Research Article

Analyzing the Success Factors Of Quick Commerce In India: A Study On Customer Satisfaction And Demographic Influences

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ARTICLE INFO	ABSTRACT
	Purpose: In India, grocery shopping is undergoing a transformative change with the rapid rise of Quick Commerce (Q commerce) platforms. The aim of our research is twofold: to pinpoint the primary drivers behind consumer satisfaction and habitual usage of these websites, and to evaluate the impact of demographic factors on consumers' intentions to make purchases. **Design/Methodology/Approach** – Using a structured questionnaire and a 10-point Likert scale, we collected data from a random sample of 137 respondents through a correlational approach. Multiple Regression, ANOVA, and t-tests were used for empirical estimations. **Findings-** 75% of the respondents rated timely delivery as highly satisfying, and this, along with product quality and return/refund policies, were found to be significant contributors to consumer satisfaction. While convenience and speedy delivery were the top reasons behind sustained and frequent usage of Q Commerce platforms, it was unexpectedly discovered that demographic variables like age, gender, income, and occupation had no significant impact on purchase intentions within this context. **Practical Implications-** Enhancing customer satisfaction and fostering a loyal customer base are top priorities for Q Commerce businesses. Based on the escalating competition, improving delivery speed, product quality, and convenience are pivotal to achieving success. This study offers useful insights to assist in accomplishing these goals. **Originality/Value-** In India's burgeoning Q Commerce sector, this research delves into the factors that underpin consumer satisfaction and loyalty, showcasing a pioneering effort. Industry stakeholders can leverage actionable recommendations that offer unique insights. **Keywords-** Quick Commerce, Drivers of Quick Commerce, Customer Satisfaction, consumer, stakeholders.

INTRODUCTION

The quick expansion of the Quick Commerce platform has significantly altered the Indian retail environment. In an era where convenience and instant gratification are paramount, these platforms have emerged as game-changers in the grocery shopping arena (Shin et al., 2021; Mittal & Mehta, 2021). Q-commerce represents a new frontier in the e-commerce domain, promising swift deliveries of essential products, frequently within the extremely short timeframes of thirty minutes to an hour (Ertz, 2020; Stojanov, 2022). As these Q-commerce platforms continue to gain popularity, an important question is raised: Does the reality match the promises of quickness and effectiveness? It's critical to think about how accurate the "quick" in Q-Commerce is at a time when consumers' expectations are shaped by instant access to information and goods.

India's e-commerce boom has seen significant changes, such as the emergence of doorstep delivery services and the proliferation of online marketplaces. The introduction of Q-Commerce, however, represents a paradigm change that attempts to completely modernize the idea of "quick delivery" (Vermani & Priyadarshi, 2021). These platforms have become a popular choice, offering to quickly satisfy fundamental requirements as consumers look for both convenience and immediacy. Although Q-Commerce has grown rapidly, important questions have also been brought up by this (Khern-am-nuai et al., 2023). Are these platforms truly delivering on their promise of speed, convenience, and customer satisfaction? What influences do consumers have when they choose to use and rely on Q-Commerce platforms, and do demographic factors have any bearing on what they buy? There is currently a dearth of thorough empirical research addressing these important issues. Therefore, the two objectives of this study are:

- To understand the drivers for sustained and frequent usage of a Q commerce platform
- To evaluate the factors responsible for Customer Satisfaction in purchasing from a

Q Commerce Platform

- To explore the relationship between sustained and frequent usage of a Q Commerce platform and Customer Satisfaction.
- To analyze the demographic variables of age, gender, occupation, and income from the point of view of influence on the purchase intent from a Q Commerce platform

This study uses a structured questionnaire and a 10-point Likert scale to collect information from a random sample of 137 respondents to achieve these goals. The correlational methodology used in this study relies on multiple regression, ANOVA, and t-tests for reliable analysis and insightful conclusions.

The organization of this manuscript is as follows: Section 2 delves into a thorough literature review, placing the research in the context of a broader context and highlighting important lines of inquiry. Section 3 then elaborates on the research methodology. In section 4, the results are presented and discussed, with connections being made between the factors that contribute to sustained platform usage. Section 5 summarizes the study's main conclusions and the implications for Q-Commerce stakeholders.

2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Quick Commerce or Q Commerce as the name suggests is all about delivering products speedily and fast (Krier et al., 2022). The speed of delivery has been increasing over the years (LaBerge et al., 2020). Some of the earlier movers in this area have been the 30-minute Pizza offers from Domino as well as Prime deliveries from Amazon. The pandemic only hailed this further (Deloitte Digital, 2022). As mentioned in the preceding section, Q commerce has filled in the need gap of the consumer that was not being addressed by traditional e-commerce (RedSeer Consulting, 2022.). However, it is necessary to ascertain the drivers that would lead to frequent and sustained usage of Q Commerce platforms as well as factors that impact customer satisfaction with these platforms.

