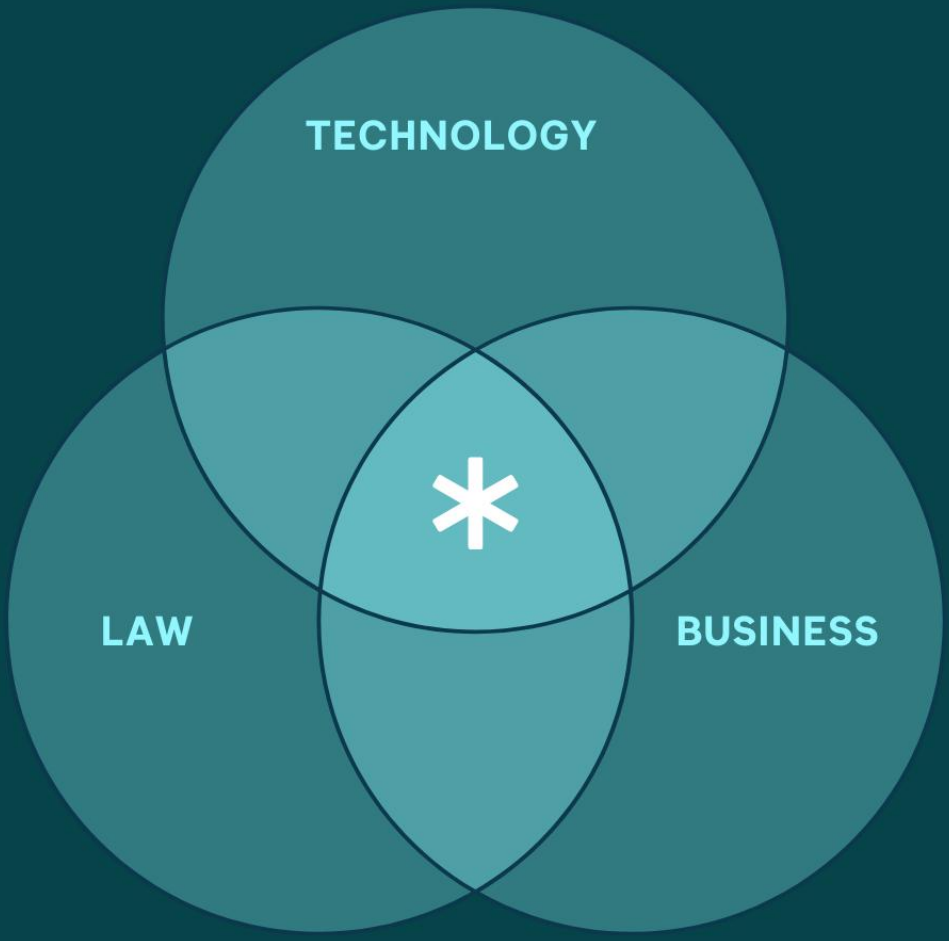

Consilience

2021

HOSTED BY:

L-TECH, NLSIU & ACLA

Conference Report

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Introduction

Consilience is an annual academic conference that explores the intersection of legal issues and technology. It was started in the year 2000 and was the first of its kind in India. It is a one-off opportunity for scholars, students, academicians, and practitioners alike to learn about pertinent policy-based issues concerning law and technology through its high-quality discussions.

In the past, the conference has been graced with the opportune presence of eminent personalities such as: Anirudh Rastogi (Founder, Ikigai Law; Founder and Managing Partner, TRA Law); Antony Taubman (Director, Intellectual Property Division of the World Trade Organisation); Arun Prabhu (Partner, Cyril Amarchand Mangaldas); Carl Malamud (President, Public.Resource.Org); Deepali Liberhan (Manager of Public Policy, Facebook); JA Chowdary (Special Chief Secretary and IT Advisor to the Chief Minister, Information Technology, Electronics & Communication Department, Government of Andhra Pradesh); Nehaa Chaudhari (Partner, Ikigai Law); Nikhil Narendran (Partner, Trilegal); Sandeep Kapoor (Founder and Managing Partner, Algo Legal); Smarika Kumar (Researcher, ALF), etc.

To continue this legacy, Consilience 2021 invited esteemed speakers on the emerging interface of business, law, and technology. The discussion ranged around the interesting and popular field of Competition Law and Tech to an equally fascinating aspect of Legal Tech Start-ups. Both the topics were dealt by eminent panels of experts in an extremely insightful discussion

Executive Summary

Inaugural Address

- Over the past decades, the use of technology in the practice of law has increased and the changes due to pandemic have simplified technology for businesses. Eg: - combination of big data and use of algorithms
- Provision of extremely valuable information for improving decision making, enabling entities to run their business strategies and to develop innovative customized services. This also gives rise to concerns like issues of merger control, exclusionary practices, barriers to entry and collusion.
- The challenges of competition authorities, therefore, primarily lies in understanding how technology works, and how the algorithm can facilitate or support antitrust infringement.
- The practice of law and the traditional functioning of courts has much to gain from the use of technology. Examples of some measures include online hearings, electronic files, identify priority cases, case management, deployment of customized AI tools for research and enhancing access to justice.

Theme 1 Panel 1 (Dominion over data: Analysis of modern market supremacy)

<u>On Data Dominance and Market Supremacy</u>

- Data is a critical resource at the disposal of enterprises on account of its velocity, volume, value, variety, veracity, variability and visualisation. Pre-existing loops can make it difficult for new entrants and enabling competition. This can result in capturing of the interconnected digital ecosystem and abusive conduct.

<u>On Problematic aspects of Dominion of Data</u>

- Data is social, which means that it has network externalities. This makes it harder for individuals to manage their data.

<u>On need of reforms in antitrust and competition law</u>

- There is no defined model for the digital economy like we have for the traditional economy in the competition law. There are no markets in the proper technical sense in the digital side. There is lack of clarity like in case of two-sided platforms where the same definitions cannot be used. There is, thus, a need to re-define market since the competition law is muddled in this aspect.

On Data and Competition Concerns

- The abuse of dominance by large digital firms cannot be completely checked by the competition law framework. Some policy rules such as Merger Controls, Advocacy may be helpful in some cases. Data is different from oil; oil is discovered while data is created. High access to private data by firms can lead to abuse as the data helps firms target individual customers. The abuse is minimal in public procurement (GeM) considering the fact that the only buyer here is government and the transactions are governed by different rules and policies.

On Data and Privacy Concerns

- Data accumulation by firms is not, by itself, a violation of Privacy if it is put to good use. If the data collected by a dominant firm is shared with smaller firms, it will foster competition, thus 'protected' use of data is not bad. With respect to concerns regarding privacy, CCI has powers to regulate different sectors, but there exists a gap which can be filled by the Data Protection law. A coordinated approach between CCI and other regulators may provide better regulation for the digital markets as they are not limited by territorial boundaries.

Theme 1 Panel 2 (Anti-competitive algorithms and challenges in antitrust)

Can algorithms collude?

- Yes, the CCI looked into this in the airlines cartel case. However, algorithms are only programs so, existing laws are sufficient. The principal cannot be absolved from its principal liability.

How would liability exist in blockchain?

- Liability can merely be established on the person deploying the algorithm.
- Since there is no one single legal entity, it would have to be created.
- Another concern is that smart contracts can be deployed on blockchain and give certainty to collusion.

What is the difference between private and public blockchain?

- In public blockchain, no one can impose decision on others. In private, there is more control, which can potentially be anti-competitive.

What is Law and Programming?

- Lawyers dealing with these questions ideally have to know the basics of code.
- Otherwise, lawyers tend to either see the wrong problems, fail to see the relevant problems or propose an unviable solution.

Are the current laws sufficient to tackle blockchain?

- Blockchains are inherently neither 'pro' nor 'anti' competitive.
- Both blockchain and antitrust have similar origins in that both want decentralisation of economic opportunities without control being in the hands of a single dominant participant.
- Regulatory sandboxes are the need of the hour.

Can we imagine a future of friendly relationship between algorithms and competition law?

