User Acceptance Of Digilocker System Based On The Theory Of Technology Acceptance Model

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Abstract : With a focused target of paperless governance, DigiLocker is a platform for issuance and verification of documents & certificates through the digital medium. The purpose is to eliminate the use of physical documents. Through the Digilocker facility which is one of the key aspects of the Digital India initiatives of the Government of India, citizens can access their digital documents anytime, anywhere and share it online. Not only is this convenient and time saving, it reduces the administrative overhead of Government departments by minimizing the use of paper. Digital Locker makes it easier to validate the authenticity of documents as they are issued directly by the registered issuers. Apart from this self-uploaded documents can be digitally signed using the eSign facility. The purpose of this paper is to understand to what extent can Create a digitally empowered society by way of providing cloud computing and storage services. The paper has used Technology Acceptance Model(TAM) to decipher the interaction between humans and technology by isolating the social and psychological factors and characteristics which explains the patterns of adoption and use of technologies. Through TAM the paper has given suggestions on key focus area that should be taken into consideration to scale up the Digilocker facility to reach a larger user base.

Key Words: Digital India, Digilocker, TAM

I.   INTRODUCTION

DIGITAL INDIA INITIATIVES: BACKGROUND:

While the concept of digitization is not uncommon in the Indian scenario, it was pursued by the Government of India with its **Digital India** campaign. It was launched in 2015, for the purpose of making the services provided by the government available, electronically. This required an improvisation of the online infrastructure. The motto of the campaign is **"Power to Empower"**. Importance was placed upon empowering the citizens across the country by way of technology. Digital India focuses on three elements,

- Deliverance of government services digitally
- Digital literacy
- Development of safe and stable digital infrastructure

By way of the electronic medium, the government has planned to render services online, making it easily accessible for anyone. High speed internet services will be provided to the rural India, made up of Gram Panchayat. Cyber security and mass reach is the key to develop a safe and stable digital infrastructure. The digital services will be provided in Indian languages, so as to make it possible for every citizen seeking the service to get it. By this way, the objective of digital literacy is achieved.

This campaign has been an enabling platform for the government in regards to other schemes provided by it; examples being, **Make in India**, **BharatNet and Startup India**. The crux of the campaign is to take digital literacy and high-speed internet networks to the rural India.

What are dubbed to be the nine '**Pillars of the Digital India**', the following are the specific areas of interest

Fig 1 **Nine Pillars of Digital India**

Digital India as a subject matter is too vast a topic to conduct an in depth study. Hence, this paper is predominantly focused upon one of the core services rendered under the digital India banner, the **Digilocker System**.

II.   KEY ASPECTS OF DIGILOCKER FACILITY: DIGILOCKER

Digilocker is one of the key services provided by the Government of India under the Digital India campaign. The Department of Electronics and Information Technology

(DeitY) had released a beta version of the services in February 2015, and officially launched on 1 July, 2015.

This service is an important step towards digitizing the way administration is done, with the removal of need for the issue and storage of documents in physical form. The digilocker works in a manner synonymous to that of a tangible locker; only that the entire process happens virtually, with storage space of upto 1 GB being provided to secure the documents safely. It's predominantly used to store personal documents such as mark sheets issued by schools, university certificates, PAN, Aadhaar, voter id etc.,

Secure access to documents issued by the government, with the additional facility of e-signature is available so as to reduce dependency on physical documents and authenticate the digital copies, virtually. By this means, the government strives reduce the administrative costs and improve process efficiency, by making it easier for the users to access the service. There are three important parties at work in the digilocker system.

- The Citizens
- The Issuers
- The Requesters

Citizens and residents are those who sign up to use the digilocker. To activate the service, the user is required to link his/her Aadhaar number to the account. Upto 1 GB space is available to store the documents and URI links of e-documents issued by the Government departments. Such documents can be authenticated online using e-signature facility. The stored documents can be shared with any requester agency, also registered with the digilocker.

Issuers are those who issue e-documents. Some of the institutions are schools, universities and government agencies. The issuers can issue the documents in XML format or as URI links, directly to the citizens' digilocker.

Requesters can gain secure access to the digital documents, as the citizen deems fit. This makes it easy for the requester to authenticate the documents since they are issued directly by the registered issuers. It results in a seamless process which is highly effective and efficient in making the documents available anytime and anywhere. The hang-ups of safeguarding physical documents are done away with.

