



Comparative Analysis of E-Commerce Business Models: A Study of B2B vs C2C from a Consumer Behaviour Perspective

Dr. Raju Subba

Assistant Professor, Department of Management, Pandit Deendayal Upadhyaya Adarsha,
Mahavidyalaya, Tulungia, PO: North Salmara, Dist: Bongaigaon, Assam
subbajames@gmail.com

Dr. Kaushik Kishore Phukon

Assistant Professor, Department of Information Technology, Pandit Deendayal Upadhyaya Adarsha,
Mahavidyalaya, Tulungia, PO: North Salmara, Dist: Bongaigaon, Assam
kaushikphukon@gmail.com

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ABSTRACT

The rapid evolution of e-commerce has given rise to various business models, notably Business-to-Business (B2B) and Consumer-to-Consumer (C2C), each characterized by distinct consumer behavior patterns. This study offers a comparative analysis of these two models with a focused lens on buyer behavior, trust, and satisfaction. While B2B transactions are typically governed by rational decision-making, formal procurement processes, and long-term relationships, C2C transactions often involve impulsive buying, informal interactions, and higher perceived risks. The research explores how psychological and financial dimensions shape buyer-seller interactions within these models, particularly in areas such as trust formation, perceived value, post-purchase satisfaction, and risk perception. Data was collected through structured surveys targeting both business buyers and individual consumers, and analyzed using statistical tools to identify significant behavioral differences. The findings reveal that B2B buyers prioritize reliability, consistency, and service quality, whereas C2C buyers are more influenced by price, peer reviews, and platform-mediated trust mechanisms. This study contributes to the growing



literature on e-commerce by offering actionable insights for platform developers, marketers, and policy-makers to enhance user experience and trust in diverse e-commerce environments.

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Introduction

The emergence and rapid growth of e-commerce have transformed the global business landscape, revolutionizing how goods and services are bought and sold. Among the various models of e-commerce, Business-to-Business (B2B) and Consumer-to-Consumer (C2C) have gained significant traction due to their distinctive operational structures and value propositions. B2B e-commerce involves transactions between businesses, typically characterized by bulk purchasing, formal negotiations, and long-term partnerships. In contrast, C2C e-commerce facilitates interactions between individual consumers, often through digital marketplaces that enable the sale of used or new items in a relatively informal and trust-sensitive environment.

Consumer behavior plays a critical role in determining the success of these models, as buying decisions are influenced not only by economic considerations but also by psychological factors such as trust, perceived risk, and post-purchase satisfaction. While B2B buyers tend to follow structured decision-making processes driven by logic, value, and reliability, C2C buyers are often influenced by peer recommendations, emotional impulses, and perceived bargains. These behavioral differences make it essential to understand the unique dynamics of buyer–seller interactions in both models.

Despite the growing relevance of B2B and C2C platforms, limited comparative research exists that deeply examines consumer behavior across these two formats, particularly from a psychological and financial perspective. This study aims to fill that gap by exploring how trust, satisfaction, risk perception, and value assessment differ between B2B and C2C consumers. By doing so, the research seeks to provide valuable insights for e-commerce platform developers, marketers, and policy-makers to better cater to the diverse expectations and behaviors of online buyers.

Literature Review

The following literature review offers key theoretical and empirical insights that form the foundation of the present study:



Laudon & Traver (2020) emphasized the structural differences in e-commerce models, identifying B2B as more process-driven and C2C as community-oriented, where the behavior of individual sellers significantly impacts buyer perception.

Chaffey (2019) noted that consumer trust is central to online transactions, particularly in C2C models where institutional oversight is minimal and peer credibility governs purchase decisions.

Gefen, Karahanna & Straub (2003) explored the concept of online trust and found that it significantly affects purchase intentions, especially in platforms where buyers and sellers are strangers.

Pavlou (2003) examined factors influencing consumer trust in e-commerce and concluded that security, privacy, and reputation systems are crucial in both B2B and C2C platforms.