- The law is always technology-agnostic and does not change with technology.
- The recent High Court decisions are evidence of the higher judiciary's continued faith in the Commission.

Can anti-trust laws keep up with technology?

- It is important to differentiate between different algorithms and know what the technology is in each context.
- Since competition law is a principle-based law, there is scope for interpretation. Regulators can also make use of technologies.
- One way is APIs and web scraping tools. A second way is algorithms can be trained on previous law. A third way is that AI and machine learning can create agent-based models.
- Ultimately, although there are problems, there are also opportunities in this space.

Theme 2 Panel 1 (Legal Tech Startups and (Promising?) Future Prospects)

- It is necessary to understand legal tech startups in a wider framework of the intersection between law, technology, and business and the value creation that emerges out of it.
- Qualities like evolved articulation, logical and analytical thinking, ability to dive deep into a subject and critical stakeholder management set apart legal professionals as a class. Thus, by marrying law into business and technology, a lot is brought to the table.

- Our journey determines us. In a world that demands interdisciplinary learning and constant relearning and unlearning, it becomes necessary to engineer our life in a way to integrate different experiences in our journey.
- The post-1999 technology boom made the unthinkable possible. Individuals shifted from being consumers to creators of technology.
- One may have a vision but it has to align with what the people want. It's important to expose oneself beyond one's role as a product or service entrepreneur, and see what is it like to create a field/ecosystem.
- Legal tech is more than just being a part of companies and law firms. It's also known as 'Justice tech', because it also deals with how it can contribute to legal services.
- The problem is that India is at the 'Idea stage' due to a lack of seed funding which does not support experimentation.
- There are some building blocks to achieve greater heights. Some of these are open technology, capital, data availability, etc. AGAMI, as an organization, is already working on some of them.
- The legal field, unlike other fields, had a slow beginning with its interaction of technology with the lack of purpose-built software. Now, platforms like SPOTDRAFT provide end-to-end contract automation drafting. The idea is based on the similarity between code and law, and the desire to make the lives of legal professionals easier.
- Technology cannot make lawyers redundant. The grunt work can surely be done away with but the value-adding work like counsel and expertise can't be.
- It is necessary to know the basics principles of technology and integrate them into your job because they form a fundamental part even of the 'vanilla' lawyer work.
- Just because there is a similarity between two systems does not mean that they can be wholly applied to each other. The history of formal logic and law shows us that there exist certain similarities, but there also exists divergence. Thus, the question about the limits to which rules of formal logic can be applied to law still exists.
- There is a lot to be desired in terms of how emerging businesses have come to exist with an acute lack of awareness about the fundamental concepts of humanities, social sciences, individual rights, privacy, etc.

- Legal tech startups are not about learning a course on law and technology. It's about engaging with the market. It's about going beyond the armchair thesis and getting into the making of it.
- Resilience and persistence are the most important attributes to keep you in the game. One should be very passionate about what one wants to do, but, at the same time, should know when to stop.
- It's great to talk about law and technology, but if one wants to do it, it's necessary to understand both formal logic and the nature of law.

Theme 2 Panel 2 (Transforming the practice of law in 2020s)

- The panel discussion was primarily concerned with the Legal Tech Startups and the various stakeholders concerned with it. For this purpose, the panelists were divided into 3 categories of stake holders.

What is the extent to which technology should be adopted in law?

- There needs to be a distinction between the core and non-core elements of law. Technology can be used as default in the non-core element. Technology should be considered as an enabler which helps us achieve our end goal.

How can technology assist Judiciary?

- Justice delivery cannot be outsourced to technology. Key elements such as fact finding and decision making have to be performed by the lawyers and judges. A contrasting position was taken by considering justice delivery as a commodity. Technology should be used to improve the overall satisfaction the litigant had as a customer.

How can technology help in the business sphere?

- Technology can assist in legal aspects dealing with businesses, but the final review should vest with the counsel. Though, it raises the concerns of deciding the costs for the service provided.

How effectively are the tech products being adopted?

- The main concern is the lack of good solutions. But, in the recent past, effective solutions have been floated in the market.

What changes need to be brought in the sphere of education with respect to legal tech?

- The law school curriculum should be more rooted in the reality and should also help fight prejudices.

What changes can be introduced in government policies to enhance legal tech?

- The government has a careful role to play both as a litigant and a service provider. Push towards digitization by the government has already helped. Government can also help by acting as a think tank or policy designer.

Can technology replace jobs in the legal sphere?

- Technology cannot replace jobs. Experience and institutional knowledge are required for the practice of the law. It is necessary that the core elements of the practice of the law remain human to avoid injustice and inequity.

Theme 1

Competition Law & Tech

June 10-11, 2021

Inaugural address

Harshit Goyal, Convener of the Law and Technology Society, NLSIU, welcomed everyone to the committee's annual flagship event, Consilience 2021, which is being held in a virtual setting for the first time. This year's conference is based on the themes of business, technology and law, specifically Competition Law and Tech and Legal Tech Startups. He briefly introduced the themes of the four-day long event, and invited Justice S. Ravindra Bhat, Judge of the Supreme Court of India, to inaugurate the conference.

Justice S. Ravindra Bhat began his keynote address by greeting the panelists and the attendees present for the conference. He referred to a 2020 US Congressional report on antitrust that said that "the companies that once were scrappy, underdog startups that challenged the status quo have become the kinds of monopolies we last saw in the era of oil barons and railroad tycoons. Although these firms have delivered clear benefits to society, the dominance of Amazon, Apple, Facebook and Google has come at a price. These firms typically run the marketplace while also competing in it – a position that enables them to write one set of rules for others, while they play by another, or to engage in a form of their own private, *quasi* regulation that is unaccountable to anyone but themselves".

He proceeded to talk about the growing use of technology in the practice of law and other fields over the past decade, which has been amplified by the global pandemic. The combination of big data with tools such as algorithms is increasingly diffused in our daily life today. A growing number of business entities are using algorithms to improve their pricing models, customize services and predict market trends. These models provide significant benefits to firms as well as consumers in terms of new, better and more tailored products and services. This is changing the competitive landscape in which many businesses operate and influencing how they make commercial decisions. Widespread use of algorithms has also raised concerns of possible anti-competitive behaviour, as they can make it easier for firms to achieve and sustain collusion, without any formal agreement or human interaction.

When competition authorities refer to measures of competition in the traditional sense, they typically refer to price, quantity, quality, choice, and innovation. In the context of digital markets, however, the competitive arena is generally different; the price and quantity commonly do not play a decisive role while quality, choice and innovation become important. Additionally, for many database businesses, the ability to collect and commercialize data has become a competition measure in and of itself. AI and machine learning have enabled certain firms to extend the type, volume and sources of data radically giving them a competitive edge.

Many businesses collect and use large and unique datasets commonly, it involves consumers voluntarily providing a firm with personal data, in return for a free product or service. For instance, access to a social media or price comparison platform which is then financed by selling the data onto further customers, for example, advertisers. Google and Facebook are two prominent examples of businesses that have employed big data to achieve substantial profits. Predictive models are deployed to estimate demand, forecast price changes, predict customer behaviour and preferences, assess risks and forecast shocks that might affect market environments such as entry of new firms, variations and exchange rate or even natural disasters. All this is extremely valuable information for improving decision making, enabling entities to run their business strategies and developing innovative customized services optimally not possible otherwise.

While highlighting the increasing use of new technologies and power of data in business, he mentioned how these have also raised several competition concerns. He stated that the use of AI, in combination with big data, can create economic efficiency and pro-competitive effects by, *first,* making it easier to identify what customers need; and, *second* , reducing cost of production and distribution. However, in certain circumstances, it is equally likely to contribute to competition concerns including-

(a) increasing market power and increasing barriers to entry,

(b) increasing market transparency and facilitating collusion,

(c) Giving rise to various exclusionary practices available for dominant firms; and,

(d) merger control issues.

