



Speed vs. Safety: Reimagining Food Delivery in India's Q-Commerce Era

Authored by:

Arya Pise, Consultant, Frost & Sullivan

Prepared for:

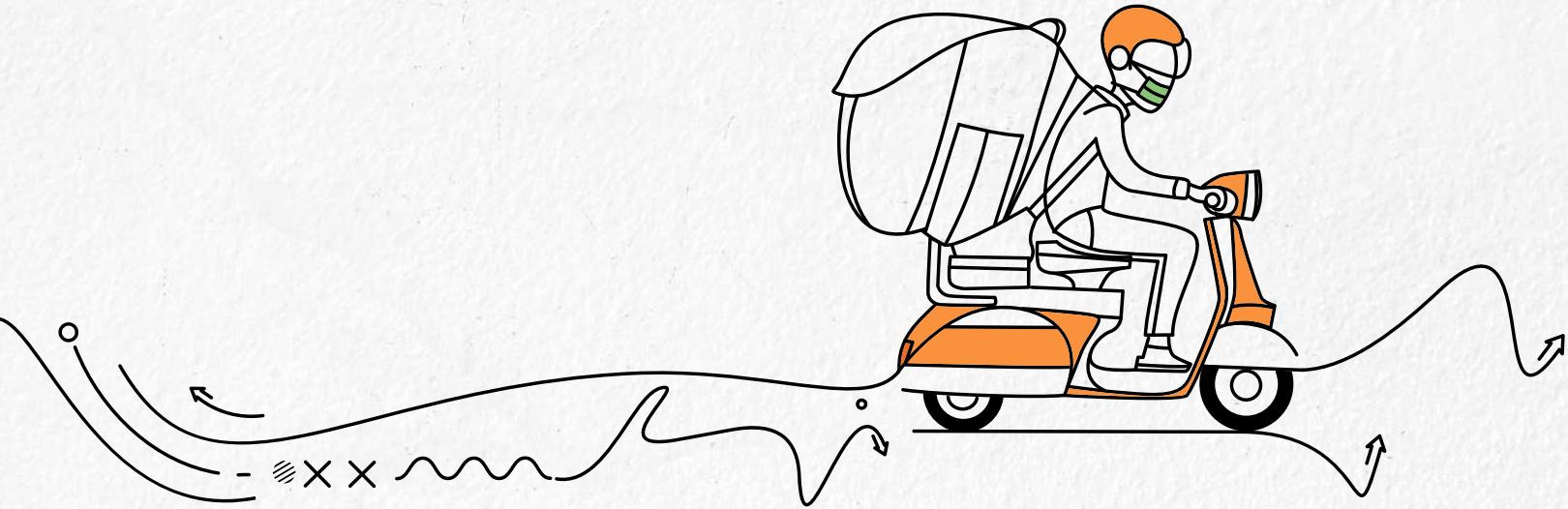


Connecting India for a Safer Food



CONTENTS

- 3** EVOLVING LANDSCAPE OF QUICK COMMERCE & FOOD DELIVERY IN INDIA
- 4** ROLE OF FOOD SAFETY IN QUICK COMMERCE – FOOD DELIVERY IN INDIA
- 6** CURRENT REGULATIONS (FSSAI) IN INDIA FOR FOOD BUSINESS OPERATORS
- 7** WHAT'S DRIVING THE FUTURE OF FOOD DELIVERY?
- 9** DEBATE OF SPEED VS SAFETY IN FOOD DELIVERY
- 10** CHALLENGES & BARRIERS FOR THE INDUSTRY
- 11** KEY INITIATIVES BY GOVERNMENT AND THE PUBLIC SECTOR IN INDIA
- 12** WAY FORWARD FOR THE INDUSTRY
- 14** GROWTH PIPELINE ENGINE





Evolving Landscape of Quick Commerce & Food Delivery in India

In India, a few decades ago, it was unimaginable to order food, groceries, or medications and have them delivered before you had brewed your coffee. With the rise of e-commerce, the buying or selling of goods over internet, Quick Commerce is rapidly transforming India's last-mile delivery and retail environment and is a game-changer in the e-commerce industry.

