



## Big Change is Afoot:

Here's How ONDC Will Create  
a Level-Playing Field for  
Businesses

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# Overview: What's all this noise about ONDC?



The Indian online market is readying itself for a [digital transformation](#). Perhaps 'revolution' is the better word to describe this change. In any case, the shift in the Indian e-commerce infrastructure will be seismic, though how far these waves will travel is yet to be seen.

ONDC, or Open Network for Digital Commerce is a private non-profit Section 8 company that has

been established by the Government of India (GoI) in a bid to create a public digital infrastructure that will open up access and enhance opportunities to the country's e-commerce ecosystem. Founded on December 31, 2021, ONDC falls under the the Department for Promotion of Industry and Internal Trade and is set to follow open protocols in the form of open registries and open network gateways to enable exchange between consumers and providers.

According to this [press release](#) by the Ministry of Commerce & Industry, the ONDC protocols are meant to standardize operations such as inventory management, order management and order fulfillment for all businesses. This bears good news for small businesses, who will now be able to use any ONDC compatible applications instead of having to adhere to platform specific policies.

What does this mean for e-commerce giants such as Walmart-owned Flipkart and Amazon? Should they be panicking? Will this move democratize India's online market for both buyers and sellers? This e-book will explore the impact ONDC is set to create by digitizing entire value chains, and bringing standardization and transparency to business operations. We will also explore how the customer's shopping experience will change under ONDC, how e-commerce businesses will be impacted, whether this move will bring in new levels of efficiency in logistics, and how a dispatch management platform can help you stay ahead of the curve.

# India's growing digital economy

According to [EY's India Trendbook 2022](#), one of the fastest growing sectors in India is internet and e-commerce. In fact, India's consumer digital economy is expected to be an \$800 billion market in 2030, registering a ~10x growth from 2020. The new-age digital customer is driving this growth, partaking in online e-commerce activities, making use of digital payments, and making India one of the fastest growing digital economies in the world.

## DIGITAL INFRASTRUCTURE ACROSS KEY GROWTH ECONOMIES

Digital Economy Metrics	USA	China	SEA	India
Internet penetration	89%	72%	64%	43% Huge penetration potential
Internet users growth(2016-21)	8.3%	43%	33.3%	124% Bharatnet to drive growth
Smartphone growth 2016-21 (no. of connections)	17%	30.7%	55.3%	132.2% Highest-ever smartphone revenue
Real-time online transactions 2020	1.2b	15.7b	5.6b	25.5b Highest real-time transactions globally in 2020
Retail e-commerce growth 2021	17.9%	18.5%	14.3%	27.0% fastest growing ecommerce market; among top 10 in sales
Network Readiness Rank*	4	29	NA	67 Among top 3 countries in lower middle income group

Source: ACI Worldwide, World Bank, InternetWorldStats, Emarketer, TRAI, EY Analysis

[This report](#) shows that 57% Indians now feel comfortable sharing their personal information with a company when performing an online transaction and 48% are comfortable sharing it through social networking websites as well. In a global survey, 53% consumers said they believed that privacy and security risks around how their data is shared outweigh the benefits.

But the digital way of doing business is not recent. Even before a black swan event such as the pandemic came into the picture, India was shopping online, carrying out online transactions, investing in edtech and telemedicine, and spending hours on over-the-top (OTT) media.

The pandemic caused a disruption in supply chains and the dependency on digital commerce became crucial. Entrepreneurs driven by innovation came into the picture, and digital infrastructure grew rapidly. If you didn't race with the growing digital economy, you were left behind.

So, businesses are quickly taking the digital path to growth. It's worth noting that [50% of corporates in the country have a digital strategy in place](#), there is a [2x growth in micro businesses actively transacting online](#), and [75% kirana stores in metros are working towards going online](#).