2.1. Key Drivers of Frequent Purchases in Quick Commerce Platforms

Delayed deliveries have been one of the major pain points for traditional e-commerce players. In addition to that, inconvenient delivery time slots as well as lesser variety led to slow adoption of e-commerce by the consumers. Q commerce has been able to address these pain points successfully leading to rapid adoption and growth. (Mukhopadhyay, 2022)

Q Commerce website essentially ensures delivery within half an hour or at the most one hour. This has led to a lot of unplanned and top-up purchases that are seemingly time-consuming even in traditional e-commerce and more in the event of purchase from a local Kirana store. An increased affinity of Gen Z towards top-up and unplanned purchases which accounts for two-thirds of India's consumable spending is driving this segment. (RedSeer Consulting, 2022.) Another important factor that drives the growth of this sector is convenience. The pandemic forced consumers to shop online which has become a matter of convenience, and choice post the pandemic. Moreover, in case of unplanned purchases, making trips to the Kirana shops or waiting for the traditional e-commerce platform to deliver becomes a hassle and the Q commerce platform is the right answer to these troubles. (Grant Thornton, 2022.) Given the time crunch that most nuclear families today face, convenience in shopping is a factor that carries a lot of weight. Here the concerned consumer spends about 5 minutes on the app and the order is placed. And the ordered products are at your doorstep in less than half an hour. This convenience is not available in any other shopping option (J M Financial, 2022.) The traditional Kirana stores operate on very low margins. Owing to this, giving discounts on the MRP or special offers is not possible for the Kirana owner. So, the products are sold at MRP. On the other hand, the Q Commerce platforms operate on a very large scale, have direct relationships with brands

and manufacturers, and can leverage their negotiation power to get huge discounts, leading to substantial cost savings. These cost savings are then passed on to the Consumers in the form of offers or discounts on the MRP (J M Financial, 2022.). A report by Grant Thornton says that 81% of users of Q Commerce were driven by Discounts and offers, which indicates that this is an important factor according to the consumers driving the frequent and sustained usage of Q Commerce platforms (Grant Thornton, 2022.). Literature review indicates that Consumers prefer to shop in one place (physical or online for all their shopping needs). Q Commerce platforms carry a really large assortment comprising Stock Keeping Units (SKUs) in the range of 2000 to 4000 (J M Financial, 2022.). Given this, consumers have a wide assortment to choose from with the availability of a variety of brands and products. Just as mentioned in the above point, the Kiranas with their limited investment and space are unable to compete with the Q Commerce platforms on this front (Deloitte Digital, 2022)

Having seen the factors that are driving frequent and sustained usage of Q Commerce platforms, let us now look at the drivers of consumer satisfaction. As mentioned here, the consumers have moved towards Q Commerce owing to various factors like speed, convenience, assortment, and offers and discounts, these are the minimum that the consumers expect from the Q Commerce platforms. These factors are considered mandatory or default. However, one needs to ascertain that when a consumer purchases from a Q Commerce platform, what are the basic expectations, and does the fulfillment of these expectations lead to Customer Satisfaction? In other words, what are the factors that lead to customer satisfaction on purchase from a Q commerce platform

2.2. Factors impacting Consumer satisfaction with respect to Q Commerce platforms

 Driven by the Pandemic, Consumers moved towards the Q Commerce platforms. Speed and convenience were the two important factors that led to continued usage even after the restrictions levied during the Pandemic were removed (Huang & Yen, 2021). However, in doing so there are certain expectations that the consumers have that need to be fulfilled to satisfy the consumer. Drawing from the literature on brand loyalty, one can argue that only satisfied consumers will lead to loyal consumers and repeat purchases (Zameer et al., 2019). On synthesizing the literature, the following factors emerged as drivers of Consumer Satisfaction concerning Q Commerce Platforms