Quick Commerce or Q-commerce is an e-commerce model that focuses on speedy product delivery, frequently within 10 to 30 minutes. It is distinguished by a focus on convenience, proficient logistics, and hyper-local fulfillment. Quick commerce responds to the increased need for speed and convenience among consumers. It is also disrupting established retail models, driven by the wide availability of mobile internet and the rapid growth of online buying.

As a result of COVID-19 and the measures that followed - lockdown and social isolation, consumers shifted their spending from non-essential to essential categories, which led to a surge in quick commerce, particularly for groceries and perishables. Quick commerce initially began with delivering ready-made or prepared food, but today it caters to a vast range of goods, such as groceries, gifts articles, flowers, beauty products, pharmaceuticals, and electronic gadgets.





According to Statista, the revenue in the Quick Commerce market is projected to reach USD 5.38 billion in 2025. Revenue is expected to show an annual growth rate (CAGR 2025-2030) of 15.54%, resulting in a projected market volume of USD 11.08 bn by 2030.

The top three platforms that dominate quick commerce in India include the likes of Zepto (delivery within 10 minutes), Swiggy Instamart (delivery within 15-30 minutes), and Blinkit (formerly Grofers) regularly promise delivery within 10-20 minutes, making them industry pioneers. These platforms have customized their offerings to deliver daily essentials & groceries with the promise of efficiency and speed. Other players include Dunzo Daily, Country Delight, Big basket and so on. In food delivery space, platforms like Swiggy and Zomato have become technological trailblazers and household names, with both making waves as few publicly listed meal delivery startups worldwide.

These companies offer a range of customer-centric services, such as healthy food options, large order fleets, food on the train, subscription/different section for everyday customers, value seekers section, cart comparisons, eco-saver for environmentally friendly deliveries and so on.

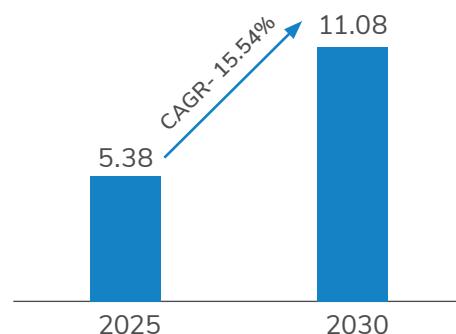
Role of Food Safety in Quick Commerce – Food Delivery in India

With the rapid growth of Quick Commerce & food delivery platforms, accountability for fresh food, quality, and safety of food has increased. Food safety is essential for protecting public health, sustaining business reputation, establishing trust within the consumers.

Food safety in online deliveries necessitates an integrated approach that includes tamper-proof packaging, appropriate temperature management during transit, and stringent hygiene guidelines for both food preparation and delivery staff. With packaged food products-list of ingredients, shelf life, and allergens is a must.

Regulatory agencies like Food Safety and Standards Authority of India's (FSSAI) are essential in establishing the guidelines. E-commerce and fast commerce businesses must adhere to the FSSAI food safety rules and standards. Customers can also help by confirming delivery times for perishable goods and looking for FSSAI licenses/registrations.

Q-Commerce Revenue in India (USD Billion)



Source- Statista, Frost & Sullivan Analysis



Some of the Key Aspects of Food Safety in Quick Commerce are:



Consumer Health:

- ▶ Unsafe food can affect public health by causing foodborne infections which can range from minor illnesses to serious medical issues.
- ▶ By ensuring safety, these risks are reduced, ensuring society's well-being.



Business Reputation

- ▶ Food safety issues may severely affect a company's reputation, resulting in a drop in customers and therefore monetary losses.
- ▶ A company's competitive edge and brand image improve with greater safety compliance.



