

DECODING ONDC

PERSPECTIVE FOR MARKETERS





Technology enables Commerce to be wherever the Consumer is. And so every interaction has a potential to lead to Commerce. Hence at Publicis Groupe, we believe that Commerce is now inseparable from any and all dimensions of Marketing and Business strategy. It can no longer be treated as a separate specialised vertical in Marketing. When we apply the India lens to this charter, it is critical that we do not miss out ONDC. The arrival of ONDC signals a new era in digital commerce and opens up exciting opportunities for consumers and brands alike. ONDC readiness requires cross functional capabilities in planning, technology, experience, content, discovery and commerce operations. While we have skilled teams to support our clients in these areas, it is critical that all marketers understand the implications on their business and brands. Through this report we will facilitate our clients with the right information to get started and leverage the opportunities presented by ONDC.

Anupriya Acharya

CEO, Publicis Groupe, South Asia



The success of digital public goods in identity, payments and social welfare disbursements in India is based upon two principles: trust in technology and value co-creation. ONDC aims to incorporate these principles to democratise e-commerce in India and revolutionise the e-retail, e-transactions, and logistics domains. This report hopes to guide stakeholders on the way to transform the e-commerce Indian landscape in a transparent and inclusive manner.



Arvind Gupta

ONDC Board Member,
Co-Founder & Head, DIF



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Bengaluru, September 30, 2022

There was a sense of anticipation all around at AtoZ Supermarket in Murugeshpalya, Bengaluru, on what otherwise would have been a regular Friday. Within minutes after opening, Deepak, the owner of AtoZ Supermarkets, received their first online order of the day. While Deepak is quite conversant with India's e-commerce, there was something special about this particular order.

For starters, the customer placing the order was likely to have used any of PayTM, SpiceMoney, or MyStore applications to place the order. The customer's request was made available in real-time to multiple registered seller nodes such as Bizom, Digiit, EnStore, eSamudaay, GoFrugal, GrowthFalcons, MyStore, SellerApp, Unengage, and UShop. Out of these, SellerApp had onboarded AtoZ Supermarkets' inventory and passed on this specific order.

Deepak quickly got to work and prepared the order for dispatch. Soon, a delivery executive from LoadShare (3rd-party logistics and delivery partner) reached the spot to pick the package for delivery. In just a short time, Deepak received a notification stating that the order had been delivered to the customer. "Et voilà! One more happy customer" he thought to himself! Deepak would go on to receive nine more orders till afternoon with the average gross merchandise value (GMV) being ₹150. Throughout the day, 150 orders in groceries and food and beverages (F&B) categories were placed across 16 pincodes in Bengaluru.

- With inputs from Tol' (ONDC Pilot in Bengaluru)

Welcome to the next evolution of e-commerce in India, enabled by the Open Network for Digital Commerce (ONDC). ONDC aims to democratise e-commerce by bringing multiple buyers, sellers, and gateway service providers on an open network to perform rule-based transactions.

In this joint report by Publicis Groupe and Digital India Foundation, we explore ONDC's capabilities, opportunities, and risks. Further, we look at ONDC from the eyes of brand leaders/managers and develop a perspective on how brands should leverage ONDC to optimise business outcomes.

1. State of e-Commerce in India

The convergence of data revolution, pandemic-fueled digital adoption, and the steady rise of entrepreneurs has brought the immense potential of India's digital economy to the limelight. In five years, India's data traffic has grown 60x and online shoppers have increased by 175%². With more and more Indian consumers and businesses adopting digital channels, the e-commerce and consumer internet sector is poised to witness rapid growth in the next three to five years.

Pioneering, new-age start-ups in sectors such as edtech, fintech, and online retail have challenged established conventions in recent years. As next-gen technology connects people and businesses, augmenting user experience and engagement has become pivotal. With the internet economy boosting productivity in numerous ways, this progress has eventually led to the birth of a new generation of relevant products and services.

Digital Infrastructure Across Key Economies

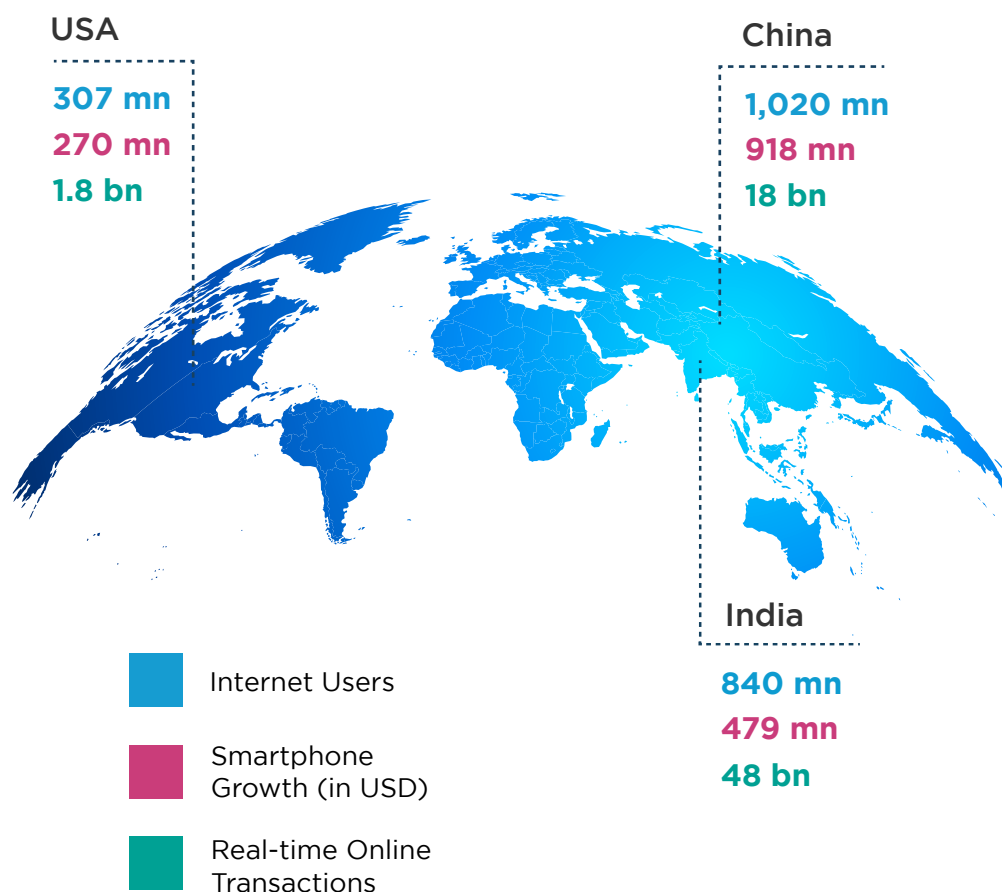


Figure 1.1 (Source: Times of India; Business Wire; Statista)



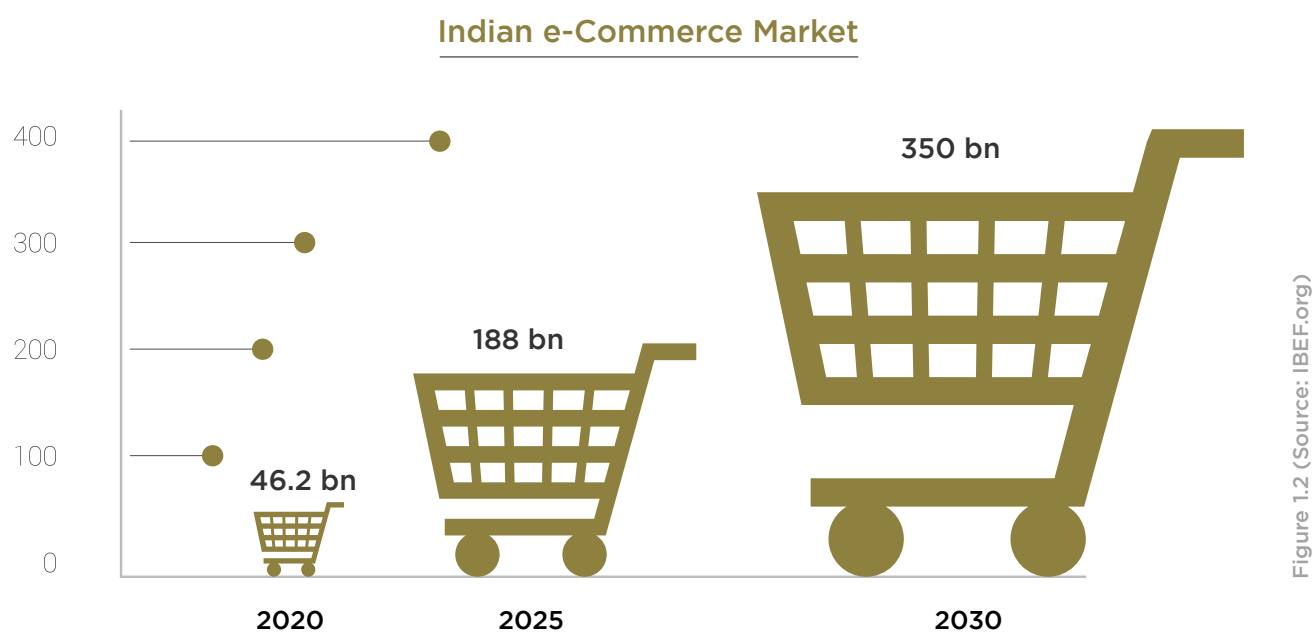
KEY INSIGHTS

1. With **48 bn real-time** online transactions in 2021, India was the global leader.
2. India is expected to have **1,100 mn Internet users** and **220 mn online shoppers** in the next 3 years.

(Source: Statista.com, TOI)

1.1 e-Commerce Penetration in India

India has witnessed a tremendous uptick in e-commerce adoption in the last 5 years. According to India Brand Equity Foundation (IBEF), India's consumer digital economy is expected to become a US\$ 1 trillion market by 2025, growing from US\$ 537.5 billion in 2020. COVID-19 has dramatically accelerated demand and brought a whole new set of opportunities in the e-commerce segment. With growth trajectories shifting towards tier-2 and tier-3 cities post-pandemic, large demographic segments became accessible, which led to newer categories of products and services being added. Consequently, e-commerce penetration increased fivefold between 2020 and 2022 alone.



Key Drivers of Growth

Consumers were getting hooked to digital and showing strong signs of growth even before Covid-19. The Indian government's 'Digital India' initiative, which sought to improve online infrastructure and increase internet accessibility in the country, led to the emergence of powerful currents across online shopping, banking, edtech, and cashless transactions. Furthermore, the rise of new-age entrepreneurs and unicorns fostered a digitally inclusive economy. As per the EY e-commerce India Trendbook 2022, Indian consumers are more positive about technology and internet changing their lives as compared to other nations.

