



Gauging DigiLocker Adoption among Youth in Rural Areas of Tenkasi Taluk

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Name of Author:

S. Uma Maheswari¹, Dr. V. Jaisudha Devi²

Affiliation: ¹ Full Time Research Scholar (Reg No: 22211201012001), PG Department of Commerce and Research Centre, Sri Parasakthi College for Women, Courtallam, Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli, 627012, Tamil Nadu, India.

² Assistant Professor, PG Department of Commerce and Research Centre, Sri Parasakthi College for Women, Courtallam, Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli, 627012, Tamil Nadu, India.

Corresponding Author:

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Abstract: Background: Digital transformation has become essential for India's governance reforms. Its goal is to improve accessibility, transparency and efficiency in public services. Among these efforts, DigiLocker plays a key role in supporting paperless governance and giving citizens to secure digital storage for documents. This study looks at how rural youth in Tenkasi Taluk adopt DigiLocker. It uses primary data from 200 respondents and secondary data from journals, reports and official websites. The findings show significant differences in adoption based on demographic factors like age, education and occupation. Effective use of DigiLocker has been restricted due to challenges such as poor internet connectivity, login failures and issue in accessing documents. Despite these barriers, DigiLocker has improved convenience, reduced dependence on physical records and enhanced access to authenticated documents. The study recommends targeted interventions such as strengthening rural digital infrastructure, enabling offline access features, simplifying user interfaces and conducting awareness campaigns in local languages. These steps can help to ensure broad adoption and long-term success.

Keywords: Digital India, DigiLocker, e-Governance

INTRODUCTION

In this era the young people rely on technology for nearly every aspect of their lives from communicating, managing study or work schedules to accessing news,

entertainment and learning resources. Digital tools such as smartphones, social media platforms and specialized apps are so deeply integrated into their daily routines as the technology has become an

indispensable partner rather than a mere convenience. More than just having access to technology youth lead the way in trying out new tools. They use online learning platforms, business apps and social media to broaden their worldview. Their feedback through ratings, reviews and word of mouth helps to shape and improve the digital services.

DigiLocker launched under the Digital India initiative which targeted at the idea of paperless governance by Indian Government. DigiLocker offers every citizen a secure digital repository for essential documents such as Aadhaar cards, educational certificates and driving licenses empowering all the documents digitally. DigiLocker aims at Digital Empowerment of citizen by providing access to authentic digital documents to citizen's digital document wallet. The issued documents in DigiLocker system are deemed to be at par with original physical documents as per Rule 9A of the Information Technology rule. By enabling direct push of digitally signed documents from issuing authorities, it eliminates the need for physical photocopies and manual attestations. DigiLocker has ushered in a paradigm shift towards paperless governance, enabling both citizens and departments for transition from paper-based to digital processes. Over 55 Crore users have registered on DigiLocker accessing authentic digital documents through their personal digital wallet.

DigiLocker offers a range of benefits to both citizens and government agencies supporting the vision of paperless governance. For citizens, it ensures anytime and anywhere access to important documents that are legally equivalent to physical originals. It facilitates the citizen to secure digital exchange of records, leading to faster delivery of services across sectors such as education, employment, healthcare, financial inclusion and access to government schemes. For government department it reduces administrative overhead by minimizing paperwork and streamlining the verification process. The platform supports digital transformation by enabling the real-time retrieval of authenticated documents directly from issuing authorities. Acting as a secure gateway between trusted issuers and verifiers. DigiLocker enables institutions to authenticate records securely, enhanced transparency and foster trust in public service delivery.

Review of Literature

Yadav (2024) This paper focused on the adoption and usage challenges of DigiLocker, a key initiative under India's Digital India programme, aiming to create an ecosystem for a paperless society. The main objectives were to identify motivators and inhibitors of low adoption and to develop empirical, strategic frameworks to boost usage. The findings revealed that factors like effort expectancy, facilitating conditions and performance expectancy had significant positive influence, while limited awareness and education

remained major barriers across certain groups. The researcher suggested that targeted awareness drives, improvement in IT infrastructure and policy interventions to increase adoption among various demographics, thereby enhancing the effectiveness of digital services and moving towards a truly paperless society.