Whereas a large volume of data is important to a particular market to form the basis of market power, new entrants are likely to face barriers to entry as they are building upon their data sets to compete with other established actors. New entrants may collect data directly from their customers or may also buy access to customer data from third parties. When a firm attempts to build this data set through its customers, it may struggle if an established firm has already developed a significant network that has won the trust and favour of a considerable number of customers. Equally, a new firm cannot allow purchasing data sets from third parties as they may not be building it with the view to part with these assets to competitors. Even a firm with a low market share, for example, based on revenue with access to valuable data can have significant market power. Increasing transparency of prices and characteristics of goods and services have a positive impact on consumers giving rise to more informed choices, for example, online platforms allow consumers to compare prices.

At the same time, however, the greater availability of information can also limit competition by facilitating price coordination. In a transparent market, firms can more easily monitor each other's actions and frequent interactions can enable them to punish deviations. Algorithms that monitor, analyse and even anticipate competitors' responses, current and future prices are now being developed. For instance, in 2016, the UK Competition and Markets Authority found that two firm retailers breached competition law by using automated repricing software to monitor and adjust the prices. As algorithms become more sophisticated with machine learning, and data sets become more readily available, the prevalence of such online collusion is likely to increase.

While it is rare, a dominant firm may also breach competition law, if it holds a unique dataset that is essential to a third party's development of a new product, and refuses to supply that data to third parties. For example, in 2007, the European Court of first instance found that Microsoft had breached the competition law by refusing to give its downstream competitors access to the minimum interoperability information, which was necessary to allow them to effectively compete in operating systems markets. In 2009, the Spanish National Competition Commission fined four electricity companies for refusing to provide access to databases on consumers' supply points. Competition concerns are likely to arise by the combination of two different data troughs that creates a unique data set which cannot be replicated by competitors and could become an essential input.

The European Commission considered this in the Google-Double Click (2008) Facebook-WhatsApp (2014) and Apple-Shazam (2018) mergers. In them, it ultimately concluded that they would not create competitive concerns as the data sets involved, while commercially valuable, were often not that unique that they could not be replicated. In light of growing developments in technology and the impacts on the market, competition authorities have begun to pay closer attention to the effects of AI and big data. For example, the UPS competition and markets authority is currently establishing a new data unit across different disciplines to increase its understanding of the impact data, machine learning and other algorithms have on markets and people. In May 2016, the German Federal Office and the French Competition Authority published a joint report on theories of harm connected to big data. More recently, in February 2018, the Canadian Competition Authority published a report on big data and innovation with the following conclusion: emergence of firms that control and exploit data can raise new challenges for competition law enforcement, but the fundamental aspects of the analytical framework, for example, market definition, market power, competitive effects etc. should continue to guide enforcement.

He also cited the latest French-German Competition Authority's joint report of 2019 that went beyond passing algorithms and elaborated different types of applications and categorized them in the following ways-

1. The tasks they perform,
2. The input parameters they use and
3. The involved Learning methods

In the next part, the study focused on the different ways in which algorithms may affect companies' interactions, potentially leading to horizontal collusion. Specifically, this part investigated the use of pricing algorithms considering different scenarios. Firstly, the study covered situations in which the algorithm only comes into play in a step to facilitate implementation monitoring enforcement or concealment of a traditional anti-competitive practice. Secondly, the study covers situations where, although there is no direct communication or contract between competitors, a certain degree of alignment could nevertheless arise, as a result of the actions of the third party, that provides the same algorithm or somehow coordinated algorithms to competitors. Thirdly, it analyzed the scenario where algorithms are unilaterally designed and implemented with no ongoing communication or contact between undertakings.

Still, the fact that several or even all competitors using pricing algorithms might facilitate the alignment of the market behaviour, resulting in a mere interaction of computers. Thus, it is a significant shift by studying the markets and behaviour driven through algorithms, perhaps we see the rise of the impact rather than the intent and the impact with some kind of knowledge as about the use of algorithms and their likely effects on the marketplace.

Revolutionizing technological tools, which enhance how companies operate and interact with each other, carry the risk that the same market players use their immense power to achieve private interests that are not aligned with social goals. One of the main risks of algorithms is that they expand the grey area between unlawful explicit collusion and lawful tacit collusion, allowing firms to sustain profits above the competitive level more easily without necessarily having to agree. For instance, in situations where collusion could only be implemented using explicit communication, algorithms may create new automatic mechanisms that facilitate the implementation of the common policy and the monitoring of the behaviour of other firms without the need for any human interaction. In other words, algorithms may enable firms to replace experiences of explicit collusion with tacit coordination. To address these forms of coordination, some jurisdictions have stretched the concept of the agreement for antitrust and looked at whether an agreement can be

inferred from evidence suggesting that competitors have not acted independently. Even in the absence of explicit agreement, for instance, courts have established an infringement of competition law if evidence of parallel conduct was accompanied by the factors, so-called plus factors, which indicated that parallel conduct was inconsistent with unilateral behaviour and resulted from coordination among parties.

Some jurisdictions, in particular the EU, also learned the concept of concerted practice, which allows them to deal with practices that do not amount to an agreement but have the effect of replacing active competition with cooperation and conducting competition. Directing the existence of an infringement and proving such an infringement must be complex, because of the presence of an algorithm. The challenges of competition authorities, therefore, primarily lies in understanding how technology works, and how the algorithm can facilitate or support antitrust infringement.

He then proceeded to talk about AI and competition law in India. According to a global study, carried out by PwC India, the highest increase in the use of AI during the COVID pandemic was in India. The AI adoption in India was led by the travel and hospitality sector with 89% of these firms having some form of AI, telecom, media and technology firms with 86%, financial services with 82% and healthcare and pharma companies with 73% adopting AI during the year.

In competition law, an enterprise is said to have a dominant position in the relevant market if it enjoys a position of strength, which enables it to firstly, operate independently of competitive forces prevailing in the market, or secondly, affect its competitors or consumers of the relevant market in its favour. Firms with huge repositories of data analyze the data to provide consumers with targeted advertisement marginalizing other competitors who do not have access to such data. The lack of such access and costs involved in the development of self-learning algorithms include high entry barriers. It has also been alleged that e-commerce entities use data collected from the sale of third-party products in the marketplace to set optimal prices and specifications for their private label products. The CCI has also initiated an investigation into the deep discounting, preferential listing and market power of e-commerce entities.

The CCI further regulates mergers, acquisitions and amalgamations above the monetary thresholds. Competent entities have sometimes resorted to coordinating their production and pricing activities to mimic a monopoly to increase their collective and individual profits by restricting market output and raising the market price. To address such explicit or tacit collusion,

the Competition Act in India prohibits anti-competitive agreements. These include any agreement that directly or indirectly determines purchase or sale prices, results in bid-rigging or collusive rigging.

In a recent case, on Matrimony Ltd and Google LLC, the Competition Commission imposed a penalty on Google for abusing its dominant position in the online search market. The informants submitted that Google runs its core business of search and advertising in a discriminatory manner, causing harm to advertisers and the ultimate consumers, that Google is creating an uneven playing field by favouring its services and partners through manual manipulation of search results. It is noted that in addition to running search services, Google also provides a large number of vertical search services such as video to YouTube, news to Google News, maps to Google Maps, etc. It was also affirmed that to promote Google's vertical sites, it started mixing many of these results into its organic search results. The effect of this activity is that when a user searches, for example, the name of a song on Google, it receives links to videos of that song from Google video for you to go to whichever site is owned by Google.

The commission noted that through the exponential growth of the internet, online markets have now developed an ability to cover an ever-increasing spectrum of commercial activities. Google search engines results were found to be in contravention with the provisions of the Competition Act. The Commission also noted that Google through its such design not only placed its entities at a prominent position in the search results but also curtailed market access to other vertical sites. It found that Google provided an extended chain in its commercial units, which led the users to its specified search results, Google flight, for example, resulting in unfair imposition on the users of general search services as well. AI primarily uses three categories of regulatory challenges, namely market foreclosure, and related exclusionary practices, novel ways of collusion, and new strategies to effectuate discrimination in price.

Competition enforcement typically focuses on the possible illegal agreements between competitors, anti-competitive vertical restraints such as resale price maintenance, the abuse of dominant market power and mergers that have the potential to substantially weaken competition. These collusive agreements and anti-competitive conduct require an element of human intervention and participation. In the present day, however, we are shifting from a world where executives actively collude to a world where pricing algorithms continually monitor and adjust each other's prices and market data. So, in other words, we are in the era of Robo collusion.

