ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 12| December 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

A REVIEW ON PHARMACEUTICAL MARKETING AND BUSINESS STRATEGIES, SUPPLY CHAIN & LOGISTICS MANAGEMENT

Mr. Shinde Bhagwat [1*], Dr. Abid Shaikh [2], Dr. Sunil Jaybhaye [3]
Institute of Pharmacy, (NKSPT) Pathrikar Campus, Badnapur, Jalna. 431202
[1] Student of Bachelor in Pharmacy, Dr. Babasaheb Ambedkar Technological University, Raigad, Lonere
[2,3] Department of Pharmacy, Faculty of Pharmacy, Dr. Babasaheb Ambedkar Technological University, Raigad, Lonere

ABSTRACT

The pharmaceutical industry brings together innovation, strict regulations, and patient care, making marketing and supply chain management equally important. Marketing is unique in this sector because it must comply with legal standards, focus on physicians as the main decision-makers, and also educate patients.

Business strategies often balance branded and generic medicines, expand into international markets, and uphold ethical practices. When marketing and logistics are integrated, companies can better serve patients, remain competitive, and meet compliance requirements. Still, challenges such as counterfeit drugs, rising costs, and regulatory hurdles persist. At the same time, new opportunities are emerging through digital health platforms, advanced AI forecasting, and blockchain-based transparency, which can strengthen trust and efficiency across the sector.

KEY WORDS: *Pharma Marketing, Business Strategy, Supply Chain, Pharma Logistics, Cold Chain, Compliance, Digital Health, AI Integration.*

INTRODUCTION

The pharmaceutical industry is a cornerstone of global healthcare, driving the development and distribution of medicines that improve lives while operating under strict regulatory standards. Success in this field depends on blending innovation with commercial viability, where strategic marketing and efficient supply chain systems work hand in hand.

Marketing is unique here, focusing on healthcare professionals, patient education, and ethical compliance, with strategies built around product positioning, pricing, distribution, and promotion. The rise of digital platforms has further transformed outreach, enabling virtual detailing and data-driven engagement with prescribers and patients.

Together, marketing and logistics form the backbone of pharmaceutical business strategy, helping companies meet demand, maintain compliance, and build trust across the healthcare ecosystem.

STATEMENT OF PROBLRM & HYPOTHESIS

Problem Statement: The pharmaceutical industry faces a tough challenge: it must follow strict rules while also keeping medicines affordable, innovative, and trustworthy. Supply chains need to deliver drugs safely and on time, but many companies struggle to connect their marketing strategies with supply chain management.

This gap often causes:

- Shortages of medicines
- Higher operating costs
- Limited patient access

Hypothesis

- When marketing and supply chain work hand-in-hand, companies gain deeper market reach, stronger patient trust, and better long-term sustainability.
- Using digital tools like AI, blockchain, and IoT makes operations more efficient, reduces costs, and boosts global competitiveness.
- Patient-focused marketing, backed by agile and transparent supply chains, builds loyalty and drives lasting profitability.

LITERATURE RIVIEW

1.Pharmaceutical Marketing Strategies: Modern pharma marketing is about more than selling medicines it's about *earning patient trust*. Companies use digital tools like apps, websites, and telehealth to connect faster with doctors and patients.

2. Business Strategies in Pharma: Pharma firms must balance innovation with affordability. Countries like India thrive in global exports by producing quality medicines at lower costs. Partnerships with hospitals, NGOs, and distributors expand reach, while "quality by design" ensures safety from the start.

3. Supply Chain & Logistics: The pharma supply chain is complex—medicines need strict storage and transport conditions. Vaccines, for example, rely on cold chains. To prevent this, companies now use AI, IoT, and blockchain to track medicines, forecast demand, and fight counterfeits.

4. Integration of Marketing & Supply Chain: Marketing creates demand, but supply chains must deliver. When both work together, patients get medicines on time, trust grows, and companies gain a competitive edge. Aligning campaigns with production avoids shortages and waste, making businesses more sustainable.

