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# Digital transformation among Indian youth: Insights from DigiLocker adoption intention

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## Abstract

This study explores the adoption intention of the DigiLocker platform, an e-governance initiative, among the youth by focusing on the role of digital transformation in enhancing public sector services. Using the Diffusion of Innovation (DOI) model, the factors influencing youth adoption of DigiLocker are examined, with an emphasis on sustainable development. The study employed Partial Least Squares Structural Equation Modelling (PLS-SEM) to build the measurement and structural models. Three out of five hypotheses were supported. Complexity, observability, and trialability positively influence the intention to adopt DigiLocker, while factors like relative advantage and compatibility showed no significant influence on adoption intention. These findings contribute to the field of e-governance by examining the key drivers of technology adoption among youth, which can help shape future public sector digital initiatives. The practical implications include enhancing user experience by simplifying platforms and showcasing clear, tangible benefits to drive adoption. By customising strategies for these stakeholders, DigiLocker can significantly contribute to promoting sustainability, inclusivity, and efficiency in urban ecosystems, thereby advancing important SDGs. Future researchers could explore adoption of DigiLocker among diverse populations, integrating additional variables, and testing the model across various sectors. The paper concludes with recommendations for advancing research in e-governance, thereby contributing to the broader goal of digital transformation and sustainable development.

***Keywords*:** Digital Transformation; DigiLocker Platform; Diffusion of Innovation; Electronic Governance; Structural Equation Modelling

## 1. Introduction

Digital transformation and e-governance have been pivotal for developmental initiatives. (Ullah et al., 2021; Yukhno, 2024). Adopting new age technologies such as cloud computing, artificial intelligence, and mobile application platforms have paved way for efficient, transparent, and digitally inclusive electronic governance (e-governance) programs for all segments of the society (Gupta., 2025). With such developments, e-governance has streamlined public service delivery, minimised administrative hurdles, and promoted accessibility to under-served populations (Aritonang, 2017; Singh et al., 2010). Globally, e-governance holds immense potential in the achievement of sustainable development, addressing challenges like inequality, lack of infrastructure, and inefficiency in service delivery (Ullah et al., 2021). DigiLocker is an Indian cloud-based e-governance platform used for digitally storing, issuing, and verifying documents, with the goal of eliminating the usage of physical papers and facilitating the exchange of certified electronic documents (Girijan, 2024). This application is part of the government initiative to create a digitally empowered society and foster economic growth (Ullah et al., 2021). This platform aims to provide digital empowerment to citizens by allowing them to access authentic digital documents such as Aadhaar cards, driving licenses, and educational certificates through a digital document wallet (Kamath, 2021; Shaju et al., 2018). The platform has two core components, a "repository" for secure document storage and an "access gateway" for user-friendly access and management (Kaur & Kaur, 2019).

The success of e-governance initiatives such as the DigiLocker platform depends on public adoption, especially among the youth. Their comfort with digital tools allows them to quickly embrace and promote such platforms, driving widespread adoption. As key drivers of innovation and societal change, their adoption intention and behavioural intent is a requisite for economic growth and sustainable development (Moletsane, 2021; Sakil, 2018). DigiLocker empowers the youth by simplifying access to essential documents for education, employment, and entrepreneurship, fostering greater efficiency, transparency, and participation in governance (Kamath, 2021). Focusing in-depth into this population and their perceptions on DigiLocker platform could provide significant insights for policymakers, government agencies, educational institutions, and businesses. This study, hence, aim at understanding the factors that influence the intention to adopt DigiLocker platform among the youth.

## 2. Literature Review

### 2.1 Role of E-Governance for Digital Transformation

Governments across nations have identified the need for a transformative and futuristic approach to interact with their people and execute their services for furthering their economies (Addo & Senyo, 2021). With extensive growth and advancement in the technology sector, it has become essential to recognise how government organisations can exploit technology as a possible resource

for developing its nation (Estevez & Janowski, 2013). E-governance leverages technology to create accessible, efficient, and corruption-free government services (Chopra & Bisht, 2024; Singh, 2024). It has been noted that emerging economies can be highly benefited from adopting technologically equipped services through electronic governance and embracing digitisation (Addo & Senyo, 2021; Adjei-Bamfo, et al. 2019; Hsieh, et al. 2013).

