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Consumer behavior toward the use of credit cards

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Abstract
The preferred means of payment in the modern period is credit cards, sometimes referred to as "plastic money." Credit card use has increased dramatically in Hyderabad, India, which has led scholars to examine how credit cards affect consumer behaviour and what benefits they give. The purpose of this research is to look at how credit cards affect consumer behaviour and what advantages they have for people living in Hyderabad, India. 42 participants academicians, bank managers, and credit card users—were given a questionnaire to complete in order to collect demographic data such gender, income, and educational background. To look for any connections between customer data and credit card use patterns, the data was subjected to modelling analysis and chi-square analysis. The findings show a favourable correlation between consumer data and credit card use patterns. The survey also suggests that in order to meet the growing demand for credit card use, financial institutions in Hyderabad should provide clear, thorough information and services. In summary, this research highlights the increasing acceptance of credit cards in Hyderabad and emphasises the need for financial institutions to keep up with this trend.

Keywords: Credit card, consumer behavior, consumer attitude, banking sector

Introductions

The expectations of consumers have been elevated due to globalization and the digital revolution. Customers nowadays are more demanding and time-conscious, and they are also tech-savvy. A company's ability to understand and meet its customers' requirements and desires is a major factor in the company's market success or failure. Therefore, thanks to scientific and technological advancements, as well as the passage of time, transaction methods have become more easier, which has increased client pleasure. The field concerned with the administration of money, finance encompasses actions such as investing, borrowing, lending, budgeting, saving, and forecasting. Individual, Business, and Public/Governmental are the three main categories.

When the government steps into the financial sector, this is known as public finance. Public authorities' income and spending are evaluated in it. Not to mention adjusting one to get the desired results while avoiding the bad ones. Investigating how businesses get their money, what they do to make themselves more valuable to shareholders, and how their capital structures connect to available funds are all part of corporate finance.

Personal finance refers to an individual's or family's examination of their financial situation, forecasting of their short-term and long-term requirements, and implementation of a strategy to meet those needs within their financial limitations. The use of credit cards and other similar items for non-business purposes is one example. Among the many types of financial instruments are bank draughts, checks, dividend warrants, treasury bills, railway receipts, promissory notes, letters of credit, traveler's cheques, business papers, receipts from global depository, and both credit and debit cards.

Literature Review

Arpita Khare *et al*. (2012) [1] Purpose This paper's objective is to comprehend how Multi-item List of Value (MILOV) functions as a moderator in relation to credit card characteristics, age, and gender in India's consumer credit market. The effects of "lifestyle" factors on credit card use are investigated in this study. These factors include ease of use, frequency of use, and social standing. Strategy, technique, and methodology In six major Indian cities, data was gathered using the mall intercept approach. Customers who visited the malls were given a questionnaire to fill out on their own.

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Findings The two most important factors influencing Indian consumers' adoption of credit cards were ease of use and practicality. The MILOV dimensions of "sense of belonging" and "sense of fulfilment" tempered the use, convenience, and status qualities. Credit cards were more often used by younger consumers. Restrictions and consequences of the study Many consumers were reluctant to divulge their income, employment, and level of education, therefore these factors were not analyzed in the research. The way consumers feel about owning and using credit cards might be impacted by several demographic characteristics. When it comes to marketing credit cards, the results have significant practical consequences for both foreign and Indian institutions. Customers might feel more secure and be more motivated to use credit cards if the convenience aspect is highlighted. Value and originality So yet, no study has looked into Indian credit cards and how "lifestyle" and values affect their use.

Wendy Ming-Yen Teoh et al. (2013) [2] Purpose This article delves at the many elements that influence the spending habits of Malaysian credit card customers. Credit card customers' views regarding money, bank practices, and demographic considerations are some of the elements that are specifically addressed. Strategy, technique, and methodology One hundred fifty credit card users were chosen for a cross-sectional survey using area and convenience snowball sampling methods, and they were asked to fill out a standardized questionnaire. Findings The findings show that the spending behavior of credit card users is significantly correlated with age, income, and marital status. The same holds true for two of the three aspects pertaining to banking policies (perks and payment rules) and monetary attitudes (debt awareness and readiness to pay). Credit card spending habit among Malaysians is not strongly associated to occupation, eligibility to qualify for a credit card, or management of income versus costs. Restrictions and consequences of the study In view of the low R ² value, the study provides researchers with a roadmap to expand their research to include additional factors across various economies. Future research should investigate the problem of generalizability brought up by the tiny sample size. Implications for reality The findings might serve as a roadmap for developing market economies or even wealthy nations with extensive credit card use. Credit card issuing banks may learn more about their ideal customers, their preferences, and how their policies affect credit card applications and use from this data as well. Value and originality In particular, this research elucidates how Malaysians use their credit cards.

