

MODIFICATION OF THE UTAUT MODEL: THE MEDIATION ROLE OF THE J-KOPI APPLICATION AND MODERATION OF TRANSFORMATIONAL LEADERSHIP ON SMART CITY ACCEPTANCE IN REGIONAL APPARATUS ORGANIZATIONS IN JEMBER DISTRICT



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Abstract

This study aims to analyze the influence of transformational leadership and technology utilization on smart city acceptance by integrating humanistic aspects as a mediating variable within the Regional Apparatus Organizations (OPD) of Jember Regency. The background of this study stems from the Jember Regency Government's effort to implement the "Jember Kota Pintar" (J-KOPI) application as a digital innovation to realize smart city-based governance. This research employed a quantitative approach using Partial Least Square Structural Equation Modeling (PLS-SEM) with SmartPLS 3.0 software. The population consisted of civil servants (ASN) within Jember Regency's OPD, with 110 respondents selected through purposive sampling. The results show that transformational leadership has a significant effect on the integration of humanistic aspects, technology utilization, and smart city acceptance. Furthermore, technology utilization has a significant positive effect on smart city acceptance. The integration of humanistic aspects mediates the relationship between transformational leadership and smart city acceptance. These findings highlight that the success of smart city implementation is not solely determined by technological readiness, but also by human values and leadership styles that inspire change. The implications of this study emphasize the importance of transformational leadership and human-centered integration in optimizing technology adoption in the public sector, particularly in the implementation of the J-KOPI-based smart city in Jember Regency.

Keywords: Transformational Leadership, Technology Utilization, Humanistic Integration, Smart City Acceptance, J-KOPI

INTRODUCTION

The rapid development of information and communication technology (ICT) has brought significant changes to various aspects of life, including governance and public services. This progress has encouraged many cities worldwide, including Indonesia, to adopt the smart city concept as an effort to improve the quality of public services, governance efficiency, and public comfort. A smart city is a city management concept that integrates ICT in the efficient, sustainable, and responsive use of resources to meet citizen needs. Through smart city implementation, local governments are expected to improve the quality of life for residents, accelerate public services, and support sustainable development (Nasir & Yuslinaini, 2024).

Jember Regency, as a developing region, is also striving to implement the smart city concept to address the challenges of sustainable development and increasingly complex community needs. To achieve this, the Jember Regency Government, through the Communication and Informatics Office, launched the Jember Smart City (J-KOPI) application. This application was developed as an integrated digital platform encompassing five main aspects: Network, Policy, Organization, Business Processes, and Application Infrastructure. J-KOPI aims to create a fast, effective, and efficient public service system in accordance with the principles of digital-based governance (Oktavianto & Triarto, 2024).

As a SuperApp, J-KOPI serves as a platform for various applications from regional government agencies (OPD) in Jember Regency, allowing the public to access them anytime and anywhere. Launched on June 1, 2022, the app offers various features such as J-YANMAS (Jember Public Service), JELITA (Jember View and Monitor), J-DER (Jember Digital Entrepreneur), J-NEWS, and JEVENT. Furthermore, J-KOPI simplifies electronic signature-based public administration processes, including online services for certificates of domicile, poverty certificates, and Police Clearance Certificates (SKCK). This innovation is a strategic step for the Jember Regency Government to improve the accessibility and transparency of public services in the digital era.

However, the evaluation of the implementation of the smart city program through J-KOPI in 2023–2024 shows that several challenges remain. According to data from the Jember Communications and Information Agency (2024), the level of integration between OPDs and the availability of open data to the public has only reached 35%, far from the 100% target. This indicates that despite increasing application usage, not all regional government agencies integrate data in real time. This low level of integration indicates the need for strengthened cross-agency coordination, increased digital literacy among government officials, and a more inclusive and sustainable data management strategy.