Indian Government's Digital Initiatives	Emerging New-Age e-Commerce Entrepreneurs	Third Largest Online Shopper Base
Exponential growth of UPI Transactions (\$100 bn+ in transactions) CoWin Success (1.6 bn vaccinations) OCEN (Open Credit Enablement Network) to encourage 7.9 mn MSMEs 1.3 billion+ unique digital identifiers (Aadhaar numbers) issued	30+ unicorns in the last 2 years	India has 3rd-highest number of e-tail shoppers (only behind China and US); India recorded 140 mn e-retail shoppers in 2020

Source: EY, Snapbiz, Kantar, CoWin, Digilocker, Media articles

1.2 Key Challenges in Current e-Commerce Landscape

1.2.1 Relatively low digital adoption

Even as the Indian e-commerce sector approaches warp speed, there's still a long way to go. As of September 2022, India was estimated to have 63 million Micro, Small and Medium Enterprises (MSMEs)³. Each of these MSMEs has the potential to flourish with innovative sales and marketing efforts but are not part of the digital revolution. Even on the consumer side, only a small portion (~20%) of the internet users in India are online shoppers⁴. Truth be told,

- A large portion of the retail sector is not digitally enabled
- Digital commerce is further limited in smaller towns and rural areas, or 'Bharat'

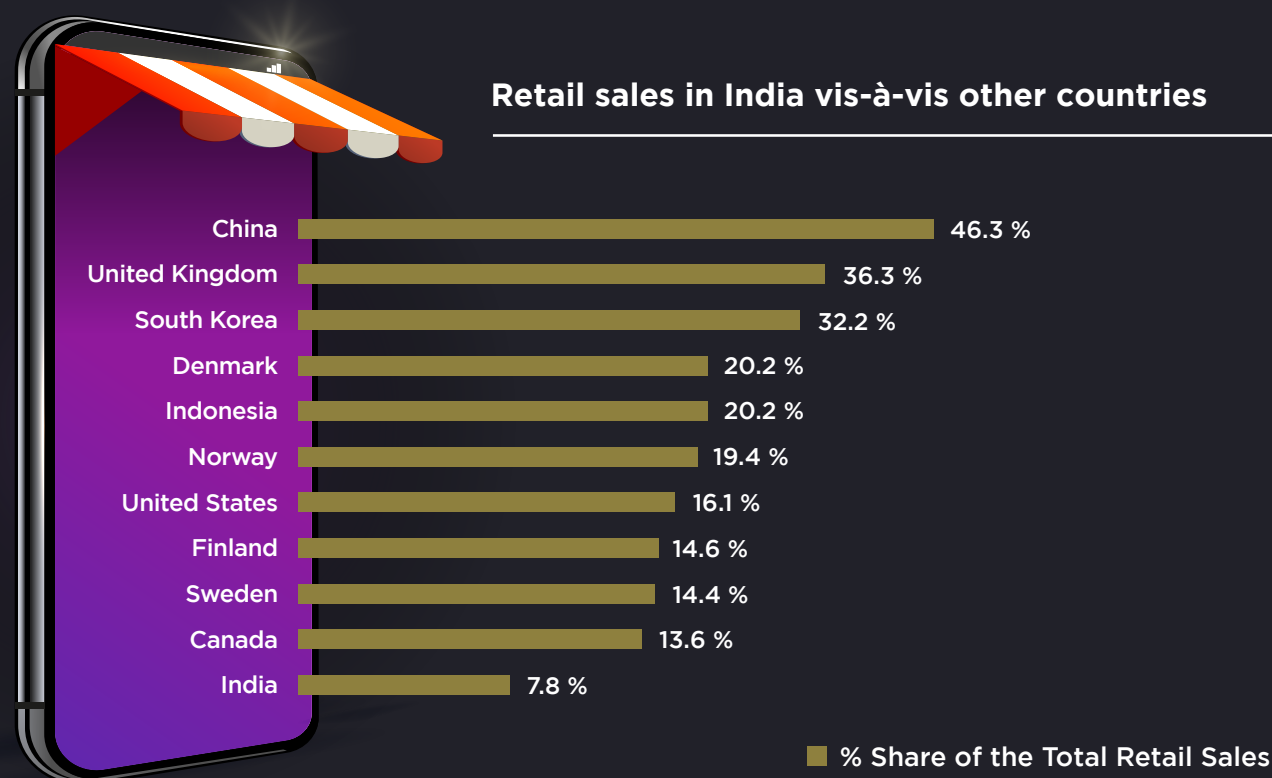


Figure 1.3 (Source: IBEF.org, Statista)

Organised v/s unorganised share of Indian retail market

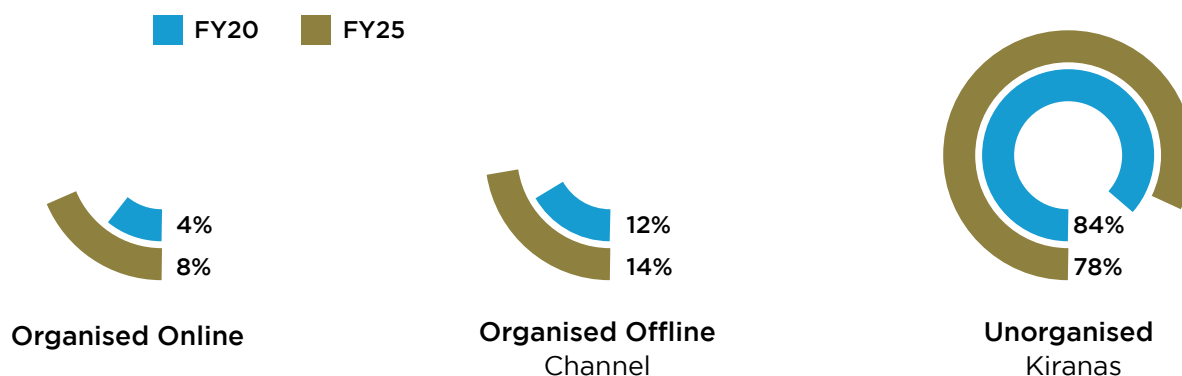


Figure 1.4 (Source: MoSPI, IMF, Redseer Analysis)

1.2.2 Industry Consolidated With A Few Players

Over the last few years, India has witnessed multiple business models come into play in the e-commerce space. Some household categories include:



At present, each of the above e-commerce categories are shaped by two to three large players, comprising nearly 80% of the market share. These industry leaders, often backed by wealthy investors, are likely to use their deep pockets to maintain their market leadership. This in turn creates entry barriers for new bootstrapped start-ups in online retail space, thereby limiting competition. In the process, both the consumer and the seller end up shelling out more to avail services of established market leaders.

1.2.3 Data privacy and consent

Without meaningful participation from smaller players, the larger players with high market shares are able to access data pertaining to e-commerce, such as data about consumer behaviour, preferences, best-selling products, pricing, etc. Insights from this data allow larger players to offer more competitive offerings. For example:

- Leading marketplace platforms can provide better offerings to customers by introducing their own branded products. Based on their insight from various data points such as fast selling categories, bestselling product features, customer preference and price points, these platforms can create competitive offerings. Smaller players can craft similar solutions if they have access to data through a common platform.

India has recently issued draft regulations on personal data protection. The draft, which is currently open for public consultation, will need to address instances of misuse (e.g., remarketing, tele-calling) of personally identifiable information and clear the protocols associated with deemed and explicit consent of customers

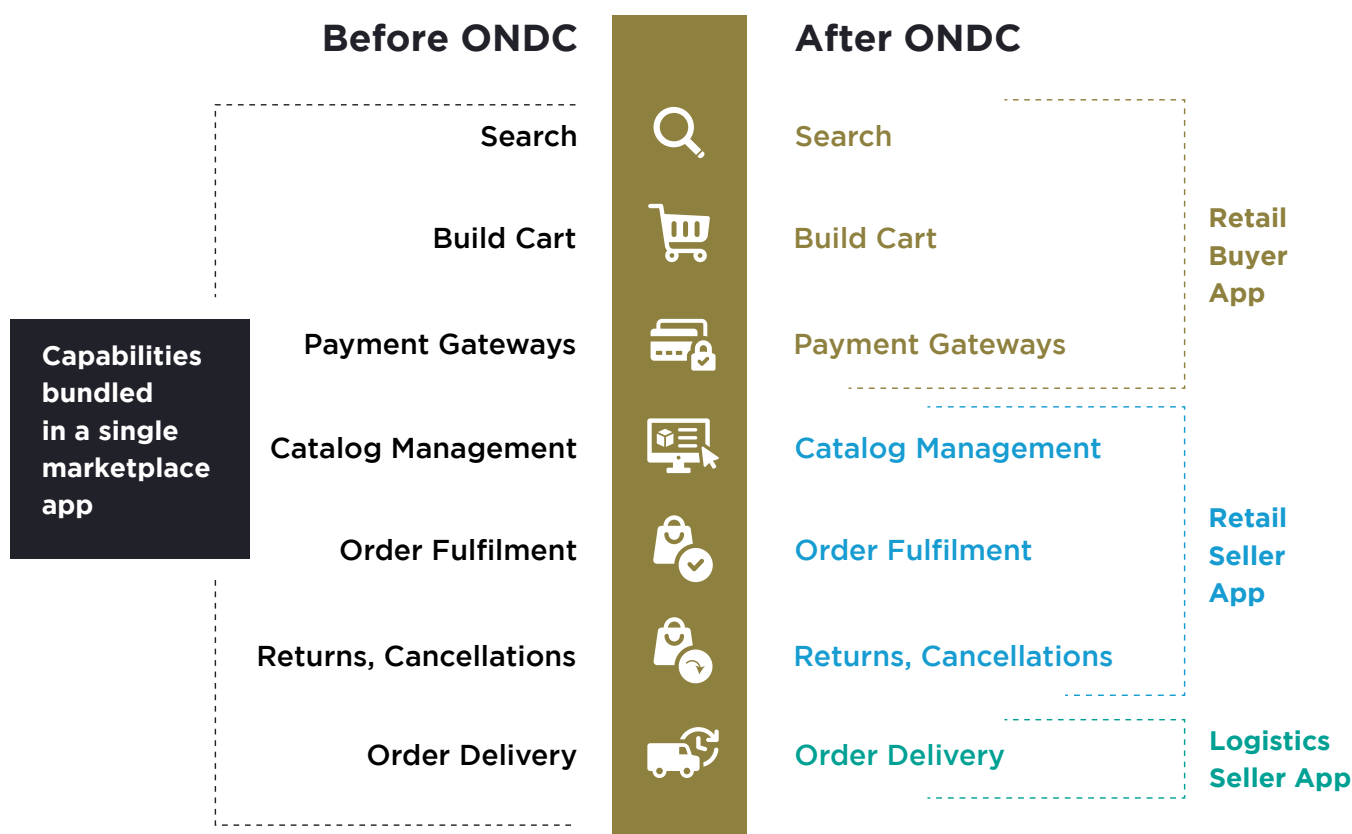
2. Introducing ONDC

2.1 ONDC Vision: In a Nutshell

ONDC aims to pave the way for revolutionising digital commerce in India and creating a globally accepted paradigm. To ensure widespread involvement by stakeholders in India's digital commerce ecosystem through various gateways, an "open network built on open protocols based on open-source standards with established registries"⁴ is being developed.

Long-tail local neighbourhood supply for categories, including grocery, fashion, home handicrafts, flight tickets, and insurance, among others, will be available on ONDC. Apart from this, some ONDC projections⁵ show:

1. More than 2 million retailers will be enabled with e-commerce
2. Over 250 million buyers will be able to purchase goods and services
3. Over 75% pin code coverage across India



ONDC **unbundles** the e-commerce components and leverages open protocols so that the unbundled components are **interoperable** in the network.

ONDC is designed to address key factors⁴ across the value chain, such as:

1. **Facilitating a decentralised network:** The ONDC network will act as a catalyst and allow value to flow down the chain, thus benefiting all parties involved instead of centralising it between a few players.
2. **Being interoperable:** To enable interoperability, the underlying architecture must be “non-rivalrous and non-exclusive” in nature. These become the ‘digital public goods’ that can stimulate and activate larger participation to ensure that the value derived by participants is not locked in a particular platform.
3. **User-centric with minimal intervention:** Adopt a minimal form of governance; it should be an ecosystem and not a system. Should offer inclusivity, choice, and agency to all participants.
4. **Innovation-led evolution of systems:** Living model that evolves through active participation, collaboration, and orchestration of members. No discouraging entry barriers preventing players from participating and leading innovation.
5. **Price comparison:** Since all players will be visible with a single search on ONDC, price comparison will become a piece of cake. Now, you can see how different websites are charging you for the same product. Thus, all players, small and big alike, can benefit from ONDC.

2.2 The Genesis of Digital India Initiatives

The proliferation of online commerce is reshaping the international economy and levelling the playing field for businesses of all sizes. In ONDC's regime, new opportunities may arise for the economy and, especially, for smaller businesses. With the earlier advent of the Open Credit Enablement Network (OCEN), a financial revolution is expected even in the lending sector. At their core, both ONDC and OCEN are facilitators (and not operators) with a decentralised, interoperable network, and minimal governance. UPI, on the other hand, is a type of payment mechanism that facilitates transactions on ONDC and OCEN.

ONDC

ONDC is primed at promoting the exchange of goods and services over digital. It is based on **Beckn Protocol**.

ONDC is set to transform **hyperlocal e-commerce in India**.

About **300 million customers** are expected to transact via ONDC in five years.

OCEN

OCEN is a credit protocol infrastructure built by **iSPIRT** for facilitating real-time microlending.

OCEN will transform **real-time money micro-lending in the country**.

OCEN is expected to unlock over **\$1 trillion of lending** market in value.

UPI

India's unified payment solution for realtime payment transactions such as IMPS, NEFT, and RTGS.

Today, the country has **over 100 million** monthly active UPI users.