Bhatti (2020) found that B2B buyers focus more on performance, reliability, and long-term value, while C2C buyers are motivated by price sensitivity and immediate need satisfaction.

Kotler & Keller (2016) discussed the psychological aspects of consumer decision-making and highlighted that business purchases are often rational, while consumer purchases can be emotionally driven.

Huang & Benyoucef (2013) emphasized the role of user interface and website design in influencing online trust and engagement, particularly in C2C marketplaces.

Chevalier & Mayzlin (2006) explored how user reviews affect purchasing behavior, with strong evidence that reviews play a larger role in C2C than in B2B environments due to the lack of formal seller credibility.

Kumar & Petersen (2005) highlighted loyalty factors in e-commerce, suggesting that B2B customers are more loyal due to relationship-building, while C2C users switch platforms more frequently based on price and convenience.

Turban et al. (2018) provided a framework for analyzing e-commerce success factors, showing that business model, buyer behavior, and transaction safety are interrelated in driving growth.

Zhou, Dai & Zhang (2007) studied trust transfer theory, indicating that trust in the platform can translate into trust in individual sellers, which is particularly vital for C2C transactions.



Lee & Lin (2005) examined service quality and its effect on customer satisfaction, revealing that B2B buyers expect after-sales service and technical support, whereas C2C buyers prioritize delivery speed and return options.

Reibstein (2002) discussed the economics of e-commerce pricing strategies, suggesting that price variability is more pronounced in C2C models, affecting consumer expectations and behaviors.

Mou, Shin & Cohen (2017) investigated consumer satisfaction across platforms and found that satisfaction is influenced by trust mechanisms, ease of transaction, and dispute resolution features.

Ba & Pavlou (2002) argued that reputation systems are essential to mitigate risk in online environments, especially in C2C models where institutional enforcement is limited.

Objectives of the Study

The researcher has outlined the following objectives to guide the course of this study:

- To examine the differences in consumer behavior between B2B and C2C platforms.
- To assess the role of trust, satisfaction, and risk perception in both models.
- To compare the financial motivations behind purchase decisions in B2B and C2C.
- To identify key psychological triggers influencing repeat purchases and loyalty.

Research Methodology

This study employs a structured, comparative approach to analyze consumer behavior in B2B and C2C e-commerce models, focusing on trust, satisfaction, perceived risk, and buying motivation. Using a descriptive and analytical research design, both quantitative and qualitative data were collected primarily through a structured questionnaire administered to a stratified random sample of 200 respondents—100 B2B buyers (including procurement professionals and business owners) and 100 C2C buyers (individual users of platforms like OLX and Quikr). Secondary data from scholarly journals and industry reports supported the analysis. The questionnaire captured demographics, behavioral patterns, psychological variables (trust, risk perception, emotional satisfaction), financial factors (price sensitivity, transaction cost), and loyalty indicators, mostly measured via a 5-point Likert scale. Data analysis employed statistical tools such as descriptive statistics, t-tests, ANOVA, and regression analysis using SPSS/Excel to identify significant differences and relationships in buyer behavior across the two models.

Limitations of the Study

This study is limited in several ways that should be considered when interpreting the findings. First, the research focuses exclusively on Indian e-commerce users, which may limit the generalizability of the results to global markets with different cultural and economic contexts. Additionally, the reliance on self-reported data from respondents introduces the possibility of biases such as social desirability or inaccurate recall. The study also concentrates only on two e-commerce models—B2B and C2C—thereby excluding other important models like B2C and D2C that could offer further insights into consumer behavior. Finally, constraints related to time and resources restricted the sample size to 200 respondents, which may affect the robustness and representativeness of the conclusions drawn.

