



Competition Commission of India



**National Conference
on
Economics of Competition Law**

**March 1, 2019
New Delhi**

Proceedings

Competition Commission of India
Economics Division

Summary of the Proceedings
National Conference on Economics of Competition Law 2019
March 1, 2019

1. Competition Commission of India organised the National Conference on Economics of Competition Law on March 1, 2019 with the aim of bringing together scholars, practitioners, academicians and experts working in the area of Economics of Competition Law. This year's conference was the 4th of the series, beginning in the year 2016.
2. The one-day Conference is an endeavour to develop and sustain interest in the Economics of Competition Law and create a critical mass of antitrust economists. The objectives of the Conference include (a) to stimulate research and debate on contemporary issues in the field of economics of competition law, (b) to develop a better understanding of competition issues relevant to the Indian context and (c) to draw inferences for enforcement of competition law in India among others.
3. The Conference consisted two 'Technical Sessions', a 'Special Session' and a 'Plenary Session'. Six papers were presented during the technical sessions covering a wide range of relevant topics. A special session on 'Contemporary Antitrust Issues' was organised wherein eminent persons presented their views and a Plenary on 'Digital Market: Antitrust and Beyond' was also held. A brief overview of the sessions is presented below;

Inaugural

4. The Conference started with the opening remarks by **Dr. Sangeeta Verma**, Member, Competition Commission of India. Dr. Sangeeta Verma, emphasised that markets are changing rapidly and the application of the law also has to keep pace, especially in the wake of digital space, Big data, Artificial Intelligence, Internet of Things, machine learning altering the market dynamics. She also pointed out that this conference is an attempt to bring theory and practice closer, to reconcile legal principles to economic rationale and above all to have an exchange of ideas.

5. **Shri Ashok Kumar Gupta**, Chairperson, CCI, in Special Address, emphasised that the necessity for an enforcing authority to frame its guiding policy in a clear and transparent manner. The discipline of economics can help in providing the much needed clarity and transparency. Further, he emphasised that competition law is an economic law and most modern competition law regimes have economic goals, such as promoting economic efficiency and consumer welfare. He also stressed on the fact that economic analysis has to help in building legally robust cases in CCI's decisions as these are subject to further judicial review. It makes it important that the economic analysis used in cases is comprehensible and that it fits well into the legal framework. Shri Gupta also informed the audience that the Commission has initiated a market study in the e-commerce sector to understand the evolving competition landscape.
6. **Dr. Krishnamurthy Subramanian**, Chief Economic Advisor of the Government of India, delivered the keynote address of the Conference wherein he underscored the role of Competition Commission of India in fostering innovation. He emphasised three major aspects to foster innovation *viz.* effective competition in product markets, competition in factor markets and encouraging pro-competitive behaviour. He mentioned that higher competition leads to greater innovation. However, product innovation has more path-breaking effects than process innovation that happens through technology. Importantly, he also emphasised that perfect competition does not always lead to more innovation. This does not mean that innovation is more likely in monopolistic markets. The optimum level of competition to foster innovation depends on the structure of the industry, wherein some amount of profits is necessary for firms to invest in innovation as firms consider risk adjusted returns. In a perfectly competitive market, firms cannot charge price greater than marginal cost and this does not leave enough profits to invest in research and development. He stated that pro-market is not always equal to perfect competition. Rate of innovation peaks and then falls as an industry becomes more competitive.
7. Dr. Subramanian further stated that across most sectors, greater product market competition can play an important role in fostering innovation in India. The factors of production required for innovation are access to finance and skilled labour. New firms with path-breaking ideas need funding, but such firms have no track record. Financial intermediaries are best placed to acquire this information and reduce information asymmetry. When new firms challenge incumbents, incumbents must innovate continuously to avoid being "creatively destroyed". He pointed that proportion of

credit, though not the magnitude, flowing to smaller firms has shrunk over the last decade. As per Dr. Subramanian, countries with developed financial sectors increase their investment more in growing industries and decrease their investment more in declining industries than countries with underdeveloped financial sectors. In countries with developed financial sectors industries with highly skilled workers grow faster and undertake more research and development. Hence competition in financial sector becomes very important. The regulators should ensure that there are low barriers to entry for new firms in the financial sector to exert competitive pressure on the incumbent firms.