Getting the delivery as promised is one of the main factors leading to consumer satisfaction. It would help to remember that, in the very first place, consumers have shifted to Q Commerce because of the speed of delivery and convenience. If the delivery is not as promised, it would lead to dissatisfaction and eventually shifting loyalty with the said Q Commerce Platform. Research (Grant Thornton, 2022) points out that delivery time was the main culprit in the case of traditional Q Commerce deliveries. In their (Grant Thornton, 2022.) report they state that 40% of respondents complained of non-adherence to promised delivery schedules. (Ahmed & Shafighi, 2022) suggest that customer acquisition is not a problem in the Q Commerce space. However, Customer retention is. Customers are expecting faster deliveries and adherence to the promised schedules. Non-adherence would lead to Consumers shifting to other platforms (J M Financial, 2022.) opine that delivery is the largest cost component in the entire Q Commerce scenario. They further state that last mile costs are particularly high for those platforms that promise a 10–20-minute delivery schedule, which invariably leads to maintaining a dense delivery network with riders idle during non-peak hours. This eventually leads to higher delivery charges (World Economic Forum, 2020). Higher Delivery charges when looked at as a percentage of the cost of the products purchased might lead to Consumers shifting to another Q Commerce platform. So, although the cost of last-mile delivery is a large component of the Q Commerce platforms, pushing high delivery charges onto consumers might lead to dissatisfaction. The report (Grant Thornton, 2022.) mentions that for sustaining, the Q Commerce platforms might be required to charge a high delivery fee for an order that is below a particular threshold. They also believe that eventually as the markets evolve the consumer would be willing to pay for shorter delivery times and smaller basket sizes. (Ahmed & Shafighi, 2022) point out that small delivery fees are acceptable, however, higher delivery fees may lead to Consumers moving to other platforms.

One of the major factors that are in favor of all kinds of brick-and-mortar stores is that the consumer can check the product physically (Sarkar, 2019). On the Q commerce platform, the consumer can at the most view the picture of the product which is a photograph. If the Quality of the product delivered is inferior to what the platform shows, it would lead to customer dissatisfaction. Research (Grant Thornton, 2022.) suggests that 33% of respondents were irked with the Quality and freshness of the products delivered. The Q commerce platforms need to ensure the quality of the product and any compromise on that would certainly lead to lost customers. According to (Sarkar, 2019), return and refund policy is one of the factors that is viewed as a disadvantage for the Q Commerce platforms. In the case of traditional brick-and-mortar stores, in case of any complaint, the customer can visit the store and get a replacement or refund. In the case of Q Commerce platforms, the customer has to first call up customer care or lodge the complaint

online and wait for the courier for reverse logistics (although many platforms do authorize the delivery personnel to take back any damaged products or products not meeting the customer satisfaction) and then further to get a refund. Drawing from the literature (Richard et al., 1995), one can see that customer dissatisfaction is not with the service failure alone (in the case of Q Commerce's failure to provide the promised quality of the product), but also with the procedure and how the complaint is resolved (In case of Q Commerce, the time taken for getting a replacement/refund and the procedure involved)

Literature brings out the above-mentioned factors that impact satisfaction when purchasing from a Q commerce platform. In addition to identifying the factors of consumer satisfaction, it is also necessary to assess the impact of demographic variables such as age, gender, education, and income on the intention to purchase from a Q Commerce platform

2.3. Impact of Demographic Variables as Influencing Factors

Literature (RedSeer Consulting, 2022) suggests that Gen Z is the main driver of Q Commerce, as also are the mid to high-income households that are convenience seekers. Q Commerce also presents a very convenient and easy solution for the older generation in terms of not having to move out and getting everything at the doorstep, round the clock. Also being more forgetful, the older generation might experience the need for unplanned purchases. These aspects need to be explored. Besides, other factors like gender, income, and occupation may also impact the intention to purchase from a Q Commerce website.

Q Commerce being a comparatively recent phenomenon, on the synthesis of the literature, it is found that very few empirical studies have been conducted to understand the factors that drive the frequent and sustained usage of Q Commerce platforms and the factors that are responsible for Consumer satisfaction after purchasing from a Q commerce platform. Also, there seems to be a dearth of literature on the relationship between the two. Based on the review of the literature the following hypotheses were developed\

H01- Age, gender, Income, and Occupation do not influence purchase intent from a quick commerce platform

H02- Speed of delivery, Convenience, Offers, and discounts, need for unplanned purchases, availability of variety and brands do not drive the customer to buy from a quick commerce platform on a sustained and frequent basis.

H03-Timely deliveries, Cost of delivery, Quality of products received, and return and refund policy of the Quick Commerce website, do not lead to customer satisfaction when purchasing from a Quick Commerce website