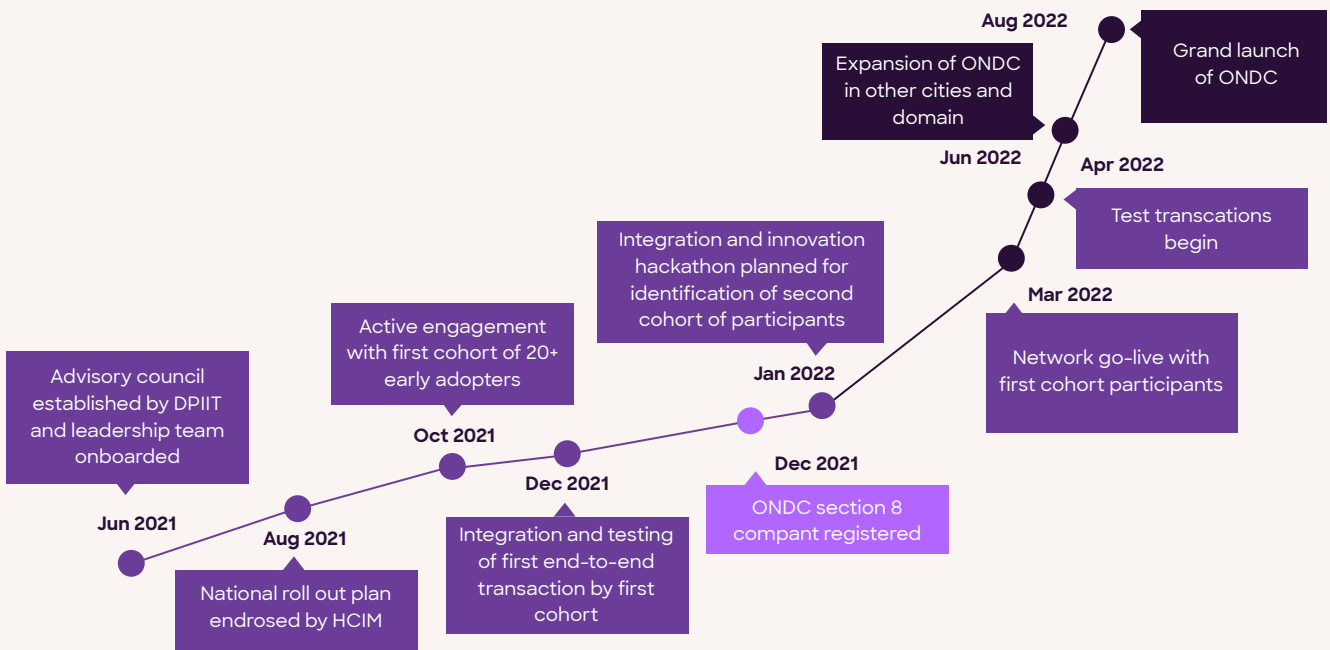
Not only this, the Government of India has quickly adapted to carry out e-governance initiatives. As of July 2022, the Unified Payments Interface (UPI) network has clocked [6.28 billion transactions worth \\$133.13 billion](#). It comes as no surprise then that the country can count itself among the leading digital economies and has become a honeypot for investors from across the world.

## What is Open Network for Digital Commerce?

Before we get into what ONDC is and what it aims to do, we should first discuss what 'open network' or 'open source' means. When a technology or code is made available for everyone to use, redistribute and modify, it means it is an open source. For example, the android operating system is open source, which is why phone companies such as Samsung, Nokia and Xiaomi are able to modify it for their use. The Apple operating system, on the other hand, can neither be modified nor be legally used, making it a closed source.

The ONDC network has been established on an open protocol, with the help of open specifications and remains independent of any specific platform. Incubated by the Department of Promotion of Industry and Internal Trade (DPIIT) and the Quality Council of India, ONDC was incorporated as a private non-profit company to create a public digital infrastructure in India's e-commerce ecosystem.

It has rolled out in five cities—Delhi-NCR, Bengaluru, Shillong, Bhopal,, and Coimbatore. The plan is to launch in 100 cities and open it to the wider public in the abovementioned cities.



## How does an ‘open network’ operate?

Open Network for Digital Commerce (ONDC) is a network based on open protocol and will enable local commerce across segments, such as mobility, grocery, food order and delivery, hotel booking and travel, among others, to be discovered and engaged by any network-enabled application. Basically, any domain that can be cataloged can be transacted on the ONDC platform.