In the recent past, India has taken efforts to initiate digitally effective programs and campaigns for the betterment of its economy (Shweta & Shachi, 2017). The core aim of the Digital India program has been to enhance government services, interacting with its citizens, and creating a digitally empowered country (Girijan, 2024; Sharma & Sarmah, 2020). Digital platforms like DigiLocker empower young individuals to participate in governance and boost their digital literacy. These initiatives align with the broader vision of fostering innovation and youth-driven growth (Chopra & Bisht, 2024).

### 2.2 DigiLocker and Sustainable Development Goals (SDGs)

The unique features of DigiLocker platform also aids in promoting sustainability and contributes to the achievement of the United Nation Sustainable Development Goals (SDGs). The platform helps in providing digital inclusion by bridging the gap between rural and urban population (Nedungadi et al., 2018) contributing to SDG 9 (industry, innovation and infrastructure) and SDG 10 (reduced inequalities). By facilitating access to academic certificates and employment opportunities, the platform supports the achievement of SDG 4 (quality education) and SDG 8 (decent work and economic growth) among youth population. Furthermore, by reducing paper usage and lowering carbon footprints associated with physical document generation (Girijan, 2024; Kumar, 2024; Tripathi & Dungarwal, 2020), the use of DigiLocker platform helps in following through with SDG 12 (responsible consumption and production) and SDG 13 (climate action).

### 2.3 Research Gap

DigiLocker platform has, thus, emerged as a significant tool in India's e-governance ecosystem, facilitating the digitisation and secure storage of important documents. Most of the researches conducted on DigiLocker were focused on understanding the concept from a fundamental level (Petare, 2015; Chavan & Rajeswari, 2019). Fewer studies were aimed at analysing the concept from a statistical viewpoint (Bharati & Garg, 2016). Existing research on DigiLocker predominantly comprises conceptual and exploratory studies, with restricted number of empirical investigations. These gaps highlight the need for further research to comprehensively understand the adoption intention of DigiLocker platform, especially among the youth. The findings of the study shall help in addressing the following research question:

***RQ.*** How does adoption intention of the DigiLocker platform among the youth support digital transformation?

## 3. Research Model and Hypotheses

### 3.1 Research Model

Many studies have previously focused on the adoption of various e-governance programs. In order to comprehend the adoption and usage of e-governance platforms, researchers have employed theoretical frameworks and models such as the Technology Adoption Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT) model, E-Government Acceptance Model (eGAM), Diffusion of Innovation (DOI) model, etc. (Janadari & Tennakoon, 2024; Karavasilis et al., 2010; Shareef et al., 2011; Sivathanu, 2018). Although TAM and UTAUT are commonly cited models among technology acceptance and adoption studies (Kaur et al., 2020; Okour et al., 2021), the present context focuses on the adoption of an innovative technology among the youth. The Diffusion of Innovation model is most suited for this study as the theory underlying it examines the adoption or non-adoption of an innovative technology. The theory explains how new technologies or innovations spread within a group of users over time through communication channels (MacVaugh and Schiavone, 2010). The key factors in the model, viz. are, relative advantage, compatibility, complexity, trialability, and observability, helps in identifying the functionalities and purposes of innovative technologies (Hsbollah et al., 2009) such as the DigiLocker platform. Also, DOI categorises individuals into groups such as early adopters, early majority, late majority, and laggards based on their readiness to adopt new technologies (Tanye, 2016; Jahanmir & Lages, 2016). Youth, often falling under the early adopters' category, are the ideal target group for studying the adoption of DigiLocker as they are more open to innovations and quicker to embrace digital platforms.

### 3.2 Hypotheses Development

#### *3.2.1 Relative Advantage (RA)*

Relative advantage, a key factor in understanding the adoption of an innovation or technology is defined as how better it is perceived compared to existing alternatives (Liu et al., 2023; Menzli et al., 2022). It highlights benefits such as removing geographical and time barriers, enabling users to access services anytime and anywhere, while offering a sustainable and cost-effective solution for managing resources (Liu et al., 2023). This is often measured through convenience, economic benefits, and social prestige, which include profitability, low initial costs, reduced discomfort, time savings, and faster results (Tanye, 2016). Efficiency and effectiveness are also linked to relative advantage (Kaur et al., 2020). DigiLocker simplifies key tasks for youth, such as accessing educational certificates, applying for jobs, and managing identity documents, making it an essential tool for empowering digitally active generations and promoting greater efficiency in their daily lives. To understand their adoption intention of DigiLocker platform based on the relative advantage it provides, we hypothesise that,