In FY22, UPI processed more than **46 billion transactions** amounting to over ₹84.17 trillion, thus breaching the \$1 trillion-mark.

Source: Multiple publications

2.3 ONDC Architecture

2.3.1 ONDC architecture design principles

ONDC architecture is designed to uphold these key tenets:

- Facilitating a decentralised and interoperable ecosystem that encourages widespread participation from all players, big and small, in the retail space
- Promoting autonomy to enable free movement of value through the supply chain
- Enable platform-agnostic discoverability
- Adoption of an ecosystem approach rather than a “system” approach
- Open digital technology infrastructure as a catalyst to distribute the ability to solve
- Open protocols, open registries, and reference apps to stimulate and activate large-scale participation



Figure 2.1 ONDC architecture; (Source: Plotch.ai; ONDC Strategy document)

ONDC is



An open network



Eliminates need for central intermediary



An enabler for massive e-commerce expansion



An enabler for broad-based innovation



Market and community-led initiative

ONDC is not



An application or a platform



A central intermediary



A medium to help digitise businesses



Responsible for buyer & seller experience



A government platform or regulatory body

2.3.3 Network Participants

There are three types of network participants on the ONDC network⁹ (see figure 2.1 above)



Buyer Apps (aka Buyer Nodes): Buyer apps are Network Participants that handle buyer-side operations, such as buyer acquisition, search and discovery, and give functionality to the buyer to place orders on the open network. Customers will use buyer apps to access ONDC. Some examples of ONDC-enabled buyer apps are Paytm, SpiceMoney, or MyStore.



Seller Apps: Seller apps manage seller-side operations and can be of two types:

- a. **Marketplace Seller Nodes (MSNs):** MSNs act as aggregators for eventual sellers of products or services on ONDC. MSNs do not hold any inventory, but rather function as pure-play marketplaces. Some examples of ONDC-enabled MSNs are GoFrugal, SellerApp, Digiit, etc.
- b. **Inventory Seller Nodes (ISNs):** ISNs are themselves sellers who also are Network Participants. Large commerce players with significant physical presence, distribution, and technological maturity can register as ISNs. Examples include retailers such as Unilever, Marico, etc., who may register as ISNs.



Gateways: Gateways function purely as nodes for multicasting search queries and collecting results. Thus, they play a crucial role in search and discovery.



Other Specialised Service providers: ONDC also has provision for Network Participants who provide specialised services, such as:

- a. Logistics service providers, e.g., LoadShare, Dunzo
- b. Payment service providers
- c. Reconciliation Service providers (for reconciling payments across multiple network partners)
- d. Settlement agency
- e. Online Dispute Resolution (ODR) service providers (for tackling disputes across multiple Network Participants)

Figure 2.2 below lists select examples of ONDC Network Participants.



Figure 2.2: Network Participants on the ONDC Network. Data as on Oct 31, 2022 (Source: ONDC Introductory Participant Presentation)

2.3.4 Rights and obligations of network participants

ONDC establishes clear rights and obligations while upholding its principle of decentralisation. Key elements of this approach⁹ are as follows:

1. Buyer and seller are bound by the terms of the sale which are declared upfront. The title for the goods is transferred from the seller to the buyer through the invoice.
2. The buyer has a pre-existing legal relationship with the buyer app (through the latter's terms and conditions), and the seller has a pre-existing relationship with the seller app (through its merchant agreement and/or terms and conditions).
3. The buyer and seller apps have a pre-existing legal relationship only with ONDC through the Network Participant agreement (NP agreement). While the NP agreement creates the legal relationship, the ONDC network policy details the operational aspects for a participant to transact on the ONDC network.
4. During a transaction, a legal relationship is created between the buyer and seller, on-the-fly, through a transaction-level contract. A transaction-level contract is a digital contract executed through the ONDC protocol between the buyer and seller apps. However, ONDC is not a party to that transaction.
5. While the transaction-level contract governs the terms of a given transaction, the ONDC network policy governs the general rules of engagement, including what may or may not be included in the contract.

2.3.5 ONDC organisation structure

From being an advisory council in 2021, ONDC went on to become a fully functional institution in less than 12 months.

ONDC's journey so far:

- ONDC's Advisory Council is established by the Department for Promotion of Industry and Internal Trade (DPIIT) in June 2021.
- ONDC is incorporated as a Section 8 company in December 2021 with the Quality Council of India and Protean eGov Technologies Ltd as initial promoters.
- ONDC receives a fund inclusion of approx. 1,575 mn from committed investors, including Bombay Stock Exchange (BSE), National Stock Exchange (NSE), State Bank of India (SBI), and ICICI Bank Ltd to name a few.

As on November 08, 2022, ONDC's board of directors includes:



Mr. Adil Zainulbhai



Mr. Suresh Sethi



Mr. Arvind Gupta



Mr. Thampy Koshy



Mr. Ritesh Tiwari



Mr. Anil Agrawal

2.4 ONDC-Proposed Customer Journey

There are 6 key customer journeys identified⁹ for transactions enabled by ONDC. The identified customer journeys are described below.

2.4.1 Search and discovery

In this step, a potential buyer searches for a product or service using one of the registered buyer apps in the network.

The buyer then gets results based on his/her search.

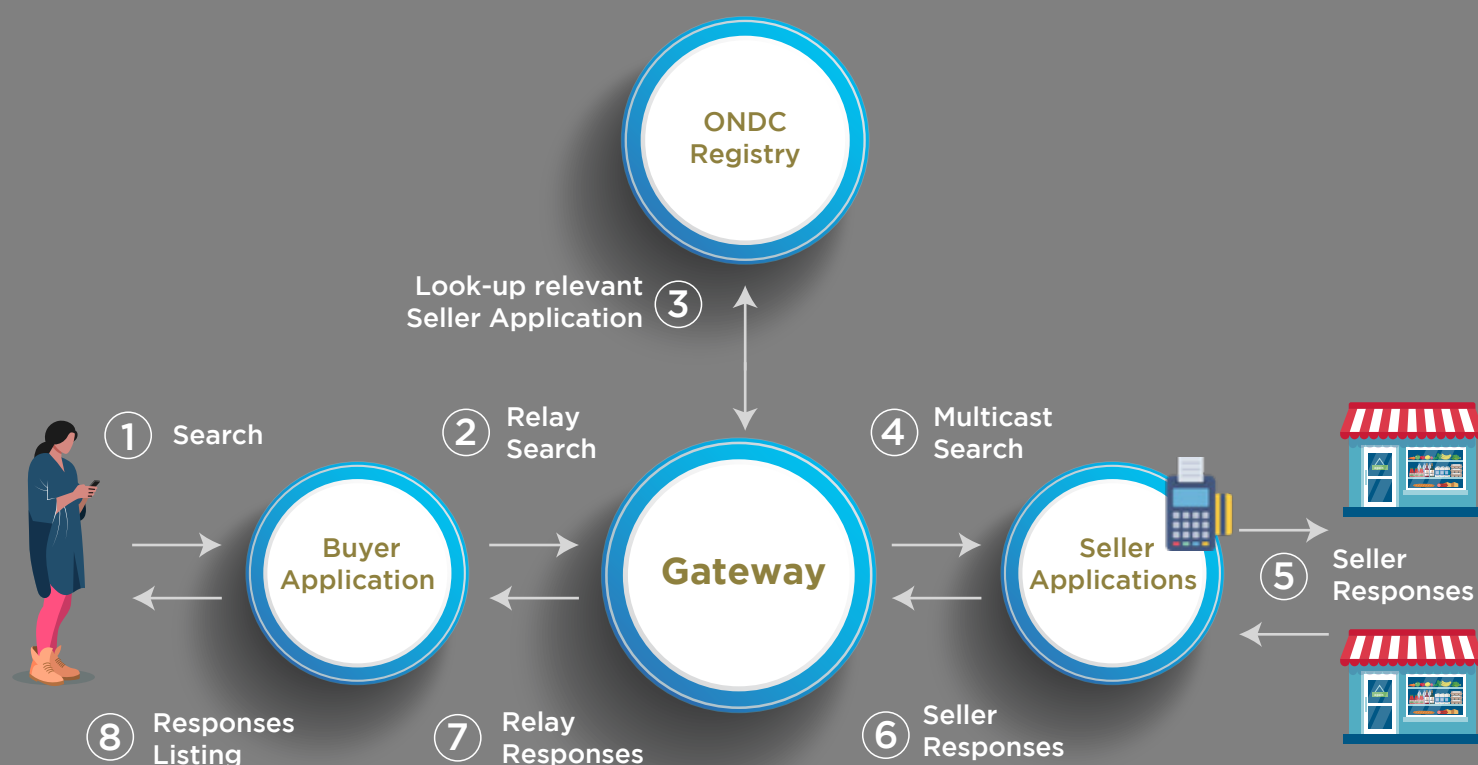


Figure 2.3: Search and discovery process flow

1. Buyer initiates a search (product, service, or store) on the buyer app interface.
2. Buyer app interface relays the query to the gateway service provider.
3. Gateway service provider checks within the ONDC registry to identify seller applications who sell the product/service matching the search query.
4. Gateway service provider multi-casts the search to all relevant seller applications simultaneously.
5. Seller applications check with their registered sellers (or in case of ISNs {section 2.3.3} check internal inventory) on availability.
6. Seller applications communicate availability information to the gateway.
7. Gateway service provider relays the information back to the relevant buyer application.
8. Buyer sees responses to his/her search query on the buyer application interface.

2.4.2 Placing an order

In this stage, the buyer selects a product, adds it to the cart, and confirms the order.

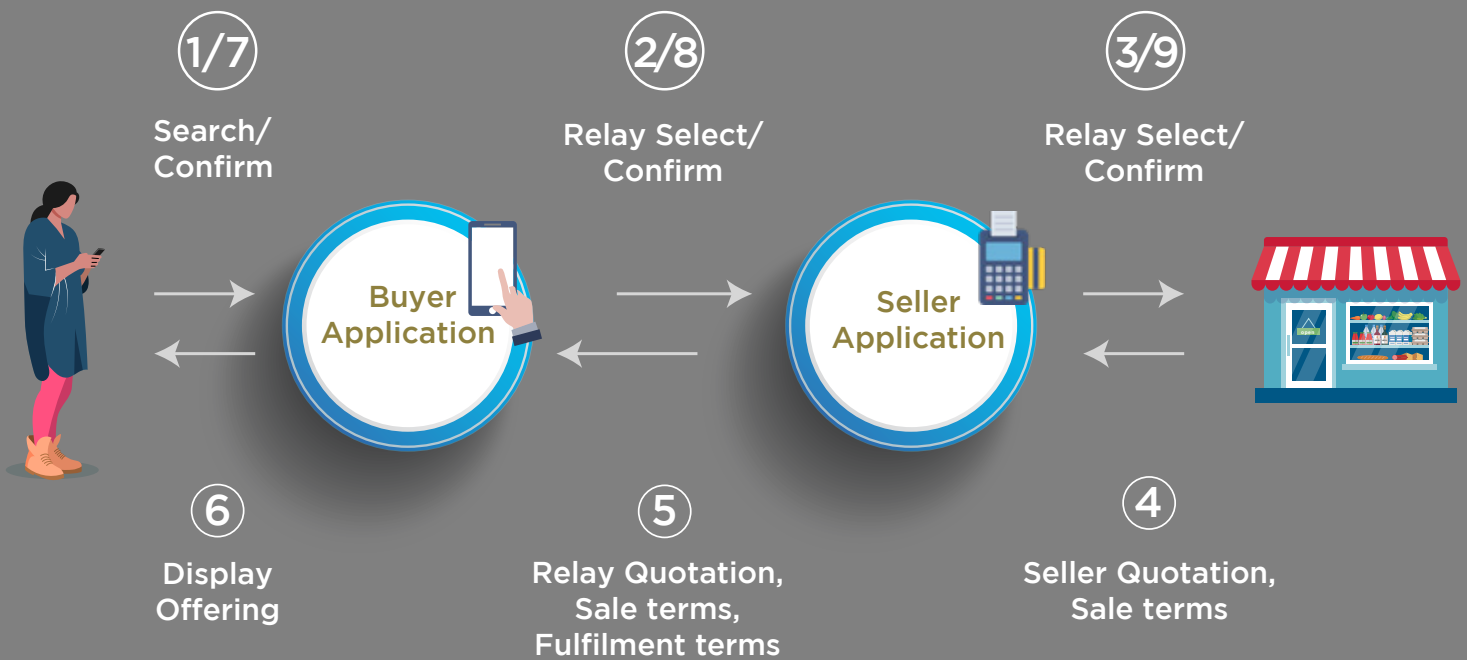


Figure 2.4: Order placement process

1. Buyer selects the product/service and wants to view product details, price, offers, delivery options, and terms of sale.
2. Buyer application contacts seller application to get the relevant information about the product.
3. Seller application gathers necessary information from the seller.
4. Seller provides product details, quotation, and terms of sale.
5. Seller application relays the above information to the buyer application.
6. Buyer application shows the details to the buyer.
7. Buyer confirms the product, makes the payment, and confirms the order.
8. Transaction-level contract is created between the buyer application and the seller application.
9. Seller application confirms the order.