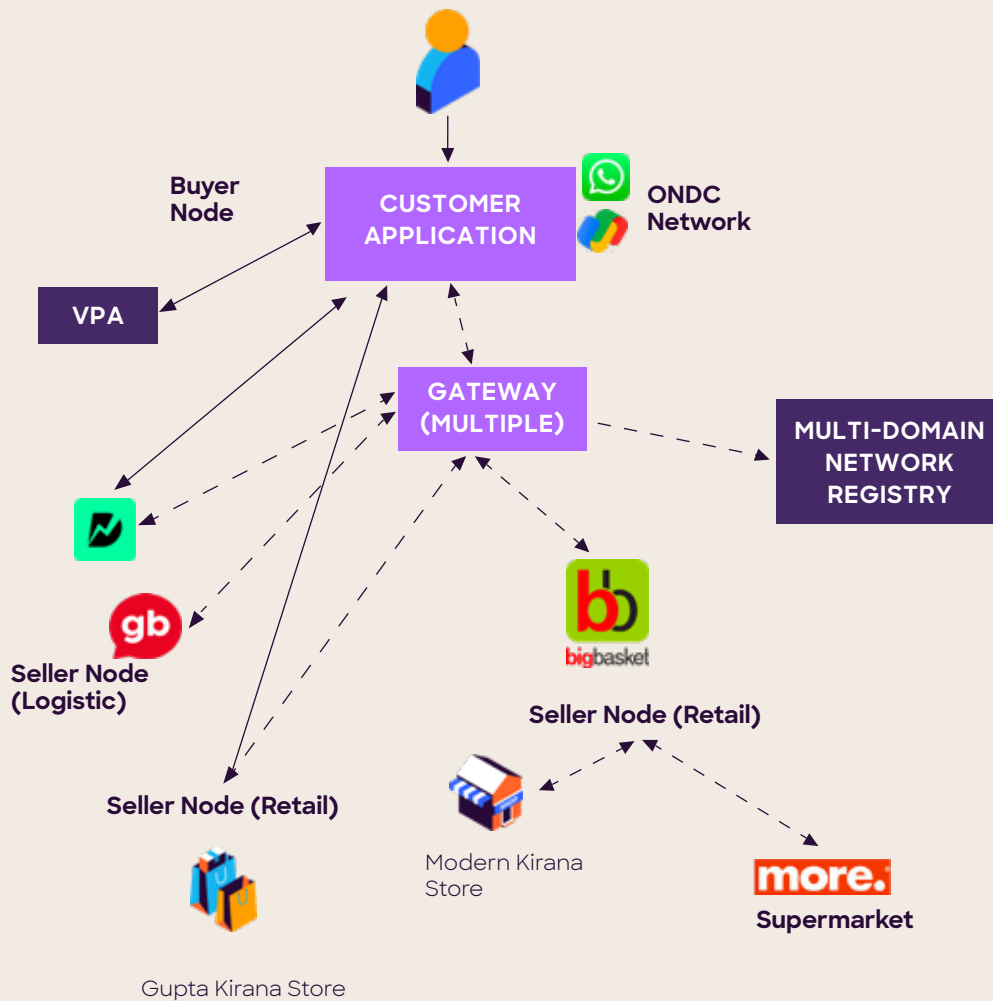
A person with short-term assignment in Kerala

Needs Identified	Today’s Solution	ONDC
Suitcase	Marketplace eg. Amazon	Add suitcase to cart
Flight ticket	Travel portal eg. Makemytrip	Add flight ticket Delhi-Kochi to cart
Service apartment	Accommodation portal eg. AirBnB	Add service apartment to cart
Basic Malayalam language knowledge	Google search > Call/email> confirmation	Add a 10-lesson introductory Malayalam language course to cart

4 checkouts on 4 platforms

1 checkout

An open network platform enables any buyer to interact with any seller. So each buyer and seller needs to register only once to be discoverable by the entire ONDC universe. Previously, between providers—public and private—and consumers, many platforms have existed in silos. ONDC will work as a connector between these platforms bringing a flow of value. Here’s an example of what a consumer’s journey can potentially look like:



All logos are used for illustrative purposes only

- Vijay logs onto a consumer application and searches for options to buy atta. The gateways will check the multi-domain registry and broadcast search to retailer seller nodes. The following search results are displayed to Vijay to choose from:
  - Gupta Kirana Store - Rs 50 (without delivery)
  - BigBasket (fulfilled by Modern Kirana Store) - Rs 150 (with delivery)

- Vijay places an order for atta through Gupta Kirana Store but doesn't opt for delivery. He searches for delivery services separately. The gateway will check the multi-domain registry and broadcast search to delivery seller nodes. Vijay is informed that Dunzo will deliver from Gupta Kirana Store at Rs 50 and Goodbox at Rs 70 in his pincode. Vijay selects Dunzo for delivery.
- Vijay is told through his consumer app that he can make payment through UPI or Cash on Delivery (COD). Vijay makes payment of Rs 50 through UPI via Virtual Payments Address (VPA) for atta from Gupta Kirana Store and Rs 50 for delivery via Dunzo.

#### THE ROLES OF NETWORK PARTICIPANTS ON ONDC CAN BE CATEGORIZED INTO FOUR BUCKETS:

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- **Retail Buyer Application:** Allows individual consumers to discover and transact with retailers or Kiranas. For example: Whatsapp and Google Pay.
- **Retail Seller Application:** Allows retailers or Kiranas to offer products and services to individual consumers. For example: BigBasket and Gupta Kirana Store.
- **Logistics Buyer Application:** Allows consumers and retailers to place orders for delivery services. So applications such as Whatsapp and Google Pay, play the role of a logistics buyer apps here. This could also be a BigBasket App or Gupta Kirana Store App.
- **Logistics Seller Application:** Allows logistics providers to offer delivery services to consumers and retailers i.e. Dunzo, Goodbox

Gateways are applications that will multicast the search request received from buyer app to all seller apps, based on criteria such as location, availability and other customer preferences etc.

Vijay is told through his consumer app that he can make payment through UPI or Cash on Delivery (COD). Vijay makes payment of Rs 50 through UPI via Virtual Payments Address (VPA) for atta from Gupta Kirana Store and Rs 50 for delivery via Dunzo.



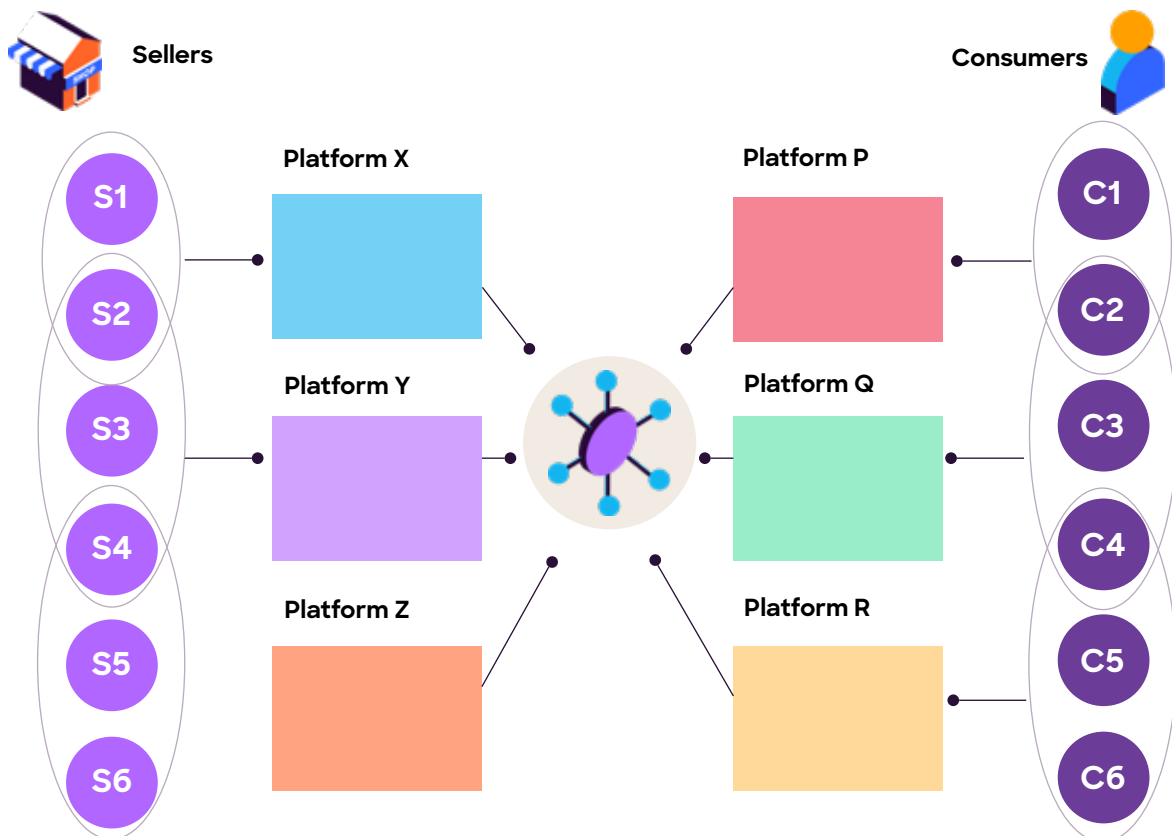
# What challenges will ONDC meet?

