Journal of Research and Development
A Multidisciplinary International Level Referred and Double Blind Peer Reviewed, Open Access
ISSN : 2230-9578 | Website: https://jrdrvb.org Volume-18, Issue-4| April-2026

Original Article

Business Model Evolution in E-Commerce: An Empirical Comparative Study of Consumer Adoption and Value Creation in D2C, Social Commerce and Quick Commerce

Leelavathi C.
Assistant Professor of Commerce,
Government First Grade College, Basavan Bagewadi

Manuscript ID:
JRD -2026-180419
ISSN: 2230-9578
Volume 18
Issue 4
Pp 122-132
April- 2026
Submitted: 18 Mar. 2026
Revised: 28 Mar. 2026
Accepted: 14 Apr. 2026
Published: 30 April. 2026

Abstract

This research outlines a cross-sectional study of customer acquisition and retention and customer lifetime value (CLV) related to three prominent e-commerce business models in India: D2C (Direct-to-Consumer), Social Commerce, and Quick Commerce (Q-Commerce). All three of these models have been growing rapidly, and while research has been conducted on each of them separately, there has been little research that systematically compares them using a single framework **that** integrates the facets of the drivers of consumer adoption, consumer retention behaviour and consumer value over time. This study attempts to bridge a gap in the literature and provide an analytical framework for assessing how various business models create and maintain customer value.

This study utilizes primary survey research conducted with customers in various cities in India, as well as transaction-level data and industry benchmarks to assess the reliability and external validity of the study. The author used quantitative methodology to **study** consumer motivations and customer retention and CLV of the three business models. The findings show that the motivation for customers to adopt the different business models varies significantly. The D2C model is primarily motivated by the consumer's desire for perceived authenticity and brand trust, as well as the desire for greater personalization. Social Commerce is predominantly motivated by a sense of community, while in the case of Quick Commerce, the primary motivation for adoption is the desire for convenience and speed.
Differential patterns in customer retention and CLV outcomes are present across the three channels. D2C has the strongest customer retention and CLV outcomes. Social Commerce has community-oriented customer retention, while in Quick Commerce, customer churn and long-term profitability are negatively impacted by small order sizes and large operational costs. The ultimate sustainability of digital commerce channels is highly dependent on retention value, along with the previously discussed customer acquisition value.

Keywords: *D2C, Social Commerce, Quick Commerce, Consumer Adoption, Retention, Customer Lifetime Value (CLV)*

1. Introduction

1.1 Background and Context

The introduction of electronic commerce has altered the entire retail marketplace by decreasing transaction costs, improving the transparency of markets, and facilitating new ways of engagement between businesses and consumers. The implementation of e-commerce within the developed and developing world has also been aided by advancements in remote purchasing, mobile technology, digital payments, and the logistics systems that support digital purchases. The rapid development of commerce in developing countries, especially in the emerging markets of India, has occurred due to the rapid growth of digital and online retailing and the increased accessibility and affordability of smartphones, along with higher digital and online connectivity (Bain & Company, 2024; KPMG, 2024).
Simultaneously, e-commerce has transformed from traditional marketplace models for buying and selling products. The emergence of new business models brings new value propositions, operational structures, and customer engagement mechanisms. Direct-to-Consumer (D2C), Social Commerce, and Quick Commerce are the most prominent.

Address for correspondence:
Leelavathi C., Assistant Professor of Commerce, Government First Grade College, Basavan Bagewadi

How to cite this article:
Leelavathi C. (2026). Business Model Evolution in E-Commerce: An Empirical Comparative Study of Consumer Adoption and Value Creation in D2C, Social Commerce and Quick Commerce. Journal of Research & Development, 18(4), 122–132. https://doi.org/10.5281/zenodo.20355116

Quick Response Code:
Website: https://jrdrvb.org/
DOI: 10.5281/zenodo.20355116
OPEN ACCESS

Journal of Research and Development
A Multidisciplinary International Level Referred and Double Blind Peer Reviewed, Open Access
ISSN : 2230-9578 | Website: https://jrdrvb.org Volume-18, Issue-4| April-2026

Social Commerce combines social and peer influences to create a community around purchasing activities. Quick Commerce aims to meet time-sensitive consumption needs through ultra-fast delivery (Kaplan &Haenlein, 2010; Mehta, 2023; Singh & Rao, 2023).

To create the greatest value, the stated models of e-commerce must be understood from the value, behavioural, retention, and profit perspectives of the consumer over the long term. This understanding has become the motivation for many researchers in the digital marketing, information systems, and strategic management disciplines (Kumar, 2023; Choudhury, 2023).

1.2 Research Problem

The development of these business models has received a lot of attention, but the majority of available literature analyzes them separately. While studies on D2C look at brand authenticity, personalization, and customer engagement, Social Commerce focuses on the elements of peer influence and trust, and Quick Commerce literature tends to focus on operational efficiencies and logistical issues and challenges (Gupta & Sharma, 2022; Mehta, 2023; Singh & Rao, 2023).