Features of Digilocker

- Files in jpg. jpeg, png., bmp., and gif., formats are accepted.
- The issuer shares with the requester or citizen, only the URI links. Hence, once verification is done and the link is received, only the link can be shared with the requesters.
- The service can be availed 24X7, from any point of the world.
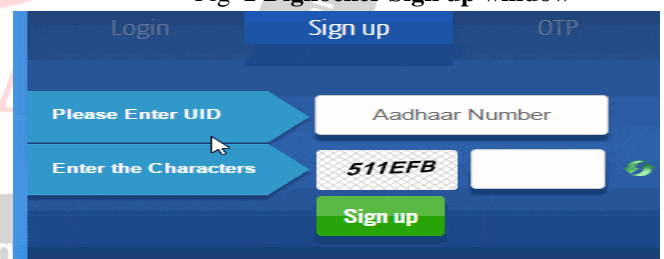
Purpose of diglocker

- Create a digitally empowered society by way of providing cloud computing and storage services.
- Minimize the use of physical documents and time wastage associated with transfer of documents in physical form.
- Ensuring authenticity of the documents by way of gaining access to government issued documents in a secure platform.
- Reducing the administrative costs of government agencies.
- Create a highly secure virtual locker system for the participants.

The digilocker contains two components: A **Repository** and an **Access Gateway.** Repository is a Collection of e-Documents which are uploaded by issuers in a standard format and exposing a set of standard APIs for secure real-time search and access. Access Gateway provides a secure online mechanism for requesters to access e-documents from various repositories in real-time using e-Document URI (Uniform Resource Indicator). The URI is a link to the e-Document uploaded by an issuer in a repository. The gateway will identify the address of the repository where the e-Document is stored based on the URI and will fetch the e-Document from that repository.
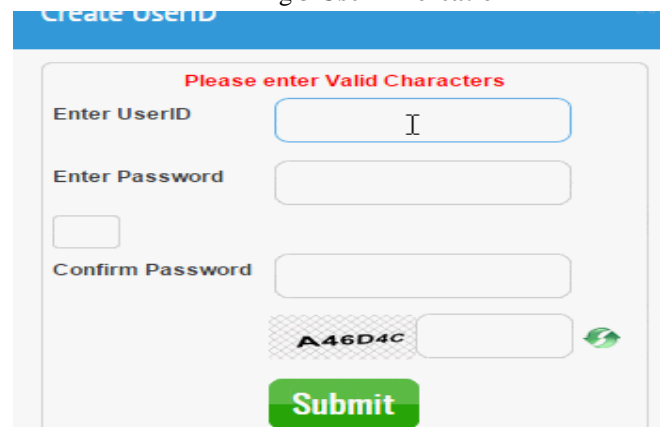
III. THE WORKINGS OF A DIGILOCKER

- Visit **http://digilocker.gov.in** to register
- Aadhaar number is mandatorily required to register. A phone number is required to be given to receive OTP (One Time Password) while signing up

Fig 2 **Digilocker Sign up window**

- Once this step is completed, a dialog box with provisions to enter email id and password pops up.

Fig 3 **User ID creation**

- With this step completed, the user account can be logged into.

Fig 4 **User Log in**

- There are some important components made visible in the homepage of the user, namely:
  - ✓ **My certificates**, which contains 'digital documents' verified by the registered issuer and 'uploaded documents' as uploaded by the registered user.
  - ✓ **My profile**, containing profile information as provided in Aadhaar card
  - ✓ **My issuer**, which lists all documents issued to the registered user
  - ✓ **My requester**, which lists all the agencies that have requested for the documents of the user
  - ✓ **Directories** list all the issuers and the corresponding registered requesters, with their link.

NEED FOR THE STUDY:

The digilocker concept is still in a very nascent stage, with not enough data available as to how rapidly it has been adopted by the public, even though it's been years since the service was first rolled out. Aim of this research is to gain perspective in this regard by analyzing some fundamental aspects involved in the usage and adoption of digilocker system by the public and to understand the measures to be adopted to scale up the usage of the same.

IV.   REVIEW OF LITERATURE

Literary works, news paper articles and research papers were studied and understood to lay a clear path as to how to go about the understanding process and decipher the aspects of digilocker that specifically require to be studied. The materials analyzed can be categorized into those of Digital India, the Digilocker system itself, and the Theory of Technology Acceptance Model, which is a significant element of this study.

Digital India:

In the paper '**Digital India and Its Impact on the Society'**, **Jyoti Sharma** has suggested that a digitally connected India will pave way to improve the social and economic conditions of people through development of non-agricultural economic activities, enhancing literacy.

