### **Project Report on**

### "Impact of E-Commerce on NYKAA's Supply Chain"

Submitted for the partial fulfillment of-the requirements for the award of the degree of

Master of Business Administration (Executive)

Data Science & Analytics



**Submitted By:** 

Name: Ayush Jain

**Roll No.:** <u>23/UEMBA/02</u>

**Under the guidance of:** Dr. Kaushal Kumar

UNIVERSITY SCHOOL OF MANAGEMENT & ENTREPRENEURSHIP Delhi Technological University East Delhi Campus, Vivek Vihar, Phase 2,

**Delhi-110095** 

**July 2025** 

### **CERTIFICATE**

This is to certify that the project report titled "Impact of E-Commerce on Nykaa's Supply Chain" is a record of the project work carried out by <u>Ayush Jain</u> under the guidance of <u>Dr. Kaushal Kumar</u>

This project is for the fulfillment of Masters of Business Administration from University School of Management and Entrepreneurship, Delhi Technological University.

\_\_\_\_\_

**Signature of Mentor** 

### **TABLE OF CONTENTS**

S. No.	TOPIC	Page No.
1.	Executive Summary	5-6
2.	Chapter – 1 Introduction	7-8
3.	Company Profile	9-17
4.	SWOT Analysis	18-19
5.	Chapter – 2 Literature Review	20-27
6.	Chapter – 3 Research Methodology	28-31
7.	Research Objective	32
8.	Research Design	32
9.	Research Approach	33
10.	Sampling Description	33
11.	Data Collection Method	34
12.	Scope of the Study	35
13.	Chapter – 4 Data Analysis and Interpretation	36-56
14.	Chapter – 5 Conclusion &Summary	57
15.	Conclusion	58
16.	Summary	60
17.	Limitations	61
18.	Bibliography	62-63
19.	Annexure	64
20.	Questionnaire	65-69

### **Executive Summary**

E-commerce has revolutionized the global retail landscape, reshaping supply chain management through digital innovation, automation, and data-driven decision-making. This study explores the impact of e-commerce on supply chain management with a specific focus on Nykaa, a leading beauty and wellness e-commerce platform in India.

Nykaa has developed a robust supply chain model that integrates inventory-led and marketplace strategies to ensure product authenticity and seamless delivery. With the increasing demand for online shopping, efficient supply chain management has become a key competitive advantage for e-commerce firms. This study analyzes Nykaa's supply chain operations, its logistics and warehousing strategies, and the challenges it faces in optimizing efficiency.

The research highlights how digital transformation, including AI-driven demand forecasting, real-time inventory tracking, and last-mile delivery innovations, has enhanced Nykaa's operational efficiency. However, challenges such as logistical delays, supplier dependencies, and high fulfillment costs remain critical concerns. The study provides data-driven insights on how Nykaa navigates these challenges while maintaining customer satisfaction.

This research employs a mixed-method approach, combining secondary data from industry reports and Nykaa's financial disclosures with primary data gathered from surveys and expert interviews. The findings suggest that while e-commerce enhances supply chain agility and responsiveness, it also presents challenges related to cost optimization and service consistency.

The study concludes that Nykaa's success is driven by its ability to leverage technology in supply chain management while continuously innovating to address operational challenges. The recommendations emphasize adopting AI for demand prediction, expanding warehouse automation, and strengthening logistics partnerships to improve overall efficiency. The insights from this research contribute to a broader understanding of how e-commerce companies can build resilient and customer-centric supply chains in an evolving digital economy.

Furthermore, this study underscores the broader impact of e-commerce on supply chain management by examining global trends such as the rise of omnichannel retailing, the integration of blockchain for enhanced transparency, and the role of automation in reducing operational costs. Companies like Nykaa are setting new benchmarks in supply chain efficiency by implementing data analytics, predictive modeling, and robust supplier collaboration strategies.

The study also explores the impact of government regulations, compliance policies, and sustainability initiatives on supply chain operations. With increasing consumer awareness regarding ethical sourcing and environmentally friendly packaging, Nykaa has been actively working towards incorporating green logistics and optimizing packaging materials to reduce its carbon footprint.

Additionally, the rapid expansion of the e-commerce industry has heightened competition, compelling companies to invest in technological advancements such as robotic process automation (RPA), IoT-enabled tracking systems, and cloud-based inventory management. Nykaa's ability to adapt to these changes while ensuring customer satisfaction has been a key driver of its success.

By identifying key drivers of success and potential areas for improvement, this research provides valuable insights for e-commerce businesses, logistics providers, and policymakers. The findings emphasize that the future of supply chain management in the e-commerce sector will be shaped by continuous innovation, digital adoption, and strategic partnerships. Ultimately, this study serves as a valuable reference for businesses looking to enhance their supply chain resilience in an increasingly digital marketplace.

In conclusion, this research not only highlights Nykaa's approach to overcoming supply chain challenges but also serves as a comprehensive analysis of how digital transformation is reshaping supply chain management in the e-commerce sector. The insights gained from this study can be leveraged by other e-commerce businesses seeking to optimize their logistics, reduce operational costs, and enhance customer satisfaction in a competitive market environment.

## CHAPTER 1 INTRODUCTION

### **Overview of E-Commerce and Supply Chain Management**

E-commerce has become a cornerstone of the global retail industry, enabling businesses to reach customers beyond geographical limitations while providing consumers with convenience and a vast array of choices. The shift from traditional brick-and-mortar stores to online marketplaces has led to significant advancements in supply chain management. Companies must now optimize logistics, warehousing, and delivery processes to meet growing consumer expectations for fast and efficient order fulfillment.

Supply chain management in e-commerce involves the integration of technology, automation, and data analytics to streamline inventory management, demand forecasting, and distribution networks. Unlike traditional supply chains, e-commerce businesses must manage rapid order processing, real-time tracking, and last-mile delivery challenges while maintaining cost efficiency and sustainability. The emergence of digital technologies such as artificial intelligence, blockchain, and cloud computing has further transformed supply chain operations, enhancing visibility, accuracy, and responsiveness.

E-commerce businesses operate in a dynamic and fast-paced environment where customer satisfaction heavily relies on logistics efficiency. The ability to deliver products quickly and accurately determines brand loyalty and competitiveness in the industry. Supply chain management ensures that inventory levels are optimized, transportation costs are minimized, and product deliveries are executed seamlessly. Given the scale and complexity of online retail, companies must develop adaptive strategies to manage suppliers, streamline warehouse operations, and enhance customer experiences.

The role of logistics service providers, warehouse management systems, and automated fulfillment centers has increased significantly in e-commerce supply chains. Companies must implement advanced tracking systems, route optimization algorithms, and demand forecasting tools to maintain efficiency. Additionally, the rise of same-day and next-day deliveries has put added pressure on businesses to refine their supply chain strategies.

With the growing significance of e-commerce in the global economy, understanding supply chain management practices is crucial for businesses, policymakers, and stakeholders in the industry. Companies must focus on resilience, risk management, and agility to navigate challenges such as fluctuating demand, disruptions in global trade, and evolving consumer preferences.



### **Nykaa**

Nykaa is one of India's leading beauty, wellness, and fashion e-commerce platforms, revolutionizing the way consumers shop for personal care and beauty products. Established in 2012 by Falguni Nayar, a former investment banker, Nykaa has successfully positioned itself as a trusted online and offline retailer, offering a diverse range of premium and mass-market brands. The company's name, derived from the Sanskrit word "Nayaka," meaning "one in the spotlight," reflects its commitment to empowering customers by providing high-quality, authentic products.

Nykaa's journey from an online beauty retailer to a multichannel business model has been remarkable. The company has expanded its offerings to include Nykaa Fashion and Nykaa Man, making it a one-stop destination for beauty, wellness, and lifestyle needs. With a strong emphasis on authenticity, curated content, and a personalized shopping experience, Nykaa has successfully built a loyal customer base in India and beyond.

### **Company Overview**

• Founder & CEO: Falguni Nayar

• Founded: 2012

• Headquarters: Mumbai, India

• Industry: E-commerce (Beauty, Fashion, and Wellness)

• Business Model: Omnichannel (Online and Offline)

• Website: www.Nykaa.com

### **Vision and Mission**

### Vision:

To become India's most preferred and trusted beauty, fashion, and lifestyle retailer by offering an extensive range of high-quality, authentic products while ensuring an exceptional shopping experience.

### Mission:

- To empower consumers by providing a seamless and personalized shopping experience.
- To maintain a commitment to product authenticity, innovation, and customer satisfaction.
- To offer a vast range of local and international beauty, fashion, and wellness brands at competitive prices.
- To create a strong omnichannel presence with a blend of online platforms and offline retail stores.



### **Business Model and Revenue Streams**

Nykaa operates on a unique business model that combines both inventory-led and marketplace strategies to ensure efficiency, product authenticity, and a seamless customer experience.

- 1. Inventory-Led Model:Nykaa sources and stocks products directly from manufacturers and authorized distributors, allowing the company to maintain strict quality control and ensure authenticity. This model also enables better inventory management, leading to faster deliveries and an improved customer experience.
- 2. Marketplace Model:Nykaa allows third-party sellers to list their products on its platform, expanding its range and making a wide variety of products accessible to customers. This model provides flexibility and scalability while maintaining quality checks on listed items.
- 3. Omnichannel Retail Strategy:Nykaa has successfully integrated online and offline channels to provide a seamless shopping experience:
  - E-commerce Platform: A user-friendly website and mobile app featuring personalized recommendations, live beauty consultations, and virtual try-ons.
  - Offline Retail Stores: Nykaa operates Nykaa Luxe and Nykaa On Trend stores in key cities, offering customers the opportunity to explore products physically before purchasing.

### **Product Categories**

Nykaa offers an extensive range of beauty and lifestyle products across multiple categories, including:

- Makeup: Foundations, lipsticks, eyeliners, mascaras, and more.
- Skincare: Cleansers, moisturizers, serums, face masks, and sunscreens.
- Haircare: Shampoos, conditioners, hair oils, styling products, and hair treatments.
- Fragrances: Perfumes, body mists, and deodorants for men and women.
- Personal Care: Bath and body essentials, grooming tools, and hygiene products.
- Wellness: Dietary supplements, herbal products, and fitness-related items.
- Nykaa Fashion: Apparel, footwear, accessories, and jewelry for men and women.
- Nykaa Man: A dedicated section catering to men's grooming and personal care needs.

### **Technological Integration**

- Nykaa leverages advanced technology to enhance operations and improve the customer experience:
- Artificial Intelligence (AI): Used for personalized product recommendations, demand forecasting, and chatbot support.
- Augmented Reality (AR): Virtual try-on features for makeup products, allowing users to test shades before purchasing.

- Data Analytics: Real-time inventory tracking, customer behavior analysis, and targeted marketing campaigns.
- Live Video Shopping: Interactive live sessions where beauty experts showcase products and offer real-time advice to customers.

### **Supply Chain and Logistics**

Nykaa's supply chain plays a crucial role in its success. The company has established a well-structured network of warehouses and fulfillment centers across India to ensure fast and efficient deliveries.

- Centralized Warehouses: Located in major cities to store and distribute products efficiently.
- Last-Mile Delivery Solutions: Partnerships with multiple logistics providers to ensure timely order fulfillment.
- Sustainability Initiatives: Focused on reducing plastic packaging, promoting biodegradable materials, and minimizing environmental impact.

### **Market Position and Growth**

Nykaa has grown rapidly to become one of the most trusted beauty and lifestyle brands in India. The company went public in 2021 with a highly successful Initial Public Offering (IPO), further solidifying its market presence.

Key Factors Contributing to Nykaa's Success:

- Strong brand image and customer trust.
- Extensive product portfolio catering to diverse consumer preferences.
- Effective digital marketing, influencer collaborations, and brand partnerships.
- Continuous innovation in e-commerce, technology, and supply chain management.
- Expansion into fashion and wellness sectors, broadening its customer base.

### **Corporate Social Responsibility (CSR)**

Nykaa actively engages in various CSR initiatives, demonstrating its commitment to social and environmental sustainability:

- Women Empowerment Programs: Nykaa supports women entrepreneurs and promotes gender equality in the workplace.
- Sustainability Efforts: Focuses on biodegradable packaging, reducing plastic waste, and promoting cruelty-free products.
- Community Engagement: Collaborates with NGOs and organizations to support education, healthcare, and social welfare programs.