Therefore, anti-competitive intent may not exist in the traditional sense. The danger here is not of express collusion, but of more elusive forms of collusion instead. It is essential that the legal regime

regulates competition in the market and creates mechanisms, on a dynamic basis, to identify these forms of collusion. Some measures that must be put in place are to increase transparency in the working of companies in the market, and put in place rules and regulations for handling, storing and processing of personal information. Regulatory authorities need to be well versed of the impacts of the use of different kinds of technology in data analysis tools, as well as how pricing algorithm functions. Better research is needed in this field, to frame more informed policies that may be adopted for the quick pace of technological progress and to regulate, anticipate and respond to how firms react and interact with an influence on market elements.

The role of authorities, therefore, in assessing competitive and anti-competitive behaviour should not be limited to preventing abuse of dominance, but should also include investigating into abusive market conduct by a firm that is in a position of imminent dominance. The CCI should be empowered to look into these situations as well. Competition authorities need to be wary of the fact that online platforms not only provide technological infrastructure to connect service providers to buyers, but also provide it to engage in pricing, funding and price discounts for products listed on platforms. It has been alleged that platforms refuse to share consumer data with service providers and, instead, utilize this data to set up their services and product at a competitive edge. This has been seen in cloud kitchens, platform-based products etc.

The CCI should, in its investigation of anti-competitive conduct, also take into consideration the practices of deep discounting and passionate offers. The test of equipment can help the CCI to determine which discounting practices will affect competition. Preventive measures can ,then, be taken to avoid such harm when the player gains a dominant position and uses it to recover incurred losses through initial discount. Finally, therefore, the competition regulatory regime will have to keep up with these rapid changes in technology accordingly.

The use of technology in the practice of the law is increasingly relevant, whether it is in the form of online dispute resolution by large businesses or in the form of legal tech startups. With the increasing use of technology to review contracts, review legal documentation, etc., the focus as ever should be on law, the confidentiality requirements and accommodations should be made for the exercise of human agency to consider each client's specific needs and offer the most responsible legal advice. The practice of law and the traditional functioning of courts has much to gain from the use of technology. During the pandemic, they have seen how useful big, digital

platforms have been for online hearings, enabling most courts in the judiciary to function practically through lockdowns.

Many judges have now taken to their digital or electronic files and resort to their hearings without the use of or aid of paper at all. The availability of e-files makes it easier for judges to read and prepare for hearings, and access online databases and case laws on search platforms. It is useful not just for research, but also during hearings in the courtroom. Technology can also be used in efficient ways to manage judicial dockets, identify priority cases for urgent listing, case management, and in deployment of customized AI tools for research and enhancing access to justice. In adopting technology to aid the functioning of the judiciary, our policies must be considerate of litigants and lawyers who may not have access to such technology.

They have to be cognizant of the fact that, indeed, there is a vast digital divide. Therefore, it is important to accommodate these contingencies and the technology that is used must be accessible, to the extent possible. Furthermore, there ought to be the realization that, in the real world, the discretion of humans, often seen as constraining, is the strength that centuries-old practice has shown the application of law to individual cases. The uniqueness of such dimensions and the room for outliers, the nonconformist, is that it injects the rule of law with the promise of progress. Technology and deployment of algorithms are based on patterning and replicating past behavioural trends. Dependence on them, as a panacea or a magical wand, exposes society to the danger of iteration of all those prejudices and biases, which civilizations have grappled with and striven to eliminate in the past two centuries. Therefore, these tools must aid judicial functioning and accessibility, instead of creating ground for further exclusion. It is said that you must welcome change because it is the only constant in life, yet change is only the rule and not the ruler.

He concluded the address by thanking the audience and the organizers, the Law and Technology Society NLSIU.

Theme 1, Panel 1: Dominion over Data: An Analysis of Modern Market Supremacy

Panel:

1. Prof. Rahul Singh (Associate Professor, NLSIU)
2. Prof. Abha Yadav (Associate Professor, IICA)
3. Mr. P.K. Singh (CEO, Government e-marketplace)
4. Prof. Jacques Cremer (Professor and Researcher, TSE)
5. Ms. Jyoti Jindgar Bhanot (Adviser and Head of Anti-Trust Division 1, CCI)

Moderator: Prof. Aditya Rathore (Assistant professor, BMU)

Prof Aditya, who was the moderator for the session, started by recapturing an example Justice Bhat gave. He said many of us might have noticed when we search something on google, they display ads that promote services owned by Google. He wondered if the results would be the same on some other browser/search engine. He stated he had carried this out and found out that the results were not the same. After setting the context for the panel discussion on today's theme he welcomes and introduced the panellists – Ms. Jyoti Jindgar, who is an economic advisor to CCI, Dr Abha Yadav, a Professor at Indian Institute of Corporate Affairs, Mr. P.K. Singh, CEO for Government e-marketplace (GeM), Professor Jacques Cremer fromToulouse School of Economics and Professor Rahul Singh from NLSIU.

He started the discussion by asking Ms. Jyoti if she could with the help of some instances help us understand what it means when we say data is leading to dominance or supremacy in the market, which is a recent phenomenon, because data-driven companies have become much larger than they were a decade ago.

Ms. Jyoti thanked the Law and Technology Society for the invitation to contribute to this discussion on the interface of data with Competition Law. She stated that the competition dimension of data has become even more pronounced on account of increasing dependence on digital modes in every sphere of life. The digital economy has revolutionized the way data is generated, stored, processed and distributed and it has led to the emergence of new possibilities in business models. On the one hand, this revolution has brought efficiency, significant benefits, and economic opportunities and on the other hand, it has brought to the forefront the potential of market power abuse at a massive scale which may be concentrated with a few players. To appreciate

this intersection of data and dominance, it is important to understand what dominance under competition law means. The concept of dominance is rooted in market power, namely the ability to act unilaterally without being constrained by competitive forces. Pertinently there has been a remarkable shift in legislative thinking whereby, unlike the erstwhile MRTP where the size itself was frowned upon, the present law provides a robust framework for assessment of dominance in terms of various factors such as market share, resources of the enterprises, vertical integration, consumer dependence, entry barriers to account for data as a source of market power. To begin with, control over data stands subsumed within resources of the enterprise besides having an intersection with other factors. Any other factor such as network effect, switching costs etc. which are typically associated with new age markets have a close nexus with data to account for undertaking such assessments.

Moving further, she expressed that it is very important to understand the attributes that have transformed the data into a critical resource at the disposal of enterprises and why it has become the new gold. These can be explained in terms of five Vs-

- Velocity- the lightning speed at which a vast amount of data is generated and analysed in real-time
- Volume- incredible amount of data
- Value- the ability to turn it into something that has a purpose, use, merit and can be monetized
- Variety- structured and unstructured data
- Veracity- the precise and accurate nature which renders it useful for undertaking commercial decisions.

Recently two more Vs have been added- Variability and visualization. She stated that it is these qualities that convert data into what is now known as big data. Data can have a transformative force in digital markets in delivering goods and services to consumers in a very efficient and customized way.

After setting the context, she proceeded to give some instances that highlighted the potential of data as a source of market power, based on the cases they have handled or observed internationally, without mentioning specific names and focusing more on issues related to data and competition. A platform with a large user base is able to collect more data to improve the quality of its service, for instance, by creating better algorithms, and further to acquire more users which is known as the user feedback loop. On the other hand, due to its multi-sided nature, the platform is also able

to monetize data through targeted advertising, which gives revenue to it and these funds can be used to invest in the quality of services and attract more users which is known as the monetization feedback loop. These loops can make it very difficult for a new entrant to compete against the incumbent with a large base of users. Data, therefore, plays a critical role in reinforcing the incumbency advantage and thereby contributing to dominance.

