A Study on Gen Z's Adoption and Intention on Digital Wallet in Allusion to Green Banking

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Abstract. In addition to the broad spectrum of financial services and goods that banks provide, green banking refers to the environmental and social responsibility of banks with regard to role they play in ensuring the sustainable growth of the environment and ecological systems. As a result, all sectors of the Indian economy, including the banking sector, now have a pressing need to address the urgent problem of environmental degradation driven on by climate change. This was taken into consideration when Green Banking was first introduced in the state of Florida in 2009 and then implemented in India. Moving all financial services and transactions online is digital banking. Services including opening a bank account, transferring money, and making withdrawals are offered by digital banking. Most work is done by machines. One of the innovations of the FinTech evolution which has been further amplified by the global COVID-19 outbreak is digital wallets. Recognizing the legitimacy factor for digital wallets is so crucial. Significant knowledge and research gaps emerge as this technology develops. Prior research on digital wallet adoption has not taken into account the significance of self-efficacy and motivation. Certain age groups are not given enough attention, like Gen Z, which is currently setting the standard for emerging technologies. The purpose of this study is to fill in the gaps on the understanding of digital wallet acceptability by focusing on motivation, self-efficacy through green banking for Gen Z. So The questionnaires were distributed through online among 251 respondents in Chennai city. Factor Analysis and simple percentage analysis tools were used to analyze the study. While there's a relationship between each Factor factorability of the correlation matrix, the model's predictive power might benefit from additional variables.

Keywords: Technology Adoption, Generation Z's Intention, Motivation, Digital media self-efficacy.

1   Introduction

Consumers, bankers, and legislators all started to pay close attention to digital banking. Although e-banking is commonly understood to be synonymous with digital banking, the two concepts are not the same. When it comes to convenient banking operations, payment services, and customer support via the Internet, a smartphone, or SMS activity, e-banking is only an upgrade option on the traditional banking platform. Conversely, digital banking is a modern financial economic concept built on the digitization of all bank operations and activities (Tiong) [7]. Smartphones have ingrained themselves deeply into our daily lives in the modern world. Due to the rapid release of newer, less expensive versions, the number of smartphone users is growing daily. As per a study that appeared in The Hindu on February 3, 2016, there are 220 million active smartphone users in India, surpassing the US market. New and innovative services are being developed on a daily basis to fully utilize the capabilities of the modern smartphone. These days, smartphones are recommended as socializing, entertainment, internet access, and even payment tools. They are no longer just communication tools. These days, people utilize their mobile phones to conduct financial transactions or make payments through installed programs. In addition to paying with their smartphones, users may keep receipts, coupons, business cards, bills, and other documents there.

The way the digital wallet app operates is by forcing potential users to download the software made by global mobile wallet providers like PayPal and Google Inc. Services on your phone, and then use the app to pay for the goods or services directly. Paytm and Free charge are Indian businesses that offer mobile wallet services. The economic advantages that mobile payments offer society are progressively coming to light due to their significantly cheaper costs when compared to cash-based services and accepted card payments. Additionally, because of its accessibility and availability, it gives businesses a competitive edge.

The use of digital money is being pushed and promoted by governments and marketers. In a relatively short period of time, mobile wallets have grown in popularity. It is currently among the most prosperous company concepts for new ventures. There is proof that in a short period of time, its user base has overtaken that of credit cards. Just Vijay Shekar Sharma's company Paytm has 100 million subscribers and has downloaded over 10 million apps. Mobile wallet transactions have increased over the last four years, from Rs 10 billion in 2012–13 to over Rs 490 billion in 2015–16 (according to a report accessed on March 25, 2017 on Scroll.in). A report conducted by the research firm RNCOS projects that by 2019, the Indian market would grow to be worth Rs. 1,210 crore.

Financial transactions have often been conducted through banks and other financial entities. As a result, consumers now have an excessive number of options. By allowing users to make real-time transactions from anywhere at any time, e-wallet services transcend time and location boundaries. Globally, mobile wallets are driving economies toward becoming cashless societies. In India, mobile wallets are still a relatively new idea. Therefore, a deeper comprehension of the variables influencing the uptake of mobile payments is required.

