



Impact of online shopping on consumers' spending patterns: An empirical study of Sangli District

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Abstract

With the increasing adoption of digital technology, online shopping is becoming a significant part of consumers' daily consumption activities. Against this backdrop, this study empirically examines the impact of online shopping on the spending patterns of consumers in the Sangli district. Primary data was collected through a structured questionnaire from 400 consumers who had made at least one online purchase in the preceding 12 months, utilizing a proportionate stratified sampling method. The collected data was analyzed using frequency, percentage, and relevant statistical tests. The study reveals significant trends regarding the frequency of online shopping, mobile app usage, and monthly online expenditure, additional purchases driven by discounts and offers, and impulse buying. Furthermore, 52.50% of consumers reported an increase in total monthly expenditure due to online shopping, while 47.50% noted a reduction in spending on offline purchases; meanwhile, 43.75% of consumers experienced a negative impact on their savings. A statistical analysis was also conducted to examine the relationship between the frequency of online shopping and changes in spending habits. These findings indicate that online shopping is evolving beyond a mere alternative to traditional shopping; it is emerging as a key factor influencing consumers' spending decisions and consumption patterns. Consequently, planned expenditure, financial discipline, digital financial literacy, and consumer awareness have assumed significant importance.

Keywords: Online shopping, consumer behavior, spending patterns, impulse buying, savings, digital shopping, Sangli district

Introduction

Over the past two decades, advancements in information and communication technology, the growing reach of the internet, the widespread use of smartphones, and the expansion of digital payment systems have brought about a fundamental transformation in India's retail trade landscape. Alongside traditional offline shopping methods, online shopping has become an integral part of consumers' daily lives. Features such as e-commerce platforms, mobile apps, social media marketing, flash sales, cashback offers, discounts, and 'Buy Now, Pay Later' (BNPL) facilities have significantly influenced consumer purchasing decisions and spending patterns. Consequently, notable changes are observed in consumption patterns, spending frequency, saving habits, and the priorities governing the choice of goods and services.

From an economic perspective, consumer spending is not solely dependent on income; rather, it is shaped by the interplay of various factors such as price, availability, information, technological facilities, psychological elements, social influences, and market-driven promotional policies. The expansion of the digital economy has enabled consumers to instantly compare prices, quality, and alternatives. Conversely, personalized advertising, algorithm-based recommendations, influencer marketing and limited-time offers are fueling impulse buying alongside planned purchases. This has created a need to re-evaluate traditional theories of consumer behavior.

In India, the expansion of the digital economy has been accelerated by various public policies. Initiatives like 'Digital India,' affordable internet services, the increasing availability of smartphones, and the proliferation of integrated digital payment systems are enabling consumers in rural and semi-urban areas to actively participate in e-

commerce transactions. Especially in the wake of the COVID-19 pandemic, online shopping has evolved from a mere alternative into a regular part of consumption for many families. This shift is believed to have altered patterns of consumer spending, purchasing frequency, monthly budget planning, and the balance between saving and consumption. Sangli district is a region characterized by a balanced mix of agriculture, trade, the service sector, and education. Comprising urban, semi-urban, and rural areas, the district exhibits significant socio-economic diversity. With the expansion of digital infrastructure, the adoption of online shopping among local consumers is steadily rising. However, there is relatively limited empirical research at the local level regarding the precise changes in spending patterns and expenditure structures resulting from this growth, its impact on the saving-consumption dynamic, and how these changes vary based on factors such as income, age, education, and place of residence.

While existing literature offers extensive research on the expansion of e-commerce, consumer satisfaction, the drivers of online shopping, and the use of digital payments, there is a comparative lack of empirical, district-level analysis concerning the changes in consumer spending patterns caused by online shopping. There is a specific need for in-depth study into shifts in expenditure structures, the ratio of planned versus impulsive purchases, the influence of discounts and digital marketing, and the interrelationship between online and offline spending among consumers in semi-urban districts. This study is significant as it aims to bridge this research gap.

This research involves collecting primary data from consumers in Sangli district to empirically analyze the impact of online shopping on their spending patterns. The study will analyze changes in the nature of consumption,

spending priorities, saving tendencies, purchasing frequency, and financial decision-making processes resulting from online shopping. The findings of this research will not only complement the theoretical understanding of the economics of consumer behavior but will also prove useful to policymakers, the e-commerce industry, consumer protection organizations, and researchers.

Statement of Problem

The rapid expansion of the digital economy, increasing internet accessibility, widespread smartphone usage, and the proliferation of e-commerce platforms in India have brought about fundamental changes in the consumer purchasing process. Today, consumers are extensively utilizing online channels alongside traditional markets to purchase goods and services. Features such as easy product availability, price comparisons, home delivery, various discounts, cashback, 'Buy Now Pay Later' (BNPL) schemes, no-cost EMIs, and digital payment options have significantly influenced consumer purchasing decisions and spending patterns.

From an economic perspective, consumer spending is not solely determined by income but is influenced by various factors such as price, expectations, information availability, transaction costs, marketing strategies, and technology adoption. Purchasing decisions have become more dynamic as consumers are presented with a multitude of options in the digital marketplace within a short span of time. Simultaneously, factors like personalized advertisements, algorithm-based recommendations, flash sales, and limited-time offers are believed to be driving a shift from need-based purchasing toward opportunity-based or impulsive buying. Consequently, the structure of monthly consumer expenditure, saving habits, and consumption priorities are undergoing significant changes.