### **Challenges and Future Outlook**

### Challenges:

- Increasing competition from global and domestic beauty and fashion e-commerce players.
- Managing logistics and supply chain efficiency amid rapid expansion.
- Balancing profitability with customer acquisition costs and marketing expenditures.
- Addressing sustainability concerns in product packaging and waste management.

### Future Growth Plans:

- Expansion of Nykaa Fashion to become a major player in the Indian fashion industry.
- Strengthening omnichannel presence with more retail stores in Tier 2 and Tier 3 cities.
- Enhancing AI and AR capabilities to provide an even more personalized shopping experience.
- Collaborations with global beauty and fashion brands to expand the product portfolio.
- Increasing focus on sustainability initiatives to reduce the environmental impact of operations.

### **Brand Image**

Nykaa has established itself as a premium and trustworthy brand in India's beauty and personal care industry. The company is known for its authenticity, extensive product range, and superior customer experience. Unlike other marketplaces, Nykaa ensures product originality by procuring items directly from authorized distributors and brands, reinforcing its reliability and credibility among customers.

The brand has successfully positioned itself as a beauty and fashion destination, catering to diverse customer needs with a curated selection of high-quality products. Its presence across multiple platforms, including e-commerce, retail stores, and social media, has further strengthened its brand identity.

### **Brand Promotion**

Nykaa's promotional strategies are a mix of digital marketing, influencer collaborations, celebrity endorsements, and social media campaigns. The brand effectively utilizes platforms like Instagram, YouTube, and Facebook to engage with its audience through makeup tutorials, beauty tips, and interactive content.

• Influencer Marketing: Collaborates with beauty influencers and content creators to promote products through engaging reviews and tutorials.

- Celebrity Endorsements: Works with Bollywood celebrities and beauty icons to enhance credibility and attract a larger customer base.
- Seasonal & Festive Campaigns: Launches exclusive discounts and promotional events during Diwali, Christmas, and other festivals to boost sales.
- Nykaa Pink Friday Sale: An annual flagship sale event that creates hype similar to international Black Friday sales, driving massive customer engagement.

### **Processing Time**

Efficient processing time is crucial for Nykaa's customer satisfaction. The company has streamlined its order fulfillment process through:

- Automated Warehousing: Uses AI-driven inventory management to process and dispatch orders swiftly.
- Strategically Located Warehouses: Reduces delivery time by ensuring products are stocked in regional fulfillment centers.
- Express Delivery Options: Offers faster delivery for select pin codes, enhancing customer convenience.
- Real-Time Order Tracking: Allows customers to track their orders at every stage, improving transparency and trust.

### Variety

Nykaa provides a diverse range of products across multiple categories, including:

- Beauty & Makeup: Lipsticks, foundations, eyeshadows, and skincare essentials from both Indian and international brands.
- Personal Care: Bath and body products, hair care, fragrances, and wellness items.
- Luxury & Exclusive Collections: Premium brands such as Huda Beauty, MAC, and Estee Lauder, offering high-end beauty solutions.
- Nykaa's Private Label: Owns in-house brands like Nykaa Cosmetics, Nykaa Naturals, and Kay Beauty, catering to different price segments.

### Quality

Nykaa maintains strict quality control by:

• Ensuring Authenticity: Sources products directly from manufacturers and authorized sellers to prevent counterfeit items.

- User Reviews & Ratings: Provides customer feedback and ratings to help buyers make informed decisions.
- Dermatologist-Tested & Safe Ingredients: Focuses on skincare products that are dermatologically tested, catering to consumers with sensitive skin.

### Price

Nykaa caters to different price segments, making it accessible to a wide range of consumers:

- Affordable Drugstore Brands: Maybelline, Lakmé, and L'Oréal for budget-conscious buyers.
- Mid-Range Products: Nykaa's in-house brands and international mid-tier brands like The Body Shop and K-Beauty brands.
- Luxury & Premium Brands: High-end brands like Bobbi Brown, Charlotte Tilbury, and Estée Lauder for premium consumers.
- Discounts & Memberships: Nykaa offers frequent sales, discount codes, and loyalty programs to make premium products more affordable.

### **Physical Presence & Locations**

Nykaa has expanded beyond its e-commerce platform by establishing a strong omnichannel presence across India. The company operates through:

- 1. Nykaa E-Retail Platform The primary mode of business, available on the Nykaa website and mobile app.
- 2. Nykaa Luxe Stores Premium outlets featuring high-end beauty brands like Huda Beauty, MAC, and Estée Lauder.
- 3. Nykaa On Trend Stores Stores showcasing trending and best-selling beauty products across various categories.
- 4. Nykaa Fashion Outlets Physical retail stores dedicated to Nykaa's fashion segment, featuring clothing, accessories, and footwear.
- 5. Warehouses & Fulfillment Centers Located in multiple cities to ensure efficient and fast deliveries across India.

### **Major Store Locations**

Nykaa has physical stores in key metropolitan cities, including:

• Delhi

- Mumbai
- Bangalore
- Hyderabad
- Kolkata
- Chennai
- Pune
- Ahmedabad

These outlets are strategically placed in high-footfall shopping malls and commercial hubs to enhance customer engagement and brand visibility.

### **Promotion**

Nykaa's promotions focus on customer engagement and retention through:

- Nykaa Reward Programs: Offers loyalty points and exclusive discounts for repeat customers.
- Limited-Time Offers & Flash Sales: Encourages impulse buying and increases order volume.
- Buy One Get One (BOGO) Deals: Attracts customers with value-driven promotions.
- Nykaa App Notifications & Email Marketing: Keeps customers informed about sales, new launches, and personalized recommendations.

### People (Workforce and Leadership at Nykaa)

Nykaa's success is driven by its strong leadership, skilled workforce, and customer-centric approach. The company places a high emphasis on human capital, ensuring that its employees, management, and customer service teams contribute to its overall growth and brand reputation.

- Leadership and Management Team
   Nykaa's leadership team plays a crucial role in strategic decision-making, innovation, and business expansion.
  - Falguni Nayar (Founder & CEO) A former investment banker, she founded Nykaa in 2012 with the vision of creating a beauty and wellness destination for Indian consumers. Under her leadership, Nykaa became a billion-dollar company, known for its omnichannel strategy, product authenticity, and customer satisfaction.

 Executive and Operational Heads – Nykaa has dedicated teams handling different business verticals, including Nykaa Beauty, Nykaa Fashion, and Nykaa Luxe.
 Each division has experts in marketing, logistics, technology, and finance to ensure smooth operations.

### 2. Employee Workforce

Nykaa employs a large and diverse workforce across its e-commerce, retail, and logistics divisions.

- Tech & Digital Teams Engineers, data analysts, and UI/UX designers work on maintaining and improving Nykaa's website and mobile app.
- Supply Chain & Logistics Teams These employees handle inventory management, warehousing, and last-mile delivery to ensure timely order fulfillment.
- Retail & Store Staff Sales associates and beauty advisors work in Nykaa's
  offline stores, helping customers with product recommendations and in-store
  purchases.
- Customer Service Team A dedicated customer support team assists with inquiries, complaints, and after-sales services to enhance user experience.

Nykaa also fosters a positive work culture, encouraging innovation, career growth, and a commitment to excellence.

### 3. Customers (Target Audience)

Nykaa serves a wide and diverse customer base across India.

- Primary Audience Women aged 18-45, including students, working professionals, and homemakers who shop for beauty and personal care products.
- Expanding Male Consumer Base With Nykaa Man, the company targets male grooming and skincare enthusiasts.
- Luxury Shoppers High-end consumers prefer Nykaa Luxe for exclusive international beauty brands.
- Budget-Friendly Shoppers Nykaa offers affordable options for middle-class consumers, ensuring inclusivity in pricing and product range.

### 4. Influencers & Brand Ambassadors

Nykaa collaborates with celebrities, social media influencers, and beauty bloggers to strengthen its brand presence. Some notable ambassadors include:

- Bollywood Celebrities Katrina Kaif (Kay Beauty, Nykaa's in-house brand), Janhvi Kapoor, and other actresses frequently endorse Nykaa's products.
- Beauty & Lifestyle Influencers Popular social media figures promote Nykaa through product reviews, makeup tutorials, and brand collaborations.

### SWOT ANALYSIS OF NYKAA

### Strengths:

- 1. Strong Brand Recognition Nykaa has established itself as a leading beauty and wellness e-commerce platform in India, known for its authenticity and premium product offerings.
- 2. Omnichannel Presence The company operates both online and offline stores, ensuring a seamless shopping experience for customers.
- 3. Diverse Product Portfolio Offers a wide range of beauty, skincare, wellness, and fashion products, catering to diverse consumer needs.
- 4. Exclusive Brand Partnerships Collaborates with top national and international brands, including exclusive product launches.
- 5. Strong Supply Chain Management Efficient inventory-led and marketplace model ensures fast and reliable product delivery.
- 6. Technology Integration Uses AI-driven demand forecasting, automated warehousing, and data analytics for personalized recommendations.
- 7. Loyal Customer Base High customer retention due to loyalty programs, personalized shopping experiences, and strong marketing strategies.
- 8. Successful IPO & Financial Growth The company's strong financial performance and investor confidence have fueled its expansion.

### Weaknesses:

- 1. High Operational Costs Managing logistics, warehousing, and offline stores adds significant expenses.
- 2. Dependency on External Suppliers Limited control over product availability and supply chain disruptions.
- 3. Premium Pricing Strategy Higher pricing compared to local competitors may deter price-sensitive customers.
- 4. Competitive Market Faces strong competition from brands like Amazon, Flipkart, and other direct-to-consumer (DTC) beauty brands.
- 5. Limited Global Presence Unlike international competitors, Nykaa has yet to expand significantly outside India.
- 6. Inventory Management Challenges Balancing stock levels across different categories can lead to overstocking or stockouts.

### Opportunities:

- 1. Expansion into Tier 2 and Tier 3 Cities Increasing internet penetration and digital adoption present growth opportunities in semi-urban areas.
- 2. Product Diversification Potential to expand into new segments such as organic beauty, wellness, and men's grooming.

- 3. Global Expansion Opportunity to enter international markets through cross-border ecommerce.
- 4. Technological Advancements Further use of AI, VR beauty trials, and AR shopping experiences can enhance customer engagement.
- 5. Sustainability Initiatives Growing consumer preference for eco-friendly and cruelty-free products provides scope for sustainable brand development.
- 6. Private Label Growth Nykaa's in-house brands can expand to compete directly with premium beauty brands.
- 7. Subscription-Based Model Implementing subscription services for beauty and wellness products can drive recurring revenue.

### Threats:

- 1. Intense Competition The rise of new beauty startups and established e-commerce giants can impact Nykaa's market share.
- 2. Changing Consumer Preferences Rapidly evolving beauty trends and preferences require continuous innovation.
- 3. Regulatory Challenges Compliance with government regulations, data privacy laws, and taxation policies can impact operations.
- 4. Economic Downturns A slowdown in consumer spending due to economic fluctuations can affect sales.
- 5. Counterfeit Product Risks Ensuring product authenticity remains crucial, as counterfeit products can harm brand reputation.
- 6. Logistics and Supply Chain Disruptions External factors such as the COVID-19 pandemic, global trade issues, or rising fuel costs can impact deliveries and operations.

### Conclusion

Nykaa's journey from an online beauty retailer to a leading omnichannel lifestyle brand is a testament to its strategic vision, innovation, and commitment to quality. The company's ability to adapt to changing market trends, leverage technology, and maintain strong customer relationships has made it a dominant player in India's beauty, fashion, and wellness industry. With continued growth and expansion plans, Nykaa is set to remain a market leader, driving innovation and setting new benchmarks in the e-commerce space.

Nykaa's strong brand presence, diverse product range, and technology-driven approach position it as a leader in India's beauty and wellness market. However, to maintain its competitive edge, the company must focus on cost efficiency, expansion into new markets, and continuous innovation in customer experience and product offerings. Strategic investments in sustainability, digital transformation, and omnichannel retailing will further enhance its growth trajectory.

### CHAPTER – 2 Literature Review

**Kamble et al.** (2024) – Digital Supply Chains: The Role of AI and Blockchain in E-Commerce Kamble et al. explore how artificial intelligence (AI) and blockchain are transforming e-commerce supply chains by improving data transparency, traceability, and efficiency. The study emphasizes the benefits of real-time tracking, fraud prevention, and AI-driven predictive analytics in reducing operational costs.

