

## Articles

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# The Emergence of Online Delivery Platforms as Capital, Culture and Code: The Changing Paradigm



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### Abstract

The author's aims in the article are to address the understanding of platforms, through their shared properties of infrastructure and how the lines of differentiation are blurring in urban spaces. In doing so, authors of the article outline the growth of online food aggregator delivery platforms and factors that accelerated their growth. Further, the authors try to shed light on the multiplicity of algorithms by dissecting online platforms into individual algorithmic components. The disassembling of the platform improved the cognizance of various ways in which algorithms within these platforms affects the users and partners. Lastly, the authors highlight various ways and means in which online platforms are governed in urban spaces. The study finds that although both platforms and government have certain safeguards for their users and partners, but lack in strategy efforts for technological innovation under the realm of trust.



## Keywords

food aggregator, algorithms, platforms, intermediary liabilities, labour law, urban spaces.

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## Introduction

In the past decade and more prominently after the beginning of the Covid-19 lockdown, societies have witnessed huge efforts of digitalisation, primarily in the form of digital platforms that have since mediated the urban lifestyle. The above phenomenon results in the entanglement of technology and space and also the emergence of socio-technical formations. In this sense, the platforms are often regarded as a form of urban infrastructure. As H. Mooshammer and P. Mörtenböck [Mooshammer H., Mortenbock P., 2021:12] highlight that platforms are not mere socio-technical transformations but pose the power of legal, cultural, and infrastructural change, thus opening the avenue for inquiry into the digital platforms. This paper reflects on platform urbanism in the context of the recent development in infrastructure and platform studies by focusing on food delivery platforms in India. Further, the paper illustrates various assemblages of algorithms in online food delivery platforms, which helped in mapping various contention zones between humans and algorithms. One of the major contention issues for platforms has been the intermediary or aggregator liability. Lastly, the paper presents the status of the liability in India within the realm of online food aggregator delivery platforms.

## 1. Methodology

The paper, in trying to understand the reign of platforms in urban spaces, used a multidisciplinary approach. The research conducted is exploratory in nature in order to clearly understand the effects and conditions of the platform economy. The study deployed critical content analysis and a literature survey as part of the research methods. The paper used secondary data as part of research sources, which included reports from national and

international organisations, journal articles, newspaper articles and court proceedings. The graphs and tables were made using the Data wrapper web application.

## **2. Mapping Transition: Infrastructure to Platform**

In the field of STS (Science and Technology Studies) the discourse on infrastructure is primarily focused on the intertwining of social and technological structures. The rationale for infrastructure is driven by the idea of the free flow of goods, ideas, and people [Mattelart A., 1996]. The need for this free flow to continue inevitably leads to the governance of technology to lead a free life in society. With the surge in digital platforms due to the prevalent economic conditions, the debate about the effects of platformisation has been bubbling. At one end, scholars point towards the potency of these platforms towards matching the supply with demand in the situated market [Davis N., Shibulal S., 2018]. In the same time others analytics like T. Scholz [Scholz T., 2017] have highlighted the damage they cause to workers of these platforms and society. As in most of the places in the world, in India, too digital platforms have their major user base in urbanised cities. Thus, in this sense urban spaces seem to be a crucial boundary in exploring the dimension of factors that affect the development of digital platforms. The most prevalent digital platforms in the sector of transportation, rentals, food delivery and domestic work have previously been a part of the informal economy, more evident in India. From this viewpoint, digital platforms do use material infrastructure like streets, business and residential complexes, airports, etc., but also use the immaterial dimensions like culture embedded in the society to the managerial practices in their prevalent business [Davidson N., Infranca J., 2016].

The existing literature on platforms, situated in urban spaces, recognises the role of business models and data-driven entrepreneurial efforts in reimagining the infrastructure and services offered by urban cities. The scale of their expansion has made them new urban institutions (Doorn N., 2019). As Doorn et al. [Doorn N., Mas E., Bosma J., 2021] have stated that the coronavirus pandemic has changed platform-mediated work, and both the United States and Europe have seen considerable growth in food delivery services during severe lockdowns. These platforms have expanded their networks of participating restaurants, range of deliveries and carrier

fleets due to a surge in demand. Similarly, India, too, saw a true jump in the business of food delivery platforms<sup>1</sup>. With such interdependency on urban spaces, these platforms codify, decodify and recodify spaces continuously in order to adapt to each other's transformations. Dominant tech giants like Amazon, Google, Apple, etc. with their data harvesting and processing scale have given birth to data-driven govern mentality of cities often termed as 'smart cities' [Vanolo A., 2014: 883–898] contrasting to this the cities which emerge as the site of confrontation between high-tech companies and subaltern subjectivities which Rossi [Rossi U., 2019] terms as 'platform metropolis.'