In this context, the role of transformational leadership is crucial to supporting the success of smart city programs. This leadership style emphasizes humanitarian values, innovation, and individual empowerment. Transformational leaders are able to inspire and motivate their subordinates to work toward a shared vision, while creating a work culture that adapts to technological change. Bass and Riggio (2021) explain that the intellectual stimulation element of transformational leadership encourages subordinates to think creatively in solving problems, which is particularly relevant in the digitalization of public services.

Previous research supports the crucial role of transformational leadership in smart city implementation. Ardinata et al. (2022) stated that transformational leadership, also known as smart integrated leadership, is one solution for realizing smart cities in the Society 5.0 era. However, Musfikar (2021) found different results, emphasizing that smart city success is more influenced by environmental, mobility, and political factors. These discrepancies indicate a research gap in understanding the extent to which transformational leadership can strengthen cross-agency coordination and encourage technology integration in local government.

In addition to leadership, user acceptance of technology is also a determining factor in the success of smart city programs. Many local government digital initiatives fail due to low technology adoption by government officials. In the context of Jember, it is important to examine the factors influencing the acceptance of the J-KOPI application by State Civil Apparatus (ASN). Based on the Technology Acceptance Model (TAM) (Davis, 1989) and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2012), technology acceptance is influenced by perceived usefulness, perceived ease of use, social factors, and performance expectations. The UTAUT model is considered more comprehensive because it can explain technology usage behavior in the context of government organizations.

Several studies have shown that perceived usefulness of technology has a positive effect on user satisfaction and the effectiveness of public services (Prastiawan et al., 2021; Giddens, 2020). Furthermore, social aspects such as public trust and social norms also influence the acceptance of digital innovation. For example, Lee (2023) found that service quality, social influence, and positive attitudes were the main factors influencing the acceptance of smart city services in Seoul. However, Syaifullah (2021) stated that low digital literacy and a lack of understanding of technology mean that the human aspect has not yet significantly influenced the acceptance of smart cities in Indonesia.

Therefore, the integration of technology, leadership, and humanitarian values is key to building a sustainable smart city. Transformational leaders play a crucial role in fostering an innovative and inclusive organizational culture, while the application of the UTAUT model can help explain the factors influencing civil servants' acceptance of technology. In the context of Jember Regency, research is needed to examine how transformational leadership acts as a moderating variable in increasing technology acceptance through the J-KOPI application, as well as how humanitarian integration can strengthen the relationship between technology use and community satisfaction.

Based on this description, this study focuses on a Modified UTAUT Model: The Mediating Role of the J-KOPI Application and Moderating Transformational Leadership in Smart City Acceptance in Regional Apparatus Organizations (APOs) in Jember Regency. This research is expected to provide theoretical and practical contributions to strengthening the implementation of humanitarian-based smart cities, while simultaneously promoting the effectiveness of digital government in the region.

REVIEW OF LITERATURE

The literature review in this study is built on three levels of theory, namely grand theory, middle theory, and applied theory, which continuously form the conceptual basis in

explaining smart city acceptance. The grand theory used in this study is the Technology Acceptance Model (TAM) developed by Fred Davis in 1989. This model explains the factors that influence user acceptance of technology based on two main constructs, namely Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). Perceived Usefulness reflects the extent to which a person believes that using technology will improve performance, while Perceived Ease of Use relates to the extent to which the technology is considered easy to use. Both constructs directly influence a person's attitude and intention to use technology. TAM is derived from the Theory of Reasoned Action (TRA), which explains that human behavior is influenced by beliefs, attitudes, intentions, and behavioral relationships formed based on perceptions and experiences. In the context of a smart city, TAM can be used to assess the extent to which the public or government officials accept and utilize technology-based systems such as the Jember Smart City (J-KOPI) application as part of the region's digital transformation efforts.

To strengthen this primary theory, this study employs a middle theory in the form of human integration, linked to Social Norm theory in the UTAUT (Unified Theory of Acceptance and Use of Technology) model by Venkatesh et al. (2003). This perspective emphasizes that technology acceptance is determined not only by ease of use and usability, but also by social norms, cultural values, and societal expectations. In UTAUT theory, four main constructs influence user behavior: Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions. Human integration in the context of a smart city explains that the success of technology adoption depends on the extent to which the system respects social values, collective norms, and aspects of inclusivity and social justice. The use of technology, such as public service applications, will be more acceptable if the public perceives the technology as aligned with the customs, needs, and social beliefs prevailing in their community. Therefore, a smart city is not only viewed in terms of digitalization and efficiency, but also in terms of the extent to which human values are integrated into its processes.