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 12| December 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

5. Research Gaps: There's still limited research on how marketing–supply chain integration impacts patient outcomes. Emerging markets like India face unique challenges with government tenders and price controls. Eco-friendly supply chains and proper governance of digital tools (AI, blockchain, IoT) remain underexplored.

AIM & OBJECTIVE

AIM: A review on Pharmaceutical Marketing and Business Strategies, Supply Chain & Logistics Management.

OBJECTIVE OF STUDY

- To study how pharma companies market medicines.
- To learn business strategies used in the pharmaceutical industry.
- To understand how medicines are stored, transported, and delivered.
- To see how new technologies (AI, IoT, blockchain) help in pharma.
- To find problems in connecting marketing with supply chain

PHARMACEUTICAL MARKETING CONCEPT

Pharmaceutical marketing is all about how medicines and medical products—like prescription drugs, over-the-counter remedies, and devices—are promoted and delivered. Unlike regular consumer marketing, it's tightly regulated because patient safety and ethics come first.

Core Idea

- It's the process of showing the value of medicines to doctors, patients, and other healthcare players.
- Purpose: To make sure the right treatments reach the right patients at the right time.
- Built on scientific evidence (clinical trials, safety data).
- Bound by strict rules (FDA in the US, EMA in Europe, UCPMP in India).
- Involves many stakeholders—doctors, pharmacists, hospitals, insurers, regulators, and patients.

Key Elements

- Evidence-Based Promotion: Marketing must be backed by solid clinical research.
- Ethical Communication: Be transparent about benefits and risks—no misleading claims.
- Stakeholder Engagement: Build trust with doctors (who prescribe), pharmacists (who dispense), and patients (who use).
- Market Access: Work with insurers and governments to set fair prices and reimbursement.
- Supply Chain Integration: Ensure medicines are available when needed, avoiding shortages.

Academic View

- Marketing theory: segmentation, branding, positioning.
- Healthcare economics: pricing and reimbursement strategies.
- Regulatory science: staying compliant with laws.
- Supply chain management: safe distribution, cold storage, and anti-counterfeit measures.

MODERN MARKETING APPROACHES

I. Marketing Approaches

- Digital & Omnichannel → Websites, apps, webinars, and social media connect pharma with doctors and patients.
- Patient-Centric → Focus on education, awareness, and support rather than just product promotion.
- Influencer & Community → Partnerships with medical influencers and patient groups strengthen credibility.

II. Business Strategies

- Innovation & R&D → Continuous development of new drugs and therapies.
- Digital Transformation → Cloud CRM, telemedicine, and e-detailing modernize engagement.
- Collaborations → Partnerships with biotech, hospitals, and insurers expand reach.

III. Supply Chain & Logistics

- Smart Tech → IoT, blockchain, and AI for tracking and anti-counterfeiting.
- Forecasting → Simulation models predict demand and align production.
- Green Logistics → Eco-friendly packaging and optimized routes reduce carbon footprint.

IV. Traditional vs Modern Marketing

Aspect	Modern Marketing	Traditional Marketing
Focus	Customer-Centric	Product-centric
Channels	Digital, Social, Mobile	Print, TV, radio
Communication	Two-Way (Interactive, Conversational)	One-way (brand → consumer)
Strategy	Personalized, Targeted	Mass marketing
Goal	Long-Term Relationships & Loyalty	Immediate sales

Table No. 01: Pharmaceutical Traditional & Modern Marketing

INDIAN PHARMACEUTICAL BUSINESS STATUS

- **Current Industry Status**
  - India is called the "Pharmacy of the World" for supplying affordable, quality medicines globally.
  - Market size in 2025: $55 billion; projected to grow to $120–130 billion by 2030.
  - Produces 60,000+ generic medicines across 60 categories, exported to 200+ countries.

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 12| December 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

- Supplies 60% of global vaccines and is a major exporter of APIs (Active Pharmaceutical Ingredients).