Whereas technological development is progressing, two distinct streams of theoretical understanding developed. The first theorisation was in the form of infrastructure studies that emerged from STS and information science, and the second one was centred around media studies referred to as platform studies. Infrastructure studies developed along two themes within STS, first along the historical perspective of Large Technical Systems (LTS) where systems like electrical power grids and telephone networks were considered in the first phase as demonstrated by Bijker and Hughes, in the later stage of the phase the shipping networks were understood as internetworks or webs. The phase included scholars like Star and Bowker who discussed the phenomenology and sociology of infrastructure. In the same time their study highlights distinctive features of infrastructure such as reliability, ubiquity, invisibility, gateways, and breakdowns.

The study on digital platforms is recent, as even the digital industry adopted the term 'platform' in the mid-1990s when Microsoft referred to Windows as a platform. In the field of management and organisation studies some researchers contextualise platforms both in digital and non-digital industries. For them, platforms are more of an architecture comprising key elements like core and complementary components and an interface for modularity [Baldwin C., Woodward C., 2008: 32]. Management and organisation identify platforms as models of innovative products with applications to the digital world.

In the context of cultural studies and political economy, the analysis of platform design and architecture is complemented by the stress on user

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<sup>1</sup> Available at: <https://www.forbesindia.com/article/brand/connect-food-delivery-sector-sees-a-huge-rise-in-orders-as-a-result-of-covid-19/61/305/1> (accessed: 20.04.2020)

agency that is majorly characterised by economic and legal implications. Thus, scholars like José van Dijck define a platform as a “set of relations that constantly needs to be performed” with users’ expressions on one side and platforms’ profit aims at the other side [Dijck van J., 2013: 26]. This explanation of platforms is shared by various scholars who highlight that economic interest affects the design decisions of these platforms and not merely provides users with a means to express themselves but also enables and benefits from ranking, recommendations, and analytics [Langlois G., Elmer G., 2013].

On the other front, T. Gillespie points towards the tension between agency and architecture in platforms by analysing how legal structure and technical affordances of intermediaries shape the discourse [Gillespie T., 2010].

Scholars like J. Plantin et al. [Plantin J., Lagoze C., Edwards P., 2016] have stressed that the difference in infrastructure and platforms is merely analytical and some platforms like Google or Amazon have vantaged to the point where they resemble more like infrastructure due to their ubiquitous and common nature. Currently, in a neoliberal world, infrastructure has shown similar features as platforms due to an increase in privatisation efforts and reduction of governance as a function of the market. Thus, infrastructure and platform have converged to a point where ‘platformisation of infrastructure’ and ‘infrastructuralisation of platforms’ both are possible.

Using the concept established by J. Plantin and his collaborators, they explored the difference between infrastructure and platforms. They initially focused on the ‘system builders’ which is central to the idea of LTS in the STS field and ‘platform builders.’ Although the latter seems to be the extension of the former, the key difference is in the approach, where platform builders do not strategise through vertical integration.

Thus, platforms are designed to be amplified from outside by other actors, who endure certain rules. Platforms like Windows by Microsoft, macOS by Apple or ChromeOS by Google have thrived by appealing to individual actors (like application developers in this case) to contribute to their ecosystem, rather than innovating their own standalone products. While users benefit from the standardised platform interface, independent actors utilise the code base, large consumer base and marketing power the platforms offer. Platform builders also leverage the lock-in of both the users

and independent actors, which has revenue benefits too. As the previous studies on platforms have highlighted this approach leads to various types of restrictions, updates offered by platforms, functionality, and design. In the end, attaining lock-in is the main motive of the platform builders and to suppress the construction of gateways as infrastructure studies also highlight the same effect.