*H1. Relative advantage has a positive influence on the adoption intention of DigiLocker platform.*

*3.2.2 Compatibility (CBT)*

Compatibility refers to the extent to which innovative technology aligns with the existing values, work styles, experiences, and practices of its potential users (Kaur et al., 2020). Research suggests that higher compatibility increases users' willingness to adopt the technology (Okour et al., 2021). It also encompasses the perceived usefulness of technology in meeting the needs of its adopters and how consistent it is with their past experiences, values, and current lifestyles (Hsbollah et al., 2009; Makse, & Volden, 2011). If a technology aligns well with users' needs, choices, and daily routines, they are more likely to develop stronger intentions to use it (Kaur et al., 2020). DigiLocker demonstrates high compatibility as it seamlessly integrates into users' lives by addressing everyday needs like storing, retrieving, and sharing essential documents digitally. Its ability to meet the demands of convenience, accessibility, and security positions it as a highly adoptable tool, especially for individuals seeking efficiency in their personal and professional lives. Hence, we hypothesise,

*H2. Compatibility has a positive influence on the adoption intention of the DigiLocker platform.*

*3.2.3 Complexity (CPT)*

Complexity, often seen as the opposite of perceived ease of use, refers to the extent to which an innovation is perceived as difficult to understand and use (Hsbollah et al., 2009; Makse & Volden, 2011). When users perceive low complexity or high ease of use, their likelihood of adopting the technology increases (Kaur et al., 2020). Research indicates that higher complexity negatively impacts the perceived value of an innovation, as users are less inclined to adopt technologies that they find challenging to use (Liu et al., 2023; Okour et al., 2021). In the context of the DigiLocker platform, its intuitive interface and simplified processes minimise complexity, aligning with the perceived ease of use concept. This user-friendly design encourages adoption and boosts usage intentions, particularly among individuals seeking accessible and efficient digital solutions. Thus, we propose that,

*H3. Complexity (Ease of Use) has a positive influence on the adoption intention of the DigiLocker platform.*

*3.2.4 Observability (OB)*

Observability refers to the extent to which the results or benefits of an innovation are visible to others and potential adopters (Hsbollah et al., 2009; Tanye, 2016). It plays a crucial role in driving adoption, as people are more inclined to adopt technologies that provide clear, positive outcomes that are easily seen and understood. When the positive effects of an innovation are observable, it builds trust, generates interest, and reduces perceived risks, thereby increasing the perceived value of the technology. Application technologies, such as DigiLocker, have high observability because their results are visible—users can upload, store, and share documents on smart devices, making the benefits clear to others. This visibility not only builds user confidence but also encourages

others to adopt the platform, as they see the practical advantages it offers. Additionally, observability can be measured through the results of collaboration and sharing within user groups, enhancing the overall motivation for adoption (Liu et al., 2023; Menzli et al., 2022). Thus,

*H4. Observability has a positive influence on the adoption intention of the DigiLocker platform.*