2.4.3 Order fulfilment

In this stage, the arrangement to execute delivery is finalised and product delivery is initiated.

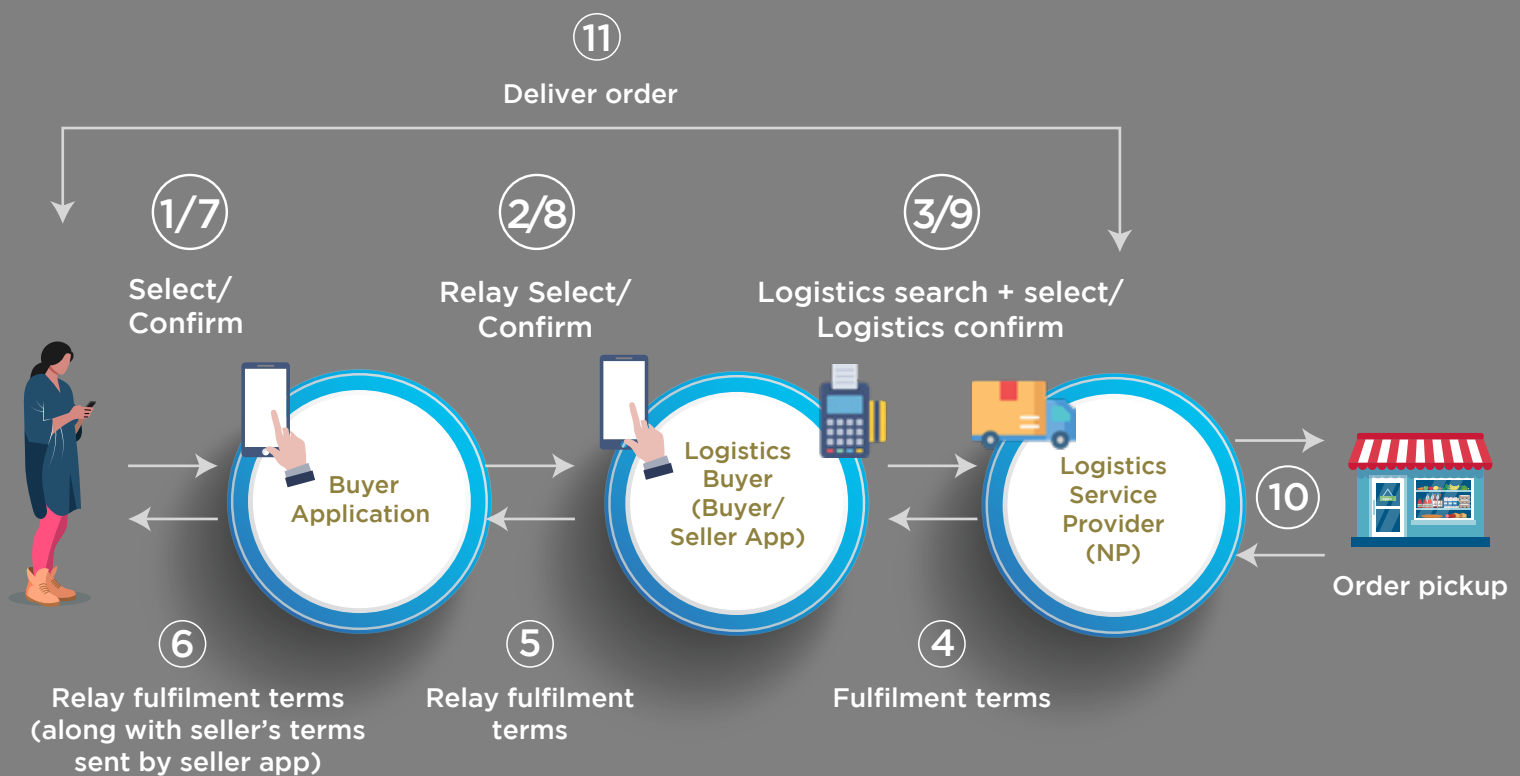


Figure 2.5: On-network logistics

1. Buyer initiates a search (product, service, or store) on buyer application interface.
2. Buyer selects product and confirms delivery terms on product page.
3. Buyer app/seller app with a pre-existing agreement with a logistics buyer relays the above information.
4. Logistics buyer searches for logistics service providers (registered on seller app, or MSNs delivery agent, or logistics sellers on network).
5. Logistic buyer receives quotation from logistics service provider.
6. Logistics buyer confirms the quotation and delivery time to buyer app.
7. Buyer app relays this information to the buyer.
8. Buyer confirms order to buyer app, shares address, delivery instructions, and makes the payment. Order is confirmed and the logistics service provider relays the turnaround time, details of the delivery agent, tracking link, etc., to the buyer's order.
9. Logistics buyer and logistics service provider sign a transaction-level contract for services.
10. Logistics service provider picks up the order from the seller (either an ISNs or MSNs {section 2.3.3})
11. Order is delivered to the buyer.

2.4.4 Payment & settlement

In this stage, the buyer completes the payment for his/her purchase and the entities involved in the transaction get paid.

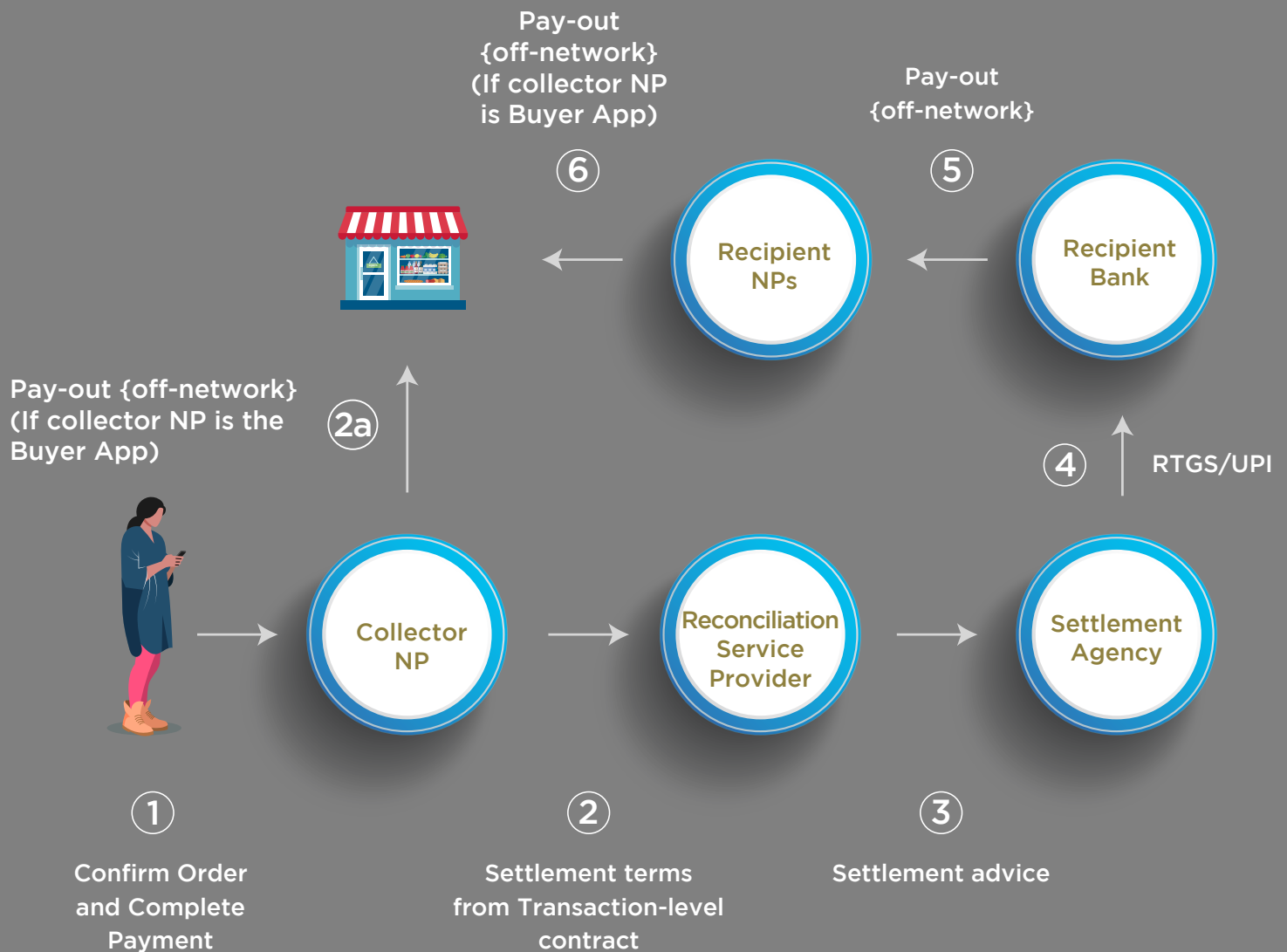


Figure 2.6: Payment & settlement construct on ONDC for payment received on network and payment received off-network (cash on delivery)

1. Buyer confirms the order and makes the payment.
2. Logistics NP <either buyer or seller app> confirms the order and collects payment from the buyer.
3. Reconciliation service provider (RSP) receives settlement terms and amounts from the transaction-level contract signed between the NPs.
4. RSP prepares settlement advice and sends to NP collector's settlement agency.
5. Settlement agency initiates settlement through recipient's bank.
6. Recipient's bank receives the payment.
7. Recipient NP receives payment from his bank.

2.4.5 Returns, refunds and cancellations

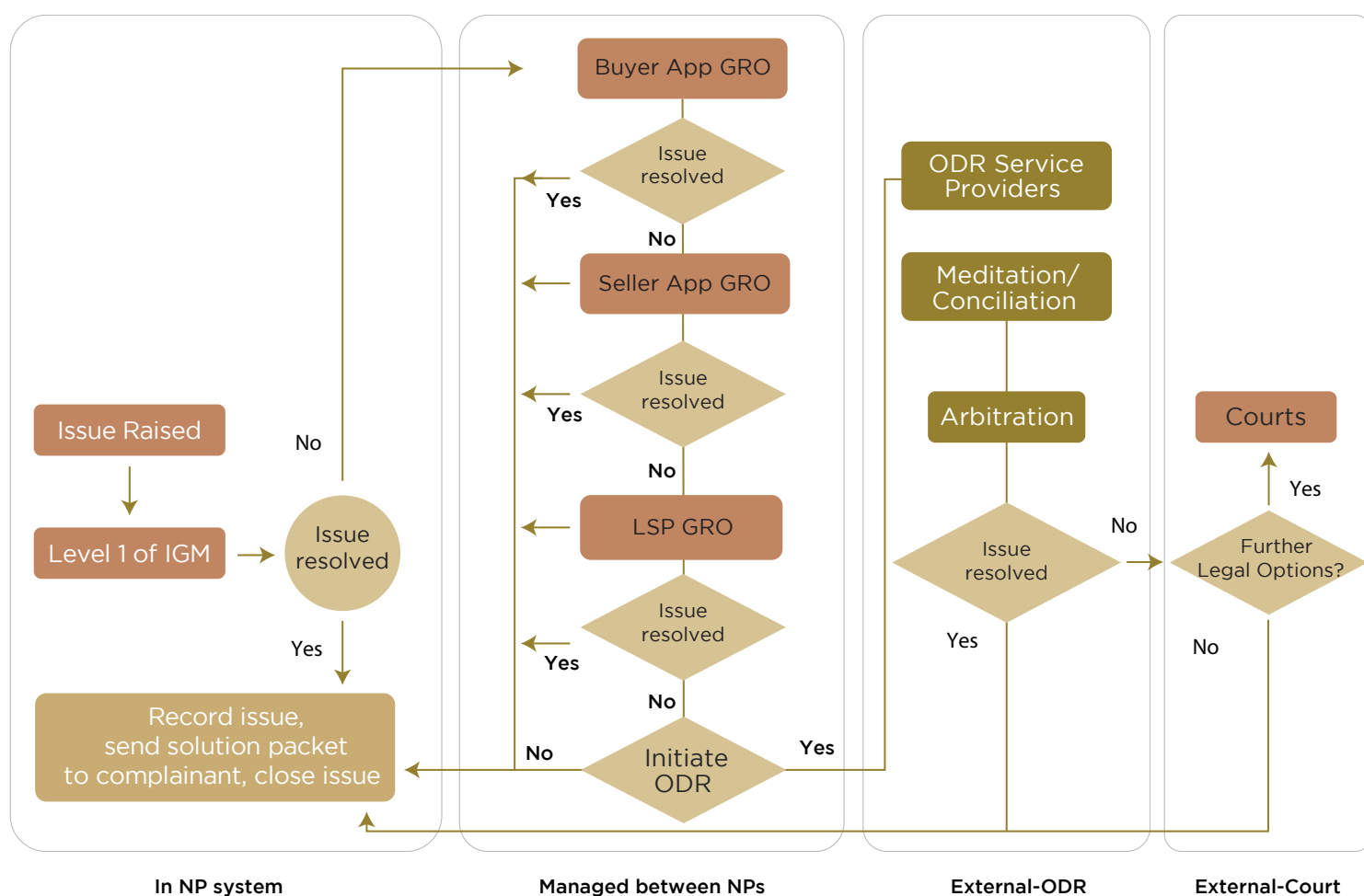
The return, refund, or cancellation requests on the network depend on the terms in the transaction-level contract created between the buyer and the seller at the time of the sale. The logic applies, more or less, equally to the current retail online transactions

