

"Comprehensive Value Chain Analysis of 1mg: Revolutionizing Healthcare Delivery"

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Abstract

This paper analyzes the value chain of 1mg, a leading digital healthcare platform in India, to understand its operational framework, competitive advantages, and strategic positioning. The study examines how 1mg integrates primary activities such as inbound logistics, operations, outbound logistics, marketing, and customer service with support activities like infrastructure, technology development, and procurement. By leveraging advanced technologies, robust supply chain management, and a customer-centric approach, 1mg has created a seamless ecosystem for online pharmacy, diagnostics, and teleconsultations. The analysis also highlights how 1mg's innovation-driven strategies and partnerships contribute to its scalability and differentiation in the competitive healthcare market.

Keywords: Author Guide, Article, Camera-Ready Format, Paper Value Chain Analysis, 1mg, Digital Healthcare, Online Pharmacy, Teleconsultation, Healthcare Logistics, Technological Innovation, Customer-Centric Healthcare, Diagnostic Services, E-health Platforms.

1. Introduction

The healthcare industry in India has witnessed significant transformation in recent years, driven by advancements in technology and the growing adoption of digital platforms. Among the pioneers of this revolution is 1mg, a comprehensive e-health platform that offers a range of services, including online pharmacy, diagnostic tests, and teleconsultations. Founded with the vision of making healthcare accessible, affordable, and convenient, 1mg has

redefined the way patients interact with healthcare providers. By integrating technology with healthcare delivery, 1mg has created a robust ecosystem that addresses critical challenges such as limited access to medicines, inefficiencies in diagnostic services, and the need for on-demand medical consultations. Its innovative solutions cater to urban and rural populations alike, providing

seamless access to healthcare services at the click of a button. This study explores the value chain of 1mg to understand the key activities and strategies that contribute to its operational efficiency and competitive advantage. The analysis highlights how the company optimizes primary activities, such as sourcing, logistics, and customer service, alongside support functions like technology development and procurement. By examining these elements, this paper sheds light on how 1mg has positioned itself as a leader in the rapidly growing digital healthcare sector in India.

The healthcare industry in India has experienced a paradigm shift in the last decade, propelled by digitalization and a growing demand for accessible, affordable, and high-quality healthcare services. Amid this transformation, 1mg has emerged as a pioneer in the e-health domain, addressing critical gaps in the healthcare delivery system. Launched with the aim of simplifying healthcare access, 1mg provides an integrated platform for online pharmacy, diagnostic services, teleconsultations, and personalized health management. Its comprehensive approach has made it a trusted name among consumers seeking convenience and reliability in healthcare services.

India's healthcare sector is often characterized by challenges such as unequal access to medical resources, inefficient distribution channels, and a fragmented supply chain. 1mg has effectively disrupted traditional healthcare models by leveraging advanced technologies like artificial intelligence (AI), machine learning, and data analytics. These technologies enable the platform to offer personalized health solutions, optimize supply chain logistics, and ensure real-time inventory management. Furthermore, its focus on customer-centricity and affordability aligns with the needs of India's diverse population, catering to urban tech-savvy users as well as underserved rural communities.

The company's innovative business model integrates various components of healthcare delivery into a single platform, streamlining processes for both consumers and service providers. Through partnerships with pharmaceutical companies, diagnostic labs, and healthcare

professionals, 1mg ensures seamless service delivery while maintaining stringent quality standards. Its emphasis on safety, convenience, and accessibility has allowed it to gain a competitive edge in the rapidly expanding digital healthcare market. This paper delves into the value chain of 1mg, analyzing its primary and support activities to uncover the strategic elements that drive its success. From sourcing medicines and diagnostic tools to providing exceptional customer support, 1mg's value chain highlights its ability to create and deliver value across multiple touchpoints. The study also examines how the company's focus on technological innovation, operational efficiency, and strategic partnerships has enabled it to address consumer pain points effectively. By conducting a comprehensive value chain analysis, this paper aims to provide insights into how 1mg has successfully transformed healthcare delivery in India. It also explores opportunities for further growth and the potential to replicate its model in other regions or sectors. As digital healthcare continues to evolve, understanding the underlying strategies of a market leader like 1mg offers valuable lessons for stakeholders across the industry.

This document is set in 10-point Times New Roman. If absolutely necessary, we suggest the use of condensed line spacing, rather than smaller point sizes. Some technical formatting software print mathematical formulas in italic type, with subscripts and superscripts in a slightly smaller font size. This is considerable.