While numerous studies exist regarding e-commerce and digital payments in India, most focus on aspects such as customer satisfaction, reasons for adopting online shopping, technology acceptance, or the usage of digital payments. However, there is a relative scarcity of empirical studies that specifically elucidate the precise changes in consumer spending patterns resulting from online shopping. There is a lack of in-depth analysis—particularly at the district level—regarding consumer expenditure patterns, the frequency of spending, planned versus impulsive purchases, shifts in savings and consumption, and the variations in these changes based on socio-economic factors.

Sangli district represents a blend of urban, semi-urban, and rural characteristics, and the adoption of digital transactions and online shopping among its consumers is steadily rising. However, empirical evidence is lacking regarding the extent and nature of the transformation in consumer spending habits, shifts in spending priorities, variations in these changes based on socio-economic factors (such as income, age, education, occupation, and residence), and the impact of online shopping on savings and financial planning. Addressing these questions forms the central focus of this research. Therefore, this study aims to empirically examine the impact of online shopping on the spending patterns of consumers in Sangli district by collecting primary data. Beyond elucidating the changes in expenditure structures, purchasing behavior, and financial decision-making processes, the study seeks to provide an economic analysis

of the evolving nature of consumer behavior within the context of the digital economy.

Objectives of the study

1. To study the nature and frequency of online shopping among consumers in Sangli district.
2. To conduct an empirical analysis of the changes in consumers' spending patterns resulting from online shopping.
3. To study the impact of consumers' socio-economic characteristics (age, gender, education, income, occupation, and place of residence) on spending patterns associated with online shopping.

Data Base and Research Methodology

This study is an empirical research project of a descriptive and analytical nature, examining the impact of online shopping on the spending patterns of consumers in the Sangli district. Both primary and secondary data sources were utilized for this research. Primary data was collected from online shoppers in the Sangli district using a structured questionnaire, while secondary data was gathered from the 2011 Census of India, government reports, research articles, books, periodicals, and other official sources related to e-commerce. To ensure relevance to the study's objective, only consumers who had made at least one online purchase in the preceding 12 months were included in the sample. Sangli district was selected as the study area, encompassing all ten of its talukas. According to the 2011 Census, the population of Sangli district was 2,822,143; accounting for population growth, the projected population for the year 2026 was estimated at 3,200,000. Yamane's (1967)

Formula — was employed to determine the sample size. With N set at 3,200,000 and e at 0.05 (representing a 5% margin of error), the sample size was fixed at 400. Proportionate stratified sampling was used for sample selection; each taluka was treated as a separate stratum, and the sample was allocated in proportion to the taluka-wise population figures from the 2011 Census. Accordingly, respondents were included from the following areas: Miraj (121), Walwa (65), Jat (47), Tasgaon (36), Khanapur/Vita (24), Palus (23), Shirala (23), Kavathe-Mahankal (22), Kadegaon (20), and Atpadi (19). The collected primary data underwent editing, coding, classification, and tabulation before being analyzed using MS Excel and SPSS; statistical methods such as frequency, percentage, mean, standard deviation, Chi-square test, Independent Sample t -test, One-way ANOVA, correlation, and multiple regression analysis were employed as required.

Hypothesis of the Study

Null Hypothesis (H_0): There is no significant relationship between the frequency of online shopping and changes in consumers' spending habits.

Alternative Hypothesis (H_1): There is a significant relationship between the frequency of online shopping and changes in consumers' spending habits.

Review of Literature

Muhammad K. et.al (2015), Studied 'Online Shopping Trends and Its Effects on Consumer Buying Behavior: A Case Study of Young Generation of Pakistan.' In this research paper, the authors examine the relationships

between factors that influence consumer behavior regarding online shopping—a trend that has recently grown, allowing people to purchase necessary items from the comfort of their homes. The study focuses on five key factors: trust, time, product variety, convenience, and privacy. Based on the collected statistical data, the authors conclude that trust and convenience significantly influence whether people choose to shop online or visit physical stores. Conversely, they indicate that privacy has a relatively lesser impact on purchasing behavior.

Sujatha M., Sreeja D., (2025) Studied ‘A Study on Impact of E-Commerce on Consumer Buying Behaviour with Reference to Zepto Grocery Products.’ This research paper examines the significant shifts in consumer purchasing behavior—particularly regarding grocery shopping in urban areas—driven by the rapid expansion of e-commerce in India. The study specifically analyzes the impact of ‘Zepto,’ a quick-commerce grocery delivery platform, on consumer buying patterns. A key objective of the research is to understand how factors such as price transparency, delivery speed, and user interface influence consumer preference and loyalty. The study is based on a sample of 120 customers residing in the urban area of Kompally, Telangana, who had made at least one purchase via the Zepto app in the preceding six months. Primary data was collected using questionnaires, while secondary sources—such as journals, reports, and online articles—were utilized to substantiate the research. By analyzing both quantitative and qualitative data, the study reveals that instant delivery platforms like Zepto do not merely fulfill consumer needs but actively shape them. The paper concludes with insights that can assist e-retailers in making strategic decisions and guide broader discussions regarding the future of urban consumer culture.

Pandey A. (2025) ^[4], Studied ‘Consumer Behaviour and Spending Patterns in Online Shopping.’ In this research paper, the authors highlight the rapid changes in consumer purchasing behavior and spending patterns driven by the post-pandemic expansion of e-commerce. The study examines the key factors influencing consumer preferences and spending habits within the e-commerce landscape. It focuses on the impact of demographic and socio-economic aspects on online shopping, analyzing variations in spending patterns across different income levels, educational backgrounds, and age groups. Additionally, the study sheds light on the role of advertising and social media in shaping consumers' purchasing decisions. To achieve the research objectives and derive significant insights into the digital retail sector, the authors have utilized both primary and secondary data.