- Sellers will initiate returns only if the goods are found defective or damaged.
- Seller can initiate a refund instead of a return.
- Cancellations will only be possible if the seller has declared it in the transaction-level contract.
- Return logistics will be initiated by the seller or seller app as per the terms agreed in the return policy.

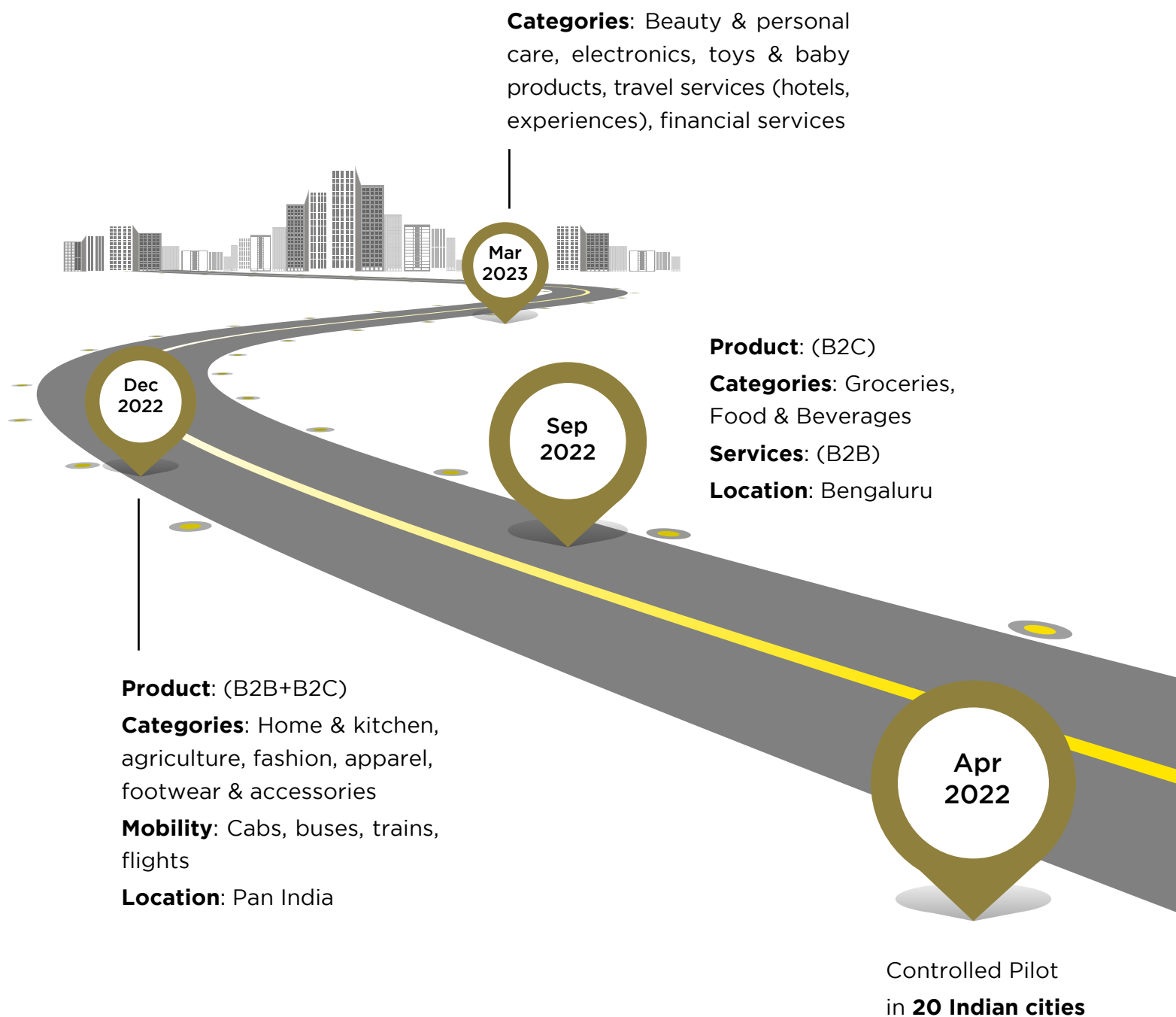
2.4.6 Issue and grievance management

ONDC has set a clear process for resolving complaints of buyers and sellers. All Network Participants will have a shared responsibility towards creating positive customer experiences.

The Issue and Grievance Management (IGM) system involves the following process:



2.5 Tentative Timelines for Pan-India Launch



(Source: Times of India)

3. Opportunities for Marketers

ONDC enables multiple opportunities for brands who register their products on the network. As an input to the report, we conducted a survey on how ONDC is perceived by senior brand leaders across industries.

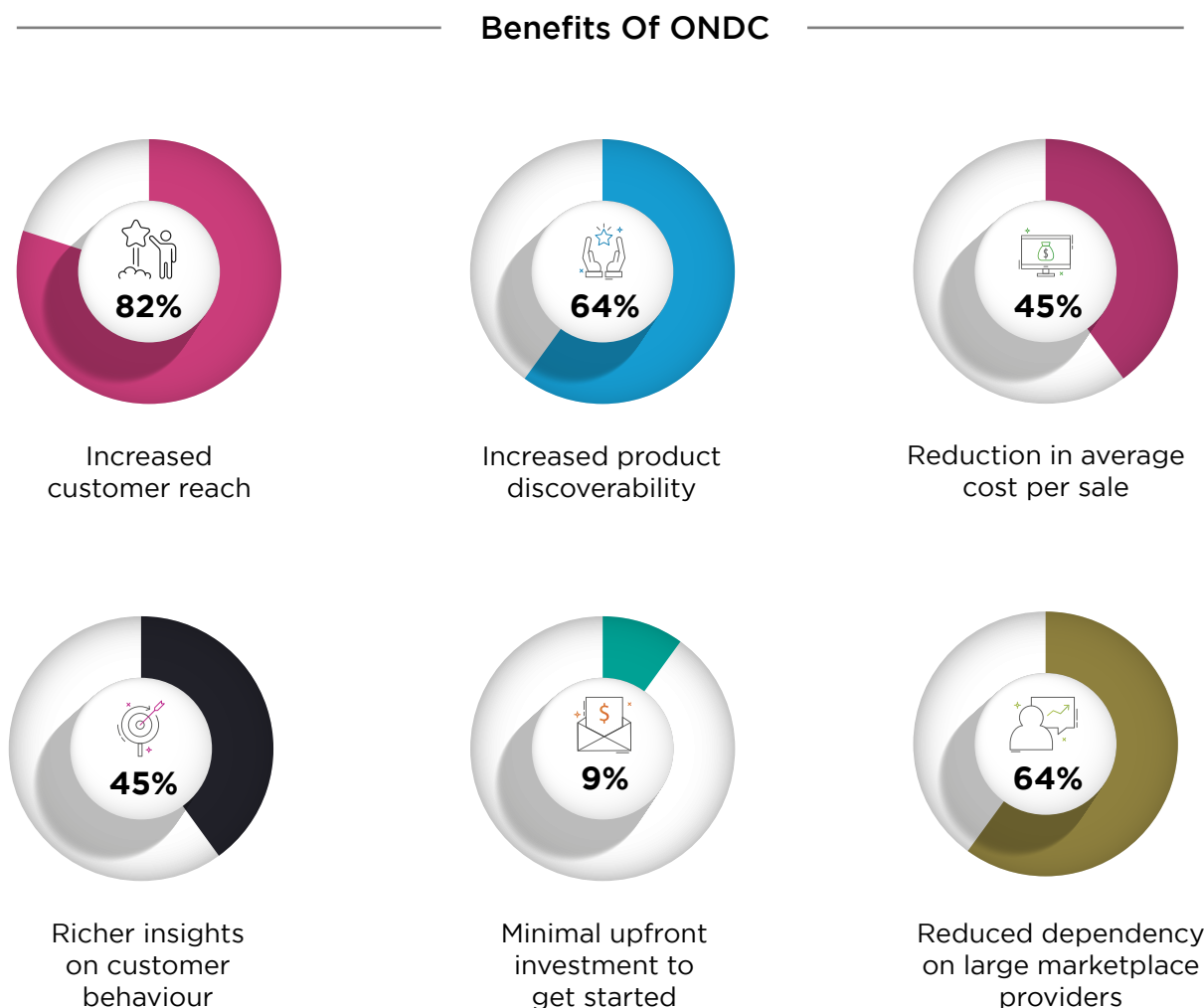


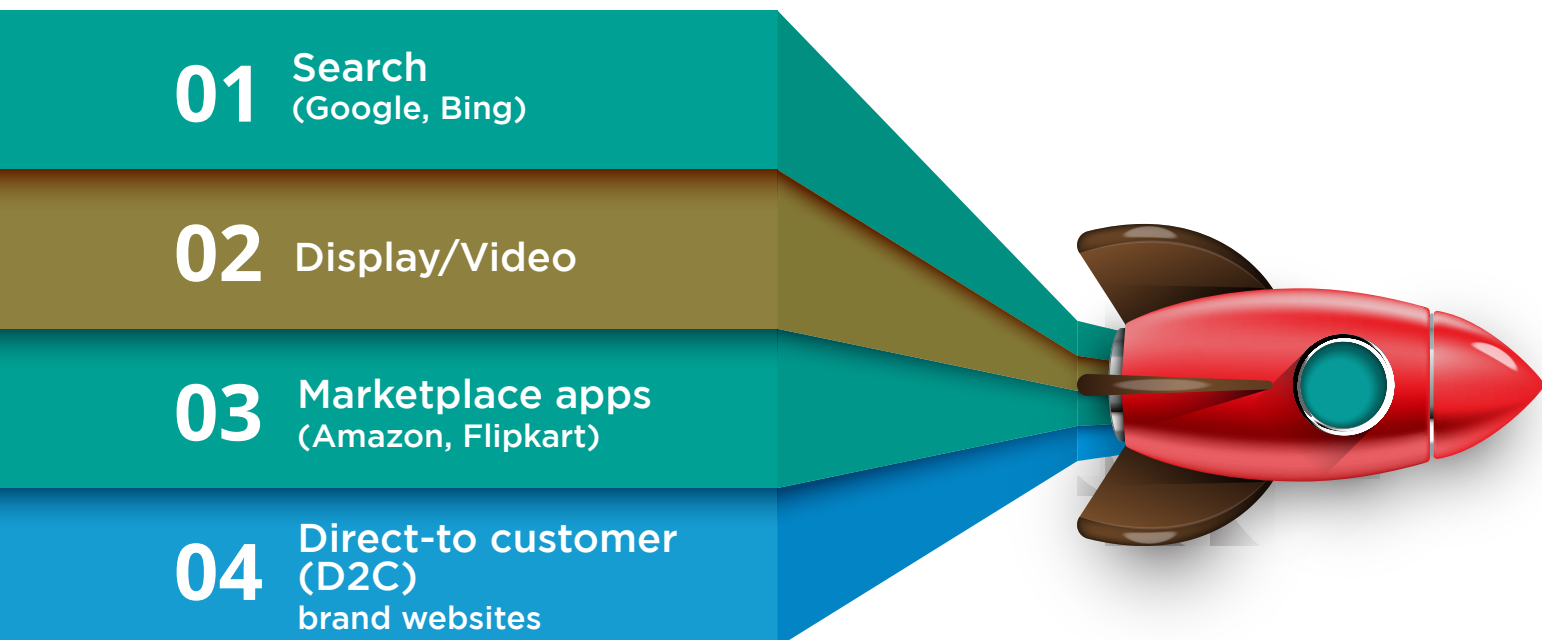
Figure 3.1: Publicis survey results – Benefits of ONDC

Based on our survey, increased product discoverability (>60% of respondents), increased customer reach (>80% of respondents), and flexibility due to reduced dependency on large marketplace providers (>60% of respondents) came out to be the primary perceived benefits of ONDC.