At the applied theory level, this study utilizes three supporting theories: Effort Expectancy, transformational leadership, and technology utilization. Effort Expectancy refers to the level of ease perceived by users in operating a system. Venkatesh et al. (2003) explain that perceived ease of use promotes comfort, reduces psychological barriers, and increases the intention to continue using a technology system. In the context of J-KOPI, the easier the application is for employees and the public to use, the greater the level of acceptance and effectiveness of its implementation. Meanwhile, transformational leadership is a crucial element in driving organizational behavioral change toward technology adaptation. According to Bass and Avolio (1994), transformational leadership encompasses four main components: Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration. Transformational leaders are able to inspire subordinates to innovate, instill a shared vision, and create a work climate that supports the sustainable use of technology. In the context of a smart city, this leadership style plays a significant role in building a digital culture in a bureaucratic environment that tends to be conventional. Furthermore, the theory of technology utilization refers to the Technology–Organization–Environment (TOE) framework introduced by Tornatzky and Fleischer (1990). The TOE framework explains that technology adoption in organizations is influenced by three main contexts: the Technological Context (technological characteristics and

readiness), the Organizational Context (organizational structure and resources), and the Environmental Context (external pressures and environmental support). In smart city implementation, technology utilization depends not only on the availability of digital systems but also on the readiness of human resources, organizational infrastructure, and inter-agency collaboration. With the support of visionary leadership, mature technological readiness, and high social awareness, a smart city can function as a sustainable and inclusive ecosystem.

Overall, the integration of TAM, UTAUT, transformational leadership, and the TOE framework provides a strong theoretical foundation to explain the factors influencing smart city acceptance. The conceptual model in this study confirms that the acceptance and success of smart city implementation are determined not only by technical aspects, but also by ease of use, social support, inspirational leadership, and the human values inherent in the user community. This comprehensive theoretical approach is expected to provide a deep understanding of how technology, humans, and organizations interact synergistically in building smart cities that are sustainable and oriented towards community welfare.

RESEARCH METHOD

The research method used in this study is a quantitative approach with explanatory research. The aim is to explain the causal relationships between independent, dependent, moderator, and intervening variables through hypothesis testing. A survey approach was used to obtain primary data by distributing questionnaires to respondents, who were State Civil Apparatus (ASN) in Regional Apparatus Organizations (OPD) in Jember Regency who used the J-KOPI application as part of their smart city program implementation. The sampling technique used was purposive sampling, based on certain criteria such as a minimum of one year of service and direct involvement in activities related to information technology utilization. Based on calculations using the Slovin formula with a 5% margin of error, the sample size used in this study was 77 respondents from a total population of 335 ASN users of the J-KOPI application.

Data collection was conducted using three main techniques: questionnaires, documentation studies, and interviews. The questionnaires were structured based on indicators for each variable and used a five-point Likert scale to measure respondents' level of agreement with the statements. Documentation studies were conducted to obtain secondary data from smart city implementation reports, official government documents, and relevant literature sources. Semi-structured interviews were conducted with key informants, such as department heads or application managers, to corroborate the questionnaire data. All collected data were then processed and analyzed using Partial Least Squares (PLS) analysis, as this method requires fewer assumptions and is suitable for small sample sizes.

Data analysis was conducted in two main stages: testing the measurement model (outer model) and the structural model (inner model). The outer model was used to measure the validity and reliability of indicators against constructs, with the criteria of loading factor > 0.5 and composite reliability > 0.7 . The inner model was used to examine the relationships between latent variables using path analysis, R-square values, and goodness-of-fit tests. Hypothesis testing was conducted using the bootstrapping method, with the criteria for hypothesis acceptance being a t-statistic > 1.96 and a p-value < 0.05 .