- **Marketing & Business Strategies**
  - Affordable pricing → Competing globally with low-cost, reliable medicines.
  - Franchise model (PCD Pharma) → Expanding reach in rural & semi-urban India.
  - Global certifications → WHO-GMP & FDA approvals boost global trust.
  - Digital marketing → Online platforms connect with doctors, hospitals, pharmacies.

- **Supply Chain & Logistics:**
  - Pharma logistics market may reach $7.6 billion by 2032.
  - Strong domestic distribution worth ₹2.5 lakh crore ensures medicine availability.
  - Cold chain systems → Vital for vaccines & biologics.
  - Innovation → AI forecasting, digital tracking, and eco-friendly logistics.
  - Government support → PLI scheme promotes local API manufacturing, reducing import dependence.

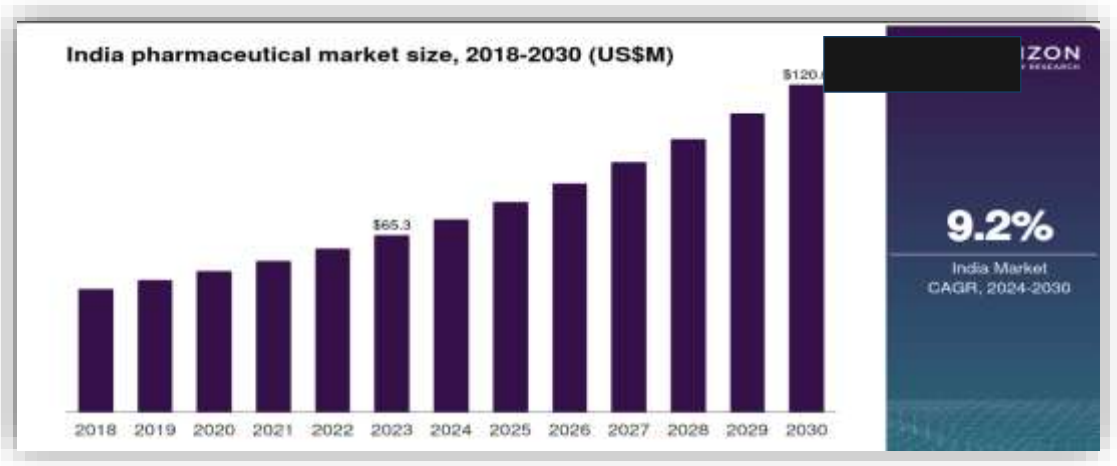


Figure No. 01: Indian Pharmaceutical Business Status

India's pharmaceutical industry is **globally competitive, affordable, and innovation-driven**.

- **Business growth:** $55B in 2025 → $120–130B by 2030.
- **Marketing:** Affordable generics, franchise expansion, digital outreach.
- **Supply chain:** Cold chain, AI-driven logistics, government incentives. *[8]*

KEY CHALLENGES IN PHARMA BUSINESS

I. Regulatory & Compliance:
- Strict rules from FDA, EMA, CDSCO.
- Different countries = different rules → global expansion is tough.
- Non-compliance risks: recalls, fines, bans.

II. High R&D Costs:
- New drug takes **10–15 years** and billions of dollars.
- Only **1 in 5,000–10,000 compounds** succeed.
- High failure rates make innovation risky and expensive.

III. Pricing Pressure & Market Access:
- Governments & insurers push for lower prices.
- Patients want affordability, companies need profits.
- Generics cut margins → balancing access vs profit is hard.

IV. Supply Chain & Logistics:
- Heavy API import dependence (India ~70% from China).
- Global crises disrupt supply.
- Cold chain for vaccines is costly and complex.
- Need AI-driven tracking & resilient systems.

V. Talent Shortages:
- Lack of skilled experts in biotech, AI, advanced therapies.
- Aging populations increase demand, but workforce lags.
- Training & retention are critical.

VI. Tech Disruption:
- Rapid rise of AI, digital health, personalized medicine.
- Cybersecurity risks + integration challenges.
- Companies must modernize without breaking existing systems.

VII. Global Competition:
- Fierce competition from US, EU, China giants.
- India strong in generics, but weak in innovation.
- Must shift from **volume → value**.

