AN INVESTIGATION INTO PMJDY CUSTOMERS' DIGITAL PAYMENTS SYSTEM IN TIRUCHENDUR TALUK OF THOOTHUKUDI DISTRICT

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ABSTRACT

The development of Indian digital payment systems has been attributed in large part to digitalization, the introduction of new payment choices, and greater customer awareness. Most research investigations came to contradictory conclusions that need to be looked into. As a result, the research study selected 200 customers from the Thoothukudi District using a practical sampling technique. It was done using the t-test, f-test, ANOVA, and post-hoc test. In terms of socio-economic characteristics, the study found that only education had a positive relationship with environmental indicators. It also showed that customers preferred digital payments due to their ease, time savings, easy use, safety, and security.

INTRODUCTION

Software is used to create digital payments, which allow customers to purchase products using digital wallets. In India, PMJDY digital payment options include E-wallets, prepaid cards, credit and debit cards, and net banking. It has positively impacted the ease of doing transactions in rural areas that were largely unchanged by any digital payment method, and it has attracted many domestic and foreign investors.

RESEARCH PROBLEM

The technological advancement has resulted in the development of numerous modes of digital payment by which customers can conduct their transactions in a more secure, user-friendly, convenient, and private manner, which will lead to a greater preference for mobile payment usage. The studies by Anuradha C. Hastak and Arun Gaikwad (2021), Gokilavani, R,

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Kumar, Venkatesh. D, Durgarani. M and Mahalakshmi R (2018), identified that socio-economic indicators have not impacted on digital payment systems. On the other hand, studies by Ranganath Santosh & Tulsi Rao G(2018), Sobana Shanthini Jand Dr. J. Immanuel Nallathmbi (2018) found that there was a positive substantial difference between socio economic variables with awareness of digital payment systems. Existing studies found conflicting findings on the PMJDY digital payment systems in India, which should be examined. Thus, the current study attempts to investigate the impact of a digital payment system mode in India, specifically in the Thoothukudi District.

HYPOTHESIS

H_{01}: There is no significant difference between socio-economic factors with environmental indicators.

SAMPLE SELECTION

This paper, 200 sample were selected from the Tamilnadu district of Thoothukudi. For this purpose, a convenient sampling method was used, and research was conducted using an interview schedule method. To test the hypotheses, statistical tools such as the t-test, ANOVA, and post-hoc test were used.

Table 1 Reliability Statistics

Sl.No.	Statements	Cronbach's Alpha
EVN1	It maintains privacy transactions	0.791
EVN2	It moderates the financial risk	0.738
EVN3	It reduces the cost of financial transactions	0.797
EVN4	Payment modes are environmentally good	0.802
EVN5	Spending time is very less	0.783

Table 1 shows the reliability statistics on economic and environmental intention factors. All the factors are greater than 0.7, so we go for further analysis.

RESULTS

Table 2 Socio-Economic Frequency

Indicator	N	Percent
Age		
Up to 20	49	24.50
21 to 40	59	29.50
41 to 60	63	31.50
Above 60	29	14.50
Total	200	100.00
Gender		
Female	121	60.50
Male	79	39.50
Total	200	100.00
Education		
Illiterate	38	19.00
School	38	19.00
College	41	20.50
Professionals	41	20.50
Others	42	21.00
Total	200	100.00
Monthly Income		

Indicator	N	Percent
Up to 5000	18	9.00
5001 to 10000	66	33.00
10001 to 15000	46	23.00
15001 to 20000	32	16.00
Above 20000	38	19.00
Total	200	100.00
Forms of Payments		
Net banking	40	20.00
E-wallet	37	18.50
Credit/Debit Card	40	20.00
POS	37	18.50
Prepaid card	46	23.00
Total	200	100.00

Table 2 describes the socioeconomic frequencies in Thoothukudi District. Out of 200 sample respondents, 49 were under the age of 20; 59 were between the ages of 21 and 40; and 63 and 29 were between the ages of 41 and 60, respectively. In terms of gender, 60.50 percent have taken from females and 39.50 percent from males. Out of percent, 9 percent and 33 percent fell into the income segments of up to 5,000 and 5,001 to 10,000, respectively. Furthermore, 23 percent of respondents were chosen from the income bracket of Rs.15, 001 to 20,000, while 19 percent were chosen from the income bracket of more than 20,000. In terms of payment methods, the majority of respondents (23 percent) preferred prepaid card; 18.5 percent preferred point of scale and E-wallet, respectively; and 20 percent preferred net banking.