2. Value Chain Analysis of 1 mg

Primary Activities

1. Inbound Logistics

Pharmaceutical Sourcing:

1mg may purchase excipients and active pharmaceutical ingredients (APIs) from reputable pharmaceutical distributors and manufacturers. Depending on the type of pharmaceutical product, these suppliers may be domestic or foreign.

Supply Chain Management:

A successful supply chain must be established to ensure prompt and economical procurement. This entails overseeing supplier relationships, maximizing order quantities, and guaranteeing on-time delivery. Modern supply chain technologies can be used for inventory management and real-time tracking.

Quality Control and Assurance:

Rigorous quality control measures are implemented during procurement to ensure that all pharmaceutical products meet regulatory standards and are safe for consumption. Regular audits and inspections of suppliers might be conducted to maintain and enhance quality standards.

Information Systems Integration:

Integration of information systems facilitates seamless communication between 1mg and its suppliers. This integration enables real-time updates on inventory levels, order status, and other critical information. Utilizing technology to automate and streamline the procurement process, improving efficiency and reducing errors.

Value addition

Investing in the latest technology

Investigate cutting-edge technologies to improve supply chain traceability and transparency, such as blockchain and IoT. Modern inventory management systems can increase precision and provide real-time visibility.

Main headings are to be column, centered in a bold font especially without underline. They need to be numbered. "2. Headings and Footnotes" at the top of this paragraph is a main heading.

Constant Process Improvement:

Examine and improve inbound logistics procedures regularly to find areas that need improvement. Use data analytics to optimize order quantities and improve demand forecasting.

2. Operations

Order Processing:

1mg utilizes a robust order processing system to handle orders efficiently and accurately. This includes features like:

- Automatic order confirmation and notification.
- Integration with payment gateways for secure transactions.
- Fraud detection and prevention measures.
- Real-time order tracking and visibility.

Picking and Packing:

1mg employs efficient picking and packing processes to ensure timely and secure delivery of orders. This involves:

- Advanced warehouse management systems for optimized picking routes.
- Quality checks at each stage of the picking and packing process.
- Secure packaging materials to protect medicines during transit.
- Temperature-controlled packaging for sensitive medications.

Quality Control:

1mg implements strict quality control measures throughout the operations process to ensure the safety and efficacy of medicines. This includes:

- Sourcing medicines only from authorized manufacturers and distributors.

- Maintaining temperature-controlled storage conditions throughout the supply chain.
- Implementing rigorous quality checks at every stage of the process, from receiving to packaging.
- Employing qualified pharmacists to review and verify orders.

Inventory Management:

Img uses advanced inventory management systems to optimize stock levels and minimize stockouts. This includes:

- Real-time inventory tracking and forecasting.
- Demand planning and forecasting based on historical data and market trends.
- Automated replenishment systems to ensure timely stock availability.
- ABC analysis prioritizes inventory based on criticality and value.

Warehousing and Logistics:

Img maintains a network of temperature-controlled warehouses across India to store medicines efficiently. They also employ:

- Efficient warehouse layouts and storage systems to optimize space and retrieval times.
- Robust transportation infrastructure to ensure timely and secure delivery of orders.
- Partnerships with reliable third-party logistics providers to ensure wider reach.

Returns and Refunds:

Img offers a convenient return and refund policy for damaged or incorrect orders. This process involves:

- Customer-friendly returns portal and support channels.
- Prompt response to return requests and efficient resolution.
- Speedy processing of refunds or replacements.

These operations activities are essential for Img to deliver high-quality medicines to customers in a timely and efficient manner. They also contribute significantly to the company's reputation for reliability and trust.

3.Outbound Logistics

Delivery

Img operates its own delivery fleet and partners with reliable third-party logistics providers to deliver medicines across India. This includes:

- Extensive network of delivery hubs and partners for nationwide reach.
- Efficient route planning and optimization for timely deliveries.
- Multiple delivery options including same-day, next-day, and scheduled deliveries.
- Real-time delivery tracking and updates for customers.

Packaging

Img uses secure and temperature-controlled packaging to ensure medicines arrive in perfect condition. This includes:

- Tamper-proof seals to prevent product tampering.

- Insulated packaging for temperature-sensitive medicines.
- Eco-friendly packaging materials wherever possible.

Customer Service

Img provides responsive customer service to address delivery concerns and inquiries. This includes:

- Dedicated customer support team available through various channels.
- Proactive communication regarding delivery delays or issues.
- Efficient resolution of delivery problems and customer satisfaction.

