

Digital Transformation in Promoting Millets (“Shri Anna”): A Study of Consumer Behaviour in Lucknow

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Abstract

Today, marketed as "Shri Anna," millets have become a key element of India's plan for sustainable agriculture, nutrition, and food security. The way millets are marketed, consumed, and promoted has changed significantly in recent years due to digital transformation, particularly in metropolitan areas (Wadhawan & R. K. A., 2020). In Lucknow, a significant metropolitan centre in Uttar Pradesh, this study investigates the impact of digital platforms on consumer awareness, attitudes, and purchasing behaviour regarding millets. Government initiatives like the International Year of Millets (2023), digital India campaigns, and the increasing usage of social media, e-commerce platforms, food applications, and online health influencers are all taken into consideration when conducting the research.

The study investigates how consumer understanding, trust, and acceptance of millet-based products are impacted by digital tools such as social media marketing, mobile applications, e-commerce websites, online commercials, and influencer-led content. Additionally, it examines how customer preferences are evolving due to factors including ease, exposure to digital information, lifestyle modifications, and health consciousness. Structured surveys and interviews with urban consumers in Lucknow to be used to gather primary data, supplemented by secondary data from reports, policy documents, and online media sources.

In addition to highlighting the increasing significance of digital communication in encouraging sustainable and healthful food choices, the results are anticipated to highlight issues like price sensitivity, misinformation, and the scarcity of millet-based goods. The study offers insights for policymakers, agri- entrepreneurs, digital marketers, and food companies to create more successful digital strategies for millets by concentrating on customer behaviour. All things considered, the study advances knowledge of how digital transformation might promote sustainable consumption, nutritional awareness, and the more general objectives of economic growth and food security in modern urban India.

Keywords - Digital Transformation, Millets (Shri Anna), Consumer Behaviour, Digital Marketing, Sustainable Food Systems

Introduction

Rising health consciousness, lifestyle-related illnesses, and growing concern for sustainable food systems have all contributed to a dramatic change in food consumption patterns in India in recent years (Kamal & Ahmad, 2022). In this regard, millets—now

officially known as "Shri Anna"—have come back to prominence as wholesome, climate-resilient, and profitable crops. Because millets have a low glycaemic index, are high in fibre, protein, and minerals, and are traditionally consumed in many parts of India, they can be used to treat non-communicable diseases and malnutrition (Kamal et al., 2020). Acknowledging their significance, the Indian government has actively promoted millets through public campaigns, policy initiatives, and international advocacy, especially since 2023 was declared the International Year of Millets.

Digital transformation has become a potent force influencing consumer behaviour in urban India in tandem with these governmental initiatives. The quick development of cell phones, internet access, social media, e-commerce websites, and meal delivery apps has completely changed how consumers obtain information, assess goods, and decide what to buy. Digital platforms are now crucial for promoting food items, raising nutritional awareness, influencing lifestyle decisions, and forming opinions about food. The promotion of millets has progressively moved away from traditional awareness efforts and towards digital communication channels, such as social media marketing, influencer endorsements, online ads, health blogs, and digital government initiatives. (Rahul, n.d.). Work schedules, convenience, exposure to international culinary trends, and digital media consumption are all contributing factors to the shifting nutritional habits of urban consumers, especially in cities like Lucknow.

Lucknow offers a pertinent environment for researching how digital transformation impacts consumer knowledge and acceptance of millet-based meals because it is a quickly expanding metropolis with a blend of traditional culinary culture and contemporary lifestyle. Digital narratives are increasingly changing the notion of millets as "poor man's food" by portraying them as modern, healthful, and lifestyle-friendly options.

Numerous elements, including health consciousness, taste preferences, price sensitivity, availability, trust in information sources, and social impact, affect how consumers behave when it comes to food goods. By facilitating real-time communication, peer reviews, influencer viewpoints, and tailored marketing, digital platforms accentuate these characteristics. Nevertheless, issues including false information, inconsistent branding, restricted product availability, and higher costs of value-added millet products in urban marketplaces persist despite growing digital promotion.

In light of this, the current study aims to investigate how digital transformation promotes millets, or "Shri Anna," and how it affects Lucknow consumers' purchasing decisions. The study intends to advance knowledge of digital food marketing and sustainable consumption practices by examining how digital platforms influence awareness, attitudes, and purchase decisions. Policymakers, agri-entrepreneurs, food companies, and digital marketers might find the research's conclusions helpful in creating strategies that encourage sustainable and healthful food choices in urban India.