Arvind.P.P, Vitthalrao.M.O and **Mukund.J.M.**, published their research paper titled, **Digi Locker: Ambitious aspect of Digital India Programme.** The crux of their study focuses on how Digital India is significant in terms of the change it brings to delivery of services, monitoring performance, managing projects and improving governance. They've stressed upon the importance of tracking and monitoring the various projects under the programme, to reduce redundancy borne out of inefficiency.

Ayushi S. Jaiswal et.al did an experimental research wherein a model for Digitally Automated Student Admission System was formulated by them. The paper on this topic delved into issues with respect to speed of processing, presentation of documents by candidates in their absence and creation of a centralized database.

In 2015, **Gupta Neeru** and **Arora Kirandeep** did a study on the impact of the Digital India programme on the rural sector. The programme seems to cater to the agriculture sector, helping entrepreneurial endeavors thrive.

'**Digital India: Unleashing Prosperity'**, a paper published by **Rani Suman** points to the positive impact that digitisation will have on the service industry. It is also reiterated that the various projects under this campaign may require some transformational process, reengineering, refinements to achieve the desired service level objectives.

In 2016, **Midha Rahul** published a paper, 'Digital India: Barriers and Remedies' and has concluded that the campaign is great plan aiming at development, but its improper implementation due to inaccessibility and inflexibility to requisite can lead to its failure.

Digilocker System:

In his paper, '**Digital Locker System in India'**, **Dr. Jayant D. Porey** has suggested that while social influence has created awareness in regards to the service, it has weak impact on the usefulness as perceived by the users. Establishing faster internet connectivity is indicated to be facilitator of smooth & hassle free operations.

The **Department of Electronics and Information Technology** commented in early 2015 that the Digilocker seeks to create an electronic space for storing the documents which is further linked to the Aadhar number of the user and thus can be utilized for securing personal documents such as PAN card etc of the citizens of India.

As per an article published by OpenGov Asia titled, '**What is the Indian government's DigiLocker platform?'**, Digilocker could be an important asset to transitioning to e-governance, if the user base of the service rises significantly and more government agencies start issuing documents digitally.

Amit Jaju, partner, EY India, in his article '**Demystifying the potential of a Digilocker**' has stressed upon the importance of Digilocker in combating identity theft and exploitation of personal data by way of transfer of physical documents. Digilocker is a highly potent initiative in regards to document management and technological transformation.

In his article '**Paperless Future**', **Adhil Shetty**, CEO and Co-founder, Bankbazaar.com has focused on the effect of digital services such as the Digilocker system and the banking sector of the country. Digitisation will have an impact on the regulatory frameworks of banks and could remove the necessity for physical interaction with banks, creating an **all inclusive digital economy**.

The Financial Express ran an opinion piece titled, '**Why Government needs more services to integrate with Digilocker**'. Due to its limited scope in regards to access to government documents, the user base even if sizeable (over 21 lakh), has not increased rapidly. This can be helped only if the government courts a plethora of agencies to use the platform to issue documents.

"**Can Digilocker catalyze Digital India?**", an article published by maximum Governance, shed light on how digilocker plays a part in building digital assets, that can be leveraged by government agencies.

The Central Board of Secondary Education (CBSE) has integrated itself with digilocker, in order make issuance of marks sheets and certificates easier and accessible from anywhere. This will also curb forgery and malpractices associated with physical proofs of important documents

Technology Acceptance Model (TAM):

Interaction between humans and technology is influenced by a number of social and psychological factors and characteristics (Taiwo & Downe, 2013). This complexity has given rise to a plethora of theories and models that explain the patterns of adoption and use of technologies. Several theoretical models have been developed to explain the acceptance behaviour of end users. Hence this requires the theories to factor in psychological aspects of user behaviour, as to whether they benefit from the use of that specific technology or device.

A plethora of theories are available to understand the perspectives that a user has before deciding to use a particular application; some of them being Innovation Diffusion Theory (IDT), Theory of Planned Behaviour (TPB), Unified Theory of Acceptance and Use of Technology (UTAUT) and TAM.

The core of the study is based upon the theories of technology acceptance, especially the **Technology Acceptance Model** (TAM). TAM is a model which shows how users accept and use a technology. In (TAM) the main determinants of user's acceptance of new technology are perceived usefulness (PU) and perceived ease of use (PEU).

TAM is an extension of Ajzen and Fishbein's Theory of Reasoned Action (TRA). It was developed by Fred Davis and Richard Bagozzi. TAM simplifies TRA and confines many of the measures found in TRA to two measures, Perceived Usefulness and Perceived Ease of Use. The theory suggests that intention to accept technology is determined by attitude, perceived usefulness and perceived ease of use.