8. Another crucial factor of production required for innovation is skilled labor, especially scientists undertaking basic research. The market for research is represented by competition among universities for research grants, research scholars, and collaboration with industry. Currently, this factor market exhibits no competition in India, whereas the level of competition in this market is matured in developed economies, and this needs to be addressed. Competition in factor markets for innovation, both in the financial markets and in the market for skilled personnel is essential for fostering innovation in India.
9. Dr Subramanian emphasized that to foster pro-market behavior, the importance of deterrence cannot be undermined. Competition regulation and its enforcement create incentives that shape the behavior of all firms, including those never found in violation. He emphasized that enforcement of competition regulation must create deterrence without any distinction between large and small firms.

Technical Session I – Competition Law and Policy

10. The Session was chaired by **Dr. Geeta Singh**, Partner, Genesis Analytic, India. Ms. Aastha Mantri, Senior, Consultant, Economic Insight was discussant in the Session. The following three Papers were presented in this session:
 - (i) ***‘Competition Regulation in Two – Sided Markets: The Indian Jurisprudence’*** by Mr. Akash Krishnan and Dr. V. K. Unni.
 - (ii) ***‘Relationship between Cartels and Mergers & Acquisitions in Indian Cement Industry: A Firm Level Analysis’*** by Ms. Neha Jaiswal, Dr. Pulak Mishra and Dr. Indrajit Dube.
 - (iii) ***‘The Nexus between Product Market Competition and Productivity Growth: Evidence from Indian Manufacturing Sector’*** by Dr. Lopamudra D Satpathy and Dr. Bikash Ranjan Mishra.

11. **Mr. Akash Krishnan**, Doctoral Student (Economics), IIM Calcutta, presented the paper on '*Competition Regulation in two-sided market: The Indian Jurisdiction*' wherein he gave a brief introduction on the two-sided market highlighting the case of radio taxi market markets and how it is different from the traditional markets. He discussed the forces driving competition in two-sided markets and their effect on market concentration. He stated that out of the 25 cases (relevant cases/ Orders considered for the study), 21 were filed under Section 4 of the Act. These cases were further analyzed in terms of relevant market definition and assessment of dominance/ abuse of dominance. He further emphasized the regulatory debates between 'Discretionarists' and 'Legalists' where the former believes that following a precedent is less important than getting the desired result whereas the latter believes that focus must be on adhering to precedents and consistency of judgements. The findings of the paper showed that the conviction rate was 9.52 % in abuse of dominance cases, 33.33 % in cartel cases and 0% in combination cases. The paper also observed that 64 % of the cases were acquitted prima facie out of which 43.75% were due to inability to show dominance. He concluded by saying that CCI's jurisprudence is of 'market discretionarist' category i.e. high on discretion and low on intervention.
12. **Ms. Neha Jaiswal**, Research Associate, Competition Commission of India, presented the paper on '*Relationship between Cartels and Mergers & Acquisitions in Indian Cement Industry: A firm Level Analysis*'. The main objective of the Paper was to find the determinants of M&A and understand the relationship between M&A and cartels within the industry. The paper attempted to analyse quantitative relationship between stricter enforcement/detection of cartels in the cement industry with the trends in M&A activity. The structure, conduct and performance of the industry were explained with the help of trend charts over the years for *inter alia* costs incurred by the firms, strategies adopted and returns made. A functional model was specified to study the extent and incidence of M&A and the impact of cartel on M&A was studied with the help of probit and tobit model. The findings showed that incidence of M&A by a firm is significantly influenced by the market size, cartelized behaviour and profits. Extent of M&A by a firm is significantly influenced by its market size, cartelized behaviour and profits. It was also observed that M&As are seen as an alternative arrangement to cartel i.e., firms engaged in cartels post its detection have taken M&A as an alternative to cartel to gain similar or increase the level of profits. It was concluded that M&A has

emerged as a vital strategy of the firms, where firms engage in it repetitively to maintain their profit margins.