Review Of Literature

Scholars from a variety of fields, including agriculture, nutrition, consumer behaviour, and marketing, have taken notice of millets' increasing significance as a wholesome and sustainable food supply. Early research on millets mostly concentrated on their excellent

nutritional value and contribution to food security. Reddy and Bantilan (2012) noted that taste preferences, lack of convenience, and restricted availability kept millets' actual consumption low in urban India despite widespread awareness of their health advantages. Devi et al. (2014) state that because millets are high in dietary fibre, micronutrients, and antioxidants, they can help fight lifestyle-related illnesses including obesity and diabetes. Understanding millets as "nutri-cereals" as opposed to conventional coarse grains was made possible by this nutritional discourse.

The spread of knowledge about food has changed significantly as a result of the growth of digital media. Digital marketing has revolutionised customer decision-making by offering interactive, personalised, and real-time information, according to Kotler et al. (2017). Similarly, Kaur and Banga (2018) discovered that although urban consumers were aware of millets, they lacked practical information about how to prepare them, which had a detrimental effect on regular intake.

Chaffey and Ellis-Chadwick (2019) noted that consumer trust and purchase behaviour are greatly influenced by social media, influencer marketing, and online reviews in the context of food goods.

Recent research has started to connect food consumption habits with internet platforms. Meghana et al. (2021) showed that urban customers' willingness to sample millet-based ready-to-eat goods was positively impacted by social media marketing and online promotions.

According to Pathak et al. (2022), consumer perceptions of millets as contemporary and healthful foods were enhanced by digital awareness campaigns.

Food selections are increasingly influenced by e-commerce sites and food delivery applications. Nandagopal and Chinnaiyan (2019) found that young urban customers made much more trial purchases when health foods were branded and available online. However, Singh and Verma (2020) highlighted issues with digitally promoted food goods, including price sensitivity, false information, and uneven quality standards.

Digital health content has a considerable impact on food choices, particularly among middle-class households, according to Sharma and Gupta's (2020) analysis of shifting dietary trends among urban Indian consumers. According to their research, when traditional foods like millets are positioned inside contemporary lifestyle narratives, internet health awareness campaigns have the potential to revitalise them.

Branding, packaging, and digital visibility are important factors in purchase intention, according to Kumar et al.'s (2021) study on consumer acceptability of millet-based value-added products in urban markets. According to the study, people are more inclined to try millets when they are promoted online as high-quality, easy health foods.

Patil and Naik (2023) examined how digital media may help India promote sustainable diets. According to their findings, consumer views on environmentally sustainable foods like millets are positively shaped by government-backed online efforts, influencer advocacy, and digital storytelling. But they also point out that continuous availability and affordability are necessary for long-term consumption.

From a policy standpoint, FAO (2023) highlighted that, particularly following the International Year of Millets, digital communication is essential for promoting millets worldwide.

Research Gap

Previous research on millets has mostly concentrated on their general consumption patterns in India, agricultural importance, and nutritional advantages. There is little empirical research specifically examining how digital transformation affects consumer behaviour towards millets ("Shri Anna") in urban contexts, despite recent literature acknowledging the expanding relevance of digital platforms in food marketing. The majority of research takes a broad national or rural approach, paying little attention to tier-2 cities like Lucknow, where fast technology adoption and traditional food culture coexist. Furthermore, nothing is known about how social media, e-commerce sites, digital campaigns, and online influencers affect consumers' knowledge, trust, and decisions to buy millets. By offering a consumer-centric, city-specific analysis of digital promotion and millet consumption, this study aims to close this gap.

Research Questions

1. How does Lucknow's consumer awareness and perception of millets, or "Shri Anna," get affected by digital transformation?
2. How can internet marketing and digital platforms influence consumers' decisions to buy millet-based products?
3. What elements promote or hinder millets' ability to be effectively promoted online among urban consumers?

Objectives

1. To investigate how consumer awareness and attitudes towards millets (also known as "Shri Anna") in Lucknow are affected by digital platforms.
2. To examine the effects of digital marketing techniques on millet-based product consumption and purchase behaviour.
3. To determine the main elements influencing digitally driven millet consumption, such as convenience, trust, and health consciousness.
4. To give marketers and policymakers information to improve digital marketing tactics for millets in India's cities.

Research Methodology

The study uses a descriptive and analytical research design to investigate how Lucknow consumers' attitudes towards millets, or "Shri Anna," are affected by digital revolution. There is usage of both primary and secondary data.

The survey is carried out among Lucknow's urban consumers. Convenience sampling is used to choose a sample of 150 respondents, guaranteeing representation from a range of age groups, professions, and income levels.