So, what is ONDC looking to do? It aims to empower local commerce across food and grocery delivery, hotel booking, mobility, among other segments with a network-enabled application. ONDC will democratize digital commerce in the country by creating new opportunities for micro, small and medium enterprises and putting an end to digital monopolies. By shining a light on small businesses it will provide equal opportunity to service providers as well as consumers.

The platform aims to create new opportunities, and curb digital monopolies by supporting micro, small and medium enterprises and small traders to make their way to online platforms. It is an initiative of the Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry.

As the figures above show, UPI has been a great success in the country. ONDC is modeled after the same platform—a neutral, open-network model where buyers and sellers can carry out transactions no matter the application they use. The ONDC network will allow them to make a purchase even if they aren't registered on the said platform.

## TRANSACTIONS ACROSS PLATFORMS



Source: <https://www.smartprix.com/bytes/a-guide-to-ondc-everything-to-know/>

Protocols will be set for cataloging, vendor match, and price discovery and transactions will be carried out via open Application Programming Interface (APIs). This is vastly different from the existing platform-centric model where buyers and sellers must use the same platform to carry out a transaction.

## Who is joining the bandwagon?

US-based tech giant Microsoft is the first multinational technology firm to join hands with India's ONDC platform. The CEO of Greyhound Research, Sanchit Vir Gogia, in this [report](#), said that Microsoft was entering the e-commerce space not as a retailer but as a tech stack provider, enabling those who fuel e-commerce.

Several other companies have come aboard the ONDC network, offering to buy, sell and offer logistics services. Paytm has entered the game as a buyer and Paytm E-commerce Private Limited (PEPL), the parent company of Paytm Mall even went as far as to [announce](#) that the company has turned its focus on ONDC to explore exports businesses.

Dunzo, which is backed by the Indian multinational conglomerate company Reliance, is coming in with its logistics services for hyperlocal deliveries. PhonePe, Zoho and Snapdeal are also in the process of finalizing deals.