2   Review of Literature

Through digital banking, people may access and perform all standard banking functions whenever and wherever they choose, eliminating the need to physically visit bank branches [5]. Paper products such as checks and payment slips are no longer necessary for people to carry about. Every customer's technological device, including their laptops, desktop computers, tablets, and cellphones, can be used for all banking activities through an application. The most recent version of M-banking, which connects via a SIM card, can be obtained via the smartphone application store. Financial services for consumers and business clients that are enhanced by technology in terms of distribution channels, blockchain, payment schemes, data, digital, mobile, and artificial intelligence are all part of technology-intensive digital banking [4]. A greater number of consumers are requesting services like banking and financial services where there are no physical connections formed during service exchanges as a result of the COVID-19 epidemic forcing the Indonesian government to rapidly expedite the adoption of cashless payments [1]. Additionally, biometric and online verification of accounts are marketed as virtual validations that can replace the physical validation process that previously required in-person contacts [2]. Improved features of digital banking include investment-related alternatives that don't require face-to-face interaction, which were previously exclusive to financial transactions conducted through mobile and internet banking. As a result, operations become less expensive, particularly for all the services that are normally rendered in a physical branch [6].

3   Methodology

This study is based on primary data collected from Gen Z Group through a structured questionnaire. Collected from 251 Gen Z in Chennai. The collected data was analyzed with the help of simple percentage analysis and factor analysis. The secondary data were collected from articles, journals, and websites.

3.1   Reliability

Table 1. Case Processing Summary

		N	%
Cases			
	Valid	250	99.6
	Excluded[a]	1	.4
	Total	251	100.0

**Table 2.** Reliability Statistics

Cronbach's Alpha	N of Items
.939	37

[a]Listwise deletion based on all variables in procedure

In this case, Cronbach's Alpha is 0.939, a Cronbach's Alpha of 0.7 or above is regarded as satisfactory, and 0.8 or higher as good. As a result, a score of 0.939 indicates that there is a high level of internal consistency among the 37 items being evaluated. There are exactly 37 items (N). This shows how many items there are in your measurement tool or survey overall. If all the items measure the same underlying construct, then a larger sample size tends to yield a more trustworthy Cronbach's Alpha.