VIII. Ethics & Responsibility:
- Criticism over pricing, marketing, transparency.
- Public trust depends on ethical, sustainable practices.
- Profitability must align with social responsibility.

Pharma faces a balancing act — strict rules, huge R&D costs, pricing pressures, supply chain risks, talent gaps, tech

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 12| December 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

disruption, global competition, and ethical scrutiny. Success means **innovating responsibly while keeping medicines affordable and accessible.**

LOGISTICS & SUPPLY CHAIN MANAGEMENT (SCM):

Supply Chain Management (SCM): The end-to-end process of planning, sourcing, producing, storing, transporting, and delivering goods to customers.

- **Logistics:** A part of SCM that focuses on the **physical movement and storage** of goods.

SCM = *strategy* + *planning*, Logistics = *execution of movement*.



Figure No. 02: Logistics & Supply Chain Management (Scm)

Supply Chain Management (SCM)

SCM is the **complete process** of making sure a product goes from idea → raw materials → production → storage → transport → delivery to the customer.

- **Planning:** Deciding what products are needed and when.
- **Sourcing:** Choosing suppliers and buying raw materials.
- **Production:** Making the product in factories.
- **Storage:** Keeping goods safe in warehouses.
- **Transport & Delivery:** Moving products to shops or directly to customers.

Logistics

Logistics is a **part of SCM** that focuses only on the **movement and storage** of goods.

- **Inbound Logistics:** Bringing raw materials into the company.
- **Outbound Logistics:** Sending finished products out to customers.
- **Warehousing:** Storing goods safely until they're needed.
- **Transportation:** Trucks, ships, planes, or even cold-chain systems for medicines.

SCM is like the **brain** that plans everything, while logistics is the **muscle** that gets things done. Together, they make sure products reach the right place, at the right time, in the right condition.

➢ COMPONENTS & TRENDS IN PHARMA LOGISTICS

❖ Components In Pharma Logistics

- **A. Cold Chain Management:** Many drugs (vaccines, biologics, insulin, blood products) are temperature-sensitive. Requires specialized infrastructure: refrigerated trucks, cold rooms, insulated packaging, dry ice, phase-change materials. Continuous monitoring with IoT sensors ensures compliance with required ranges (e.g., 2–8°C for vaccines).



Figure no. 03: Pharmaceutical Cold Chain Management

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 12| December 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

- **B. Regulatory Compliance:** Governed by Good Distribution Practices (GDP) from WHO, EMA, and national agencies. Requires documentation, audits, and certifications for every step of the supply chain. Compliance ensures drug safety, authenticity, and patient trust.
- **C. Warehousing & Inventory Management:** Warehouses must be climate-controlled (temperature, humidity). Automation (robotics, AI-driven inventory systems) reduces human error. FIFO (First In, First Out) and FEFO (First Expiry, First Out) principles prevent wastage. Segregation of controlled substances and hazardous materials is mandatory.

❖ **Trends In Pharma Logistics**

- **A. Digitalization & AI Integration:** AI optimizes routes, demand forecasting, and inventory planning. Predictive analytics helps anticipate temperature excursions or supply chain disruptions. Digital twins simulate logistics scenarios for better planning.
- **B. Supply Chain Diversification:** Post-COVID, companies are reducing reliance on single suppliers or regions. Nearshoring and regional hubs improve resilience. Multi-supplier strategies reduce risk of shortages.
- **C. Sustainability Initiatives:** Eco-friendly packaging (biodegradable insulation, recyclable materials). Carbon-neutral logistics through electric vehicles and green warehouses. Circular supply chains: recycling and reusing packaging materials.

CONCLUSION

The pharmaceutical industry thrives on the balance between innovation, ethical marketing, and efficient supply chain management. Marketing strategies ensure that life-saving medicines reach the right people, while logistics guarantee they arrive safely and on time. Together, these domains not only drive business success but also strengthen global health systems.