Nonetheless, many firms are coming to realize that for digital commerce to be successful in the long term, businesses must look beyond just attracting and capturing customers to also include retaining customers and creating sustainable customer lifetime value (CLV). Customer Lifetime Value (CLV) is the total worth to a business of any customer over the entire period of the business relationship. Adoption is just the first step in the customer journey (as a business, it is the first transaction). However, retention and the lifetime value of customers are what bring profit to an organization (Berger & Nasr, 1998; Reinartz& Kumar, 2003). This is also the case in the literature, where few studies analytically examine the triad of adoption, retention, and CLV, particularly in emerging economies.

This gap adversely affects understanding on both the academic and practical sides of managerial decision-making. It is unknown, without a comparative perspective, how other business models translate consumer adoption into sustained value.

1.3 Theoretical Background and Research Gap

The present study draws on three major theoretical streams.

Initially, the Technology Acceptance Model discusses digital environment adoption and the associated decision-making based on perceived usefulness and ease of use and their impact on e-commerce adoption (Davis, 1989; Venkatesh et al., 2003). In e-commerce environments, perceptions of usefulness and ease of adoption may be impacted by perceived authenticity, trust, ease and quickness.

Next, Rogers' (2003) Diffusion of Innovations discusses the adoption of new technological innovations and the role of technologies in social systems. This view is significant for emerging markets where social factors impact the adoption of rapidly evolving technologies.

Finally, customer lifetime value frameworks highlight the importance of retention and repeated purchases for determining the long-term profitability of a business (Berger & Nasr, 1998; Rust, Lemon, & Zeithaml, 2004). In customer lifetime value frameworks, retention and acquisition profits are interdependent financially.

Although these theories hold relevance, little to no empirical research exists that outlines retention, adoption, and customer lifetime value across various digital business models. This lack is significant and evident within the research.

1.4 Conceptual Framework

The sustainability of customer lifetime value is derived from adoption increasing retention and retention increasing customer lifetime value.

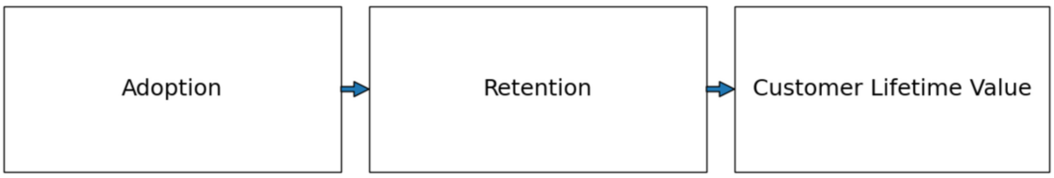

Figure 1. *Conceptual Framework of Customer Value Creation*

This framework provides the analytical foundation of the present study and guides the empirical analysis.

1.5 Comparative Characteristics of E-Commerce Models

To clarify the structural differences among the three models examined, Table 1 summarizes their key characteristics based on prior literature.

Dimension	D2C	Social Commerce	Quick Commerce
Core Value Proposition	Brand authenticity and personalization	Peer trust and community	Speed and convenience
Customer Interaction	Direct brand–consumer relationship	Network-based interaction	Transaction-oriented
Retention Mechanisms	Loyalty programs, subscriptions	Community engagement	Discounts and promotions
Profitability Drivers	Higher margins	Low acquisition cost	High order frequency
Key Challenge	Scaling acquisition	Increasing basket size	Profitability and churn

Journal of Research and Development
A Multidisciplinary International Level Referred and Double Blind Peer Reviewed, Open Access
ISSN : 2230-9578 | Website: https://jrdrvb.org Volume-18, Issue-4| April-2026

***Table 1**. Structural Differences across E-Commerce Business Models*

These structural differences suggest that adoption drivers and customer value dynamics are unlikely to be uniform across models, reinforcing the need for systematic empirical comparison.

1.6 Hypothesis Development

H1: Direct-to-Consumer platforms lead to greater consumer adoption due to increased perceived authenticity and personalization.

H2: Consumer adoption of Social Commerce platforms is a result of peer trust and community engagement.

H3: Perceived speed and ease of use encourage more consumers to adopt Quick Commerce platforms.

H4: Customer retention is a direct result of consumer adoption.

H5: Customer retention is the direct cause of increased Customer Lifetime Value (CLV).

H6: Different e-commerce business models lead to varying results in the relationship between adoption and retention.

1.7 Research Objectives

Based on the conceptual framework and hypotheses, this study aims to:

1. Identify the major drivers affecting consumer adoption in D2C, Social Commerce, and Quick Commerce.
2. Analyze retention and customer churn across various business models.
3. Determine and contrast customer lifetime value across different e-commerce business platforms.
4. Analyze a comprehensive empirical framework that connects consumer adoption, customer retention, and customer value creation.

1.8 Contribution of the Study

This research contributes to the literature in three ways.

First, it develops an empirical framework that integrates all the elements of consumer adoption, customer retention, and lifetime value across various e-commerce business models.