13. **Dr. Lopamudra D. Satpathy**, Lecturer, Government College, Balangir, Odisha, presented the paper on *'The Nexus between Product Market Competition and Productivity Growth: Evidence from Indian Manufacturing Sector'*. The objective of the paper was to understand the nexus of competition and productivity in the case of Indian manufacturing firms through effect of innovation, efficiency and technological gap. She conducted an empirical analysis for the period from 1997-98 to 2016-17 where total factor productivity growth was treated as the dependent variable and the main explanatory variable was product market competition which was analyzed through rent. Other explanatory variables included size of the firm, age of the firm, technology, R&D intensity, advertisement intensity, etc. The results showed that rent has a negative significant effect on the productivity growth in case of manufacturing. It was further observed that size and technology are positively related with productivity whereas age, R&D intensity and advertisement intensity are negatively related. Product market competition was observed to have a significant positive impact on total factor productivity both at the firm and industry level. It was concluded that this positive relationship reaffirms the industrial policies already in force and gives a framework to revise it further in similar lines focusing on innovation.
14. The discussant, **Ms. Aastha Mantri**, summarized all the three papers presented in the Session. She pointed out the Pros and Cons of each paper. Thereafter, participants raised questions ranging from issues related to the data in two sided markets, relationship between innovation and productivity, offline and online market etc. The chair and panelists addressed the questions.

Special Session – Contemporary Antitrust Issues

15. **Ms. Payal Malik (Chair)**, Advisor, Competition Commission of India, chaired this session. Dr. Ioannis Lianos, Professor, University College of London, Dr. David Campbell, Director, Berkeley Research Group, Mr. James Harvey, Co-founder and Director, Economic Insight and Dr. Kadambari Prasad, Senior Economist, Compass Lexecon were the other distinguished speakers.
16. After the initial remarks of the Chair, **Dr. Ioannis Lianos** delivered his special address on *'Competition Law in a Complex Economy: Concepts, Metrics, Application and Remedies'*. He drew inspiration from the book written by *Alvin Toffler* titled as *Future Shock*. Dr. Ioannis, drawing parallel from book, highlighted the structural change in the

modern society from an industrial one to a super industrial one characterized by certain distinctive features such as (a) change in nature of competition from product development to development of an ecosystem (b) change in business style and (c) mass personalization. He highlighted that in a complex system which composed of many parts/subsystems intricately interconnected in ways, for which the degree and nature of the relationships is imperfectly known, the overall emergent behaviour is difficult to predict, even when the subsystem behaviour is readily predictable. As such, small changes in inputs or parameters may produce large changes in behaviour. Complex dynamical systems learn, evolve and adapt, generating emergent non-deterministic behaviour. The following concepts of complex systems were addressed (a) Increasing returns (e.g. network effects); (b) Leverage points that are places in a complex system where the system can be altered or changed; (c) Tipping points are when a system suddenly changes state based on a small change in a parameter of the system, and (d) Path dependence which means that the current possibilities of the system are in some sense constrained by the past choices that were made. While discussing Agents' changing roles within platform-based ecosystems, he also explored 'Consumer welfare' and 'efficiencies' in multi-sided payment platforms taking an example of American Express Card, pointing out that Multilateral Interchange Fees (MIF) needs to have benefits, needs to create value, consumers need to be "no worse off", and it has to correct a market failure. He also raised an interesting question of whether high platform profits because they have much less fixed investment and fewer employees: should this be a competition law problem? While competition Authorities have been slow in their response in dealing with such complex system, correspondingly no changes have been made to the Competition law and the old statute is being used to understand the new complex society. In this ecosystem, price no longer remains as the key metric for capturing consumer preferences and consumers do not have a choice of shifting/switching when price increases in such a system, increasing return prevail due to network effect, winners take it all owing to network effect.

17. **Dr. David Campbell**, in his lecture titled '*Too big to fix? Prospects for Bayer-Monsanto Remedy*' drew attention to the recent wave in mega mergers that have taken place in the Agrochem sector viz.,– Dow-Dupont (2015); ChemChina-Syngenta (2016) thereby reducing the global Seed/ Crop Protection innovators from four to three, and Bayer-Monsanto (2016). The Bayer-Monsanto deal had overlapping relevant markets (GM seeds, traits and crop protection) and it was also vertical in nature. After

examining the remedy studies conducted by USFTC and EU DG Comp, risk arising from remedies and best remedy practices he was of the opinion that in case of mergers between key competitors, divestiture remedies do not offer the required benefits. Further, in case of Bayer Monsanto merger he was of the view that the divestiture remedy was much worse, i.e. the merger was ‘Too Big to Fix’. He highlighted the following observations from Event Studies in merger analysis – (a) the stock price of acquired firm always goes up; (b) the stock price of acquiring firm often goes down especially if shareholders think management has overpaid, (d) If the merger is anticompetitive, then combined firm will be able to successfully raise prices i.e. an “umbrella effect” will lead to higher prices for everyone in the industry and stock prices of competitors will rise on news of the merger; (e) On the other hand, if the merger is efficiency enhancing, then stock prices of competitors will fall and rivals will be harmed by lower costs. He concluded his talk by providing some evidence from financial markets on the effects of a merger/ remedy based on the behaviour of stock prices of rival companies to the said merger.