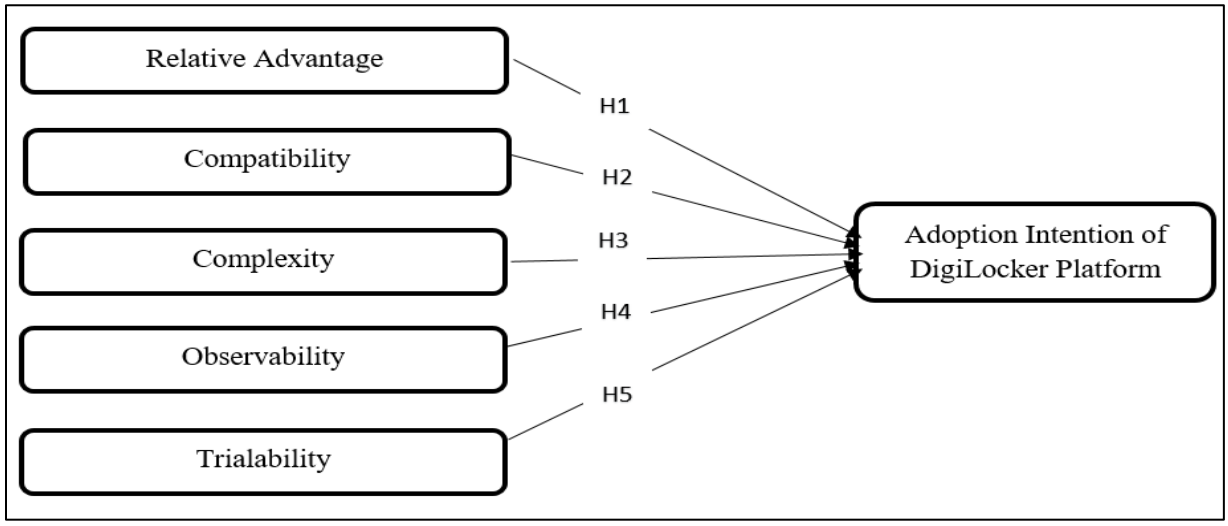
*3.2.5 Trialability (TR)*

Trialability refers to the extent to which an innovation can be tested or experimented with on a limited basis before full adoption (Tanye, 2016). It plays a significant role in reducing uncertainty, as users gain the opportunity to evaluate the functionality and performance of a product, which in turn builds confidence and increases perceived value (Liu et al., 2023). Trialability is especially important for encouraging usage intentions, as it allows users to experience the benefits of an innovation first-hand, reducing fear or hesitation associated with trying new technology (Kaur et al., 2020). Research shows that innovations widely tested are more likely to be widely adopted (Menzli et al., 2022). In the context of DigiLocker, its accessibility and ease of experimentation, such as allowing users to upload, store, and retrieve documents without significant initial commitments, make it highly trialable. This hands-on experience helps users understand its practical benefits, encouraging wider adoption and long-term usage. Therefore, we propose,

*H5. Trialability has a positive influence on the adoption intention of the DigiLocker platform.*

Therefore, investigating the relationships between these independent variables and the behavioural intentions of youth regarding DigiLocker adoption is crucial for understanding e-governance adoption dynamics and enhancing the effectiveness of digital transformation for sustainable development. The hypothesised model for the study is depicted in Figure 1.

**Figure 1. Research model on the adoption intention of DigiLocker platform**




*Note. Created by authors*

## 4. Research Methodology

### 4.1 Instrument Development

A structured questionnaire consisting of two sections was developed to test the proposed model in Figure 1. The first section of the questionnaire collected data related to the demographic profile of the respondents. The second section of the questionnaire consisted of five-point Likert scale statements for measuring constructs adopted from the diffusion of innovation theory. A total of 23 statements under 6 constructs were taken from previously validated scales. These statements were refined and tailored to suit the context of this study. The items measuring relative advantage (5 items) and trialability (3 items) were adopted from Yuen et al. (2021). Compatibility (4 items) and complexity (3 items) were obtained from Kaur et al. (2020). Observability (3 items) was derived from Adeaba (2023) and Raman et al. (2023). In addition, 4 items of intention to adopt were taken from Ayanwale & Ndlovu, (2024) and Octavius & Antonio (2021).

### 4.2 Study Participants

The study was conducted among youth in Chennai, India, identified by the Government of India's National Youth Policy (Press Information Bureau, 2014) as individuals aged 15 to 29 years. This group was selected because urban youth represent the most digitally active population segment, with nearly 91.8% internet access (Press Information Bureau, 2024). Chennai, being a major metropolitan city with robust digital infrastructure, widespread internet connectivity, and high literacy levels, provides an ideal population for examining behavioural and perceptual factors. A total of 231 respondents participated in the questionnaire survey, out of which 103 were identified as non-users of the DigiLocker platform. The present study focused on analysing the adoption intention of these non-users to test the proposed research hypotheses.

### 4.3 Data Analysis

The data was analysed using the IBM SPSS Statistics 26 and SmartPLS 4 (Ringle et al., 2024). This study examined hypotheses with a two-stage approach (Measurement model and Structural model analysis) using Partial Least Squares-Structural Equation Modelling (PLS-SEM). PLS-SEM was chosen as it offers flexibility in handling complex relationships without strict rules about measurement scales, sample size, or data distribution (Kaur et al., 2020). This makes it ideal for working with reflective models and intricate constructs.

## 5. Results

### 5.1 Respondents' Profile

The demographic profile of the respondents showed that 57.3% were female and 42.7% were male. 10.68% aged 15-19 years, 66.01% aged 20-24 years, and 23.31% aged 26-29 years. The educational qualification of majority of the participants was post-graduation (57.3%), followed by under-graduation (33%), professional degrees (5.8%) and others (3.9%). 57.3% were from

commerce and management streams, 24.3% were from arts/humanities, whereas only a small fraction (18.4%) was from science and technology.

