**Impact of Goods and Services Tax (GST) on Consumer Behaviour in Online Shopping Systems**

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**Abstract:**

The increasing prevalence of online shopping platforms and digital services has significantly influenced consumer behaviour, especially in the context of Goods and Services Tax (GST) in India. GST, implemented as a unified tax structure, has brought about notable shifts in how consumers interact with online systems. This study explores the impact of GST on consumer behaviour in e-commerce platforms, focusing on purchasing decisions, price sensitivity, and overall consumer satisfaction. The transition to a single tax system has streamlined online shopping processes, leading to greater transparency in pricing. However, it has also introduced challenges such as price fluctuations due to input tax credits and compliance costs. By examining consumer response before and after the GST implementation, this research seeks to identify the key drivers of consumer behaviour in an increasingly digital marketplace. The findings indicate that while GST has facilitated a more organized and consistent taxation system, it has also required consumers to adapt to new pricing structures, with varying levels of understanding and acceptance. The study concludes by providing recommendations for businesses to align their online strategies with the evolving consumer behaviour influenced by GST, highlighting the importance of transparency, consumer education, and responsive pricing strategies.

**Index term**

Goods and Services Tax (GST), Consumer Behaviour, Online Shopping, E-commerce

**I Introduction**

In recent years, the rise of e-commerce has drastically transformed the global retail landscape. With the proliferation of online shopping platforms, consumers are now empowered to make purchasing decisions with greater convenience, variety, and speed. However, as the e-commerce sector grows, so does the complexity of its regulatory environment. In India, the introduction of the Goods and Services Tax (GST) in July 2017 was a watershed moment, not only for the taxation system but also for its wider implications on consumer behaviour, particularly in the online marketplace. GST replaced the patchwork of multiple indirect taxes, including excise duty, service tax, and VAT, with a single, unified tax. While GST was designed to simplify the tax system and streamline business operations, its introduction has had far-reaching effects on how consumers interact with online shopping systems.

For the consumer, GST represents both a challenge and an opportunity. On one hand, it promises lower costs and more transparent pricing, thanks to the elimination of the cascading tax effect [8]. On the other hand, it also introduces new complexities, including potential price hikes and fluctuations due to tax compliance issues and the varying application of GST rates across different product categories. As businesses update their pricing strategies to accommodate the tax structure, the price-conscious online shopper must navigate these changes, which can directly affect purchasing decisions and overall shopping satisfaction. This study aims to explore the relationship between GST and consumer behaviour in the online shopping environment. How has the implementation of GST altered consumers' perceptions of prices, product value, and trust in e-commerce platforms? Has the simplification of the tax structure led to more efficient online shopping experiences, or has it created confusion among buyers? More importantly, how has GST shaped consumer decision-making in the online space? At the core of this research is the idea that consumer behaviour is multifaceted and influenced by a range of economic, psychological, and social factors [7]. GST, being a significant economic policy change, naturally fits into this framework, creating new variables that impact consumer behaviour. Price sensitivity, for example, has long been a key driver of online purchasing behaviour, but with the added complexity of GST, this sensitivity may either increase or decrease, depending on how consumers perceive the tax's impact on product pricing.

This paper delves into other aspects of consumer behaviour, such as consumer trust, purchase frequency, and satisfaction with online transactions post-GST implementation. With GST leading to the harmonization of tax rates and improved compliance by online retailers, the impact on overall consumer confidence and satisfaction remains to be fully understood. Are consumers more inclined to trust online platforms due to the transparency offered by GST? Or have they become more cautious, scrutinizing tax-inclusive prices before making purchasing decisions?

Through a thorough examination of these dynamics, this study will seek to answer the following key questions:

* How has the GST affected the perception of prices among online consumers?
* What role does GST play in shaping consumers’ trust in online platforms?
* How do consumers balance price sensitivity with other factors, such as convenience and product quality, in the context of online shopping under GST?

