A Study Exploring the Factors Affecting Purchase Intention of Online Consumers in Quick – Commerce

SUBMITTED BY:

Sanskriti Soni (12109457), Student, Mittal School of Business, Lovely Professional University, Phagwara (Punjab)

Vipinjot Singh (12103576), Student, Mittal School of Business, Lovely Professional University, Phagwara (Punjab)

Under The Guidance of:

DR. Arun Kaushal

ASSISTANT Professor Mittal School of Business Lovely Professional University, Phagwara (Punjab)

Abstract

Quick Commerce (Q-Commerce) is changing how we shop, with speed and convenience becoming more important than ever. As more people rely on these platforms for instant deliveries, it's crucial to understand what really drives their buying decisions. This study looked into key factors like ease of use, trust, usefulness, price, and delivery speed. Interestingly, it found that traditional elements like trust and ease of use don't matter as much in Q-commerce—what really stands out is delivery speed, though even that isn't overwhelmingly significant. The findings suggest that other elements like product availability, competitive pricing, and reliable service might play a bigger role than expected. For Q-commerce brands, this means focusing less on flashy tech and more on smooth logistics and customer satisfaction. By applying and rethinking the Technology Acceptance Model (TAM), the study shows we need fresh approaches to truly understand today's fast-moving consumer behavior.

Keywords: Quick Commerce, Consumer Behaviour, Purchase Intention, E-Commerce, Technology Acceptance Model, Delivery Speed, Personalization, Trust, Last-Mile Logistics, Market Evolution\

Chapter- 1

1.Introduction

The evolution of e-commerce technology and the changing mindset of e-commerce consumers have drastically changed shopping behaviour. The revolution from physical retail to digital space is being spurred with rising internet penetration, widespread use of smart phones and shifting consumer expectations. The rise of so-called Quick-Commerce (Q-commerce) is one of the most revolutionary e-commerce models, offering super-fast deliveries and changing the way in which consumers use e-commerce. Traditional e-commerce works on long delivery time schedules, but Q-commerce is quick commerce which is able to fulfil orders within minutes, to give modern consumers instant gratification and convenience. The rapid dependence on fast delivery services has made it vital research area for academia and industry alike to know the major contributors that drive consumer purchase intentions in Q-commerce. These factors include everything from levels of trust to convenience, pricing strategies to technological integration — businesses operating in this space need to have a graph both for consumer engagement and long-term viability. While the industry has grown quickly over the past couple of years, there remains a gap in research that would help to better our understanding of consumer behaviour in Q-commerce, which makes the field a crucial space for research.

1.1 Aim of the Study

This study aims to investigate the factors affecting consumer purchase intention in Q-commerce by employing the Technology Acceptance Model (TAM) as a theoretical lens. This study intends to examine how perceived usefulness, ease of use, trust, personalization, delivery speed, and data security influence the consumer decision-making process. Through a systematic assessment of these determinants, the study will offer evidence-based insights for businesses, marketers, and policymakers, helping to enhance consumer engagement, improve operational efficiency, and ensure service quality in Q-commerce.

1.2 Importance of the Study

This study is of great importance as it involves a fast-growing market segment that is re-shaping the future of digital commerce. Now, although e-commerce in general is a hot area of study, the rapid delivery model of Q-commerce works under its own set of specialized challenges and opportunities. For companies looking to carve out a unique position in the market, a detailed insight into consumer activity in this space is key. Additionally, the insights gleaned from studying consumer adoption behaviour will encourage Q-commerce platforms to fine-tune user experiences and improve adoption rates as technology continues to progress.

1.3 Applicability and Scope

The results of this study will be useful for several stakeholders, namely:

- Q-commerce businesses and startups wanting to analyse operational strategies and enhance service quality.
- Marketers and business strategists in charge of creating consumer engagement models to increase brand loyalty and repeat purchases
- Technology solution developers and UI/UX specialists enhancing app usability, AI-based recommendations, and real spots of the tracking to gain improved customer experiences.
- Regulator, policy makers ensuring transparency, security and consumer protection in digital transactions.

While most studies focus on purchase behaviour, this study assesses critical dimensions including trust, perception of price, and technology adoption. By collecting real-time data and conducting real empirical research, this research seeks to offer a contribution to industry practitioners in addition to academic researchers.

1.4 Relevance of the Study

As Q-commerce continues to thrive in both urban and semi-urban areas, its growing role in the digital economy is undeniable. The shift in consumer expectations—driven by the desire for instant service, fast delivery, and personalized experiences—has reshaped how people view online shopping. Unlike traditional e-commerce, which focuses on broad product selections and slower delivery timelines, Q-commerce stands out for its speed, efficiency, and localized service. Previous studies have highlighted various factors that shape online consumer behavior. Bahari et al. (2024) credit the rise of online shopping to its accessibility, convenience, and cost-effectiveness. Still, ongoing issues like trust, perceived risk, and service inconsistencies continue to affect buyer decisions. Similarly, Baeshen (2021) emphasizes the importance of strategic pricing, transparency, and strong security in building consumer confidence. For Q-commerce platforms to foster loyalty and repeat purchases, they must prioritize these trust-building elements alongside operational efficiency.

Building trust and loyalty in Q-commerce requires more than just fast delivery—it demands a well-rounded, consumer-first approach. Unlike traditional e-commerce, Q-commerce deals with impulse-driven, time-sensitive purchases where

customers are highly concerned about payment security, product authenticity, and service reliability. To address this, platforms must offer secure transactions, transparent return policies, real-time tracking, and seamless tech integration. Personalized recommendations, AI-driven inventory updates, and easy navigation enhance user experience, while affordable pricing and quick fulfilment foster repeat business. However, operational hiccups like inconsistent delivery and poor support can quickly erode trust. As consumers prioritize speed, affordability, and convenience, Q-commerce companies must constantly adapt. This research aims to bridge the gap in understanding how these factors influence purchase intentions specifically in the Q-commerce space. The insights will help marketers, businesses, and policymakers improve customer engagement, streamline operations, and create scalable, sustainable models in this fast-evolving retail frontier.