*Table 1*

**Properties of infrastructure and platform**

<b>Property</b>	<b>Infrastructure</b>	<b>Platform</b>
Structure	De-centralised	Centralised
Component interaction	Interoperability by standardizing	Application programming interface (APIs)
Interest	Essential services	User benefits
Value	Public	Private
Scale	Large	Small-medium
Capital	Government, PPP, pay per use	Venture capital, subscription, pay per use
Sustainability	Long term	Short (frequent updates))
User Agency	Opt-in	Opt-out

Even with the argument that recently the boundary between infrastructure and platforms is diminishing, Table 1 describes the distinct features and where they overlap. In this case of platforms, the focus was restricted to food delivery platforms. Most of the properties were adopted from the study by Plantin et al.

**3. The Regime of Platforms**

**3.1. Contextualising Platforms**

Digital platforms, with all the dissonance around them about platform capitalism, the gig economy etc. have lately been regarded as the conceptual framework for analysing and contemplating social, economic and spatial developments. However, their historical and geographical embeddness is often unnoticed (Ecker U., Strüver A., 2022). Similarly, less focus has been on the management and cultural perspectives of digital platforms. In this section, the paper focuses on what has given rise to the platform economy

in the context of online food delivery. Secondly, the section also showcases the multiple layers that accumulate to form online food delivery platforms. The multiple interactions with various algorithms within the platforms also generate liability conflicts

In highlighting these discourses, the paper also touched upon the different management practices of online food delivery platforms and the nature of the shifting cultural context.

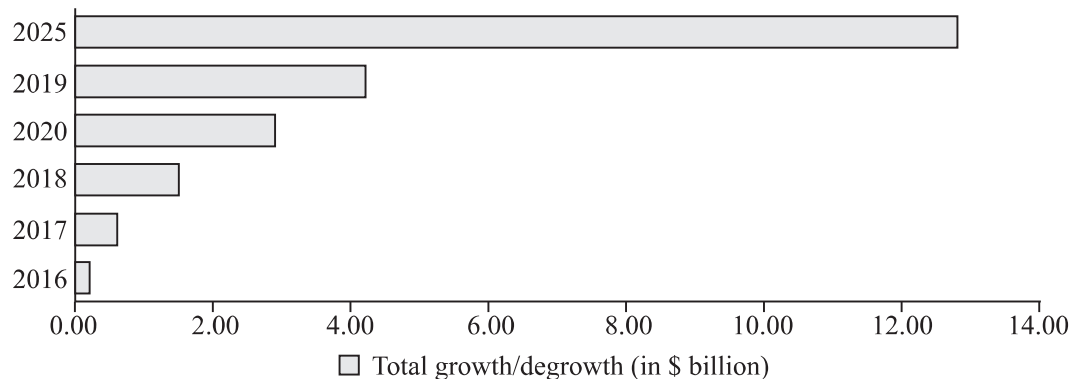
In the above section, the study focused on the blurring line between infrastructure and platform studies. Now, it is important to understand what contextualises something as a platform. Nick Srnicek [Srnicek N., 2017: 43] in his research *Platform Capitalism* defines a platform as “a digital infrastructure that enables two or more groups to interact.” Primarily, platforms act as intermediaries and collect, analyse, and capitalise on data. A prevailing characteristic of online platforms is the attainment of a self-enforcing monopolist effect and interdependency between sector platforms and infrastructures [Poell T., Waal M. et al., 2018]. As seen in the case of online food delivery platforms which depend on various online payment platforms (sector platforms) and market themselves on infrastructural networks such as Google and Facebook. This behaviour of platforms highlights their inherent tendency of converging towards the centralisation of various efforts [Guyer J., 2016]. To be within the contextual boundary of the study, the paper specifically addresses the lean platforms in urban spaces. Lean platforms prominently focus on individual services (delivery, cleaning, etc.) while following growth-oriented methods rather than profit-based strategies. An important feature of lean platforms is their reliance on maximum out-sourcing in order to operate with a fixed capital [Srnicek N., 2017: 76].

#### **4. Rise of Online Food Delivery**

Platform economies emerged as the product of technological innovation in infrastructural capabilities and the Internet. The monetary policy following the impact of the 2008 economic crash, with the inflow of capital through venture capitalist firms [Card J., 2017] into the rising entrepreneurial efforts paved the way for digital platforms.

