



THE CRITICAL ANALYSIS OF OPEN NETWORK FOR DIGITAL COMMERCE IN INDIA

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Abstract

In a fastest growing digital economy like India, it is essential that nation should have its own digital commerce platform. This research paper presents a critical analysis of the Open Network for Digital Commerce (ONDC) in India. The ONDC is a government initiative that aims to create an open, transparent, and interoperable network for digital commerce, with the goal of promoting innovation, competition, and consumer choice in the e-commerce sector.

The paper examines the ONDC from various perspectives, including its potential benefits, challenges, and risks. It analyses the key features of the ONDC, such as its open architecture, common registry, and standard APIs, and evaluates their effectiveness in promoting interoperability and reducing entry barriers for new players.

The paper also discusses the regulatory and policy implications of the ONDC, including its impact on competition, consumer protection, data privacy, and cybersecurity. It examines the existing legal framework for digital commerce in India and assesses whether it is adequate to address the new challenges posed by the ONDC.

Overall, the paper provides a comprehensive and critical assessment of the ONDC, highlighting its strengths and weaknesses, and providing recommendations for policymakers, industry stakeholders, and consumers. The research contributes to the ongoing debate on the role of open networks in promoting innovation, competition, and consumer welfare in the digital economy, particularly in emerging markets like India.

However, we also highlight several challenges that must be addressed for the ONDC to be successful, including issues related to data privacy, interoperability, and governance. We argue that the success of the ONDC will depend on its ability to foster trust among all participants in the ecosystem and ensure a level playing field for all.

Introduction:

Open Network for Digital Commerce (ONDC) is a digital platform based on open protocol and it will support local business over all sectors of an economy, such as auto, grocery, restaurants, beverages, booking of various services, hospitality and

tourism, among the big and establish players, to be known and searched by any websites or applications. This digital app target to bring new opportunities, stop the monopoly of big players and by helping micro, small and medium enterprises and

small shopkeepers and provide them get on worldclass platforms.

Evolution of Open Network for Digital Commerce:

The Directorate for Promotion of Industry and Internal Trade (DPIIT) of the Government of India founded the private, non-profit Section 8 corporation known as Open Network for Digital Commerce (ONDC) with the goal of fostering open e-commerce. The Quality Council of India and Protean eGov Technologies Limited established it on 31st Dec. 2021. The initial funding has made by them (formerly NSDL e-Governance Infrastructure Limited). The ONDC is a space with different characteristics which aimed to give boost to open communication and reach among the

different segments of population. It is a place with technological independence, provides and entertain the need for equitable playing fields, particularly from small retailers, the reduction of online entry and discovery barriers, the adoption of an open digital ecosystem across major industries, and the correction of big ecommerce companies' anti-competitive behaviour. By integrating them into an open-source decentralised network where data portability will break down data silos and data interoperability will enable innovation, this system is intended to stop the giant companies from bypassing the Consumer Protection (E-Commerce) (Amendment) Rules, 2021 and helpful in reducing market autonomy of few tech companies.