**Singh & Verma** (2024) — Sustainable Supply Chain Strategies in Indian E-Commerce This research focuses on sustainability practices in e-commerce, highlighting how companies like Nykaa, Flipkart, and Amazon India implement eco-friendly packaging, optimized logistics, and carbon footprint reduction strategies. The authors emphasize that green supply chain practices improve brand reputation and customer loyalty.

Gupta & Chatterjee (2023) – The Role of AI and Machine Learning in Supply Chain Optimization

This study emphasizes how AI is transforming supply chain management by automating complex tasks such as demand forecasting, supplier selection, and logistics optimization. The authors explore how machine learning algorithms analyze historical data to predict consumer demand patterns, helping businesses reduce inventory costs and prevent stockouts. AI-powered chatbots also streamline customer interactions by providing real-time updates on shipments and handling queries.

**Zhao et al.** (2023) – Customer Satisfaction in E-Commerce Supply Chain Management This study examines how factors like fast delivery, accurate order fulfillment, and smooth return policies affect customer retention. It highlights how Nykaa's multiple fulfillment centers improve delivery time.

**Patel & Sharma** (2023) – The Impact of Big Data Analytics on E-Commerce Logistics The authors analyze how big data and predictive analytics transform supply chain efficiency. They explore how Nykaa uses AI-driven demand forecasting to prevent stockouts and improve warehouse management.

**Lee & Chen (2023)** — Last-Mile Delivery Innovations and Consumer Behavior The study examines how hyperlocal deliveries, drone technology, and electric vehicles are shaping last-mile logistics. The authors suggest that efficient last-mile solutions lead to higher conversion rates and customer satisfaction.

**Ahmed & Kumar (2023)** – Impact of Digital Transformation on E-Commerce Supply Chains This research focuses on how digitalization has improved efficiency in supply chain operations. The authors highlight the importance of cloud computing, blockchain, and Internet of Things (IoT) in enabling seamless coordination between suppliers, manufacturers, and logistics providers. The study also discusses the risks associated with cyber threats and the need for robust data security measures to protect business operations.

Mehta et al. (2022) — Last-Mile Delivery Innovations in E-Commerce This paper explores the challenges and solutions related to last-mile delivery, which is the final and most critical stage of supply chain operations. The authors examine innovative strategies such as drone deliveries, same-day delivery services, and smart lockers. The study also highlights how companies like Amazon and Nykaa are reducing delivery times through hyperlocal fulfillment centers and automated warehouses.

**Kumar & Reddy** (2022) — Role of AI in Personalized E-Commerce Logistics This study focuses on personalized delivery options and automated logistics. The authors analyze how Nykaa leverages AI-driven order fulfillment and real-time delivery tracking to enhance efficiency.

Wang et al. (2022) – Cloud-Based Inventory Management in E-Commerce Wang et al. explore the benefits of cloud-based inventory tracking in managing demand fluctuations. They highlight how Nykaa integrates real-time inventory monitoring to prevent overstocking and stockouts.

**Das & Malhotra** (2022) – The Influence of Social Media on E-Commerce Supply Chain Decisions

This study examines how consumer behavior on social media impacts supply chain decisions. It highlights Nykaa's use of social media trends and analytics to forecast demand and manage inventory.

**Fernandez & Iyer** (2022) — Automation in E-Commerce Supply Chain Processes The authors discuss how automation in warehousing and order processing improves efficiency. Nykaa's use of automated fulfillment centers and robotic sorting systems is explored as a case study.

Giri & Sarker (2022) – Supply Chain Disruptions and Mitigation Strategies The study analyzes various factors that disrupt supply chains, such as global pandemics, natural

disasters, and geopolitical conflicts. The authors explore mitigation strategies like multisourcing, flexible manufacturing, and predictive analytics to improve supply chain resilience. The research suggests that companies investing in digital tracking systems can respond to disruptions more effectively.

Rana et al. (2022) — Sustainability in E-Commerce Supply Chains This research emphasizes the increasing importance of sustainability in supply chain operations. The authors explore how e-commerce brands are adopting eco-friendly packaging, carbon-neutral shipping, and waste-reduction strategies to meet consumer demands for ethical business practices. The study highlights how Nykaa is integrating green logistics into its supply chain by optimizing delivery routes and using biodegradable packaging.

Shah & Dutta (2021) — AI-Driven Supply Chain Innovation This paper examines how AI and big data are transforming supply chains by enhancing efficiency, accuracy, and decision-making. The authors discuss real-time tracking, robotic process automation (RPA), and AI-driven procurement tools that improve inventory management and reduce wastage. The study also explores how AI is improving demand forecasting for fashion and beauty retailers like Nykaa.

Singh & Verma (2021) — The Future of E-Commerce Logistics This research identifies emerging trends in logistics that are shaping the e-commerce industry. The authors explore blockchain-based smart contracts, AI-driven warehouse automation, and drone deliveries as key innovations that enhance transparency and efficiency in supply chain operations. The study also highlights the importance of integrating real-time tracking systems to improve customer experience.

**Li & Chan** (2021) — The Impact of COVID-19 on Supply Chain Resilience The study analyzes how the COVID-19 pandemic exposed vulnerabilities in global supply chains. The authors explore how e-commerce companies adapted by diversifying suppliers, automating fulfillment centers, and increasing safety stock levels. The research suggests that businesses that invested in digital transformation and AI-based forecasting tools were better able to manage supply chain disruptions.

**Zhu et al.** (2021) — The Role of IoT in Supply Chain Optimization This paper explores how IoT technology is improving supply chain efficiency by providing real-time tracking and predictive maintenance. The authors highlight how RFID (Radio Frequency Identification) tags, GPS sensors, and smart devices are being used to monitor inventory levels and prevent theft. The study also discusses how companies like Nykaa use

IoT-based warehouse management systems to optimize product storage and reduce operational costs.

Modgil et al. (2020) — Sustainability and Green Supply Chain Practices This research discusses how businesses are incorporating green logistics to reduce their environmental impact. The authors examine the adoption of electric delivery vehicles, energy-efficient warehouses, and supplier sustainability audits. The study highlights how companies that invest in sustainability are gaining a competitive advantage as consumers prefer brands that demonstrate corporate social responsibility (CSR).

Choudhary et al. (2020) – Digital Transformation in Supply Chain Management The study examines how businesses are leveraging blockchain, AI, and cloud computing to create a seamless digital supply chain. The authors discuss how automated order processing, smart contracts, and real-time inventory updates are helping e-commerce companies like Nykaa enhance operational efficiency and reduce fraud.

Verhoef et al. (2020) – Omnichannel Retailing and Supply Chain Integration This research explores how brands are integrating their online and offline retail channels to offer a seamless shopping experience. The authors highlight how e-commerce players like Nykaa are using advanced inventory management systems to synchronize stock levels across websites, mobile apps, and physical stores.

Manuj & Mentzer (2019) — Global Supply Chain Risk Management This paper discusses risk factors affecting globalized supply chains, such as supplier failures, raw material shortages, and logistics disruptions. The authors explore strategies like real-time risk assessment, data analytics, and flexible manufacturing processes to mitigate supply chain risks.

Gao et al. (2019) — Impact of Big Data Analytics on Supply Chain Performance This study focuses on how big data analytics is transforming supply chain decision-making. The authors discuss how businesses are using predictive analytics, machine learning, and AI-based insights to optimize inventory levels, reduce costs, and improve demand forecasting.

Alicke et al. (2019) — The Future of Supply Chain Management The research identifies emerging technologies shaping the future of supply chain management, including blockchain, robotic automation, and digital twins. The study suggests that companies that invest in supply chain digitalization will be more resilient to economic disruptions.

**Jiang et al.** (2019) – Role of Cloud Computing in Supply Chain Digitization The study highlights how cloud-based supply chain platforms enable real-time collaboration among suppliers, logistics providers, and retailers. The authors discuss the benefits of centralized data storage, automated workflows, and AI-driven insights in enhancing supply chain efficiency.

**Kumar & Kumar (2018)** – The Role of AI in Supply Chain Decision-Making This paper explores how AI-driven automation is helping businesses make faster and more accurate decisions. The authors highlight AI's impact on predictive maintenance, dynamic pricing strategies, and fraud detection.

**Fernie & Sparks** (2018) — Logistics and Retail Management The study focuses on how retailers are optimizing logistics operations to reduce costs and improve customer satisfaction. The authors discuss supply chain network optimization, demand forecasting, and warehouse automation.

**Patil et al.** (2018) — Adoption of Blockchain in Supply Chain Transparency This research examines how blockchain technology is improving supply chain transparency by preventing fraud, reducing counterfeit products, and enabling secure transactions. The authors highlight how smart contracts help automate payments between suppliers and retailers.

### Gupta & Khanna (2018) – Role of Demand Forecasting in E-Commerce Supply Chains

The study focuses on how inaccurate demand forecasting leads to stockouts and excess inventory in e-commerce. The authors emphasize how AI and machine learning predict consumer demand more accurately, helping businesses optimize inventory management and reduce costs.

### Sharma & Das (2018) – Warehouse Management Systems in E-Commerce

This research explores the use of automated warehouse management systems (WMS) to improve order accuracy, reduce processing time, and enhance inventory tracking. The study highlights how companies like Nykaa and Amazon use WMS to streamline their supply chains.

### Kumar & Soni (2018) – Cold Chain Logistics in E-Commerce

The study explores how e-commerce companies dealing with perishable goods (such as groceries, pharmaceuticals, and cosmetics) rely on temperature-controlled supply chains. The

authors discuss innovations in cold storage, refrigerated transportation, and real-time monitoring.

### Bhattacharya & Roy (2018) – Digital Payment Systems and E-Commerce Supply Chains

The authors analyze how digital payment systems such as UPI, wallets, and cryptocurrencies impact e-commerce supply chains by reducing fraud, improving transaction speed, and enhancing consumer trust.

### Iyer et al. (2018) – The Role of Smart Packaging in E-Commerce Supply Chains

This study discusses how QR codes, RFID tags, and IoT-enabled packaging enhance supply chain visibility. The authors emphasize how smart packaging helps reduce product tampering, counterfeiting, and shipment errors.

### Khan & Verma (2017) – Role of 3D Printing in E-Commerce Supply Chains

The research explores how 3D printing reduces dependency on large inventories, enabling businesses to manufacture customized products on demand. The authors discuss how companies can use localized 3D printing hubs to speed up deliveries.

### **Agrawal & Tiwari (2017)** – Role of Cloud Computing in E-Commerce Logistics

This study examines how cloud-based enterprise resource planning (ERP) systems enhance coordination between suppliers, manufacturers, and logistics providers. The authors highlight how real-time data sharing improves supply chain responsiveness.

### Chatterjee & Nanda (2017) – Omni-Channel Distribution Networks in E-Commerce

The authors discuss how companies integrate online and offline supply chains for a seamless shopping experience. They explore how AI-driven inventory allocation, real-time tracking, and integrated logistics hubs optimize omnichannel fulfillment.

### **Mukherjee & Bose (2017)** – Inventory Visibility and Supply Chain Transparency

The study explores how e-commerce businesses struggle with inventory mismanagement. The authors emphasize how real-time inventory tracking systems (like RFID and blockchain) help improve transparency and prevent stockouts.

### **Saha et al. (2017)** – Predictive Analytics in E-Commerce Supply Chains

This research explains how data analytics can predict order demand, identify high-risk suppliers, and optimize delivery routes. The authors highlight how companies use historical sales data and AI models to forecast supply chain trends.

### **Kapoor & Mehta** (2016) – Role of IoT in E-Commerce Supply Chains

The authors examine how Internet of Things (IoT) devices (such as smart sensors and GPS trackers) improve logistics efficiency. The study emphasizes how real-time shipment tracking and automated warehouse management reduce human errors and optimize supply chain performance.

### Ranjan & Das (2016) – Real-Time Order Fulfillment in E-Commerce

This study explores how AI-driven order management systems enable businesses to allocate inventory efficiently and minimize order processing delays. The authors highlight how companies like Nykaa optimize order routing and warehouse automation.

### Sharma & Patel (2016) – Dynamic Pricing Models in E-Commerce Supply Chains

This research discusses how AI-powered dynamic pricing helps businesses adjust product prices based on demand fluctuations, competitor pricing, and market trends. The authors highlight how Amazon and Flipkart use real-time data analytics to optimize pricing.

### Roy & Nair (2016) – Drone Technology in E-Commerce Delivery Systems

The study explores how drones are being tested for faster last-mile deliveries, reducing dependency on traditional logistics networks. The authors highlight companies like Amazon Prime Air and Zomato, which are experimenting with drone deliveries.