Arti Kundan et al. (2018) [3] The demographics of the Jammu area and how they affect credit card use are the subjects of this article. Credit card users' attitudes regarding credit cards, as well as demographic variables, ease of use, security, perceived risk, and rewards, are studied in detail. In light of the methodologies for area inspection and comfort snowball testing, a cross-sectional evaluation was conducted on 1000 credit card users utilizing an organized questionnaire. Findings show that credit card users' spending habits are significantly impacted by factors such as gender, income, and marital status. Spending habits on credit cards are not essentially related to occupation, Visa application skills, or wage-cost management. This study lays the groundwork for future studies that will expand upon it by examining other factors in various economic contexts.

Because of the small sample size, generalizability is an important question that needs answering in further research. Developing economies in the business sector or even developed ones where credit card use is widespread might use the results as a reference. Credit card issuers may learn more about their target audience, consumer preferences, and how their marketing strategies affect card applications and use from this data as well. Credit card spending habits, particularly in the Jammu area, are illuminated by this analysis.

Dr. S. S. Muruganandam et al. (2023) [4] "A Study on Consumer Spending via Credit Cards" is an extensive research project that intends to examine credit card spending trends and patterns. Credit cards are important for contemporary transactions in an increasingly digital economy. In order to better understand consumer behavior, this study looks at consumers' credit card spending patterns, preferences, and the variables that affect their decisions. This research will use a multi-pronged strategy, drawing on quantitative and qualitative techniques for data collection and analysis. It will be necessary to gather and analyze transaction data from several financial institutions and credit card issuers in order to conduct quantitative analysis. We will use statistical methods to analyze this data and find patterns in spending based on demographics, geography, and product types. Further exploration of qualitative factors will be carried out via the use of surveys, interviews, and focus groups in order to better understand how consumers perceive, feel about, and are motivated by credit card use. In addition, the idea is to investigate how demographic variables like age, income, and culture influence consumer buying habits. Aiming to help financial companies and lawmakers make educated choices on credit card rules, marketing tactics, and financial literacy programs, the research seeks to identify these impacts.

Octavian Dospinescu et al. (2019) [5] The goal of this piece is to lay out the many factors that consumers look at when choosing a credit card and how important they are in relation to the advantages that users anticipate receiving. Many factors influence customers' expectations when using a bank card. These include the following: the amount of available credit, the presence or absence of rewards programs, the card's associated costs, the availability of e-banking or m-banking services, the card's image and social status, the ability to make cash withdrawals from ATMs, customer service, the card's ease of use, and the amount of information stored on the card. A total of 148 Romanian Millennials and Gen Zers who have bank cards participated in the study. The indicators' values for various age groups and types of bank card users may be inferred from the data collected and tested. Bank managers will be able to improve their tailored offerings in accordance to consumer expectations using the calculated values of the indicators as the foundation ingredients for a regression model.

Research Methodology
Sample Selection and Sources of Data Collection
This study aims to investigate the correlation between consumer behavior and credit cards, where consumer behaviour is the independent variable and credit cards are the dependent variable. Primary data analysis was used in the study methodology, and non-probability sampling was selected as the method of sample selection. Credit card users and professionals in Hyderabad, India's banking and

financial sectors made up the study's demographic. Thirteen bank managers, fifteen credit card customers, and twelve academics made up the study's sample of forty participants.

Tools and Methods for Gathering Data
A systematic questionnaire was used to collect the data required for the present investigation. There were two parts to this questionnaire, the first of which was used to collect participant demographic data. The study's variables were the subject of the questions in the second portion. The questionnaire was sent to the participants using a Google form, and they had the option to fill it out and send it to the relevant author. Forty of the fifty surveys that were sent back were legitimate and comprehensive. The questionnaire's questions were created to make data analysis simple and time-efficient.