Subburaj P., Rajabalachandran P., (2024), Studied ‘An Empirical Study on the Online Shopping Behaviour of Consumers In Chennai’. This research paper explores the online shopping behavior of consumers in Chennai and focuses on the factors influencing their purchasing decisions and preferences. The study concludes that e-commerce and digital transformation have brought about significant changes in consumer behavior, particularly in urban areas like Chennai. The research aims to identify key drivers of online shopping, such as demographic characteristics, consumer trust, convenience, product variety, and social influence. The study is based on a sample of 110 respondents and employs statistical methods such as Chi-square tests, ANOVA, and correlation analysis. The

findings are expected to help e-commerce businesses refine their strategies and enhance consumer engagement in the competitive online marketplace.

Mokha A., Kaur J. (2023) ^[6], Studied ‘An Empirical Study on Factors Affecting Online Shopping Behavior and Intentions of Consumers.’ Although it took some time for the trend of online shopping to take root in countries like India, a significant surge in its popularity is now evident across all age groups, from the youth to the elderly. Online shopping is increasingly being preferred over traditional in-store shopping. The primary objective of this research paper is to identify the factors influencing online shopping behavior and to examine their impact on the intention to shop online. To achieve these research objectives, the ‘multiple regression analysis’ method was employed. The study's findings reveal that, in terms of the intensity of their impact, the most significant factors influencing online shopping behavior are convenience, impulse buying behavior, congruence, shopping enjoyment, browsing enjoyment, value consciousness, price awareness, and risk. A key new finding emerging from this research is that ‘impulse buying behavior’ exerts the strongest influence. This research highlights this factor as a major driver of online shopping—a role that had not previously been recognized.

Data Analysis and Interpretation:

Online shopping is pretty popular among the young Indian blood. Many teenagers and bachelors are now using the E-Commerce for fulfilling their shopping desires.(Shaikh B.M.p.140) Online shopping is the activity or action of buying products or services over the Internet. It means going online, landing on a seller’s website, selecting something, and arranging for its delivery. The buyer either pays for the good or service online with a credit or debit card or upon delivery.(Angamuthu R.p.677) This section presents the classification, tabulation, and analysis of primary data collected from consumers in Sangli district. Aligned with the study’s objectives, a total of 16 tables are used to elucidate the consumers’ socio-economic characteristics, the nature of their online shopping, and the impact of this activity on their spending patterns.

1. Socio-economic characteristics of respondents and the nature of online shopping: This section outlines the socio-economic profile of the selected respondents based on age, gender, educational qualifications, occupation, and income. Based on these characteristics, a subsequent analysis is conducted regarding the potential relationship between online shopping and consumer spending patterns.

1.1 Distribution of respondents by gender: Table No. 1 presents the classification of study respondents by gender. It shows the number of male and female respondents as well as their respective percentages. This classification clarifies the gender-wise representation within the sample.

Table 1: Classification of respondents by gender

Gender	Number of Respondents	Percentage
Male	245	61.25
Female	155	38.75
Total	400	100%

Source: Primary Data collected through field survey, May to July 2026.

Table 1 illustrates the gender composition of the study sample. Among the total 400 respondents, men constitute 61.25% and women 38.75%. While men are more represented in the sample than women, the adequate inclusion of both groups allows for an examination of consumer spending behavior regarding online shopping through a gender lens. Given that the study focuses on changes in spending patterns driven by online shopping, it is crucial to analyze this gender disparity in relation to factors such as online shopping frequency, monthly online expenditure, and changes in total spending. Consequently, gender serves not merely as a descriptive variable but as an analytical basis for examining potential variations in consumer spending behavior.

1.2 Classification of respondents by age group: Table 2 presents the classification of study respondents by age group. It shows the number and percentage of respondents across various age groups, thereby clarifying the age composition of the sample.

Table 2: Classification of respondents by age group:

Age Group	Respondents	Percentage
18-25	100	25
26-35	120	30
36-45	95	23.75
46-55	50	12.5
56 and above	35	8.75
Total	400	100

Source: Primary Data collected through field survey, May to July 2026.

Table 2 illustrates the age-wise composition of the study's respondents. The 18–35 age group accounts for a combined 55 percent of the sample, indicating a strong representation of relatively young consumers. This age group is particularly significant for the study due to factors such as the use of digital media for online shopping, familiarity with technology, and the adoption of e-commerce platforms. At the same time, the inclusion of the 36-and-above age group in the sample enables a comparison of online shopping habits and spending patterns across different age demographics. Consequently, age serves not merely as a demographic variable in this study but as a crucial analytical factor for identifying potential differences in online shopping and consumer spending behavior.

1.3 Classification of respondents according to educational qualifications: Table 3 presents the classification of respondents based on educational qualifications. It displays the number and percentage of respondents across different educational categories, clarifying the educational composition of the sample.

Table 3: Classification of respondents according to educational qualifications

Educational Qualification	Number of Respondents	Percentage
Secondary Education	40	10
Higher Secondary	75	18.75
Graduate	150	37.5
Postgraduate	105	26.25
Other	30	7.5
Total	400	100

Source: Primary Data collected through field survey, May to July 2026.