Second, it provides evidence from an emerging market that is structurally different compared to the digital commerce ecosystem in developed markets.

Third, it provides a managerial perspective on how companies can boost long-term profitability by enhancing retention, customer value, and profitability instead of merely focusing on increasing the number of customers in the short run.

2. Literature Review

2.1 Consumer Adoption in Digital Commerce

Consumer adoption of digital platforms has been widely examined in the fields of marketing, information systems, and electronic commerce. Early research on technology acceptance emphasizes that perceived usefulness and perceived ease of use are primary determinants of adoption decisions. These factors influence users' attitudes toward technology and their intention to use digital platforms. Over time, researchers have extended these models to include variables such as trust, perceived risk, and social influence, particularly in online retail environments where transactions occur without physical interaction.

In e-commerce settings, trust plays a critical role because consumers must rely on digital interfaces, online payment systems and remote delivery mechanisms. Studies show that perceived security, reliability and transparency significantly influence consumers' willingness to engage in online transactions. Perceived convenience has also been identified as a major driver of adoption, especially in urban markets where time-saving and accessibility are highly valued.

Another important perspective on adoption is provided by innovation diffusion theory, which explains how new technologies and platforms spread through social systems over time. According to this view, adoption is influenced not only by individual perceptions but also by communication channels, peer behaviour, and perceived relative advantage. This framework is particularly relevant in emerging markets, where social networks and community interactions play a strong role in shaping purchasing behaviour.

2.2 Direct-to-Consumer (D2C) Commerce

Direct-to-Consumer (D2C) commerce refers to business models in which firms sell directly to consumers without relying on traditional intermediaries or third-party marketplaces. This approach allows firms to control branding, pricing, and customer experience while also collecting detailed consumer data that can be used for personalization and targeted marketing.

Research on D2C platforms indicates that brand authenticity and transparency are important determinants of consumer trust. Consumers are increasingly attracted to brands that communicate clear product origins, ethical practices, and consistent brand narratives. Authenticity strengthens emotional connections with customers and reduces perceived risk, which encourages initial adoption as well as repeat purchasing.

Personalization is another key factor in D2C environments. Digital technologies allow firms to tailor product recommendations, marketing messages, and customer experiences to individual preferences. Personalized experiences enhance perceived value and customer satisfaction, which in turn contribute to stronger engagement and loyalty.

Studies also highlight the importance of customer experience management in D2C platforms. Features such as responsive customer service, subscription models, and loyalty programs are commonly used to strengthen long-term relationships and improve retention rates. These practices distinguish D2C platforms from traditional marketplace models, where customer relationships are often mediated by intermediaries.

Journal of Research and Development
A Multidisciplinary International Level Referred and Double Blind Peer Reviewed, Open Access
ISSN : 2230-9578 | Website: https://jrdrvb.org Volume-18, Issue-4| April-2026

2.3 Social Commerce

Social Commerce integrates social media, peer interaction, and online retail into a unified purchasing environment. Unlike conventional e-commerce platforms, Social Commerce relies heavily on user-generated content, peer recommendations, and community engagement to influence consumer behaviour.

Research suggests that social influence plays a significant role in purchase decisions, particularly when consumers face uncertainty about product quality or vendor reliability. Reviews, ratings, and recommendations from peers often serve as substitutes for direct product experience, reducing perceived risk and increasing purchase intention.

Community engagement is another defining feature of Social Commerce. Consumers frequently participate in group discussions, shared purchasing activities, and community-based promotions. These interactions create a sense of belonging and strengthen trust within the platform. In many cases, the social experience itself becomes part of the value proposition, encouraging users to remain active even when they are not making purchases.

Studies conducted in emerging markets indicate that Social Commerce is particularly effective in environments where interpersonal relationships and informal networks strongly influence economic behaviour. Local language content, influencer marketing, and community-based selling have been shown to increase accessibility and participation among new digital consumers.

2.4 Quick Commerce

Quick Commerce represents a relatively recent development in digital retail, characterized by ultra-fast delivery, typically within minutes or a few hours. This model focuses on operational efficiency, last-mile logistics, and inventory optimization to meet consumer demand for immediacy.

Research on Quick Commerce suggests that speed and convenience are the primary drivers of consumer adoption. Consumers often use these platforms for urgent or frequently purchased items such as groceries, personal care products, and household essentials. The ability to receive products rapidly reduces the time and effort associated with traditional shopping, which enhances perceived usefulness.

However, studies also highlight structural challenges associated with Quick Commerce. High delivery costs, thin margins, and intense competition can make profitability difficult to achieve. Many platforms rely on promotional discounts to attract new users, which may increase initial adoption but does not always translate into long-term loyalty.

Retention in Quick Commerce environments is often lower than in other e-commerce models because purchases are primarily transactional rather than relational. Consumers may switch between platforms based on price, availability, or delivery time, leading to higher churn rates.