Kaur & Kaur (2019) The researcher explored the adoption and effectiveness of the DigiLocker scheme undergraduate students, with the key theme focusing on the digital empowerment of youth through government driven e-governance initiatives. The researcher found that awareness and usage of DigiLocker were significantly associated with age, school type and course pursued, but independent of gender and college; most students found DigiLocker is easy to use, though a majority questioned its security, and very few used it during admission processes because many institutions were not yet ready to accept digital documents. The researcher suggested that increasing digital literacy and publicity, making DigiLocker widely acceptable in more institutes and agencies, linking it to the e-sign framework, tightening security through a central agency, and implementing strict policy measures and large-scale campaigns to drive uptake among students and institutions.

George et al., (2019) This paper provided an overview of DigiLocker and explored increasing public awareness and acceptance of DigiLocker as a convenient and reliable alternative to physical document handing. Findings indicated a moderate to good level of public awareness about DigiLocker but highlighted significant challenges including lack of IT literacy. Security concern network issues, and limited regulatory framework which hindered widespread adoption. The study suggested that consistent government efforts, improved digital literacy programs, stronger security measures, better network infrastructure, and regulatory enhancements were necessary to boost usage and realize the full benefits of the DigiLocker initiative. Overall, the paper concluded that while DigiLocker represents a transformative step towards a digitally empowered society and knowledge economy, overcoming exiting barriers would be critical for its success.

Objectives

- ❖ To study the adoption of DigiLocker among the youngsters in rural areas.
- ❖ To identify the problems faced by the youngsters in rural areas in adoption of DigiLocker
- ❖ To suggest measures to policymakers for promoting the adoption of DigiLocker among youth in rural areas.

Statement of the Problem

In today's rapidly evolving digital ear, citizens across

the country are now in the target range of the Digital India initiative of the Indian government to empower them digitally. DigiLocker is counted among a number of flagship programs. The secured cloud-based platform is designed for Indian citizens to store, access, and share their important documents digitally at anytime and anywhere. Youth adoption is uncertain in rural locations, though DigiLocker is now common in cities. Rural youth battle with limited digital literacy along with uneven internet access. Also, they have lack of knowledge about the digital services that they may obstruct DigiLocker usage. This study seeks to gauge how youth in rural Tenkasi Taluk adopt DigiLocker and also identifies the key factors influencing its adoption. This research tries to give understanding into DigiLocker's effectiveness in empowering rural youth digitally.

Research Design

The study consists of both primary and secondary data. Primary data were collected from the youngsters in youth areas of Tenkasi Taluk. Secondary data were gathered from journals, websites and magazines related to digital adoption. A purposive sampling technique was applied targeting youth aged 14 years to 29 years in the study area. The study covered a sample size of 200 rural youth. Statistical tools such as percentage analysis, one way ANOVA and weighted average were employed for data analysis to assess the adoption level of DigiLocker usage among rural youth.

Analysis and Discussion

Demographic Profile

Variables	Categories	Respondents	
		Frequency	Per cent
Gender	Male	108	54
	Female	92	46
Age	14-17	28	14
	18-21	68	34
	22-25	62	31
	26-29	42	21
Marital Status	Married	43	21.5
	Unmarried	157	78.5
Educational Qualification	Middle School	27	13.5
	High School	48	24
	Diploma	32	16
	Degree	93	46.5
Occupation	Student	118	59
	Government Employee	22	11
	Private Employee	39	19.5
	Businessman	21	10.5
Family Monthly Income	Below 20,000	87	43.5
	20,000 – 40,000	72	36
	Above 40,000	41	20.5

Interpretation

The study revealed that 54 per cent of respondents are male and 34 per cent belong to the age group of 18 – 21. Most of the respondents are unmarried with 78.5 per cent. 46.5 per cent of the respondents have a degree as their educational qualification. 59 per cent of respondents are students by occupation. 43.5 per cent of respondents have a monthly income of below Rs. 20,000.