### 5.2 Assessment of Measurement Model

For assessing the measurement model, according to Hair et al. (2016), outer loadings should be above 0.4 (Ali et al., 2024). All the indicators achieved the threshold except RA2. Hence, this indicator is removed from the model. Next, Internal consistency and convergent validity is evaluated. Internal consistency is measured by using Cronbach's alpha and composite reliability. The value of Cronbach's alpha and composite reliability was above the threshold of 0.6 (Fornell and Larcker, 1981; Taber, 2018; Yaacob et al., 2021). In addition to this, Average Variance Extracted (AVE) of the constructs need to be above 0.5 (Fornell and Larcker, 1981). All constructs were above the threshold as shown in Table 1. This shows the adequate internal consistency and robust convergent validity (Ly & Doeur, 2024).

**Table 1. Result of reliability and validity test**

| Constructs | Cronbach's alpha | Composite reliability | Average variance extracted (AVE) |
|---|---|---|---|
| RA | 0.679 | 0.703 | 0.505 |
| CBT | 0.707 | 0.708 | 0.532 |
| CPT | 0.719 | 0.721 | 0.640 |
| OB | 0.687 | 0.789 | 0.609 |
| TR | 0.765 | 0.770 | 0.679 |
| IA | 0.769 | 0.773 | 0.593 |

Note. Computed with SmartPLS

With regard to discriminant validity, the Heterotrait-Monotrait ratio of correlations (HTMT) was evaluated, the value of which should be below 0.9 (Henseler et al., 2015). This criterion was also met and is shown in Table 2.

**Table 2. Result of discriminant validity using HTMT criterion**

| | CBT | CPT | IA | OB | RA | TR |
|---|---|---|---|---|---|---|
| CBT | 0.729 | | | | | |
| CPT | 0.615 | 0.800 | | | | |
| IA | 0.417 | 0.511 | 0.770 | | | |
| OB | 0.361 | 0.243 | 0.466 | 0.781 | | |
| RA | 0.550 | 0.521 | 0.373 | 0.162 | 0.711 | |
| TR | 0.513 | 0.552 | 0.510 | 0.415 | 0.380 | 0.824 |

Note. Computed with SmartPLS

### 5.3 Assessment of the Structural Model

For assessing the structural model, initially, we need to check for collinearity issues using Variance Inflation Factor (VIF) (Hair et al., 2017). VIF should range between 0.20 and 5.0 (Hair et al., 2017). In this study, the VIF values met the criteria (Table 3), indicating the absence of multicollinearity issues. Also, Harman's single-factor test was used to assess Common Method Bias (CMB). This was used to determine whether a single factor explains the majority of the variation (Fuller et al, 2016). This revealed that CMB was not an issue in the study, as 30.17% were attributable to one factor.