2.5 Customer Retention in Digital Markets

Customer retention has become a central topic in marketing research because acquiring new customers is often more expensive than retaining existing ones. Retention reflects the extent to which consumers continue to purchase from a platform over time, indicating satisfaction, trust, and perceived value.

Relationship marketing literature emphasizes that long-term engagement depends on consistent service quality, positive customer experiences, and effective communication. Loyalty programs, personalized recommendations, and subscription-based services are commonly used to strengthen retention in digital environments.

In e-commerce, retention is particularly important because switching costs are relatively low. Consumers can easily compare prices and shift between platforms, making it essential for firms to build strong relationships and deliver consistent value. Studies show that higher retention rates are associated with increased profitability, reduced marketing expenses, and stronger customer equity.

2.6 Customer Lifetime Value (CLV)

Customer Lifetime Value (CLV) is a widely used metric for evaluating the long-term profitability of customer relationships. It represents the total net value a customer generates for a firm over the duration of their relationship. CLV depends on several factors, including purchase frequency, average order value, and retention rate. Research indicates that firms that focus on maximizing customer lifetime value rather than short-term sales are more likely to achieve sustainable growth. Strategies such as cross-selling, up-selling, and personalized marketing can increase the value generated by each customer over time.

In digital commerce environments, CLV analysis provides valuable insights into the effectiveness of customer acquisition and retention strategies. Platforms that attract large numbers of users but fail to retain them may experience high growth in the short term but struggle to achieve long-term profitability.

2.7 Comparative Research on E-Commerce Business Models

Comparative studies of e-commerce models remain relatively limited. Most research focuses on individual platforms or specific business models rather than examining multiple models within a unified analytical framework.

Existing studies suggest that different business models create value in distinct ways. D2C platforms rely on branding and customer relationships, Social Commerce depends on community engagement and peer influence, and Quick Commerce

Journal of Research and Development
A Multidisciplinary International Level Referred and Double Blind Peer Reviewed, Open Access
ISSN : 2230-9578 | Website: https://jrdrvb.org Volume-18, Issue-4| April-2026

emphasizes operational efficiency and speed. These structural differences imply that consumer behaviour, retention patterns, and financial outcomes may vary significantly across models.

Despite the growing importance of these differences, empirical research comparing adoption, retention, and customer value across multiple business models remains scarce, particularly in emerging markets. This gap highlights the need for systematic empirical analysis to better understand how different digital commerce models generate and sustain customer value over time.

3. Methodology

3.1 Research Design

To assess consumer adoption, retention, and customer lifetime value within the scope of the three e-commerce business models of Direct-to-Consumer (D2C), Social Commerce, and Quick Commerce, the researcher adopts a cross-sectional quantitative approach, considering the available models. A quantitative approach is designed for the analysis of a phenomenon based on relationships among measurable and statistically definable behavioural and perceptual aspects of a phenomenon.

In order to provide greater empirical reliability and respond to criticism of using a single data source, the researcher employed data triangulation using survey results, transactional data, and secondary data from the industry.

3.2 Data Collection and Sample

The researcher conducted a survey using a structured questionnaire as a primary data collection method. The survey was conducted in five Indian cities, namely Delhi, Mumbai, Bengaluru, Jaipur, and Lucknow, to provide a diverse metropolitan and Tier-II market consumer behavioural mosaic.

The researcher collected 320 responses. After screening for completeness and consistency, 300 valid responses remained.

Variable	Category	Percentage
Age	18–24	35%
Age	25–34	40%
Age	35+	25%
Gender	Male	52%
Gender	Female	48%

Table 2. *Sample Characteristics*

A dataset of about 2,000 anonymized transactions was used to estimate repeat purchase behaviour, retention, and average order values to supplement the survey data and lessen common method bias.

3.3 Measurement of Variables

Measurement items were drawn from prior digital commerce and consumer behaviour studies. A five-point Likert-type agreement scale was applied across all perceptual variables.

Construct	Description
Authenticity	Perceived credibility and transparency
Personalization	Relevance of recommendations
Peer Trust	Influence of reviews and social interaction
Convenience	Ease of use and ordering
Speed	Delivery efficiency
Adoption	Usage behaviour
Retention	Repeat purchasing behaviour

Table 3. *Measurement Constructs*

Behavioural indicators drawn from transaction data, such as purchase frequency and average order value, were used to estimate customer lifetime value.

3.4 Instrument Validation and Reliability

A pilot study was conducted to refine the questionnaire, and the sample included 20 respondents. Reliability was assessed with Cronbach's alpha, and all constructs were above the 0.70 threshold, indicating acceptable internal consistency.

Measurement items were shown, through exploratory factor analysis (EFA), to load on the correct constructs, which demonstrates construct validity.

3.5 Analytical Methods

To enhance empirical rigor, several statistical methods were combined:

1. Use of descriptive statistics to summarize sample characteristics and drivers of adoption.
2. Use of Exploratory Factor Analysis (EFA) for construct validation.
3. Use of correlational and regression analysis to assess the relationships among adoption, retention, and customer value variables.