With regard to practical applications, a Cronbach's Alpha of 0.939 signifies a high degree of correlation between the items in your measurement tool, implying a robust degree of dependability when it comes to assessing the intended construct. This demonstrates the instrument's dependability and consistency in assessing whatever designed to measure.
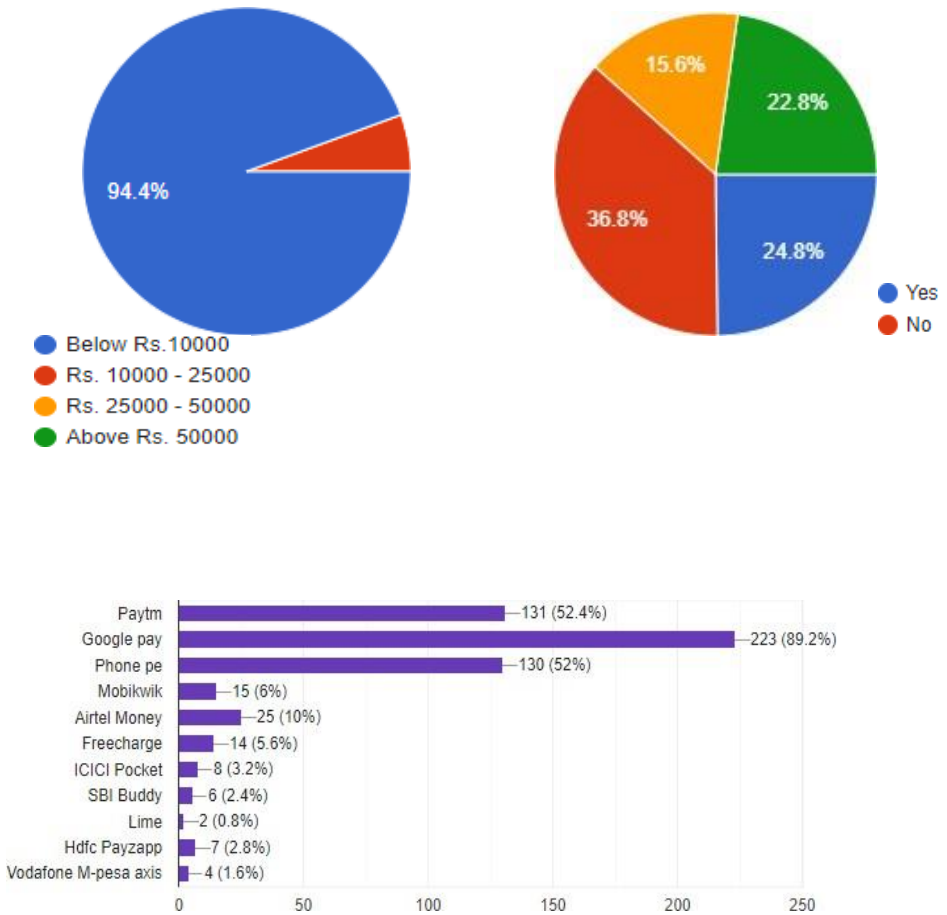
4   Demographic Table Variable
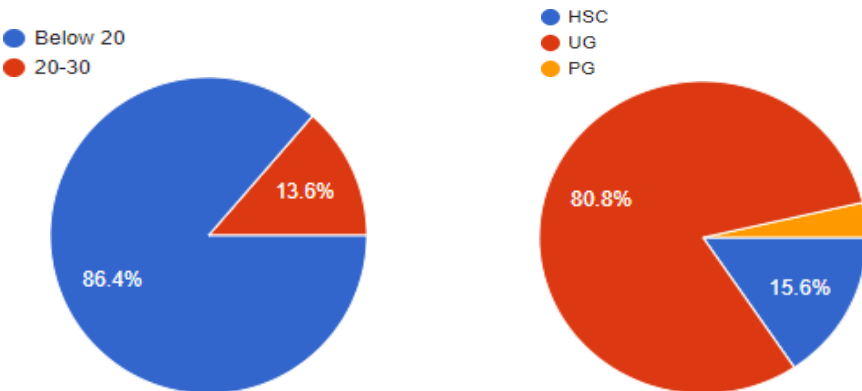
Fig. 1. Digital wallet payment gateways Gen Z awareness

5   Factor Analysis

Table 3. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.920
Bartlett's Test of Sphericity	Approx. Chi-Square	6658.114
	df	630
	Sig.	.000

- The KMO measures the sampling adequacy 0.920, the value is acceptable and the data is satisfactory for factory analysis.
- The KMO value is 0.920 required value is >0.05
- Bartlett's test is another indication of the strength of the relationship among variables.
- We can see that the Bartlett's Test of sphericity is significant.
- $0.00 < 0.01$, the significance level is small enough to reject the null hypothesis.

Table 4. Total Variance Explained

Compo-nent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	13.051	36.252	36.252	13.051	36.252	36.252	5.981	16.613	16.613
2	4.182	11.616	47.869	4.182	11.616	47.869	5.559	15.441	32.054
3	2.954	8.206	56.075	2.954	8.206	56.075	4.600	12.778	44.832
4	1.993	5.535	61.610	1.993	5.535	61.610	4.262	11.839	56.670
5	1.671	4.642	66.252	1.671	4.642	66.252	3.252	9.034	65.705
6	1.100	3.054	69.307	1.100	3.054	69.307	1.297	3.602	69.307
7	.775	2.154	71.460						
8	.758	2.106	73.566						
9	.712	1.978	75.544						
10	.672	1.866	77.411						
11	.603	1.675	79.085						
12	.593	1.647	80.732						
13	.559	1.553	82.285						
14	.548	1.521	83.806						
15	.468	1.300	85.107						
16	.440	1.222	86.329						
17	.426	1.182	87.511						
18	.413	1.148	88.658						
19	.381	1.057	89.715						
20	.351	.974	90.690						
21	.310	.860	91.550						
22	.299	.829	92.379						