This study will explore the implications for businesses operating in the digital marketplace. As online retailers adjust their pricing strategies and tax compliance practices, understanding the shifting consumer behaviour becomes crucial for maintaining competitive advantage [6]. This research will contribute to a deeper understanding of how GST, as a policy reform, is reshaping the relationship between online businesses and consumers in the modern e-commerce ecosystem. By analysing post-GST consumer behaviour, this research aims to provide insights into broader trends and implications that go beyond India, as other nations with evolving tax systems may face similar challenges and opportunities in the years to come. Understanding the evolving landscape of online consumer behaviour in the age of GST is crucial for businesses, policymakers, and researchers interested in the future of e-commerce.

**II Challenges:**

The implementation of Goods and Services Tax (GST) in India has led to numerous shifts in the online retail landscape, but it has also introduced various challenges for both consumers and businesses within the e-commerce ecosystem. These challenges span several dimensions, including pricing, taxation compliance, consumer awareness, and operational efficiency. Understanding these obstacles is crucial for evaluating the true impact of GST on consumer behaviour in the online system. The following outlines the key challenges faced post-GST implementation (figure 1):

**Figure 1: challenges faced post-GST implementation**

**Price Fluctuations and Increased Complexity**

One of the most immediate challenges consumers face after the implementation of GST is the potential for price fluctuations. Under the previous tax structure, goods were taxed at varying rates across different states, leading to inconsistencies in pricing. With the introduction of GST, the expectation was that it would streamline the taxation system. However, many consumers have reported experiencing unexpected price hikes for certain products [5]. This could be attributed to businesses recalibrating their pricing strategies to factor in GST compliance costs, as well as the changes in the Input Tax Credit (ITC) mechanism. These price changes are often difficult for consumers to track and understand, leading to confusion and frustration, particularly for price-sensitive buyers.

**Consumer Awareness and Understanding of GST**

Another significant challenge is the level of awareness and understanding that consumers possess about GST and its implications for online shopping. Despite the government's efforts to educate the public, many consumers still struggle to fully comprehend the intricacies of the tax system, such as how GST rates are applied to different goods and services. This lack of understanding may affect their ability to make informed purchasing decisions, leading to scepticism and mistrust towards online retailers. Inaccurate or misleading representations of prices, especially those that fail to clearly distinguish between pre-GST and post-GST costs, further exacerbate this issue.

**Differential GST Rates and Category-Specific Issues**

Under GST, different categories of products are taxed at different rates. For instance, while essential goods like food items and health products may attract a lower tax rate, luxury goods and electronic products may carry higher rates. This differential taxation complicates pricing for both consumers and e-commerce platforms. For consumers, it can lead to difficulties in comparing prices across categories, as the same product in different states or regions may be subject to varying tax rates. For online retailers, this creates a challenge in ensuring consistent pricing across multiple states and platforms, leading to potential discrepancies in tax calculations and consumer dissatisfaction.

**Operational Costs and Compliance Challenges for E-Commerce Platforms**

Online retailers must grapple with the operational complexities introduced by GST. The necessity for accurate tax calculation, invoicing, and compliance with state-specific tax rates requires significant technological infrastructure, staff training, and investment. Smaller e-commerce platforms, in particular, may face challenges in adapting to these requirements, leading to potential delays, inaccuracies in tax filings, and other logistical issues that can affect consumer experience [4]. Compliance with GST regulations may lead to higher administrative costs, which are often passed on to consumers in the form of higher prices.

**Impact on Cross-Border E-Commerce**

For cross-border e-commerce transactions, GST creates further challenges. Products sold internationally may not fall under the same tax structure, and when imported goods are taxed under the Indian GST system, consumers may face additional costs such as customs duties, transportation fees, and handling charges. This adds complexity for international shoppers who are used to different pricing structures, often leading to higher final costs for imported goods. The difficulty of calculating these extra charges in advance may discourage international consumers from making online purchases from Indian e-commerce sites.

**Shifts in Consumer Trust and Satisfaction**

With the introduction of GST, some consumers have expressed concerns over the transparency and fairness of online transactions. The initial confusion surrounding GST and its impact on pricing has, in some cases, diminished consumer trust in e-commerce platforms. Consumers have become more cautious when it comes to evaluating online prices, questioning whether the final price shown includes the correct tax rates. This scepticism can lead to reduced purchase frequency or abandonment of shopping carts, as customers may hesitate to proceed with transactions they perceive as potentially misleading or unclear [4].