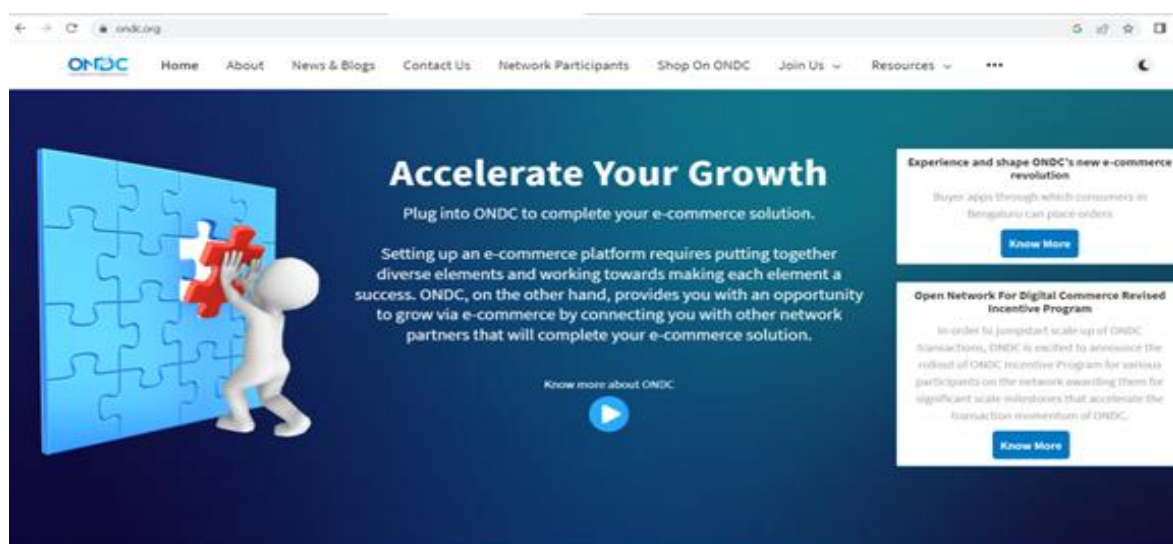


Image 1.1 ONDC website

History of ONDC:

A nine-person advisory council was established by the Department for Promotion of Industry and Internal Trade on July 5, 2021. (DPIIT). The very difficult task of creating the ONDC based on open-source methodology employing open standards and network protocols was given to the Quality Council of India (QCI). Within two years of its introduction, it plans to cover 25% of domestic internet commerce and will include inventory, logistics, and dispute resolution. Delivery services will be decentralized by ONDC so

that clients can select their preferred logistics company. While DPIIT sanctioned 10 crores as an initial investment, QCI set up a team of specialists and recruited certain small and medium-sized companies as volunteers to carry out the project till 26 October 2021.

Several public and private sector organisations acquired holdings in ONDC between November 2021 and March 2022 by making seed money investments to become early promoters. More than 20 organisations have invested 255 crore (US\$32 million) in the project as of July

2022. According to Nandan Nilekani, the Account Aggregator Network (AAN) would collaborate with ONDC to

efficiently provide everyone in the supply chain with access to formal credit.

ONDC Promotors:



Image 1.2 ONDC Promotors

Ekart, the logistics section of Flipkart, and Dunzo, backed by Reliance Retail, have made their contribution in ONDC to give logistic and distribution services. It is been expected that the biggest tech companies like Flipkart and Walmart-owned PhonePe are going to join the network and is currently undergoing in talks with officials. A member of the network is Paytm. Among the lenders in negotiation with the ONDC to establish buyer platforms are State Bank of India, Axis Bank, PNB, ICICI, HDFC, Kotak, and IDFC First. By using these, the banks would be able to promote the use of their credit cards, loans, and other services. Startups that would join the ONDC are also appealing to the venture capital companies Sequoia and Accel. Bharti Airtel and Vodafone Idea, two telecommunications companies, are also discussing how they may make use of the platform.

Review of Literature:

1. Several studies have highlighted the potential benefits of open networks for digital commerce in India. A study by the Reserve Bank of India (RBI) found that open networks could improve competition, reduce costs, and increase innovation in the digital payments space. The study also suggested that an open network could help to achieve the government's objective of increasing financial inclusion by providing greater access to digital payment services.
2. Another study by the Indian Council for Research on International Economic Relations (ICRIER) highlighted the potential benefits of an open network for digital commerce for small and medium-sized enterprises (SMEs). The study found that SMEs faced several challenges in accessing digital payment services due to the high

costs and technical requirements of closed networks. An open network could provide SMEs with greater access to digital payment services, reduce costs, and increase competition in the digital commerce space.

3. A report by the National Institute of Public Finance and Policy (NIPFP) also highlighted the potential benefits of an open network for digital commerce in India. The report suggested that an open network could reduce the risk of monopolistic practices in the digital payments space and promote greater competition and innovation. The report also suggested that an open network could increase financial inclusion by providing greater access to digital payment services for underserved segments of the population.
4. In their paper titled "A Review of ONDC's Digital Warfare in India Taking on the E-Commerce Giants," Bibhu Dash, Pawan Kumar Sharma, Meraj F Ansari, and Swati Swayamsidha came to the conclusion that ONDC India can bridge the gap between large players and small retailers in the e-commerce sectors through a distinctive design. It is actually developing a value chain-based e-commerce network with growth potential for all small, medium We will have a better grasp of how things will function in the short and long term once the ONDC network is ready for full phase implementation. It is still under construction and undergoing several unique and novel improvements.