23	.282	.784	93.164
24	.271	.754	93.918
25	.252	.699	94.617
26	.232	.644	95.261
27	.227	.630	95.890
28	.216	.601	96.491
29	.207	.574	97.065
30	.198	.549	97.615
31	.180	.501	98.116
32	.161	.447	98.563
33	.155	.432	98.994
34	.135	.376	99.370
35	.116	.322	99.692
36	.111	.308	100.000

Extraction Method: Principal Component Analysis.

➢ Before rotation factor 1 accounted 36.252% of variance, after extraction it accounts for 12.613 % of variance.
➢ Before rotation factor 2 accounted for 11.616% of variance, after extraction it accounts for 15.441% of variance.
➢ Before rotation factor 3 accounted for 8.206% of variance, after extraction it accounts 12.778 % of variance.
➢ Before rotation factor 4 accounted for 5.535% of variance, after extraction it accounts for 11.839 % of variance.
➢ Before rotation factor 5 accounted for 4.642 % of variance, after extraction it accounts for 9.034 % of variance.
➢ Before rotation factor 6 accounted for 3.054% of variance, after extraction it accounts for 3.602% of variance
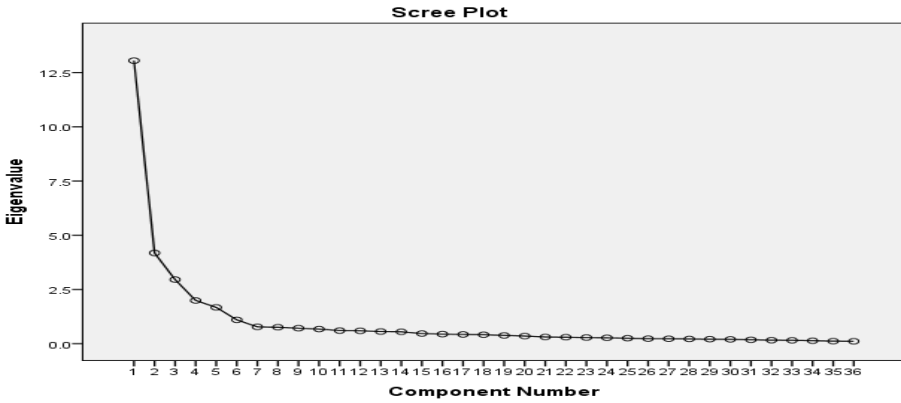
It can be seen the curve begin flatten between 7 and 8. In this figure, the diagram six factors have been extracted

Table 5. Rotated Component Matrix[a]

	Component					
	1	2	3	4	5	6
Mark your preference for the following factors affecting the usage of digital wallets.						
5 = 5, 4 = 4, 3 = 3 ,2 = 2, 1 = 1.						
[Digital wallets are useful]	.791					
[Is it easy to use digital wallet]	.770					
[I am satisfied with current digital]	.754					
[24x7 Availability]	.747					
[Digital wallets maintain privacy off transaction]	.731					
[Convenience in buying products online]	.708					
Discount offers by digital wallet in the form of cash backs & free]	.687					
[Cost involved in the form of transaction fees service fees is less in digital wallet]	.638					

Rate the following reasons for you to start using the digital wallet payment gateway services?

5 = 5, 4 = 4, 3 = 3 ,2 = 2, 1 = 1.   .805

[To take the advantages of loyalty reward points and discounts]

[Availability/Acceptance of the services at different stores]		.785	
[Comfortable with the security of the mobile payment]		.764	
[User Friendly mobile payment services]		.732	
[Digital wallet saves time]		.730	
[Will you prefer using digital banking services over digital wallets]		.724	
[Digital wallet substitutes the physical payment system]		.721	
[Digital wallet has made life easier]	.427	.712	
[Transfer Money]			.816
[Making payments for online]			.808

[To make payments for movie ticket/restaurant/school/college fees/stay at resort or hotel]   .792

How for do you prefer using digital wallet for completing various transactions?