**Variations in GST Rate Application Across Platforms**

In the dynamic and diverse online marketplace, there are concerns about how GST is applied across different e-commerce platforms. Some online platforms may not be fully compliant with the tax regulations, leading to inconsistencies in how GST is reflected in prices. For instance, some platforms may display the price inclusive of GST, while others may show prices before taxes, leaving consumers unsure about the final cost. This lack of uniformity creates confusion and complicates the online shopping experience, making it harder for consumers to compare prices effectively.

**Customer Behaviour and Price Sensitivity**

GST has the potential to alter consumers' price sensitivity and purchasing behaviour. In an environment where tax-inclusive prices are not always clearly communicated, consumers may become more cautious about their spending. This heightened price sensitivity could lead to changes in online shopping behaviour, with consumers potentially seeking discounts, special offers, or switching to platforms that provide clearer tax breakdowns. Moreover, as GST potentially increases the overall cost of products, the consumer's focus on value for money becomes even more pronounced, and price comparison tools or strategies become critical to drive purchasing decisions [3].

**Technological and System Integration Challenges**

The technological infrastructure of e-commerce platforms has had to evolve to support GST implementation. Many online retailers needed to integrate sophisticated tax calculation systems to manage GST compliance across multiple states and product categories. This has led to a steep learning curve and technical challenges, especially for small and medium-sized enterprises (SMEs). Poor integration of GST compliance systems could result in inaccuracies, delays in tax filings, and potential penalties for businesses, which could, in turn, affect the consumer experience.

**III GST and Consumer Behaviour in Online Systems**

The introduction of the Goods and Services Tax (GST) in India in 2017 marked a significant reform in the country's taxation system, promising to simplify the process of indirect taxation and create a unified market. GST replaced multiple state and central taxes, which were previously levied on goods and services, with a single tax applicable nationwide. This change had profound implications for businesses across sectors, particularly for the rapidly growing e-commerce industry. The online retail market, which operates in a dynamic and competitive environment, had to quickly adapt to the new tax structure. Consequently, the implementation of GST also triggered significant changes in consumer behaviour in the online shopping landscape. India’s e-commerce sector, which has seen explosive growth in recent years, has been profoundly impacted by GST. Prior to the GST rollout, India’s e-commerce ecosystem faced challenges with fragmented tax structures and inconsistent state-specific tax policies [2]. The introduction of GST aimed to streamline the taxation process by creating a single tax slab for goods and services sold across the country. However, the implementation of GST brought about both opportunities and challenges, especially regarding pricing, tax compliance, and operational costs. As a result, consumer behaviour has evolved in response to changes in pricing mechanisms, online shopping experience, and product accessibility. One of the most important factors influencing consumer behaviour post-GST is price perception. GST has altered the way taxes are applied to products, with some goods witnessing a price reduction, while others have seen an increase. While the government has promoted the idea that the tax regime would lead to reduced prices for consumers, the actual impact has been more nuanced. Many online shoppers have experienced price fluctuations for products across different categories [1]. In some cases, price-sensitive consumers have expressed confusion or dissatisfaction regarding price hikes that resulted from the new taxation system. The lack of transparency in how GST is applied and communicated has also contributed to a shift in consumer trust. Consumers, traditionally price-conscious in India, have become more cautious in their purchasing decisions. With varying tax rates for different product categories, consumers are now more likely to engage in price comparison, seek discounts, and avoid purchases that appear overpriced due to GST. This shift has led to changes in the frequency of online shopping, with consumers opting for promotions, discounts, and transparent pricing mechanisms.