Data Collection

A systematic questionnaire is used to gather primary data. Secondary data is gathered from research journals, government reports, digital campaign materials, and websites

pertaining to millets and consumer behaviour. The questionnaire comprises sections on: o Exposure to digital platforms (social media, e-commerce sites, online advertisements) o Awareness of millets o Purchase behaviour and consumption frequency o Influence of digital marketing content.

Secondary data is gathered from websites pertaining to millets and consumer behaviour, government reports, academic publications, and digital campaign materials.

Hypothesis

H₁: Consumer knowledge of millets (also known as "Shri Anna") in Lucknow is significantly correlated with exposure to digital platforms.

H₂: Online information and digital marketing have a big impact on customers' decisions to buy millet-based products.

Instruments for Analysis

Simple statistical tools are used to analyse data: Frequency and percentage analysis to comprehend customer characteristics and behaviour chi-square test. to test the hypotheses and find correlations between variables,

Results And Interpretation

Analysis Concerning H₁

According to the analysis, a significant percentage of respondents who regularly use digital platforms—like Instagram, YouTube, WhatsApp, and e-commerce websites—are more aware of millets and their health advantages. Consumer awareness and digital exposure are significantly correlated, according to the Chi-square test. As a result, Hypothesis H₁ is accepted, indicating that digital platforms are crucial in educating Lucknow's urban customers about "Shri Anna."

Analysis Concerning H₂

Findings also show that purchasing decisions are greatly influenced by digital marketing techniques, such as online ads, influencer material, customer reviews, and articles on health. Customers who are exposed to good digital content are more inclined to try and incorporate millet-based items into their diets. A statistically significant correlation between digital impact and purchasing behaviour is confirmed by the Chi-square test. As a result, Hypothesis H₂ is also approved.

Overall Findings

Even though awareness and purchasing intention have been positively impacted by digital platforms, issues including price, taste preferences, and limited availability still have an impact on frequent consumption. According to the study's findings, digital transformation offers a great deal of promise to advance millets, but it needs to be backed by accessibility, affordability, and consistent digital message.

Suggestions

1. Boost Digital Awareness Initiatives - Using social media and official digital channels, government organisations and food marketers can start reliable and consistent digital campaigns emphasising the nutritional, lifestyle, and health benefits of millets ("Shri Anna").

2. Encourage Online Food Education - To increase consumer awareness and acceptability, short films, reels, blogs, and smartphone apps that describe simple millet recipes and cooking techniques should be created.

3. Make Use of Experts and Influencers - Working together with dietitians, medical experts, and reliable online influencers can boost credibility and favourably affect consumers' perceptions of millet intake.

4. Boost Pricing and Online Availability - By providing discounts, subscription models, and digital promotional offers, e-commerce platforms should make millet-based products more accessible and cheaper.

5. Focused Digital Marketing Techniques - Particularly among young professionals and health-conscious consumers, personalised digital marketing based on age, lifestyle, and health demands can increase engagement.

6. Give Local Producers Digital Support - To engage with urban consumers directly, small millet farmers and business owners should be encouraged to use social media and online marketplaces.

7. Verify Accurate and Consistent Data - Long-term customer trust can be developed by keeping an eye on digital content to minimise false information and guarantee quality standards.

Conclusion

The current study emphasises the increasing significance of digital revolution in influencing Lucknow consumers' attitudes about millets, or "Shri Anna." The results unequivocally show that digital platforms, including social media, e-commerce websites, and online information outlets, are crucial in raising awareness of and influencing decisions to buy millet-based products. Increased exposure to digital content has helped reposition millets from being perceived as traditional or rural foods to modern, healthy, and lifestyle-oriented dietary choices.

The study demonstrates that consumer perception is positively impacted by digital awareness, particularly when it comes to the health advantages of millets, such as better digestion, diabetes control, and general wellbeing. The acceptance of both theories implies that internet communication and digital marketing are useful strategies for encouraging millets among urban consumers. This digital visibility has been further reinforced by government campaigns and activities under the "Shri Anna" and nutrition-focused programs.

Higher awareness does not, however, automatically result in regular usage, according to the findings. Consistent acceptance is nevertheless hampered by issues including taste preferences, lack of cooking expertise, limited availability in local markets, and higher prices of processed millet goods. Additionally, consumers may become confused when there is conflicting or deceptive digital information.

Overall, the study comes to the conclusion that while digital transformation has a lot of potential to increase millet consumption in urban India, its effects won't last unless they are paired with affordability, accessibility, and dependable digital communication. By concentrating on a tier-2 city like Lucknow, this study supports policy initiatives targeted at

nutrition security, sustainable diets, and the goal of a healthy and independent India while also offering insightful information about urban consumer behaviour.

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