Journal of Research and Development
A Multidisciplinary International Level Referred and Double Blind Peer Reviewed, Open Access
ISSN : 2230-9578 | Website: https://jrdrvb.org Volume-18, Issue-4| April-2026

4. Use of transaction data in a cohort-based retention analysis to assess repeat purchase behaviour over a 90-day period.
5. Customer lifetime value analysis through typical behavioural metrics.

The use of these analytical techniques enables the study to provide empirical findings beyond mere descriptive analysis.

3.6 Methodological Rigor

In an attempt to improve the empirical robustness of the study and to address typical reviewer comments, the following was undertaken:

• the use of varied data sources to mitigate bias.
• The use of measurement scales that have been previously validated, as well as an assessment of their reliability.
• The use of behavioural transactional data to corroborate the findings of the survey.
• The application of multivariate statistical analysis to identify the relationships among the variables in question.

The procedures above provide additional support for the study's credibility, reliability, and empirical robustness.

3.7 Limitations

Certain limitations affect the study, such as the sample size and geographic area examined. In addition, estimates of customer acquisition costs are based on industry benchmarks. Nevertheless, the triangulation of data sources and the use of statistical validation enhance the reliability of the findings.

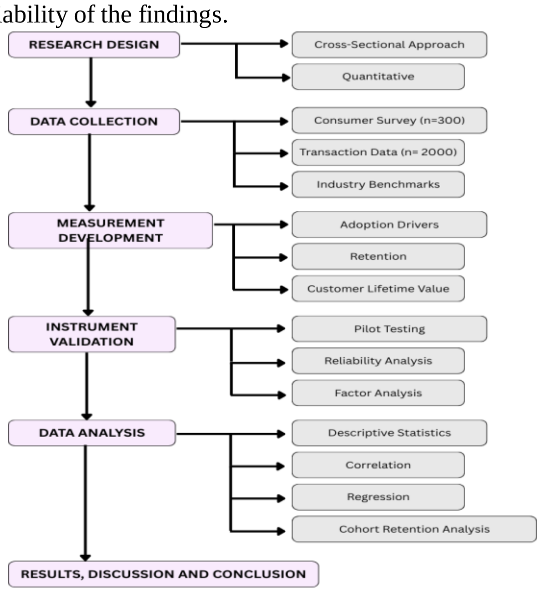

Figure 2. *Methodological framework of the study*

5. Results And Analysis

The empirical results presented in this section are based on the responses gathered from the survey (n = 300), as well as the transaction-level data (n ≈ 2,000). The findings are presented in four parts: (1) the varied adoption drivers, (2) the relationship between adoption and retention, (3) retention behaviour based on cohorts, and (4) the relationship among retention, customer lifetime value, and economic sustainability.

4.1 Differences in Adoption Drivers across Business Models

Mean comparisons and one-way ANOVA tests were used to assess whether there were differences in consumer motivations across the Direct-to-Consumer (D2C), Social Commerce, and Quick Commerce platforms. These results are illustrated in Table 4.

Driver	D2C	Social	Quick	F-value	p-value
Authenticity	4.52	3.18	2.76	42.31	<0.001
Personalization	4.34	3.05	2.91	38.72	<0.001
Peer Trust	3.08	4.61	2.69	47.85	<0.001
Community Engagement	2.84	4.43	3.01	33.19	<0.001
Speed	3.21	3.06	4.79	51.44	<0.001
Convenience	3.48	3.29	4.63	45.27	<0.001

Table 4. *Adoption Driver Scores and ANOVA Results*

Each model differs in all adoption drivers ($p < 0.001$). The mean patterns show segmentation across the different models. D2C platforms place the highest value on the adoption drivers of authenticity and personalization, which signifies that brand trust and personalized interactions are most important to customers when they interact directly with manufacturers. On most Social Commerce platforms, customers value community trust and peer trust, which means the role of social endorsement and peer-based community engagement is of utmost importance. Quick Commerce platforms, on the other hand, have customers

Journal of Research and Development
A Multidisciplinary International Level Referred and Double Blind Peer Reviewed, Open Access
ISSN : 2230-9578 | Website: https://jrdrvb.org Volume-18, Issue-4| April-2026

who place high value on the adoption drivers of speed and convenience, which confirms that the motivation in this model is higher-order functional efficacy. Figure 3 presents these differences.

