



The Impact of E-commerce on Traditional Retail in Pasighat

Obinam Libang¹

¹Assistant Professor (Guest), Department of Economics, Arunachal Pradesh University, Arunachal Pradesh

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ABSTRACT:

The rapid growth of e-commerce has transformed the global retail landscape in a positive way, yet its influence on small urban areas and remote regions remains underexplored. This study delves into the nuanced impact of e-commerce on traditional retail businesses in Pasighat, a historically significant town in Arunachal Pradesh. While much of the academic discourse has focused on urban markets, this research brings much-needed attention to how digital commerce is reshaping consumer habits, pricing structures and economic resilience in India's farthest frontiers.

Through a focused examination of local retailers across electronics, apparel, and grocery sectors, the study uncovers how online price competition, changing consumer priorities and digital inaccessibility are affecting the sustainability of offline retail. Primary data collected from shop owners reveals a complex mix of adaptation and struggle, as retailers grapple with shrinking margins, customer outflow and technological lag. By analyzing these dynamics, the research not only reflects the lived experiences of Pasighat's retailers but also presents critical insights into the digital divide in retail development.

The findings advocate for a balanced approach to modernization, one that does not sideline traditional enterprises but supports them through policy intervention, capacity building and grassroots digital inclusion. This work stands as a timely contribution to both academic and policy-oriented discussions, offering a rare perspective on the intersection of technology, economy and local livelihoods in India's Northeast.

Keywords: E-commerce, Traditional Retail, Pasighat, Price Difference, Income Impact, Digital Transformation, Arunachal Pradesh

I. Introduction

The rapid advancement of digital technologies and increased internet accessibility have brought about a profound shift in global commerce. At the heart of this transformation lies e-commerce, a digital mode of conducting business that enables

consumers to browse, select and purchase products and services online. With the convenience of home delivery, extensive product ranges and competitive pricing, e-commerce platforms have reshaped consumer behavior and redefined how businesses operate.

India stands at the forefront of this digital revolution. With rising smartphone usage, robust internet penetration and initiatives like Digital India, the country has witnessed a tremendous boom in its e-commerce ecosystem. What initially began in metropolitan cities has gradually expanded into Tier-II and Tier-III towns and even remote areas. This shift is not only altering urban consumer trends but is also creating ripples in small towns and semi-urban markets across the country.

One of such examples is Pasighat, which is the oldest town in Arunachal Pradesh and a very crucial administrative and commercial center in the East Siang district. Settle along the banks of the Siang River and surrounded by green hills, Pasighat holds historical and cultural importance in the region. It was selected under the Smart Cities Mission in 2015, a move that triggered improvements in its digital infrastructure, public services and urban planning. In recent years, Pasighat has seen the growing use of smartphones, rising digital awareness among youth and better internet services all of which have contributed to the spread of e-commerce in the region.

The COVID-19 pandemic further accelerated the adoption of online shopping in towns like Pasighat. Lockdowns, social distancing measures and fear of physical contact pushed consumers toward digital platforms for essential and non-essential purchases. While this shift ensured convenience for customers, it intensified the challenges faced by traditional brick-and-mortar retailers. Many local stores experienced declining footfall, disrupted supply chains, and decreased income during the pandemic. Those without an online presence or digital payment systems were hit the hardest, highlighting a critical gap in the digital preparedness of traditional retail sectors in smaller towns.

As the world gradually recovers from the pandemic, the retail sector in Pasighat faces a defining moment. Traditional retailers are now attempting to rebuild and compete with online platforms that have



firmly established their presence in consumers' lives. The need to understand the effects of e-commerce on income, pricing and business sustainability has become more urgent than ever.

This research explores how these developments are impacting traditional retailers in Pasighat. It focuses on the price differences between online and offline platforms, and how these differences affect income levels, customer preferences and long-term business viability for local sellers. The study aims to contribute to the broader understanding of how small-town economies in the northeast are adapting or struggling to adapt to the fast-evolving digital marketplace. It also sheds light on the unique challenges and resilience of traditional businesses in regions like Pasighat, where modern technology intersects with traditional commerce.

Objectives

1. To examine the price differences between products sold in online platforms and local retail stores in Pasighat, focusing on three categories of items: smartphones, t-shirts and packaged snacks.
2. To assess the impact of price differences on the income and profit margins of local retailers in Pasighat.
3. To identify and analyze the key challenges that traditional retailers face due to the growing presence and popularity of e-commerce platforms.

Research Questions:

In the study titled “The impact of E-commerce on Traditional Retail in Pasighat” I would like to test the validity of the following questions with reference to objectives.