For professionals, mastering scientific knowledge, business insight, digital skills, and regulatory awareness open doors to impactful careers. Ultimately, success in pharma means more than growth—it means contributing to healthier lives worldwide.

REFERENCES

1. *Kotler, P., & Keller, K. L. (2016). Marketing Management (15th ed.). Pearson.*
2. *Chopra, S., & Meindl, P. (2021). Supply Chain Management: Strategy, Planning, and Operation (7th ed.).*
3. *World Health Organization (2010). Good Manufacturing Practices for Pharmaceutical Products. WHO Guidelines.*
4. *Mishra, B., Biswal, P. K., Behera, S. K., & Maharana, S. (2021). A Text Book of Pharmaceutical Marketing Management (BP803ET), Shashwat Publication.*
5. *Ahmed, R. R. (2023). Pharmaceutical Marketing: Strategies and Best Practices.*
6. *Hassan, M. A. (2011). Supply Chain Management in the Drug Industry: Methods and Applications.*
7. *Rees, H. (2011). Supply Chain Management in the Drug Industry: Delivering Patient Value for Pharmaceuticals and Biologics.*
8. *Majumdar, K., Jain, J., & Mohan, D. (2024). AI-Driven Optimization of Pharmaceutical Supply Chains: Enhancing Forecasting, Inventory, and Transparency.*
9. *World Health Organization (2011). Good Manufacturing Practices for Pharmaceutical Products. WHO Guidelines.*
10. *Barbosa-Povo, A. P., Jenzer, H., & de Miranda, J. L. (2019). Pharmaceutical Supply Chains: Medicines Shortages.*
11. *Mishra, B., Biswal, P. K., Behera, S. K., & Maharana, S. (2022). A Text Book of Pharmaceutical Marketing Management (BP803ET), Shashwat Publication.*
12. *Kotler, P., Keller, K. L., Koshy, A., & Jha, M. (2012). Marketing Management: A South Asian Perspective (13th ed.). Pearson India.*
13. *Chopra, S., & Meindl, P. (2019). Supply Chain Management: Strategy, Planning, and Operation (6th ed.).*
14. *Rathore, A. S., & Winkle, H. (2009). Quality by Design for Biopharmaceuticals.*
15. *Shukla, S. (2018). Pharmaceutical Marketing in Emerging Markets. Pharma Book Syndicate.*
16. *Majumdar, K., Jain, J., & Mohan, D. (2025). AI-Driven Optimization of Pharmaceutical Supply Chains: Enhancing Forecasting, Inventory, and Transparency.*
17. *Indian Pharmacopoeia Commission (2022). Indian Pharmacopoeia (Latest Edition). Government of India.*
18. *Narayanan, V. K., & Fahey, L. (2005). The Relevance of Marketing Strategy. SAGE Publications.*
19. *Akkaladevi, M. R. (2021). Pharma Marketing Management. Notion Press. Sukhtankar, A. C., Haldankar, S. M., Wadekar, P. M., Sharma, N., & Patil, R. P. (2024). Supply Chain Management in Pharmaceutical Industry.*
20. *Smith, M. C., & Gagnon, J. P. (2012). Pharmaceutical Marketing: Principles, Environment, and Practice. Pharmaceutical Products Press.*
21. *Banerjee, A. K. (2016). Essentials of Pharmaceutical Marketing. Pharma Med Press.*
22. *Chandra, P., & Garbis, J. (2016). Supply Chain Configuration: Concepts, Solutions, and Applications.*
23. *Alok, D. (2019). Pharmaceutical Marketing in India: A Practical Guide. Pharma Med Press.*
24. *Kumar, S., & Chandra, C. (2010). Supply Chain Management in Emerging Markets. IGI Global.*
25. *Singh, R. K. (2017). Supply Chain Management: Concepts, Practices, and Implementation. Excel Books India.*
26. *Sahay, B. S., & Mohan, R. (2006). Supply Chain Management Practices in India. Macmillan India.*
27. *Nayak, A. (2015). Pharmaceutical Quality Assurance. Pharma Med Press.*