Chapter- 2

2Literature of Review

1. Akar and Nasir (2015) investigated the determinants of online shopping behavior by reviewing more than 100 studies of consumers' purchase intention. Their research, which focused on categorizing these influences into categories like consumer demographics, website functionality and seller characteristics. Although they emphasized the importance of these factors, they argue that the impact of social media on purchase behaviour is under-studied and thus represents a crucial area for future research. This study provides useful insights regarding online purchasing behavior, especially in rapidly growing fields such as Q-commerce.

2. Burman & Aggarwal (2015) examined the factors that affect e-commerce buying behavior in India, with particular attention to cultural, social and psychological influence. The convenience also illustrates the increasing importance of digital marketing tools, especially among younger consumers, the study said. While the research provides a thorough overview, the paper focused mainly on theoretical facets concerning the trends prevalent in e-commerce and does not provide empirical validation, indicating a lack of comprehension about the practical implementation of how technological developments can drive new e-commerce trends, such as mobile applications and social media marketing.

3. Omni-channel retailing and purchase intention factors–Kazancoglu and Aydin (2018) Clarifying the above definition, they built focus groups with 30 university students, obtaining 12 categories, 6 of which correlated with UTAUT2 model as performance expectancy, effort expectancy, facilitating conditions, hedonic motivation, habit, and price value. In addition, the study identified six other themes of interest, namely the perceived trust, situational factors, perceived risk, anxiety, need for interaction, and privacy concerns — interesting new insights into consumer behaviour.

4. Othman et al. (2019) identified trust, perceived risk, and service quality as critical determinants of customer loyalty in e-commerce, highlighting the role of these factors in maintaining loyalty (2019). Their research highlights the role that trust plays in promoting customer loyalty in online shopping environments. In particular, the authors advise e-commerce firms to apply trust-enhancing and risk-reducing strategies to facilitate increased retention of customers.

5. Pradipta et al. (2020) investigate impact of social media marketing on brand awareness and purchase intention in automobile automotive workshop sector through e-commerce. According to the study, social media marketing had a great impact on improving brand awareness, subsequently affecting the purchase decision positively. There was a limitation of the research to Instagram without considering other platforms or the wider e-commerce context like

pricing strategies or post-purchase behaviour, all of which are essential for a complete understanding of how consumers make decisions.

6. Le-Hoang (2020) investigated online purchase intention on Lazada in Ho Chi Minh City, Vietnam, using the Theory of Planned Behaviour (TPB) as the theoretical framework. The following six factors were identified in the findings of the study: Trust, business competency, reference group opinions, usefulness-convenience, behavioural control awareness, and perceived risk. Results showed Trust to be the most important driver of Purchase Intention, and Perceived Risk to have a negative impact. Consumers of e-commerce tends to decide based on the study, where evidence of the reliability and efficient service, as well as the social proof (peer reviews) play a crucial part.

7. Chakraborti et al. (2024) examined the effects of electronic word-of-mouth (eWOM) on customer loyalty and buying decisions in the quick commerce (QC) industry in India with a focus on Stimulus-Organism-Response (SOR) process. Customer engagement (CLE), social media interaction (SMPE), and influencer partnerships (IPE) were shown to have significant positive effects on eWOM, and eWOM exhibited a strong significant positive effect on purchase decisions (β=0.268, $p<0.001$). On the other hand, eWOM did not directly affect customer loyalty, which reveals the transactional nature of QC, where speed is far more important than brand attachment.

8. The study highlights the pivotal role of eWOM in QC marketing strategies tailored for Blinkit and Zepto, given how crucial it is to have real-time customer feedback at their disposal, along with working with influencers to achieve faster conversions. The findings are consistent with global e-commerce trends but highlight the unique characteristics of hyperlocal delivery markets, where immediacy and trust drive consumer behavior.

9. This research would face a difference with regards to platforms that work in arenas targeting young, technology usage savvy demographic in the form of developing markets where convenience and trust play a focal role. While its findings reflect global e-commerce trends, they also highlight localized approaches, like improving post-purchase support and tapping into social influence, to push back against regional consumer doubts.

10. Rosa et al. In their study on e-commerce buying behaviour in Palembang, Indonesia, they found out that online shopping experience and brand image significantly increases web trust, and in turn drives purchasing decisions (2018) But WOM made very little difference. The research underscores the significance of security, brand credibility, and user experience, which are vital takeaways for company platforms targeting young, tech-savvy users who drive the online commerce landscape.

11. Pham (2020) researched what factors influence consumer goods buyers' decisions when buying online in Vietnam noting that the brand, colour and position of a product were important in choosing an e-commerce site (Pham, 2020). Brand was the single biggest factor, the study said, followed by colour and screen location. Significantly, background education and gender were also related with preferences, so that employees with a master's degree considered colour more important and women were concerned with product position. Although, this study gives an insight of visual and brand related factors, it is limited to Vietnam and neglects the impact of mobile shopping or customer reviews which are more common in their influence in global e-commerce.

12. Hartanto et al. (2022) examined the effects mobile shopping, customer reviews, perceived credibility, and celebrity endorsements have on online purchase decisions on Tokopedia, Indonesia's largest e-commerce platform. Mobile shopping, customer reviews, and perceived credibility were found to be important factors influencing purchase decisions, while celebrity endorsements had no significant effect. The study also demonstrated the correlation between purchases decision and CS and BL. In addition, the study was only conducted in Jakarta, which affirms the limitations of the study findings to be applicable in other areas or markets where consumers behave differently."

13. Tsotetsi (2023), A review of factors affecting consumer purchase intentions in the South African e-commerce context. Perceived risk, trust, and service quality were found to be important factors driving online shopping few of the research recognised from the data up to October 2023. The insights gained through this study provide new perspectives on consumer engagement in South Africa that will guide e-commerce companies in refining their strategies to better engage their customers.

14. Daroch et al. Thus, (2021) has studied what discourages Indian Consumers from shopping online. Using factor analysis, they found six main reasons: trust issues regarding online payment security; preference for brick-and-mortar stores; communication challenges regarding the product; previous bad experiences; lack of product information, and problem with service/reputation. The findings highlight the importance of transparency, detailed product descriptions, and greater customer support in alleviating these barriers, enabling Q-commerce services to better meet consumer expectations.