However, the extent to which this prevents entry will depend on the specificities and dynamics in terms of feasibility to replicate data, portability, interoperability. The absence of portability and interoperability may imply high switching costs and exit barriers for consumers and thereby transmitting into corresponding barriers for other market participants. So, the relevance of such accumulative data and the ability to employ such data in a versatile manner across verticals and purposes may further expand the market power of a platform. This entire thing may result in a scenario and create an ecosystem where few players in the market, by having control over huge amounts of data, may capture the entire interconnected digital ecosystem in the market, giving them potential power of abusive conduct.

She said that, therefore, data plays a critical role at every stage of antitrust enforcement, be it ascertaining dominance in the market and examining the abuse of dominance. This of course requires understanding the structure of the market, underlying incentives of players and implications on consumers to ensure that innovation is not stifled, and market disruptions are addressed.

Prof Aditya observed that we have been hearing that data is the new oil. In this context, he posed a larger question for everyone and requested the panelists to point out in what other ways can the dominion of data be seen as problematic, by giving examples of cases from India or abroad. This was too better understand and contextualize the idea of abuse of dominance or dominance in terms of data.

Prof Cremer stressed that one of the qualities of data is that it's social and not only individual. If it were only individual, then it would have been easy for us to switch to other platforms in case we were not satisfied with the services of a particular platform. For instance, in case we were not satisfied with Amazon's handling of our data, we could ask Amazon to transfer our data to the new marketplace (for example, Cuba offers data portability). There could be a little trouble with the transition, but the cost would be only individual.

He further mentioned that data also has network externalities, which means the data that Amazon uses to decide to what is to be shown to a particular user, is not only that individual user's data but

also the data about everybody else, what people like him have used and so on. Therefore, this is an important aspect of data; it's not a collection of individual data, it's an aggregate of data which makes it much harder for individuals on their own to manage their data because on their own it's not very useful.

Prof Aditya then asked if the existing antitrust or competition law and the concepts of relevant markets are sufficient at this stage to accommodate the concerns which are being raised by tech-driven companies or is there a need to change, expand or rethink them.

Prof Cremer said that we should first understand why the definition of market was introduced in the competition law. He stated that in competition laws of other countries, unlike in India, the definition of market is not a part of statutory law, it's a part of case law. Markets, in themselves, are an extraction that the economists invented at the beginning of the 20th century. Later, there was a need to organise how the competition law was to be applied. Therefore, there was a need to define the market. It was envisaged in the context of those traditional markets. People learned how to do economics, estimate demand and supply curve.

Speaking from an economist's perspective, he said that in a lot of cases, in particular for a market economy, we have ways of thinking about the interactions between different elements of the economy. The economy is much more complicated than any other model, but we have a way of thinking about it, which makes some sense and gives some approximation, but we don't have this for the digital economy. Hence, the concept of the market in some sense doesn't exist and the Amazon marketplace is not what we mean when we are talking about a competition market.

According to him, there are some things for which the traditional view of markets works perfectly well, even in digital economies, for instance, the French Competition Agency agreed with Google (Google wasn't declared guilty) about the advertising stack and the way the advertising works. In this case, there is a market for people who advise advertisers, a certain type of market can be defined but Google was providing services to the individual users.

There are other cases where there is no clarity as to what a market is. In particular, when we think about two-sided platforms, they cannot be said to be markets in the traditional sense. We don't have prices and hence, we cannot use the same definition. It is also complicated by the fact that a lot of platforms set several services at the same time. In those cases, there might be a need to define, however, it's doubtful if any definition of market would be useful. The reason behind inventing the definition of the market was to help the analysis. In some cases, it is not really possible anymore. Therefore, there is a need to redefine this.

Prof Aditya asked if he understood Prof Cremer's views correctly when he says that the traditional understanding of the market works in some way when we talk about the digital economy, but we haven't understood the digital economy completely yet. Therefore, would it be correct to state that some definitions which worked earlier may not work and we are discovering them slowly.

Prof Cremer doesn't think we are discovering it. According to him, there are no markets in the proper technical sense or in the way we invented it. He recommended us to look at the particular case and see if it makes sense to think about it as a market, for example, think about a market for advertising services, does it look like a normal type of market that can be seen outside of the digital world. If it looks very digital, very platform-oriented, if there are interactions between different agents, then it's not a market. There might be a need for definition of the market for legal purposes. But since he is an economist, he wouldn't consider such forums as markets.

Prof Aditya explained that Prof Cremer speaks from an economist perspective and in his opinion, the digital economy is very different from what we understood it as before the 2000s. He then moved on to gather a lawyer's perspective on how they see data-driven companies gaining and abusing dominance and what challenges do they foresee for the present competition law and whether it requires any change in the understanding of concepts.

Dr Abha clarified that Prof Aditya has been talking about self-preferencing without naming it. She stated that the antitrust agencies across the world are trying their best to tame the cat of self-preferencing which in the simplest terms means prioritizing the products of your enterprise in comparison to those of your competitors. She noted that how much ever we try to control the big tech giants, it is difficult to do so. One of the best examples of such behaviour can be seen in the article 'Alexa Fund' which is published in the Wall Street Journal where Amazon funded the research project of Nucleus. This was despite reservations from the promoters that Amazon might replicate their data. On the other than, Amazon promised that it would not do so. But once the information was shared by Nucleus with Amazon for funding, within a year, Amazon Echo was launched, and it had incorporated much of the features of Nucleus. The promoters had no choice but to give in to Amazon merely because of the sheer size of the firm and the inability to compete with such a huge corporation.

She gave another example of Quidsi's hostile takeover where Amazon had monitored the baby products that were sold on its platform and had forcefully acquired diapers.com after an ugly price war which involved undercutting the prices and forcing Quidsi to sell its business to Amazon. She said that during the hearing, Mr. Jeff Bezos himself agreed that self-preferencing is general business order and that Alexa might be promoting their products over others which is a common feature.

She then came to the topic of abuse of dominance and agreed with Ms. Jyoti that the 'big is not bad' principle is very much established as a fundamental tenet of competition policy. There may be various reasons for an entity's large size, it could be the result of efficient operations, innovation or a novel business model. In other words, it can be the reward for aggressive competition and a fair market which is what the aim of competition is and is beneficial for consumers and economic productivity. All of this traditional knowledge has taken a toll with the advent of digital platforms and various traditional notions are being challenged. While competition law across the world has established legal and economic frameworks for assessing abuses of dominance, in a digital market, competition law frameworks cannot address all digital market policy concerns because the concerns are so huge, vast and varied. In her opinion, alternative competition policy rules such as merger controls, advocacy could be more appropriate in some cases, and they are being used in India as well. Further, some concerns may not be easily addressed within a competition policy framework at all. One can, therefore, say that the debate about abuse of dominance by large digital firms is a small part of the broader discussion about competition in digital markets.

Prof Rahul proceeded to answer two questions posed by Prof Aditya – one on the relevant market and the other one on data. He said that, unlike what Prof Cremer mentioned, the Indian competition agency might not discuss the delineation of the relevant market, because it's present in the statute. In many different contexts, the Supreme Court itself might not look at the letter of the statute but jurisprudentially, we do understand that the moment something is written in the statute, it has a certain normative binding value. In that sense, he answered the question by relying on theories like exclusive legal positivism and stated that it is an unlikely scenario that the CCI will have that discussion about not defining the relevant market. After defining the relevant market, they might or might not find an infringement. But to say that they will not define the relevant market is a difficult proposition from a jurisprudential angle.

While answering the second question on data, he expressed that the analogy that data is the new oil may sound good but is not entirely accurate, in his opinion. Oil is found but data is created. He posed a rhetorical question to convey his point; he said, the organizers of this conference have the email ids and designations of all the participants, can that be shared with Prof Aditya who, let's assume, need the details of all the participants for some purpose. Prof Aditya is not the creator of data and has not put any hard work into creating that particular set of data. Therefore, according to him, data cannot be compared to oil at all. Data is something that needs hard work, it needs to be created. It also needs incentives if seen from a law and economics perspective of incentives.

Prof Aditya highlighted that there is another side to data as well, it can also be put to some good use. He then moved to Mr. P.K. Singh who is the CEO of Government e-marketplace (GeM) which is a one-stop-shop for all public procurements that are to be done by various departments of the government. He asked Mr. P.K. Singh to share if in his experience, high access to private data by firms pose any competition-related challenges to public procurement in the first place.