18. **Mr. James Harvey**, in his lecture on *‘Price Discrimination: Fairness and Competition Policy’* began by pointing out standard clause in all jurisdictions about dominance in their statute. Pointing at the effect of price discrimination on consumers he raised a few interesting question on assessing price discrimination such as what is the harm from price discrimination? What is fair and unfair? What could be the counterfactual price for fairness? Are there any benefits arising from price discrimination? Competition and fairness trade-off? Artificial intelligence leading to increase in the scope for price discrimination etc. He concluded by calling for sectoral regulations in some sectors in the long term.
19. **Dr. Kadamabari Prasad**, in her lecture on *‘Anti-trust issues in Europe Development in Abuse of Dominance’* explored a specific anti-competitive conduct emanating from conditional rebates offered by dominant entities which was the specific allegation raised in Intel, Qualcomm and South African Airlines cases in Europe. She observed that such rebates on commodities offered on sale are ubiquitous and are prevalent in almost any commodity. She illustrated the concept of conditional rebate by taking a hypothetical example of a coffee brand and the impact of such conduct on the competition in the market for coffee. She concluded her lecture by demonstrating through the example that the allegation with respect to conditional rebates was a rebuttal presumption and

the same view has also been upheld in the judgement passed by European Court of Justice in Intel Case.

Technical Session II – Economics of Mergers

20. The Session was chaired by **Dr. Aditya Bhattacharjea**, Professor, Delhi School of Economics. Dr. Nathan Goldstein, Assistant Chief, Economic Policy Section, Antitrust Division, U. S. Department of Justice was the discussant of this session. The following three Papers were presented in the session:

- (i) *‘Application of Economic and Quantities Tools for Mergers Analysis in India’* by Dr. Ramji Tamarappoo and Ms. Neha Malhotra Singh.
- (ii) *‘Merger and Innovation Portfolios’* by Dr. José L. Moraga-González, Dr. Evgenia Motchenkova and Mr. Saish Nevrekar.
- (iii) *‘Effect of Mergers and Acquisitions on Innovation in Agri-input Companies: Theory and Evidences’* by Mr. Subash. S.P. and Mr. Ejaz Anwer.

21. **Ms. Neha Malhotra Singh**, Managing Economist, NATHAN, presented the paper on *‘Application of Economic and Quantities Tools for Mergers Analysis in India’*. The paper stressed the ideal approach for competition authorities which is to focus on the anticipated effects of a proposed combination in a careful, balanced and robust manner. In the paper authors assessed how the use of economic analysis and quantitative tools has evolved in merger assessments. in India, and drew a comparison with practices in two of the advanced jurisdictions, the United States (US) and the European Union (EU).The authors observed that Competition law jurisdictions around the world have adopted analytical approaches and tools to determine the positive and adverse effects of a combination on competition. Thus, they have taken an effects-based approach rather than a form-based approach. The tools have been used to define relevant markets, assess pre and post combination concentration and market power, and possible effect on prices. While these tools are universal in terms of applicability, the application and reliance on these tools/analytical approaches, and the threshold levels used vary across competition authorities. The paper concludes that India’s Competition Act 2002 has drawn extensively from practices in advanced jurisdictions. However, there are limitations in implementation of the Act, primarily due to the lack of detailed merger guidelines (including thresholds). The paper points that the lack of merger guidelines has created significant scope for discretion by the CCI in application and interpretation of merger analysis.