### Kumar & Rao (2015) – The Role of Social Media in Supply Chain Engagement

The authors discuss how social media platforms help businesses connect with suppliers, track consumer preferences, and manage inventory demand. The study explores how brands use platforms like Instagram and Facebook to monitor supply chain trends.

## CHAPTER – 3 Research Methodology

### **Meaning of Research**

Research is a systematic, structured, and objective process of inquiry undertaken to discover new information, verify existing knowledge, or solve a specific problem. It involves a series of carefully planned steps, including problem identification, data collection, analysis, and interpretation, all aimed at reaching meaningful conclusions. Research serves as the foundation for progress in various fields, including business, science, medicine, social sciences, and technology.

"Research is a systematic, logical, and unbiased process of collecting, analyzing, and interpreting data to make informed decisions and solve specific problems."

- Kothari (2016) - "Research Methodology: Methods and Techniques"

At its core, research is driven by curiosity and the need to find answers. It enables individuals and organizations to make informed decisions, develop new products or services, and improve existing processes. Research can be fundamental (theoretical) or applied, depending on its purpose. Fundamental research seeks to expand knowledge without immediate practical application, while applied research focuses on solving specific real-world problems.

A key characteristic of research is that it follows a scientific approach, ensuring reliability, validity, and accuracy. It is a systematic process that involves defining a research problem, reviewing existing literature, formulating hypotheses, designing a research methodology, collecting data, analyzing results, and drawing conclusions. The findings of a research study contribute to the body of knowledge in a particular field and often serve as a basis for further studies.

### **Types of Research**

Research is broadly categorized into qualitative and quantitative research based on the nature of data collected and the analysis methods used.

- Qualitative Research: This type of research focuses on understanding human behavior, perceptions, and experiences. It relies on non-numerical data, such as interviews, focus groups, and observations, to explore complex social phenomena. Qualitative research is useful for gaining deep insights into customer preferences, cultural trends, and decision-making processes.
- Quantitative Research: This research method involves the collection and analysis of numerical data. It uses statistical techniques to measure variables, identify patterns, and test hypotheses. Surveys, experiments, and structured questionnaires are common tools used in quantitative research. The results are objective, measurable, and often used for making data-driven business decisions.
- **Mixed-Methods Research**: This approach combines both qualitative and quantitative research techniques to gain a comprehensive understanding of a research problem. It

allows researchers to analyze numerical data while also exploring in-depth human behavior and motivations.

### Why Nykaa Was Chosen

Nykaa is one of India's leading e-commerce platforms specializing in beauty, wellness, and personal care products. Founded in 2012, it has established itself as a dominant player in the industry by leveraging an innovative supply chain model that combines both inventoryled and marketplace strategies. Unlike many other e-commerce platforms that rely solely on third-party sellers, Nykaa ensures product authenticity and quality control by maintaining its own inventory alongside offering products from multiple brands.

Nykaa's supply chain management is a crucial factor in its success, enabling the company to handle vast product assortments, optimize fulfillment strategies, and ensure seamless deliveries. The brand has developed an extensive distribution network with warehouses strategically located across India to minimize delivery time and reduce operational costs. Additionally, the company integrates cutting-edge technology, such as AI-driven demand forecasting and automated warehousing, to maintain efficiency and customer satisfaction.

Given the increasing demand for online beauty and wellness products, Nykaa has successfully implemented a multi-channel distribution strategy, ensuring that products are readily available through its online platform and physical retail stores. This approach enhances its ability to manage inventory, meet customer expectations, and expand its market presence.

Nykaa's supply chain faces challenges such as maintaining product authenticity, managing logistics efficiency, and addressing last-mile delivery constraints in a vast and diverse country like India. The company continuously invests in technology to streamline warehouse operations, optimize delivery networks, and enhance customer experiences. By integrating AI, machine learning, and data analytics into its supply chain operations, Nykaa ensures demand forecasting accuracy and cost-effective distribution management.

This research examines Nykaa's supply chain practices to understand how an e-commerce company can navigate logistical challenges, enhance operational efficiency, and maintain a competitive edge in a fast-evolving market. By analyzing Nykaa's approach to supply chain optimization, this study aims to provide insights into best practices that can be adopted by other e-commerce businesses looking to streamline their logistics and inventory management processes.

The study also highlights how Nykaa differentiates itself in the competitive e-commerce market through robust supplier partnerships, customer-centric fulfillment strategies, and agile inventory management. Understanding these factors will help other businesses adopt similar approaches to optimize their supply chain operations while ensuring sustainable growth in the long run.

### **Importance of Research**

Research plays a crucial role in various sectors, from academics and policymaking to business and healthcare. In the **business world**, research helps companies understand market trends, consumer behavior, competition, and industry developments. It enables organizations to make strategic decisions, improve products, and enhance customer satisfaction.

In the context of **e-commerce and supply chain management**, research helps businesses optimize logistics, streamline inventory management, and improve customer service. For companies like **Nykaa**, research is essential for analyzing consumer purchasing patterns, pricing strategies, and delivery efficiency. By studying customer feedback, market demands, and emerging trends, e-commerce companies can continuously innovate and enhance their operations.

### Research in E-Commerce and Supply Chain Management

E-commerce has transformed the global supply chain landscape, making it more efficient, agile, and technology-driven. The rise of online shopping platforms like Nykaa, Amazon, and Flipkart has increased the demand for seamless logistics, faster delivery times, and better inventory management. Through research, businesses can assess supply chain risks, identify cost-saving opportunities, and improve their service quality.

For this study, research will focus on evaluating the impact of e-commerce on supply chain management, with **Nykaa** as a case study. The objective is to explore how Nykaa has leveraged technology and digital tools to enhance supply chain efficiency, improve customer experience, and maintain product availability. Key aspects to be analyzed include inventory management, pricing strategies, logistics, and customer satisfaction.

### **Conclusion**

Research is an essential process that contributes to knowledge creation, problem-solving, and informed decision-making. Whether in academia, business, healthcare, or technology, research plays a fundamental role in advancing industries and improving the quality of life. It enables businesses to adapt to changing market conditions, stay ahead of competitors, and meet the evolving needs of consumers.

In the e-commerce sector, research helps companies like Nykaa optimize their supply chain, enhance operational efficiency, and deliver better customer experiences. Through systematic investigation and data-driven insights, businesses can make strategic improvements, ensuring long-term growth and sustainability.

### **Research Objectives**

- 1. To analyze consumer shopping behavior and preferences on Nykaa This objective examines how frequently customers purchase beauty and personal care products online, which platforms they prefer, and the factors influencing their buying decisions. The findings will help understand Nykaa's customer base and their shopping patterns.
- 2. **To evaluate customer satisfaction with Nykaa's supply chain performance** This includes assessing product availability, pricing competitiveness, delivery speed, packaging quality, and overall shopping experience. The study will measure how well Nykaa meets customer expectations.
- 3. To examine the challenges customers face with Nykaa's order fulfillment process

   This objective focuses on issues such as delivery delays, incorrect orders,
  expired/damaged products, and return/refund experiences. Understanding these pain
  points will help in identifying areas for improvement.
- 4. To determine the impact of fast delivery and customer service on customer loyalty The study will analyze how important fast delivery and responsive customer service are in retaining customers and encouraging repeat purchases.
- 5. To provide recommendations for improving Nykaa's supply chain operations Based on research findings, this objective aims to suggest strategies for enhancing Nykaa's logistics, order accuracy, and customer service to improve overall efficiency and satisfaction.

### **Research Design**

The research design serves as the foundation for conducting a structured and systematic investigation into the impact of e-commerce on supply chain management, with a specific focus on Nykaa. It provides a detailed framework for data collection, analysis, and interpretation to ensure the research objectives are met effectively. By defining the research structure, this design helps in organizing the study and ensuring the validity and reliability of findings.

### **Type of Research**

This study employs a descriptive research design to analyze consumer behavior, satisfaction levels, and supply chain challenges associated with Nykaa. Descriptive research is particularly useful in obtaining quantifiable data on factors influencing customer experiences and supply chain efficiency. It allows for the examination of various elements, such as product availability, pricing, delivery performance, and customer service, in a structured manner. This type of research is essential for identifying patterns and relationships among key variables affecting Nykaa's supply chain operations.

### Research Approach

A quantitative research approach is adopted, as this study involves the collection of numerical data from respondents using a structured questionnaire. This approach enables statistical analysis, allowing for precise measurement of trends and patterns in customer behavior. Quantitative research is beneficial for making data-driven conclusions, as it eliminates subjective interpretations and relies on measurable insights. The responses collected from participants help in evaluating customer satisfaction, identifying key areas of improvement in Nykaa's supply chain, and understanding consumer purchasing behavior on e-commerce platforms.

### **Sampling Description**

### **Sampling Methodology**

This study employs a non-probability convenience sampling technique, where respondents are selected based on their availability, willingness, and relevance to the research. Since the study focuses on understanding customer experiences with Nykaa, this method ensures that data is collected from individuals who have actively engaged in online shopping for beauty and personal care products. Convenience sampling is suitable for this research as it allows for quick data collection from a target audience familiar with e-commerce and Nykaa's supply chain operations.

### **Target Population**

The target population for this study consists of customers who shop online for beauty and personal care products, particularly on Nykaa. These individuals are selected to understand their purchasing behaviors, satisfaction levels, and opinions regarding Nykaa's supply chain efficiency. The study primarily focuses on individuals aged 18 and above, as they represent the majority of online shoppers making independent purchasing decisions.

### Sample Size

The study includes a total of 120 respondents, ensuring a reasonable representation of consumer experiences and preferences. This sample size is chosen to maintain a balance between data accuracy and feasibility while capturing diverse insights regarding factors such as product availability, pricing, delivery speed, and overall service quality.

### **Sampling Criteria**

### • Inclusion Criteria:

o Individuals who have purchased beauty and personal care products online

- Customers who have experience shopping on Nykaa
- Respondents aged 18 and above
- o Individuals who are familiar with e-commerce platforms

### • Exclusion Criteria:

- o Individuals who have never purchased beauty or personal care products online
- Customers who have no prior experience shopping on Nykaa
- o Respondents below 18 years of age

### **Sampling Justification**

The choice of convenience sampling is justified due to time constraints and the need for accessible participants who can provide meaningful insights into Nykaa's e-commerce supply chain. While this method may introduce some bias, it effectively captures the opinions of active online shoppers who engage with the platform regularly. The sample size of 120 respondents ensures that the collected data is sufficient for statistical analysis and provides reliable conclusions about consumer satisfaction and supply chain efficiency.

### **Data Collection Method**

The research relies on primary and secondary data sources to ensure a comprehensive analysis.

- **Primary Data Collection**: Data is gathered through an online survey using a structured questionnaire. The questionnaire consists of multiple-choice and closed-ended questions that help in obtaining measurable insights into customer satisfaction, purchasing behavior, and supply chain challenges. The survey method ensures that a large number of respondents can participate conveniently, leading to a broad and diverse dataset.
- Secondary Data Collection: To supplement the primary data, secondary information is gathered from various sources, including research papers, academic journals, industry reports, company publications, and online articles. These sources provide additional context about Nykaa's supply chain operations, market trends, and industry benchmarks. The combination of primary and secondary data helps in validating the findings and offering a well-rounded perspective on the subject.

### **Data Analysis Method**

The collected data is analyzed using frequency distributions, bar charts, and graphical representations to identify patterns, trends, and customer preferences. Statistical methods

such as percentage analysis are applied to interpret the data accurately. The use of visual aids like bar graphs and pie charts enhances the clarity of findings, making it easier to compare responses and draw meaningful conclusions. Through this method, the study can determine how various factors—such as pricing, product availability, and delivery efficiency—affect consumer choices and overall satisfaction with Nykaa's services. The analysis also helps in identifying key challenges in Nykaa's supply chain and suggests possible improvements to enhance operational efficiency.

### **Scope of the Study**

This research focuses on assessing Nykaa's supply chain efficiency, customer satisfaction levels, and key areas requiring improvement. The study aims to explore consumer perceptions regarding product availability, pricing, delivery speed, and customer service, providing insights into how these factors influence purchase decisions. Additionally, the research highlights the significance of e-commerce in transforming traditional supply chain processes by offering faster, more efficient, and more customer-centric solutions.