Mr. PK Singh began by briefly describing the platform. He stated that GeM is a distant public platform that enables government buyers across ministries down to the level of urban local bodies and villages to come on a platform and transact. It is something like Amazon and Flipkart, the only difference is that it's only the government on the buyer side. Since public procurement involves taxpayers' money, the government buyer cannot simply add anything to the cart, there are various rules and policies on it. He said that they have connected almost 1.8 million sellers of different capacities with about 52k buyers on the government side.

He then came to the question at hand and stated that high access to private data by firms does pose competition challenges but, in their case, it's slightly different, it's in different shape and form. This problem is not comparable to the competition issue in the larger market where the firms have a competitive advantage of big data to track customer preference or market trends. The high cost of access takes the form of entry barriers. He said they try to find out if they are offering any entry barriers. In his opinion, the challenge is not so much access to private data as it is access to information about government bids. The way the platform is structured, this thing is taken care of. Whatever information is available to a particular sector is shared with all the sellers, be it big or small.

He acknowledged that there is huge power in data, both useful and abusive. They deal with the useful power, so they know how much abuse can also be associated with it. He mentioned that he is not from economics or legal background, but it is apparent that AI and ML are becoming the order of the day and the growth is exponential and we can't even think of the uses it can be put to. The practitioners of competition law and those who deal with antitrust issues will have to be well equipped. The visibility of abuse is going down, for instance, the portals make us dependent upon them, we access them repeatedly because they have analysed our actions and have put them together through an algorithm based on AI to give you exactly what you want. This is also concerning because we wouldn't even know about it. Therefore, the abusive power is immense.

Coming to the topic of public procurement, he said that the primary reason why GeM was set up was to bring transparency and inclusivity. Close to 7 lakhs small companies are associated with the platform and are offering goods and services. He stated that they do big data analytics and get to know if the market discipline is being violated. About 7 lakhs MSME sellers contribute to 60% of our value, this itself proves that there is no entry barrier of any kind. The numbers are going up by the day. They also try to promote different sectors, let's say, bamboo products based on their philosophy of inclusivity. To that end, more visibility may be given to those sectors to bring them closer to the government buyers.

Prof Aditya mentioned that Public Procurement amounts to around 20-22% of the entire GDP of India. Data is playing a big role over here and in a way, GeM dominates the data they have. He then proceeded to related concerns around competition law such as privacy. Competition law has a specific goal in mind when it tries to prevent abuse of dominance, but when it comes to data, another concern gets clubbed with it, which is the protection of privacy. He asked if this is something that the competition law should be concerned about.

Prof Rahul referred to an SSRN paper and screenshared this picture from the paper to answer the question as it has some datasets from India. The paper is not published yet.

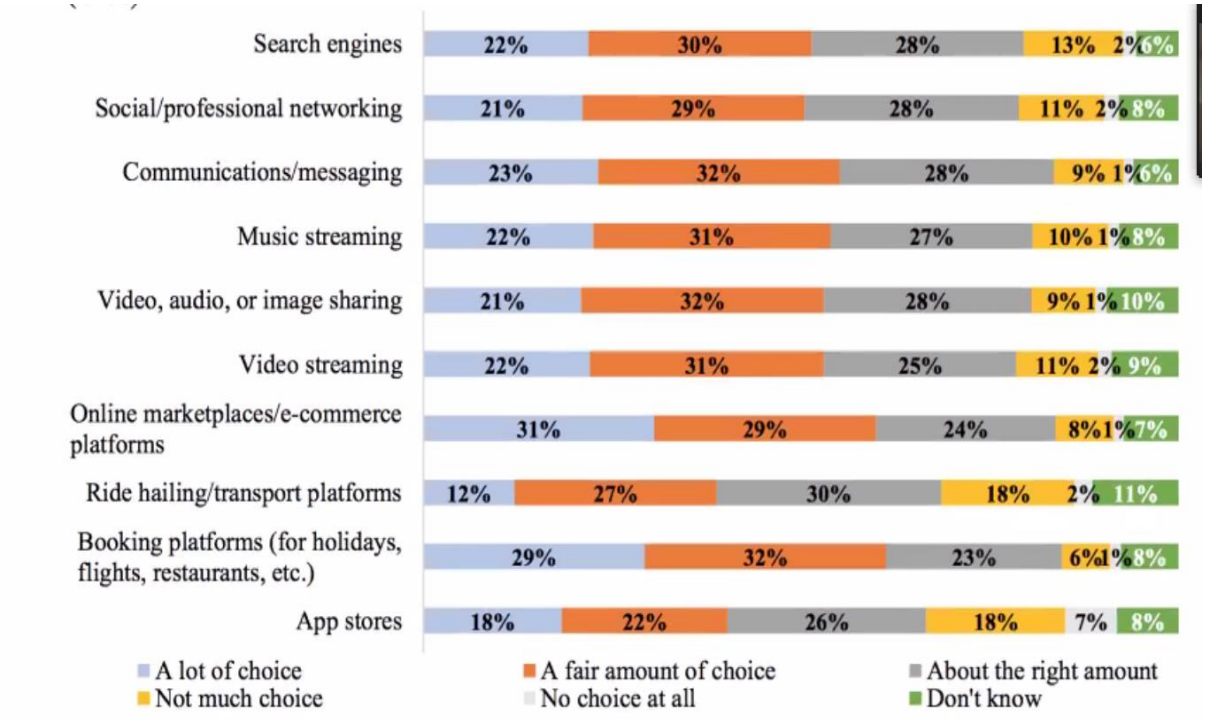

Figure 9. Amount of perceived choice between different platforms available (Base: all who ever used the service in the last five years, n= 7,160 – 10,845) (Q: Which of the following best describes how much choice you feel you have when it comes to your ability to pick between different platforms for the following services?)

This graph states that there is a multitude of choices that people have and are aware of. He explained this with the help of a recent instance- he said, each one of us might have had friends or family who kept on asking us to switch to signal from WhatsApp. This leads to the question as to whether people are aware of privacy concerns. He argued that we don't have data to indicate they are not aware of the privacy concerns, because sometimes our default norm is to believe that people are not aware of privacy. We don't have empirical evidence to suggest either way. He believes that this paper, that has provided some sort of empirical evidence, can guide us unless we don't believe in the findings of the paper. Coming to the issue, is there any economic or empirical evidence to assert either outcome; when it is said that Indians are not aware of privacy, how do we know it? He suggests that if we don't believe the findings of the paper, we can do a wider study on our own.

Dr Abha Yadav said that while Prof Rahul Singh is unconvinced about people not being aware of breach of their privacy (she agrees with him that a study should be conducted to see whether people are aware of it or not), she would like to assume that there is a problem that exists, and it needs to be tackled. According to her, we may not even need empirical evidence, it is a fundamental right that need to be protected. We need to understand that there is a huge potential exploitative threat that tech giants are posing to the common public, government institutions and private institutions that are not limited to privacy and economic issues only. She contextualized it by saying that even the political arena and democratic values have been affected across the world. This happened in 2018 in the Facebook-Cambridge Analytica data breach case where it was seen that Cambridge Analytica harvested millions of Facebook users' data without their knowledge or consent and used it for political advertising. In her opinion, it is a huge threat.

The US and the EU jurisdictions have dealt with these issues at length, and she gave some pointers on it – First, the EU and the US have looked at issues such as should competition law be used to address privacy concerns. The EU and the US have taken different approaches for the same. While the US enforcers have relied on adversarial litigation to vindicate antitrust concerns, mostly guided by consumer welfare standards, whereas European enforcers have relied on regulatory enforcement. The intersection between privacy, big data and competition has led US agencies to create task forces to study this tension.