Fig 5 Technology Acceptance Model
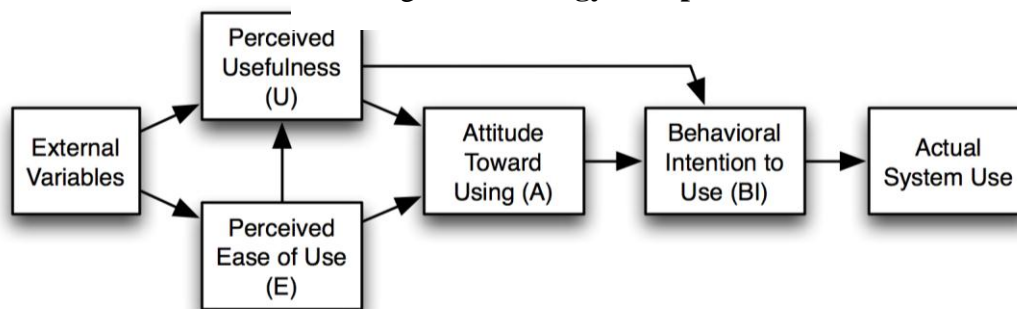
Chen and Barnes (2007), T.C. Edwin Cheng et al. (2006) found that perceived ease of use, perceived usefulness and security and privacy affect customer adaptation intentions. But, Qureshi et al., (2008) claimed that Perceived usefulness, security and privacy are the main perusing factors to accept online banking system.

Celik (2008) stated that perceived usefulness and perceived ease of use are direct determinants of customers' attitudes towards using internet Banking. Traditional service quality and website features (PU, PEOU and PC) that give customers confidence build trust in e-banking (Yap, K et al. 2010).

Fred Davis developed the TAM first in 1986 in his doctoral study. The TAM originated as an adaptation of the Theory of Reasoned Action (TRA) and was developed more specifically later to predict and explain technology usage behaviour and it was developed to identify the factors which lead to user's acceptance or rejection a technology by integrating technological aspects with organizational behaviour concepts (Davis et al., 1989; Davis, 1989).

Two important factors are perceived usefulness and perceived ease of use. Shroff et al. (2011) reported that manipulation of these two determinants can help system

developers to have better control over users' beliefs about the system and also predict their behavioural intention and actual usage of the system. Attitude towards using a new system has been classified as a determinant that guides future behaviour or as a cause of intention which eventually leads to certain behaviour.

In TAM, attitude towards using a system refers to the evaluative effect of positive or negative feelings of individuals in performing a certain behaviour (Shroff et al., 2011). So, TRA is the theoretical basis of TAM to find the links between these two factors as well as the user's attitude, intention and actual technology behaviour In contrast with TRA, the TAM does not include subjective norms because of the weak psychometric results which are generated (Davis et al., 1989; Wu et al., 2011).

However, it has also been recognized by others as a powerful, valid and highly reliable predictive model that can be used in several contexts (Legris et al., 2003; Sharma & Chandel, 2013). Moreover, it constitutes an important theoretical contribution towards understanding ICT usage and acceptance behaviours (Chen & Li, 2011; Galletta, 1999).

After studying the above mentioned literary works and articles it can be said that there is a need to get information with regards to the user base of digilocker system. More number of participants, both users and issuers are required to make this service indispensable. TAM seems to be the right theory based on which this research can be conducted and the data analyzed.

OBJECTIVES OF THE STUDY:

After thorough analysis of existing material with respect to the subject matter in concern, the research problem was arrived at. The core objectives of the study are as follows:

- Determine if the user acceptance and satisfaction from using digilocker can be explained using TAM theory

- Identify the motivators that may drive a prospective user towards using the digilocker.

V.   RESEARCH METHODOLOGY

The purpose of this study is gain familiarity with the digilocker system, the pace at which it is accepted by the general public and the factors that affect their attitude towards using the service and the satisfaction they derive from it. In order to facilitate this, an **exploratory** research design with an inferential approach has been adopted since there are limited research studies available as of now in regards to digilocker system.

