Digital Literacy. Service Quality emerged as the strongest predictor of Intention to Use, while Information Quality, Intention to Use, and Net Benefit significantly shaped User Satisfaction revealing a reciprocal relationship in which satisfied users are more likely to continue using the app and perceive greater benefits from it. However, qualitative findings highlight persistent gaps, including incomplete service features, limited information availability, and unmet administrative needs. Therefore, it is recommended that the Bandung city government prioritize improving service completeness and information accuracy within the app, as these factors have the most direct impact on user satisfaction and perceived benefit, ultimately determining the app's overall effectiveness as a public service platform.

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