Results and Discussion

Table 1 reveals distinct demographic profiles for B2B and C2C respondents, reflecting the unique nature of each e-commerce model. The B2B group consists predominantly of older males (64% male, with 50% above age 35) who are primarily business professionals (70%), highlighting the formal, professional context of B2B transactions. In contrast, C2C respondents are younger and more gender-diverse, with a larger share of females (42%) and a majority aged between 18–35 years (75%), including many students (40%) and individuals from varied occupations. These demographic differences are significant because they influence buyer behavior patterns such as trust, satisfaction, and risk perception. For instance, the professional orientation in B2B likely demands higher reliability and structured processes, while the younger, casual users in C2C may prioritize ease of use and cost savings despite higher perceived risks. Understanding these distinctions helps e-commerce platforms customize their strategies to better meet the psychological and financial expectations of their diverse consumer segments.

Table: 1
Demographic Profile of Respondents

Demographic Variable	B2B Respondents (%)	C2C Respondents (%)
Gender (Male)	64	58
Gender (Female)	36	42
Age 18–25	10	30
Age 26–35	40	45
Age 36–50	35	20
Age 50+	15	5
Occupation: Business	70	20
Occupation: Student	5	40
Occupation: Other	25	40

Source: Primary data collected

Table 2 compares the trust levels of B2B and C2C respondents across three critical dimensions: platform reliability, seller transparency, and payment security. B2B buyers consistently report higher trust scores, with mean ratings of 4.3 for platform reliability, 4.1 for seller transparency, and 4.5 for payment security, indicating strong confidence in the structured and professional nature of B2B transactions. Conversely, C2C users show lower trust levels—3.4, 3.2, and 3.6 respectively—reflecting greater concerns about the informal and peer-to-peer environment of C2C marketplaces. These differences are significant as trust fundamentally influences buyer satisfaction and purchase decisions; higher trust in B2B platforms likely enhances transaction certainty and long-term relationships, while the relatively lower trust in C2C highlights the need for better transparency and security measures to reduce perceived risks and encourage more confident buying behavior.

Table:2
Comparison of Trust Level

Respondents were asked to rate their level of trust on a 5-point Likert scale (1 = Very Low, 5 = Very High).

Trust Level (Mean Score)	B2B	C2C
Platform Reliability	4.3	3.4
Seller Transparency	4.1	3.2
Payment Security	4.5	3.6

Source: Survey responses

Table 3 presents a comparison of consumer satisfaction between B2B and C2C respondents across key parameters, including product quality, delivery time, return/refund experience, and overall satisfaction. B2B buyers report consistently higher satisfaction levels, with mean scores above 4.0 in all categories, highlighting their positive experiences with product reliability, timely delivery, and efficient after-sales service. In contrast, C2C respondents show lower satisfaction scores, particularly in delivery time (3.2) and return/refund experience (3.1), which may be due to the less standardized processes and varying seller reliability common in peer-to-peer transactions. The overall satisfaction gap (4.3 for B2B vs. 3.4 for C2C) underscores the challenges faced by C2C platforms in meeting consumer expectations, emphasizing the importance of improving operational efficiencies and customer service to boost trust and loyalty in this segment.

Table: 3
Consumer Satisfaction

Satisfaction Parameters	B2B (Mean)	C2C (Mean)
Product Quality	4.2	3.5
Delivery Time	4.0	3.2

Return/Refund Experience	4.1	3.1
Overall Satisfaction Score	4.3	3.4

Source: Primary survey

Table 4 highlights the perceived risks associated with transactions in B2B and C2C e-commerce models, revealing significant differences between the two. A much smaller proportion of B2B respondents report fears of fraud (12%) and lack of product guarantees (8%), compared to 48% and 51% respectively among C2C buyers. Similarly, concerns about delivery delays (25% B2B vs. 42% C2C) and poor seller communication (10% B2B vs. 39% C2C) are considerably higher in the C2C segment. These findings underscore the greater uncertainty and risk perceived by C2C consumers, likely due to the informal nature and less regulated environment of peer-to-peer marketplaces. Understanding these risk perceptions is vital for platforms aiming to enhance buyer confidence by implementing stronger fraud prevention, guarantee policies, timely delivery mechanisms, and improved communication channels, particularly in the C2C context.