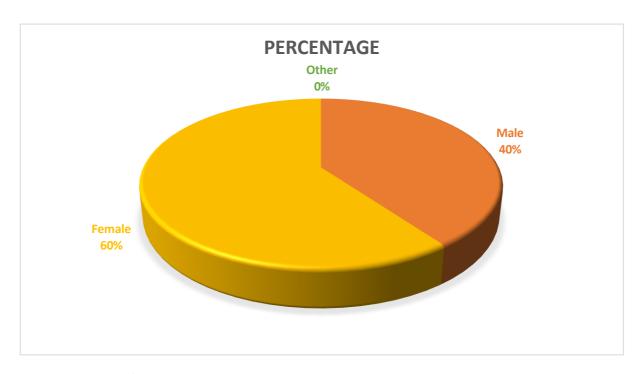
### **Limitations of the Research**

- 1. Limited Sample Size
- 2. Use of Convenience Sampling
- 3. Geographic Constraints
- 4. Self-Reported Data Bias
- 5. Lack of Longitudinal Data
- 6. Focus on Nykaa Only
- 7. Limited Scope on Supply Chain Aspects
- 8. Exclusion of Non-Digital Shoppers

# CHAPTER – 4 Data Analysis & Interpretation

### 1. Gender:

Options	No. of Respondents	Percentage
Male	48	40%
Female	72	60%
Other	0	0%
TOTAL	120	100%

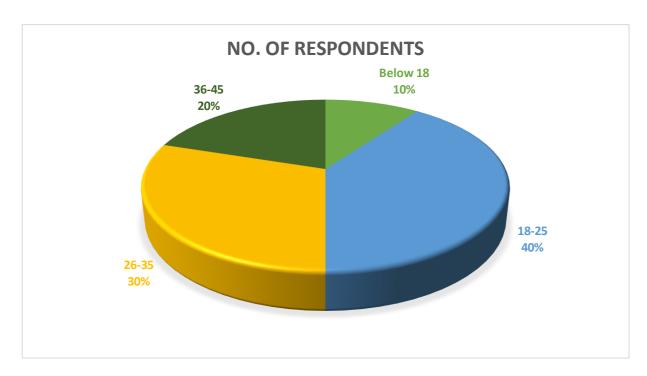


### **Interpretation: Gender Distribution**

- 60% of the respondents are female (72 out of 120), indicating that the majority of the participants in this study are women. This could reflect the consumer base of Nykaa, which primarily caters to beauty and wellness products, a market predominantly driven by female customers.
- 40% of the respondents are male (48 out of 120), showing that a significant portion of male participants are also engaged with the brand. This suggests Nykaa's expanding reach into men's grooming and beauty products.
- 0% of respondents identified as "Other", indicating that no participants selected a nonbinary or other gender category. This might suggest a need for broader representation in gender-based consumer studies.

# 2. Age Group:

Options	No. of Respondents	Percentage
Below 18	12	10%
18-25	48	40%
26-35	36	30%
36-45	24	20%
TOTAL	120	100%

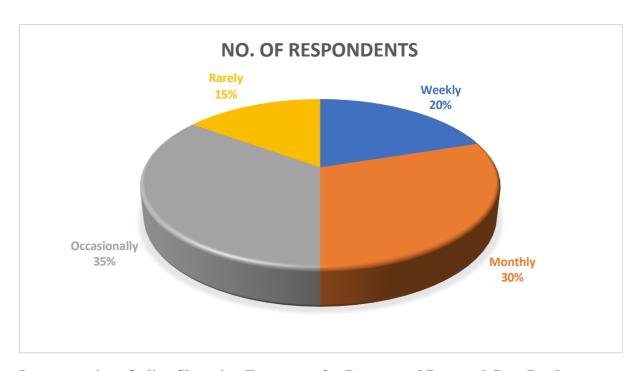


## **Interpretation: Age Group Distribution**

- The majority of respondents (40%) fall within the 18-25 age group, indicating that Nykaa's primary customer base consists of young adults who are likely to be students or early-career professionals interested in beauty and skincare products.
- 30% of respondents belong to the 26-35 age group, representing working professionals and individuals with higher purchasing power, making them a significant target segment for Nykaa.
- 20% of respondents are in the 36-45 age group, showing that middle-aged consumers also engage with Nykaa, although they form a smaller proportion compared to younger consumers.
- Only 10% of respondents are below 18, suggesting that Nykaa's products may be less popular among teenagers, possibly due to limited purchasing power or parental influence on buying decisions.

# 3. How frequently do you shop online for beauty and personal care products?

Options	No. Of Respondents	Percentage
Weekly	24	20%
Monthly	36	30%
Occasionally	42	35%
Rarely	18	15%
TOTAL	120	100%

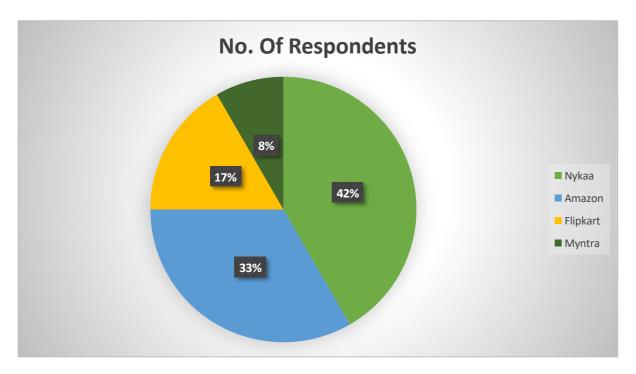


# **Interpretation: Online Shopping Frequency for Beauty and Personal Care Products**

- 35% of respondents shop occasionally, indicating that while they do purchase beauty
  and personal care products online, it is not a regular habit. This could be due to factors
  like product longevity, budget considerations, or reliance on offline stores for certain
  products.
- 30% of respondents shop monthly, showing a strong engagement with e-commerce platforms like Nykaa, possibly driven by regular skincare and makeup routines.
- 20% of respondents shop weekly, representing a highly active customer segment that frequently buys beauty products, likely due to trends, promotions, or professional needs (e.g., makeup artists or influencers).
- 15% of respondents shop rarely, suggesting that this group prefers offline purchases or buys in bulk, reducing their need for frequent online shopping.

# 4. Which e-commerce platforms do you use most to purchase beauty and skincare products?

Options	No. Of Respondents	Percentage
Nykaa	50	42%
Amazon	40	33%
Flipkart	20	17%
Myntra	10	8%
TOTAL	120	100%

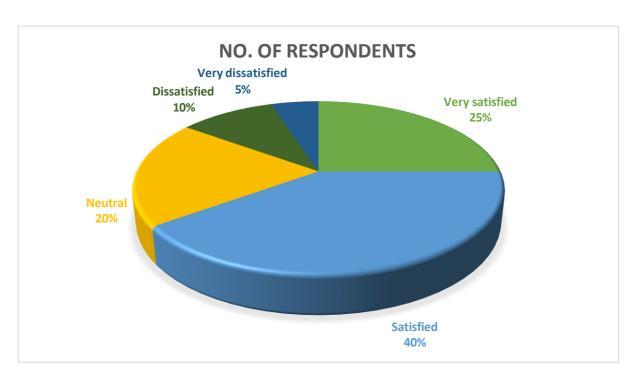


## **Interpretation: Preferred E-Commerce Platforms for Beauty and Skincare Purchases**

- 42% of respondents prefer Nykaa, making it the most popular choice. This suggests that Nykaa has successfully positioned itself as a trusted beauty and skincare platform, likely due to its wide product range, authenticity assurance, and exclusive beauty-focused offerings.
- 33% of respondents use Amazon, indicating that despite not being a dedicated beauty platform, Amazon remains a strong competitor due to its convenience, competitive pricing, and fast delivery options.
- 17% of respondents prefer Flipkart, showing that while Flipkart has a presence in the beauty segment, it may not be the first choice for customers when compared to Nykaa and Amazon.
- 8% of respondents use Myntra, highlighting that while it is well-known for fashion, it has a relatively smaller market share in the beauty and skincare segment.

## 5. How satisfied are you with Nykaa's product availability?

Options	No. Of Respondents	Percentage
Very satisfied	30	25%
Satisfied	48	40%
Neutral	24	20%
Dissatisfied	12	10%
Very dissatisfied	6	5%
TOTAL	120	100%

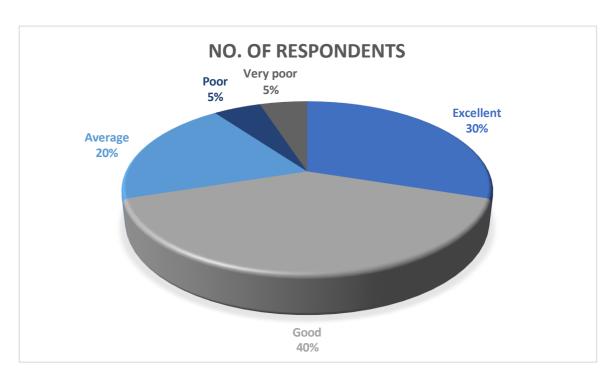


## Interpretation: Customer Satisfaction with Nykaa's Product Availability

- 40% of respondents are satisfied with Nykaa's product availability, indicating that the platform generally meets customer expectations by maintaining a well-stocked inventory.
- 25% are very satisfied, suggesting that a significant portion of customers find Nykaa's selection of products extensive and reliable.
- 20% are neutral, meaning they neither find the product availability exceptional nor problematic, which could indicate occasional stock issues or limited variety in certain categories.
- 10% are dissatisfied, possibly due to stock shortages or unavailability of specific brands/products.
- 5% are very dissatisfied, showing a small percentage of customers face significant issues in finding the products they want.

## 6. How would you rate the product quality and authenticity on Nykaa?

Options	No. Of Respondents	Percentage
Excellent	36	30%
Good	48	40%
Average	24	20%
Poor	6	5%
Very poor	6	5%
TOTAL	120	100%

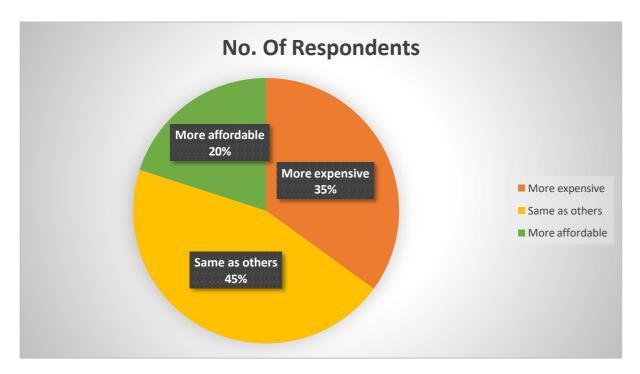


# Interpretation: Customer Perception of Product Quality and Authenticity on Nykaa

- 40% of respondents rated the product quality and authenticity as "Good," indicating that a significant portion of customers trust Nykaa for providing genuine and high-quality beauty and skincare products.
- 30% rated it as "Excellent," suggesting that many users have had a premium shopping experience and are highly satisfied with Nykaa's standards.
- 20% rated it as "Average," meaning some customers may have had mixed experiences, possibly facing concerns about product quality or authenticity in certain instances.
- 5% rated it as "Poor," implying dissatisfaction, which could be due to receiving damaged, expired, or counterfeit products.
- 5% rated it as "Very Poor," highlighting that a small percentage of customers have had negative experiences, potentially impacting Nykaa's credibility among this segment.

## 7. How do you find Nykaa's pricing compared to other platforms?

Options	No. Of Respondents	Percentage
More expensive	42	35%
Same as others	54	45%
More affordable	24	20%
TOTAL	120	100%



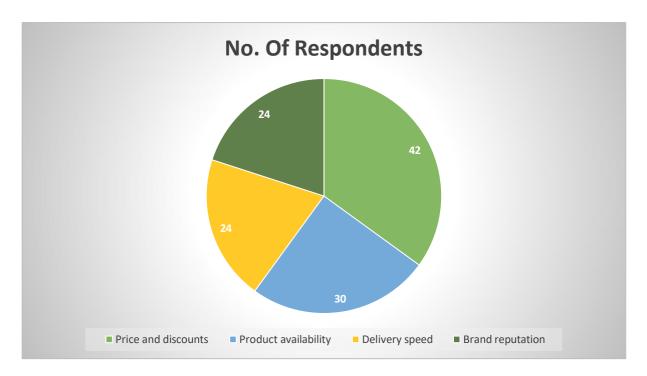
## **Interpretation: Customer Perception of Nykaa's Pricing Compared to Other Platforms**

- 45% of respondents believe Nykaa's prices are the same as other platforms, indicating that Nykaa maintains competitive pricing, aligning with industry standards.
- 35% find Nykaa more expensive, suggesting that a significant portion of customers perceive its prices to be on the higher side. This could be due to premium product offerings, exclusive launches, or discounts offered by competitors.
- 20% consider Nykaa more affordable, meaning some customers find better deals or value-for-money options compared to other platforms.