In the case of India, the Information Technology (IT) sector generated twice more in 2010 as in 2005, thus providing confidence in the post-2008 crash economy. The number of GICs (Global In-house Centres) also

surged during the same time period. Although, the growth of online food services in India surged after 2016 and will reach the \$12.8 billion mark by 2025<sup>2</sup> (“India’s Online Food Services Have Plenty of Room to Grow,” 2021). Figure 1 shows the growth trajectory of online food services in India. Till 2018, India had two unicorns, Zomato and Swiggy, in the online food delivery sector. P. Jalote and P. Natarajan [Lalote P., Natarajan P., 2019] also observed that the growth of the IT sector was the result of minimal government intervention coupled with incentive policies, a focus of the industry on skilling and development, and a high focus on process orientation, industrial collaborations and scale and entrepreneurship. Most of these factors also have a meteoric role in the rise of the platform economy in India. Currently, India is third in online food delivery business led by China followed by the United States [Reeves S., 2019].



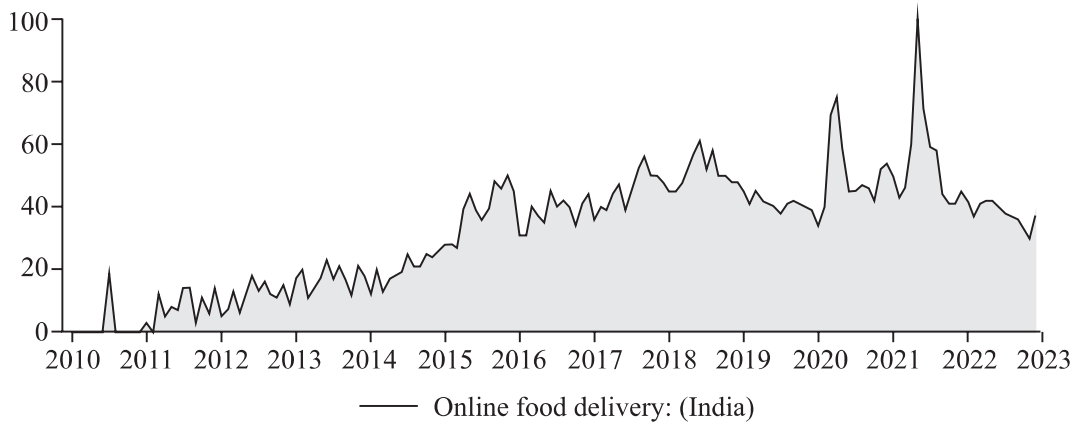
**Fig. 1.** Growth of online food services in India (Source: Redseer report)

Another technique to understand the penetration of online food delivery platforms is to analyse their popularity in a region. Figure 2 underlines the interest over time<sup>3</sup> for the term “online food delivery” in India and the rise in interest activity for the term during the beginning of the first and second phases of Covid-19 lockdowns (2020 and 2021). The interest activity also highlights the gradual rise in the popularity of the term since the mid of 2014.

<sup>2</sup> India’s online food services have plenty of room to grow (2021, October 7). *The Economic Times*. Available at: <https://economictimes.indiatimes.com/tech/startups/indias-online-food-services-have-plenty-of-room-to-grow/articleshow/86842016.cms?from=mdr> (accessed: 21.04.2022)

<sup>3</sup> Numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means that there was not enough data for this term. For more information visit: Google Trends