22. **Mr. Saish Nevrekar**, Research Scholar, IGIDR, presented the paper on '*Mergers and Innovation Portfolios*'. The paper studied mergers in markets in which firms invest in a portfolio of independent research projects of varying profitability and social value. The authors contended that by investing in a project a firm engages in a contest with the rival firms. The winner of the contest appropriates the profits generated by the innovation, while the losing firms obtain zero profits. Investing in a project increases the marginal cost of investing in another project, which generates negative externalities across them. The paper showed that firms invest inefficiently for two reasons: first, because of competition, they put too much money on the most profitable project; second, because firms do not appropriate fully the social gains from an innovation, they tend to underinvest in socially desirable projects. A merger internalizes two innovation externalities. A negative externality that arises because the investment of a firm in one project lowers the probability the partner firm wins the contest for that project. A positive externality because the investment of a firm in one project increases the marginal cost of that firm in the other project, which raises the likelihood the partner firm wins the contest for the alternative project. It was concluded that, when the winning firm appropriates all the social surplus from an innovation, then mergers are always welfare improving. In different words, if firms can perfectly price discriminate in the product market, a merger necessarily aligns the social and the private incentives. Otherwise, mergers may increase or decrease welfare, depending on how the appropriability of the social surplus from an innovation varies across markets.
23. **Mr. Subash. S.P.**, Scientist, Agricultural Economics, ICAR, presented the paper on '*Effect of mergers and acquisitions on innovations in agri-input companies: Theory and evidences*'. The paper dealt with the key question of what has led to the increase in innovation and competitiveness in agri-input sector (seed and pesticides). The paper establishes an empirical relation between mergers and innovation in the sector through applying the ex ante and ex post assessment approach. The paper explored the effect of M & A on innovation in agricultural input companies. Firstly it looked into effect of M & A on ownership network of the 'Big Six' company and its ownership network. Secondly, it assessed the effect on M & A on acquiring and acquirer firms. The effect of M & A on the ownership network and its effect on emerging genome editing technology was studied using an ex ante approach and the effect of M & A on patents was analysed using ex post approach. With this methodology the paper concluded that M & A provides firms an opportunity to reposition itself in the industry as a leader. The

analysis showed that such M & A could also lead to emergence of cross-licensing resulting in a 'Non-merger merger'; a situation similar to cartels in oligopoly. The results showed that the effect on M & A on innovation depends on the typology of M & A. The study suggested that the effect of M & A on innovations should be looked into by case by case basis and assessed based on the typology of M & A. The study also recommended using network measures together with other concentration measures and in-depth analysis in understanding the typology of the M & A to assess the effect of M & A.

Plenary – Digital Markets: Antitrust and Beyond

24. The plenary session was chaired by **Mr. Augustine Peter**, Former Member, Competition Commission of India. The Panellists in the session included Mr. Rentala Chandrashekhar, Former President, Nasscom; Dr Iaonnis Lianos, Professor University College of London; Dr. Arghya Sengupta, Founder, Vidhi Centre for Legal Policy; Mrs Rama Vedashree, CEO, Data Security Council of India and Dr. Nathan Goldstein, Assistant Chief, Economic Policy Section, Antitrust Division, US Department of Justice.
25. **Mr Augustine Peter** initiated the discussion by highlighting antitrust issues in the digital economy. He raised the issue whether price be the only factor to assess the market power there should be some broad definition of price that can be attributed in digital economy? He was of the view that a broad definition of price is required for the reasons of zero cost, below cost pricing and personalised pricing in the digital economy. He highlighted other issues like capital dumping by foreign players, effects of deep-discounting policies on competition, personalised pricing with increasing use of data algorithms and analytics. While talking about the issues related to data and privacy he raised certain questions, whether harnessing of data without any justification is possible to be regulated by ex-ante regulation? Collusions based on algorithms, artificial intelligence and machine learning whether can be addressed by competition law that circumvents on human interference. He submitted that vicarious liability if fixed on humans may lead to requirement in changing the perceptions regarding meeting of mind. He also stated that online vertical restraints have also emerged as a grave antitrust concern in form of retail MFN clauses which may lead to non-neutral treatment of enterprise which may further lead to discriminatory treatment against enterprise against the spirit of competition law. Apart from all these, he stated that size of transaction

threshold may be considered to be used for merger notification thresholds. Further, authorities should strive toward reducing the regulatory overlap between various regulators.