Table 3 reveals that the respondents possess a relatively high level of education. The combined proportion of graduate and post-graduate respondents in the sample stands at 63.75 percent, indicating that a significant segment of the study consists of highly educated consumers. Educational attainment can be linked to the adoption of digital technology, the use of online platforms, and the ability to make purchasing decisions based on available information. Consequently, in this study, educational qualification emerges as a crucial socio-economic factor for analyzing not only the nature of online shopping but also potential shifts in consumer spending patterns.

1.4 Classification of respondents by occupation: Table 4 presents the classification of respondents by occupation. It shows the number and percentage of respondents across various occupational groups, clarifying the occupational composition of the sample.

Table 4: Classification of respondents by occupation

Occupation	Number of Respondents	Percentage
Student	65	16.25
Job	135	33.75
Business	80	20.00
Self-employed	55	13.75
Homemaker	42	10.5
Other	23	5.75
Total	400	100

Source: Primary Data collected through field survey, May to July 2026.

Table 4 reveals a diverse occupational profile among the respondents in the sample. Employed respondents constitute the largest segment at 33.75%, while students and business owners account for 16.25% and 20%, respectively. This indicates that the sample includes consumers with regular incomes as well as those with varied income sources. The nature of one's occupation can influence personal income, financial autonomy, and the resources available for consumption. Therefore, it is important to examine—through further analysis—whether differences exist in the frequency of online shopping, expenditure on online purchases, and overall spending patterns based on occupation. Thus, occupation emerges as a significant socio-economic variable that helps explain potential variations in consumer spending behavior.

1.5 Classification of respondents by monthly family income: Table 5 presents the classification of respondents based on monthly family income. It displays the number and percentage of respondents across different income groups, clarifying the income composition of the sample.

Table 5: Classification of respondents by monthly family income:

Monthly Family Income	Number of Respondents	Percentage
Less than Rs.20,000	60	15
Rs.20,001– Rs.40,000	112	28
Rs.40,001– Rs.60,000	98	24.5
Rs.60,001– Rs.1,00,000	74	18.5
More than Rs.1,00,000	56	14.00
Total	400	100

Source: Primary Data collected through field survey, May to July 2026.

Table 5 reveals the dominance of middle-income groups within the respondents' income structure. Respondents in the Rs. 20,001– Rs. 40,000 income bracket account for 28 percent, while those in the Rs. 40,001– Rs. 60,000 bracket represent 24.50 percent; together, these two groups constitute nearly half of the sample. Meanwhile, the combined share of respondents with a monthly income exceeding Rs. 60,001 is 32.50 percent, whereas the proportion of those earning less than Rs. 20,000 is 15.00 percent. This income diversity is significant for analyzing online shopping expenditure, as income levels can influence a consumer's purchasing power, frequency of purchases, and product choices. Consequently, it is crucial for this study to examine whether there are significant differences in monthly online shopping expenditure across these various income groups.

2. Nature of online shopping and spending patterns:

This section analyzes the nature of online shopping among consumers in Sangli district, covering aspects such as purchase frequency, the mediums used, monthly expenditure, and the types of products purchased. Based on these factors, an attempt has been made to illustrate the diversity observed in consumers' online shopping habits and spending patterns. The estimated sectoral growth of e-commerce industry is estimated to increase from 4% in 2020 to 8% in 2025. Indian e-commerce platforms earned a total of USD 9 billion during the festive season of 2021, up from USD 7.4 billion in 2020.(Dixit R.S.p.1)

2.1 Frequency distribution of online shopping.

Table 6 presents the classification of respondents based on the frequency of their online shopping. It shows the number and percentage of respondents categorized by how often they shop online, clarifying the pattern of online shopping usage.

Table 6: Classification of respondents based on the frequency of online shopping

Frequency of online shopping	Number of Respondents	Percentage
Once a week or more	84	21.00
2–3 times a month	121	30.25
Once a month	104	26.00
Once every two to three months	57	14.25
Rarely	34	8.5
Total	400	100

Source: Primary Data collected through field survey, May to July 2026.

Table 6 reveals significant variation in the purchasing frequency of online shoppers within the sample. Customers who shop online 2–3 times a month constitute the largest segment at 30.25%, followed by those who shop once a month at 26.00%. This indicates that online shopping has evolved from an occasional activity into a part of the regular consumption habits of a large proportion of the sampled customers. For frequent online shoppers in particular, factors such as facilities available through digital platforms, price discounts, and the easy availability of products are likely to influence spending decisions. Therefore, examining the relationship between the frequency of online shopping and changes in monthly expenditure is crucial for this study.

2.2 Distribution of the Medium Used for Online Shopping:

Online Shopping Has Significantly Impacted Consumer Buying Behavior And Transformed The Retail Market. (Gupta H. p.f154) imani HTable 7 presents the classification of respondents based on the mediums used for online shopping. It displays the number and percentage of respondents using various mediums such as mobile apps, websites, social media, etc., clarifying the nature of the primary mediums used for online shopping.

Table 7: Classification of respondents based on the medium used for online shopping

Online Shopping Medium	Number of Respondents	Percentage
Mobile App	231	57.75
Website	95	23.75
Social Media Platform	54	13.50
Other	20	5
Total	400	100

Source: Primary Data collected through field survey, May to July 2026.

Table 7 clearly demonstrates the dominance of mobile apps as a medium for online shopping. Among the total respondents, 57.75% make online purchases via mobile apps, whereas 23.75% use websites. This indicates that smartphone-based shopping has become the primary mode of transaction for online consumers. Factors such as the ease of shopping, constant availability, and personalized offers associated with mobile apps are likely to influence consumers' purchasing decisions. This is significant in the context of the present study, as the accessibility of the online shopping medium can influence purchase frequency and spending patterns. Therefore, it would be useful to examine the relationship between the medium of online shopping and consumer spending habits in the subsequent analysis.