Influence of Age on Adoption of DigiLocker

Factors		Sum Squares	of df	Mean Square	F	Sig
Performance Expectancy	Between Groups	18.023	3	6.008	25.346	.000
	Within Groups	46.457	196	.237		
	Total	64.480	199			
Ease of Use	Between Groups	7.619	3	2.540	13.729	.000

	Within Groups	36.256	196	.185		
	Total	43.875	199			
Availability of Resources	Between Groups	7.619	3	2.540	13.729	.000
	Within Groups	36.256	196	.185		
	Total	43.875	199			
Consistency and Dependability	Between Groups	18.023	3	6.008	25.346	.000
	Within Groups	46.457	196	.237		
	Total	64.480	199			
Innovation and Upgradability	Between Groups	18.023	3	6.008	25.346	.000
	Within Groups	46.457	196	.237		
	Total	64.480	199			
Trust	Between Groups	18.023	3	6.008	25.346	.000
	Within Groups	46.457	196	.237		
	Total	64.480	199			
Security	Between Groups	18.023	3	6.008	25.346	.000
	Within Groups	46.457	196	.237		
	Total	64.480	199			

Interpretation

It is observed that the adoption factors such as Performance Expectancy, Ease of Use, Availability of Resources, Consistency and Dependability, Innovation and Upgradability, Trust and Security show statistically significant differences at 0.05 level across age groups. Since the significance values (Sig. = .000) for all factors are less than 0.05. Therefore, there is a significant difference of age on these adoption factors.

Influence of Education Qualification on Adoption of DigiLocker

Factors		Sum of Squares	df	Mean Square	F	Sig
Performance Expectancy	Between Groups	14.194	3	4.731	18.442	.000
	Within Groups	50.286	196	.257		
	Total	64.480	199			
Ease of Use	Between Groups	10.364	3	3.455	20.205	.000
	Within Groups	33.511	196	.171		
	Total	43.875	199			
Availability of Resources	Between Groups	10.364	3	3.455	20.205	.000
	Within Groups	33.511	196	.171		
	Total	43.875	199			
Consistency and Dependability	Between Groups	14.194	3	4.731	18.442	.000
	Within Groups	50.286	196	.257		
	Total	64.480	199			
Innovation and Upgradability	Between Groups	14.194	3	4.731	18.442	.000

	Within Groups	50.286	196	.257		
	Total	64.480	199			
Trust	Between Groups	14.194	3	4.731	18.442	.000
	Within Groups	50.286	196	.257		
	Total	64.480	199			
Security	Between Groups	14.194	3	4.731	18.442	.000
	Within Groups	50.286	196	.257		
	Total	64.480	199			

Interpretation

It is observed that the adoption factors such as Performance Expectancy, Ease of use, Availability of Resources, Consistency and Dependability, Innovation and Upgradability, Trust, and Security show statistically significant difference at 0.05 level across educational qualification groups. Since the significance value (Sig. = .000) for all factors are less than 0.05. Therefore, there is a significant difference of educational qualification on these adoption factors.

Influence of Occupation on Adoption of DigiLocker

Factors		Sum of Squares	df	Mean Square	F	Sig
Performance Expectancy	Between Groups	19.755	3	6.585	28.857	.000
	Within Groups	44.725	196	.228		
	Total	64.480	199			
Ease of Use	Between Groups	6.292	3	2.097	10.939	.000
	Within Groups	37.583	196	.192		
	Total	43.875	199			
Availability of Resources	Between Groups	6.292	3	2.097	10.939	.000
	Within Groups	37.583	196	.192		
	Total	43.875	199			
Consistency and Dependability	Between Groups	19.755	3	6.585	28.857	.000
	Within Groups	44.725	196	.228		
	Total	64.480	199			
Innovation and Upgradability	Between Groups	19.755	3	6.585	28.857	.000
	Within Groups	44.725	196	.228		
	Total	64.480	199			
Trust	Between Groups	19.755	3	6.585	28.857	.000
	Within Groups	44.725	196	.228		
	Total	64.480	199			
Security	Between Groups	19.755	3	6.585	28.857	.000
	Within Groups	44.725	196	.228		
	Total	64.480	199			

Interpretation

It is observed that the adoption factors such as Performance Expectancy, Ease of Use, Availability of Resources, Consistency and Dependability, Innovation and Upgradability, Trust, and Security show statistically significant differences at 0.05 level across occupational groups. Since the significance values (Sig. = .000) for all factors are less than 0.05. Therefore, there is a significant difference of occupation on these adoption factors.