3.1 Increased Reach, Product Discoverability

Traditionally, 'in-market' e-commerce consumers discover products through:



In contrast, products registered on ONDC can be accessible using all the above methods as well as any ONDC-registered buyer-side application, thereby increasing the reach of the brand.

For example, at the time of writing this report, PayTM, SpiceMoney and MyStore were registered as buyer-side apps for the city-wide pilot rollout in Bengaluru. A host of other banking and digital players are in process of registering themselves on ONDC. As a result, an incremental user segment, which is used to fintech/payment platforms, but has not embraced e-commerce yet, also becomes a potential consumer of ONDC-registered brands.

As stated earlier, some projections⁵ on the forecasted reach of the ONDC network over the next five years:

- Customer Reach: Aiming for 250 mn buyers by 2027
- Geographic Reach: Sell goods and services to more than 75% pin code in India

3.2 Reduction in Cost per Sale

Given ONDC's open architecture and increased competition, the commissions and overhead cost for transactions are likely to come down. The chart below shows the prevailing commission structure⁷ for food delivery segment on ONDC.

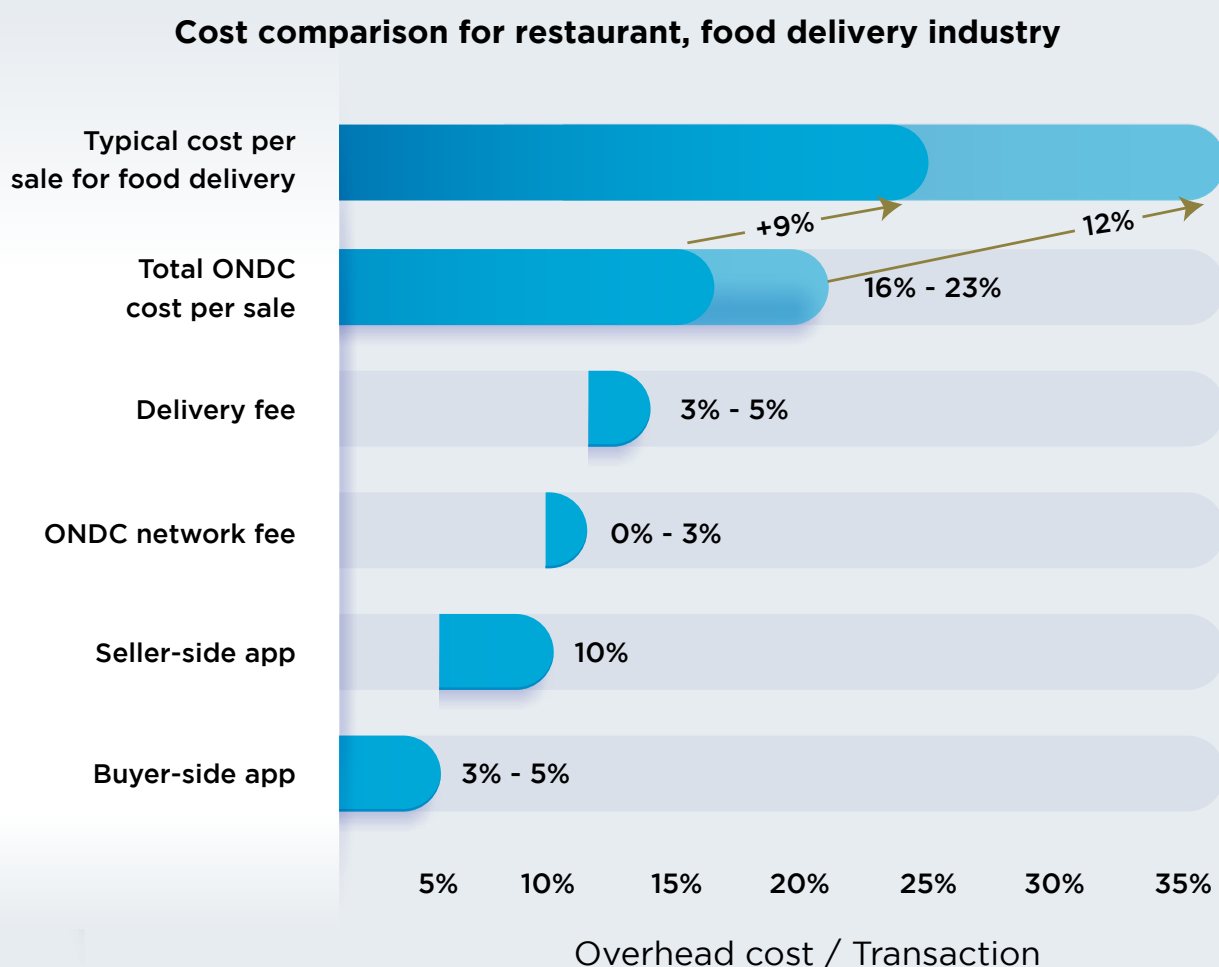


Figure 3.2: Commission and overhead costs on ONDC vis-à-vis marketplaces

- **Buyer-side applications:** Based on empirical evidence, buyer-side apps charge approximately 3% commission (buyer finder fee) on the gross merchandise value (GMV). This amount is usually paid by the seller-side app.
- **Seller-side applications:** These apps charge up to 10% of GMV as transaction fee, including the commission payable to buyer-side apps. In the future, large brands with sufficient technical know-how may build their own seller-side apps, further optimising the transaction cost.
- **ONDC network fee:** Currently, ONDC does not plan to charge any network fee. In the future, however, a tiered transaction processing fee up to 3% could be levied.
- **Delivery cost:** Varies by product and location. As more and more delivery partners join the network, the delivery cost is likely to get optimised due to increased competition.

All things considered, the net cost per sale on ONDC is already lower than the commissions paid on marketplaces and quick commerce platforms for most product categories with scope for further optimisation.

As we write the report, there are no data points on marketing spend on ONDC. Hence, in this context, we assume the marketing costs on ONDC (in future) will be similar to (if not lower) what we have in established marketplaces.

3.3 Data and Insight

ONDC's data policy will be compliant⁴ with the Information Technology Act, 2000. Below are some of the key design considerations of the ONDC data policy:

- Transaction data will reside only with the buyer and seller applications and will not be visible to ONDC. Essentially, ONDC will not be storing/viewing transaction data.
- Policies around the exchange of this data will evolve, be consent-based, and bound by the limitation of purpose.
- ONDC will ensure data security and credibility at the transaction level, which will be key to the growth of digital commerce and its success.
- User's Personally Identifiable Information (PII) as well as seller data critical to trade, i.e., competitive data, will be protected from third-party access.
- ONDC will foster and promote established and viable principles for platforms to emit anonymised performance metrics. This will enable informed policymaking and network robustness, empower network participants fairly and equitably, and make network-wide reputation possible, all the while helping buyers make informed decisions.

Given the above considerations, brands can get insight on their performance from three primary sources, namely:

- a.** ONDC network **b.** Buyer-side applications **c.** Seller-side applications

Given below are some of the specific data types which are made available to brands:

3.3.1. Insight from ONDC network

- Catalogue decline data:** Enables brand leaders to develop strategies for expanding their product catalogue.
- Price gap against winning orders:** Enables brand leaders to price their products better.
- Scoring and Badging system:** ONDC requires buyer and seller apps to share user ratings with independent scoring and badging agencies. The scoring agency will then compute scores for sellers, logistics service providers, as well as seller and buyer apps based on quality of service and past disputes. Eventually, the scoring and badging system will act as an indicator for trustworthiness of any Network Participant.

[illegible]

- d. Demographic data
- e. Location
- f. Frequency of purchase
- g. Shopping behaviour
- h. Customer's credit worthiness/purchasing power (from digital banking apps doubling up as buyer-side platform)

Seller-side applications enable the merchant-specific journeys on the ONDC network. As described in section 2.3.3, seller-side applications can be of two types: Marketplace Seller Nodes and Inventory Seller Nodes.

- i. Category insights (useful for brand planners to know how a category is performing)
- j. Stockouts
- k. Catalogue as a Service: ONDC aims to empanel a set of technology service providers (TSP) to provide catalogue management as a service to individual sellers. Eventually, these TSPs providing 'Catalogue as a Service' can generate additional insight on best-selling products in categories across buyer and seller apps.

However, brands registering as Inventory Seller Nodes are likely to get a more nuanced understanding of product/category sales and attribution to their own marketing efforts.

Unlike established marketplaces, ONDC offers increased flexibility to brand marketers. For example:

- The extra layer of flexibility allows brand marketers to optimise their product proposition and customer experience.

4. Leveraging ONDC: Industry-Specific Perspective

ONDC will unbundle opportunities across industry verticals. Based on another survey we conducted with senior brand leaders to understand their readiness for ONDC, below are some key insights:

a. Consumer packaged goods (CPG) industry appeared most advanced when it comes to awareness of ONDC (50% of our respondents are from the CPG industry). 10% of our overall respondents are already in the process of integrating with ONDC.

b. Banking and Financial Services, Travel, Transport, and Logistics, Food Services and Hospitality are the other industries who are making ONDC part of their growth strategy)