Research Hypothesis

This study aims to analyze the influence of transformational leadership and technology utilization on smart city acceptance, with human integration as an intervening variable. A hypothesis is a tentative answer to a research problem, which is stated in the form of a question (Sugiyono, 2018). Based on previous research, the following research hypotheses can be formulated:

- H1: Effort expectancy influences the utilization of the J-KOPI smart city application technology.
- H2: Human integration has a significant influence on the utilization of the J-KOPI smart city application technology
- H3: The utilization of the J-KOPI application technology influences smart city acceptance.
- H4: Transformational leadership influences human integration in the utilization of the J-KOPI application technology.
- H5: Transformational leadership influences effort expectancy in the utilization of the J-KOPI application technology

Research Model

This research model describes the relationship between the independent variables Effort Expectancy (X1), Institutional Integration (X2), and Transformational Leadership (M) on the dependent variable Smart City Acceptance (Y) with the Utilization of J-KOPI Application Technology (Z) as an intervening variable. This model can be illustrated as follows:

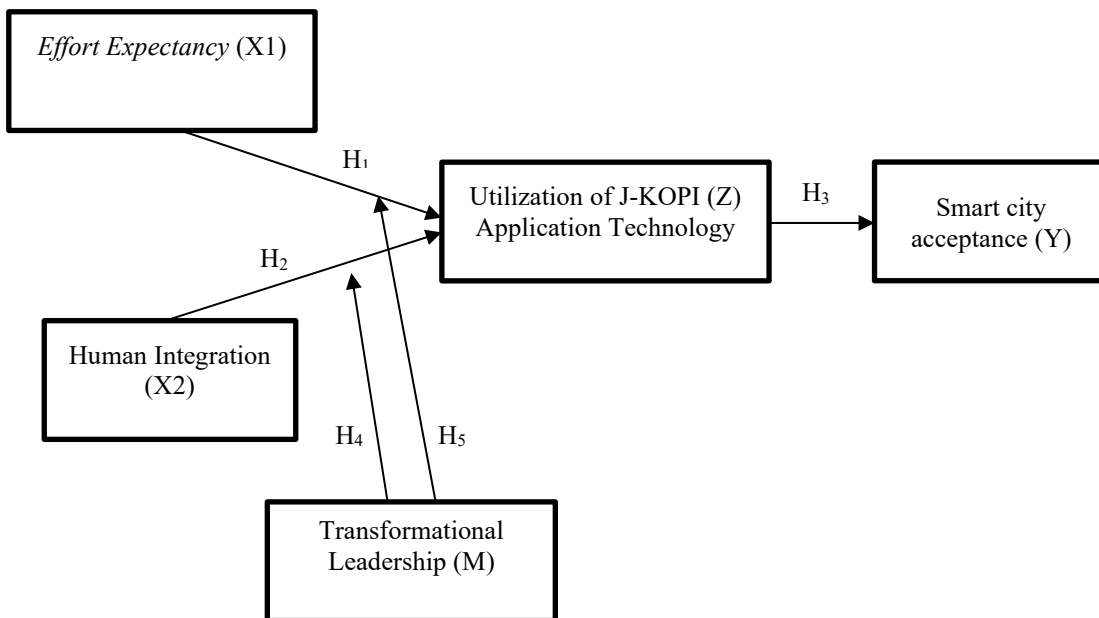


Figure 1
Conceptual Framework of the Research
Source: Modified UTAUT Model

The model description of this research shows that Effort Expectancy (X1) and Institutional Integration (X2) influence the Utilization of J-KOPI Application Technology (Z), which in turn influences Smart City Acceptance (Y). Furthermore, Transformational Leadership (M) plays a role in strengthening the relationship between the independent variables and technology utilization.

This research used a quantitative approach with a survey method. Data were obtained through the distribution of Likert-based questionnaires to respondents involved in the implementation of the J-KOPI application within the local government. Data analysis was conducted using structural equation modeling (SEM) to examine the direct and indirect influences between variables.