15. Baeshen (2021) explored the online fashion retail consumer purchase behaviours in Saudi Arabia using the Technology Acceptance Model. The study identified such factors as convenience, price, product information in detail and secure transactions as important ones for decision making. Providing actionable strategies for Q-commerce from some prominent companies, the research emphasizes on the need for both robust security measures, and comprehensive product descriptions to improve consumer trust and satisfaction.

16. Pal et al. (2021) aim to recognize the factors influencing students' satisfaction and loyalty in using online food delivery applications during the COVID-19 lockdown, emphasizing perceived value and service quality as the key factors affecting customer satisfaction and loyalty. This has great relevance in the Q-commerce sector, particularly amongst students and younger audience using digital services with a focus on convenience.

17. Norris et al. (2021) explores the behavioural adjustment within the Q-commerce industry in the time of restrictions related to COVID-19, as well as studies how the use of online platforms helped the Q-commerce industry to maintain relationships with customers. The study compromises the evidenced that effective communication and trust-building strategies were critical for businesses to understand the challenges presented by the pandemic. This study highlights the importance of agility and responsiveness in dynamic environment of fast delivery services.

18. Kim et al. (2022) studied the effects of e-customer satisfaction, e-trust, and perceived value on the B2C e-commerce consumers repurchase intentions. Results from the study demonstrate that increased e-trust has a significant positive effect on repurchase intention, which highlights the need for e-commerce stores to develop trust with their clientele. According to the authors, the competition among businesses in the era of e-commerce is fierce, and they need to concentrate on enhancing customer satisfaction and trust to promote loyalty.

19. Hartanto et al. Anderson et al. (2022) are (conducted empirical analysis to identify factors affecting the desire to purchase online, customer satisfaction, and brand loyalty in Indonesia's e-commerce, using Tokopedia as a case study. They found that mobile shopping, customer reviews, and perception of credibility are the three most significant contributors to consumers' inclination to buy in the online environment, indicating that accessibility, feedback from peers, and trustworthiness are the major factors that drive buying behaviour.

20. On the other hand, the study also showed that Korean celebrity endorsements do not significantly affect purchase decisions, evolving marketing in a more localized way could be more effective than capturing the global market through influencers. Similarly, their results showed a positive correlation between online purchase decision making and customer satisfaction, meaning that when customers can buy online easily and in trust, they become more satisfied overall. This is where enhancing service quality, fostering trust, and engaging customers come into play as

they lead to satisfied customers who are loyal to your brand. This knowledge can help e-commerce enterprises fine-tune their marketing strategies & encourage long term brand loyalty.

21. Q-Commerce (Quick Commerce) is quickly changing the game of e-commerce with its on-demand premise. For instance, Deepthi and Bansal (2023) utilized the Technology Acceptance Model (TAM) and Structural Equation Modelling (SEM) to explore Q-commerce acceptance. According to their study across 277 respondents from Indian metropolitan cities, perceived benefits (PB), perceived ease of use (PEU), social influence (SI), and socio-demographic factors (SDF) significantly influence user adoption. PB facilitates adoption by giving users ease and efficiency and PEU provides ease of navigation. Factors like SI (including peer recommendations and social media) are powerful bot SND. SDF, like age and income, are also key.
22. Quick commerce becomes well place because All of these insights help Q commerce firms during competitive markets strategy optimizations, user experience optimizations, customer engagement optimizations.

23. Munday and Humbani (2024) explored the perceptions driving mobile food delivery app use during the pandemic and implications for Q-commerce platforms. Increased health concern caused by COVID-19 has changed the way consumers behave with a focus on safety and hygiene. As Q-commerce is offered in every aspect of life, whether it is food or groceries or medicines, the study has highlighted that such businesses must focus on transparency, clear communication and reliability to win the trust of the customers.

24. Nguyen and Nguyen (2024) explored the motivations of Generation Y and Z toward online food delivery services, with implications for the Q-commerce industry. Generation Y places a premium on service quality and trust, whereas Generation Z is more responsive to promotions and digital interactions. The research also points to the necessity for Q-commerce companies to customise their strategy align with these consumer group preferences.

25. Sanchez & Pedro (2024): Q-commerce development focusing on fast delivery and app-based transactions Logistics for Last-Mile Delivery, Consumer Behaviours and Challenges According to the study, Convenience, Speed, Product Variety, and User Interface Design are the primary drivers for consumer usage of e-grocery; however, security of data and limited access to digital platforms are significant challenges.
26. Zaheer et al. (2024) investigated the role of e-trust in digital commerce and its influence on purchasing intentions in OFDAs. He showed how OFDA security features improve trust and subsequent purchase intentions.

27. Research on Variables Impacting Online Purchase Intention Ghosh (2024) examined the impact of a range of variables on online purchasing using a meta-analysis of previous studies. The major factors considered were ease of use, reliability, perceived usefulness, online reviews (e-WOM) and demographic factors. The proposed study model yielded practical strategies that can help businesses develop effective customer engagement strategies in Q-commerce.

28. Bahari et al. Perceived trust, perceived benefits, and perceived risks were the notable determinants, as per (2024), which evaluated determinants of consumer purchase intentions in online shopping. Trust and benefits have a significant, positive, and general influence on the decision-making of online consumers, while the risk perceived has a minimal deterrent effect. Such insights emphasize Q-commerce platforms to instil consumer trust and confidence in digital transactions.

29. Al-Mazied (2024) examined online purchasing behaviours among Jordanian students using Technology Acceptance Model and Theory of Planned Behaviour. The study identified primary motivators for online shopping as trust, positive attitude, ease of use of platforms and perception of utility. Platforms should be user-friendly and build trust to facilitate Q-commerce adoption.

Research Gaps:
Despite the rapid growth of Q-commerce, there is limited research on how trust, delivery speed, and data privacy influence consumer purchase intentions. Additionally, the role of rapid delivery and technology-driven personalization in shaping consumer behavior remains underexplored. Furthermore, there is a lack of studies examining how Q-commerce platforms build trust and ensure product availability to drive purchasing decisions.