The following factors were identified to facilitate the study:

- Perceived Usefulness (PU) - the degree to which an individual believes that using a particular system will enhance the task performance.
- Perceived Ease of Use (PEU) - the degree to which an individual believes that using a particular system is free of physical and mental effort.
- Perceived Risk (PR)
- Perceived Quality (PQ)
- Trustworthiness (TRUST)
- Compatibility (COMP)
- Subjective Norms (SN)
- Awareness (AWARE)
- Satisfaction (SAT)
- Intention of Use (INTENTION)

Questionnaire was used to fulfil the purpose of the study. Questionnaire was circulated online, rendering the sample collection process inexpensive and less time consuming. Moreover, Likert Scale is applied to for the questionnaire. Likert scale is used to determine as to how strongly a respondent agrees or disagrees with a statement. The scale was limited to 5 points, with (1) Strongly Agree (2) Strongly Disagree (3) Neither agree nor disagree (4) Disagree (5) Strongly Disagree.

Table 1 **Constructs, their operational definition & measured items**

Construct	Operational definition	Measured items
Perceived Usefulness	The degree to which an individual believes that using the digilocker system will enhance the task performance.	**PU1:** A digital storage service for storing official documents on the cloud helps one to complete any authentication requirements easily. **PU2:** Digilocker is efficient, since it saves a lot of time when compared to traditional authentication and verification processes. **PU3:** Digilocker service is effective, since it costs less to transfer documents digitally. **PU4:** A digital locker ensures transparency, when compared to physical storage services. **PU5:** Users can communicate with government officials through the service.
Perceived Ease of Use	The degree to which an individual believes that using digilocker is free of physical and mental effort.	**PEU1:** Digilocker is a one stop service. Navigating through the online portal is far easier than approaching requesters of legal documents tangibly. **PEU2:** Assistance when required is available without caveats, since there is minimum human interference in digital storage platform
Perceived Risk	The degree to which an	**PR1:** Legal documents are rather sensitive in nature. Cloud storage may

	individual believes that using digilocker may expose him or her to unwarranted risks.	expose the use to risk of cyber threats such as distributed denial of service, brute force attack etc., **PR2:** The digilocker service is still at a fledgling state. The monitoring and protection against cyber threats is underdeveloped due to this reason.
Perceived Quality	The respondent's / user's perception of the overall quality of digilocker.	**PQ1:** Digilocker is relevant today, because we are moving towards a digital, paper less country. **PQ2:** The digilocker service is reliable. **PQ3:** Digilocker is user friendly.
Perceived Behavioural Control	The respondent's / user's perception of his/her ability to perform a given behaviour.	**PBC1:** The respondent has necessary resources, knowledge and ability to use the service. **PBC2:** Using the service is entirely within the user's control. **PBC3:** The respondent would be able to use the digilocker successfully.
Trustworthiness	The respondent's / user's trust in the mechanism.	**TRUST1:** The respondent's concern about his/her privacy being affected by storing legal documents online. **TRUST2:** The respondent's lack of trust in the government to take efforts to safeguard his/her documents and provide confidentiality **TRUST3:** The respondent's belief that by using this service, he/she is giving undue access to the government, to inspect through all that he/she considers private.
Compatibility	How well the usage of digilocker fits within the lifestyle of the respondent without problems	**COMP1:** The respondent's perception that using the digilocker would fit well with the way he/she carries his/ her documents. **COMP2:** The respondent's belief that using the digilocker service would fit into his/her life style. **COMP3:** The respondent's belief that the setup of the service will be compatible with the way he/she works.
Subjective Norms	The perceived social pressure to perform or not perform a behaviour.	**SN1:** The people important to the respondent support his/her use of digilocker. **SN2:** The people whose opinions the respondent values prefer that he/she use digilocker.
Satisfaction	The satisfaction derived from using digilocker	**SAT1:** The respondent is satisfied with the user interface of the digilocker service. **SAT2:** The respondent is satisfied with the speed at which the digilocker service is rendered. **SAT3:** The respondent is satisfied with the quality of the digilocker service. **SAT4:** The respondent is satisfied with the security measures currently in place in regards to the digilocker service. **SAT5:** The respondent is satisfied with the digilocker service.

Reliability Analysis

A pilot study was conducted initially with 50 respondents. Reliability test using Cronbach's Alpha Coefficient was conducted for this data set. Cronbach's alpha is a measure of internal consistency. It gives a clear picture as to how closely related a set of items are in a group.

Table 2 **Results of Reliability Analysis**

RELIABILITY STATISTICS		
Variable	Cronbach's Alpha	N of Items
Compatibility	.911	3
Perceived Behavioural Control	.894	3
Perceived Ease of Use	.767	2
Perceived Quality	.856	3
Perceived Risk	.856	3
Perceived Usefulness	.707	5
Satisfaction	.940	5
Subjective Norms	.876	2
Trustworthiness	.822	3

A Cronbach's alpha coefficient of .70 or higher is considered "acceptable" in general. From the table it can be seen that that most of the variables have high internal consistency and all of them are over the acceptable value of .70.