Reverse Logistics

Img offers a convenient return and refund policy for damaged or incorrect orders. This includes:

- Easy return process initiated through the app or website.
- Speedy pick-up of returned items.
- Prompt processing of refunds or replacements.
- Efficient disposal of returned medicines in accordance with regulations.

Technology Integration

Img leverages its technology platform to optimize and manage its outbound logistics. This includes:

- Real-time tracking of delivery vehicles and packages.
- Automated route optimization and dispatch systems.
- Customer notification and communication tools.
- Performance analytics and reporting for continuous improvement.

4.Marketing and Sales

Discounts for Screenings and Tests:

In crafting discounts for screenings and tests, Img strategically positions itself to attract a broader customer base, emphasizing the importance of regular health check-ups. This approach fosters a culture of preventive healthcare, encouraging customers to prioritize their well-being. It encourages regular health check-ups, fostering a preventive healthcare approach.

Value Added:

- Increased customer loyalty through cost savings.
- Higher volume of test orders due to attractive pricing.

Insurance Tie-ups:

By forging strategic alliances with health insurance providers, Img extends the accessibility of cost-effective healthcare options to insured individuals, creating a symbiotic relationship that benefits both the company and its customers. It builds trust with customers who have health insurance coverage.

Value Added:

- Increased customer base through insurance partnerships.
- Enhanced brand reputation as a trusted healthcare provider.

Vaccination and Awareness Drives:

Img's commitment to public health is exemplified through its vaccination and awareness drives, contributing significantly to community well-being. The value of creation extends beyond the immediate impact on public

health, encompassing a positive brand image cultivated through active community engagement.

Value Added:

- Increased footfall for vaccination services.
- Long-term brand loyalty as a socially responsible healthcare company.

Personalized Marketing Campaigns:

In personalizing marketing campaigns through data analytics, Img demonstrates a customer-centric approach, tailoring strategies based on individual health needs and preferences.

Value Added:

- Enhanced customer engagement and conversion rates.
- Improved customer satisfaction and loyalty.

Digital Marketing Integration:

The seamless integration of digital marketing not only broadens reach and visibility but also offers real-time analytics, empowering continuous improvement in marketing strategies, reflecting Img's commitment to staying at the forefront of digital healthcare solutions.

Value Added:

- Broader reach and increased brand visibility.
- Real-time analytics for continuous improvement of marketing strategies.

5.Services

Ambulance Services:

In offering ambulance services, Img positions itself as a reliable healthcare partner, ensuring timely responses to emergencies and comprehensive care from incident to hospital.

Value Added:

- Revenue from ambulance services.
- Enhanced brand trust as a reliable healthcare service provider.

Teleconsultation:

The convenience of teleconsultation services provided by Img transcends geographical barriers, offering immediate access to healthcare professionals, especially in remote areas.

Value Added:

- Service fees for teleconsultation.
- Increased customer satisfaction and loyalty.

Home Care:

Img's home care services redefine healthcare delivery by offering personalized services in the comfort of one's home. This not only reduces hospitalization costs for certain conditions but also generates revenue through home care service fees. Additionally, potential partnerships with healthcare insurance providers for coverage further strengthen Img's commitment to providing comprehensive and accessible healthcare solutions.

Value Added:

- Home care service fees.
- Potential partnerships with healthcare insurance for coverage.

Remote Monitoring:

Continuous health monitoring for chronic conditions. In the realm of remote monitoring, Img pioneers continuous health surveillance for chronic conditions, promoting early detection and prevention. The value-creation component is two-fold, encompassing subscription fees for remote monitoring services and the resultant improvement in patient outcomes. This proactive approach not only generates revenue but also solidifies Img's position as a trusted healthcare partner dedicated to enhancing patient well-being.

Value Added:

- Subscription fees for remote monitoring services.
- Improved patient outcomes leading to increased brand trust.

24/7 Customer Support:

Establish a robust customer support system for immediate assistance. Beyond its core services, Img's commitment to 24/7 customer support establishes a robust system for immediate assistance. Timely issue resolution contributing to positive brand perception.

Health Education Programs:

Img's investment in health education programs goes beyond transactions, offering informational resources that improve public health literacy and foster brand loyalty through a genuine commitment to empowering individuals in managing their health effectively.

Value Added:

- Improved public health literacy.
- Enhanced brand loyalty through educational initiatives.

3.SECONDARY ACTIVITIES

1.Firm Infrastructure

Img's success can be attributed in part to its robust firm infrastructure, which acts as the backbone of its entire value chain. Let's delve into the key components of this infrastructure and how they contribute to its overall effectiveness.