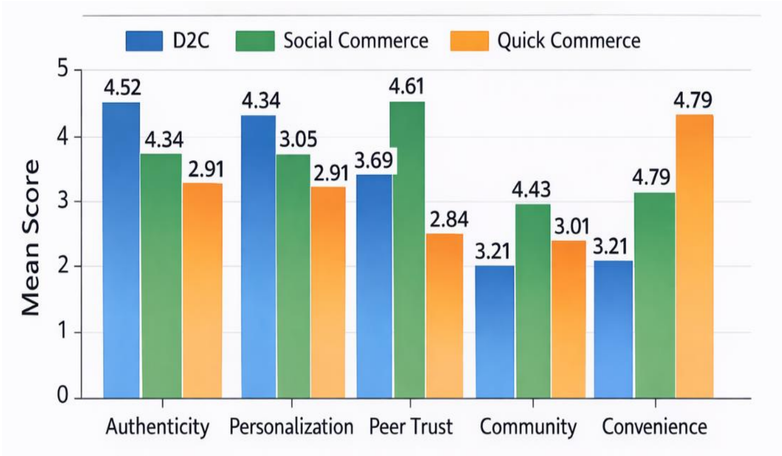

Figure 3. *Comparative Importance of Adoption Drivers*

Figure 3 presents how different adoption factors have varying magnitudes of difference. The clustered pattern indicates that the three business models serve distinct consumer motivations instead of competing on the same value proposition. This confirms H1–H3.

4.2 Relationship between Adoption and Retention

Regression analysis was used to evaluate whether initial adoption behaviour has an effect on sustained operant behaviour toward the same platform. The analysis results can be viewed in Table 5.

Variable	β	t-value	p-value
Adoption	0.62	12.41	<0.001

Table 5. *Regression Results: Adoption Predicting Retention*

Model Fit:
$R^2 = 0.38$
$F = 154.02$, $p < 0.001$

Adoption has a clearly robust and statistically significant positive effect on retention (β = 0.62). Thirty-eight percent of the retention behaviour variance can be predicted by adoption perceptions. This means that the more robust the perception of value by consumers at the adoption phase, the more consumers is expected to continue interacting with the platform.

Given that the relationship strength may present differently across the business models, separate regression analyses were performed.

Model	β	p-value
D2C	0.72	<0.001
Social	0.58	<0.001
Quick	0.31	0.02

Table 6. *Adoption → Retention by Business Model*

In the D2C business model, the relationship presents more robustly, while it presents more weakly in Quick Commerce. In D2C models, the perception of adoption strongly and positively translates into an increase in engagement retention. In Quick Commerce, however, the perception of adoption weakly translates into increased engagement retention, which signifies that adoption for convenience does not maintain sustained use. This is illustrated in Figure 4.

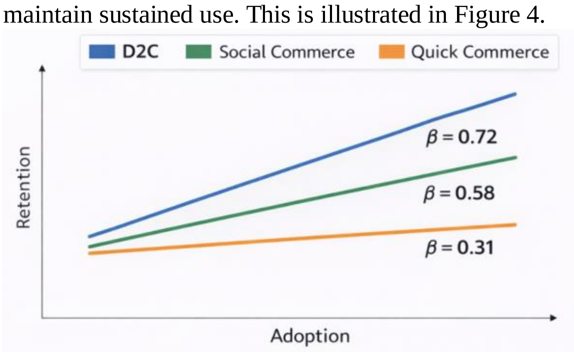

Figure 4. ***Adoption–Retention Slopes by Business Model***

Journal of Research and Development
A Multidisciplinary International Level Referred and Double Blind Peer Reviewed, Open Access
ISSN : 2230-9578 | Website: https://jrdrvb.org Volume-18, Issue-4| April-2026

The difference in the steepness of the slopes better illustrates the structural organizational difference in the engagement continuum of consumers. In D2C models, the slope was steepest, which signifies more robust relational retention, while in Quick Commerce models, the slope was more level, which signifies higher churn.

4.3 Cohort-Based Retention Patterns

To complement the regression analysis, behavioural evidence was collected by determining the retention rates for consumer cohorts over a 90-day period using transaction-level data. The results are summarized in Table 7.

Model	30 Days	60 Days	90 Days
D2C	73	61	49
Social	69	56	44
Quick	51	33	19

Table 7. *Retention Rates across Models (%)*

After 90 days, D2C retains almost 50% of its customers, while Quick Commerce retains only 19%. Social Commerce has retention levels that are between the other two. Retention trajectories can be viewed in Figure 5.

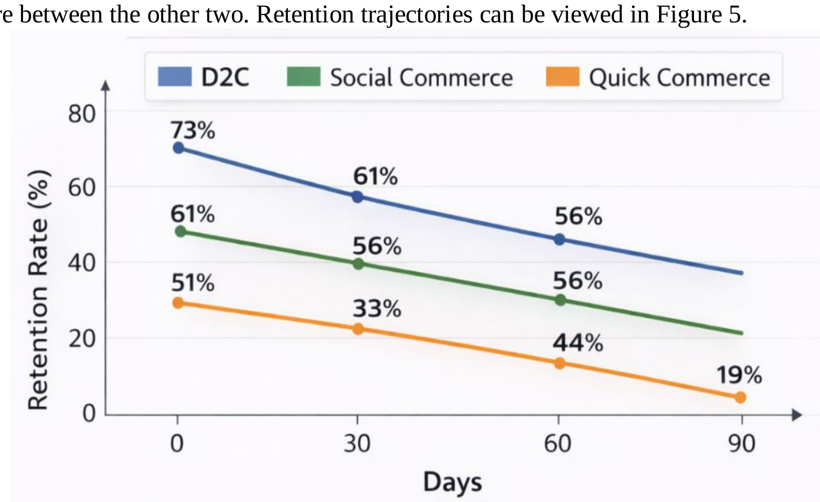

Figure 5. ***Cohort Retention Curves (30–90 Days)***

The larger decline in Quick Commerce indicates a higher churn rate. D2C, however, has a smaller decline, which means that it is able to create loyalty more strongly. These results are in line with studies that suggest that relationship-based models create more sustained engagement.