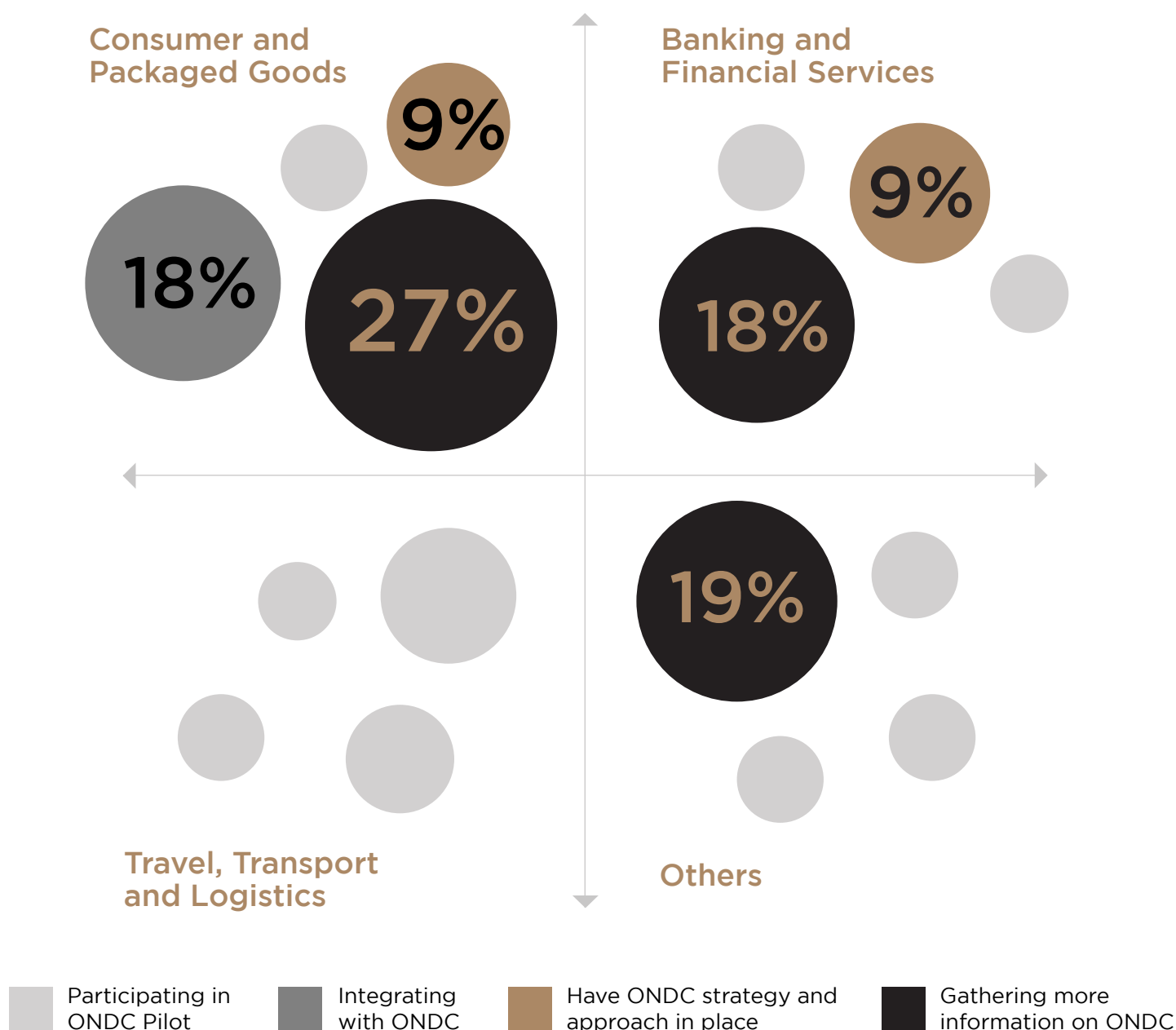


Figure 4.1: Publicis survey response - ONDC readiness by industry

Let's deep dive into some of these industries and their potential use cases for ONDC.

4.1 Consumer and Packaged Goods

The consumer and packaged goods (CPG) industry has been a frontrunner in adopting e-commerce in India. The advent of ONDC opens even newer avenues for this industry. Potential use cases of ONDC for the CPG industry are as follows:

- a. **Direct participation as an Inventory Seller Node (ISN):** Organisations with experience in e-commerce and having strong operational and technology capabilities may register on ONDC as an Inventory Seller Node. In this construct, they will have complete control on product, category definition, inventory management, distribution, and customer service.

Buyers will discover their products from any of the registered buyer applications. Once an order is received, the brand can own end-to-end delivery and service via ONDC. Benefits of this approach are as follows:

- i. Increased customer reach and ease of product discovery
 - ii. Data and insight on fast-selling categories, price comparison
 - iii. Access to first-party data
- b. **Indirect participation through Marketplace Seller Nodes (MSN):** Organisations may choose to join ONDC through existing Marketplace Seller Nodes (or seller applications) such as GoFrugal, GrowthFalcons, etc. This approach requires minimal upfront time and effort to get started. However, this approach involves additional overhead costs paid to an intermediary MSN.
 - c. **As an extension to physical retail:** This option is applicable to brands with substantial physical retail presence. Such brands may register their retail outlets as distribution hubs on ONDC, thereby increasing their chances of discovery (through hyperlocal search). Consequently, ONDC will also augment the sales potential of each physical outlet.

4.2 Travel, Transport, and Logistics

The travel, transport, and logistics (TTL) industry has also been an early adopter of digital transactions. Potential use cases of ONDC in the TTL Industry are as follows

- i. **As a standalone digital channel:** Most organisations in this space list their inventory with aggregators (e.g., MakeMyTrip, EaseMyTrip, etc.) or have their own digital platforms. Organisations in this industry may register their inventory on ONDC (through any seller-side app) for increased reach and reduced overhead costs.
- ii. **Aggregators as ONDC network partners:** Existing aggregators in this space may join ONDC by registering as a buyer-side or seller-side app. This would open an incremental revenue stream for existing players in this space.
- iii. **ONDC logistics partners:** Logistics providers in this industry may choose to register themselves as independent partners on ONDC. This way, organisations in this space can exponentially increase their revenue by providing logistics services to a broad range of customers and organisations.



4.3 Banking and Financial Services



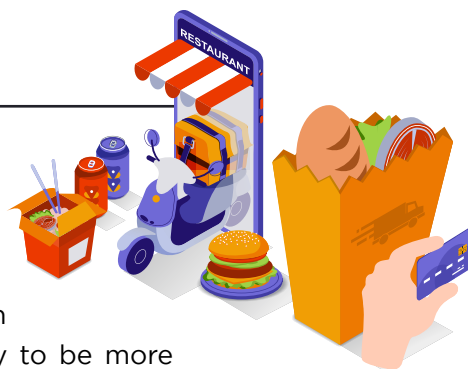
While banking and financial services (BFS) organisations do not directly engage in commerce, they have a significant way to provide value-added services on the ONDC network. Potential use cases for BFS players are as follows:

1. **As an ONDC network participant:** BFS players can join as network participant and provide primary commerce services. For example:
 - a. **Buyer-side app:** BFS organisations such as Paytm, PhonePe, Kotak Mahindra Bank, and IDFC First Bank have already joined ONDC by launching their buyer-side apps. Benefits of this approach are:
 - i. Increased customer base
 - ii. Commission fee as an incremental revenue stream
 - iii. Potential to monetise aggregated user/transaction data gathered from ONDC-enabled commerce
 - b. **Gateway service provider:** BFS providers with payment experience may register as a standalone payment gateway service provider, thereby increasing their revenue potential.
2. **Secondary value-added services:** BFS providers may provide secondary value-added services to ONDC participants beyond pure-play commerce. For example:
 - a. Buyer-side applications are likely to collect a wealth of consumer behaviour data based on the transactions they record. BFS players may leverage this data to offer other retail banking products such as personal loans, credit cards, etc., to worthy customers.

Similarly, seller-side apps will collect significant data from merchants such as their inventory, cashflow, credit cycle, etc. Leveraging this data, BFS providers may offer SME/corporate banking products such as working capital loans, letters of credit, bank guarantees, etc., to businesses with potential.

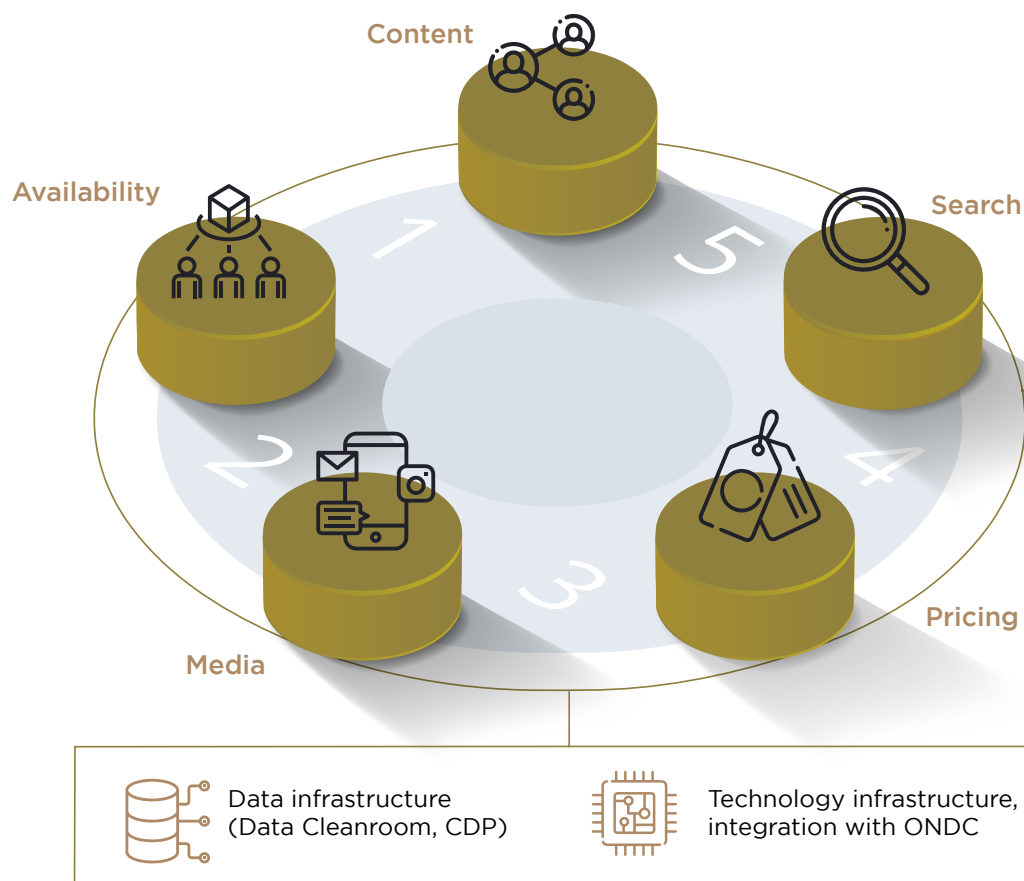
4.4 Food Services and Restaurants

Restaurants typically leverage food delivery platforms or their own website/tele-calling to grow their take-away business. ONDC will provide an additional channel to drive orders from customers. Restaurants can leverage ONDC's network partners (gateways, logistics, etc.) to serve their customers. Based on empirical evidence, the commission structure on ONDC is likely to be more competitive vis-à-vis established food delivery platforms (refer section 3.2).



5.1 Critical Success Factors

Publicis Groupe's proprietary CAMPS framework is highly relevant in maximising impact from e-commerce. The framework covers five essential elements of e-commerce, namely Content, Availability, Media, Pricing, and Search (CAMPS). Given below are the applicability of these elements in the context of ONDC.



5.1.1 Content

Clarity and relevance of content plays a critical role in converting an interested consumer into an eventual sale. Therefore, brands registering on ONDC must design their content to maximise conversion potential.



Figure 5.1: 'Catalog' schema definition

Above is the 'Catalog' schema as defined⁸ by ONDC. From a content perspective, both 'categories' and 'descriptor' attributes play a critical role. Brands need to plan for the following while designing their content strategy.

- a. **Design proper category mapping:** Leverage 'Categories' schema on ONDC to make sure products are listed under relevant categories.
- b. **Increase relevance:** The 'descriptor' schema provides detailed attributes such as 'name', 'short_desc', and 'long_desc'. Brands can use these attributes to highlight relevant keywords and product proposition, thereby increasing the chances of discovery.
- c. **Leverage images and audio:** The 'descriptor' schema further allows brands to define 'symbol', 'images', 'audio', and '3d_render'. Brands must design hi-resolution, e-commerce-optimised creatives to fully leverage these attributes to make the product description attractive, consequently increasing the chances of conversion.

5.1.2 Availability

Product availability plays a critical role in e-commerce, especially in ONDC's regime. Brands need to pay attention to two specific aspects:

- a. Declaring products/SKUs under the right category within ONDC: As described in section 2.3, at the early stages of discovery, the buyer application checks the ONDC registry to identify a seller application. There is significant opportunity cost associated with incorrect category tagging.
- b. ONDC brings focus on hyperlocal commerce. Brands must design logistics' and operations' structures to ensure availability in majority pincodes of their target markets.

5.1.3 Search

Product discovery on ONDC is driven primarily by search on buyer-side apps. Consumers are most likely to make a purchase decision based on results displayed in the first or second page of the search results. Therefore, it is essential for brands to ensure their products are ranked higher in the search results page to have a meaningful chance of conversion.