Technological Prowess:

•ODIN: This proprietary platform, aptly named Order Delivery Intelligent Network, orchestrates inventory management, order fulfillment, and delivery across all Img fulfillment centers. Real-time monitoring, performance metrics, and quality control features ensure efficient and seamless operations.

•AI-powered Algorithms: Img leverages sophisticated algorithms to optimize inventory allocation, delivery routes, and pricing strategies, resulting in enhanced efficiency and cost optimization.

•Data-driven Insights: Img's data analytics platform provides valuable insights into customer behavior, market trends, and operational performance. This information empowers data-driven decision-making across all levels of the organization.

Financial Stability:

•Strong Financial Backing: Img's access to substantial funding allows for continued investment in technology

infrastructure and expansion plans, bolstering its long-term viability.

- Prudent Financial Management:** Efficient financial management ensures secure transactions and timely payments to suppliers and partners, fostering trust and fostering a strong ecosystem within the value chain.

Human Capital Excellence:

- Talented Workforce:** Img boasts a diverse and skilled workforce comprising professionals across technology, logistics, healthcare, and marketing. This diverse expertise allows for comprehensive understanding and execution of various value chain activities.

- Continuous Learning & Development:** Img invests heavily in employee training and development programs, fostering a culture of innovation and continuous improvement. This commitment ensures that its workforce remains adaptable and equipped to face evolving market challenges.

Streamlined Organizational Structure:

- Clear Roles & Responsibilities:** Img's organizational structure is characterized by well-defined roles and responsibilities. This clarity facilitates efficient workflows, accountability, and smooth collaboration across teams.

- Open Communication & Collaboration:** Img emphasizes open communication and cross-departmental collaboration, leading to better decision-making, problem-solving, and overall value chain optimization.

Legal & Regulatory Compliance:

- Commitment to Compliance:** Img adheres to stringent healthcare regulations, ensuring the safety, quality, and efficacy of its products and services. This commitment fosters trust and confidence among customers and stakeholders.

- Robust Risk Management:** Img implements a comprehensive risk management framework to identify, assess, and mitigate potential risks proactively, safeguarding its operations and reputation.

Impact on Value Chain:

- The combination of these elements produces a powerful synergy that significantly impacts the entire Img value chain:

- Enhanced Efficiency & Productivity:** Technology-driven processes and automation streamline operations, reduce costs, and improve delivery times.

- Elevated Customer Experience:** User-friendly platforms and data-driven insights personalize experiences, leading to increased customer satisfaction and loyalty.

- Data-driven Decision-making:** Comprehensive data analytics empower informed strategic planning and resource allocation, maximizing the effectiveness of each value chain activity.

- Sustainable Competitive Advantage:** Img's robust infrastructure enables it to adapt quickly to changing market landscapes, outpacing competitors, and maintaining its market leadership position.

Looking Ahead: Continuous Improvement & Innovation

Img remains committed to continuous improvement and innovation in its firm infrastructure. This commitment will involve:

- Further Integrating AI & Automation:** Continued investment in AI-powered solutions will further enhance operational efficiency and personalize customer service.

- Expanding Logistics Network:** Strengthening the logistics network will enable Img to reach a broader customer base and improve delivery speeds, further enhancing customer satisfaction.

- Talent Acquisition & Retention:** Attracting and retaining top talent will remain a key focus area, ensuring that Img has the necessary expertise to drive its future success.

By continuously refining its firm infrastructure, Img ensures its long-term sustainability and positions itself to capitalize on emerging opportunities within the ever-evolving healthcare landscape.

2.Human Resources Management

Talent Acquisition and Recruitment:

It's critical to draw in and hire qualified workers from healthcare, technology, and related fields. Employing chemists, medical specialists, tech specialists, and other personnel essential to the business's operations falls under this category. To guarantee a varied pool of talent, they make use of a variety of offline and online recruitment channels.

Skill Development and Training:

Programs for skill development and ongoing education are crucial, particularly in the fast-paced healthcare and technology industries. Providing training to keep staff members informed on new technologies, healthcare laws, and customer service. Encourage cross-functional training to improve the efficiency of communication between the technology and healthcare teams.

Healthcare Professionals:

Overseeing a group of medical specialists who provide online advice, validate prescriptions, and assist clients with medical-related inquiries. Making certain that medical personnel follow applicable laws and ethical guidelines.

Inclusion and Diversity:

Encouraging a diverse and inclusive work environment that considers the various needs of stakeholders and clients. Putting into effect laws and procedures that promote inclusivity and equality.

Monitoring Performance:

Defining performance measures and carrying out frequent evaluations of performance. Connecting performance targets to both personal career development and the overarching goals of the organization.