With the help of the results from the pilot study and available literature a tentative model based on TAM was formulated.

Fig 6 **Hypotheses Formulated on the Basis of TAM using SEM**
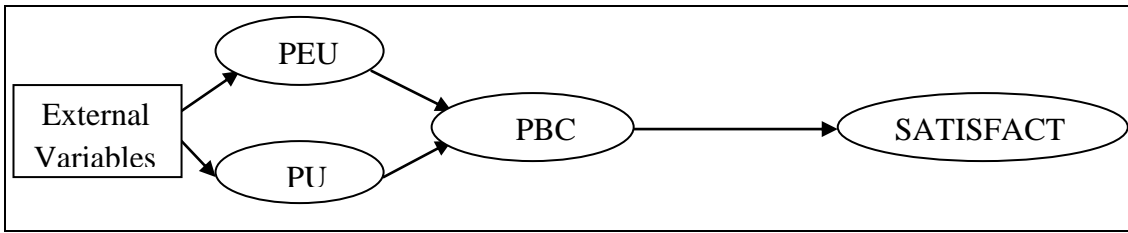
AMOS 25 have been used to test the following hypotheses.

H1: The tentative model based on TAM is a good fit for the data and the population analysed.

H2: Perceived Usefulness has a direct relationship with Perceived Ease of Use and vice versa. Increase in one implies an increase in another.

H3: Perceived Usefulness and Perceived Ease of Use are positively related to Perceived Quality.

H4: Perceived Risk is directly related to trustworthiness or the lack of trust that the people have in digilocker system. If the perceived risk is high, then the lack of trust is also high.

H5: Perceived Quality is directly related to satisfaction derived from using digilocker.

H6: Compatibility and Subjective Norms are positively related to Perceived Quality, Perceived Ease of Use, Perceived Usefulness and Perceived Behavioural Control.

H7: Perceived Usefulness and Perceived Ease of Use have an inverse relationship with Perceived Risk and Trustworthiness.

H8: Perceived Behavioural Control is directly related to Perceived Usefulness, Perceived Ease of Use, Perceived Quality and Satisfaction.

H9: Perceived Risk is inversely related to Perceived Usefulness. Lower the perceived risk, higher the level of perceived usefulness.

With the help of AMOS 25, Structural Equation Modeling (SEM) was undertaken. SEM, a combination of factor analysis and multiple regression analysis, is a technique used to analyze the structural relationship between measure variables and latent variables. This was used to test the tentative model formulated.

VI.   DATA ANALYSIS AND INTERPRETATION

Table 3 **Demographic Profile of Respondents**

Demographic Profile	Frequency	Percentage (%)
AGE (in years)		
15 - 20	27	27.0
20 - 25	68	68.0
30 - 35	1	1.0
35 - 40	1	1..0
Above 40	3	3.0
TOTAL	100	100
GENDER		
Male	35	35.0
Female	65	65.0
TOTAL	**100**	**100**
EDUCATION		
Middle School	8	8.0
High School	17	17.0
Under - Graduation	29	29.0
Post Graduation	46	46.0
Not Applicable	**100**	**100**
TOTAL		
OCCUPATION		
Profession	7	7.0
Employment	9	9.0
Business	0	0
Student	83	83.0
Not Applicable	1	1.0
TOTAL	100	100
INCOME (Per Month)		
< Rs. 20000	16	16.0
Rs.20000 - Rs. 30000	4	4.0
Rs. 30000 - Rs. 40000	9	9.0
Not Applicable	71	71.0
TOTAL	100	100
INTERNET USE (In Years)		
< 1	2	2.0
1 - 5	23	23.0
5 - 10	36	36.0
10 - 15	37	37.0
> 15	2	2.0
TOTAL	100	100
AVAILABILITY OF INTERNET FACILITY AT HOME		
Yes	95	95.0
No	5	5.0
TOTAL	**100**	**100**
AVAILABILITY OF INTERNET FACILITY AT WORKPLACE		
Yes	27	27.0
No	1	1.0
Not Applicable	72	72.0
TOTAL	100	100
DEVICE USED TO AVAIL ACCESS TO INTERNET		
Smartphone	71	71.0
Laptop	25	25.0
Tablet Computer	3	3.0
Desktop PC	1	1.0
TOTAL	**100**	**100**

- **Structural Equation Modeling**

Structural equation modeling is used to analyze structural relationship between measure variables and latent constructs.