Regulatory Compliance

- ▶ Adherence to policies aids in preventing legal action and maintaining business operations.
- ▶ The FSSAI enforces certain rules, such as mandatory food product labeling, shelf life guidelines, ingredient labelling and so on.



Loyalty

- ▶ When placing online orders, consumers are placing a higher priority on food safety and quality, therefore loyalty and trust are essential for platforms that facilitate rapid commerce.





Current Regulations (FSSAI) in India for Food Business Operators

Food business operators (FBOs) are subject to regulations by the Food Safety and Standards Authority of India (FSSAI) to ensure food safety and compliance with established standards. The agency plays a pivotal role in formulating food safety rules and overseeing their implementation across India. Depending on their size and type of operation, FBOs, including those involved in food manufacturing, processing, transportation, and sales, or any other commercial activity related to food must obtain an FSSAI license or registration.

Key Regulations for food business operators include: -

- ▶ **Licensing and Registration:** FSSAI requires all FBOs, irrespective of size, to register or acquire a license. The yearly revenue of the company and the type of business activity determines the kind of licensing (central or state).
- ▶ **Labeling and Display:** Specific information, such as the food's name, ingredients, and shelf life, must be written on food packaging labels.
- ▶ **Sanitary and Hygiene Practices:** FBOs are required to follow sanitary and hygiene regulations, which include handling, storing, and preparing food in the right way.
- ▶ **Claims and Advertising:** FBOs are required to abide by advertising laws, guaranteeing that statements on their food items are truthful and not deceptive.
- ▶ **Food Standards:** According to the FSSAI, food products must adhere to a number of rules and guidelines, including those pertaining to contaminants and food additives.
- ▶ **Food Distribution and Recovery:** The recovery and distribution of excess food are likewise covered by regulations.
- ▶ **Food Safety Management Systems (FSMS):** Large food processors and other FBO types may need to implement and manage an FSMS.

Apart from this food delivery services must make sure that the restaurants they list adhere to food safety laws under the FSSAI Food Safety and Standards Act. However, these platforms not only serve as a conduit between customers and restaurants; they are also indirectly responsible for ensuring food safety during delivery.

Additionally, the FSSAI has a strong system in place to address customer grievances and concerns. Through different channels, including the web portal and mobile app, the FSSAI Helpline, Twitter, Facebook, and others, consumer complaints are primarily directed to the Food Safety Connect Portal, which is a component of the online Food Safety Compliance System (FoSCoS).



Recently, food delivery e-commerce companies have been mandated by the FSSAI to make sure that the products they provide have at least 30% or 45 days' shelf life. To keep their 10-minute delivery promise, it also warned the FBOs that they cannot disregard current food safety regulations.

Food delivery platforms are also subjected to an additional layer of regulation under the Consumer Protection (E-Commerce) Rules 2020. These regulations require that food products be accurately represented, including information regarding allergens and ingredients. Also, a strong grievance redressal procedure is required for customer complaints.

What's Driving the Future of Food Delivery?

Hyperlocal delivery, cloud kitchens, sustainable business practices, drones-based delivery, and contactless delivery are key trends to look out for in the food delivery industry.



DIGITALIZATION OF FOOD SAFETY MANAGEMENT:

Digitalization of food safety management is an emerging trend in Food & Beverage industry. Blockchain, Artificial Intelligence (AI), and the Internet-of-Things (IoT) are just a few of the initiatives being used by the Food Safety and Standards Authority of India (FSSAI) to actively promote the digitalization of food safety management. These developments are intended to increase supply chain transparency, streamline workflows, and improve food safety.

Food Safety Compliance System (FoSCoS) of FSSAI facilitates application, registration, licensing, and compliance procedures for food businesses. Erstwhile **Food Licensing & Registration System (FLRS)** used to enable online licensing and registration, leading to a dynamic database of licensed and registered food businesses has been replaced with **FoSCoS**. To automate procedures, analyze data, and anticipate any risks, FSSAI is integrating AI and IoT technology.