**Table 3. Result of multicollinearity using VIF**

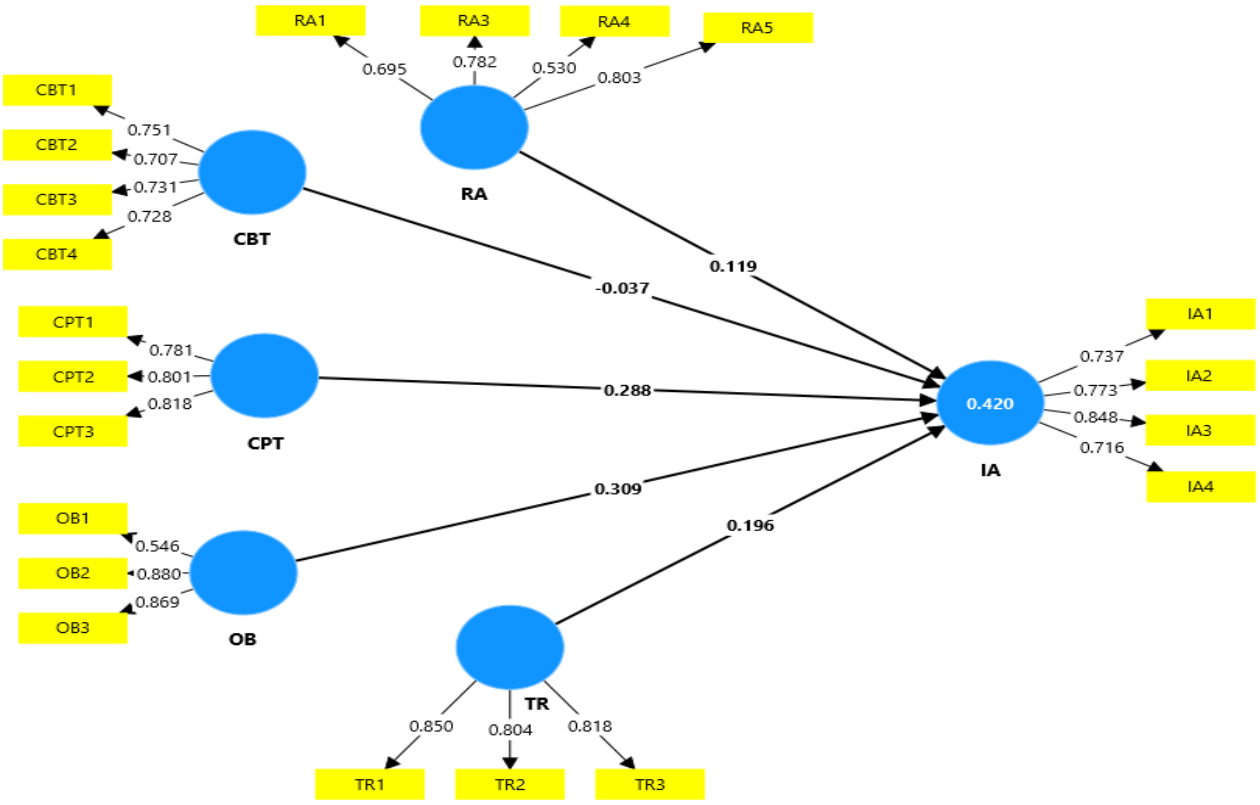
| | VIF |
|---|---|
| RA1 | 1.165 |
| RA3 | 1.500 |
| RA4 | 1.289 |
| RA5 | 1.593 |
| CBT1 | 1.364 |

| | |
|---|---|
| CBT2 | 1.301 |
| CBT3 | 1.325 |
| CBT4 | 1.345 |
| CPT1 | 1.307 |
| CPT2 | 1.510 |
| CPT3 | 1.489 |
| OB1 | 1.184 |
| OB2 | 1.532 |
| OB3 | 1.623 |
| TR1 | 1.830 |
| TR2 | 1.634 |
| TR3 | 1.415 |
| IA1 | 1.472 |
| IA2 | 1.557 |
| IA3 | 1.913 |
| IA4 | 1.447 |

Note. Computed with SmartPLS

To examine the significance of path coefficient, bootstrapping in SmartPLS4 with 5000 subsamples was carried out (Figure 2). The results for the hypotheses testing are shown in Table 4, where 3 out of 5 hypotheses were found to be supported. CPT (β = 0.288, t=3.039, *p*= 0.002), OB (β =0.309, t=3.868, *p*= 0.000) and TR (β =0.196, t=2.076, *p*= 0.038) are significantly associated with the adoption intention of DigiLocker Platform. Conversely, RA (β = 0.119, t=1.442 *p* =0.149*)*, and CBT (β = -0.0307, t= 0.325, p = 0.746) did not significantly influence the adoption intention of DigiLocker Platform.

**Figure 2. Structural Model**




*Note. Created with SmartPLS; Standardized coefficients shown along paths, $R^2$ within the endogenous variable, and outer loadings presented along each indicator*

**Table 4. Hypotheses Testing**

| | Path | Original sample (β) | Sample mean | Standard deviation | t statistics | p values | Result |
|---|---|---|---|---|---|---|---|
| H1 | RA -> IA | 0.119 | 0.141 | 0.083 | 1.442 | 0.149 | Not supported |
| H2 | CBT -> IA | -0.037 | -0.021 | 0.115 | 0.325 | 0.746 | Not Supported |
| H3 | CPT -> IA | 0.288 | 0.272 | 0.095 | 3.039 | 0.002 | Supported |
| H4 | OB -> IA | 0.309 | 0.313 | 0.080 | 3.868 | 0.000 | Supported |
| H5 | TR -> IA | 0.196 | 0.186 | 0.095 | 2.076 | 0.038 | Supported |