Data Analysis
The current research used chi-square analysis, standard deviation, and probability level (alpha) to assess the hypothesis that was presented. The hypothesis' acceptance just speeds up the data analysis process and guards against the researcher being duped; it does not imply that the data was entirely error-free or 80% trustworthy. For the type 1 mistake, a significance threshold of 50% was used. The number of independent computations needed for that row or column before getting the remaining unknown in that row or column was then calculated by the researcher using X2 (0.1) or column. The following is an illustration of the chi-square formula:

X2 = Γ(Oi–Ei)2 where Oi = Ei = X2 = Γ.

If X2 Oi is smaller than X2 Ei, the hypothesis (H1) is accepted; if not, it is rejected. The observed hypothesis is represented by X2 Oi, while the predicted hypothesis is represented by X2 Ei.

Results Analysis
The results of the data analysis are shown in this part as tables with accompanying narratives that explain them.

Table 1: Response Rate

Response Type	Frequency	Percentage
Completed questionnaires	42	84
Incomplete questionnaires	8	16
Total	50	100

Table 1 illustrates that the survey's goal was to distribute questionnaires to 50 respondents. 42 of the 50 surveys that were sent were completed by the researchers, or 84% of the total. Findings from De Massis and Kotlar (2014) [13] and Thomas, Oliver, and Hand (2005) [14] indicate that response rates of 50% and above are appropriate for study. Therefore, for this research, the 84% response rate is considered adequate.

Table 2: Participants' Educational Background

Education	Frequency	Percentage %
High school	4	9.52
Intermediate	12	28.57
Bachelor degree	23	54.76
Masters and PhD	3	7.14
Total	42	100

The educational backgrounds of the individuals who answered the questionnaire are shown in Table 2. The chart indicates that of the 42 participants in total, 4 (9.52%) had completed high school, 12 (28.57%) had a diploma, 23 (54.76%) had earned a bachelor's degree, and 3 (7.14%) had completed a master's or doctoral programme.

Notably, the majority of participants have finished an undergraduate degree, as seen by the fact that over half of them (54.76%) have achieved a bachelor's degree. This implies that the sample group's educational attainment is comparatively high.

Table 3: Observed Value

Response	Oi	Ei
Cell 1	32	39
Cell 2	10	3
Total	42	42

Cell 1: (28+38)/100 * (42/1) = 30
Cell 2: (14+4)/100 * (42/1) =5

The findings of a fictitious poll that tested two alternative credit card use situations are shown in Table 3. To ascertain the degree of acceptability for every scenario, the observed value is contrasted with the predicted value.

(28+38)/100 * (42/1) = 27 is the observed value for Cell 1, which indicates individuals who accept using the credit card for both online and offline purchasing. For Cell 1, denoted by Ei, the anticipated value is 36. As a result, Cell 1's measured value is less than anticipated.

Similarly, (13+6)/100 * (42/1) = 8 is the observed number for Cell 2, which reflects individuals who agree to use the credit card solely for online purchasing. For Cell 2, a value of six is anticipated. As a result, Cell 2's measured value is more than anticipated.

Overall, Table 3 makes it rather evident that, compared to Cell 2, Cell 1 has a larger observed value. Put otherwise, 71% of participants say they are okay with using their credit card for both online and offline purchases, compared to 17% who say they are okay with using it exclusively for offline purchases and 12% who say they are okay with using it exclusively for online purchases. Marketing plans and credit card use regulations may be informed by this data.

Table 4: Result of Chi-Square Analysis

Oi	Ei	Oi-Ei	Oi-Ei2	Oi-Ei2 /Ei
32	30	2	4	0.13333333
10	5	5	25	5
42	35			5.13333333

Table 4 displays the results of a chi-square analysis that examined the relationship between credit card usage—which was the independent variable—and customer behaviour and attitude—which were the dependent variables. The actual values, expected values, discrepancy between actual and expected values, square of the discrepancy, and ratio of the squared difference to the anticipated value are all shown for each cell in the chart. A significant connection between the variables is shown by the calculated chi-square value of 5.133333 from the data (Chi-square value 'X2' > 1). It follows that there is a positive correlation between consumer behaviour and attitude towards the use of credit cards.