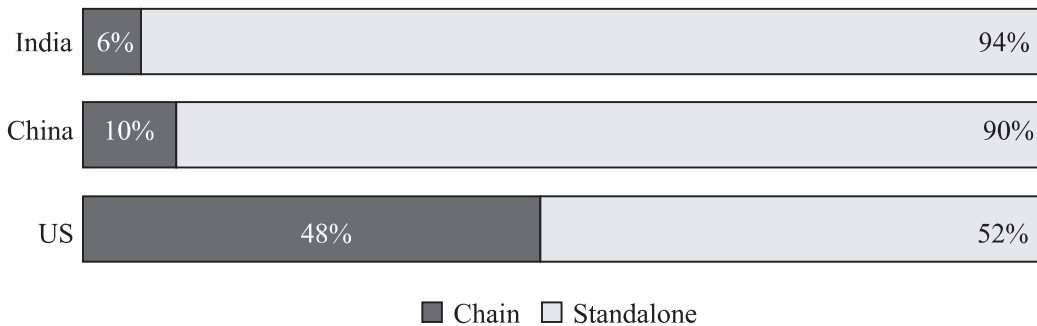


**Fig. 2.** Interest over time for online food delivery.

A comparison between food services in India, the United States and China put the spotlight on the existing societal practice and market penetration of food services. Indian food services market is growing but is severely underpenetrated as compared to the US and China. China dominates in food services sales with 57.8% and but the US is the leader in terms of the size of the food economy with \$1780 billion. Figure 3 shows the tabular representation of food services in India, the US and China.

	Food Services Sales (%)	Home-cooked (%)	Total Size of market (in \$ billion)
India	10.0	90.0	670.0
China	57.8	42.1	1210.0
US	54.4	45.5	1780.0

**Fig. 3.** Food Services: India vs US vs China (Source: Redseer report)



**Fig. 4.** Food services: Chain vs Standalone (Source: Redseer report)

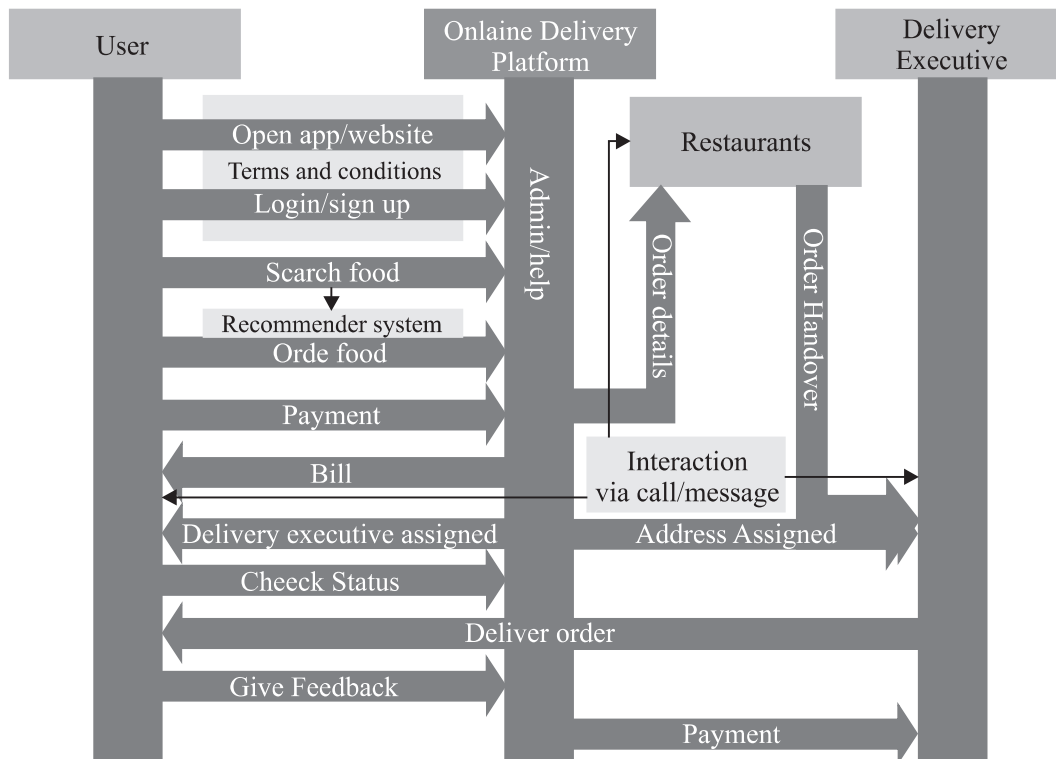
Further, the Indian food market is dominated by standalone restaurants and kitchens whereas the US market although dominated by standalone restaurants, has a roughly equal percentage of food chains. Figure 4. shows the market dominance of chains and standalone restaurants in India, the US and China.