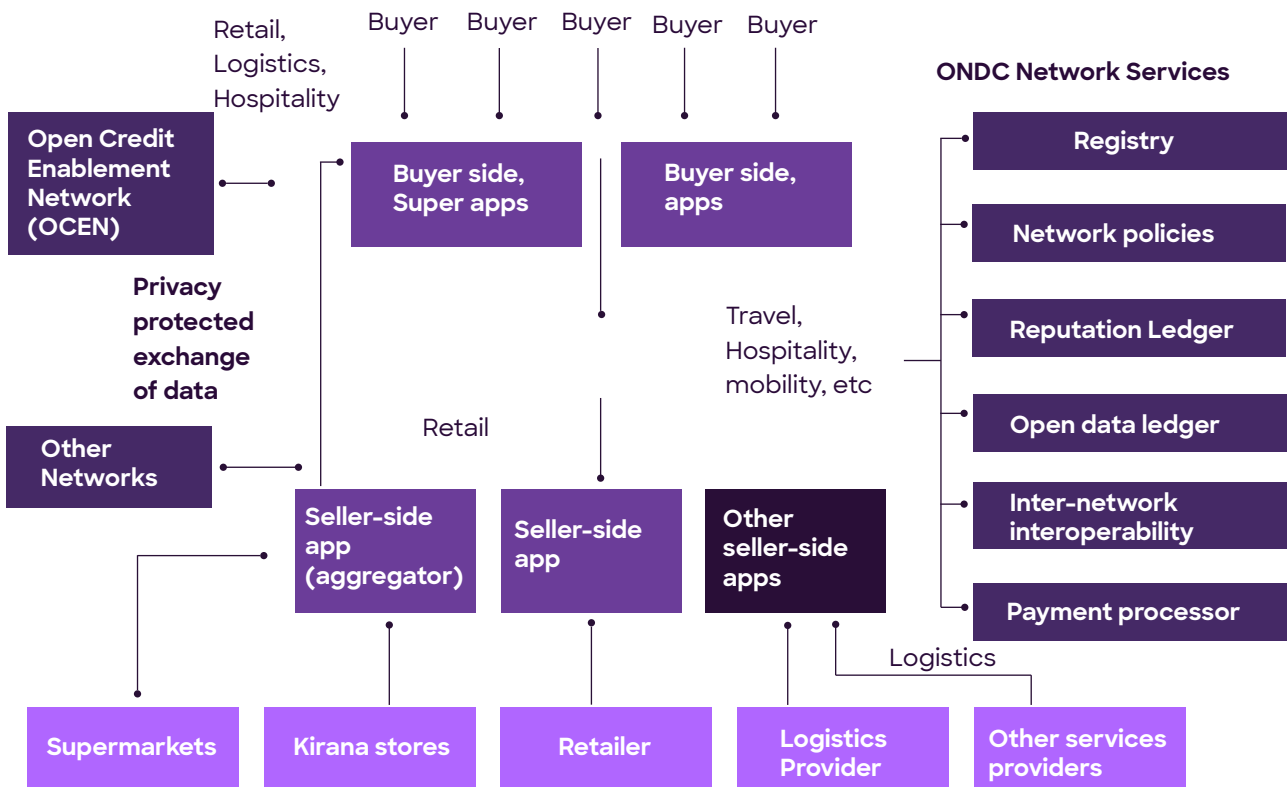
This is not it; a number of private sector banks have been quick to jump on the bandwagon as well. HDFC, Kotak Mahindra, Axis Bank, State Bank of India (SBI), and Punjab National Bank (PNB)—all have stakes in ONDC. Axis, HDFC, SBI and Kotak Mahindra have all invested [US\\$ 1.3 million each](#), holding 10,00,000 shares each in the non-profit company. What's more, Google, which has, up until now, been an aggregator of online listings, has been in the process of [integrating its shopping services with the network](#).

# Creating equal opportunity for all businesses



So what changes are afoot? For one, ONDC will make all businesses—big and small—more discoverable. After it is implemented and mandated, the platform’s inclusivity and interoperability will encourage new businesses to sell in a democratic space, bring efficiency in logistics operations and empower online retailers. All e-commerce companies will operate using the same processes and the rules of the game will be the same for all players. E-commerce giants will no longer be the only flag bearers of innovation and change.

## COMPONENTS OF OPEN NETWORK ENABLED BY ONDC



Source: <https://in.investing.com/analysis/open-network-digital-commerce--more-questions-than-answers-200517502>

Lightweight investment, transparency and a lower cost of business acquisition are all ways retailers can benefit from this change. Protocols set by ONDC aim to standardize operations such as cataloging, inventory management, order management and order fulfillment. Businesses will no longer need to adhere to a single platform's policies. Small businesses will be easily discoverable, and adoption of digital commerce networks will be encouraged.