**IV GST and Its Effect on Pricing Mechanisms**

Before GST, businesses faced challenges with complex, state-specific tax systems that led to varied pricing for the same goods across different regions. The cascading effect of taxes—where goods and services were taxed at each stage of production and distribution—led to higher prices and inefficiencies in the supply chain. With the implementation of GST, a single, destination-based tax is levied on goods and services, eliminating the cascading effect and ensuring a more transparent and consistent pricing model. However, while this simplified tax structure benefits businesses in terms of ease of compliance, it also brought about several challenges and opportunities in pricing strategies.

One of the primary effects of GST on pricing is the variation in tax rates across different product categories. While some goods have seen a reduction in prices due to the removal of multiple taxes, others have experienced an increase in prices because they fall under higher GST slabs. For instance, consumer goods such as electronics, apparel, and luxury items often attract higher tax rates compared to essential commodities. These price shifts have had a noticeable impact on consumer behaviour, with many consumers becoming more price-sensitive and cautious in their online shopping decisions. In some cases, GST has led to increased prices on popular products, causing consumer dissatisfaction, particularly among budget-conscious shoppers. On the other hand, some categories, especially non-luxury goods, have benefited from lower tax rates, which has led to price reductions that benefit the end consumer.

In addition to price fluctuations, the transparency of pricing has become a critical issue. With GST, consumers are now more aware of how taxes affect the total cost of the products they purchase. E-commerce platforms, therefore, must ensure that the GST is clearly broken down in the final price displayed on product pages, helping consumers understand the impact of taxation on their purchases. Failure to communicate GST clearly can lead to distrust and confusion among consumers, who may feel that they are being charged unfairly or without proper explanation. As a result, online retailers are under pressure to ensure greater transparency in their pricing, with some even adopting “inclusive pricing” strategies, where the price shown is the final price with taxes included. The implementation of GST has increased the need for businesses to invest in advanced accounting and tax compliance systems. The complexity of GST rates across various states and product categories means that e-commerce platforms must ensure correct tax calculation and accurate invoicing. This has prompted many businesses to upgrade their back-end systems and technology to ensure smooth integration with GST rules. While this has improved compliance and reduced tax evasion, it has also increased operational costs for e-commerce players, which could be passed on to consumers through higher product prices. The shift to a more transparent pricing model due to GST has created both challenges and opportunities for pricing strategies. E-commerce businesses now need to be strategic in how they present pricing information to consumers. They must consider factors such as offering price comparisons, discounting, and promotional strategies that mitigate the impact of price hikes due to GST. In some cases, businesses have absorbed the extra cost to maintain their price competitiveness, while in other cases, they have passed on the additional cost to consumers, depending on market conditions and competition. In the long term, the simplification of the tax structure through GST is expected to create a more competitive and balanced pricing environment for both consumers and businesses. As GST compliance becomes more streamlined, businesses will likely find more efficient ways to price products while maintaining profitability. For consumers, the increased price transparency should result in more informed purchasing decisions, especially with the growing awareness of GST’s role in determining product costs. However, it is important to note that the full impact of GST on pricing mechanisms will continue to evolve as businesses, regulators, and consumers adapt to this new taxation system. Therefore, online retailers must remain agile in adapting their pricing models, and continuously communicate clearly with consumers, while also optimizing their pricing to ensure long-term consumer satisfaction and loyalty. The GST’s impact on pricing mechanisms in India’s e-commerce sector is multifaceted. While it has contributed to a more transparent and simplified tax structure, its direct effects on pricing, consumer behaviour, and retailer strategies are complex. Businesses must navigate these changes carefully, considering factors like price sensitivity, competition, and compliance, to ensure that they meet consumer expectations while also remaining competitive in a rapidly evolving market. The evolution of pricing mechanisms under GST will continue to shape the future of online shopping, driving both opportunities and challenges for all stakeholders involved.

**V Comparison Between Pre-GST and Post-GST Consumer Behaviour**

The introduction of the Goods and Services Tax (GST) in India in 2017 brought significant changes to the e-commerce and retail sectors. This new tax system unified the country's complex web of indirect taxes into a single tax, which has had a profound impact on consumer behaviour. Below is a detailed comparison between consumer behaviour before and after the implementation of GST:

**Price Sensitivity and Perception**

* **Pre-GST:** Prior to GST, consumers faced a lack of price transparency due to the presence of multiple state and central taxes, including VAT, excise duty, and service tax. These taxes were often passed on to the consumer, but since they were not always clearly itemized, it was difficult for consumers to understand the total cost of a product. This lack of transparency led to confusion, and consumers were often unaware of how much tax they were actually paying.