Fig 7 **Confirmatory Factor Analysis**
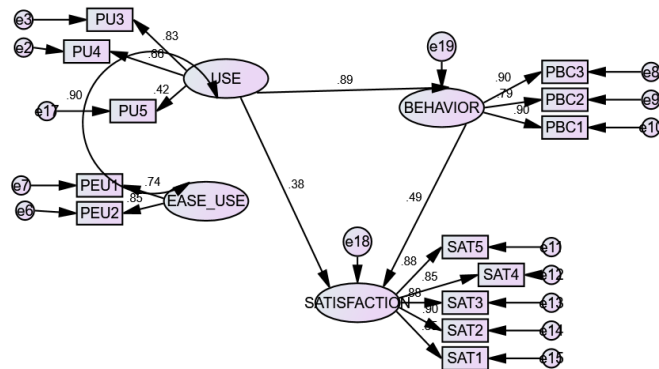
The structural model shows the hypotheses formulated. It can be seen that there are 4 unobserved latent factors and 13 observed variables. These observed variables are indicators of their respective latent factors, and attached to each of them is an error item (e1 - e19). This is a representation of measurement error associated with adequacy in measuring the factors related to that specific observed variable. The one way arrows represent structural regression coefficients, denoting the impact of one variable on another. The unidirectional arrow pointing toward factor BEHAVIOUR (Perceived Behavioural Control) implies that USE (Perceived Usefulness) causes BEHAVIOUR. The unidirectional arrow pointing toward factor SATISFACTION implies that BEHAVIOUR causes SATISFACTION. The unidirectional arrow pointing toward factor SATISFACTION implies that USE causes SATISFACTION

NPAR stands for number of parameters. P is probability value, while DF is degrees of freedom. The Chi-square (x^2) is also referred to as CMIN, which are 77.575 in this model. It represents the discrepancy between the unrestricted sample covariance matrix and the restricted covariance matrix. The value is significantly smaller when compared to that of independence model whose chi-square is 1049.298. Hence the chi-square value is good, implying that it supports the proposed theoretical model being tested. But it is important that the CMIN/DF value is also checked since chi-square can be misleading. The probability of model rejection increases with a bigger sample size, even if the model has minimal errors, hence x^2/df is suggested as a better fit metric. CMIN/DF is the minimum discrepancy

Goodness of Fit Index (GFI) is a standardized fit index. If this value is closer to 1.0, it indicates a good fit while a GFI value closer to zero indicates a poor fit. From the above table where GFI = .894, it can be seen that the model is good fit. Similar index is the Adjusted Goodness of Fit Index (AGFI). This index adjusts on the basis of number of

Similarly, the four unidirectional arrows from USE to 3 observed variables (PU3, PU4 and PU5) suggest that their values are affected by the underlying factor. This applies to the other 3 latent factors too. These path coefficients represent the magnitude of expected change in the observed variables for every change in the related latent factor. The one-way arrows pointing from the enclosed error terms (e1 – e49) indicate the impact of measurement error on the observed variables.

Amos Here, the entire structural equation model is considered and the hypotheses to be tested relates to the pattern of casual structure linking several variables that bear on the construct of satisfaction from using digilocker. It can be seen that perceived usefulness and perceived ease of use have a non casual relationship. On the other hand, perceived behaviour control is affected by perceived usefulness. Ultimately, satisfaction from using digilocker is influenced by perceived behavioural control, driven by an intention to use the service.

Model Fit Summary
CMIN

Table 4 Minimum Discrepancy & Degrees of Freedom

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	30	77.575	61	.075	1.272
Saturated model	91	.000	0		
Independence model	13	1049.298	78	.000	13.453

divided by its degrees of freedom. Degrees of freedom represent the amount of mathematical information available to estimate model parameters. For a model to be accepted as an adequate fit, this ratio should be less than 5.00. From the table it can be seen that the ratio is 1.272, implying that the model fit is good.

RMR, GFI

Table 4 **Model Fit Index**

Model	RMR	GFI	AGFI	PGFI
Default model	.042	.894	.842	.600
Saturated model	.000	1.000		
Independence model	.614	.201	.068	.173

degrees of freedom in the specified model. The Parsimony Goodness of Fit Index (PGFI) adjusts the value of GFI by way of a factor sensitive to the model's complexity and size.

Root Mean Square Residual (RMR) reflects the average residual value derived from the filling of the variance covariance matrix for the hypothesized model to the

variance covariance matrix of the sample data. It is the square root of the mean of the standardized residuals. Unlike GFI and few other indices to follow, RMR value should be closer to zero for the model to be recognized as a good fit.