RESULTS AND DISCUSSION

The following are the research results obtained from the analysis using SPSS, namely:

Table 1.
R-Square Value from SmartPLS Application Analysis Results

Variable	R Square	Adjusted R Square
Effort Expectancy (X1)	0,308	0,302
Integration of Human Aspects (X2)	0,409	0,404
Utilization of Technology (Z)	0,769	0,765
Smart City Acceptance (Y)	0,798	0,796

Source: Data processed (2025)

Based on the analysis results, the R Square and Adjusted R Square values indicate the magnitude of the contribution of independent variables to the dependent variable in the research model. The Effort Expectancy variable (X1) has an Adjusted R Square value of 0.302, which means that 30.2% of its variation can be explained by factors in the model, while the remaining 69.8% is influenced by other factors outside the model. The Humanitarian Aspect Integration variable (X2) has an Adjusted R Square value of 0.404, indicating that 40.4% of its variation is explained by the independent variables in the study. Furthermore, the Technology Utilization variable (Z) has an Adjusted R Square value of 0.765, indicating that 76.5% of its variation can be explained by Effort Expectancy and Humanitarian Aspect Integration. Finally, the Smart City Acceptance variable (Y) has an Adjusted R Square value of 0.796, indicating that 79.6% of its variation is explained by the previous three variables. Thus, this research model has strong predictive ability and excellent explanatory power because the R Square value is close to 1.

Table 2.
Direct Influence Path Coefficient Value

No	Hypothesis	Path Coefficient	P Values	Description
H ₁	Effort Expectancy (X1) -> Technology Utilization (Z)	0,984	0,326	Positive and Insignificant
H ₂	Integration of humanitarian aspects	9,739	0,000	Positive and Significant

(X2) -> Utilization of Technology (Z)						
Technology						
H ₃	Utilization (Z) -> Smart City	Acceptance (Y)	37,966	0,000	Positive and Significant	

Source: Data processed (2025)

Based on the analysis results in Table 4.17 regarding the direct influence path coefficient values, the Effort Expectancy variable (X1) has a coefficient value of 0.984 with a p-value of 0.326 (>0.05). These results indicate that Effort Expectancy has a positive but insignificant effect on Technology Utilization (Z), thus rejecting the first hypothesis. This means that although ease of use of technology is considered important, this factor has not been able to exert a strong influence on the level of technology utilization in the context of Smart City implementation.

Meanwhile, the Human Aspect Integration variable (X2) showed different results with a path coefficient value of 9.739 and a p-value of 0.000 (<0.05), indicating a positive and significant effect on Technology Utilization. This confirms that the better the human aspects, such as comfort, security, and ease of access, are integrated into the system, the greater the technology utilization will be. Furthermore, Technology Utilization (Z) was also proven to have a positive and significant effect on Smart City Acceptance (Y) with a path coefficient of 37.966 and a p-value of 0.000 (<0.05). This finding indicates that the higher the intensity of technology utilization, the greater the level of public acceptance of Smart City implementation.

Table 3.
Indirect Influence Path Coefficient Value

No	Hypothesis	Path Coefficient	P Values	Description
H ₄	Transformational leadership (M) > human integration (X2) -> Technology Utilization (Z)	0,943	0,000	Positive and Significant
H ₅	Transformational leadership (M) > effort expectancy (X1) -> Technology Utilization (Z)	6,788	0,346	Positive and Insignificant

Source: Data processed (2025)

Based on the analysis results in Table 4.18 regarding the coefficient value of the indirect influence path, it is known that transformational leadership (M) has a positive and significant effect on the integration of humanity (X2) in the utilization of technology (Z) J-KOPI Application, with a path coefficient value of 0.943 and a p-value of 0.000 (<0.05). This indicates that transformational leadership is able to provide a real contribution in increasing the integration of the humanitarian aspect in the application of smart city technology. However, on the other path, the influence of transformational leadership on effort expectancy (X1) in the utilization of technology produces a coefficient value of 6.788 with a p-value of

0.346 (>0.05), which means the influence is not significant. Thus, it can be concluded that although transformational leadership is effective in strengthening the integration of the humanitarian aspect, it has not been able to significantly influence the perception of ease of use (effort expectancy) towards the utilization of technology.