Value addition

Flexible Work Arrangements:

Considering the demands of technology roles and healthcare services, offer flexible work arrangements

whenever feasible to meet the varied needs of your staff. Accept hybrid work models that strike a balance between the advantages of remote work and the necessity of in-person collaboration.

Employee Engagement:

Putting plans into action to improve worker happiness, job engagement, and general well-being. Arranging frequent feedback meetings and questionnaires to learn about the suggestions and concerns of the workforce.

Technology Development

Img's current success lies in efficiently managing its primary activities, particularly operations. However, to remain competitive and unlock further growth, the company can invest in technology development for secondary activities, enhancing its value proposition and customer experience. Here are some potential areas for tech development:

AI-powered Personalization:

- Developing an AI-driven recommendation engine: This can recommend relevant medicines, healthcare products, and services based on individual customer profiles, purchase history, and health data.
- Personalizing the user experience: This can involve tailoring the app interface, content, and promotions to individual preferences and needs.
- Utilizing AI chatbots for personalized health support: These chatbots can answer common health questions, provide medication reminders, and offer personalized health tips.

Advanced Data Analytics and Insights:

- Leveraging data analytics to optimize marketing campaigns: This can involve analyzing customer data to identify target audiences, create personalized ads, and track campaign performance.
- Utilizing data to predict demand and optimize inventory management: This can help Img avoid stockouts and improve operational efficiency.
- Developing predictive healthcare models: These models can analyze customer data to identify potential health risks and recommend preventative measures.

Telemedicine and Remote Healthcare Services:

- Expanding telemedicine services: Img can offer online consultations with specialists in various fields, improving access to healthcare beyond medication delivery.
- Developing remote monitoring solutions: This can involve wearable devices and sensors to track vital signs and health data, allowing for remote diagnosis and treatment.
- Integration with medical records and health platforms: This can provide a more holistic view of a patient's health and enable seamless data exchange between healthcare providers.

Blockchain-based Supply Chain Management:

- Implementing blockchain technology to track and verify the origin of medicines: This can enhance transparency and combat counterfeit drugs in the market.

- Optimizing logistics and delivery through blockchain-based smart contracts: This can automate and streamline the delivery process, improving efficiency and reducing costs.
- Using blockchain to manage patient data and medical records: This can provide secure and tamper-proof storage of sensitive health information.

Developing Educational and Interactive Content:

- Creating engaging and informative medical content: This can include articles, videos, and infographics on various health topics, empowering patients to make informed decisions.
- Developing interactive tools and quizzes: These can help users learn about their health and assess their personal health risks.
- Building a community platform for patients to connect and share experiences: This can provide support and encouragement for individuals managing chronic conditions or health concerns.

4.Procurement

4.1.Sourcing:

- Img establishes direct relationships with pharmaceutical companies and authorized distributors to ensure:
- Genuine medicines: Sourcing directly from manufacturers and authorized distributors minimizes the risk of counterfeits.
- Quality control: These partners adhere to strict quality standards and regulations.
- Competitive pricing: Direct sourcing allows for better pricing negotiations and cost optimization.

4.2Supplier Management:

- Img implements effective supplier management practices to ensure:
- Reliable supply: They maintain strong relationships with key suppliers and build contingency plans for potential disruptions.
- Quality management: Regular supplier audits and performance evaluations ensure consistent quality standards.
- Collaborative partnerships: Img works closely with suppliers to optimize supply chain processes and improve efficiency

4.3Inventory Management:

- Img utilizes advanced inventory management systems to:
- Optimize stock levels: They utilize demand forecasting and analysis to maintain sufficient stock without unnecessary surplus.
- Minimize stockouts: They implement automated replenishment systems and real-time inventory tracking to prevent stockouts and ensure timely delivery.
- Reduce warehousing costs: Efficient inventory management optimizes warehouse space utilization and minimizes storage costs.

4.4Procurement Technology:

- Img leverages technology to:

- Automated procurement processes: Streamlining order placement, invoice processing, and payment processes.
- Real-time data analytics: Gaining insights into supplier performance, inventory levels, and market trends.
- E-procurement platform: Facilitating efficient communication and collaboration with suppliers.

4.5 Cost Optimization:

- Imag constantly seeks ways to optimize procurement costs through:
- Negotiating better prices: Utilizing their purchasing power to leverage discounts and favorable terms.
- Consolidating orders: Combining orders from different locations to reduce supplier costs.
- Exploring alternative suppliers: Identifying and evaluating new suppliers for competitive pricing and quality.

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