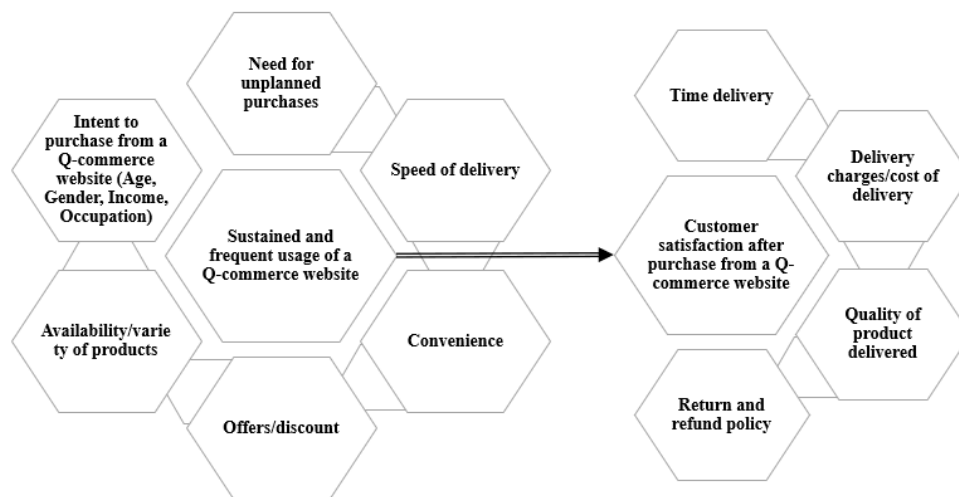H04- Customer Satisfaction does not depend on Sustained and frequent usage of a Quick Commerce website

Figure 1: Conceptual model

Based on a synthesis of the literature review, the author has come up with a conceptual model. This model enunciates the drivers of frequent and sustained usage and the factors affecting Customer satisfaction. The drivers of frequent and sustained usage namely Need for unplanned purchases, Speed of delivery, convenience, offers and discounts and availability of variety and brands are what prompt the customer to buy from a Q Commerce platform. The factors that affect Customer satisfaction are the ones, that are based on the experience after purchasing. For example, the factor of Timely Delivery measures whether the order was delivered within the time that was promised. Similarly for the other factors, whether the customer finds the delivery charges reasonable, is the quality of the product delivered same as what was depicted on the Q Commerce platform, is the Return and refund policy easy to use, and whether is it fair. These factors will decide the satisfaction of the Customer. Further, the model propagates a relationship

between sustained and frequent usage of the Q Commerce platform and Customer satisfaction. The Model also attempts to measure the impact of demographic variables like age, gender, income, and occupation on the intent to purchase from a Q Commerce platform.

3. RESEARCH METHODOLOGY

3.1. Research Design and Respondent's Profile

This study adopts a correlational research design to address the existing knowledge gap concerning the factors that drive customers toward sustained and frequent usage of Q Commerce platforms. Additionally, it seeks to identify the factors responsible for customer satisfaction during the process of purchasing from a QCommerce platform. To gather data for this research, a structured research questionnaire was developed and administered. In the initial section of the questionnaire, respondents were requested to provide information about their demographic characteristics. Specifically, their age was assessed using a cardinal scale, which included four distinct age categories: 16-30, 31-50, 51-70, and Above 70. Gender was evaluated through a categorical scale, encompassing three options: Male, Female, and "Prefer not to say." The study included a total of 135 respondents, with 88 of them being male, constituting approximately 65.18% of the sample, and 47 were female, representing around 34.81% of the sample. Importantly, no respondents fell within the "Prefer not to say" category. For a comprehensive overview of the demographic profile, encompassing the age, gender, income, and occupation of the participants, please refer to Table 1 below.

Table 1: Respondents Demographic Profile

Attribute	Category	N	%
Gender	Male	89	65.18
	Female	48	34.82
Age	16-30	96	70.07
	31-50	27	19.71
	51-70	14	10.22
	Above 70	0	0.00
Occupation	Student	82	59.85
	Service (Salaried)	43	31.39
	Business (Self-employed)	8	5.84
	Homemaker	4	2.92
Income	Not Working	34	24.82
	3 to 5 LPA	17	12.41
	6 to 10 LPA	26	18.98
	Above 10 LPA	60	43.80

Source: Author's calculation based on Primary data

3.2. Data Collection and Analysis

A total of 137 respondents, representing diverse demographic characteristics including age, gender, income, and occupation, were engaged to collect primary data. The research sought insights into the factors influencing the use of Q Commerce platforms and factors contributing to customer satisfaction during Q Commerce platform transactions. Random sampling methodology was employed for participant selection. Google Forms served as the online survey distribution tool. The survey instrument, utilizing a ten-point Likert scale, consisted of questions related to delivery times, delivery charges, convenience, offers and discounts, need for unplanned purchases, and the availability of variety and brands. The survey aimed to encompass participants from various demographic groups. Out of the 200 individuals who received the survey questionnaire, 137 respondents provided complete responses, resulting in a response rate of 68.5%. The survey was intentionally distributed across different age groups to ensure the representation of young, middle-aged, and older participants. From the initial pool of 200 survey recipients, 33 individuals who did not respond and 30 with incomplete data were excluded. The final sample consisted of 137 respondents. This approach was employed to prevent any bias in the research process by distributing demographics evenly across a range of age and gender groups. In addition to primary data collection, this research also drew upon secondary data sources. Various databases, such as Scopus, Emerald, and Web of Science, were consulted for relevant academic and research literature. Furthermore, reports from consulting firms, including Deloitte, Redseer

Consulting, J M Financial, and Grant Thornton, were examined to complement the research with industry insights and perspectives.