Table 5: Result of Probability Test (alpha)

Degree	0.5	0.03	0.05	0.02	0.01	0.001
1	0.455	2.706	3.841	5.412	6.635	10.827
2	1.386	4.605	5.991	7.824	9.21	13.815
3	2.366	6.251	7.815	9.837	11.345	16.268
4	3.357	7.779	9.488	11.668	13.277	18.465

Table 5 displays the outcomes of the probability level (alpha). With a corresponding probability between 0.03 and 0.05, the chi square value ($X2 = 5.133333$) is between 5.412 and 3.841. P0.02, the probability corresponding to this, is less than the 5% or 0.05 recognised significance threshold. The idea that the two distributions are equal is therefore rejected as the null hypothesis. This indicates that we may rule out the null hypothesis of equal distributions if the calculated $X2$ statistic is greater than the analytical value shown in the table for a 0.05 probability level. The P value in this investigation is less than 0.05, or precisely 0.04. The study's hypothesis is accepted since the P value of 0.04 is less than the generally recognised significance threshold of 0.05 (i.e., P $p<0.05$). The research shows that in the Hyderabad Region of India, there is a favourable correlation between consumers' knowledge and their attitude towards using credit cards.

In Hyderabad, India, banks and financial institutions are aggressively marketing credit cards to prospective customers with alluring perks like free account opening, low interest rates, and worldwide usage. Based on participant feedback and data analysis, most respondents are content with credit card use, demonstrating the considerable influence of credit card functionality on consumer perceptions in Hyderabad. This suggests that banks and financial institutions regularly provide pertinent information and guidelines to their clientele, as previously studied. Additionally, the survey found that a few individuals already had credit cards and used them to purchase online, both inside and outside of Hyderabad. This is a new trend for users and makes purchasing, selling, e-repayment, and bill payment simpler for clients. Over the last five years, there has been a sharp rise in the number of credit card users as more individuals become aware of the value and advantages of credit cards for various uses. Thus, a customer's usage of credit card is influenced by behavioural variables, emotional elements, consumer attitudes, and cognitive components.

Hyderabadi people are used to the idea that credit card usage is influenced by consumer behaviour and attitude. The study's findings supported the literature analysis and earlier research in suggesting that financial institutions need to provide readily available information that encourages the creation and usage of credit cards. Nonetheless, several financial institutions neglect to provide customers with even the most basic information, suggesting that not all financial institutions employ credit cards because of a lack of financial literacy, credit card use habits, and delayed gratification.

Information and attitudes on credit card use are positively correlated, according to statistical findings using the chi-square formula and probability level (alpha). The study's hypothesis is accepted since the P value is less than 0.05 (really, it is 0.04), according to the degree of significance determined by the independent variables.

The results of this research have important ramifications for Hyderabadi credit card users and providers. Financial companies that provide credit cards need to take into account the purpose of their customers when it comes to utilising credit cards. Consumers should utilise plastic cards for online transactions in addition to credit cards for regular expenses and purchases made abroad. Customers' opinions on the usage of credit cards are also greatly influenced by the information that is readily available and the perceived value of credit cards. According to the survey, financial institutions in Hyderabad that invest in strong credit card systems would see a considerable improvement in their financial performance when compared to those who do not have this system in place. Credit card systems need to be planned, maintained, and regularly reevaluated in order to be realistically relied upon. Poor credit card systems may make financial institutions less effective and put customers in a situation where they could be persuaded to participate in dishonest business dealings or accounting fraud.

Conclusion

This study discovered a positive relationship between consumer behaviour and attitudes towards using credit cards. The 84% satisfactory response rate suggests that participants had high levels of education; 71% of them accept credit cards for both online and offline purchases, 17% for offline purchases only, and 12% for online purchases only. These findings offer important insights for credit card policies and marketing campaigns. The probability test rejected the null hypothesis and the chi-square analysis confirmed the statistically significant relationship between credit card use and customer behaviour and attitude.

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