Problems Faced in Adoption DigiLocker

S.No	Factors	W	5	4	3	2	1	W/A	Mean	Rank
		R	1	2	3	4	5			
1	Login is unsuccessful	No	12	21	47	59	61	464	2.32	5
		Ws	60	84	141	118	61			
2	Document upload fails	No	18	27	46	49	60	494	2.47	4
		Ws	90	108	138	98	60			
3	Issues in accessing documents	No	23	33	38	53	53	520	2.60	3
		Ws	115	132	114	106	53			
4	Server does not respond	No	11	18	42	62	67	444	2.22	6
		Ws	55	72	126	124	67			
5	Network connection is unstable	No	34	38	49	39	40	587	2.94	2
		Ws	170	152	147	78	40			
6	Credentials are rejected	No	13	16	33	48	90	414	2.07	7
		Ws	65	64	99	96	90			
7	Documents become corrupted	No	6	9	26	42	117	345	1.73	10
		Ws	30	36	78	84	117			
8	Account gets locked	No	7	11	31	39	112	362	1.81	9
		Ws	35	44	93	78	112			
9	Account update is not possible	No	11	14	36	52	87	410	2.05	8
		Ws	55	56	108	104	87			
10	Network connection is required	No	52	63	41	28	16	707	3.54	1
		Ws	260	252	123	56	16			

Interpretation

From the above table, it is observed that “Network connection is required” has been ranked 1st with a mean score of 3.54, “Network connection is unstable” has been ranked 2nd with a mean score of 2.94 “Issue in accessing documents” has been ranked 3rd with a mean score of 2.60 “Documents upload fails” has been ranked 4th with a mean score of 2.47. “Login is unsuccessful” has been ranked 5th with a mean score of 2.32 “Server does not respond” has been ranked 6th with a mean score of 2.22 “Credentials are rejected” has been ranked 7th with a mean score of 2.07. “Account update is not possible” has been ranked 8th with a mean score of 2.05. “Account gets locked” has been ranked 9th with a mean score of 1.81. “Documents become corrupted” has been ranked last with a mean score of 1.73.

CONCLUSION

The study on DigiLocker adoption among rural youth reveals that demographic variables such as age, education, and occupation significantly influence adoption factors including performance expectancy, ease of use, availability of resources, consistency & dependability, innovation & upgradability, trust and security. Across all groups, connectivity issues emerge as the most critical barriers, with the constant

requirement for internet access and unstable networks ranked highest. To overcome these challenges, DigiLocker must introduce offline access features such as cached documents, lightweight app versions, and optimization for low bandwidth environments, while also partnering with telecom providers to strengthen rural connectivity. Technical difficulties like failed uploads, document access issues, and unsuccessful logins can be addressed through improved search and categorization functions, auto retry mechanisms for uploads, and multiple login

options including biometric and OTP based access. Server downtime requires enhanced capacity, load balancing, and backup systems, while problems such as credential rejection, account update failures, and account lockouts can be resolved through standardized credential formats, guided update processes, and user friendly recovery options. The document corruption barrier occurs infrequently; however, it can be prevented through stronger backend validation, preview options, and automatic backup systems. Beyond technical improvements, usability must be tailored to diverse user groups: younger users demand innovation and advanced features, older and less educated users require simplified interfaces with local language and voice support, students benefit from academic integration, professionals seek efficiency and system compatibility, government employees emphasize compliance and reliability, and informal sector workers need assisted access. Trust and security concerns cut across all groups, highlighting the importance of transparent encryption standards, biometric authentication, and document integrity safeguards. Finally, awareness and training programs, workshops for students, corporate integration for professionals, structured training for government staff, and community help desks for rural users are essential to build confidence and encourage adoption. Collectively, these measures strengthen infrastructure, enhance reliability, ensure inclusivity, and build trust, thereby transforming DigiLocker into a more accessible, dependable, and widely accepted digital platform for rural communities.

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