## 5. Dissecting Online Food Delivery Platform

Platforms are foremost an assemblage of algorithms working in a scrupulous and veiled manner. To ameliorate our conception of online food delivery platforms, it is crucial to understand the various layer of algorithms which amalgamate to form a platform. Computer scientist idea of an algorithm has predominantly been based on them being mere instructions that when executed result in the accomplishment of a singular goal. This restricted understanding considers algorithms as textual and singular in action and separates them from their technological execution. Thus, scholars in the field of algorithmic studies stress on understanding algorithms in and as action [Deven-dorf L., Goodman E., 2014]. Computational algorithms in action largely depend on the outside actors for data required as input, machines that execute them, the data centres that maintain results, etc. Thus, algorithms themselves are an agglomeration of public, machine, data, policies and as of any other component that may emerge over time. As Annemarie Mol [Mol A., 2002: 18] states: “It is possible to refrain from understanding objects as the central points of focus of different people’s perspectives. It is possible to understand them instead as things manipulated in practice. If we do this—if instead of bracketing the practices in which objects are handled, we foreground them—this has far-reaching effects. Reality multiplies.” In this context, the online food delivery platform was mapped to understand the multiple algorithms.

Figure 5 highlights algorithms in action in online food aggregator delivery platforms in India. The diagram outlines the various site of human algorithm interaction. All the terms written in white denote algorithms or algorithmic action and terms written in black are human or human-to-human interactions. This points out the areas of contention between humans and algorithms. Further, it assists in mapping the stakeholders are affected by the platformisation of urban spaces.

The inner functioning of various clusters of algorithms within the food delivery platform the multiplicity of algorithms and how different set of algorithms interact in unique ways with the users of the platform.



*Fig. 5.* Diagram of algorithms in action in an online food aggregator delivery platform

The obscurity in the functioning of these algorithms and the involvement of large user informational datasets make platforms eligible for scrutiny, although various sites for scrutiny exist within the platform. The paper focuses on the intermediary liability of online food delivery aggregator platforms.

## 6. Intermediary Liability of Online Food Delivery Aggregators

Platforms scale up their operations and visibility through intensive and extensive data aggregation, production and using analytics thus connecting them to existing infrastructure [Chan C., Klareld A.-S., 2022]. With the boost in the platform economy, platforms have acquired certain infrastructural properties like scale, and moreover, platforms also portray themselves as neutral, with clear boundaries just acting as mediators between different set users, strategically divesting their platform owner's power. The invisibility of LTS in our life, whereas is present everywhere is also shared by platforms as they get entrenched in our lives. For example, Zomato as a

platform work to be absent while having a nexus of delivery in the city. This strategic act reduces the role of platforms as matchmakers, although their algorithms are acting in a far more complex manner by impacting the decision-making of users [Pujadas P., Curto-Millet D., 2019].

The above argument about the power that platforms yield to users requires scrutiny from their liability perspective and what safeguards government institutions provide users within the realm of digital evolution.

Much of the population interacts with the Internet through online intermediaries; this way includes Internet service providers (ISPs), search engines and various types of platforms. The companies working in these sectors play a crucial role in providing access to information for decision-making, connecting users to other users and acting as vital drivers of economic and innovation growth. Thus, the policies embraced by these intermediaries to exercise control over users significantly shape the user's economic, social, and political selves. These policies have an implication for users' rights, expression, freedom, and privacy that are fundamental in nature in the Indian constitution.

## **7. Governance of Digital Platforms in India**

The international legal fraternity and governments have considered an intermediary liability since their existence. A few approaches have been deployed for their governance of responsibilities and liabilities. One of the major steps towards this approach was a set of documents launched in 2015 by a coalition of Internet rights activists and civil societies. This document came to be known as Manila Principles, whose prime objective was to foster the development of interoperable and harmonised liability, which will promote innovation, amidst keeping users right at the forefront<sup>4</sup>.

Countries like China hold intermediaries to strict liability for user-generated content, while European Union and the United States grant them leverage in form of conditional liability. Conditional liability shields intermediaries from unlawful user-generated content if they adhere to certain specific conditions as mentioned under relevant laws.