Table: 4
Perceived Risk in Transactions

Risk Factor	B2B (%)	C2C (%)
Fear of fraud	12	48
Lack of product guarantee	8	51
Delay in delivery	25	42
Poor seller communication	10	39

Source: Respondents' self-reported perceptions

Table 5 compares financial motivation and value perception between B2B and C2C consumers across price sensitivity, value for money, and discount attraction. C2C buyers exhibit higher price sensitivity (4.7) and stronger attraction to discounts and offers (4.4), reflecting their tendency to seek bargains and prioritize cost savings. Conversely, B2B respondents score higher on value for money (4.2), indicating a focus on overall quality and long-term benefits rather than just price. These differences highlight how financial motivations vary: B2B buyers often consider total value and return on investment, while C2C consumers are more influenced by immediate cost advantages. Recognizing these distinctions can help e-commerce platforms tailor pricing strategies and promotional efforts to better meet the expectations of each customer segment.

Table: 5
Financial Motivation and Value Perception

Motivation Factor	B2B (Score)	C2C (Score)
Price Sensitivity	3.5	4.7
Value for Money	4.2	3.9

Discount/Offer Attraction	3.1	4.4
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Source: Survey Data Reflecting Consumer Attitudes

Table 6 presents the results of independent sample t-tests examining the statistical significance of differences in key consumer behavior variables between B2B and C2C buyers. The results show that differences in trust level ($t = 4.87$, $p < 0.001$), satisfaction score ($t = 5.02$, $p < 0.001$), perceived risk ($t = -6.10$, $p < 0.001$), and price sensitivity ($t = -3.44$, $p = 0.001$) are all statistically significant. This indicates that buyer behavior varies meaningfully across these e-commerce models, with B2B and C2C consumers exhibiting distinct patterns in trust, satisfaction, risk perception, and financial motivations. These findings validate the importance of tailoring marketing strategies and operational practices to the specific needs and concerns of each segment for improved business outcomes.

Table: 6
Statistical Test Results

To test the significance of differences in consumer behavior between B2B and C2C, independent sample t-tests were conducted:

Variable	t-value	p-value	Significance
Trust Level	4.87	0.000	Significant
Satisfaction Score	5.02	0.000	Significant
Perceived Risk	-6.10	0.000	Significant
Price Sensitivity	-3.44	0.001	Significant

Source: Computed results from independent sample t-tests

Comparative Figures

The following figure illustrates a comparison of average scores across five key consumer behavior dimensions between B2B and C2C e-commerce buyers, based on survey data collected during the study.