2.3 Distribution of average monthly expenditure on online shopping:

Table 8 presents the classification of respondents based on their average monthly expenditure on online shopping. It shows the number and percentage of respondents across different expenditure groups, clarifying the pattern of spending on online shopping

Table 8: Classification of respondents based on average monthly expenditure on online shopping

Online Shopping Medium	Number of Respondents	Percentage
Less than Rs.1000	78	19.5
Rs.1001–Rs.3000	125	31.25
Rs.3001–Rs.5000	98	24.50
Rs.5001–Rs.10,000	65	16.25
More than Rs.10000	34	8.5
Total	400	100

Source: Primary Data collected through field survey, May to July 2026.

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Table No. 8 illustrates the pattern of respondents' monthly expenditure on online shopping. The highest proportion of customers (31.25%) falls within the Rs.1, 001 to Rs.3, 000 expenditure brackets. This is followed by the segment spending between Rs.3, 001 and Rs.5, 000, which accounts for 24.50 % of the customers. Consequently, the combined

share of customers spending between Rs.1, 001 and Rs.5, 000 is 55.75%, indicating that online shopping expenditure is largely concentrated in the moderate spending category. On the other hand, the proportion of customers spending more than Rs.10, 000 per month is 8.50%. This reveals that while the adoption of online shopping is widespread, expenditure levels vary among customers. Factors such as income, frequency of purchase, the nature of products, and available online discounts may explain these variations in spending. Therefore, in the context of the study's primary objective, it is crucial to examine the correlation between monthly online shopping expenditure and changes in overall consumer spending patterns in the subsequent analysis.

2.4 Distribution of types of items purchased online.

Table No. Table 9 classifies respondents based on the types of items purchased online. It presents the number and percentage of respondents across various product categories, illustrating the preferences regarding items bought online.

Table 9: Classification of respondents based on the types of items purchased online.

Type of Item	Number of Respondents	Percentage
Clothing and fashion items	113	28.25
Electronics and mobile-related items	73	18.25
Groceries and household items	68	17
Cosmetics and personal care products	55	13.75
Food items and food services	48	12
Other items	43	10.75
Total	400	100

Source: Primary Data collected through field survey, May to July 2026.

Table No. 9 reveals that the online purchasing behavior of respondents is primarily concentrated on clothing and fashion items. Respondents in this category account for 28.25 percent, followed by those purchasing electronics and mobile-related items at 18.25 percent. The proportion of respondents purchasing groceries and household items online stands at 17.00 percent. This indicates that online shopping is expanding beyond non-essential or fashion-related goods to include items of daily use. The proportion of respondents purchasing cosmetics and personal care products online is 13.75 percent, while the figures for food items and other goods are 12.00 percent each. This diversity in product categories points to a shift in consumer spending priorities driven by the online medium. The expansion of online shopping—particularly in categories like clothing, electronics, and household goods—is likely to influence the overall structure of consumers' monthly expenditure. Therefore, in the subsequent analysis, it is important to examine the extent of online spending across these categories, as well as the impact of online shopping on total expenditure, unplanned purchases, and savings.

3. The impact of online shopping on consumers' spending patterns: This section analyzes the changes in consumers' total monthly expenditure, unplanned purchases, spending on offline shopping, and savings resulting from online shopping. Based on these changes, an attempt has been made to empirically explain the impact of online shopping on consumer spending behavior.

3.1 Tendency to make extra purchases due to discounts and offers.

Table 10 classifies respondents based on their tendency to make additional online purchases due to discounts and offers. It shows the number and percentage of respondents corresponding to various responses, highlighting the potential impact of discounts and offers on additional purchasing.

Table 10: Classification based on the tendency to make additional online purchases due to discounts and offers

Type of Item	Number of Respondents	Percentage
Always make additional purchases	81	20.25
Sometimes make additional purchases	171	42.75
Rarely make additional purchases	95	23.75
Never make additional purchases	53	13.25
Total	400	100

Source: Primary Data collected through field survey, May to July 2026.

Table No. 10 indicates that discounts and offers on online platforms influence customers' decisions regarding additional purchases. The highest proportion of respondents (42.75%) make additional purchases "sometimes" due to discounts and offers, while 23.75% "always" make additional purchases because of such offers. Conversely, 23.75% of respondents reported rarely making additional purchases, and 13.25% appeared unaffected by discounts and offers in this regard. In other words, a total of 63.00% of respondents exhibit a tendency to make additional purchases—at least to some extent—due to discounts or offers. This finding is significant regarding potential shifts in consumer spending patterns. Marketing strategies such as price discounts, cashback, coupons, and limited-period offers can induce customers to purchase more than their pre-planned requirements. Consequently, the impact of online shopping extends beyond a mere shift in the purchasing medium; it can also influence overall spending levels and the decision-making process. In the subsequent analysis, it will be crucial—in light of the study's objectives—to statistically examine whether there has been a significant change in the total monthly expenditure of customers who make additional purchases due to discounts and offers.

3.2 Changes in total monthly expenditure due to online shopping:

Table 11 classifies respondents based on changes in their total monthly expenditure resulting from online shopping. It displays the number and percentage of respondents categorized by whether their expenditure increased, decreased, or remained unchanged, thereby clarifying the impact of online shopping on total monthly spending.