CONTACTLESS DELIVERY:

Since the COVID-19 epidemic, contactless delivery has become the new norm. Contactless delivery will keep evolving due to technological breakthroughs and rising consumer demand for safety and convenience. While utilizing technology like artificial intelligence (AI) and drones to make delivery operations more sustainable and effective, businesses will concentrate on improving customer experience and enhancing features like digital proof of delivery and real-time tracking.



TRANSPARENCY & CLEAN LABEL - With consumer awareness, Food business operators need to be ready to give details on their products, such as ingredient lists, source information, and processing techniques. Consumers are preferring natural & known ingredients and this trend will continue for the coming years. **Blockchain Technology is being used to track** food products from farm to table.



HYPERLOCAL DELIVERY TREND, i.e., business delivering food from local restaurants within a specified region is here to stay as consumers prefer speed and convenience and do not mind paying a little extra for the same. Hyperlocal delivery also supports local businesses in the case of restaurants, cafes and food outlets. **Zomato** is a popular food delivery platform across India that also offers hyperlocal grocery delivery at some locations through Blinkit. **Swiggy** is another major food delivery app, with a focus on quick food deliveries. They also have another business vertical-Swiggy Instamart for delivering groceries and essential items.



SUSTAINABILITY - As more and more companies design sustainability programs and publish yearly reports detailing their success, sustainability initiatives are gaining traction in the food industry. Additionally, while considering a restaurant or food business, customers are increasingly taking sustainability and food safety into account. This is a result of the younger generation of customers being far more aware of how their food choices affect the environment. Companies are encouraging green deliveries with the use of electric vehicles. Companies such as Swiggy & Zomato are reducing plastic waste by ditching single use plastics and using reusable packaging. Local vendors prefer to reduce the carbon footprints. With growing sustainability trends, companies are also funding global environmental projects to offset the carbon footprint of packaging & delivery.



Debate of Speed Vs Safety in Food Delivery

Quick commerce businesses like Swiggy Instamart-Bolt, Zepto, and Blinkit by Zomato have emerged, promising to bring groceries and meals in as little as ten minutes.

Zomato owned Blinkit (grocery quick-commerce subsidiary) launched "Bistro" in December 2024 aiming to provide "snacks, meals and beverages delivered in just 10 minutes." Similarly, Zepto Cafe was also launched in December 2024 aiming for lightning-fast delivery of coffee, snacks, and ready-to-eat meals in ten minutes. Starting with metro cities, these platforms are aiming at Tier I & II cities for their expansion.

As 10 minutes delivery services are expanding in different categories and in Tier I & II cities, companies are experiencing enhanced client loyalty and satisfaction, competitive advantage in the market for quick gratification, and the possibility of larger profit margins as a result of lower returns. Additionally, it simplifies inventory control and logistics, enabling quicker deliveries and effective order processing.

Even though 10-minute delivery services are expanding quickly and offer unmatched convenience, there are serious concerns regarding the actual cost of this speed. There is a growing number of difficulties that are frequently disregarded beneath the appeal of rapid satisfaction. Keeping up with the expectations of quick delivery commerce platforms while managing stress, safety hazards, and declining profitability is all part of the drive to reach ultra-fast delivery schedules.

Delivery partners may take unsafe risks, such as speeding, taking shortcuts, and working in unsafe conditions, as a result of the pressure to fulfill quick delivery deadlines. For delivery workers, this can lead to accidents, fatigue, and stress. They may also experience low pay and little protection or compensation against any mishaps. Additionally, because of increased delivery fleet, for quick deliveries, increased traffic, air pollution, and carbon emissions, are exacerbating climate change. In addition to possibly compromising quality or safety, striving to compete and fulfill timelines for delivery can result in unsustainable practices.