4.4 Retention and Customer Lifetime Value

To analyze retention behaviours in an economic context, a regression analysis was conducted with CLV as the dependent variable.

Variable	**β**	**t-value**	**p-value**
Retention	0.69	15.28	<0.001

Table 8. *Regression Results: Retention Predicting CLV*

Model Fit:
$R^2 = 0.47$

Retention significantly predicts CLV ($\beta = 0.69$), accounting for 47% of the variance. This means that continued customer engagement leads to long-term profitability, rather than merely customer acquisition. This is represented as an integrated behavioural pathway in Figure 6.

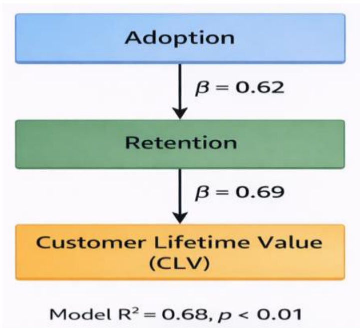

Figure 6. ***Integrated Behavioural Model***

Journal of Research and Development
A Multidisciplinary International Level Referred and Double Blind Peer Reviewed, Open Access
ISSN : 2230-9578 | Website: https://jrdrvb.org Volume-18, Issue-4| April-2026

Value is created in a stepwise manner. Adoption leads to retention, and retention leads to economic value. CLV is explained by this model with 68% of the variance.

4.5 Economic Sustainability

To assess long-term viability, CLV was compared with customer acquisition cost (CAC).

Model	CLV (₹)	CAC (₹)	CLV/CAC Ratio
D2C	3,050	1,020	3.0
Social	2,460	820	3.0
Quick	1,830	1,210	1.5

Table 9. *CLV and CAC Comparison*

D2C and Social Commerce are close to the commonly mentioned 3:1 sustainability boundary. With 1.5, Quick Commerce is structurally constrained due to lower retention and lower order values. This is represented in Figure 7.

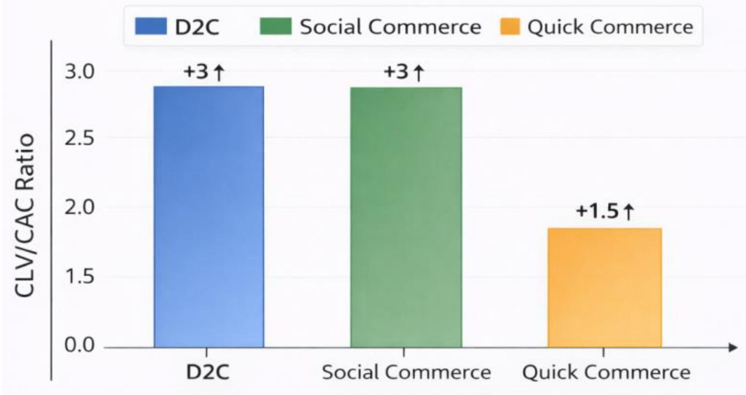

Figure 7. *CLV–CAC Ratio across Business Models*

The narrowing margins in Quick Commerce reveal the financial consequences associated with higher churn rates and lower average order values. The reverse is true for long-term unit economics in D2C and Social Commerce.

Summary of Findings

Across multiple empirical tests, four consistent patterns emerge:

- Adoption drivers differ across business models.
- Adoption predicts retention, and though the degree may vary according to the model, the prediction is strong.
- Retention is the most significant factor in the customer lifetime value (CLV) equation.
- Models based on relational engagement strategies (as opposed to transactional efficiency strategies) are better positioned for long-term sustainability.

5. Discussion

5.1 Interpretation of Findings and Hypothesis Support

The findings of this study indicate that adoption drivers are unique to each business model and that retention is the most significant factor in determining long-term customer value. The findings validate the hypotheses pertaining to D2C adoption influenced by authenticity and personalization, Social Commerce adoption influenced by peer trust, and Quick Commerce adoption influenced by speed and convenience, reflecting the primary consumer motivation derived from each platform's unique structural features.

The analysis also confirms the hypothesis that adoption has a positive correlation with retention, retention has a positive correlation with customer lifetime value, and customer lifetime value has a positive correlation with long-term profitability. This shows that digital commerce long-term profitability relies less on customer adoption and more on customer retention.

5.2 Theoretical Implications

The study shows that retention, adoption, and customer value are interrelated processes that occur within a customer lifecycle. Most past studies examine these factors separately, but this study shows that when these factors are understood sequentially, they better explain digital commerce performance.