Note. Computed with SmartPLS

Then, model quality of endogenous latent variable is predicted using $R^2$ (Ly & Doeur, 2024). The interpretation of $R^2$ depends on the context and discipline of the study. In consumer behaviour research, an $R^2$ value above 0.2 is generally considered acceptable (Abdenneb, 2023; Hair et al., 2017). Hence, an $R^2$ value of 0.420 in this study is considered robust and satisfactory. $F^2$ is used to measure the effect of an exogenous variable on an endogenous variable. The commonly accepted values for $F^2$ are 0.02, 0.15, and 0.35, which correspond to small, medium, and large effects, respectively (Abdenneb, 2023; Hair et al., 2019). The results showed that CBT (0.001) and RA (0.016) had no effect on intention to adopt DigiLocker platform, while CPT (0.073), OB (0.130), and TR (0.039) had small effect on intention to adopt.

$Q^2$ predict value shows the predictive relevance of the model (Ali et al., 2024). This value should be higher than zero (Hair et al., 2013), and this study meets the threshold, as shown in Table 5. It indicates the independent variable's predictive significance for the dependent variable. The PLS-Predict power tests the model's out-of-sample prediction power, while $R^2$ only reveals the model's in-sample explanatory power (Shmueli et al., 2019). In this study, most PLS-SEM indicators show medium predictive power compared to the naive LM benchmark (except for IA4). Therefore, the model demonstrates moderate predictive power (Abdennebi, 2023; Hair et al., 2019).

**Table 5. Result of predictive power assessment using PLSpredict**

| | $Q^2$predict | PLS-SEM_RMSE | PLS-SEM_MAE | LM_RMSE | LM_MAE |
|---|---|---|---|---|---|
| IA1 | 0.224 | 0.599 | 0.474 | 0.647 | 0.488 |
| IA2 | 0.178 | 0.746 | 0.590 | 0.807 | 0.610 |
| IA3 | 0.225 | 0.749 | 0.570 | 0.788 | 0.606 |
| IA4 | 0.162 | 0.753 | 0.602 | 0.735 | 0.579 |

Note. Computed with SmartPLS

## 6. Discussion

The DOI model was employed to examine the adoption intention of the DigiLocker platform among the youth in Chennai. This approach aligns with previous research, such as Rana et al. (2013), who conducted a meta-analysis on e-governance studies and evaluated various theoretical models for understanding citizen-centric adoption of e-government systems. In the present study, relative advantage did not significantly influence the intention to adopt the DigiLocker platform among youth. This finding aligns with studies (Janadari & Tennakoon, 2024; Karavasilis et al., 2010; Folorunso et al., 2010) that found relative advantage influenced attitudes but not actual adoption intentions, often due to factors like lack of trust, cultural barriers, and poor

responsiveness. Notably, Karavasilis et al. (2010), in their study on e-governance adoption in Greece, found that relative advantage impacted attitudes toward use but not intention to adopt. However, contrary evidence from Kaur (2020) and Okour et al. (2021) demonstrated its positive impact on m-wallets and knowledge management systems, respectively. For DigiLocker, adoption appears necessity-driven, as it is tied to accessing essential government services, making perceived advantages like speed or efficiency less critical. This highlights the need to prioritise factors such as awareness and trust to enhance adoption rates. Compatibility did not significantly influence the intention to adopt the DigiLocker platform among youth. This finding aligns with Rana et al. (2013), who observed that the compatibility-adoption relationship was often non-significant in e-government studies. Similarly, Okour et al. (2021) found compatibility to be insignificant for decision-makers adopting knowledge management systems in Jordanian banks, likely because advanced technologies may not align with users' existing practices. However, this contradicts studies by Karavasilis et al. (2010) and Liu et al. (2023), which found compatibility to have a positive impact on e-governance adoption and the perceived value of online applications, respectively. In the case of DigiLocker, its adoption may be driven more by necessity than by alignment with users' values or lifestyles, as it is tied to utility-based government services. This highlights the need to focus on accessibility and user awareness over compatibility for such platforms.