26. **Mr. Rentala Chandrashekhar**, Former President, Nasscom, stated that nature of digital economy has profound implications on the principles on which antitrust law rests. He is of the view that powerful and innovation based new high tech companies are the drivers of India's growth in the digital economy. He stated that these emerging high-tech companies are not only motivated by profitability but also neutrality of legal aspects and treatments. Taking the discussions further, he highlighted the differentiating features between traditional economy and digital economy and stated that it is a very difficult task to regulate it. However, considering the fact that data creates huge value for the consumers it is required to maintain a balance between regulation and creating economic value. The very first problem in regulating this economy is that it is very difficult to ascertain 'who owns the data'. The new e-commerce policy provides for centrality of data and postulates that data belong to the people of the country. He emphasised on the fact that data in itself does not have value, it has value when it is present in some form. While talking about the ways to regulate the digital economy he spoke of two ways viz. 'open' approach followed by the United States and the Chinese way of constructing walls and build value out of data internally. He stated one is aggressive and the second is defensive. Considering the domestic marketing scenario, it is possible for India to come up with its own way. He concluded by stating that once digital platforms achieve dominance, they have to be looked as 'public utilities' so they don't play favourites.
27. **Dr. Ioannis Lianos**, Professor University College of London, started his discussion with the question of 'how to define market power'? Is it possible to examine conduct before determining market? In this regard he mentioned about a German case in which intermediary power has been observed by the court where large part of market value was expected from future earnings. He further spoke about the block-chain technology and its possible implications in near future. He stated that public block-chain may be more problematic than the private block-chain.
28. **Dr. Arghya Sengupta**, Founder, Vidhi Centre for Legal Policy, talked about the interface between the privacy and the antitrust. To illustrate the interface, he discussed the case of Federal Cartel Office of Germany which recently found Facebook guilty of collecting personal data of users that were visiting third party websites. In this case,

Facebook was seen as dominant in the market share as 90% of the daily active users were on it. The essence of the complaint was that the Facebook collected information by seeing consent of users that wasn't free as defined under the GDPR (General Data Protection Regulation). He shared observations with regard to this case, i.e. (i) there is a higher standard of what constitutes 'Free consent' and 'taking the consent'. He was of the view that by doing this the German Cartel Office had aligned privacy and antitrust. In this manner the court has suggested that violation of privacy will *ipso facto* be a violation of competition law. He stated such an approach has inherent problems that is, the link between the conduct and why it is a manifestation of monopoly practice is not clear. Further, remedies in such case will not be clear. Therefore, according to him, the best possible remedy in such cases could be to make the consent terms fairer and clearer. There should be interaction between sectoral regulators since the possibility of their being regulatory conflict is rife. Therefore, Data Protection Authority under the Data Protection Bill and the CCI should be working in the tandem.

29. **Dr. Nathan Goldstein**, Assistant Chief, Economic Policy Section, Antitrust Division, US Department of Justice, discussed about the article written by Ms. Lina Khan in the Yale Law Journal '*Amazon Antitrust Paradox*'. The Article states that Antitrust laws are ill suited to look at new age digital economy products; Network effects lead to tipping and lead to a winner-takes-all scenario; Prices are zero and in such a scenario it is hard to demonstrate consumer harm; and Data is unique asset and confirms an insurmountable advantage. He rebutted the same by stating that New Product argument is not convincing since antitrust laws dealt with new products and new market structures all the time during its investigations; Network effects do not necessarily undermine competition –they create incentives for competition to be winner of the 'tipping point'; Zero prices are not a new concept, radio being an example. The key thing here is that just because the product is free does not mean that there cannot be non-price competition or competition on quality. Zero pricing does not imply market power. Data is unique asset but its aggregation allows firms to become more efficient.
30. The main thrust of **Ms. Rama Vedashree**, CEO, Data Security Council of India, deliberation was that the digital economy is driving the new economy of the country. She stated that there exist a struggle that digital platforms were meant to collect data and provide services but now these digital platforms make use of Artificial Intelligence and engage with their consumers. She also stated that when digital platforms provider

use AI (Artificial Intelligence) data offer super specialised services in adjacent field/market, antitrust law has a role.

31. The Conference was concluded with the 'Vote of Thanks' by **Ms. Payal Malik**, Advisor, CCI. She highlighted key learnings from the Conference and extended heartfelt thanks to the Commission, Chairs, Paper Presenters, Speakers and participants for making the Conference a success.

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