The study further identifies the role of platform attributes in influencing consumer behaviour. The varying degrees of trust, patterns of interaction, and models of operation impact not only consumer adoption but also sustained engagement and value generation.

5.3 Managerial Implications

The study also shows that management should focus on retention and relationship-building strategies with consumers rather than on securing new consumers.

D2C companies might find personalization and loyalty programs beneficial. Social Commerce platforms can further develop community engagement while also surpassing average order value goals. Quick Commerce providers have to change pricing and engagement structures to achieve customer retention and long-term sustainability.

5.4 Limitations

This study has several limitations:

- The sample size, while sufficient for performing statistical analysis, still pales in comparison to the size of the datasets found on large-scale platforms.
- The geographical span of the study is mainly focused on urban settings, restricting the generalization of the study to rural markets.
- The transaction-level data collected for this study is from a small set of sources and therefore is likely missing a significant number of categories of consumer behaviours.
- The customer acquisition cost estimates are based on a mix of industry benchmark data and firm-specific data, which may affect accuracy.
- The inability to observe behavioural changes over a prolonged period is a consequence of the cross-sectional design.

5.5 Future Research Directions

To address these limitations, future studies should consider the use of longitudinal, larger, and more comprehensive datasets. Researchers are encouraged to consider adoption and retention mechanisms in new digital environments by studying live-stream retail and conversational commerce as emerging formats of commerce.

A deeper understanding of the role of cultural and economic factors in the creation of customer value in various digital retail ecosystems will be enhanced by using structural modelling and cross-national datasets.

Conclusion

This research analyzed consumer adoption, retention, and distinct customer lifetime value across three e-commerce business models (Direct-to-Consumer (D2C), Social Commerce, and Quick Commerce). The study analyzed the impact of the three model frameworks using behavioural survey data and transactional data of customers across different stages of the consumer lifecycle and long-term value generation.

Adoption drivers differed across digital commerce models. Personalization and authenticity drove adoption on the D2C platform. Adoption on the Social Commerce platform was driven by peer trust and community. Speed and convenience drove adoption on the Quick Commerce platform. Most importantly, customer retention on the platform was fundamental in determining customer lifetime value (CLV). Clear economic outcomes were generated on platforms that retained and sustained customers for a long time compared to platforms that experienced rapid customer uptake.

This study established an integrated framework of value across several business models based on retention, adoption, and consumer value, in contrast to prior studies that examined the three business models separately or focused on a single model. This demonstrates the comprehensive nature of the interaction and sustainability of the digital commerce ecosystem. The research demonstrates the impact of business model structure on behavioural and economic outcomes.

In relation to management, the outcomes show that sustained profitability is reliant not on rapid growth techniques, but rather on retention strategies and the improvement of customer relationships. Organizations that focus on retention, trust, and value relationships will, in all likelihood, achieve sustained growth.

The research highlights that in digital commerce ecosystems, customer lifetime value is not merely a metric of customer acquisition, but rather a reflection of enduring behavioural allegiance.

References

1. **Bain & Company.** (2024). *India e-commerce outlook: Consumer adoption and digital acceleration*. Bain & Company Research Report.
2. **Berger, P. D., & Nasr, N. I.** (1998). Customer lifetime value: Marketing models and applications. *Journal of Interactive Marketing*, *12*(1), 17–30.
3. **Choudhury, R.** (2023). Personalisation in D2C commerce: Building loyalty through curated experiences. *Journal of Retailing and Consumer Services*, *72*, 103245.
4. **Davis, F. D.** (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319–340.
5. **Gupta, A., & Sharma, V.** (2022). Quick commerce in India: Adoption, challenges, and future outlook. *South Asian Journal of Business Studies*, *11*(4), 556–573.
6. **KPMG.** (2024). *Direct-to-Consumer (D2C) in India: Unlocking growth through authenticity*. KPMG Insights Report.
7. **Kumar, N.** (2023). Brand authenticity and consumer trust in direct-to-consumer markets. *International Journal of Consumer Studies*, *47*(2), 198–210.
8. **Mehta, S.** (2023). Social commerce in India: Peer networks and purchase behaviour. *Asia Pacific Journal of Marketing and Logistics*, *35*(6), 1345–1362.
9. **Rogers, E. M.** (2003). *Diffusion of innovations* (5th ed.). Free Press.

JOURNAL OF RESEARCH AND DEVELOPMENT ISSN: 2230-9578

Journal of Research and Development

A Multidisciplinary International Level Referred and Double Blind Peer Reviewed, Open Access
ISSN : 2230-9578 | Website: https://jrdrvb.org Volume-18, Issue-4| April-2026

10. **Singh, R., & Rao, P.** (2023). Speed, convenience, and adoption of quick commerce platforms in urban India. *Journal of Business Research*, *158*, 113648.
11. **Verma, A.** (2022). Loyalty ecosystems in Indian e-commerce: The role of personalisation and subscriptions. *IIMB Management Review*, *34*(4), 276–289.