- Is there a significant price difference between online platforms and local retail stores in pasighat across selected products smartphone, clothing and packaged snacks?
- How have this price differences impacted the income and profitability of traditional retailers in Pasighat?
- What kinds of challenges are traditional retailers in Pasighat facing due to the growing dominance of e-commerce platforms?

II. Review of Literature

Sharma and Ali (2021) in their work “A Comprehensive Study on the Impact of E-commerce on Traditional Shopkeepers” They found that lower online prices, due to bulk buying, no middlemen and large-scale operations lead to declining sales and income for local retailers. For example, a ₹15,000

smartphone might cost only ₹13,500 online with added offers. Retailers struggle to match these prices without hurting profit margins, especially during online sales events. The study also noted a lack of digital skills among local sellers, suggesting that adopting digital tools and value-added services is key to survival.

Kumar & Ganguly (2023) in their study “How the Advent of E-commerce Has Reinvented the Growth of Traditional Retail” explored the economic challenges faced by small local retailers due to the rise of online shopping. They concluded that traditional retailers face reduced income, tighter profit margins and even potential job losses. E-commerce platforms offering convenience and lower prices have significantly altered consumer preferences, making it difficult for small shops to survive without adapting digitally.

P. Kumar (2023) in “The Impact of E-Commerce on Traditional Retail Model in India” studied how e-commerce platforms, through electronic supply chain management, impact pricing structures. The study found that traditional retail methods, which rely on multi-level distribution, often lead to inefficiencies. In contrast, online platforms streamline supply chains, allowing cost savings and competitive pricing pressuring traditional stores to modernize their logistics to remain viable.

Karthikeyan & Vimalnath (2022) examined how the rapid growth of e-commerce is changing the landscape of India’s retail industry. Their study highlighted that more consumers now prefer online shopping because of ease, time-saving features and lower prices. These changes have forced traditional stores to rethink their operations, as their market share and customer loyalty continue to decline.

Mishra (2022) investigated the income impact of e-commerce on small retailers in Northeast India. The study showed that many local shopkeepers, especially in electronics and clothing, experienced a sharp decline in revenue as customers browsed products in-store but completed purchases online. Lack of digital knowledge and absence on online platforms worsened the problem, signaling the urgent need for digital training and support infrastructure.

Sen & Thakur (2020) studied the price wars between online and offline retail in smaller Indian cities. They observed that customers now favor affordability over in-store experiences, due to deep online discounts and cashback offers. This trend challenges traditional business models and encourages local retailers to explore hybrid strategies such as joining online platforms or offering exclusive services to stay competitive.



Dahiya (2017) in “A Study on E-Commerce and Its Impact on Market and Retailers in India” offered a detailed analysis of how traditional retailers are struggling to stay relevant in the face of rapid digital transformation. The study found that declining customer footfall and growing price competition from online platforms are forcing offline retailers to reconsider their business models. Dahiya emphasized that without embracing innovation and new technology, traditional stores risk becoming obsolete.

Shree BPB Arts and MHG Commerce College (2023) in “E-commerce and Its Impact on Traditional Retail” explored how small retailers can integrate digital tools to remain competitive. The study highlighted the importance of adopting omnichannel strategies and digital marketing techniques to reach tech-savvy consumers. It concluded that blending offline strengths like personal service with online convenience can create a more resilient retail model.

Rani (2020) studied the changing preferences of customers who now favor online platforms due to their ease and variety. She observed that traditional retailers who rely on personal relationships and location-based sales are facing reduced customer engagement. The study noted that trust and familiarity, once core strengths, are losing influence compared to convenience and competitive pricing.

Kumar and Saha (2021) explored the technological gap between modern e-commerce businesses and traditional retailers. Their research showed that many small shopkeepers still rely on manual systems and are not familiar with digital payment methods or online platforms. This lack of digital know-how is becoming a significant barrier to staying competitive in today's market.

Thomas (2023) studied how traditional retailers are losing premium customers to online platforms. He found that consumers prefer buying expensive goods like electronics and branded fashion online due to better pricing, cashback offers, and return policies. As a result, local retailers not only lose sales but also see their high-margin product categories suffer.

Dey et al. (2021) explored the psychological and financial strain experienced by traditional shopkeepers due to the growing influence of e-commerce. The study revealed that many are anxious about the future of their businesses and lack the resources to invest in digital transformation. Without support or a strategy to modernize, these businesses face the risk of shutting down.

III. Research Methodology

To study how e-commerce is impacting traditional retailers in Pasighat, both primary and secondary data collection methods were used. This mixed-method approach allowed the researcher to understand not just the numerical trends, but also the personal experiences of local shopkeepers. For primary data, a structured questionnaire was prepared and distributed to local retailers selling electronics (smartphones), clothing (t-shirts), and grocery items (packaged snacks). The question

naire included both closed-ended (multiple choice) and open-ended questions. The closed-ended questions helped gather measurable data about price differences, income changes and customer behavior, while the open-ended ones allowed respondents to express their challenges and insights in their own words.