3.3. Data Analysis

To assess the internal consistency of the collected data, Cronbach's alpha was computed using the PSPP statistical software package. The calculated Cronbach's alpha value was found to be 0.87, indicating a high level of internal consistency in the dataset. The impact of gender on the drivers for sustained and frequent usage of Q Commerce platforms, as well as customer satisfaction, was examined using t-tests. This analysis aimed to understand whether gender had a statistically significant effect on these factors. Age, income, and occupation were evaluated as potential influencers on drivers for sustained and frequent usage of Q Commerce platforms and customer satisfaction using Analysis of Variance (ANOVA). It was possible to determine whether these demographic factors had a significant impact on the factors being considered in this statistical method. Multiple regression analysis was done to find out more about specific factors that the literature review revealed had an impact. These factors included product quality, return and refund policies, delivery costs, and speed of delivery. Customer satisfaction served as the dependent variable, while the aforementioned factors were treated as independent variables. Similarly, multiple regression analysis was employed to assess the influence of drivers of sustained and frequent usage, such as speed of delivery, convenience, the need for unplanned purchases, offers and discounts, and availability of variety and brands, on customer satisfaction. Customer satisfaction was used as the dependent variable, while the identified drivers served as the independent variables. To provide a more comprehensive understanding of the data, the percentage distribution of each score was calculated. In order to interpret the frequency of specific items or responses in relation to the total number of responses, this analysis technique used the formula% Distribution = (Frequency of the Item/Response) / (Total Number of Responses) * 100.

4. FINDINGS/RESULTS

In Table 2, the findings regarding the top three factors that drive the usage of Q Commerce platforms are presented. These findings are based on responses from the survey conducted with the participants. The table reveals that among the respondents, the "Speed of delivery" factor was identified as the most influential, with 105 respondents, constituting approximately 76.64% of the total respondents, indicating that it significantly motivates them to use Q Commerce platforms. Additionally, "Offers and Discounts" emerged as another highly significant factor, with 104 respondents, or 75.91% of the participants, acknowledging its importance in driving their usage of Q Commerce platforms. "Convenience" was also a prominent factor, as 103 respondents, accounting for approximately 75.18% of the total respondents, recognized it as a key driver for utilizing Q Commerce platforms.

Table 2: Findings regarding the top three factors leading to the usage of Q Commerce platforms

Variable	Number of respondents	Percentage of respondents
Speed of delivery	105	76.64%
Offers and Discounts	104	75.91%
Convenience	103	75.18%

Source: Author's calculation based on Primary data

Table 3 provides insights into customer experiences with Quick Commerce (Q Commerce) platforms across various variables: A majority of respondents (46.72%) reported delivery times between 21-30 minutes, followed by 29.93% experiencing delivery times exceeding 30 minutes. Only a small percentage (3.65%) received deliveries in less than 10 minutes. None of the respondents reported delivery charges in the 10-20 Rupees range. Most (53.28%) incurred charges between 61 to 80 Rupees, while 20.44% experienced delivery charges exceeding 80 Rupees. The majority (43.07%) indicated that products matched the promised quality between 99% to 80% of the time. A smaller proportion (12.41%) reported receiving products as promised 100% of the time. A significant number (45.99%) of respondents used the refund and return policy 100% of the time, while 23.36% utilized it between 79% to 60% of the time.

Table 3: Findings regarding Customer Experiences with Q Commerce platforms

Variable	Category	N	Percentage
Speed of Delivery	less than 10 min	5	3.65
	10-20 mins	27	19.71
	21-30 mins	64	46.72

	More than 30 mins	41	29.93
Delivery charges	10 to 20 Rupees	0	0.00
	21 to 40 Rupees	0	0.00
	41 to 60 Rupees	36	26.28
	61 to 80 Rupees	73	53.28
	more than 80 Rupees	28	20.44
The quality of products delivered is as promised	100% times	17	12.41
	99 to 80 % times	59	43.07
	79 to 60% times	49	35.77
	59 to 40% times	8	5.84
	Less than 40% times	4	2.92
Use of refund and return policy	100% times	63	45.99
	99 to 80 % times	11	8.03
	79 to 60% times	32	23.36
	59 to 40% times	18	13.14
	Less than 40% times	13	9.49