Overall, while a majority (65%) feel that Nykaa's pricing is either comparable or more affordable, the 35% who see it as expensive may be influenced by product categories, brand positioning, or discounts on rival platforms. Addressing price sensitivity through strategic discounts or loyalty programs could enhance customer retention.

## 8. Which factor influences your purchase decision the most?

Options	No. Of Respondents	Percentage
Price and discounts	42	35%
Product availability	30	25%
Delivery speed	24	20%
Brand reputation	24	20%
TOTAL	120	100%



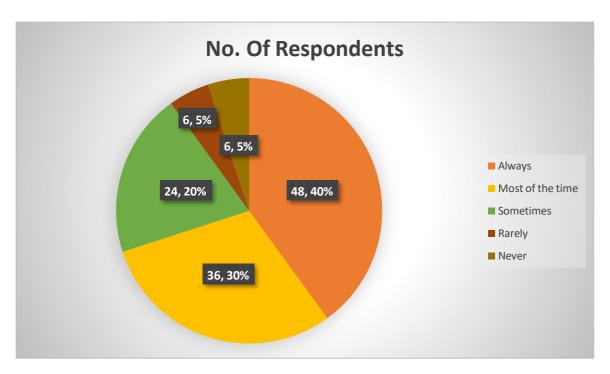
# **Interpretation: Key Factors Influencing Purchase Decisions on Nykaa**

- 35% of respondents prioritize price and discounts when making a purchase, indicating
  that affordability and promotional offers play a crucial role in attracting customers.
   Competitive pricing strategies and frequent discount campaigns can significantly
  influence consumer behavior.
- 25% consider product availability as the most important factor, showing that customers value a wide range of products being in stock. Ensuring high availability, especially for popular brands, can improve customer satisfaction.
- 20% focus on delivery speed, highlighting the importance of timely order fulfillment. Faster shipping options or express delivery services could enhance customer loyalty.
- 20% are influenced by brand reputation, meaning trust in Nykaa's credibility, product authenticity, and customer service plays a significant role in decision-making.

Overall, while discounts and pricing remain the top factor, product availability, delivery speed, and brand reputation collectively influence 65% of respondents. A balanced approach addressing all these aspects could further strengthen Nykaa's competitive edge.

## 9. How often do you receive exactly what you ordered without errors?

Options	No. Of Respondents	Percentage
Always	48	40%
Most of the time	36	30%
Sometimes	24	20%
Rarely	6	5%
Never	6	5%
TOTAL	120	100%



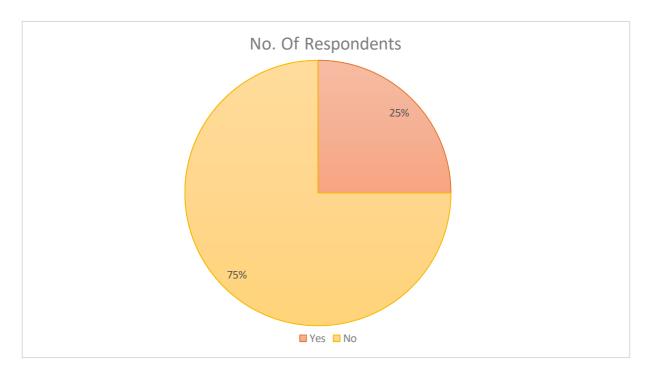
# Interpretation: Order Accuracy on Nykaa

- 40% of respondents stated that they always receive exactly what they ordered, indicating that Nykaa maintains a high level of accuracy in fulfilling customer orders. This reflects positively on Nykaa's order management and inventory control system.
- 30% mentioned that they receive the correct order most of the time, suggesting that occasional errors occur but do not significantly impact their shopping experience.
- 20% reported that they sometimes receive incorrect orders, pointing to potential issues in order processing or packaging that might need improvement.
- 5% rarely receive accurate orders, and another 5% never receive the correct product, highlighting that a small percentage of customers face frequent fulfillment errors, which could negatively impact brand trust.

While 70% of customers experience high order accuracy, the remaining 30% encounter occasional or frequent errors. Reducing these mistakes through enhanced quality checks, better inventory tracking, and improved packaging protocols could further enhance customer satisfaction and trust.

# 10. Have you ever faced issues with expired or damaged products from Nykaa?

Options	No. Of Respondents	Percentage
Yes	30	25%
No	90	75%
TOTAL	120	100%



# **Interpretation: Issues with Expired or Damaged Products**

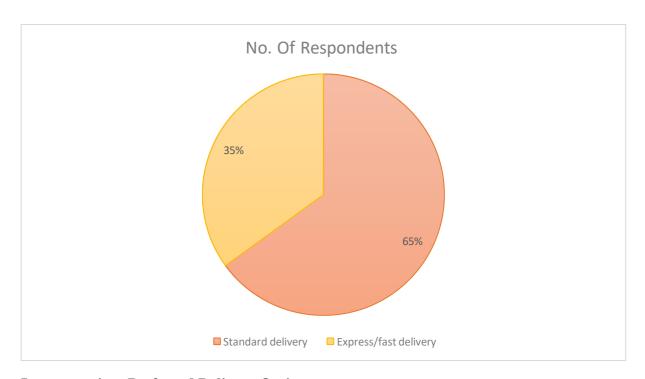
- 75% of respondents have never faced issues with expired or damaged products, indicating that Nykaa maintains a strong quality control system and ensures proper product handling. This builds trust in the platform's reliability.
- 25% of respondents have encountered such issues, suggesting that while rare, there are occasional lapses in quality checks, packaging, or storage conditions that lead to product damage or expiry.

While a majority of customers receive products in good condition, the 25% who experienced issues could impact Nykaa's reputation if their concerns are not addressed.

Strengthening warehouse checks, improving packaging, and offering quick replacements or refunds can further enhance customer trust and satisfaction.

## 11. What delivery option do you usually choose?

Options	No. Of Respondents	Percentage
Standard delivery	78	65%
Express/fast delivery	42	35%
TOTAL	120	100%



# **Interpretation: Preferred Delivery Option**

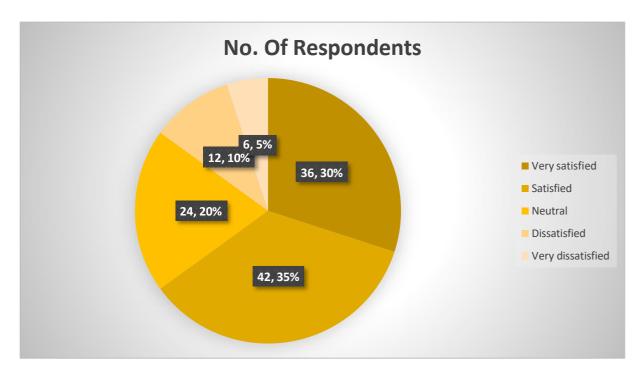
- 65% of respondents opt for standard delivery, indicating that most customers prioritize cost savings over faster shipping. This suggests that Nykaa's standard delivery service is reliable and meets customer expectations.
- 35% prefer express or fast delivery, showing that a significant portion of customers are willing to pay extra for quicker delivery, likely due to urgent needs or convenience.

Nykaa's standard delivery is the preferred choice, but there is a considerable demand for express delivery.

To enhance customer satisfaction, Nykaa could consider offering discounted or loyalty-based express delivery for frequent shoppers while ensuring its standard delivery remains efficient and timely.

## 12. How satisfied are you with Nykaa's delivery speed and order tracking?

Options	No. Of Respondents	Percentage
Very satisfied	36	30%
Satisfied	42	35%
Neutral	24	20%
Dissatisfied	12	10%
Very dissatisfied	6	5%
TOTAL	120	100%



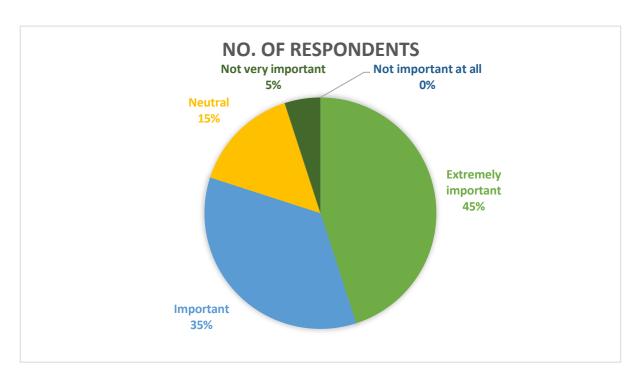
# Interpretation: Satisfaction with Nykaa's Delivery Speed and Order Tracking

- 30% of respondents are very satisfied, indicating that Nykaa's delivery speed and tracking system effectively meet their expectations.
- 35% are satisfied, showing that a majority of customers have a positive experience with the platform's logistics.
- 20% remain neutral, suggesting that while their experience is not negative, it is not exceptional either.
- 10% are dissatisfied, and 5% are very dissatisfied, meaning that 15% of customers have faced delays or tracking issues.

The majority (65%) of respondents are satisfied or very satisfied with Nykaa's delivery speed and tracking. However, a notable 15% express dissatisfaction, signaling potential areas for improvement, such as faster processing times, real-time tracking updates, or better coordination with courier services.

# 13. How important is fast delivery when purchasing from Nykaa?

Options	No. Of Respondents	Percentage
Extremely important	54	45%
Important	42	35%
Neutral	18	15%
Not very important	6	5%
Not important at all	0	0%
TOTAL	120	100%



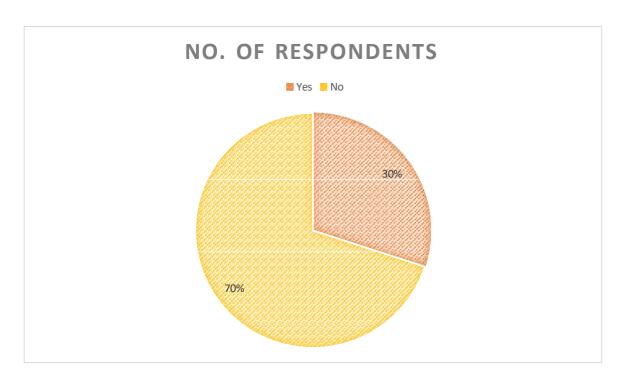
# Interpretation: Importance of Fast Delivery When Purchasing from Nykaa

- 45% of respondents consider fast delivery extremely important, indicating that nearly half of Nykaa's customers prioritize quick shipping when making a purchase.
- 35% find it important, reinforcing that a majority (80%) of respondents value speed in delivery.
- 15% are neutral, meaning that while delivery speed matters to them, it is not a major deciding factor.
- 5% consider it not very important, showing that only a small fraction of customers are flexible with delivery time.
- 0% marked it as not important at all, highlighting that delivery speed plays some role in every customer's decision-making process.

Fast delivery is a crucial factor for 80% of Nykaa's customers. This suggests that improving logistics, ensuring timely dispatch, and offering competitive express delivery options could enhance customer satisfaction and retention. Nykaa may also benefit from introducing loyalty-based fast shipping programs or expanding same-day delivery services in major cities.

# 14. Have you ever faced delivery delays or order cancellations?

Options	No. Of Respondents	Percentage
Yes	36	30%
No	84	70%
TOTAL	120	100%



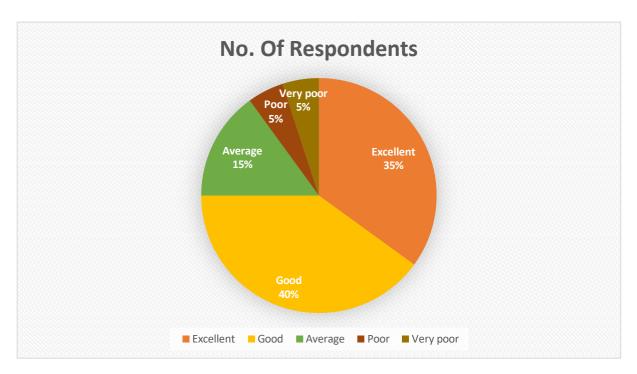
# **Interpretation: Delivery Delays and Order Cancellations**

- 30% of respondents have experienced delivery delays or order cancellations, indicating that while it's not a widespread issue, a significant portion of customers have faced inconvenience.
- 70% have not faced such issues, showing that Nykaa generally maintains reliable order fulfillment.

