



Consumer Preferences for Physical and Digital Marketing of Pomegranates in Tier I and II Cities in Maharashtra

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Abstract:

This research article, based on a comprehensive literature review and a pilot survey of 48 respondents from tier I and II cities in Maharashtra, examines consumer preferences for physical and digital marketing channels when purchasing pomegranates. The marketing landscape for pomegranates in Maharashtra is undergoing significant transformation, driven by advancements in digital tools and changing consumer behaviours. This study investigates recent consumer adoption trends for digital and physical marketing strategies within the pomegranate industry, highlighting the opportunities and challenges farmers in the state.

The Maharashtra, which contributes over 55% of India's pomegranate production, has traditionally relied on physical marketing channels such as local mandis and wholesalers. However, the increasing penetration of e-commerce platforms, social media, and mobile apps is reshaping how farmers and consumers interact. The study analyses demographic variables, purchasing behaviours, and consumer attitudes toward traditional and digital markets. Results highlight key drivers influencing consumer adoption trends, emphasizing the significance of hybrid marketing strategies, particularly in light of rapid developments in quick commerce (Q-commerce), to enhance consumer satisfaction and purchasing experiences.

Keywords: Consumer Preferences, Digital Marketing, Hybrid Marketing Strategies, Pomegranate Marketing, and Quick Commerce (Q-commerce)

Introduction:

Pomegranate (*Punica granatum* L.) is a fruit known for its significant health benefits and has become a leading horticultural crop in the Indian subcontinent. India is one of the world's top producers of pomegranates. In the 2013-14 season, pomegranate cultivation covered approximately 131,000 hectares, yielding 1.346 million tonnes with a productivity rate of 10.27 tonnes per hectare. In 2015, Maharashtra stood out as the leading state in pomegranate farming, accounting for about 68.7% of the total cultivated area. Additionally, around 70.2% of the overall production that year came from Maharashtra. Other notable states for

pomegranate cultivation include Karnataka, Gujarat, and Andhra Pradesh. Importantly, India is the only country in the world where pomegranates are available year-round (January to December). (**National Research Centre on Pomegranate, 2015**)

Maharashtra, often referred to as the "Fruit Basket of India," contributes approximately 55% to the national output of pomegranates. This growth has been driven by the region's favorable climate and rising demand in both domestic and international markets. However, marketing continues to be a significant challenge for farmers. Traditionally reliant on physical distribution channels, the pomegranate marketing landscape is beginning to change with the

rise of digital platforms. The promotion of pomegranates is shifting from conventional methods, like local mandis and intermediary traders, to modern digital strategies that include online platforms, mobile applications, and social media. While digital marketing presents considerable opportunities for improving efficiency and profitability, many farmers struggle to adopt these technological tools due to obstacles such as limited awareness, technological challenges, and inadequate infrastructure.

The shift from traditional to digital purchasing channels has significantly accelerated with the rise of quick commerce platforms, reshaping consumer expectations for immediacy and convenience. Recent reports indicate substantial growth in the Indian Q-commerce market, with platforms such as Swiggy Instamart, Zepto, and Blinkit rapidly expanding their presence and consumer base (**RedSeer Consulting, 2022**). Understanding consumer adoption trends is critical for optimizing marketing strategies, particularly in urban markets such as Maharashtra's tier I and II cities. This study explores consumer behavior, identifies preferences and challenges in purchasing pomegranates through different marketing channels, and suggests implications for hybrid marketing strategies.

Literature Review:

(**Siddiqui & Tripathi, 2016**) highlights the transformative impact of the internet on marketing, advertising, promotion, logistics, and distribution within the Indian retail sector, emphasizing how retailers are adapting to e-retailing models to gain a competitive advantage and provide spatial convenience to consumers. It identifies five broad perceptual dimensions (convenience, value for money, variety, loyalty, and ambient factors) that influence consumers' selection of grocery purchase modes, suggesting that understanding these dimensions can help online retailers tailor

their offerings to meet customer expectations and preferences effectively.

(**Vaghasiya & Thakkar, 2019**) analyzes the factors influencing online customer buying behavior specifically in the fruits and vegetables sector, providing insights into consumer preferences and purchasing patterns in Surat city. The research identifies key reasons for customer attrition in the online shopping of fruits and vegetables, particularly highlighting complaints regarding the quality and pricing of products in comparison to competitors. This information is crucial for retailers like Big Basket to improve customer satisfaction and retention strategies.