5 = 5, 4 = 4, 3 = 3, 2 = 2 , 1 = 1.   .768

[To recharge your mobile phones/dish tv/broadband/datacard]

[To pay Utility bills off electricity /water tax/landline/LPG]			.689
[To pay for transportation through IRCTC/RSRCTC/Cabs/Metro/flight]			.654

In your opinion what are the risk associated while using digital wallets?

5 = 5, 4 = 4, 3 = 3 ,2 = 2, 1 = 1. [Using public networks for digital transaction leads to lose off personal information]   .838

[Lose of time due to poor network connectivity]	.820
[Performance of digital wallet is not up to the expectation]	.820
[Digital wallet is financial risk]	.808
[Poor operating system leads to delay in digital transaction]	.788
[Fake sign up]	.747
[IMPS]	.890

[NEFT]		.869
How 4 do you use the following payment methods for online transaction?		
5 = 5, 4 = 4, 3 = 3, 2 = 2 , 1 = 1. [Credit Card]		.748
How 4 do you use the following payment methods for online transaction?		
5 = 5, 4 = 4, 3 = 3, 2 = 2 , 1 = 1. [Debit Card]		.552
[Net Banking]		.479
How 4 do you use digital wallet? (per month)	.400	.691
How 4 do you use the following payment methods for online transaction?		
5 = 5, 4 = 4, 3 = 3, 2 = 2 , 1 = 1. [Digital Wallet]	.483	.501

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a.   Rotation converged in 6 iterations.

6   Interpretation

Further in detail, Component 1: This component is strongly associated with factors such as "Digital wallets are useful," "Is it easy to use digital wallet," "I am satisfied with current digital," "24x7 Availability," "Digital wallets are secured," and "Digital wallets maintain privacy of transaction." The first component clearly represent the overall satisfaction and usability of digital wallets.

Component 2: The main variable associated with this component is "Digital wallet has made life easier." This suggests that this component two represents the perception that digital wallets have improved life easier.

Component3: This component is strongly associated with factors like "Availability/Acceptance of the services at different stores" and "Digital wallet substitutes the physical payment system." It could represent the convenience and acceptance of digital wallets at various locations.

Component 4: This component is most strongly associated with "Comfortable with the security of the mobile payment" and "Digital wallet saves time." It represent a perception of security and time-saving aspects of using digital wallets.

Component 5: The main variable associated with this component is "Will you prefer using digital banking services over digital wallets." This suggests that this component represents a preference for digital banking services over digital wallets.

Component 6: This component is associated with "Poor operating system leads to delay in digital transaction," "Using public networks for digital transaction leads to loss of

personal information," "Digital wallet is financial risk," "Lose of time due to poor network connectivity," and "Fake sign up." It seems to capture concerns and risks associated with the usage of digital wallets.

7   Conclusion

Kaiser-Meyer-Olkin is 0.920, which indicates a high level of adequacy for factor analysis and Bartlett's test on the other side, is significant with p value less than 0.05, supporting the factorability of the correlation matrix. The communalities indicates the proportion of variance for each variable and it ranges from 0.428 to 0.807. When it comes to total variance explained, the first factor explains 36.252% of the total variance. Here, varimax rotation is applied for the rotated component matrix. Component scores(FAC1_1, FAC2_1, etc.) are created for each case which represents the scores on every extracted factor. From the investigation it is found that, most of the GEN Z's are found to be experiencing Digital wallet adoption . Decisions may involve comparing, analyzing, and selecting options depending on the preferences and opinions of users.. All things considered, the model does a good job of explaining the variation in the risk decision. To gain a more thorough comprehension, it is necessary to investigate the distinct influence and importance of every predictor in the model.

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