Effort Expectancy influences the utilization of J-KOPI smart city application technology

Based on the test results and data analysis, the path coefficient was 0.984 with a p-value of 0.326, which is greater than 0.05. This indicates that effort expectancy has a positive but insignificant effect on technology utilization. Therefore, the first hypothesis is rejected. This means that although perceived ease of use exists, this factor is not strong enough to influence the level of technology utilization in the context of a smart city.

This finding indicates that although the public or users perceive ease of use in technology, this factor is not yet able to provide a strong impetus for increased technology utilization in the context of a smart city. This means that perceived ease of use is not the dominant factor determining whether technology will be optimally utilized.

Practically, these results mean that technology adoption in smart city implementation is more influenced by other factors, such as the integration of human aspects or the benefits directly experienced by the community. Therefore, although effort expectancy plays a role in providing convenience, its role is not significant enough to encourage widespread technology utilization.

This is consistent with research by Venkatesh and Davis (2000), Lawan and Dahalin (2011), and Venkatesh et al. (2012), Mahendra and Affandy (2013), Iriani et al. (2014), and Widnyana and Yadnyana (2015) showed that performance expectancy is one of the most important determinants of information technology system acceptance. On the other hand, research by Alshehri et al., (2012) found in the context of e-government that effort expectancy, namely perceived ease of use, is a significant predictor of technology adoption according to the UTAUT model. Riyanto et al. (2023) also showed that effort expectancy is positively related to the intention to use digital services in digital service providers. Furthermore, a recent study on the use of AI health assistants (Nature, 2025) demonstrated that effort expectancy has a strong positive impact on user behavioral intentions. These findings consistently support the role of effort expectancy as a key determinant in technology utilization.

Human Integration has a significant influence on the utilization of J-KOPI smart city application technology.

Based on the test results and data analysis, the path coefficient was 9.739 with a p-value of 0.000 (<0.05). These results indicate that the integration of humanitarian aspects has a positive and significant effect on technology utilization. Therefore, the second hypothesis is accepted. This means that the better the integration of humanitarian aspects (e.g., comfort, security, and ease of use) increases technology utilization.

This finding implies that the greater the integration of humanitarian aspects in technology use, the higher the level of technology utilization. The humanitarian aspects in question include comfort, security, and ease of use, as directly experienced by users. When these factors are well integrated, the public will be encouraged to utilize the available technology more effectively.

These results emphasize the importance of humanitarian aspects in driving successful technology adoption in the context of Smart Cities. Technology is not only assessed based on its functionality, but also on the extent to which it provides a safe, comfortable, and easy-to-use experience for the public. Therefore, the integration of humanitarian aspects is a crucial factor in increasing sustainable technology utilization.

This aligns with research by Taun (2024), which explains that technology significantly influences national integration. Human-centric approaches such as Human Integration have proven crucial in the adoption of smart city technology. Bibri & Krogstie (2024) emphasized that digital inclusion, citizen participation, and an ethical approach in smart cities significantly drive technology acceptance.

Utilization of J-KOPI Application technology has an impact on the acceptance of smart cities

Based on the test results and data analysis, the path coefficient was 37.966 with a p-value of 0.000 (<0.05). This indicates that technology utilization has a positive and significant effect on smart city acceptance. Therefore, the third hypothesis is accepted. This means that the more intensive the technology utilization, the greater the level of public acceptance of smart city implementation.

This finding implies that the more intensive the public utilizes technology, the greater the level of acceptance of smart city implementation. Technology utilization is a crucial factor driving public acceptance of smart cities, as it facilitates access to information, public services, and daily activities.

Therefore, the results of this study confirm that technology utilization not only serves as a supporting tool but also plays a key role in increasing public acceptance of the smart city concept. The higher the level of technology utilization, the greater the public support and involvement in the success of smart city implementation in a region.