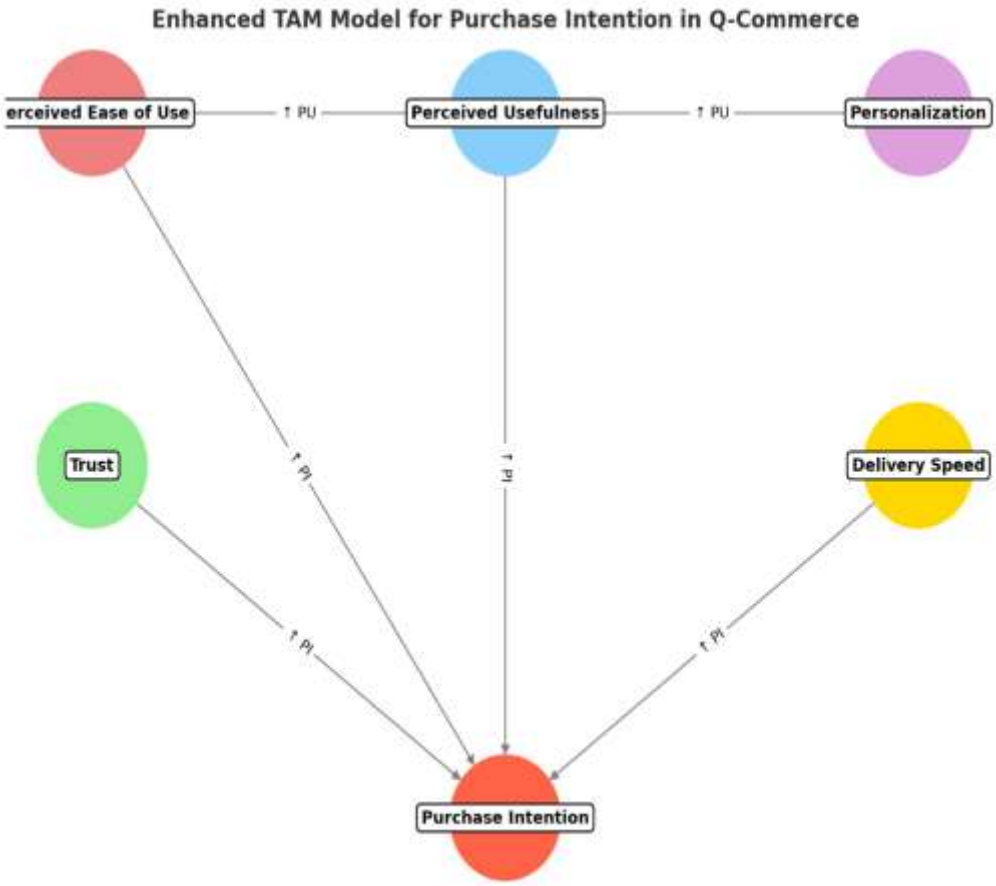
Objectives:
1. To explore the impact of trust, delivery speed, and data privacy on consumer purchase intentions in the Q-commerce sector.
2. To analyse how rapid delivery and technology-driven personalization influence consumer behaviour and decision-making.
3. To assess strategies used by Q-commerce platforms to enhance product availability and customer experience, fostering consumer trust and driving sales.

Chapter- 3

3. Research Methodology/Implementation of Project
This study uses a quantitative research approach to explore key factors influencing consumer purchase intentions in Q-commerce, focusing on trust, delivery speed, data privacy, and tech-driven personalization. By adopting a structured and statistical method, the research ensures reliable and unbiased results. Using a deductive framework based on the Technology Acceptance Model (TAM), it examines digital consumer behavior in the fast-evolving fintech and e-commerce space. The findings offer valuable insights for both scholars and industry professionals, helping improve customer experiences and shape effective Q-commerce strategies.

3.1 Research Design
This study adopts a descriptive research design to systematically examine consumer purchase intentions in the Q-commerce industry. Using a quantitative approach, it investigates key factors—trust, delivery speed, data privacy, and tech-driven personalization—that influence buyer behavior. The design allows for an in-depth analysis of how these elements shape consumer perceptions and decisions in a post-pandemic, fast-paced digital shopping environment. By collecting data up to October 2023, the research provides empirical insights and supports its findings with statistical modeling, offering a clearer understanding of evolving consumer patterns in Q-commerce.
3.2 Research Approach
This is a deductive research approach, that is, it applies and tests existing theories by formulating and testing research hypotheses. Conceptual Framework The study relied on the Technology Acceptance Model (TAM) as a guide to evaluate the extent how perceived usefulness, perceived ease of use, perceived trust, and personalization significantly affected the purchase intention of the consumers. The study employs both primary and secondary data sources, providing a well-rounded examination of the issue. Meanwhile, the deductive approach cements the study with empirical evidence in supporting or revising already established theories.

3.3 Theoretical Framework: Technology Acceptance Model (TAM)
This study extends the Technology Acceptance Model (TAM) to understand consumer purchase behavior in Q-commerce, adding factors like trust, personalization, delivery speed, and data privacy to the original focus on perceived usefulness and ease of use. The model examines how these factors influence consumer decisions, such as the efficiency of the shopping process, platform usability, trust in the service, and concerns about data security. Using linear regression analysis in Jamovi, the study tests how these variables impact purchase intentions in Q-commerce.



3.4 Research Hypothesis

Based on the Extended Technology Acceptance Model (TAM) framework, this study formulates the following hypotheses to examine the influence of key factors on consumer purchase intentions in the Q-commerce sector. These hypotheses focus on the impact of perceived usefulness, perceived ease of use, trust, personalization, delivery speed, and data privacy on consumers' decision-making processes.

- H1: Perceived usefulness (PU) positively and significantly affects the consumer purchase intention in Q-commerce platforms.

Consumers will continue using Q-commerce platforms if they feel these services meet their daily needs. Platforms offering convenience, efficiency, and added value are more likely to encourage purchases, as customers are drawn to the time and effort savings they provide.

- H2: PEOU has a positive effect on consumer purchase intention by improving user experience and lowering transaction barriers in Q-commerce.

Consumers prefer digital platforms that are user-friendly, require minimal effort to place an order, and offer a smooth checkout experience. A simple, intuitive interface reduces cognitive load, enhances satisfaction, and increases the likelihood of purchase.