In her opinion, maybe a market study is needed to study this tension. Many in the US believe that it is not an antitrust issue if a company holds a lot of data, for example, data is not a barrier to entry because it is readily accessible to others in the market and data changes constantly, so relatively it has a brief useful life. To both protect deep-rooted privacy concerns and to maximize

choices for consumers, enforcers focus on the competitive advantage of holding data and are open to limiting the amount of data that a company can aggregate and use. In the Indian context, maybe a short-term solution could be found in the conjoint reading of section 60 and 62 of the Act which establishes the CCI as an agnostic regulator which can assume jurisdiction concerning any sectoral law violation provided it has a competition angle attached to it. We also need to look at the Data Protection Bill and whether it is the appropriate forum.

Prof Cremer stressed that we need to remember that data is two-faced. Data is good faced when it is protected. In terms of competition law, there are two objectives. A big firm like Amazon has lots of data and data is useful and productive. The aim shouldn't be to prohibit Amazon from using it, it should be to provide this data to other companies so that they can use it to provide services to consumers and hence, there is more competition. He said that we need to be very careful and keep the balance between privacy concerns and sharing of data. We think of privacy as one big thing, but privacy has lots of nuances. Sharing of data can be good as well. Therefore, the focus should not be on preventing the use of data but fostering the protected use of data. He said that the CCI should have both of these aims or concerns in mind.

Prof Aditya said that different jurisdictions have a different understanding of privacy, jurisprudences are evolving everywhere, competition concerns have been of different types. The countries where the digital economy has become more prominent now, are facing new kinds of challenges compared to countries where they were already existing. In his opinion, it is possible that the kind of competition laws that are required needs to be contextual to that particular nation. In that context, he asked if we need different laws for developed countries as compared to developing countries because developed countries already have a huge digital economy as compared to developing countries where it is just starting.

Ms. Jyoti generally observed that the design of laws including the antitrust laws should reflect the economic level of development of the country concerned, the structure of the economy, overarching constitutional framework and culture. She further said that the competition law has also embedded these aspects and takes them into account in its application. While the application of antitrust laws may vary across jurisdictions and geographies, accounting for peculiarities of the domestic economy, the extent of internet penetration, role of the digital economy in the overall market, the fundamental principles governing competition regulation are, by and large, grounded in some principles of economics and this is the position world-wide. Given this extent of globalization and interconnectedness of economies and the blurring of geographic boundaries in the digital ecosystem, it is axiomatic that digital players would be operating across jurisdiction and

have to comply with domestic frameworks. As long as their policymaking and functioning are concerned, they are adhering to the fundamental principles, there is not much of a challenge in terms of compliance across the regimes. Of course, both in law as well as in the application of the law, the nuances and the actual situation prevailing in the economy has to be factored in.

Prof Cremer said that, while he is not much aware about the developing economies, he understands there is a problem of coordination of the competition laws, which is getting even more difficult in the digital economy. We know what happens, for instance, when we have a Chinese internet and the rest-of-the-world internet, we are gaining more by having a worldwide internet. On the other hand, different countries have different requirements. There is a lot of debate in India about Twitter and WhatsApp, and let's say India, for whatever reason – good or bad, wants WhatsApp to change the way it is functioning. Whether it's a good or bad idea, it's upon India to judge.

He further observed that once WhatsApp develops its capacity in India, it is much easier to use this capacity somewhere else. For instance, if there is a problem with anonymity because once WhatsApp can look into private messages in India, it can do so in other countries. It changes the nature of the game. In his opinion, it is difficult to have normative statements because it is difficult for us to determine what is the required level of national heights as opposed to individual heights, as opposed to international heights. It is difficult because it depends much on the incentives of the regulatory agencies.

Prof Aditya requested other panellists to share their thoughts on the issue regarding the contextualisation of the competition regime depending on the state of the economy and culture of that particular country and how competition law would interact with privacy laws. He further asked if the Data Protection Bill will create or resolve more issues.

Dr Abha stated that it is known that CCI is a cross-sectoral regulator, so the Bill will help in smoothening out a lot of ambiguities that exist as of now. But the jurisdiction of CCI would remain in the basic tenets of the competition law. The Bill will only help us in regulating the big data and tie loose ends and regulate these kinds of issues. CCI is a cross-sectoral regulator and will always have this all-pervasive power and it will always regulate where required. But as of now since there is a gap, there is more to be done by the CCI. Once the Bill becomes an Act, there will be more clarity as far as privacy law is concerned.

Ms. Jyoti, seeking to explain CCI's take on it, said that when it comes to privacy, CCI's stand also got reflected in the Telecom study which was recently conducted. That also addresses the point

which was raised by Prof Rahul Singh, and she fully agrees that it is very important to carry out market studies to understand the structure of the market because all these issues are very complex, the markets are becoming increasingly complex and interconnected. So, that has been CCI's endeavour and as can be seen from the recent trends, multiple market studies are done, be it in the e-commerce sector, which brought about self-regulatory guidelines to guide the industry. The Telecom study also reflected on the interface between privacy and competition law, it brought out how privacy can be a parameter for non-price competition and how it can also translate into exclusionary, exploitative and abusive conduct. She said that whenever they are examining issues related to privacy, apart from looking at whether the users are aware of the privacy-related concerns, they also examine the meaningful choice that the users would have when they are aware of the privacy concerns. Market study is one of the effective tools to understand these issues. Having said all of this, she also stated that in case CCI comes across an issue that requires intervention or an investigation, the CCI would not shy away from that.

Prof Rahul went back to Prof Cremer's analogy of the World Wide Web where he mentioned that it's fortunate that it is a World Wide Web and not an India web or an EU web. He proceeded to state, however, unfortunately or maybe fortunately, the competition law is only Indian competition law, similarly the EU competition law is only the EU competition law and so on. Each of these jurisdictions says that so long as you are exporting, cartels are not an issue. They are looking for an impact on the market. Until we get an international competition law, the reality is that this is going to remain an Indian Competition law and given that the goals of different competition laws are vastly different, it is worthwhile for us to stick to the goals of Indian competition law.

Prof Aditya took us back to Prof Cremer mentioned earlier about the digital economy being a new kind of economy which is different from how it used to be earlier and also more integrated. It doesn't always abide by territorial boundaries. On this, he asked if there is a possibility that the national competition laws may not be able to respond to the new challenges unless they decide to come together to regulate this digital space.

Prof Rahul stated that this feeling is not unprecedented. At the time when Shaman Act came about in 1890, railroads raised the same question- that they are railroads and antitrust laws should not apply to them and that they predate the antitrust law. This is the idea of law; they are supposed to be sector-agnostic, particularly Competition law. This also ties in with what Prof Cremer was mentioning that there is a common language which has come about which is the law and economics-based language. There is also an international competition network and the CCI participates very actively in it. In his views, every new sector feels that it is the exception to the

law. This also becomes an interesting question in the context of blockchain, cryptocurrency, AI etc. About his views on the draft data protection bill, he said, maybe an expert body like the data protection authority can look at the digital economy questions in greater depth. He recommended that each of the regulators must work together and maybe some of these questions might not arise if they talk to each other.

Ms. Jyoti, on the issue of coordination between different regulators, said that our regulatory framework already provides for this kind of exchange, coordination and cooperation. The CLRC, which had submitted its report, has recommended further strengthening of such kinds of exchanges. She wanted to put it on record that the CCI regularly does these kinds of exchanges with other regulators. She agrees that going forward, a coordinated approach and comity between regulators is very much required to appreciate the scope of issues and to ensure effective regulation. This coordination framework is reciprocal.

Prof Cremer also emphasised that there must be coordination and it is impressive that there is discussion among the competition law agencies around the world.

Prof Aditya concluded the panel discussions with few of his takeaways and also noted there were differing views on some issues as well. The first takeaway according to him was that the digital economy is different from what the economy meant earlier, it has brought in a new dimension that doesn't understand territories. There are new challenges in this regard. There was an opposite view on this as well, that it is the same old wine in a new bottle and we need to understand and figure it out, and then the problems can be dealt with. Furthermore, data was discussed not only as something which could lead to competition concerns but also how these competition concerns are linked to privacy concerns and are context specific. Finally, data is not necessarily bad; it can be put to some good use as well, as in the case of GeM.