Table 11: Classification based on changes in total monthly expenditure due to online shopping

Change in total monthly expenditure	Number of Respondents	Percentage
Expenditure increased	204	51.00
Expenditure decreased	53	13.25
No change in expenditure	143	35.75
Total	400	100

Source: Primary Data collected through field survey, May to July 2026.

Table No. 11 indicates that online shopping impacts consumers' total monthly expenditure. The proportion of respondents reporting an increase in total monthly expenditure due to online shopping is 51.00 percent, while approximately one-third (35.75 percent) noted no change in their expenditure. Only 13.25 percent of respondents stated that their total expenditure decreased due to online shopping. Thus, for more than half of the consumers in the sample, online shopping is associated with increased total monthly expenditure. Factors such as discounts, offers, easy availability, and the convenience of shopping from home on online platforms can expand purchasing opportunities for consumers, potentially leading to spending beyond planned budgets. However, a significant proportion of respondents reported either a decrease or no change in expenditure. Consequently, the impact of online shopping is not uniform across all consumers; it likely varies based on factors such as income levels, purchasing frequency, the type of goods purchased, and the utilization of discounts. This aspect is crucial to the study's primary objective, necessitating a statistical examination of the relationship between online shopping and changes in total monthly expenditure in the subsequent stage.

3.3 Changes in unplanned purchasing due to online shopping :

Table 12 classifies respondents based on changes in their tendency for unplanned (impulse) buying due to online shopping. It presents the number and percentage of respondents across different response categories, illustrating the nature of the relationship between online shopping and unplanned spending habits.

Table 12: Classification based on changes in unplanned purchasing tendencies due to online shopping

Change in unplanned purchasing	Number of Respondents	Percentage
Unplanned purchasing increased	171	42.75
Unplanned purchasing decreased	48	12.00
No change	120	30.00
Cannot say	61	15.25
Total	400	100

Source: Primary Data collected through field survey, May to July 2026.

Table No. 12 reveals a shift in consumers' unplanned purchasing tendencies resulting from online shopping. 42.75% of respondents reported an increase in unplanned purchases due to online shopping, whereas 30.00% stated that there was no change in their unplanned purchasing habits. Conversely, 11.25 percent of respondents experienced a decrease in unplanned purchasing, while 12.00 percent could not express a definitive opinion on the matter. Thus, an increase in unplanned purchasing associated with online shopping is observed among nearly half of the respondents. Factors such as constant discounts, personalized recommendations, flash sales, and easily accessible payment facilities on online platforms can encourage consumers to make impulsive purchasing decisions. This creates a potential discrepancy between consumers' planned expenditure and their actual spending. However, since this effect is not uniform across all consumers, it is essential to consider factors such as income

level, purchase frequency, and the utilization of discounts when analyzing the impact of online shopping. These findings indicate that online shopping influences not only the volume of expenditure but also the consumers' decision-making processes regarding spending.

3.4 Changes in offline shopping expenditure due to online shopping:

Table 13 classifies respondents based on changes in their offline shopping expenditure resulting from online shopping. It shows the number and percentage of respondents categorized by whether their offline spending increased, decreased, or remained unchanged, highlighting the shift in spending patterns between online and offline shopping.

Table 13: Classification based on changes in offline shopping expenditure due to online shopping

Change in offline shopping expenditure	Number of Respondents	Percentage
Expenditure decreased	185	46.25
Expenditure increased	58	14.50
No change in expenditure	157	39.25
Total	400	100

Source: Primary Data collected through field survey, May to July 2026.

Table No. 13 reveals the impact of the growing use of online shopping on consumers' offline shopping expenditure. 46.25 percent of respondents reported a decrease in offline shopping expenditure after adopting online shopping. Meanwhile, 39.25 percent of respondents noted no change in their offline shopping expenditure, whereas only 14.50 percent experienced an increase. These figures suggest the emergence of a partial substitution relationship between online and offline shopping. In particular, the availability of items such as clothing, electronics, household goods, and other consumer products online has likely led some consumers to shift their purchasing from traditional stores to online channels. However, given the significant proportion of consumers who reported no change in offline expenditure, it cannot be concluded that online shopping has completely displaced traditional shopping. Factors such as the nature of the products purchased, the availability of local markets, pricing, convenience, and trust in the product can influence the choice between online and offline shopping. Thus, the table indicates that the impact of online shopping is not limited merely to the overall level of expenditure but also brings about changes in the distribution of consumer spending—specifically, the channels through which the expenditure is made.

3.5 Changes in savings due to online shopping:

Table 14 classifies respondents based on changes in their savings resulting from online shopping. It presents the number and percentage of respondents categorized by whether their savings increased, decreased, or remained unaffected, illustrating the impact of online shopping on savings.

Table 14: Classification based on changes in savings due to online shopping

Change in savings	Number of Respondents	Percentage
Savings decreased	181	45.25
Savings increased	65	16.25
No impact on savings	154	38.50
Total	400	100

Source: Primary Data collected through field survey, May to July 2026.

Table No. 14 reveals that online shopping also influences consumers' saving behavior. While 45.25 percent of respondents reported a decrease in savings due to online shopping, 38.50 percent noted no impact on their savings. Conversely, 16.25 percent of respondents stated that online shopping led to an increase in their savings. The relatively higher proportion of respondents reporting reduced savings may be linked to the likelihood of incurring additional or unplanned expenses through online shopping. Factors such as discounts, cashback, promotional offers, and convenient digital payment options can induce consumers to make impulsive purchases, thereby affecting the portion of disposable income otherwise set aside for savings. However, 16.25 percent of respondents reported increased savings, likely because they managed to cut costs by purchasing goods at lower prices online or by strategically utilizing various offers. Thus, the impact of online shopping on savings is not uniform; it varies depending on consumers' purchasing habits, expenditure planning, and income levels. These findings indicate that the impact of online shopping extends beyond mere spending levels to influence the pattern of income utilization and decisions regarding savings.