Price sensitivity was still a dominant factor, especially for cost-conscious buyers. However, the perception of taxes was somewhat blurred, and many consumers did not fully grasp the effect of taxes on their purchasing decisions. Shoppers often focused primarily on the final price, without understanding the complexities behind it.

* **Post-GST:** The post-GST era brought greater transparency in pricing. Goods and services are now taxed uniformly across India, with the final price inclusive of GST clearly displayed. This clarity has led to increased price sensitivity among consumers, who are now more aware of the breakdown of taxes and how it impacts the final cost. Consumers are more likely to compare prices across platforms, looking for the best deals, and they have become more conscious of how the GST affects their purchasing decisions.

As a result, many consumers now scrutinize the final prices, which may include GST, more carefully. This shift has resulted in both positive and negative consequences. While some products have become cheaper due to lower tax rates, others have become more expensive due to the introduction of higher tax slabs on certain categories.

**Purchase Frequency and Spending Patterns**

* **Pre-GST:** Consumers in the pre-GST era often made impulsive purchases, driven by discounts or promotions. However, there was also a general lack of clarity around pricing, and many consumers didn’t fully understand how taxes influenced product costs. While e-commerce was growing rapidly, especially in urban areas, consumers were not as cautious about price fluctuations since taxes were not a focal point of their decision-making.

Some consumers, especially in rural areas, were hesitant to shop online due to confusion around taxes and delivery costs, which varied from state to state. The lack of a standardized tax system meant that many purchases were perceived as less transparent, and consumers were more likely to make purchases from local or traditional markets, where taxes and delivery costs were more straightforward.

* **Post-GST:** After GST, consumers have become more deliberate in their purchasing behaviour, focusing on price comparisons and the transparency of final prices. There is a noticeable reduction in impulsive purchases as consumers tend to evaluate the total cost more critically, especially with the clear visibility of GST rates on invoices and websites.

Spending patterns have also shifted, with some consumers cutting back on non-essential purchases or waiting for sales and discounts that offer lower overall prices. The increased price sensitivity, combined with online platforms offering greater visibility of tax-inclusive prices, has resulted in a more cautious approach to spending. The frequent price changes due to GST have led consumers to explore price comparison tools more regularly, which has influenced their shopping habits.

**Trust and Transparency**

* **Pre-GST:** The absence of a single, unified tax system created a scenario where taxes were not always transparently communicated. Many consumers were uncertain about the exact amount of tax they were paying, and some felt that they were being overcharged. This led to a general lack of trust in pricing, with customers often questioning the final price they were charged. In some cases, businesses used complex tax codes, making it difficult for consumers to understand what they were paying for.

Although there was some trust in online retailers offering discounted prices, the lack of clarity around taxes often led to dissatisfaction and a sense of being misinformed.

* **Post-GST:** Post-GST, the pricing system became more transparent. E-commerce platforms and brick-and-mortar stores alike began displaying clear GST breakdowns, helping consumers understand the composition of the final price. The shift towards a more transparent tax regime has led to an increase in consumer trust, as they are now able to see exactly how taxes are applied to the products they are purchasing. This has improved consumer confidence in online shopping, as buyers feel more informed and secure in their purchasing decisions.

However, the introduction of GST rates that vary across categories has also created some confusion. For example, while GST has reduced prices on certain items, it has increased them for others, causing some consumers to feel uncertain about whether they are getting the best deal. E-commerce businesses now need to emphasize clarity in communication to maintain the trust of their customers.