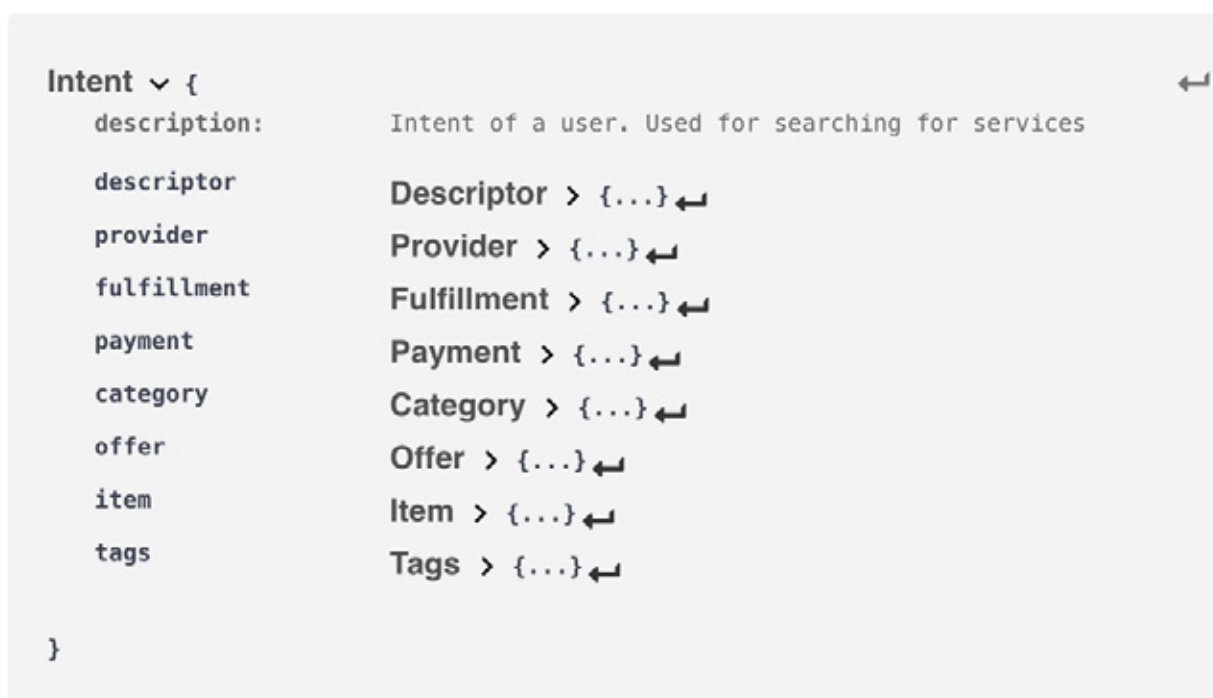


Figure 5.2: 'Intent' schema definition

Search from buyer-side apps on ONDC are primarily based on 'context' and 'intent'. The above picture shows the 'intent' schema definition. Brands must carefully optimise for content (as described earlier), provider rating, fulfilment, payment options, and offers for improving their search result ranking.

As ONDC evolves, all buyer-side platforms must declare their search ranking approach in public. Brands must continue to optimise (ongoing process) their catalogue and content to improve their search rankings. For example, during the pilot phase, the buyer-side apps allowed filtering based on price and location. Brands can improve their chances of being discovered by increasing their presence in as many locations as possible (defined by 'Circles' in ONDC).

5.1.4 Media

In the current state, ONDC does not have a provision for advertising on the network. However, brands must develop their media strategy along following lines:

- a. ONDC may, in the future, extend the 'Catalog' schema to include 'Advertising Inventory' as a purchasable item to enable paid advertising
- b. Buyer-side applications are likely to build provisions for promoted content. As per ONDC policies, this is allowed if the terms are declared and shared on the network.

Brands must keep a watch on the latest developments on ONDC specifications to design their media strategy accordingly.

5.1.5 Pricing

Pricing is, perhaps, the most critical element of an e-commerce transaction. Price comparison and benchmarking are likely to be challenging given the availability of multiple buyer-side apps and delivery options. However, ONDC plans to provide insight on price-rejection data by category for brand marketers to set the right pricing for their product(s).

5.2 Setting up the Infrastructure: Seller Registration, Logistics Partners

As explained in section 2.3.3, there are two primary ways in which brands can register with ONDC to sell their products.

5.2.1 Join as an Inventory Seller Node (ISN)

Joining as an Inventory Seller Node requires addition to ONDC Live (Production) registry.

At the present stage, these steps will be followed:

1. Participant shares the following information with ONDC:
 - a. Legal entity name or business name (as per GSTN)
 - b. Business address (primary place of business)
 - c. GST details (for primary place of business)
 - d. Permanent Account Number (PAN)
 - e. Name of Authorised Signatory for digitally signing transactions
 - f. Address of Authorised Signatory
 - g. E-mail ID
 - h. Mobile No.
 - i. Domain (retail/logistics)



- j. Cities
 - k. Type of application (buyer app / seller app)
 - l. subscriber_id
 - m. subscriber_url
 - n. public key for signing (base64 encoded)
 - o. public key for encryption (base64 encoded)
2. Participant initiates verification of domain ownership
- A participant generates the code for verification of domain ownership using the endpoint “/ondc/verifyParticipant/verifyD/init”, as documented [here](#). The domain verified here would be a part of the ‘subscriber_url’ to be provided by the participant for registration. ONDC will verify the domain.
3. After successful verification of domain ownership, participant initiates verification of ownership of keys by participant. Participant will initiate verification of their signing and encryption keys using the endpoint “/ondc/verifyParticipant/verifyK/init”, as documented [here](#).
4. ONDC verifies subscriber GST, PAN, contact details (email ID, phone number).
5. Participant is added to registry with status “Subscribed”.
6. Participants can initiate key rotation (policy to be announced) using the endpoint “/ondc/subscribe”.
7. For further onboarding details, contact team@ondc.org.

5.2.2 Join via an established Marketplace Seller Node (MSN)

Various Marketplace Seller Nodes are already available on ONDC. These MSNs can help merchants sell their products on the open network. Notable MSNs to get started on ONDC are:

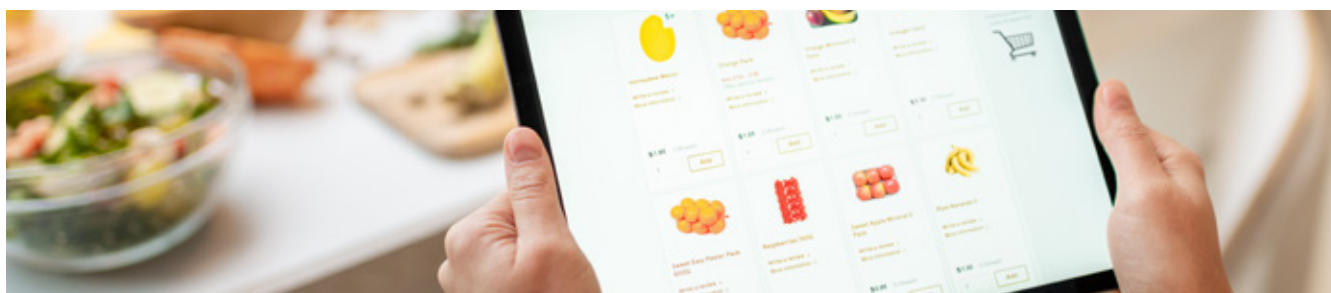


Brand marketers can follow the below steps to register on ONDC using an MSN:

1. Seller must share the following information with the seller app to register
 - a. Legal entity name/business name (as per GSTN)
 - b. Business address (primary place of business)
 - c. GST details (for primary place of business)
 - d. Permanent Account Number (PAN)
 - e. Name of authorised signatory for digitally signing transactions
 - f. Address of authorised signatory
 - g. Email ID
 - h. Mobile no
 - i. Domain (retail/logistics)
 - j. Cities
2. Seller app initiates verification of domain ownership.
3. Seller-side service provider uploads product catalogue.
4. ONDC verifies subscriber GST, PAN, contact details (email ID, phone number)
5. Participant is added to registry with status 'SUBSCRIBED'.

5.3 Setting up Data Infrastructure: Single Customer View, Attribution

As ONDC opens newer avenues for commerce, brands must invest in the setting up of/upgrading their data platforms. The following data infrastructure will be necessary to get the most out of ONDC:



1. **Basic MIS:** At present, ONDC does not provide rich, on-network reports on category and product-wise sales. As the guidelines evolve, MSNs and 3rd-party data service providers will start to provide advanced reports. Until then, brands must invest in gathering ONDC transaction data in a data pool and build their own reports as well as Management Information Systems (MIS). Off-the-shelf tools such as Tableau or QlikView can provide reach analysis beyond what is possible using basic spreadsheet software.
2. **First-party customer data:** Enables brands to understand their customer behaviour better. Using first-party data, brands may reach out to customers in the most optimal channel with the right product and offer. If a brand joins ONDC as an ISN, they will have access to all sales-side transactions and customer information. If a brand joins ONDC through an MSN (intermediary seller-side application), they may have to strike partnerships with either the MSN or some leading buyer-side application to collect first-party customer data.
3. **Data clean rooms:** As ONDC adds yet another digital sales channel, in addition to brands present in existing marketplaces, D2C commerce, quick commerce, etc., having a data clean room becomes even more important. Using such data clean rooms, brand marketers may analyse sales data across channels to build uniform media attribution and targeting models.

6. Key Risks to Manage In ONDC Regime

Despite its attractive value proposition, ONDC has some associated inherent risks. Based on our survey, we found these to be:

- a. Access and ownership of data
- b. Evolving roles and responsibilities, and
- c. Customer service

Risks associated with ONDC

27%

Brand Safety

64%

Access and ownership of data

73%

Absence of clear guidelines on customer service

64%

Evolving Roles & Responsibilities in a Multi-party Network

36%

Absence of regulator, enforcing mechanism

Figure 6.1: Survey Response: Key risks associated with ONDC

The following are key risks that marketers should plan for:

6.1 Customer Service, Returns

ONDC does not prescribe how to handle returns, refunds, and cancellations as it deems itself a facilitator and not a regulator.

1. ONDC operates in a decentralised, rule-based system. Unless brands join ONDC as ISNs, they would have limited control on actual delivery and customer service.
2. ONDC has set up a dispute resolution framework to address inter-party conflicts. As these frameworks get tested and refined, eventual customer experience remains at risk in the interim.

In a recently published consultation paper⁹, ONDC has proposed a series of steps to build trust in returns, refunds, and cancellations through transparency and contracts between the buyer and seller. Key recommendations are as follows:

- a. When making an offer, the seller must provide terms for returns, refunds, and cancellations. The transaction-level contract will encode these terms for transparency.
- b. Repeated infractions can result in disciplinary action against the Network Participant.

6.2 Managing Roles and Responsibilities in an Evolving Ecosystem

Given ONDC's role as facilitator, it sets guidelines on roles and responsibilities of various network participants. As such, ONDC relies on community support and 3rd-party online dispute resolution (ODR) platforms to resolve disputes. This poses significant risk of malicious activities, poor customer experience, and delays in dispute resolution, among others. The veracity of this model will be proven over time. Until then, brands can take control of their own fulfilment, delivery, customer service, etc., through either direct ownership (ISN model) or partnerships to mitigate risk.

6.3 Regulatory and Compliance

The standards governing the ONDC network demand that an independent auditor conduct periodic reviews to ensure that all applicable policies are being followed. Given the anticipated (high) number of providers and buyers, the efficiency and success of these audits, especially amid the absence of data storing/tracking standards, remains to be seen.

6.4 Delays in Nationwide Rollout

ONDC plans for a nation-wide rollout by the first quarter of calendar year 2023. However, a lot depends on the success of ongoing pilots in select cities. As with any new service offering, new learnings will emerge, which may delay the pan-India roll out of ONDC. The true benefit of ONDC will be seen when it is made available to a wider audience than it is now. Brands must factor in possible delays in the nation-wide rollout in their ONDC strategy plan.

7. Conclusion

ONDC, as a concept, is pathbreaking in many ways. If all goes as planned it is likely to revolutionise the way e-commerce is conducted. Further, the modular and interoperable architecture opens multiple relevant use cases across industries.

That said, we are still at the early stages of the ONDC lifecycle. A lot of it rides on the learnings from the ongoing pilot run. As we speak, the policy framework is being refined based on public consultation. If all goes as per plan, we should expect a nation-wide roll out in CY2023.

Meanwhile, brands need to get their ONDC strategy and approach in place (key elements identified in section 5 of this report). Those who plan to join the network as ISNs would need additional preparation (in terms of catalogue, inventory management, logistics, etc.) to register on the network.

As with any innovation, ONDC brings its own share of opportunity (section 3) and risks (section 6). Brands who take the initiative to maximise opportunity while addressing the risks are likely to come out as winners.



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