With all these drawbacks, it's time to think about the sustainability of these 10 – minutes delivery business. Unquestionably, it is convenient to have what we want & when we want , but this convenience shouldn't come at the expense of the environment, health, or safety. Online platforms ought to implement delivery models that provide consumers with the choice between eco-friendly and quick solutions, rewarding businesses that put sustainability first. To reduce the pressure on delivery drivers to sacrifice safety, they must also establish more equitable pay plans for them that do not link their income to delivery speed. For rider safety, as at Mar-24, ~19k delivery partners have been trained as emergency first responders by Zomato. The Shelter Project, which was started in FY23 by Zomato, gives all gig workers access to rest areas where they can relax while



delivering and use basic facilities & it ran a nationwide network of 373 rest stops as of March 2024. The emergency ambulance network's average response time had decreased to less than 15 minutes as of March 2024.

In this evolving ecosystem, regulatory bodies also play a crucial role. To protect the welfare of consumers, they should impose laws that guarantee equitable pay structures for delivery drivers as well as more stringent guidelines for food safety and cleanliness.

Challenges & Barriers for the Industry

Challenges	Solutions
Complex Supply Chain with multiple players as producers, suppliers, distributors, and delivery agents.	Building trustworthy relations with all the stakeholders along with performing assessments for vendors, producers, etc.
Temperature-Controlled Nature of Products such as Meat, dairy, frozen foods, and other edibles which are heat-sensitive, and they may spoil or develop bacteria if they are subjected to warm conditions while being transported, stored, or prepared.	<ul style="list-style-type: none">▶ Cold Chain Logistics: Using insulated packaging and refrigerated trucks to maintain the proper temperatures for perishable goods.▶ IoT Sensors: Real-time temperature tracking while being transported and stored.
Contaminant Transfer: Food items can get contaminated at different stages, such as food production, packing, distribution processes- including delivery, transportation, and even sale. Food-borne infections can arise when raw and cooked meals are transported together.	<ul style="list-style-type: none">▶ Wherever appropriate, using blockchain technology to improve food traceability will boost customer confidence across the supply chain.▶ Conduct a remote inspection of a vendor's location to verify compliance with food safety regulations.
Packaging issues such as contamination & plastic waste.	<ul style="list-style-type: none">▶ To reduce the chance of contamination, use food-grade, tamper-proof packaging.▶ To balance sustainability and safety, use biodegradable alternatives.
Low Barrier to entry	Business to build trustworthy brand through quality food offerings for repeat customers. Feedback tools such as calls and pictures can help for redressal of complaints.



Key Initiatives by Government and the Public Sector in India

A. Government Initiatives:

Through initiatives like training programs for last-mile delivery staff, enhanced compliance for e-commerce food business operators (FBOs), and increased scrutiny of product shelf life, the Indian government, through the Food Safety and Standards Authority of India (FSSAI), is actively addressing food safety concerns in the quick commerce sector. To guarantee food safety in the e-commerce food ecosystem, the FSSAI is also focusing on licensing, registration, and routine inspections.

The Department of Consumer Affairs in consultation with all relevant parties, has introduced a "Safety Pledge," which is an e-commerce platform's voluntary public promise to uphold consumer rights and guarantee the safety of products sold online. This program, which is in line with international best practices, improves e-commerce consumer safety. 13 significant e-commerce businesses, including food aggregators like Zomato and Swiggy, signed the Safety Pledge on National Consumer Day 2024 to guarantee consumer safety.

B. Food Delivery Platform Initiatives:

Zomato has multiple safety initiatives to bring health and safety knowledge and innovations to restaurant partners. To improve food safety and cleanliness on its platform, Zomato has put in place several measures. These include the "Food Rescue" program, which attempts to minimize food waste while maintaining quality, food safety supervisor training, and hygiene audits. In an effort to stop the spread of diseases, Zomato has also implemented tamper-proof packaging and urged eateries to adhere to WHO regulations.