- H3: Due to higher levels of trust, T (trust) on Q-commerce platforms positively influences consumer purchase intention (CPI), by increasing the level of consumer confidence in conducting transactions online.

Trust is crucial in online shopping behavior. Consumers are more likely to use Q-commerce platforms when they feel their personal and financial data is secure, transactions are transparent, and promises are fulfilled. If payment methods fail to build trust or service records are poor, reflected in customer reviews, purchase intentions may decline.

- H4: AI-powered customization (P) impacts consumer purchase intention in a positive manner as it increases product recommendations and improves customer engagement.

Personalization plays a significant role in modern e-commerce, with AI algorithms offering product recommendations based on past purchases, interests, and browsing patterns. By tailoring product offerings, Q-commerce platforms create a sense of exclusivity, making products more relevant and boosting purchase intent. Personalized promotions, discounts, and targeted ads further strengthen customer relationships and encourage repeat purchases.

- H5: Increased convenience and ability to satisfy the consumer's desire for instant gratification, faster delivery speed (DS) positively affect consumer purchase intention.

Q-commerce is all about the speed of delivery, usually in under five minutes. In age of instant gratification, the delivery speed can be an important factor when the consumers making a purchase. Platforms that ensure product delivery in the time frame promised, reinforce consumer satisfaction and drive repeat purchases. On the contrary, delays or an erratic service can erode trust and dissuade consumers from using the platform.

Why These Hypotheses?

- The Technology Acceptance Model (TAM) comprises PU and PEOU as important drivers to describe consumer adoption and purchase behaviour.
- E-commerce models based on trust highlight its importance in affecting e-transactions.
- AI and data-powered insights are used by personalization to improve customer engagement and retention.
- It becomes critical to shape consumer decisions as delivery speed aligns with the core value proposition of Q-commerce.

This study employs a structured hypothesis-building framework to enhance clarity and align with existing consumer behavior theories while considering the unique features of Q-commerce platforms. Descriptive analysis is used to summarize consumer perceptions, demographic characteristics, and behavioral trends, providing an overview of response distributions and potential patterns. Regression analysis, performed with Jamovi software, tests the impact of independent variables like perceived usefulness, ease of use, trust, personalization, delivery speed, and data privacy on consumer purchase intentions. These statistical methods help establish the strength, significance, and direction of the relationships between the study variables.

3.5 Data Collection

This study used a combined data collection strategy, integrating both primary and secondary data to understand consumer purchase behavior in Q-commerce. Primary data was gathered via a structured survey with a Likert-scale questionnaire, focusing on factors like trust, delivery speed, personalization, and data privacy. Secondary data, sourced from academic journals and industry reports, helped establish a theoretical framework. The integration of both data types enhanced the validity and reliability of the findings, providing a comprehensive view of evolving consumer behavior trends in Q-commerce.

3.6 Sampling techniques and sample size

A purposive sampling technique was employed to target active users of Q-commerce platforms, ensuring that respondents could provide valuable insights for the study. The sample size of 100 respondents was chosen to balance statistical

significance and practical feasibility, allowing meaningful conclusions without overwhelming the data collection process. Demographic and behavioral segmentation was applied to ensure a diverse representation, considering factors like age, income level, and frequency of Q-commerce usage. This approach helped capture a broad spectrum of consumer experiences and preferences, enhancing the validity of the study's findings.

3.7 Data Analysis Techniques

The Jamovi statistical software was used to process and analyse the collected data, as it is a precise and reliable tool for quantitative research. Meaningful interpretations and validation of the study's hypotheses were obtained using various statistical techniques.

- Descriptive Analysis

Descriptive statistics was used to summarize demographic characteristics and main observations in consumers responses. This Avamm study gave an overall summary of participants' characteristics and general perceptions of Q-commerce platforms with basic insights of consumer behaviour patterns.

- Linear Regression Analysis

The impact of trust, delivery speed, personalization, and data privacy, that are independent variables on consumer purchase intentions was investigated with a linear regression model. This analysis was conducted in Jamovi for determining the significance and strength of the impact of each factor in the study, thus providing a better understanding of the drivers in consumer decisions. The analytical approach based on this model gave the empirical evidence for the Q-commerce environment relative to consumer perceptions and buying intentions.

Chapter- 4

4. Results and discussions

This chapter presents the outcomes of the statistical analysis conducted using the Jamovi application to examine how independent variables such as Perceived Ease of Use (PEOU), Trust (T), Perceived Usefulness (PU), Personalization (P), and Delivery Speed (DS) affect the dependent variable, Purchase Intention (PI) within the Q-commerce platform. Descriptive and inferential statistical techniques, including linear regression analysis, were used to evaluate the significance and strength of the relationships between these variables. The results, supported by tables, graphs, and statistical outputs, provide insights into consumer behavior and purchasing intentions. This chapter also discusses these findings in the context of the Technology Acceptance Model (TAM) and existing literature, revealing key implications and areas for improvement. Descriptive statistics summarize the data and inform trends, setting the stage for further statistical testing and a deeper understanding of consumer perceptions in Q-commerce.

Key aspects of the descriptive analysis in this study are primarily based on the following

Measures of Central Tendency and Variability

The mean, median, and mode for all independent and dependent variables were calculated to understand the distribution and tendencies of consumer responses. These measures help gauge how average consumers perceive factors like ease of use, trust, usefulness, personalization, and delivery speed in Q-commerce platforms. Variability measures, including standard deviation, variance, and range, were also assessed to determine the dispersion of responses, revealing whether consumer attitudes are uniform or varied.

Demographic characteristics like age, gender, and shopping behavior were analyzed to further understand the respondent profile and identify trends in consumer preferences. This segmentation provides insights into how different groups view and engage with Q-commerce platforms.

Descriptive statistics were then used to examine consumer perceptions of key factors: Perceived Ease of Use (PEOU), Trust (T), Perceived Usefulness (PU), Personalization (P), and Delivery Speed (DS). These insights lay the groundwork

for further inferential analysis, which tests hypotheses and investigates the drivers of Purchase Intention (PI) in Q-commerce.