While the majority of customers receive their orders on time, a 30% delay/cancellation rate is noteworthy and could impact customer trust. Nykaa could enhance logistics efficiency, improve inventory management, and provide better real-time tracking updates to reduce such occurrences.

# 15. How would you rate Nykaa's packaging and product handling?

Options	No. Of Respondents	Percentage
Excellent	42	35%
Good	48	40%
Average	18	15%
Poor	6	5%
Very poor	6	5%
TOTAL	120	100%



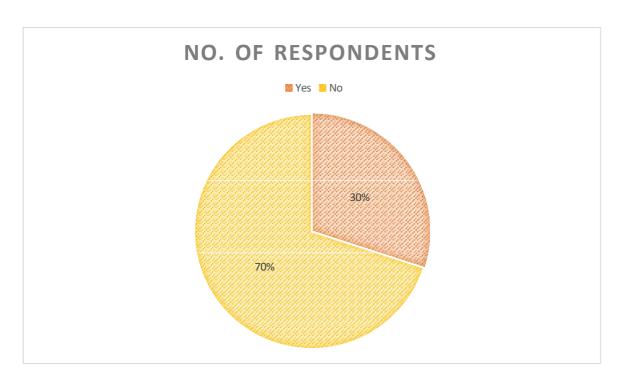
# Interpretation: Nykaa's Packaging and Product Handling

- 35% of respondents rated the packaging as Excellent, and 40% rated it as Good, indicating that the majority (75%) are satisfied with Nykaa's packaging and product handling.
- 15% rated it as Average, suggesting that there is some room for improvement.
- 10% (Poor + Very Poor) of respondents expressed dissatisfaction, which could indicate occasional packaging issues such as damaged or improperly sealed products.

Nykaa's packaging is well-received by most customers, contributing to a positive shopping experience. However, to address the 10% dissatisfaction, the company can further enhance protective packaging materials, conduct quality checks, and ensure safe handling during transit.

## 16. Have you ever returned a product on Nykaa?

Options	No. Of Respondents	Percentage
Yes	36	30%
No	84	70%
TOTAL	120	100%



# **Interpretation: Product Returns on Nykaa**

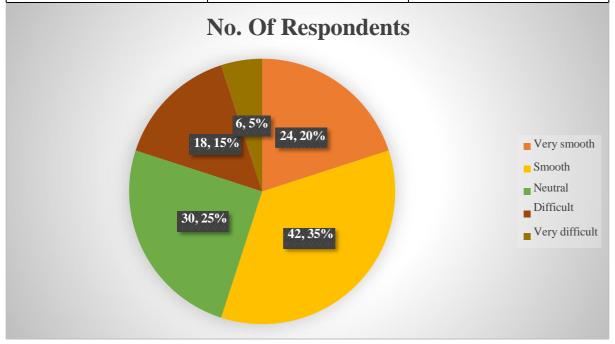
- 30% of respondents have returned a product on Nykaa, indicating that a significant portion of customers have faced issues with their orders, such as receiving incorrect, damaged, or unsatisfactory products.
- 70% have never returned a product, suggesting that most customers are satisfied with their purchases or do not face issues requiring returns.

While the majority of customers do not return products, the 30% return rate highlights potential concerns related to product quality, accuracy of orders, or customer expectations. To improve customer satisfaction, Nykaa could:

- Ensure accurate product descriptions and images to reduce mismatch issues.
- Enhance quality checks to minimize cases of damaged or defective products.
- Streamline the return process to make it more convenient for customers when needed.

# 17. If yes, how was your experience with Nykaa's return and refund process?

Options	No. Of Respondents	Percentage
Very smooth	24	20%
Smooth	42	35%
Neutral	30	25%
Difficult	18	15%
Very difficult	6	5%
TOTAL	120	100%



## Interpretation: Experience with Nykaa's Return and Refund Process

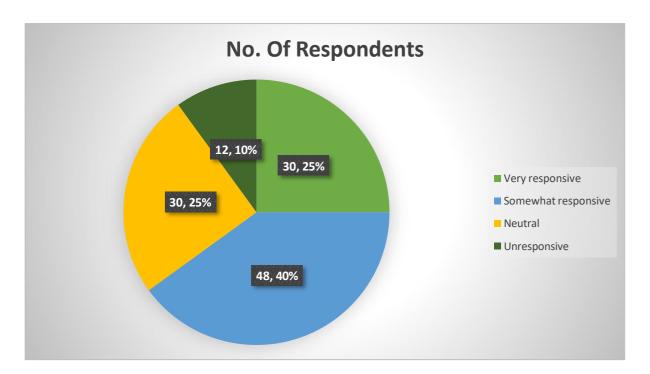
- 20% of respondents found the return and refund process very smooth, and 35% found it smooth, indicating that a majority (55%) had a positive experience with returns and refunds.
- 25% were neutral, meaning they did not face major issues but also did not find the process exceptionally convenient.
- 15% found it difficult, and 5% found it very difficult, suggesting that some customers struggled with the return or refund process due to delays, complicated procedures, or unresponsive support.

Nykaa's return and refund system is generally perceived positively by most customers. However, improvements could be made to address the difficulties faced by 20% of respondents who had a negative experience. Possible solutions include:

- Reducing refund processing time to enhance customer convenience.
- Simplifying the return procedure, such as allowing quick pickups or fewer approval steps.
- Providing better customer support to address refund-related concerns efficiently.

## 18. How responsive is Nykaa's customer service when resolving complaints?

Options	No. Of Respondents	Percentage
Very responsive	30	25%
Somewhat responsive	48	40%
Neutral	30	25%
Unresponsive	12	10%
TOTAL	120	100%



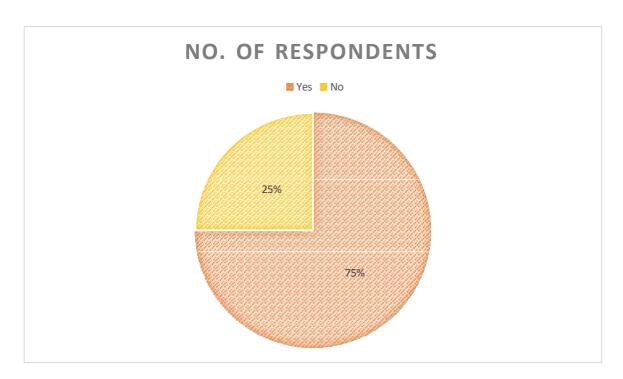
# **Interpretation: Nykaa's Customer Service Responsiveness**

- 25% of respondents find Nykaa's customer service very responsive, indicating a segment of customers who have had positive experiences with issue resolution.
- 40% consider it somewhat responsive, suggesting that while customer service is functional, there is room for improvement in speed or effectiveness.
- 25% remain neutral, which could indicate inconsistent experiences or a lack of interaction with customer service.
- 10% find it unresponsive, highlighting a concern that could lead to dissatisfaction and churn.

While a majority of customers (65%) perceive Nykaa's customer service as responsive, there is still a significant portion (35%) who are neutral or dissatisfied. To enhance customer satisfaction, Nykaa should focus on faster complaint resolution, better communication, and more proactive support.

# 19. Would you continue shopping from Nykaa in the future?

Options	No. Of Respondents	Percentage
Yes	90	75%
No	30	25%
TOTAL	120	100%



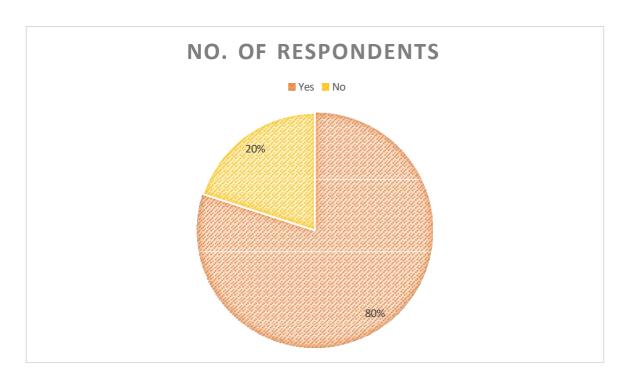
# **Interpretation: Future Purchase Intent from Nykaa**

- 75% of respondents plan to continue shopping from Nykaa, indicating a high level of
  customer retention. This suggests that most customers are satisfied with their
  shopping experience, whether due to product quality, pricing, delivery, or overall
  service.
- 25% of respondents do not plan to continue shopping from Nykaa, signaling a notable portion of customers who are dissatisfied. Possible reasons could include pricing concerns, product authenticity issues, delivery delays, or negative past experiences.

Nykaa maintains a strong customer retention rate, which is crucial for long-term success. However, a quarter of customers are not willing to return, which indicates areas for improvement. To enhance loyalty, Nykaa could analyze feedback from dissatisfied customers, improve its competitive pricing strategies, ensure better product quality control, and enhance customer service interactions.

# 20. Would you recommend Nykaa to others for beauty and personal care shopping?

Options	No. Of Respondents	Percentage
Yes	96	80%
No	24	20%
TOTAL	120	100%



# Interpretation: Willingness to Recommend Nykaa

- 80% of respondents would recommend Nykaa to others, indicating a strong level of
  customer satisfaction and trust in the platform. This suggests that a majority of users
  have had positive shopping experiences, reinforcing Nykaa's brand loyalty and
  reputation.
- 20% would not recommend Nykaa, highlighting that one-fifth of customers have concerns that prevent them from endorsing the platform. These concerns could stem from pricing, product quality, delivery issues, or customer service experiences.

Nykaa enjoys a high recommendation rate, which is essential for organic growth through word-of-mouth marketing. However, addressing the concerns of the 20% who would not recommend the platform is crucial. Improving pricing strategies, enhancing product quality checks, and optimizing customer service responses could help convert hesitant customers into loyal advocates.

# CHAPTER – 5 Conclusion & Summary

# **Conclusion Based on the Survey**

The survey findings provide valuable insights into customer perceptions, preferences, and challenges associated with Nykaa's e-commerce platform and supply chain management. Based on the responses from 120 participants, the following key conclusions can be drawn:

## 1. Strong Female Customer Base.

The majority of respondents (60% female) indicate that Nykaa's primary customer base consists of women, reinforcing its positioning as a beauty and personal care marketplace that caters predominantly to female shoppers.

# 2. High Engagement Among Young Consumers

A significant proportion of respondents (40% aged 18-25 and 30% aged 26-35) highlights that Nykaa is most popular among young adults. This suggests that Nykaa's marketing and product offerings resonate well with younger demographics who actively shop online.

# 3. Online Shopping is Mostly Occasional or Monthly

Most consumers (35% shop occasionally, 30% shop monthly) purchase beauty and personal care products periodically rather than on a weekly basis. This indicates that while Nykaa has a steady customer base, frequent purchases might be influenced by factors like promotions, product needs, or seasonal trends.

# 4. Nykaa as the Leading E-Commerce Platform for Beauty Products

Nykaa is the most preferred platform (42% of respondents) for beauty and skincare purchases, followed by Amazon (33%) and Flipkart (17%). This suggests that Nykaa holds a strong competitive edge in the beauty and personal care segment.

## 5. High Product Availability and Quality Perception

A combined 65% of respondents are satisfied or very satisfied with Nykaa's product availability. Similarly, 70% rate product quality and authenticity as excellent or good, indicating that Nykaa successfully meets customer expectations in these areas.

### 6. Perception of Higher Pricing

While 45% believe Nykaa's pricing is similar to competitors, 35% find it more expensive, suggesting that some customers perceive Nykaa's pricing as premium. This could be due to exclusive brand availability or lack of discounting compared to other platforms.

### 7. Major Purchase Drivers: Discounts and Availability

Price and discounts are the biggest purchase influencers (35%), followed by product availability (25%). This indicates that competitive pricing strategies and stock availability are crucial factors affecting consumer purchasing decisions.

### 8. High Order Accuracy but Some Issues with Product Condition

A majority (40% always, 30% most of the time) receive the correct products, indicating a well-managed order fulfillment process. However, 25% have faced issues with expired or damaged products, highlighting a need for quality control in packaging and dispatch.