(**Stiletto & Trestini, 2021**) reviews the rising interest in healthy products, particularly superfoods like pomegranate, which have gained significant traction in the international market. It aims to identify the determinants of consumer choices regarding pomegranate and its derivatives, highlighting the need for a comprehensive analysis of consumer preferences. The paper provides a systematic review of consumer preferences for pomegranate and its derivatives, identifying key product characteristics that influence purchasing decisions, such as sweetness, astringency, color, shape, and juiciness. Familiarity with pomegranates influences purchase decisions, with consumers who are more future-oriented showing a higher willingness to pay for the fruit due to its health benefits. This analysis helps producers and the industry better understand consumer targets for pomegranate products.

(**Ranasingha et al., 2019**) investigates consumer preferences for various attributes of four popular fruits—grapes, sweet orange, pear, and pomegranate—using a conjoint analysis approach. It emphasizes the importance of understanding consumer preferences to aid fruit breeders in developing new varieties that align with market demands, as the

breeding process is lengthy and often has low success rates. The study provides valuable insights into the significant attributes that affect consumer willingness to pay (WTP) for these fruits, such as the importance of shelf life in sweet oranges and the preference for bitterness-free and soft-seeded pomegranates, which can inform breeding programs and marketing strategies for local fruit producers in Sri Lanka.

(Chen, 2013) discusses crucial perspectives on consumer preferences, budget constraints, choices, and expenditures, providing a framework to address long-standing inquiries in consumer theory and service science. It discusses the relationship between transitivity in preference order relations and coherence in choice functions, noting that while coherence may not ensure transitivity, both concepts are crucial for understanding consumer behavior. The paper also suggests the need for further research into the psychological processes influencing individual and group consumption choices in a global context.

(Widiyawati et al., 2023) analyzes consumer preferences for suboptimal agricultural products, revealing that consumers tend to prefer optimal performance in commodities like papaya and cucumber, which are available in traditional markets, and that their purchasing decisions are influenced by the physical characteristics of the products rather than their nutritional content. The study provides insights into consumer willingness to pay (WTP) for suboptimal products, indicating that the average WTP for misshapen or suboptimal papaya and cucumber is lower than for their optimal counterparts, suggesting that producers should consider pricing suboptimal products more competitively to reduce waste and enhance marketability.

(Venkataramudu et al., 2018) discusses the challenges in storing pomegranate arils, which have a short shelf

life due to processing damage that increases respiration and ethylene production. It emphasizes the development of processing techniques, particularly modified atmosphere packaging and low temperature storage, to extend the shelf life of these ready-to-eat arils to meet consumer demand for high-quality products.

Research Questions:

1. What are consumer preferences for purchasing pomegranates through physical versus digital channels in tier I and II cities of Maharashtra?
2. What factors influence consumers' preferences for physical or digital purchasing methods?
3. What challenges limit consumer adoption of digital platforms, particularly Q-commerce, for fresh produce?

Research Methodology:

A structured questionnaire was administered to 48 consumers from major tier I and II cities in Maharashtra (India), including Mumbai, Pune, Nagpur, Kolhapur, Navi Mumbai, Nashik, Aurangabad, Pimpri-Chinchwad, Ulhasnagar, and Nanded Waghala. Participants provided demographic information, purchasing habits, and preferences for physical versus digital purchasing channels. Responses were collected through a purposive sampling (non-probability) method, targeting intentionally selecting participants from Tier I&II cities in the state.

Scope of Study:

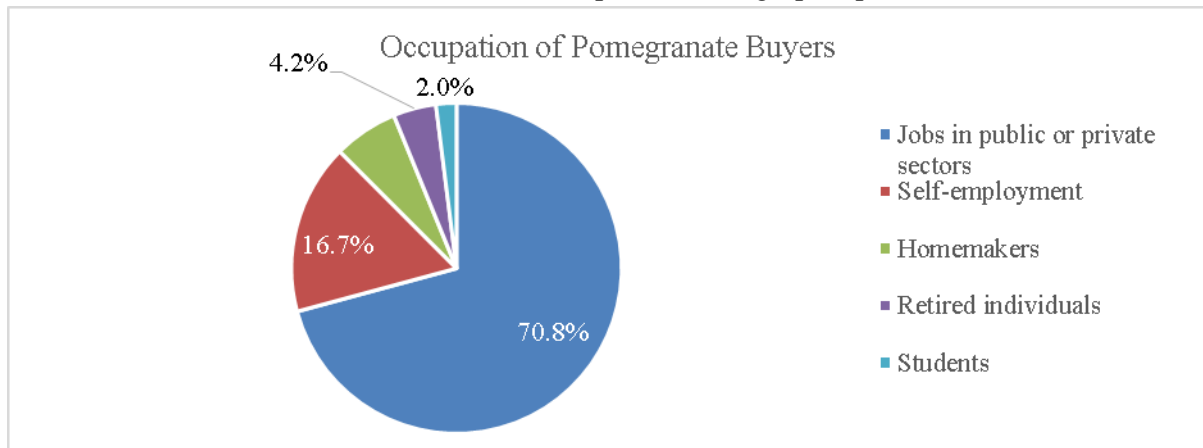
The scope of the study is limited to understanding the consumer preference methods of pomegranate purchase in Tier I&II cities in Maharashtra (India). The secondary data used for the purpose is from 2012 to 2025.

Data Analysis and Discussion:**A. Demographic Analysis:**

- Respondents were categorized by age, gender, city of residence, and occupation. The survey comprised 48 participants, primarily from Tier I cities (62.5%), including Pune, Navi Mumbai, and Mumbai.
- A significant percentage of respondents (66.7%) identified as male, while female respondents accounted for

33.3%.

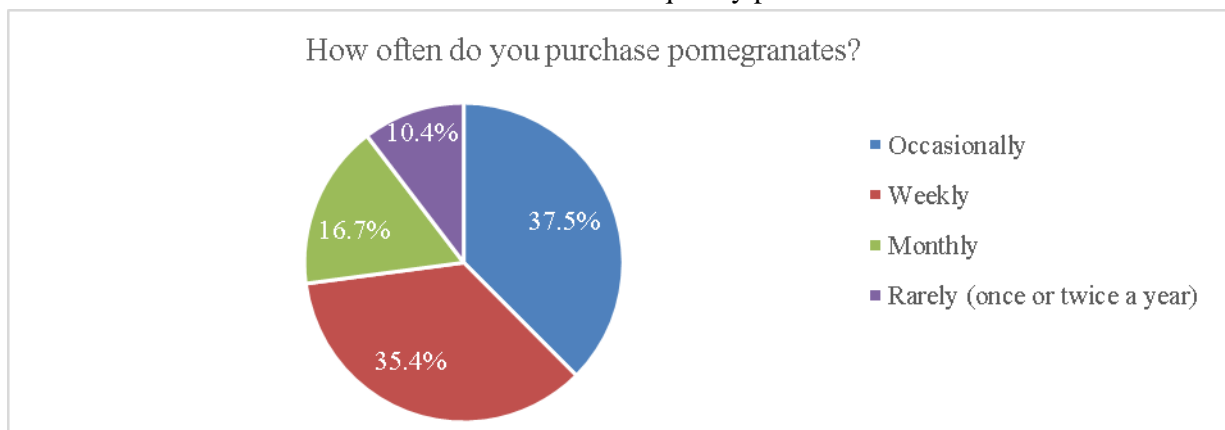
- Regarding age distribution, the majority of respondents fell within the 31–40 age bracket, indicating considerable purchasing power and higher likelihood of digital literacy.
- The most common occupation among respondents was employment in public or private sectors (70.8%), followed by self-employment (16.7%) and homemakers (6.3%).

Chart -1: Consumer occupation: demographic pattern**B. Purchasing Behavior:**

- A substantial portion of consumers (35.4%) purchased pomegranates weekly, followed closely by occasional buyers (37.5%) and monthly buyers (16.7%).
- About 52.1% of respondents reported regular purchases (weekly – 35.4% and monthly – 16.7%) of pomegranates.
- Physical stores were the

overwhelmingly preferred purchase location, chosen by approximately 64.6% of respondents.