Table 3 Age and Factors of Environmental Indicator

Age	Up to 20	21 to 40	41 to 60	Above 60	F	Sig.
EVN1	3.70	3.84	3.63	3.45	1.560	0.200
EVN2	3.71	3.80	3.60	3.83	0.702	0.552
EVN3	3.55	3.68	3.53	3.78	0.695	0.556
EVN4	3.57	3.73	3.56	3.60	0.485	0.693
EVN5	3.64	3.67	3.64	3.73	0.078	0.972
OVEVN	19.17	18.23	18.78	18.67	0.435	0.654

Table 3 demonstrates the connection between age and the environmental indicator factor. The significant value of EVN was 0.200; EVN2 was 0.552; EVN3 was 0.0.556; EVN4 was 0.693; EVN5 was 0.972; and the overall environmental indicator was 0.654, all of which were greater than the significant value, and thus we accepted that no relationship was found between the above selected variables.

Table 4 Gender and Factors of Environmental Indicator

Gender	Female	Male	t	sig.
EVN1	3.69	3.62	0.557	0.578
EVN2	3.65	3.58	0.520	0.603
EVN3	3.64	3.60	0.271	0.787
EVN4	3.68	3.69	0.125	0.901
EVN5	3.72	3.73	0.063	0.950

Gender	Female	Male	t	sig.
OVEVN	18.38	18.24	0.316	0.752

Table 4 examines the correlation between gender and environmental indicator factors. The t-value and p-value of EVN1 were showed to be 0.557 and 0.578; EVN2 was found to be 0.520 and 0.603; EVN3 was recorded to be 0.271 and 0.787; EVN4 was found to be 0.125 and 0.901; EVN5 was observed to be 0.063 and 0.950; and OVEVN was found to be 0.316 and 0.752, all of which were greater than the significant value

Table 5 Education and Factors of Environmental Indicator

Education	Illiterate	School	College	Professionals	Others	F	Sig.
EVN1	3.22^{a}	3.56^{ab}	3.84^{bc}	4.09^{c}	3.98^{c}	6.872	<0.001**
EVN2	3.35^{a}	3.40^{ab}	3.71^{abc}	3.79^{ab}	3.93^{c}	3.563	0.008**
EVN3	3.47^{a}	3.51^{a}	3.76^{ab}	3.85^{b}	3.87^{ab}	1.954	0.012*
EVN4	3.37^{a}	3.42^{a}	3.73^{ab}	3.96^{b}	3.70^{ab}	3.091	0.017*
EVN5	3.39^{a}	3.49^{ab}	3.76^{bc}	3.89^{c}	3.83^{c}	2.894	0.023*
OVEVN	16.80^{a}	17.39^{a}	18.80^{b}	19.57^{b}	19.30^{b}	6.291	<0.001**

Table 5 shows the relationship between education and environmental indicator factors. The p-values of EVN1 and OVEVN were less than 0.001percent, and the significant value of EVN2 was 0.008, both of which were less than the 1percent level. Furthermore, EVN4 detected 0.017, EVN3 detected 0.012, and EVN5 detected 0.023, all of which were less than the significant value of 5percent. As a result, we noted that there was a significant correlation between environmental factors and education.

According to post hoc results of education categories with environmental factors EVN3 and EVN4, illiterate and school groups differed from professionals, but college and other categories differed from the rest of the groups. Furthermore, EVN2 discovered that illiteracy differed from other classifications and was associated with school and professional groups, whereas college was positively matched with all other segments. Furthermore, EVN1 and EVN5 discovered that illiteracy varied with professional classification, but school and college groups were related to the remaining baskets. Furthermore, OVEVN determined that the illiterate and school clusters were unrelated to the rest of the groups.