Several empirical evidence supports this technology utilization, as explained in (Jinghui et al., 2020), which concludes that technology utilization, particularly through mobile applications for city services, significantly influences smart city acceptance. However, this differs from research (Harsono et al., 2023), which shows that some users feel anxious about new technology regarding the usability and ease of use of smart service technology. Zhang (2023), in a study analyzing technology acceptance in online health communities, showed that Effort Expectancy and Performance Expectancy influence the intention to adopt health technology, supporting the role of technology utilization as a connecting variable. Feng's (2025) study on a systematic review of educational technology adoption highlighted its use as a mediator in increasing acceptance and actual use of smart tools

Transformational leadership influences Human Integration in the use of J-KOPI Application Technology

Based on the test results and data analysis, the path coefficient was 0.943 with a p-value of 0.000. This p-value is less than 0.05, thus concluding that the effect of transformational leadership on human integration is positive and significant. In other words, transformational leadership can make a significant contribution to improving the integration of human aspects in the context of Smart City technology utilization.

This finding indicates that transformational leadership can make a significant contribution to improving the integration of human aspects in the context of Smart City

technology utilization. This means that although a transformational leadership style can motivate and inspire, in this study, this factor was quite influential in encouraging the integration of human aspects such as comfort, security, and ease of use of technology.

Research conducted by (Ardinata et al., 2022) concluded that transformational leadership, later known as smart integrated leadership, is one solution for realizing the Smart City concept in the Society 5.0 era. Desirée van Dun & Kumar (2023) found that transformational leadership strengthens the adoption of Industry 4.0 technology in organizations, particularly by strengthening social and human-centric aspects. Kalasindhu & Kuntunbutr (2022) demonstrated that transformational leadership increases self-efficacy, which then strengthens the relationship between human-oriented factors and technology use intentions based on the UTAUT model. Furthermore, Perera & Abeysekara (2023) in their conceptual study of Lorocho found that this leadership characteristic strengthens UTAUT variables related to human input factors (such as social and ease-related perceptions), supporting the hypothesis that transformational leadership strengthens the effect of Human Integration on technology use.

Transformational Leadership influences Effort Expectancy in the use of J-KOPI Application Technology

Based on the test results and data analysis, the path coefficient was 6.788 with a p-value of 0.346. A p-value greater than 0.05 indicates that this indirect influence path is also negative and insignificant. This means that transformational leadership, through effort expectancy, is unable to significantly increase technology utilization.

This finding indicates that transformational leadership, which is expected to influence perceived ease of use (effort expectancy), is not sufficient to increase technology utilization. In other words, although transformational leaders can provide direction, motivation, or inspiration, these factors do not significantly contribute to increased technology utilization through the perceived ease of use pathway.

Research by Anugrah (2024) explains that performance expectancy and social influence influence behavioral intention. Furthermore, Kalasindhu & Kuntunbutr (2022) also confirmed that transformational leadership increases user self-efficacy, a factor that strengthens the effect of effort expectancy on technology utilization intention within the UTAUT framework. Perera & Abeysekara (2023) added in a conceptual study that the transformational leadership conceptually moderates the effect of effort expectancy on behavioral intention to use advanced systems. This finding supports the hypothesis that transformational leadership strengthens the effect of effort expectancy on technology utilization.

CONCLUSION

Based on the research results, it can be concluded that Effort Expectancy has a positive but insignificant effect on Technology Utilization, while Humanity Aspect Integration has a positive and significant effect, indicating that the better the human aspect is integrated, the higher the level of technology utilization. Furthermore, Technology Utilization is proven to have a positive and significant effect on Smart City Acceptance, which means that the intensity of technology use plays an important role in increasing public acceptance of the Smart City concept. Meanwhile, Transformational Leadership does not have a significant effect on Humanity Integration or Effort Expectancy, so it can be

concluded that the role of transformational leadership in increasing the utilization of J-KOPI Application technology has not provided a significant influence.

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