Outcomes: Linear Regression Results for Inferential Analysis

Linear regression analysis was used, utilizing Jamovi software to assess the relationship between the independent variables, namely Perceived Ease of Use (PEOU), Trust (T), Perceived Usefulness (PU), Personalization (P), and Delivery Speed (DS), and the dependent variable (Purchase Intention (PI)). Such statistical technique enables to evaluate the predictive power of each factor, thus identifying their significance in influencing consumer behaviour in Q-commerce platforms.

The aim of the analysis is to verify the research hypotheses regarding the effects of independent variables on purchase intention. The Regression Analysis gives valuable insights to understand consumer decisions or decision-making processes to explain how the Ease of use, Trust, Usefulness, Personalization, as well as Delivery Speed, affect their purchasing behaviour within the online commerce environment.

The results of the regression analysis are presented systematically below, covering model summary, regression coefficients, and detailed interpretation of results.

4.3.1 Model Summary

The overall performance of the regression model is summarized in Table 4.1 below, which presents key statistical metrics such as R, R^2, Adjusted R^2, and sample size (N).

Table 4.1 Regression Model Summary

Model	R	R^2	Adjusted R^2	Sample Size (N)
1	0.237	0.056	0.006	100

- Correlation (R = 0.237): The correlation coefficient (R) of 0.237 indicates a weak relationship between the independent variables and purchase intention. This suggests that while there is a connection between the predictors and consumer purchase behavior, it is not strong.
- Coefficient of Determination (R^2 = 0.056): The R^2 value of 0.056 implies that the independent variables collectively explain only 5.6% of the variance in purchase intention. This indicates that a large proportion of consumer purchase behavior is influenced by external factors beyond the scope of this study.
- Adjusted R^2 (0.006): The adjusted R^2 value of 0.006 suggests that when adjustments are made for the number of predictors, the model's ability to explain variations in purchase intention reduces further. This implies that the model may not generalize well to other datasets, highlighting the influence of additional factors beyond those included in the study.

The low R^2 and adjusted R^2 values indicate that while the selected independent variables play some role in shaping consumer purchase intention, other external elements, such as brand reputation, marketing strategies, pricing, product availability, and user experience, may be stronger predictors.

Model	**R**	**R^2**	**Adjusted R^2**	**Sample Size (N)**
1	0.237	0.056	0.006	100

4.3.2 Regression Coefficients and Interpretation

To better understand how each independent variable influences purchase intention, Table 4.2 presents the regression coefficients (β values), standard errors, t-values, and significance levels (p-values).

Table 4.2: Regression Results for Purchase Intention

Predictor	Estimate (β)	Standard Error (SE)	t-value	p-value	Interpretation
Intercept	2.7415	0.7737	3.543	<0.001	Significant; baseline purchase intention is positive.
Perceived Ease of Use (PEOU)	-0.0592	0.0975	-0.607	0.545	Not significant; ease of use does not strongly impact purchase intention.
Trust (T)	-0.1363	0.1221	-1.117	0.267	Not significant; trust does not significantly affect purchase intention.
Perceived Usefulness (PU)	0.0189	0.1143	0.166	0.869	Not significant; perceived usefulness has minimal effect.
Personalization (P)	0.1173	0.1208	0.971	0.334	Not significant; personalization does not significantly drive purchase intention.
Delivery Speed (DS)	0.1666	0.0978	1.704	0.092	Marginally significant; faster delivery may have a positive influence.

4.3.3 Key Findings from Regression Analysis

1. Baseline Consumer Purchase Intention is Positive

- The intercept ($\beta = 2.7415$, $p < 0.001$) indicates that consumers generally have a positive purchase intention toward Q-commerce platforms, even in the absence of significant influence from the independent variables.
- This suggests that consumers are inherently inclined to shop from Q-commerce platforms, likely due to factors beyond the selected predictors, such as convenience, availability of products, and competitive pricing.

2. Perceived Ease of Use (PEOU) is Not a Significant Predictor ($p = 0.545$)

- The β-value of -0.0592 and high p-value (0.545) indicate that ease of use does not significantly impact purchase intention in this context.
- This suggests that consumers may already be familiar with digital shopping interfaces, making ease of use a less critical determinant in their purchasing decisions.

3. Trust and Perceived Usefulness Do Not Strongly Influence Purchase Intention

- Trust ($\beta = -0.1363$, $p = 0.267$): Despite being an essential factor in e-commerce, trust does not significantly influence purchase intention in this model. This could be because consumers already assume a basic level of trustworthiness in well-known Q-commerce platforms.
- Perceived Usefulness ($\beta = 0.0189$, $p = 0.869$): The insignificant impact of perceived usefulness suggests that consumers prioritize other aspects of Q-commerce, such as convenience and pricing, over how useful they find the platform.

4. Personalization is Not a Major Driver of Purchase Intention ($p = 0.334$)

- Personalization ($\beta = 0.1173$, $p = 0.334$) does not have a statistically significant impact on purchase intention. This implies that tailored recommendations and AI-driven customization alone may not directly increase purchases, as consumers might value other factors like product variety or discounts more.

5. Delivery Speed Shows the Strongest Influence but is Only Marginally Significant ($p = 0.092$)

- Delivery Speed ($\beta = 0.1666$, $p = 0.092$) had the highest influence on purchase intention among all independent variables, though it remains only marginally significant ($p < 0.10$).
- This suggests that faster delivery may positively impact consumer purchase decisions, but its effect is not strong enough to be conclusive.
- Given the increasing demand for rapid deliveries in Q-commerce, further research is needed to examine the extent to which delivery speed affects consumer choices.

4.3.4 Summary of Regression Analysis

- The overall regression model suggests that the selected independent variables explain only 5.6% of the variance in purchase intention, implying that other factors beyond the study play a more dominant role.

- Among the five independent variables, only Delivery Speed showed a relatively notable influence (though marginal), while Trust, Perceived Ease of Use, Perceived Usefulness, and Personalization did not exhibit significant effects on purchase intention.
- The results indicate that while Q-commerce platforms may benefit from optimizing delivery speed, they should also consider exploring other influential factors, such as pricing strategies, product quality, consumer preferences, and marketing efforts, to drive purchase intention effectively.