Source: Author's calculation based on Primary data

4.1. Findings of t-test and ANOVA

To understand the potential differences among various demographic factors impacting sustained and frequent usage of Q Commerce platforms and customer satisfaction, independent two-sample t-tests and ANOVA tests were conducted. These tests aimed to analyze the effects of age, gender, income, and occupation on the factors under consideration. The results of independent sample t-tests revealed that there were no significant differences in how males and females perceived the factors influencing sustained and frequent usage of Q Commerce platforms, as well as those affecting customer satisfaction. This conclusion is based on the p-values obtained, as shown in Table 4 and Table 5 below, where all p-values exceeded the threshold of 0.05, leading to the acceptance of the null hypothesis. Conversely, for the other demographic factors, including age, income, and occupation, the results of ANOVA tests indicated p-values less than 0.05, thereby leading to the acceptance of the null hypothesis. This suggests that age, income, and occupation do not have a significant impact on the intention to purchase from a Q Commerce platform. The detailed results for these factors are presented in Table 6 and Table 7. These analyses provide evidence that age, income, and occupation do not significantly influence the intention to purchase from a Q Commerce platform, as indicated by the acceptance of the null hypothesis based on the p-values obtained.

Table 4: t-Test on gender for variables impacting Customer Satisfaction after purchasing from the Q Commerce platform

Variable	Gender	N	Mean	t-Value (Two-Tailed)	Significance
Delivery Time	Male	89	7.26	-1.18	0.24
	Female	48	7.63		
Delivery Charges	Male	89	5.88	1.73	0.09
	Female	48	5.23		
Quality of Product	Male	89	7.27	-0.21	0.83
	Female	48	7.33		
Refund Policy	Male	89	6.52	0.13	0.90
	Female	48	6.46		
Refund Amount	Male	89	6.43	0.31	0.76
	Female	48	6.29		

Source: Author's calculation based on Primary data

Table 5: t-Test on gender for drivers for sustained and frequent usage of the Q Commerce platform

Variable	Gender	N	Mean	t-Value (Two-Tailed)	Significance

Speed of Delivery	Male	89	7.54	-1.31	0.19
	Female	48	8.02		
Convenience	Male	89	7.75	-1.50	0.14
	Female	48	8.29		
Offers and Discounts	Male	89	8.13	-1.54	0.13
	Female	48	8.69		
Variety and Brands	Male	89	7.96	-1.67	0.10
	Female	48	8.54		

Source: Author's calculation based on Primary data

Table 6: ANOVA test for demographic variables towards Customer Satisfaction

Variable	Category	N	Mean	Variance	p Value
Age	16-30	96	8.05	3.62	0.97
	31-50	27	8.15	4.00	
	51-70	14	8.07	2.29	
Occupation	Student	43	8.30	2.44	0.65
	Salaried	8	8.05	5.25	
	Business	82	7.99	4.06	
	Homemaker	4	7.20	1.17	
Income	Not Working	34	7.81	3.13	0.82
	3 to 5 LPA	17	8.16	3.67	
	6 to 10 LPA	26	8.22	3.10	
	Above 10LPA	60	8.13	3.98	

Source: Author's calculation based on Primary data

Table 7: ANOVA test for demographic variables towards sustained and frequent usage of the Q Commerce platform

Variable	Category	N	Mean	Variance	p Value
Age	16-30	96	6.80	2.42	0.92
	31-50	27	6.67	2.22	
	51-70	14	6.82	4.17	
Occupation	Student	43	7.44	3.06	0.71
	Salaried	8	7.13	6.13	
	Business	82	7.46	4.10	
	Homemaker	4	8.50	0.33	
Income	Not Working	34	7.56	2.38	0.96
	3 to 5 LPA	17	7.47	2.01	
	6 to 10 LPA	26	7.58	5.13	
	Above 10LPA	60	7.37	4.58	

Source: Author's calculation based on Primary data

4.2. Findings of the Multiple Regression Test

Two different regression tests were conducted. Customer Satisfaction was the dependent variable for both the regression tests. For the first test, the independent variables were Timely Delivery, Delivery Charges, Quality of the Product delivered, Return and Refund Policy, and refund amount. The R^2 value of 61% showed that the model is a fit (table 8). The results also displayed the absence of multicollinearity between the variables. Hypothesis testing using regression showed that Timely delivery, Quality of the product delivered, and return and refund policy are the prominent three factors that impact Customer Satisfaction with a p-value of 0.00 which is less than 0.1 (at 90% confidence level) and hence the null hypothesis is rejected. The alternate hypothesis is accepted. Customer Satisfaction is primarily dependent on Timely delivery, Quality of the product delivered, and return and refund policy after purchasing from a Q Commerce platform. In the second test, the independent variables were speed of delivery, convenience, variety and brands offered Offers and discounts, and need for unplanned purchases. The R^2 value of 43% showed that the model is a fit. The results also displayed the absence of multicollinearity between the variables. Hypothesis testing using regression showed that out of the five variables, speed of delivery and Convenience were

significant with p-values of 0.061 and 0.01 respectively. Since the values for these three variables are less than 0.1(at a 90% confidence level), the null hypothesis is rejected and the alternate hypothesis is accepted. The main factors impacting sustained and frequent usage of the Q commerce platform are speed of delivery and Convenience