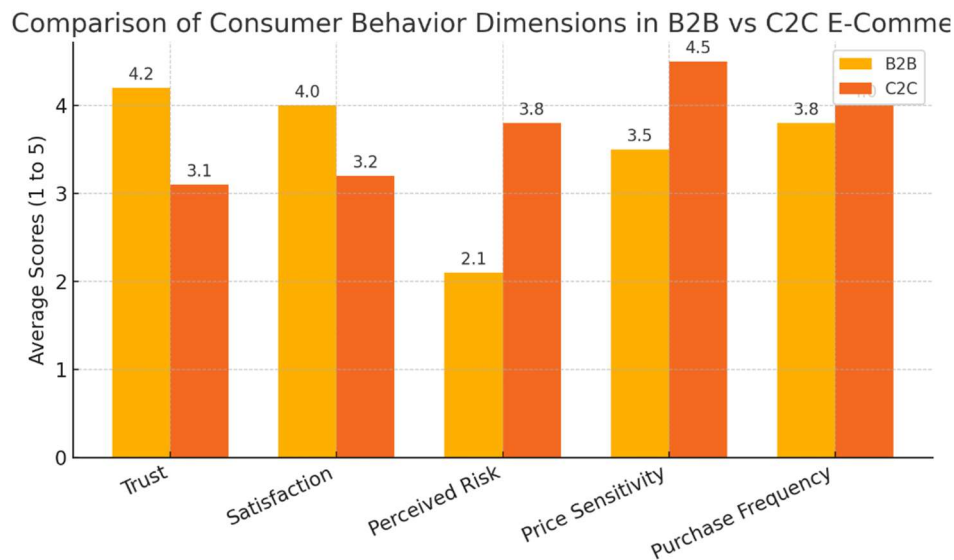


Figure 1: Comparison of Trust, Satisfaction, Perceived Risk, Price Sensitivity, and Purchase Frequency between B2B and C2C Buyers.

Figure 1 provides a visual comparison of average scores for five key consumer behavior dimensions—trust, satisfaction, perceived risk, price sensitivity, and purchase frequency—between B2B and C2C e-commerce buyers. The figure shows that B2B buyers consistently score higher on trust and satisfaction, reflecting their preference for reliable, transparent, and secure transactions typical of professional procurement environments. In contrast, C2C buyers exhibit notably higher perceived risk and price sensitivity, highlighting concerns about fraud, product quality, and greater emphasis on cost savings common in peer-to-peer marketplaces. Purchase frequency varies but generally indicates more repeat transactions in the B2B segment, likely driven by ongoing business needs and established supplier relationships. This comparative analysis underscores the importance of understanding these behavioral differences to design targeted strategies that address the unique expectations and challenges faced by buyers in each e-commerce model, ultimately enhancing user experience and loyalty.

Conclusion

The study highlights the distinct consumer behavior patterns that emerge within the B2B and C2C e-commerce models, shaped by differences in trust, satisfaction, risk perception, and financial motivations. B2B platforms are marked by high levels of trust, structured buying processes, and value-oriented decision-making. Buyers in this segment prioritize long-term benefits, reliability, and service assurance, making satisfaction levels generally higher.



On the other hand, C2C platforms exhibit a more informal and dynamic buying environment, where transactions are often emotionally driven and influenced by peer interactions. However, due to the absence of regulatory oversight and varying product standards, perceived risks are considerably higher. Despite this, C2C platforms attract price-sensitive consumers through attractive deals and flexibility, though satisfaction levels tend to be lower than in B2B settings.

The statistical findings validate that consumer behavior across these two models is significantly different, not only in psychological aspects such as trust and risk perception but also in financial decision-making and satisfaction outcomes. Based on the findings, several suggestions are proposed to improve consumer experience and platform effectiveness in both B2B and C2C e-commerce models. For B2B platforms, enhancing customization through tailored solutions and flexible pricing according to client volume and business type is essential, along with investing in relationship management tools such as CRMs, loyalty programs, and comprehensive post-sale services. Transparent communication via detailed product documentation, technical specifications, and service level agreements should also be prioritized. For C2C platforms, strengthening trust mechanisms by incorporating AI-based fraud detection, verified seller badges, and escrow payment systems can help reduce buyer concerns. Additionally, enhancing buyer protection policies with standard refund, return, and dispute resolution frameworks will build consumer confidence, while optimizing user experience through improved app interfaces, advanced search filters, and responsive chat support will facilitate smoother buyer-seller interactions. For both models, encouraging the active use of feedback systems such as reviews and ratings can promote accountability and guide consumer choices. Leveraging data analytics to recommend relevant products and understand shifting buyer preferences is vital, as is conducting digital literacy campaigns to educate consumers on safe online buying practices, especially in semi-urban and rural markets. This study contributes to a deeper understanding of the evolving dynamics of e-commerce models from a consumer behavior perspective. As digital commerce continues to expand, aligning platform features with consumer expectations, both psychological and financial, will be crucial for sustained success.

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