# 9. Delivery Efficiency with Room for Improvement

Most customers opt for standard delivery (65%), but fast delivery remains important (45% find it extremely important). While 65% are satisfied with delivery speed and tracking, 30% have faced delivery delays or cancellations, suggesting occasional logistical challenges.

## 10. Packaging and Handling Rated Positively

Nykaa's packaging and product handling receive positive feedback, with 75% rating it as good or excellent, reinforcing the company's strong packaging standards.

# 11. Returns and Refunds are Generally Smooth

While 30% have returned products, a majority (55% found the return and refund process smooth or very smooth) indicating a fairly efficient post-purchase experience. However, 20% faced difficulties, suggesting areas for improvement.

# 12. Customer Service Responsiveness is Moderate

While 40% find customer service somewhat responsive, only 25% rate it as very responsive, indicating that Nykaa could improve its customer support efficiency for resolving complaints.

### 13. High Customer Loyalty and Brand Advocacy

A strong 75% of respondents express willingness to continue shopping from Nykaa, and 80% would recommend Nykaa to others, indicating high customer loyalty and positive brand perception.

The survey results suggest that Nykaa has successfully positioned itself as a trusted and preferred e-commerce platform for beauty and personal care products. While it excels in product availability, quality, and customer loyalty, challenges remain in pricing perception, occasional delivery issues, and customer service responsiveness. Addressing these areas through competitive pricing, enhanced logistics, and improved customer support can further strengthen Nykaa's market dominance and customer satisfaction.

### Summary

This study examines the impact of e-commerce on supply chain management, focusing on Nykaa as a case study. The research is based on a survey of 120 respondents, analyzing their shopping behavior, preferences, and satisfaction levels with Nykaa's services.

The findings indicate that Nykaa is the preferred e-commerce platform for beauty and personal care products (42% of respondents), particularly among young adults aged 18-35. Most consumers shop occasionally or monthly, with price, discounts, and product availability being the main purchase drivers.

Nykaa performs well in terms of product quality and authenticity, with 70% of respondents rating it as excellent or good. However, pricing perception is mixed, as 35% find Nykaa more expensive than competitors. Delivery services are mostly reliable, though 30% have faced delays or cancellations. Additionally, 25% of customers have experienced issues with expired or damaged products, highlighting the need for stricter quality control.

Customer satisfaction remains high, with 75% willing to continue shopping from Nykaa and 80% recommending it to others. While Nykaa excels in product availability, packaging, and order accuracy, areas like customer service responsiveness and return/refund processes need further improvement.

Overall, the research concludes that Nykaa has a strong market presence, customer trust, and efficient supply chain management, but it must address pricing concerns, delivery reliability, and customer support to enhance its competitive advantage.

### **Limitations of the Research**

While this study provides valuable insights into Nykaa's impact on supply chain management and customer satisfaction, it has certain limitations based on the survey data:

# 1. Limited Sample Size

The study is based on 120 respondents, which may not be fully representative of the entire customer base of Nykaa. A larger sample size could provide more generalized and reliable results, reducing the impact of individual biases.

# 2. Use of Convenience Sampling

Since convenience sampling was used, the sample might not accurately reflect the diversity of Nykaa's customer base. The results are influenced by respondents who were easily accessible, which may exclude perspectives from other potential users with different experiences.

# 3. Geographic Constraints

The study primarily collects responses from individuals in specific regions or cities, limiting the ability to generalize findings across a wider customer base, including rural areas where e-commerce adoption may vary.

# 4. Self-Reported Data Bias

The data is based on self-reported responses, which can be affected by recall bias, personal opinions, or social desirability bias. Respondents may not always provide accurate or objective answers, impacting the study's reliability.

## 5. Lack of Longitudinal Data

This research captures responses at a single point in time, making it difficult to track changes in customer preferences, satisfaction levels, or supply chain efficiency over time. A longitudinal study would provide deeper insights into trends and evolving consumer behavior.

### 6. Focus on Nykaa Only

The study is limited to Nykaa's supply chain and e-commerce operations, excluding comparisons with other major competitors. A broader comparative study involving platforms like Amazon, Flipkart, and Myntra would offer a more comprehensive analysis.

## 7. Limited Scope on Supply Chain Aspects

While the research explores Nykaa's e-commerce impact on supply chain management, it does not deeply analyze backend logistics, vendor management, warehousing, or international supply chain dynamics, which are crucial for a holistic supply chain assessment.

# 8. Exclusion of Non-Digital Shoppers

The study only considers online consumers, ignoring potential beauty and personal care shoppers who prefer offline retail stores. Their perspectives on pricing, availability, and brand trustworthiness are not captured.

# **Bibliography**

The following sources were referenced and consulted during the research on "Impact of E-Commerce on Supply Chain Management: A Case Study on Nykaa":

### **Books & Journals**

- 1. Chopra, S., & Meindl, P. (2019). Supply Chain Management: Strategy, Planning, and Operation. Pearson.
- 2. Kotler, P., Keller, K. L. (2021). Marketing Management. Pearson.
- 3. Christopher, M. (2016). *Logistics and Supply Chain Management*. Pearson.
- 4. Mentzer, J. T. (2004). Fundamentals of Supply Chain Management: Twelve Drivers of Competitive Advantage. Sage Publications.
- 5. Bhattacharya, S. (2020). *E-commerce and Supply Chain Integration in India*. Oxford University Press.

# **Research Papers & Articles**

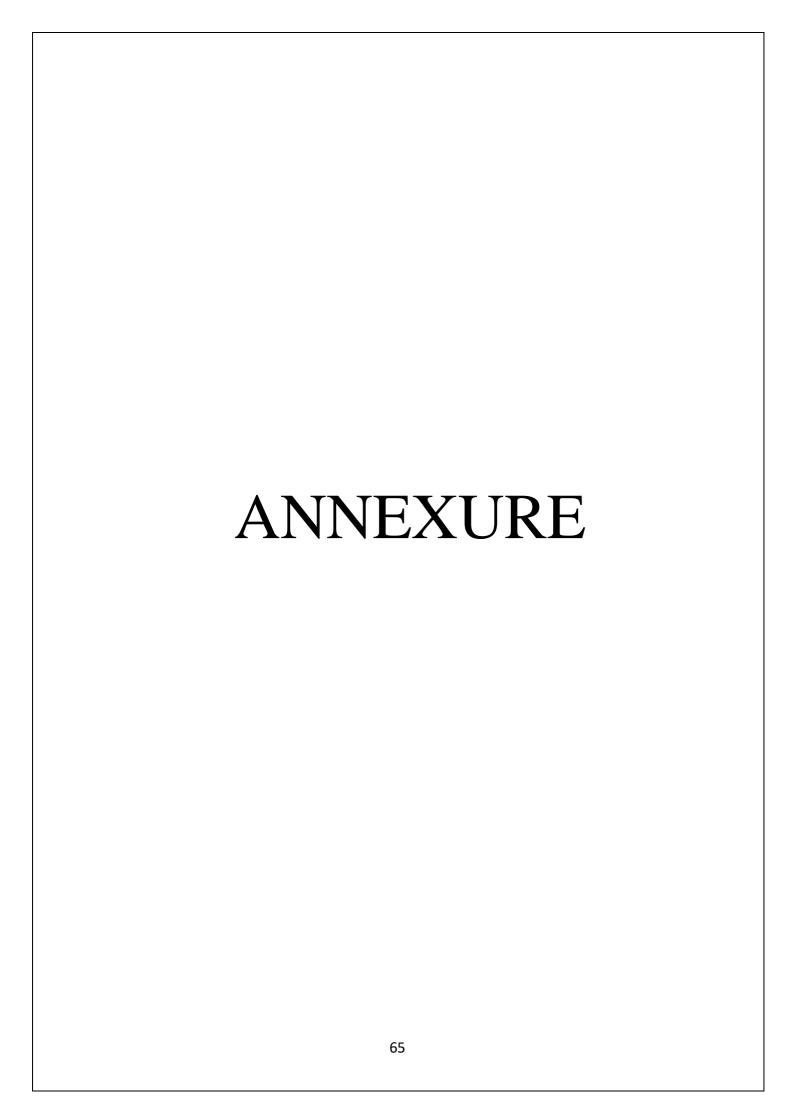
- 6. Agrawal, N., & Smith, S. A. (2019). *E-commerce Supply Chain Strategies:* Challenges and Opportunities. Journal of Business Logistics, 40(2), 123-145.
- 7. Sharma, P., & Singh, R. (2021). *Impact of Digitalization on E-commerce Logistics in India*. International Journal of Logistics Research, 18(3), 45-60.
- 8. Rajput, S., & Gupta, S. (2022). Customer Perception Towards Online Beauty Retailing: A Case Study on Nykaa. Indian Journal of Marketing, 52(4), 89-102.

### Web Sources

- 9. Nykaa Official Website <a href="https://www.Nykaa.com">https://www.Nykaa.com</a> (For understanding company policies, logistics, and product availability)
- 10. India Brand Equity Foundation (IBEF) <a href="https://www.ibef.org">https://www.ibef.org</a> (For insights on India's e-commerce market trends)
- 11. Statista <a href="https://www.statista.com">https://www.statista.com</a> (For statistical data on online beauty and personal care industry)
- 12. Economic Times https://economictimes.indiatimes.com (For reports on Nykaa's business operations, supply chain, and market growth)
- 13. Business Standard <a href="https://www.business-standard.com">https://www.business-standard.com</a> (For industry reports and competitive analysis of Nykaa vs other e-commerce platforms)

# **Company Reports & Market Research**

- 14. Nykaa Annual Report 2023 Company Financial and Operational Highlights.
- 15. Redseer Consulting (2022). *India's E-commerce Beauty & Personal Care Market Report.*
- 16. Forrester Research (2021). *Impact of Digital Marketplaces on Beauty & Skincare Supply Chains*.



# ANNEXURE

# Questionnaire

Perso	nal Details:		
Name	e:		
Addre	Address:		
Section	on 1: Demographic Information		
Q1. G	ender:		
	Male		
	Female		
	Other		
Q2. A	ge Group:		
	Below 18		
	18-25		
	26-35		
	36-45		
Q3. H	low frequently do you shop online for beauty and personal care products?		
	Weekly		
	Monthly		
	Occasionally		
	Rarely		
	Which e-commerce platforms do you use most to purchase beauty and skincare acts? (Select any one)		
	Nykaa		
	Amazon		
	Flipkart		
	Myntra		

**Section 2: Shopping Experience & Product Availability** 

Q5. How satisfied are you with Nykaa's product availability?

	Very satisfied Satisfied
	Neutral
	Dissatisfied
	Very dissatisfied
Q6. H	ow would you rate the product quality and authenticity on Nykaa?
	Excellent
	Good
	Average
	Poor
	Very poor
Q7. H	ow do you find Nykaa's pricing compared to other platforms?
	More expensive
	Same as others
	More affordable
<b>Q8.</b> W	Which factor influences your purchase decision the most?  Price and discounts
	Product availability
	Delivery speed
	Brand reputation
	•
Q9. H	ow often do you receive exactly what you ordered without errors?
	Always
	Most of the time
	Sometimes
	Rarely
	Never
Q10. I	Have you ever faced issues with expired or damaged products from Nykaa?
	Yes
	No

# **Section 3: Delivery & Logistics Experience** Q11. What delivery option do you usually choose? Standard delivery ☐ Express/fast delivery Q12. How satisfied are you with Nykaa's delivery speed and order tracking? Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied Q13. How important is fast delivery when purchasing from Nykaa? Extremely important Important Neutral □ Not very important □ Not important at all Q14. Have you ever faced delivery delays or order cancellations? Yes No Q15. How would you rate Nykaa's packaging and product handling? Excellent □ Good Average Poor □ Very poor **Section 4: Customer Service & Returns** Q16. Have you ever returned a product on Nykaa? Yes □ No

Q17. If yes, how was your experience with Nykaa's return and refund process?		
	Very smooth	
	Smooth	
	Neutral	
	Difficult	
	Very difficult	
Q18. l	How responsive is Nykaa's customer service when resolving complaints?	
	Very responsive	
	Somewhat responsive	
	Neutral	
	Unresponsive	
	on 5: Customer Loyalty & Suggestions Would you continue shopping from Nykaa in the future?	
QI).		
	Yes	
	No	
Q20. Y	Would you recommend Nykaa to others for beauty and personal care shopping?	
	Yes	
	No	
Q21. V	What improvements would you suggest for Nykaa's e-commerce services?	
-	Please share any specific experience (positive or negative) you have had with a's supply chain, such as delivery, product availability, or returns.	