Table 8: Multiple Regression Analysis Statistics Output for Factors Affecting Customer Satisfaction

Particulars	Output
Multiple R	78%
R2	61%
Adjusted R2	60%
Standard Error	1.22
Observations	137

Source: Author's calculation based on Primary data

Table 9 ANOVA Table results in Multiple Regression Analysis

Dependent Variable	Independent Variable	p values
Customer Satisfaction	Timely Delivery	0.0001
	Delivery Charges	0.1990
	Quality of products delivered	0.0000
	Return and refund policy	0.0001
	Fairness of refund policy	0.1782
	Significance	0.0000

Source: Author's calculation based on Primary data

Table 10: Dependent Variables and Multicollinearity

	Unstandardised Coefficients		Standardized Coefficients			90% Confidence interval for B		Collinearity Statistics	
	B	Standard Error	Beta	T	Sig	Lower Bound	Upper Bound	Tolerance	VIF
Constant	1.25	.50	.00	2.49	.014	0.42	2.08		
Timely Delivery	0.27	.07	.27	3.96	.000	0.16	0.39	.66	1.52
Delivery Charges	-.07	.05	-.08	-1.29	.199	-0.15	0.02	.85	1.18
Quality of products delivered	.33	.07	.31	4.65	.000	0.21	0.45	.65	1.54
Return & Refund Policy	.25	.06	.33	4.11	.000	0.15	0.35	.44	2.25
Refund Amount	.08	.06	.11	1.35	.178	-0.02	0.19	.48	2.09

Source: Author's calculation based on Primary data

In Table 11, the multiple regression analysis statistics output reveals the impact of various factors on customer satisfaction. The multiple correlation coefficient (R) is 66%, indicating a substantial linear relationship between the independent variables and customer satisfaction. The R-squared value (43%) signifies that 43% of the variation in customer satisfaction can be attributed to the independent variables. The adjusted R-squared value (41%) accounts for the model's complexity, providing a more accurate representation of its goodness of fit. The standard error (1.48) represents the average deviation of observed values from predicted values within the model, and the analysis is based on a sample of 137 observations. Table 12, the ANOVA table, focuses on customer satisfaction as the dependent variable and examines the significance of independent variables. The low significance F value (7.97E-15) implies that the overall regression model is statistically significant in explaining customer satisfaction. In Table 13, unstandardized coefficients demonstrate how a one-unit change in independent variables affects customer satisfaction, with standardized coefficients (Beta) offering a basis for comparing their relative importance. The T-statistic measures the significance of each variable's impact on customer satisfaction. Tolerance and VIF assess

multicollinearity, with values close to 1 and below 5 indicating minimal multicollinearity among the independent variables.

Table 11: Multiple Regression Analysis Statistics Output for the impact of factors of sustained and frequent usage on Customer satisfaction

Particulars	Output
Multiple R	66%
R2	43%
Adjusted R2	41%
Standard Error	1.48
Observations	137

Source: Author's calculation based on Primary data

Table 12: ANOVA Table results in Multiple Regression Analysis

Dependent Variable	Independent Variable	p values
Customer Satisfaction	Speed of Delivery	0.062
	Convenience	0.011
	Offers and Discounts	0.164
	Variety and Brands	0.314
	Unplan	0.983
	Significance F Value	0.000

Source: Author's calculation based on Primary data

Table 13: Dependent Variables and Multicollinearity

	Unstandardised Coefficients		Standardized Coefficients			90% Confidence interval for B		Collinearity Statistics	
	B	Standard Error	Beta	T	Sig	Lower Bound	Upper Bound	Tolerance	VIF
Constant	2.15	.55	.00	3.89	0.000	1.20	3.09		
Speed of Delivery	.16	.08	.18	1.89	0.061	0.02	0.30	.46	2.20
Convenience	.23	.09	.27	2.61	0.011	0.08	0.38	.41	2.44
Variety	.17	.11	.19	1.56	0.164	-0.03	0.36	.30	3.37
Offers	.11	.10	.12	1.12	0.314	-0.07	0.28	.36	2.76
Unplanned Purchases	.00	.12	.00	.02	0.983	-0.20	0.21	.26	3.84

