Digital Locker - Bottlenecks & Success Factors

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Abstract: **E-Governance in India has been launched with a great desire to digitize various services and in turn provide benefits to the citizens across the country. E-Governance in any nation is implemented through various projects of the government that are a combination of ICT enabled infrastructure, proper automation and also service delivery to the last citizen of the country. Digital Locker is one of the important projects in terms of E-Governance implementation. At present in our Country almost all the government issued documents are in physical form, and this use of physical copies of documents creates huge overhead in terms of repetitive manual verification and submission. The concept behind Digital Locker is to digitize all the documents and records of the residents and make them available on real time basis. Although the idea seems great but the bottlenecks appear to be greater. India being a diverse country with geographical, regional, linguistic, boundaries along with average if not poor technical access to everyone, the implementation of any such Initiative requires a dynamic technical framework. This paper not only tries to highlight the Challenges but also attempts to find out the loopholes in the current paradigm through a survey, and also analyses effect of various factors on the successful implementation of this scheme.**

Index Terms: **Digital Locker, E- Governance, Paradigm, Framework**.

INTRODUCTION:

Digital locker is an initiative of Government of India to offer its citizens a free platform to store and access important documents. Unlike the traditional cloud storage solution like google drive or drop box, Digital locker comes in two distinct parts, where one part is designed to store links to documents that are issued to citizens by government authority that have signed up with digital locker, and the other can be used to upload any legacy or old documents that the citizens wish to. One of the most important aspects of Digital locker is that it comes with Aadhar integration to offer citizens a secure platform to store e-documents online. It also has an e-sign option to let the users self-attest their documents.

LITERATURE REVIEW:

This section deals with the literature available on Digital Locker. The literature review takes into account various Research papers, journals, articles, case studies, responses from the industry as well as the government agencies regarding its working and progress done so far. Shbham Nahar & Dr. Jyotsana [1] in ------ described digital locker as one of the important pillars of E-Governance in India. CSI in its cover story in ----- referred Digital Locker as an important part of Digital India Campaign that can transform India into a digitally empowered society and Knowledge economy [3]. According to Department of Electronics and Information Technology in 2015[7] Digital Locker aims at creating electronic space for storing documents which when further linked to Aadhar number can be utilized for securing personal documents of the citizens of India. Dr.Jayant & D Porey[4] in 2016 in his Research paper suggested that Digital Locker schemes aims at establishing Transparency and eliminating fraudulent practices of issuing unauthorized documents. Arpit Garg and Jyotsna Singh Bharati [5] in their Research Paper in 2016 found Digtal Locker useful in a country like India from the perspective of ease of use, Social Influence and in Perceived Risk. According to Government reports the type of documents issued through digital locker by various Departments as of Sep16, can be shown as[6]:
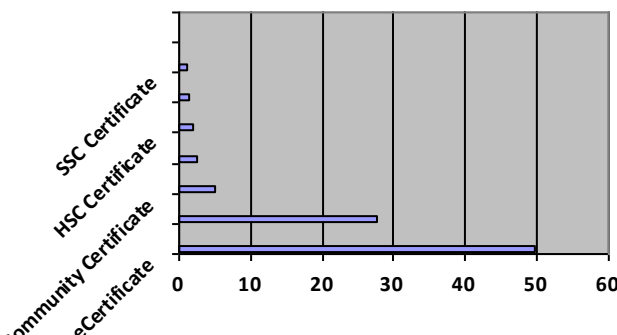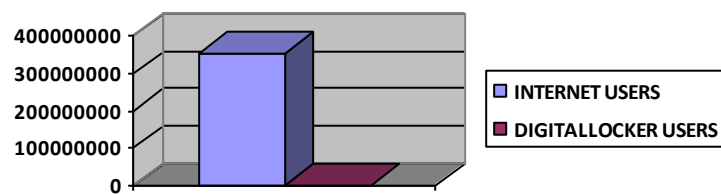

Figure 1: *Documents issued through Digital Locker*

According to Sep 16 figures the platform has about 1.1 million people signed up as users, according to the official website. [7] The graph can be represented as;

Figure 2: Documents issued through Digital Locker

OBJECTIVE:

The objective of this research work is to analyze   the level of awareness about the Digital Locker in citizens and the role of various parameters in its success. Accordingly, in this paper following Hypothesis are used in the   research:

 Ho_1 There is no significant relationship between gender and the performance of Digital Locker.

 Ho_2 There is no significant relationship between   gender, age and various parameters effecting the implementation of Digital Locker and there is a considerable amount of skeptism about implementation of Digital Locker.

RESEARCH METHODOLOGY:

In this paper Research is done by using the Sampling method and conducting a survey about the awareness and usage of Digital Locker. The study targeted 150 respondents based on the convenience sampling method.

SURVEY INSTRUMENT:

The survey was carried out by using a self administered questionnaire which is divided into two major parts. The first part collected the respondent's demographic data such as age, gender and educational qualifications. The second part of the questionnaire focuses mainly on the various parameters such as level of awareness regarding implementation of Digital Locker, feasibility of implementation in current scenario and implications of Aadhar linking. The questions were having options ranging from a scale of 1 to 5 and also as a) Good b) average c) excellent d) poor for measuring various independent variables.