Objectives:

1. To understand the implications of ONDC platform in India
2. To critically examine the advantages and disadvantages of ONDC platform in India

Challenges of ONDC platform:

1. There is no proper mechanism for liability of network participants against consumer complaints - Without a clear framework for liability, it can be difficult for consumers to seek redressal when they face issues such as fraud, defective products, or non-delivery of goods. This can erode trust in the digital commerce ecosystem and discourage consumers from transacting online.
2. Third party audit policy is not clear - Third-party audits are an important aspect of any digital ecosystem, as they provide an independent assessment of the security and reliability of the network. In the context of ONDC, third-party audits can help to identify vulnerabilities and gaps in the system, and provide recommendations for improvements.
3. Participants search algorithms will be very complicate - ONDC is expected to bring together a wide range of participants, including buyers, sellers, service providers, and intermediaries. Each of these participants will have unique needs and preferences, which will need to be accommodated in the search algorithms. The search algorithms in the Open Network for Digital Commerce (ONDC) in India are likely to be complex, given the scale and diversity of the network.
4. Large number of promoters could lead to clash of individual objectives - Promoters in ONDC could include buyers, sellers,

service providers, and intermediaries, each of whom may have their own goals and objectives. For example, sellers may prioritize sales volume, while buyers may prioritize price and quality. Service providers may prioritize efficiency and cost-effectiveness, while intermediaries may prioritize revenue generation. The presence of a large number of promoters in the Open Network for Digital Commerce (ONDC) in India can potentially lead to a clash of individual objectives and priorities, which could create challenges for the functioning of the network.

5. Getting data related to customer buying behaviour algorithms is very challenging - Customer data is a critical input for developing algorithms that can provide personalized and relevant product recommendations to buyers. However, the collection and use of customer data is subject to strict regulations and guidelines, aimed at protecting the privacy and confidentiality of personal information. To address this challenge, ONDC will need to establish robust data protection and privacy policies, in line with national and international standards.
6. Online dispute resolution will be handled by third party - However, relying on third-party providers for dispute resolution can also create challenges, particularly in terms of transparency and accountability. It can be difficult to ensure that the decisions of third-party providers are fair and unbiased, and that their fees and charges are reasonable and transparent. To address these challenges, ONDC will need to establish clear guidelines and rules for the selection, qualification, and performance of third-party

providers of online dispute resolution.

7. Challenges to bring local level participants on board to make them technically sound - Local level participants, such as small businesses, rural artisans, and individual entrepreneurs, may have limited access to technology, infrastructure, and resources, which can create barriers to their participation in ONDC. They may also lack the technical knowledge and skills required to use the platform effectively.

Opportunities of ONDC platform:

1. PayTM, and PhonePay integrated with this network for faster payment options - PayTM and PhonePe are popular mobile payment apps in India that allow users to make digital transactions using their mobile phones. Integrating these platforms with ONDC can enable buyers and sellers to complete transactions more quickly and easily, without the need for cash or physical payment instruments. In addition to providing faster payment options, integrating payment platforms like PayTM and PhonePe can also help to increase the adoption and usage of ONDC, by providing a seamless and integrated user experience.
2. The number of sellers and buyers' participation is increasing day by day - as more people participate in ONDC, it can potentially lead to increased network effects, where the importance of any digital app increases as it is used by number of people. This can create a virtuous cycle, where more participants lead to more value, which in turn leads to more participants.
3. The local level product will be promoted on national level - To

promote local level products on a national level, ONDC will need to develop targeted marketing and promotional strategies that highlight the unique features and benefits of these products. This could include partnering with local level producers and artisans, showcasing their products on the platform, and promoting their products through social media and other channels.

4. Logistic Network Partners are helping for last mile delivery - Last mile delivery is the final stage of the delivery process, where the product is delivered from a local hub to the customer's doorstep. This can be a challenging and costly process, particularly in India, where logistics infrastructure is often inadequate and fragmented. Logistic Network Partners can help to overcome these challenges by providing specialized last mile delivery services, including doorstep delivery, cash on delivery, and returns management. These partners have the necessary infrastructure, expertise, and network to deliver products quickly and efficiently, even to remote or hard-to-reach locations.

Conclusion:

We can conclude that the ONDC has the potential to be a game-changer for e-commerce in India, but its success will depend on careful planning and execution. We recommend that the government work closely with industry stakeholders to address the challenges and ensure that the ONDC is implemented in a way that benefits all participants in the ecosystem. ONDC is effort by government of India to boost uses digital commerce in India about 25% over the next two or three years from the current 8%, and touch maximum sellers in the farthest part of our country. If we compare the pros and cons of ONDC

platform it seems to have greater challenges than opportunities at initial phase but later on this network will be boon for local level participants as soon as the participation grows in future.

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