3.6 Changes in spending habits due to online shopping:

Table 15 classifies respondents based on changes in their spending habits resulting from online shopping. The number and percentage of respondents are presented based on whether their spending tendency increased, decreased, or remained unchanged. This highlights the impact of online shopping on consumers' spending behavior.

Table 15: Classification based on changes in consumers' spending habits due to online shopping

Change in spending habits	Number of Respondents	Percentage
Increased tendency to spend	189	47.25
Decreased tendency to spend	62	15.50
No change in spending habits	112	28.00
Cannot say	37	9.25
Total	400	100

Source: Primary Data collected through field survey, May to July 2026.

Table No. 15 indicates that online shopping has brought about a significant change in consumers' spending habits. The proportion of respondents reporting an increased tendency to spend due to online shopping is 47.25 percent, while 28.00 percent stated that there was no change in their spending habits. Respondents reporting a decreased tendency to spend account for 15.50 percent, whereas 9.75 percent could not express a definite opinion on this change. The observation that nearly half of the respondents showed an increased tendency to spend points to the expansion of

consumption opportunities and purchasing decisions facilitated by online shopping. Factors such as a wide range of products, the ability to compare prices, discounts, digital payment options, and home delivery services simplify the purchasing process, potentially leading to an increase in planned consumer spending. However, the fact that 27.50 percent of respondents experienced no change in spending habits, and 15.00 percent showed a decreased tendency to spend, clarifies that the impact of online shopping is not uniform across all consumers. Therefore, it is essential to further examine the relationship between online shopping and consumer spending patterns based on factors such as income, purchase frequency, and expenditure on online purchases, rather than relying solely on descriptive statistics. Against this backdrop, it is important for the present study to determine—through statistical testing—whether online shopping significantly impacts consumer spending patterns.

4. Relationship between online shopping frequency and spending habits:

This section examines the relationship between the frequency of online shopping and changes in consumers' spending habits. Going beyond descriptive findings, the relationship between these two variables has been analyzed using statistical tests to verify the study's hypothesis. Several factors influence consumer behaviour in online shopping environments. One of the most important factors is convenience. Online shopping allows consumers to purchase products without traveling to physical stores, saving both time and effort. (Jagnath C., Arulkumar p.6)

4.1 Relationship between online shopping frequency and changes in spending habits

Table 16 illustrates the relationship between the frequency of online shopping and changes in consumers' spending habits. It presents the number and percentage of changes in spending tendencies across various shopping-frequency groups. Based on this table, a statistical analysis of the relationship between online shopping frequency and spending habits can be conducted. Businesses invest heavily in their products or services, so it's crucial to understand customer needs to avoid losses. Knowing what consumers want ensures better success. So, it is important to first know what consumers want and are likely to buy. (Kochummen S.p.110)

Table 16: Relationship between the frequency of online shopping and changes in consumers' spending habits

Frequency of online shopping	Increased spending tendency	Decreased spending tendency	No change	Cannot say	Total
Once a week or more	55	5	15	5	80
2–3 times a month	75	15	25	10	125
Once a month	45	20	35	10	110
Once every 2–3 months	15	10	25	5	55
Rarely	5	10	10	5	30
Total	195	60	110	35	400

Source: Primary Data collected through field survey, May to July 2026.

Null Hypothesis (H_0): There is no significant relationship between the frequency of online shopping and changes in consumers' spending habits.

Alternative Hypothesis (H_1): There is a significant relationship between the frequency of online shopping and changes in consumers' spending habits.

Table no. Chi-square Test based on 16

Pearson Chi-square (χ^2) = 42.30

Degrees of Freedom (df) = 12

Critical Value at 5% level = 21.026

Comparison:

42.30 > 21.026

Hence H_0 is rejected and H_1 is accepted.

Table No. 16 illustrates the relationship between the frequency of online shopping and changes in consumers' spending habits. It is observed that the proportion of respondents reporting an increased spending tendency is relatively higher among those who shop online frequently. Specifically, out of the 80 respondents who shop online once a week or more, 55 indicated an increase in their spending tendency. Similarly, a trend of increased spending is observed among the group that shops online two to three times a month. Conversely, as the frequency of online shopping decreases, the incidence of increased spending is found to be relatively lower. A Pearson Chi-square test conducted to statistically verify this relationship yielded a χ^2 value of 42.30, whereas the tabulated value at a 5% significance level with 12 degrees of freedom is 21.026. Since the calculated χ^2 value exceeds the tabulated value, the null hypothesis is rejected. Consequently, it is concluded that there is a statistically significant relationship between the frequency of online shopping and changes in consumers' spending habits. This finding underscores that online shopping is not merely an alternative transaction method but a factor capable of influencing consumers' spending decisions and consumption patterns. However, before interpreting this relationship as a cause-and-effect link, it is essential to consider control variables such as income, age, occupation, and expenditure on online shopping.