Baseline Comparisons

Table 5 **Base Line Comparisons**

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.926	.905	.983	.978	.983
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Normed Fit Index (NFI) is a ratio of difference in chi-square value for the fitted model and null model divided by the chi-square value for the null model. The NFI value ranges from zero to one; closer the value is to 1.00, better the fit is. From the table it can be seen that NFI = .926, indicating a superior fit.

Root Mean Square Error of Approximation (RMSEA) is a measure that is used to examine as to how well a model fits a population, and not just the sample used for estimation. Lower RMSEA value indicates a better fit (preferably less than 0.06). RMSEA for the model is .052, suggesting that it is a good fit.

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

Table 4.3. **Regression Paths & Weights**

Relative Fit Index (RFI) represents a derivative of NFI. Here too, RFI value closer to 1.00 indicates a superior fit, which is the case as can be seen from the table (RFI = .905).

Comparative Fit Index (CFI) is an upgrade of NFI. It is relatively insensitive to model complexity, making it highly objective indicator. A CFI value closer to 1.00, preferably greater than 0.95, implies that the model fits well. CFI value for this model is .983.

Tucker Lewis Index (TLI) is a comparison of the norm chi-square values of null and specified model. Similar to the above mentioned indices, TLI value closer to 1.00 indicates a good fit, which is the case here (TLI = .978).

RMSEA

Table 6 **RMSEA**

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.052	.000	.085	.434
Independence model	.355	.336	.374	.000

The confirmatory factor analysis showed an acceptable overall model fit. Hence, the theorized model fit well with the observed data. The hypothesized CFA model fits the sample data very well.

			Estimate	S.E.	C.R.	P	Label
BEHAVIOR	<---	USE	1.941	.472	4.117	***	
SATISFACTION	<---	USE	.836	.521	1.605	.108	
SATISFACTION	<---	BEHAVIOR	.495	.219	2.258	.024	
PU4	<---	USEFULNESS	1.830	.474	3.862	***	
PU3	<---	USEFULNESS	2.108	.506	4.163	***	
PEU2	<---	EASE_USE	1.000				
PEU1	<---	EASE_USE	.915	.122	7.476	***	
PBC3	<---	BEHAVIOR	1.000				
PBC2	<---	BEHAVIOR	.920	.090	10.251	***	
PBC1	<---	BEHAVIOR	1.120	.085	13.202	***	
SAT5	<---	SATISFACTION	1.000				
SAT4	<---	SATISFACTION	.844	.073	11.638	***	
SAT3	<---	SATISFACTION	.892	.071	12.579	***	
SAT2	<---	SATISFACTION	.961	.072	13.418	***	
SAT1	<---	SATISFACTION	.775	.065	11.849	***	
PU5	<---	USE	1.000				

This table lists the estimated path coefficients that minimize the difference between observed and model coefficients along with their corresponding standard errors, critical ratios and p values. Here, the estimated path coefficients represent the strength of connections or the strength of the influence conveyed through the pathway. From the above table, significant regression paths can be seen where p<.001, denoted by ***

VII.   FINDINGS

The theory of the technology acceptable model validates the hypotheses formulated using SEM, with limitations. The data set was able to give a definitive structure as to how the users of digilocker derive their satisfaction from using it. While ease of use and usefulness go hand in hand, it is their combined effect that drives their behavioural control, which ultimately has an effect on the satisfaction levels.

There is scope for further study in the same vein, where a larger sample size can be used to explore various regression paths and how the variables or critical factors can be used within the framework of TAM to predict actual usage of digilocker. When digilocker becomes a more familiar service, UTAUT model can be utilized to explain user intentions to operate digilocker and subsequent usage behaviour.

VIII.   CONCLUSION

- Active campaigning of digilocker service is the need of the hour, the target audience being millennials.
- Digilocker application for smart phones can be developed to make it easily accessible and available anywhere at the user's convenience.
- The service has to be expanded with more government institutions becoming issuing members.
- Cyber security and privacy measures are of utmost importance; this can be seen from its far reaching impact on all the other crucial elements involved in acceptance and actual use of this technology.
- The Digilocker is still at a nascent stage, simply because of lack of awareness among the population in regards to this service. Publicizing its advantages is key to creating awareness and drawing subscribers or user.
- Although this may be considered utopian when it comes to a developing country, unfettered internet access across the country is a potent step towards expanding user base of a number of government services, including digilocker.

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