VALIDITY& RELIABILITY ANALYSIS:

The questionnaire was pretested on a sample (n=30) of respondents. After the pretest, some variables are eliminated and the expression of some questions is modified. In the Descriptive analysis the normality of the distribution of data is tested so that it can be found that which techniques of inferential analysis can be applied. Descriptive analysis is used to describe the content in the data. The descriptive analysis of the given data shows the respondent's gender and the frequency of the occurrence through tables and graphs. The total number of male respondents is 109, i.e. 72. % of the respondents are male and the rest 41 i.e. 27.3% are females. Similarly a study has been made on different age groups and it has been observed that the respondent between the age group of 19-23, i.e. 40% is the maximum in all age groups. As far as qualifications of the respondents is concerned, the descriptive analysis of the data shows 41% of the respondents were graduates, and 30 % were about to start their college life. Therefore it can be said that the survey concentrated mainly on the educated class. Also the data shows that the targeted audience is the youth who are somewhat digitally aware.

The detail of respondent's various parameters such as gender, age & qualification with specific percentages and analysis can be shown in a in a tabulated form as   below. :-

Table1*: Gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent	
VALID	Male	109	72.7	72.7	72.7
	Female	41	27.3	27.3	100
	Total	150	100.0	100.0	

Table 2: Age

Age		Frequency	percent	Valid percent	Cumulative percent
Valid	14-18	32	21.3	21.3	21.3
	19-23	60	40.0	40.0	61.3
	24-28	12	8.0	8.0	69.3
	29-33	26	17.3	17.3	86.7
	<34	20	13.3	13.3	100.0
	Total	150	100.0	100.0	

Table 3: Qualification

Qualification		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Up to HSC	45	30.0	30.0	30.0
	Graduate	62	41.3	41.3	71.3
	Postgraduate	43	28.7	28.7	100.0
	Total	150	100.0	100.0	

After descriptive analysis, various tests are done as a part of inferential analysis so as to ascertain the validity of hypothesis and then find out the conclusion.

WILCOXON SIGNED RANKS TEST

The Wilcoxon signed-rank test is the non-parametric test equivalent to the dependent t-test. As the Wilcoxon signed-rank test does not assume normality in the data, it can be used when this assumption has been violated and the use of the dependent t-test is inappropriate. It is used to compare two sets of scores that come from the same participants. This can occur when the researcher wishes to investigate any change in scores from one time point to another, or when individuals are subjected to more than one condition.

Table4: Wilcoxon Signed Ranks Test

Ranks		N	Mean Rank	Sum of Ranks
Qualification- Occupation	Negative Ranks	92[a]	69.18	6365.00
	Positive Ranks	29[b]	35.03	1016.00
	Ties	29[c]		
	Total	150		

a.   Qualification< occupation
b.   Qualification>Occupation
c.   Qualification = Occupation

Table5: Test Statistics

	Qualification-Occupation
Z	-7.002
Asymp.Sig(2-tailed)	.000

a. Based on positive ranks
b. Wilcoxon Signed Ranks Test

From the above calculated p value . ooo<.05, therefore we can assume there is significant difference between qualification and occupation of the respondent in analyzing of non-Parametric data. The tabulated data can be shown as:

Table 6: Parameter Estimates

	Estimate	Std Error	Wal d	df	Sig	95%Confidence Interval	
						Lower Bound	Upper Bound
Threshold Performance [Digital_India=0] [Digital_India =1]	-.828 -.030	.446 .441	3.446 .005	1 1	.063 .945	-1.702 -.894	.046 .833
Location [Qualification =1] [Qualification =2] [Qualification =3]	-.106 -.456 0ᵃ	.413 .381	.067 1.436	1 1 0	.796 .231 .	-1.203 .	.290 .
[Aadhar_Mandatory=0] [Aadhar_Mandatory=0]	.529 0ᵃ	.341	2.400	1 0	.121	-.140	1.198
[Egov_platform = 0] [Egov_platform = 0]	-.247 0ᵃ	.360	.472	1 0	.492	-.952	.458

Link function: logit
a ; this Parameter is set to zero as it is redundant.

Table 7: Test of Parallel lines

Model	-2Log Likelihood	Chi-Square	df	Sig
Null Hypothesis	76.246			
General	66.322ᵃ	9.923	4	.042

DATA ANALYSIS & FINDINGS:

   The analysis shows that various factors such   as qualification, mandatory Aadhar number and performance of the E-Governance platform individually don't affect the performance and implementation of Digital Locker but when taken collectively they have a considerable effect on the performance of Digital Locker. IT can also be said that there is a significance relation between gender viz-a-vis male with the performance of digital locker. However there is no other significance being observed with other variables. The Parallel Line test of non-parametric data shows a combined effect of all factors significantly with gender, performance of Digital India platform, qualification,   Aadhar mandatory etc.

CONCLUSION & SUGGESTIONS:

The aim of the paper is to know whether there is awareness about digital Locker and is it implementable successfully in the current form. It can be concluded in that the various other factors such as mandatory Aadhar, qualification, etc may affect the successful implementation of Digital Locker with respect to a specific gender.

The survey has been conducted on a young age group in a metro city, further studies can be done and a comparative analysis could be made in different age groups in other demographic areas as well in order to get a Pan India Picture of the implementation of Digital Locker.

ACKNOWLWDGEMENT:

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