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<sup>4</sup> Manila Principles on Intermediary Liability. 2015. Available at: <https://manilaprinciples.Org./index.html> (accessed: 16.04.2020)

In the case of India, the Information Technology Act was notified in 2000, which primarily dealt with cyber-crimes and e-commerce. The amendment of IT Act-2000 in 2008 and the introduction of Intermediaries Guidelines Rules in 2011 had added certain due-diligence prospects in relation to intermediaries, which intermediaries must adopt in order to have a shelter of immunity. In the beginning, the Act was ambiguous in nature that was rectified after the important judgement in the case of *Shreya Singhal v. Union of India* by the Supreme Court of India in 2015 (*Shreya Singhal vs U.O.I 24 March, 2015*).<sup>5</sup> After which, in 2018, the Ministry of Electronics and Information Technology issued the proposal to revise the 2011 Rules. Section 2(1) (w) under the IT Act defines intermediary in detail as “Intermediary, concerning any particular electronic records, means any person who on behalf of another person receives, stores or transmits that record or provides any service with respect to that record and includes telecom service providers, network service providers, Internet service providers, web-hosting service providers, search engines, online payment sites, on-line-auction sites, on-line-market places and cyber cafes.” Then under section 79 of the same act also have safe-harbour protection for intermediaries for third-party content. The function-based approach opted by the government provided safeguards to the intermediary based on the following conditions: “Firstly, observance of due diligence and certain guidelines issued by the Central Government; secondly, not conspiring, abetting, aiding or inducing the commission of the unlawful act; and lastly, upon receiving ‘actual knowledge or being notified by the government, taking down unlawful content’”. The above safeguarding notions are provided through the provision of government-enacted IT laws, although there are other instruments also to prevent intermediaries from wrongdoings.

With the boom in the platform economy, the fair competition aspect of online platforms has also come under scrutiny that is enforced by the Competition Commission of India. Recently, a complaint was against Zomato and Swiggy (online food aggregator delivery platforms) by the National Restaurant Association of India (NRAI) for subscribing to anti-competitive practices and abuse of position by dominance<sup>6</sup>. The NRAI raised the is-

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<sup>5</sup> *Shreya Singhal vs U.O.I on 24 March, 2015*. Indian Kanoon. Retrieved December 7, 2022. Available at: <https://indiankanoon.org/doc/110813550/> (accessed: 20.04.2020)

<sup>6</sup> Available at: <https://nrai.org/nrai-reaches-out-to-cci-against-anti-competitive-practices-by-zomato-swiggy> (accessed: 20.04.2020)

sue of the practice of deep discounts strategies, charging high commissions from restaurants, not sharing customer data with restaurants, bundling of services, violating platform neutrality and transparency disclosures for delivery prices and commission share (ranges from 25% to 35%). The delivery partners and restaurants function through vertical integration of supply chains at various levels. But in the case of Zomato and Swiggy which are online platforms and function both as marketplace partners and competitors. The food recommender system utilised by these platforms in searching for food and price comparison generates massive traffic and user data. So, it becomes important for sellers to be listed on these intermediary platforms for business visibility and increased sales. As a consequence, these aspects make businesses depend on these platforms to access last-mile connectivity, which contributes to yielding higher bargaining power for online platforms.

Although the case is to be decided still, the Supreme Court of India judgement in the case of Uber India Systems Pvt. Ltd. v. CCI in 2019 pointed out that predatory pricing by a platform is indicative of dominance and abuse [Nariman F., 2019]. Thus, such judgements might force more regulations on online platforms. Other charges filed by NRAI can be looked at in terms of various sections under the Competition Act 2002. The deep discounts offered by these platforms come under price squeeze which under section 4(2) (a) (ii) is discriminatory and unfair in nature. The overall effect of such practices by food aggregator delivery platforms leads to a competitive disadvantage to standalone restaurants in reaching consumers of their products.

The rise of food delivery platforms has also given rise to precarious work [Iqubbal A., 2021]. The lack of employment opportunities and shifting economic conditions is one of the reasons for participating in the platform economy (“Unemployment Rate at Four-Decade High of 6.1% in 2017–2018: NSSO Surveys,” 2019; “NITI Aayog Tries to Counter Bleak Unemployment Data, Says Ola & Uber Helped Create Over 2 million Jobs,” 2019)<sup>7</sup>. Although, these online platforms create jobs which is evident by their success, the quality of livelihood offered needs urgent scrutiny.