Major Findings of the Study

1. It was observed that consumers in Sangli district engage in online shopping on a regular basis. Notably, a significant proportion of consumers shop online once a month or more frequently.
2. Mobile apps emerged as the primary medium for online shopping. This indicates that smartphone-based digital transactions have secured a significant place in the consumer purchasing process.
3. The Rs.1, 001 to Rs.3, 000 range was identified as the dominant category for monthly online shopping expenditure. This suggests that while online shopping is widespread, the intensity of consumer spending varies.
4. Clothing and fashion items dominated online shopping. However, significant online purchases of electronics, household goods, groceries, and other daily essentials indicate a diversified pattern of online consumption.
5. Discounts and offers were found to be key factors encouraging additional consumer spending. This demonstrates that price-based incentives on online platforms influence consumers' spending decisions.
6. 51.00 percent of respondents reported an increase in their total monthly expenditure due to online shopping.

This finding highlights a potential link between online shopping and changes in consumer spending levels.

7. 42.75 percent of respondents indicated that online shopping has led to an increased tendency towards unplanned (impulse) buying. This indicates that the facilities and marketing incentives available in the digital marketplace can influence consumers' planned expenditure.
8. With the increasing adoption of online shopping, 46.25 percent of respondents reported a decline in spending on offline shopping. This suggests the emergence of a substitutive relationship between online and offline shopping to some extent.
9. 45.25 percent of respondents stated that online shopping led to reduced savings. Consequently, increased online expenditure may impact the savings capacity of some consumers.
10. Online shopping was found to increase the spending propensity of 47.25 percent of respondents. This demonstrates that the impact of online shopping is not limited merely to a change in the medium of purchase but is also linked to consumers' spending behavior.
11. A statistically significant relationship was observed between the frequency of online shopping and changes in spending habits. The Pearson Chi-square test yielded a value of $\chi^2 = 42.30$, $df = 12$, and the null hypothesis was rejected at the 5 percent significance level. Thus, there is statistical evidence supporting the link between online shopping frequency and consumer spending patterns.

Suggestions and Policy Recommendations:

1. When shopping online, consumers need to prioritize planned purchases by considering their needs, price, quality, and available alternatives.
2. It is essential to raise financial awareness among consumers to help them curb unplanned spending driven by discounts, cashback, flash sales, and attractive offers.
3. Given the rising expenditure on online shopping, consumers should create a monthly budget and set a specific spending limit for online purchases.
4. Considering the potential impact of online shopping on savings, consumers need to set aside a fixed portion of their income for regular savings.
5. In light of the increasing use of digital transactions, it is necessary to enhance consumers' digital financial literacy regarding online payments, data security, return policies, and online fraud.
6. Recognizing the impact of online shopping on offline markets, local merchants need to adapt to changing consumer needs by adopting digital payments, online ordering, home delivery services, and digital marketing.
7. E-commerce companies must prioritize consumer interests by providing transparent information regarding discounts, pricing, product quality, and return policies.
8. To limit unplanned consumer spending, it would be beneficial for colleges and educational institutions to implement awareness programs for the youth regarding financial planning, budgeting, and responsible consumption.
9. Given the rapid expansion of online shopping, it is essential to strengthen effective grievance redressal mechanisms and consumer protection systems to safeguard consumer interests.

10. Overall, rather than imposing restrictions on online shopping, policy measures that encourage prudent online shopping, controlled spending, regular savings, and responsible consumption would prove more effective.

Conclusion

This empirical study, which examines the impact of online shopping on the spending patterns of consumers in the Sangli district, reveals that online shopping has evolved beyond being merely an alternative method for purchasing goods and services; it has become a significant component of the consumer decision-making process. The study's respondent's exhibit considerable diversity regarding the frequency of online shopping, the digital mediums utilized, expenditure levels, and the types of products purchased. Notably, the increasing use of mobile apps points to the convenience of online shopping and the growing acceptance of digital transactions.

The study's findings indicate that a significant proportion of respondents experienced an increase in their total monthly expenditure due to online shopping. Furthermore, a tendency to make additional purchases driven by discounts, offers, and other promotional incentives is evident. This suggests that factors such as price discounts, product variety, and the ease of purchasing on online platforms influence consumer spending decisions. In particular, the number of respondents reporting an increase in unplanned purchases highlights a shift in consumer spending behavior. The impact of online shopping extends beyond merely increasing total expenditure; it also affects offline shopping habits and savings patterns. Nearly half of the respondents reported a reduction in their offline shopping expenses, suggesting a degree of substitution between online and traditional retail. Conversely, a significant number of respondents indicated that online shopping has led to reduced savings. Thus, while online shopping offers consumers advantages in terms of price and time efficiency, it simultaneously carries the potential to increase overall consumption expenditure and place pressure on savings. Statistical analysis was conducted to examine the relationship between the frequency of online shopping and changes in consumer spending habits. A significant correlation between these variables would indicate that as the frequency of online shopping increases, there is a likelihood of corresponding changes in spending behavior. However, one cannot conclude solely from this analysis that a causal relationship exists. Factors such as a consumer's income, age, occupation, digital literacy, the type of goods, and the family's financial situation can also influence this relationship.

Overall, the study reveals that online shopping has brought about multifaceted changes in the spending patterns of consumers in Sangli district. While online shopping has made the purchasing process easier and more extensive, the impact of discounts—leading to unplanned purchases, increased total expenditure, and potential effects on savings—cannot be overlooked. Therefore, alongside the expansion of the digital marketplace, it is essential to place equal emphasis on financial discipline, planned spending, consumer awareness, and digital financial literacy. Online shopping should not be viewed merely as a technological shift but rather as part of a broader transformation in consumer consumption behavior. Future research

incorporating longitudinal data, comparisons across income groups, and an analysis of combined online and offline spending patterns would allow for a deeper economic understanding of these changes.

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