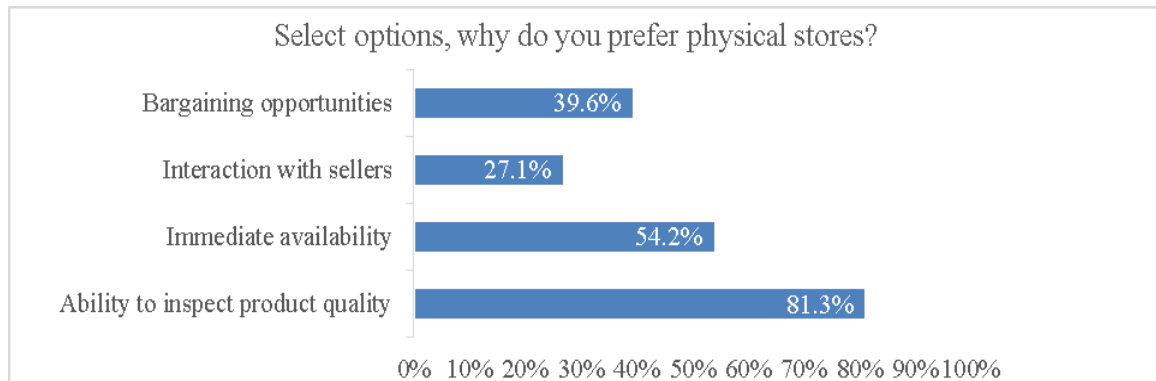
- However, combination of physical store and online platforms (quick commerce and e-commerce) were also used by nearly 35.4%, highlighting a growing acceptance of digital channels for fresh produce shopping.

Chart -2: Purchase frequency pattern

C. Physical Marketing Preferences:

- An overwhelming majority (91.7%) of respondents expressed a strong preference for physical store purchases, primarily due to the ability to inspect product quality firsthand (81.3%) and immediate availability (54.2%).
- Local markets (mandis) were identified as the most frequently visited physical outlets (77.1%), followed by supermarkets (43.8%), street vendors (41.7%), and farmers' markets (31.3%).

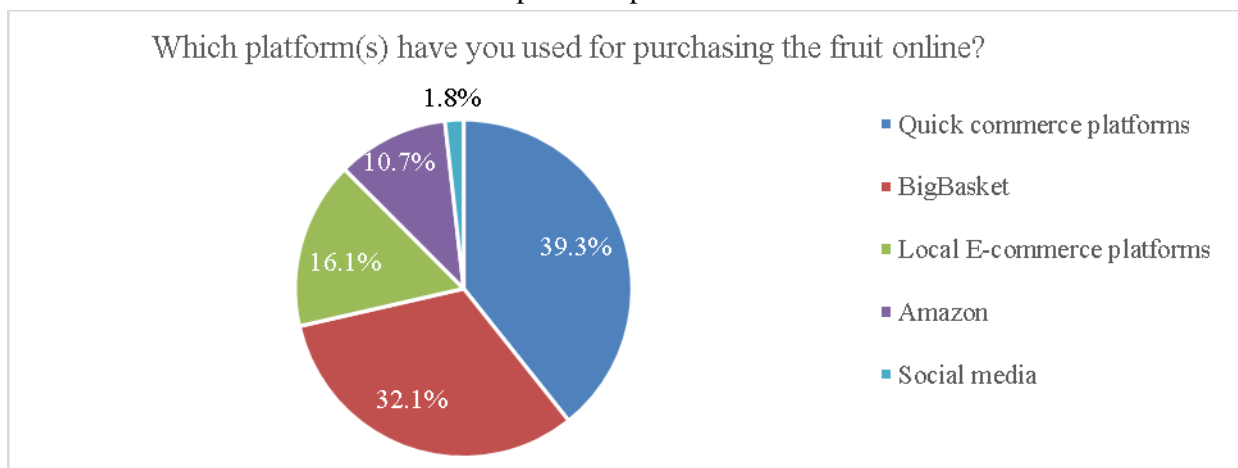
Chart -3: Key factors responsible for physical purchase preference of consumer



D. Digital Marketing Adoption:

- Around 62.5% of respondents reported to have the experience of purchasing pomegranates online, indicating significant penetration of digital marketing.
- Quick commerce platforms such as Swiggy Instamart and Zepto were popular among digital shoppers 39.3% alongside established e-commerce platforms such as BigBasket (32.1%) and Amazon (10.7%).
- Consumers identified key advantages of digital purchases as quick home delivery (58.3%), product quality and variety (35.4%), competitive pricing (33.3%), and availability of discounts/offers (22.9%).
- Nevertheless, significant concerns were raised, particularly regarding trust and quality assurance (60.4%), high delivery charges (37.5%), and limited availability or reach in certain geographic areas (31.3%).