Table 6 Monthly Income and Factors of Environmental Indicator

Monthly Income	Up to 5,000	5,001 to 10,000	10,001 to 15,000	15,001 to 20,000	Above 20,000	F	Sig.
EVN1	3.84	3.50	3.52	3.61	3.90	1.684	0.154
EVN2	3.68	3.59	3.80	3.66	4.00	1.409	0.232
EVN3	3.52	3.51	3.75	3.54	3.83	1.202	0.311
EVN4	3.72	3.67	3.52	3.71	3.76	0.509	0.729
EVN5	3.68	3.65	3.77	3.66	3.67	0.138	0.968
OVEVN	18.44	17.93	18.36	18.17	19.17	0.876	0.479

Table 6 depicts the relationship between monthly income and environmental indicator factors. The f-value and p-value of EVN1 were found to be 1.684 and 0.154; EVN3 was found to be 1.202 and 0.311; EVN5 was 0.138 and 0.968; EVN2 was 1.409 and 0.232; EVN3 was 0.509 and 0.729; and OVEVN was 0.876 and 0.479, both of which are significant. As a result, we conclude that no relationship between environmental indicators and monthly income variables was discovered.

Table 7 Mode of Payments and Factors of Environmental Indicator

Mode of Payments	Net banking	E-wallet	Credit/Debit Card	POS	Prepaid card	F	Sig.
EVN1	3.90[a]	4.00[b]	3.60[ab]	3.67[ab]	3.31[a]	4.777	0.001**
EVN2	4.00[b]	3.81[ab]	3.91[b]	3.61[ab]	3.42[a]	3.352	0.011*
EVN3	3.94[b]	3.88[b]	3.79[b]	3.57[ab]	3.37[a]	3.301	0.012*
EVN4	3.77[ab]	3.74[ab]	3.91[b]	3.41[a]	3.39[a]	3.195	0.014*
EVN5	3.79[b]	3.83[b]	3.79[b]	3.49[ab]	3.34[a]	2.767	0.028*
OVEVN	19.40[b]	19.26[b]	19.00[ab]	17.75[ab]	16.82[a]	5.739	<0.001**

Table 7 depicts the relationship between modes of payment and environmental indicator factors. The significance value of overall environmental factor and EVN1 was less than one percent, which is less than the 1percent level. Furthermore, EVN5 had a p-value of 0.028, EVN4 and EVN3 had p-values of 0.014 and 0.012, respectively, and EVN2 had a p-value of 0.011, all of which were less than 5 percent. As a result, we concluded that the selected variables had a significant relationship.

According to the post hoc results expressed the sub segments of the above two variables. The EVN5 and EVN3 indicators explained that there was a difference between the net banking, E-wallet, and credit/debit card groups and the prepaid card group, but not between the rests of the baskets. The EVN4 factor discovered a significant difference between point of sale and prepaid card segments and the credit/debit card category, but net banking and E-wallet groups were positively related to the remaining three brackets. The EVN2 factor measured the difference between prepaid card holders who used net banking and credit/debit card holders, while the E-wallet and point of sale variables were significant when compared to the rest of the factors. The EVN1 factor revealed a significant deviation.

CONCLUSION

The findings of a study on the PMJDY digital payments system customers' perspectives on socioeconomic variables such as age, gender, monthly income, education, and mode of digital payments with environmental indicators are summarized below.

The relationship between age, gender, and monthly income did not differ significantly with environmental indicators, whereas education and mode of payment did differ significantly with environmental and purchase factors. Furthermore, the overall environmental indicator results highlighted that the E-wallet cluster differed significantly from prepaid card holders. According to the findings of this study, the majority of customers are shifting from traditional to digital transactions, and usage is increasing in both directions. It is clear that the majority of the PMJDY sample respondents preferred digital payments because they take less time and are more convenient.

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