**Consumer Awareness and Education**

* **Pre-GST:** Before GST, consumers were not well-educated about the complex tax system, and many were unaware of the various indirect taxes being levied. The lack of understanding about the tax structure often led to confusion and frustration when consumers encountered unexpected costs or price hikes. In some cases, consumers were also unaware of the differences in tax rates between states, which impacted their buying behaviour.
* **Post-GST:** The implementation of GST prompted an increase in consumer awareness regarding taxation and its effect on the final cost of goods. E-commerce companies have taken steps to educate consumers by providing clearer explanations about GST and offering guidance on how it affects pricing. As a result, consumers are now more informed about the taxes that contribute to the price of goods and services.

Despite this increased awareness, there remains a segment of consumers, particularly in rural areas, who still lack full understanding of GST and how it affects their purchases. This gap in knowledge can lead to confusion and hesitation, with some consumers questioning whether the prices displayed online are truly the final prices, including all taxes.

**Consumer Loyalty and Brand Perception**

* **Pre-GST:** Brand loyalty was often influenced by factors like product quality, customer service, and price competitiveness. The absence of a clear understanding of taxes did not significantly influence how consumers viewed brands, as long as they received quality products and services. However, consumers did expect price discounts or offers, and businesses that provided such incentives had an edge.
* **Post-GST:** Post-GST, the pricing model and transparency became an important factor in consumer loyalty. Consumers who feel confident about the pricing and understand the tax structure are more likely to trust the brand and become repeat buyers. Brands that are able to communicate effectively about their pricing and provide value-added services (such as accurate tax breakdowns and lower prices) have an advantage in fostering consumer loyalty.

E-commerce platforms that focus on clear communication about GST and other pricing elements, such as return policies, delivery charges, and discounts, are better positioned to retain customers. Trust and transparency in pricing now play a critical role in shaping long-term brand perception.

**VI Conclusion**

The implementation of the Goods and Services Tax (GST) has significantly impacted consumer behaviour in both online and offline retail sectors. The transition from a complex, multi-tax system to a unified tax regime has brought about various changes, both positive and negative, affecting how consumers perceive and interact with pricing, purchasing decisions, and e-commerce platforms. In conclusion, GST has reshaped the way consumers approach shopping, with increased emphasis on transparency, informed decision-making, and price comparisons. As consumers adapt to the new system, businesses are tasked with maintaining clear communication and competitive pricing strategies. This evolution of consumer behaviour presents both challenges and opportunities for retailers, but those who successfully align their strategies with the changing consumer mindset will likely thrive in the post-GST era. Ultimately, GST has empowered consumers with greater knowledge, fostering a more efficient, transparent, and consumer-friendly marketplace.

**References**

1. Dr. P. Uma Swarupa, One Nation - One Tax (GST) – The Gainers And Losers In India, 1 IJIRMS 35 (2016).
2. Viji, Overview of GST, VIKASPEDIA (22 September,2016),https://vikaspedia.in/social-welfare/financial inclusion/faqs-on-gst 1/faqs-on-gst
3. Prabha L, Bhuvaneswari K and Nandida S, “Impact of GST on consumer’s behaviour”, 4 IJAR 410 (2018).
4. Vinayak Revji Gandal “An Analytical Study on Awareness Towards GST Amongst Traders: A Case Study of Khalapur Taluka of Raigad District in Maharashtra”, 2 IJMS 133 (2018).
5. R.Karthik (2017), "A study on consumer perception towards GST in Kancheepuram district”, Paripex - Indian Journal of Research, October-2017, Volume 6, Issue: 10, ISSN No: 2250-1991.
6. D. Poorani & Dr. J. Vidiya (2019), "A study on customer's perception towards Goods and Service Tax (GST)”, Journal of the Gujarat Research Society, Dec 2019, Volume 21, Issue 15s2, ISSN No: 0374-8588.
7. Krishan Kumar (2017), " A study on consumer's perception towards GST (Goods and Service Tax)”, Journal of Advances and Scholarly Researches in Allied Education (JASRAE), Oct 2017, Volume XIV, Issue: 01, ISSN No: 2230-7540.
8. Grish Garg (2014), "Basic concepts and features of goods and service tax in India”, International Journal of scientific research and management, Vol. 02(02), ISSN No:542-549.