Chart -4: Online platform preference of consumer

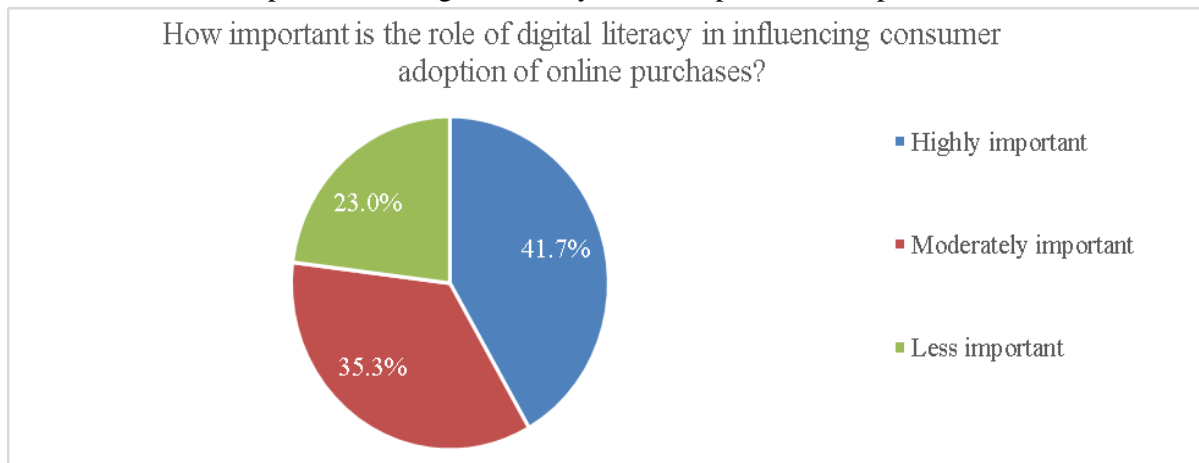


E. Role of Digital Literacy:

Participants highlighted digital literacy as a crucial factor influencing their adoption of online purchasing platforms. Approximately 41.7% rated digital literacy as highly important, whereas another 35.3%

considered it moderately important, underscoring the necessity of digital competence and confidence to facilitate wider adoption of digital marketplaces among consumers.

Chart -5: Importance of digital literacy in online purchase adoption in consumers

**F. Hybrid Marketing Models:**

Most respondents (62.5%) supported the adoption of hybrid marketing strategies combining online and offline elements, asserting that integrated models could significantly improve the overall consumer experience. An additional 33.3% remained uncertain but open to exploring hybrid strategies, suggesting a strong potential for hybrid models to resonate widely if adequately implemented.

Conclusion:

The survey conducted among consumers in Tier I and II cities of Maharashtra reveals significant insights into preferences for purchasing pomegranates. Traditional physical marketing channels remain dominant, preferred by 91.7% of respondents, primarily due to tangible benefits such as quality inspection, immediate availability, bargaining options, and seller interaction. Local markets, street vendors, and supermarkets continue to be

favored purchase locations. However, digital platforms, especially quick commerce services like Swiggy Instamart, Zepto, and BigBasket, have shown growing adoption among 62.5% of respondents. Consumers opting for digital channels value the convenience of quick home delivery, competitive pricing, and variety. Nevertheless, trust issues related to product quality, high delivery charges, and limited availability hinder broader acceptance.

Digital literacy emerged as critical, with respondents acknowledging its role in influencing online purchasing decisions. Hybrid marketing models combining both physical and digital channels received substantial support (62.5%), highlighting consumer interest in integrated shopping experiences. To effectively capitalize on these trends, businesses should invest in strengthening trust in digital offerings, improving consumer digital literacy, and implementing hybrid strategies. Such approaches can significantly enhance

customer satisfaction, broaden market reach, and drive growth in Maharashtra's pomegranate industry.

Recommendations for future marketing strategies:

- Trust-building measures in digital channels via quality assurance and reliable delivery.
- Leveraging physical stores for experiential marketing, complemented by digital convenience.
- Enhancing digital literacy to foster wider online adoption.
- Capitalizing on rapid Q-commerce growth through strategic partnerships and targeted promotions.

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