Discussion of Findings

The regression analysis indicates that traditional technology adoption factors like Perceived Ease of Use (PEOU), Trust (T), and Perceived Usefulness (PU) do not significantly influence Purchase Intention (PI) in the Q-commerce sector. Delivery Speed (DS) is the most influential factor, though with marginal significance. The model's low R^2 value of 5.6% suggests that factors like pricing, promotions, product variety, and customer service may play a larger role in consumer behavior. These findings challenge assumptions in the Technology Acceptance Model (TAM) and highlight the need for further research with additional variables to better understand consumer choices in digital commerce.

The lack of significance of PEOU suggests that ease of use is no longer a key differentiator for consumers in Q-commerce. As consumers have become more familiar with online platforms and mobile applications, user-friendliness is less of a concern. Today's focus is more on operational efficiencies, such as fast delivery, product availability, and competitive pricing. Q-commerce platforms should prioritize these factors over interface enhancements to meet evolving consumer priorities.

The findings also reveal that Trust (T) and Perceived Usefulness (PU) do not significantly impact Purchase Intention (PI), challenging the assumptions of the Technology Acceptance Model (TAM). One possible explanation is the inherent credibility of established Q-commerce platforms, which offer secure payment mechanisms, transparent policies, and consistent service quality. As a result, consumers may not actively evaluate trustworthiness but instead rely on the platform's established reputation. Similarly, the lack of significance in Perceived Usefulness suggests that consumers expect all Q-commerce platforms to serve the same basic function—providing quick access to essential goods. Therefore, companies must differentiate through factors like pricing, speed, and convenience.

Among the variables analyzed, Delivery Speed (DS) had the strongest influence on Purchase Intention, though it remained marginally significant. This finding aligns with industry trends where speed and convenience are becoming key determinants of consumer preferences. In Q-commerce, instant delivery is crucial, especially in the grocery and essentials markets. Delays in order fulfillment can lead to dissatisfaction and reduced retention. Companies focusing on logistical efficiency, AI-driven route optimization, and effective distribution strategies are likely to gain a competitive advantage. While Delivery Speed's significance remains marginal in this study, its practical importance for business strategy is clear.

Overall, the findings suggest that Q-commerce platforms should shift their strategic focus away from usability and trust-building efforts and instead emphasize operational speed, logistical optimization, and competitive pricing. Future research should expand on this study by incorporating additional external factors such as promotional discounts, product availability, and customer support to develop a more comprehensive understanding of purchase behavior in the Q-commerce sector. These insights contribute to the ongoing discourse on digital commerce by highlighting the evolving priorities of modern consumers and the need for businesses to adapt to changing market dynamics.

Chapter- 5 : Conclusion and Future Scope

5.1 Conclusion

In the fast-food industry, Q-commerce has revolutionized how consumers connect with digital marketplaces. This research sought to examine the major factors influencing Q-commerce purchase intention, drawing on the Technology Acceptance Model (TAM) to explore variables such as Perceived Ease of Use (PEOU), Trust (T), Perceived Usefulness (PU),

Personalization (P), and Delivery Speed (DS). Using rigorous statistical techniques in Jamovi software, these independent variables were analyzed in relation to purchase intention.

The study challenges the traditional TAM constructs, arguing that in the context of instant, on-demand digital transactions, convenience and speed outweigh concerns over trust, usability, and perceived functionality. While traditional e-commerce platforms require consumers to evaluate trustworthiness and ease of use, Q-commerce users prioritize urgency and instant gratification over deliberation.

Regression analysis showed that the traditional TAM factors—PEOU, Trust, and PU—did not significantly affect purchase intention. Instead, Delivery Speed (DS) emerged as the only variable with even a marginal significance, indicating that consumers' primary expectation when using Q-commerce platforms is rapid delivery. This finding aligns with the rise of ultra-fast delivery models, where companies compete not on trust or personalization but on delivering goods in minutes rather than hours.

The low R^2 value (5.6%) suggests that other external factors—such as product price, availability, promotional discounts, and brand equity—may have a stronger influence on consumer behavior than the variables examined in this study. Although technology facilitates seamless transactions, success in the Q-commerce space ultimately depends on logistical efficiency and competitive pricing.

This means that, at a strategic level, Q-commerce firms should prioritize investments towards enhancing supply chain flexibility, delivery coverage, and last-mile logistics over interface usability and trust-establishing components. The future of Q-commerce will belong to those who can find the right balance between speed, cost and consumer satisfaction.

5.2 Future Scope

Appropriately, this study sets a context from which guidance and insight into consumer While insights into purchase behavior in Q-commerce have been gained, the dynamic and rapidly evolving nature of the sector indicates the need for further investigation. Future research could expand beyond the variables assessed in this study and explore other factors that may have a more significant impact on purchase decisions, such as:

- **Pricing and Promotional Strategies**: Since Q-commerce customers are highly price-sensitive, factors like discounts, loyalty programs, and dynamic pricing could play a major role in shaping their decisions. Investigating how various pricing models influence purchase intentions would be valuable.
- **Product Availability and Inventory Optimization**: Delivery speed is crucial, but if a product is out of stock, customers may turn to competitors. Using AI for inventory forecasting and real-time stock visibility could help Q-commerce platforms retain customers by preventing stockouts.
- **Post-Purchase Experience and Customer Support**: Quick delivery alone isn't enough; customers expect seamless issue resolution, flexible return policies, and responsive support. Future studies could examine the impact of after-sales services on customer retention and brand loyalty.
- **Psychological and Behavioral Insights**: Given the impulsive nature of Q-commerce, consumer psychology research—such as the effects of urgency marketing, FOMO (Fear of Missing Out), and instant gratification—could help understand how emotions and psychological factors influence purchasing choices.
- **Technical Innovations**: With advancements like AI, drone delivery, predictive analytics, and automated fulfillment centers, future research should explore how these innovations affect consumer expectations and influence Q-commerce business strategies.

Moreover, deeper analysis of demographic variations is warranted. For instance, younger, tech-savvy consumers may behave differently than older users, and Q-commerce adoption could vary significantly between metropolitan areas and smaller towns. Comparative studies between Q-commerce and traditional e-commerce models would also provide valuable insights into how consumer priorities shift in different retail environments.