A stratified sampling technique was used to ensure that data was collected fairly across the three different product categories. This method helped in making sure that each group of retailers electronics, clothing, and grocery was equally represented in the study. It also allowed for comparisons between different sectors of traditional retail, helping to identify which types of products are more affected by the rise of e-commerce. In terms of data analysis, both quantitative and qualitative methods were applied. Quantitative data from the closed-ended questions was analyzed using the Statistical Package for the Social Sciences (SPSS). Some of the tools and techniques used included:

Frequency analysis: to see how often certain responses occurred and understand common patterns.

Mean (average): to calculate general trends like changes in income or customer flow.

Chi-square test: to identify relationships between two variables, such as price differences and income changes.

Descriptive statistics: including percentages, tables, and visual charts to clearly present the results.

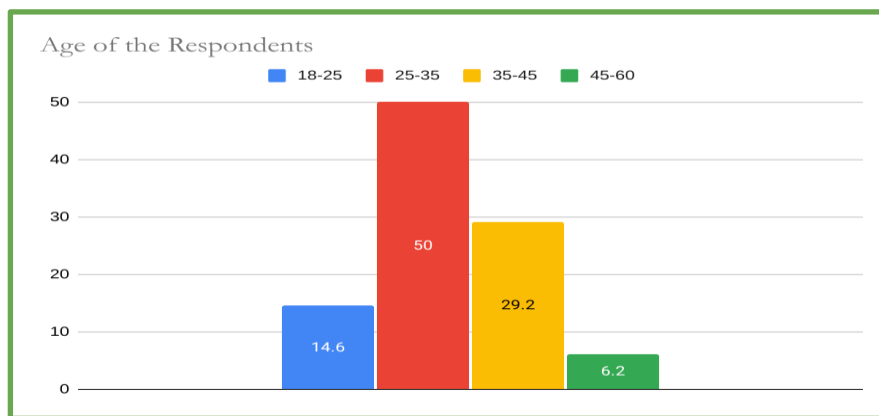
For the open-ended responses, qualitative analysis was done by identifying common themes and grouping similar answers together. This gave more depth to the numerical findings, providing a better understanding of the real-world struggles faced by shopkeepers. Additionally, secondary data was gathered from government websites, published research papers, policy documents and news articles. These sources offered useful background information on the growth of e-commerce in India, the digital development of Arunachal Pradesh and the local business environment in Pasighat. By combining firsthand information from shopkeepers with verified secondary sources, this research methodology ensured



that the study captured a full and balanced view of how e-commerce is changing the landscape of traditional retail in Pasighat.

IV. Results and Findings

1. Demographics: Pasighat's retail sector is led by young male shopkeepers (25–35 years), with most stores running for over 10 years showing business stability but limited new entries and low female participation.



Source: field survey, 2025

2. Income Impact: 62.5% reported income decline due to online price competition, confirming that price gaps are financially harming traditional retailer

CHANGE IN INCOME OF THE LOCAL RETAILERS DUE TO THE PRICE DIFFERENCE IN (%)

INCOME CHANGE		TOTAL
DECREASED	REMAINED THE SAME	
62.5%	37.5%	100.0%

Source: Field Survey, 2025

3. Price Comparison: iPhones are significantly cheaper online, while Samsung budget models are more affordable offline, showing that price differences vary by product type.



Price difference between online platforms and local retail stores of Pasighat (%)									
Price Difference	Product								
	Samsung Price	Redmi	IPhone	Onn	Jockey	Maxzone	Uncle chips	Nutri choice	Kurkure
-1 to - 500	0.0	0.0	0.0	81.2	62.5	93.8	0.0	0.0	0.0
-500 to -1000	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-1001 and above	68.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Zero Difference	0.0	12.5	0.0	0.0	31.2	0.0	100.0	0.0	0.0
1 to 500	6.2	6.2	0.0	18.8	6.2	6.2	0.0	100.0	100.0
500 to 1000	6.2	68.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1001 & Above	0.0	12.5	100	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Field Survey, 2025

Negative price difference = higher online price and lower offline price.

Positive price difference = higher offline price and lower online price.

4. Customer Base Loss: 37.5% cited declining customers as the biggest challenge, showing how e-commerce is pulling foot traffic away from local shops

BIGGEST CHALLENGE FACED BY THE LOCAL RETAILERS DUE TO THE GROWTH OF E-COMMERCE IN (%)

BIGGEST CHALLENGES			TOTAL
DECLINING CUSTOMER BASE	HIGH OPERATIONAL COSTS	DIFFICULTY IN MAINTAINING PRICING	
37.5%	31.2%	31.2%	

Source: Field Survey, 2025

5. Customer Trust: 87.5% said customers trust local stores more than online platforms, showing that personalized service remains a key competitive strength.