India currently has about [1.2 crore](#) Kirana stores. These hyperlocal stores make up 80% of the retail sector and don't have a digital presence. Similarly, 4.25 crore of Micro, Small and Medium Enterprises (MSMEs) also face digital exclusion. The ONDC revolution will make such stores share the same stage as e-commerce giants. Digital penetration has also forever been an issue in the remote areas of the country. The Gross Merchandising Value (GMV) for the digital commerce retail market in India was [US\\$ 38 billion in 2020](#), which is only 4.3% of the total retail GMV in India and ONDC can help change that.

## Should e-commerce giants be panicking?

The full force of this revolution is yet to be seen and ONDC's goal is to dramatically step change e-commerce penetration throughout the country. Protests from large e-commerce firms have been made, especially by those who have invested in retail and development (R&D) and worked on deploying new technologies and processes. The government maintains that India's e-commerce market value, which is estimated to reach [\\$200 billion by 2027](#) will be significant enough for any and every type of business competitor.

The current Indian e-commerce market is largely dictated by the duopoly of Amazon and Walmart-owned Flipkart, both of which have spent a total of [\\$24 billion to capture 80 percent of the market](#). They run aggressive discounts on their websites and some sellers are preferred more than others. Neither do traditional retailers, nor global retailers wish to be locked out or priced out. A comparative market landscape is that of China where, under Beijing's stringent rules, hyperlocal businesses managed to thrive in an indigenously created ecosystem.

## To sum it up

Still in its formative stage, ONDC promises benefits for buyers, sellers and technology companies that were not possible before. Buyers gain single platform access to all domains, they get access to all sellers in each domain, faster hyper-local fulfillment, have wider options for price, delivery and other add-ons, all of which make for a unified experience.

The benefits for sellers are no less. They become discoverable by an entire buyer universe, have a low cost access to the complete value chain, can enjoy their autonomy; and have their own rules and conditions in place. There is also the promise of a portable network-wide reputation and increased profitability.

Technology companies can expect to maximize the value of their technology, monetize opportunity on transactions, and innovate their strengths. This market and community-led initiative is here to shake things up and one way or another, the face of the Indian E-commerce industry is going to change forever.

## Sources

<https://pib.gov.in/Pressreleaseshare.aspx?PRID=1814143>

<https://www.deccanherald.com/business/nandan-nilek-ani-plans-an-ecommerce-industry-free-from-amazon-s-control-1104602.html>

<https://www.ibef.org/industry/ecommerce>

<https://in.investing.com/analysis/open-network-digital-commerce--more-questions-than-answers-200517502>

<https://www.reuters.com/world/india/google-talks-join-indias-open-e-commerce-network-ondc-sources-2022-05-27/>

<https://www.india-briefing.com/news/what-is-the-open-network-for-digital-commerce-ondc-and-how-will-it-impact-ecommerce-in-india-23463.html/>

<https://economictimes.indiatimes.com/tech/technology/small-businesses-up-digital-quotient-kantar/articleshow/85195950.cms>

<https://pib.gov.in/Pressreleaseshare.aspx?PRID=1814143>

<https://economictimes.indiatimes.com/industry/services/retail/paytm-mall-announces-pivot-to-ondc-as-its-primary-focus-to-explore-export-opportunities/articleshow/91581483.cms>

<https://economictimes.indiatimes.com/tech/technology/microsoft-onboards-ondc-to-launch-shopping-app-for-indian-consumers/articleshow/93453428.cms>

<https://www.outlookindia.com/business/bhim-upi-google-pay-phonepe-clocks-6-28-billion-transactions-gears-up-for-greater-financial-inclusion-in-india-news-214024>

<https://www.indianretailer.com/article/operations/research/kirana-stores-transform-their-approach-to-daily-selling.a6904/>

<https://www.thehindubusinessline.com/info-tech/one-in-two-corporates-in-india-have-a-digital-transformation-strategy-in-place-report/article36665667.ece>

[https://assets.ey.com/content/dam/ey-sites/ey-com/en\\_in/topics/e-commerce/2022/ey-e-commerce-and-consumer-internet-sector-india-trendbook-2022.pdf?download](https://assets.ey.com/content/dam/ey-sites/ey-com/en_in/topics/e-commerce/2022/ey-e-commerce-and-consumer-internet-sector-india-trendbook-2022.pdf?download)



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