The key takeaway for businesses is clear: the success of Q-commerce is no longer just about user interface design. It hinges on logistics, AI-powered analytics, and competitive pricing. Those who can anticipate consumer needs and deliver seamless, superior experiences will lead the next wave of digital commerce.

5.3 Final Thoughts

Consumer shopping behavior is rapidly evolving in the era of instant gratification. Traditional e-commerce levers, like trust-building and usability, are becoming less relevant as customers now expect products almost as quickly as they decide to purchase. This shift highlights the growing importance of speed and convenience in Q-commerce.

The Technology Acceptance Model (TAM), which has long been used to study e-commerce adoption, seems less applicable to Q-commerce, where decisions are influenced by urgency, cost-effectiveness, and logistics optimization rather than system usability alone.

As Q-commerce embraces AI, real-time data analytics, and smart deliveries, businesses that leverage predictive insights, streamline fulfillment, and offer competitive pricing will lead this digital race. At its core, this study emphasizes that consumers demand immediate satisfaction, and only those who adapt and innovate will thrive in this fast-paced world.

References

1. Deepthi, B., & Bansal, V. (2023). Employing TAM model to investigate the factors influencing quick commerce applications adoption using structural equation modelling technique. International Journal of Management and Enterprise Development, 22(4), 348-365.
2. Hartanto, N., Mani, L., Jati, M., Josephine, R., & Hidayat, Z. (2022). Factors Affecting Online Purchase Decision, Customer Satisfaction, and Brand Loyalty: An Empirical Study from Indonesia's Biggest E-Commerce. Journal of Distribution Science, 20(11), 33-45.
3. PHAM, H. C. (2020). Factors Affecting Consumer Goods Buyers' Choice in E-Commerce Sites: Evidence from Vietnam. Journal of Asian Finance, Economics and Business, 7(11), 947-953.
4. Burman, D., & Agrawal, A. (2015). Factors affecting buying behavior in E-commerce in India: A review of literature. International Journal of Business Quantitative Economics and Applied Management Research, 2(2), 56-62.
5. Pradipta, I. A., Maulana, Y., & Jio, I. M. S. (2020). Factors That Affecting Purchase Decision on Automotive Workshop Official Store In E-Commerce.
6. Rosa, A., lisnawati, & Daud, I. (2018). Key Factors Analysis of E-Commerce and Marketplace Purchasing Decision in Palembang. Sriwijaya International Journal of Dynamic Economics and Business, 2(4), 347-362.
7. Laukkanen, T.. (n.d.). Internet purchase intention: The effects of website attributes and their determinants. Retrieved from https://aaltodoc.aalto.fi/items/d6ab7a09-0b76-456e-8ad4-38e155eb816e
8. Lau, T. C., & Lee, C. K. M. (2006). Investigating the shopping orientations on online purchase intention in the e-commerce environment: A Malaysian study.
9. Nasution, M. K. (2019). An empirical examination of the factors influencing consumer's purchase intention toward online shopping.
10. Md Nor Khasanah, S. N. A. K. M., & Wan Ismail, W. K. (2021). Online Purchase Intention during the Pandemic Recovery Among UiTM Students.
11. Ndou, V., & Fiore, M. (2010). Factors influencing consumers decision to buy online: The case of a South African University.
12. Syed, A. (2018). A study on E-tailing: Factors influencing the online consumer behavior of Indian consumers.
13. Hartanto, N., Mani, L., Jati, M., Josephine, R., & Hidayat, Z. (2022). Factors Affecting Online Purchase Decision, Customer Satisfaction, and Brand Loyalty: An Empirical Study from Indonesia's Biggest E-Commerce. Journal of Distribution Science, 20(11), 33-45.

14. Hsu, C. L., & Lin, J. C. C. (2023). How does livestreaming reshape consumer purchase decisions with the moderating role of transaction intention?. International Journal of Information Management Data Insights, 3(2), 100222.
15. Islam, T., Islam, M. S., & Hossain, M. M. (2024). Factors influencing online food purchase intention: evidence from a developing country. Cogent Business & Management, 11(1).
16. Uddin, B., Hossain, M. M., & Andersson, Å. (2020). Factors Affecting Consumers' Internet Shopping Behavior During the COVID-19 Pandemic: Evidence From Bangladesh.
17. Cho, Y. C., & Sagynov, E. (2015). Exploring factors that affect usefulness, ease of use, trust, and purchase intention in the online environment. International journal of management & information systems, 19(1), 21-36.
18. Kwek, C. L., Tan, H. P., & Lau, T. C. (2010). Investigating the shopping orientations on online purchase intention in the e-commerce environment: a Malaysian study. Journal of Internet Banking and Commerce, 15(2), 1.
19. Goswami, A., & Kumari, R. A Study on Impact of Quick Commerce on Consumer Decision Making Process.
20. May So, W. C., Danny Wong, T. N., & Sculli, D. (2005). Factors affecting intentions to purchase via the internet. Industrial Management & Data Systems, 105(9), 1225-1244.
21. Do, T., Nguyen, T., & Nguyen, C. (2019). Online shopping in an emerging market: the critical factors affecting customer purchase intention in Vietnam. Journal of Economics and Management Sciences, 2(2).
22. LIU, D. (2013). Factors influencing Chinese consumer online group-buying purchase intention: An empirical study.
23. Ling, K. C., Chai, L. T., & Piew, T. H. (2010). The effects of shopping orientations, online trust and prior online purchase experience toward customers' online purchase intention. International business research, 3(3), 63.
24. Riaz, M. U., Guang, L. X., Zafar, M., Shahzad, F., Shahbaz, M., & Lateef, M. (2021). Consumers' purchase intention and decision-making process through social networking sites: a social commerce construct. Behaviour & Information Technology, 40(1), 99-115.
25. Gan, C., & Wang, W. (2017). The influence of perceived value on purchase intention in social commerce context. Internet research, 27(4), 772-785.
26. Lu, H. P., & Su, P. Y. J. (2009). Factors affecting purchase intention on mobile shopping web sites. Internet research, 19(4), 442-458.
27. Syed, A. A., & Khan, A. (2019). A study on E-tailing: Factors influencing the online consumer behaviour of Indian Consumers. The Service Industries Journal, 4(9), 34-38.