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<sup>7</sup> Unemployment rate at four-decade high of 6.1% in 2017-18: NSSO surveys. *Business Standard*. 2019, January 31. Available at: [https://www.business-standard.com/article/economy-policy/unemployment-rate-at-five-decade-high-of-6-1-in-2017-18-nssu-survey-119013100053\\_1.html](https://www.business-standard.com/article/economy-policy/unemployment-rate-at-five-decade-high-of-6-1-in-2017-18-nssu-survey-119013100053_1.html) (accessed: 20.05.2021).

The International Labour Organisation (ILO) introduced a concept of ‘decent work’ which maintains that “the freedom to express their concerns, organise and participate in decisions that affect their working lives” of workers is fundamental [Ghai D., 2003]. According to the Fairwork report on labour standards in the platform economy in India highlights that food aggregator delivery platforms are not holding fair conditions in terms of pay, working conditions, contracts, management, and representation<sup>8</sup>.

The labour workforce in India is supported through labour legislation, whose main aim is to provide social security, protection, social justice, and regulation. The Indian law categorises workers broadly into Employees, Contractual workers (including contract labour and inter-state migrant workers) and workers employed in the unorganised sector. Although, safeguard measures for workers exist but workers of these online platforms are not governed under any of the including the Contract Labour (Regulation and Abolition) Act 1970, Minimum Wages Act 1948, Employees’ Provident Fund and Miscellaneous Provisions Act 1952, Payment of Bonus Act 1965 and Unorganised Workers’ Social Security Act 2008. The unique nature of tech-based platforms has made it impractical to be governed under such laws. Thus, with the recommendation of the National Commission on Labour, the Ministry of Labour and Employment introduced the Code of Social Security (2020) that recognises the platform workers as ‘gig workers.’ The new Labour Code provides definitions of ‘gig worker’ and ‘platform work’ but through various judgements, Indian courts, have also provided requirements to be considered when assessing employer-employee relationships. The New Social Security Code of 2020 in this sense distinguishes between employees and gig workers. The Code provides mandatory benefits to employees whereas providing a framework to central and state governments for suitable schemes to benefit gig workers and mandates their registration. The central government is required to establish a social security fund as suggested by the new Code and gig employers are obligated to contribute one or two percent from their annual turnover [Ganguly S., Ramesh A., 2022]. The Code awaits its compliance until state governments make suitable changes in their labour legislations. So, currently, gig and platform workers remain unprotected and unregulated under existing laws. Another section which requires scrutiny is the terms and conditions obli-

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<sup>8</sup> Rating Fairness in the Indian Platform Economy: 2020 Fair Work India Scores. Available at: <https://fair.work/en/fw/blog/2020-fairwork-india-scores> (accessed: 15.12.2020)

gated by the online food aggregator platforms to users and partners. There is arbitrariness in the decision-making in user assistance and refunds.

The rise of platforms has also complicated the legal domain at times moving ahead at a faster pace than law; consequently, the trust in and safety of online platforms will be under scrutiny. The lack of a transparent privacy policy is an example of how the delay in law exposes the population to «platform capitalism».

## Conclusion

The convergent and divergent nature of infrastructures and platforms towards each other is the result of constantly evolving innovation in the technology space. The shift towards infrastructure to platforms is in the terms of gap bridged by their sharing properties like scale and use. Thus, understanding the rise of platforms is evidence of how infrastructures have transformed into platforms and how platforms have acquired properties of infrastructures. The inquiry into multiple layers of algorithms revealed a clear understanding of the functioning of online food delivery platforms. This also furnished information regarding various contention zones between humans and algorithms, which expanded the horizon of intermediary liability.

Currently, in India the IT Act, Competition Act 2020, and various labour legislations are insufficient or inefficient in protecting the rights of various stakeholders of the platform economy. The online platforms are at present investing in AI technologies, Deep Tech to gain a competitive edge. Thus, a robust and comprehensive legal approach towards current and future technology is required to avoid distrust in technology.

For a country like India, with diverse cultures and languages, platforms need to invest more in the diversification of the workforce and robust business models to make platforms safe for every stakeholder. The government needs to ensure quick and decisive resolutions for technology-based concerns.

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