The "Swiggy Seal" program is one of Swiggy's food safety initiatives, which attempts to improve food quality and hygiene standards among its partner food outlets. In addition to providing assistance, such hygiene audits and informative webinars, to help businesses improve their food safety procedures, this initiative analyzes validated consumer input to pinpoint areas that need improvement. Furthermore, Swiggy offers professional hygiene audits at special prices through partnerships with FSSAI-accredited organizations. Additionally, Swiggy provides assistance in areas like hiring a professional photographer and procuring kitchenware.



Way Forward for the Industry

The highest standards of food safety must be maintained if the online food delivery industry to continue thriving. Given the extended time between food preparation and consumption, ensuring food safety is critical in online food delivery, necessitating the maintenance of quality and hygiene throughout the process. This not only protects customer health, but also fosters customer loyalty and trust, safeguards brand reputation, and ensures compliance with regulatory requirements.

Kirana stores should leverage online platforms for order management, offer personalized services, and collaborate with delivery services to enhance their operational efficiency and remain competitive. This approach also benefits customers by ensuring access to fresh food products thereby upholding the hygiene & safety of packaged food items.

Going forward, companies must take greater responsibility for ensuring the safety of food delivered to consumers. Online delivery platforms should be mandated to ensure that only restaurants with valid FSSAI licenses are permitted to register on their platforms and must ensure that regular audits are conducted to uphold food safety standards. Additionally, delivery platforms should implement strict protocols to ensure delivery partners' food bags are routinely cleaned and sanitized. Risks of contamination can be decreased by following a washing and sanitization schedule regularly.

Food delivery platforms should be required to carry out health and safety audits to evaluate adherence to food safety regulations prior to listing any new eateries. This could involve making sure that digital standards, such safe delivery methods, are followed as well as doing physical inspections.

Regulatory bodies such as FSSAI, Department of Consumer Affairs need to be more stringent in case of adherence to the rules.

According to the Minister of State for Consumer Affairs, the total number of complaints filed by customers against online food delivery apps with the FSSAI from 2020-21 till 2024-25 are 21042. These complaints were pertaining to food safety issues such as substandard or unsafe food, adulteration, labeling defects, and misleading claims and advertisements. For the same period, 1500 licenses were cancelled and 853 were suspended along with a fine of Rs.210 crore imposed on various food outlets.

Regulatory bodies should additionally focus on informing customers of their rights under the FSSAI and E-Commerce regulations. Campaigns to raise consumer awareness can encourage systemic change by enabling them to report infractions and demand greater standards.

All the stakeholders - be it restaurants, delivery agents, online delivery platforms, and regulatory bodies, must remain committed to delivering safe food to consumers. Delivery platforms, in particular, should play a central role in bridging the gaps across the food safety supply chain to ensure end-to-end compliance and accountability.



DISCLAIMER

Frost & Sullivan is not responsible for any incorrect information supplied by companies or users. Quantitative market information is based primarily on interviews and therefore is subject to fluctuation. Frost & Sullivan research services are limited publications containing valuable market information provided to a select group of customers. Customers acknowledge, when ordering or downloading, that Frost & Sullivan research services are for internal use and not for general publication or disclosure to third parties. No part of this research service may be given, lent, resold, or disclosed to noncustomers without written permission. Furthermore, no part may be reproduced, stored in a retrieval system, or transmitted in any form or by any means—electronic, mechanical, photocopying, recording, or otherwise—without the permission of the publisher.



GROWTH PIPELINE ENGINE™



Frost & Sullivan's Growth Pipeline Engine™ supports clients through all 5 phases of growth: from developing, evaluating, and prioritizing opportunities to building and implementing go-to-market strategies and optimizing opportunities. The objective of this study is to be a client's first step on a growth journey.

To get in touch with our Growth Advisory Experts, E-mail: nimisha.iyer@frost.com

YOUR TRANSFORMATIONAL GROWTH JOURNEY STARTS HERE

Frost & Sullivan's Growth Pipeline Engine, transformational strategies and best-practice models drive the generation, evaluation, and implementation of powerful growth opportunities.

Is your company prepared to survive and thrive through the coming transformation?

Join the journey. 