Source: Author's calculation based on Primary data

5. DISCUSSIONS

The emergence of Q Commerce platforms is a fairly recent phenomenon, which has rapidly grown mainly due to the pandemic. Based on the literature review, the author has identified the factors leading to customer satisfaction and the drivers of sustained and frequent usage of Q Commerce platforms. The study also examines the impact of demographic variables on purchase intent from a Q commerce platform. Further, the relationship between sustained and frequent usage of the Q Commerce platform and Customer satisfaction is also examined. As mentioned above, the literature highlights five factors namely, timely delivery, delivery charges, quality of product delivered, ease of return and refund policy, and fairness of refund amount. The results of multiple regression analysis indicate that timely delivery, quality of the product delivered, and return and refund policy show significance with regard to Customer Satisfaction. However, Delivery charges and Refund amounts do not show significance with regard to Customer satisfaction. In the case of sustained and frequent usage of Q commerce platforms leading to customer satisfaction, speed of delivery and convenience are the two variables showing significance while the other three variables are offers and discounts, variety of products and brands, and need for unplanned purchases do not indicate any significance with respect to customer satisfaction. Though the literature suggests that one of the main drivers of sustained and frequent usage of Q commerce platforms is the need for unplanned purchases, our findings do not support this. Regarding the demographic variables, the results show that gender, age, income, and occupation do not impact the choice of drivers of frequent and sustained usage as well as the factors impacting customer satisfaction.

Several reports also suggest that millennials are driving the growth of Q commerce platforms. However, according to our study age does not impact the intent to purchase from a Q commerce platform. This may also be due to the fact that owing to the pandemic, the older generation, which is more prone to infections, prefers contactless home delivery and prefers the Q commerce platform as much as the millennials do.

6. MANAGERIAL IMPLICATIONS

The study has important managerial implications for Q commerce platforms. Customer Satisfaction is the prime driver of any business. The study brings out factors that are important from the customer's point of view and lead to satisfaction. The study also highlights the drivers for sustained and frequent usage of the Q commerce platform. It also examines the impact of demographic factors on the intent to purchase from Q commerce platforms. Timely delivery (different from the speed of delivery), that is, delivery as promised, quality of the product, and return and refund policy have emerged as the major factors that affect Customer Satisfaction. The current customer experience shows that almost 47% of respondents got delivery in 21-30 minutes and 30% of respondents after 30 minutes. Given that customers place a lot of importance on Speed of delivery, it would help Q commerce platforms to ramp up their deliveries. Similarly, as regards current customer experience with regards to the Quality of the product, only 12 % of respondents said that they get the expected (as depicted on the platform) quality 100% time. Improving this can help enhance the customer experience Return and refund policy is another important factor that leads to Customer satisfaction. Current experience shows that almost 46% of respondents have used the policy every time they purchased. This has two implications. One is that probably the quality of goods is not as expected and the other is that the return and refund policy should be easy to use since many customers would require it. Further, the findings also point out that Speed of Delivery, Convenience, Offers, and Discounts are the top three factors that Consumers give importance to when using a Q Commerce platform. Paying attention to these factors would augur well for the Q Commerce platforms. Since these are the drivers for sustained and frequent usage, it would help them retain customers and build loyalty. Customer loyalty can be achieved only through satisfied customers and focusing on those factors that matter to the customer can help achieve this (Alvarez & Marsal, 2022.).

7. CONCLUSION

Q commerce being at a nascent stage, the study highlights the factors that impact Customer satisfaction and the drivers for frequent and sustained usage. Timely Delivery (That is delivery as promised), Quality of the products delivered, and refund and return policy (ease of use) have emerged as the main factors contributing to Customer Satisfaction when purchasing from a Q Commerce platform. Similarly Speed of delivery and Convenience and the main drivers for frequent and sustained usage of the platform. Q Commerce platforms that are able to give quick (in less than 30 minutes) delivery, deliver as promised when the order is placed, deliver good quality products (as shown on the platform), have an easy-to-use return and refund policy, and provide the contactless doorstep delivery will enable frequent and sustained usage of the platform and lead to Customer Satisfaction. The study finds that demographic variables of age, gender, income, and occupation do not have a significant impact on the intent to purchase from a Q commerce platform. As the Q commerce platforms grow, there may be significant changes in the buying and selling patterns. Further research can be undertaken to study the emerging patterns. Also, most Q commerce platforms are as of now, offering groceries vegetables, and fruits. The study can be replicated for other emerging products that are offered on the platforms.

DATA AVAILABILITY STATEMENT

CONFLICTS OF INTEREST

The authors declare that they have no conflict of interest.

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