CUSTOMERS TRUST ONLINE STORES MORE THAN OFFLINE STORES OR NOT IN (%)

TRUST ONLINE OR OFFLINE			TOTAL
YES, COMPLETELY	YES, TO SOME EXTENT	NO, LOCAL RETAILERS ARE MORE TRUSTED	
2.1%	10.4%	87.5%	100.0%

Source: Field Survey, 2025

6. Digital Marketing Gap: Only 2.1% use digital promotion, highlighting a major weakness in adapting to online consumer behavior.

ADOPTION OF DIGITAL MARKETING OR ONLINE SELLING TO COMPETE WITH E-COMMERCE IN (%)

DIGITAL MARKETING ADOPTION			TOTAL
YES, I HAVE USED DIGITAL MARKETING	NO, I HAVEN'T USED ANY DIGITAL MARKETING	YES, BUT FOR OTHER PURPOSE	
2.1%	77.1%	20.8%	100.0%

Source: Field Survey, 2025

7. Discounts & Offers: Just 6.2% offer festival discounts, showing limited ability to compete with aggressive online sales during high-demand periods.

DISCOUNTS OR PROMOTIONAL SALES BY RETAILERS TO COMPETE WITH ONLINE FESTIVAL SALES IN (%)

DISCOUNT ON FESTIVAL SALES				TOTAL
YES, REGULARLY	SOMETIMES	RARELY	NO	
6.2%	20.8%	27.1%	45.8%	100.0%

Source: Field Survey, 2025

8. Digital Payments: 95.8% observed a rise in digital payment use, proving that consumers are moving faster toward digital trends than retailers.

INCREASE IN CUSTOMERS PREFERRING DIGITAL PAYMENT OVER CASH IN PASIGHAT MARKET IN (%)

DIGITAL PAYMENT PREFERENCE		TOTAL
YES, SIGNIFICANTLY	YES, SLIGHTLY	
95.8%	4.2%	100.0%

Source: Field Survey, 2025

9. Operational Costs: 68.8% pointed to high rent and utilities as the biggest burden, restricting their ability to compete on pricing.



OPERATION COST THAT IMPACTS THE MOST TO THE LOCAL RETAILERS IN (%)

OPERATION COST IMPACT MOST				TOTAL
RENT AND UTILITIES	EMPLOYEE WAGES	INVENTORY COST	LOGISTICS AND SUPPLY CHAIN EXPENSES	
68.8%	4.2%	22.9%	4.2%	100.0%

Source: Field Survey, 2025

10. Product Variety: 50% reported customer complaints about limited product variety, showing a gap in matching online platforms' extensive options.

COMPLAIN ABOUT LIMITED VARIETY OF PRODUCTS AVAILABLE IN THE STORE IN (%)

COMPLAIN OF LIMITED VARIETY				TOTAL
YES, FREQUENTLY	SOMETIMES	RARELY	NO	
8.3%	50.0%	31.2%	10.4%	100.0%

Source: Field Survey, 2025

11. Stock Challenges: 75% admitted difficulty updating stock quickly, underlining weak logistics as a key challenge.

DIFFICULTY IN INVENTORY UPDATE AS QUICKLY AS ONLINE STORES IN (%)

DIFFICULTY IN INVENTORY UPDATE		TOTAL
SLIGHTLY DIFFICULT	NO PROBLEM	
75.0%	25.0%	100.0%

Source: Field Survey, 2025

12. Support Needed: 56.2% demanded financial help, while only 4.2% asked for digital training indicating economic stress and low awareness of long-term digital strategies.

SUPPORT SYSTEM THAT LOCAL RETAILERS NEEDED FROM GOVERNMENT AND LOCAL AUTHORITIES TO HELP LOCAL RETAILERS GROW THEIR BUSINESS IN (%)

SUPPORT FROM GOVERNMENT AND LOCAL AUTHORITY				TOTAL
FINANCIAL SUPPORT	DIGITAL TRAINING	SUBSIDIES FOR SMALL RETAILERS	OTHER	
56.2%	4.2%	25.0%	14.6%	100.0%

Source: Field Survey, 2025

V. Conclusion

In conclusion, the research highlights a shifting retail landscape in Pasighat where local businesses are increasingly affected by digital alternatives. While they show resilience and

adaptability, they also require external support to thrive. The findings fulfill the study's objectives and respond to the research questions effectively, offering a deeper understanding of how localized retail markets are evolving in the face of e-commerce. This



study not only fills a gap in rural and semi-urban retail research but also provides practical suggestions to bridge the digital divide between traditional and online commerce.

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