Complexity, observability, and trialability were supported in this study, indicating their significant influence on the intention to use the DigiLocker platform. These findings align with several e-governance studies. Complexity negatively impacts adoption and usage intention when users struggle to understand how a novel technology functions (Okour et al., 2021; Liu et al., 2023). Kaur et al. (2020) also noted complexity's significance in adoption. However, in this study, complexity shows a positive influence since the indicators were reversed to represent perceived ease of use, underscoring that the lack of complexity fosters adoption. For DigiLocker, features such as quick document retrieval and reduced reliance on physical copies align with these findings, reinforcing its practicality and ease of use. Observability positively affects adoption by emphasising visible and tangible benefits. Liu et al. (2023) found observability enhanced the perceived value of online applications, while Al-Jabri and Sohail (2012) reported a similar effect in mobile banking. Trialability's positive influence is consistent with findings by Hsbollah et al. (2009), Liu et al. (2023), and Janadari and Tennakoon (2024), who observed its impact in contexts like e-learning, mobile health apps, and e-participation. DigiLocker platform enable users to try and experience functions like downloading and uploading documents seamlessly, thereby reducing apprehension and increasing trust, ultimately encouraging adoption.

Overall, the findings for complexity, observability, and trialability provide strong evidence for their role in driving DigiLocker adoption, offering insights into how technology features can shape user behaviour.

## 7. Conclusion

This study highlights the critical factors influencing adoption intention of DigiLocker among the youth in Chennai, providing valuable insights into the dynamics of e-governance adoption. By exploring constructs such as complexity, observability, and trialability, this research shows how youth perceive and engage with digital platforms, offering actionable recommendations to enhance adoption. The findings not only validate key elements of the DOI model but also emphasise the importance of simplifying, demonstrating, and testing digital solutions for user trust and satisfaction. The study contributes to the literature by identifying the key variables that influence adoption intention for DigiLocker, thus offering a framework for understanding user perceptions of e-governance platforms. By addressing youth perspectives, this research supports broader initiatives such as Digital India, aimed at improving citizen service delivery and bridging the digital divide. The trends observed can serve as a foundation for further academic exploration and the enhancement of government-backed digital innovations.

### 7.1 Practical Implications

This study highlights the strategies that key stakeholders can implement to improve the adoption of DigiLocker. The government can enhance the adoption of DigiLocker among urban youth by promoting paperless governance, thereby contributing to environmental sustainability (SDG 12; SDG 1). Policies can focus on integrating DigiLocker platform into various urban services, such as higher education admissions, job applications, and healthcare access. By emphasising the platform's security and convenience, policymakers can address trust issues and further encourage its widespread use (SDG 10). Educational institutions will benefit if students utilise DigiLocker for storing and sharing academic certificates, reducing the administrative burden and ensuring secure, tamper-proof document management. This integration can enhance transparency and efficiency in admissions and other academic processes, aligning with goals of sustainable and innovative practices (SDG 4; SDG 12). Businesses can streamline recruitment and onboarding processes by encouraging the use of DigiLocker for document submissions, fostering an eco-friendly, paperless approach (SDG 12). This adoption can also promote inclusivity by providing a standardised platform for all applicants, ensuring equitable access to employment opportunities (SDG 10). Special interest groups can support the adoption of DigiLocker by organising awareness campaigns that highlight its role in creating a sustainable and digital-first society. By addressing concerns around privacy and security, these groups can build trust among the youth, promoting long-term behavioural shifts toward eco-friendly practices (SDG 12; SDG 13). By tailoring strategies for these stakeholders, DigiLocker can play a pivotal role in fostering sustainability, inclusivity, and efficiency within urban ecosystems, driving progress toward key SDGs.

### 7.2 Limitations and Scope for Future Research

This study has certain limitations that provide opportunities for future research. The research was conducted among the youth in Chennai. This may mean that the results differ among other demographics. Future studies must, therefore, explore different geographical locations and a broader population to obtain more comprehensive insights. This study mainly focused on adoption intention and did not evaluate actual usage behaviour. Future research could examine how intentions could possibly change into actual use of DigiLocker among other e-governance platform. Only selected variables from the DOI model were considered in this study. Variables such as trust, perceived risk, and user satisfaction may be included in future studies to better understand adoption behaviour of e-governance platforms. On a final note, DigiLocker can serve as a base for measuring similar digital innovations across various sectors like health, education, and agriculture (Giang., 2025). This shall help in aligning digital advancements with policy goals, thereby fostering widespread digital inclusion.

### Conflict of Interest

The authors declared no potential conflict of interests with respect to the research, authorship, or publication of this chapter.

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