Prof Rahul wished to ask a question to Mr. PK –if he seen any kind of impact on MSME participation in public procurement after GeM has come about. (This could not be answered due to connectivity issues at Mr. P.K.'s end).

Kabeer Jay, Joint-Convenor of the Law and Technology Society, NLSIU, extended a vote of thanks to everyone for the successful completion of the first session.

Theme 1, Panel 2: Anti-Competitive Algorithms and Challenges in Antitrust

Panel:

1. Prof. Rahul Singh (Associate Professor, NLSIU)
2. Ms. Tatheer Fathima (PhD Candidate, NLUD)
3. Prof. Thibault Schrepel (Faculty Affiliate, CodeX)
4. Ms. Smriti Parsheera (Fellow, CyberBRICS Project)
5. Dr. K D Singh (Director at Anti-Trust Division 1 and CPIO, CCI)

Moderator: Prof. Amit Kumar Padhy (Asst. Professor of Law, Christ University)

Prof. Amit Kumar Padhy first welcomed the attendees. In continuance of the previous panel on the same theme, he identified three major issues that would be discussed: firstly, algorithms and their effects, secondly, blockchain and smart contracts and thirdly, changes across the globe when dealing with such issues. He then introduced the panellists.

Prof. Amit Kumar Padhy began by posing a question to Dr. K.D. Singh. In the context of recent anti-trust cases, can algorithms collude with respect to competition law? If they can, how have other jurisdictions dealt with this issue?

Dr. K.D. Singh observed that the theme of today's talk is opportune in light of the CCI's order on the airline's cartel case. The order looked into the software which means that the age of algorithm collusions has arrived. However, algorithms are merely programs. Therefore, the legal liability of the principal does not alter. This is why existing laws, which were made in the context of brick-and-mortar economy, are sufficient to address the challenges. Although the medium is changed, antitrust laws can still look at algorithmic collusion.

He then explained how algorithms help in collusion. There are broadly three levels. Firstly, where algorithms are programmed so that feedback from transparent market data facilitates coordination. Secondly, where firms use algorithms developed by a common third party, or the platform itself delegates pricing decisions to a common intermediary. This creates a hub-and-spoke cartel. Thirdly, where algorithms autonomously "speak" to each other through machine learning and AI. According to Dr. K.D. Singh, all three instances are captured under the existing competition law framework.

He then talked about the technical expertise required to examine complex programming to detect whether the programming has been at the instance of the concerned enterprise. In that case, the

enterprise will be liable. But even otherwise, as long as the algorithm is used by the principal, the principal cannot be absolved from its principal liability. With regards to various competition agencies, they have applied and deployed existing tools to tackle algorithms.

The European Commission's e-commerce sector enquiry found that approximately twenty-eight per cent of respondents use software to track and subsequently adjust their own pricing. Among other things, increased price transparency through price monitoring software may facilitate tacit and explicit collusion between retailers by making a detection of deviations from collusive agreements easier and more immediate. This in turn can reduce the incentive of retailers to deviate from their collusive price by limiting expected gains from such deviations. Whether using this software to track pricing which is then fed into the algorithm falls foul of competition law is a separate matter.

Where firms use third-party algorithms or delegate, this can also create a hub-and-spoke structure that may facilitate information exchange. The Competition Law Review Committee examined the hub-and-spoke type of arrangements in the new-age market economy laws and concluded that the existing framework is sufficient. However, they suggested that in the Competition Act, Section 3, the presumption of appreciable adverse effect on competition can be extended in the context of hub-and-spoke cartels since the existing arrangement will only be able to capture the spokes. With regards to the hub, the appreciable adverse effect on competition has to be established under the factors mentioned in the framework of Section 19(3). So, the enquiry has to be divided into two parts, which is unworkable. Therefore, the proposal of the CLRC and its incorporation in the forthcoming bill would go a long way in addressing the hub-and-spoke cartels in the digital world.

Finally, he also mentioned how industry-wise wide uses of algorithms have made these issues common. When algorithms operate within greater transparency, computers would be programmed to anticipate and respond to a rival's moves, with the computer's ability to rely on prior strategies to punish deviations, prices will climb in not just duopolies but also oligopolies. The OECD has also highlighted that because of the clear risk that algorithms may pose, both the lack of intervention and overregulation can have serious costs on society. Any future action should be cautious and subject to deep assessment.

Prof. Amit Kumar Padhy asked Prof. Rahul Singh how competition law should deal with different algorithms. Are we susceptible to over-regulate the sector?

Prof. Rahul Singh answered that firstly, innovation is never a justification for cartelisation. A person who is innovating is not justified to cartelise. As per the text of the statute, even indirect

collusion is captured within 'cartelisation'. Coming to newer technological concepts like blockchain, would there be a chilling effect? In that context and in light of the CCI discussion paper on blockchain, the right approach for the Commission would be to conduct a cost-benefit analysis. This should be done from a market study-perspective, rather than from a conduct-related activity perspective straightaway.

Prof. Amit Kumar Padhy then asked Dr. Thibault Schrepel how liability would be established in blockchain and algorithms because of decentralisation and lack of entities.

Dr. Thibault Schrepel differentiated between the medium which is used for an anti-competitive activity and the price itself. The two main questions then are firstly, how do we detect and secondly, who is liable? On the liability question, liability can be established on the person who is in control of the technology. Technological solutions can also limit what an algorithm can do. If one were to use a supervised learning algorithm, data is fed, and the algorithm is asked to find the output, but the exact output required is also shown. In an unsupervised algorithm, it would be more complicated.

On the second question, when blockchain is just a medium to put one algorithm over another, there are several issues. Since there is no vertical control or a legal entity in blockchain, he is of the opinion that a legal entity should be created to capture blockchain. The deeper question is how a legal entity can be created in a way that makes sense.

Then, Prof. Amit Kumar Padhy briefly explained how blockchain and smart contracts work. He then asked Prof. Rahul Singh and Dr. Thibault Schrepel how the law has approached blockchain in India and the rest of the world respectively.

Dr. Thibault Schrepel explained that what one records in a blockchain are transactions about the past, or transactions about the future, i.e., smart contracts, where if certain conditions are met the smart contract would be triggered. Future contractions can be put on the blockchain and once it is there it cannot be removed. This creates trust, which can be conducive to collusion.

Competition regulators usually try to inject uncertainty so that one colluder applies for leniency. But with algorithms or smart contracts on blockchains, it is immutable, and the code will be automatically triggered. Therefore, they make collusion cooperative, a new challenge to antitrust. This is why it is important to state the medium which algorithms use. Discussing with some persons in the blockchain ecosystem, he opined that they are already implementing collusions using smart contracts. Therefore, spreading the expertise is the need of the hour.

Prof. Amit Kumar Padhy followed up by asking about distinguishing between private and public blockchain systems.

Dr. Thibault Schrepel said that on a public blockchain no one can impose a decision on others. Intuitively, there would not be an abuse of the dominant position because it is not under any single person's control. For a private blockchain, there is more power, and it might be anticompetitive. It is important to differentiate between the two. Otherwise, regulators may punish individual private players in a public blockchain for individual practices but can never capture the strategy coming out of the blockchain.

Prof. Rahul Singh said that the Commission might also be thinking as to what those areas in which one can are think of the application of competition law when it comes to blockchain. In China, following the prisoner's dilemma did not help. There may not be enough evidence to suggest what might happen in the Indian context with the leniency regime that India has, particularly as blockchain is being applied. Theoretical assumptions have to be formulated if certain predictions have to be made. Just based on a law and economics theory, insofar as the evidence from a developing country like China comes about it seems the Prisoner's Dilemma might not work in a Chinese context. He does not know whether it will work in the Indian context or not.

Prof. Amit Kumar Padhy asked Dr. Thibault Schrepel if he could throw some light on the Law and Programming he presented before the OECD.

Dr. Thibault Schrepel explained that Law and Programming helps close the loophole where companies now do illegal things through the code, since regulators do not look at it. In his opinions, lawyers in this field lawyers ideally have to know the basics of code. Otherwise, lawyers tend to either see the wrong problems, fail to see the relevant problems or propose an unviable solution.

Prof. Amit Kumar Padhy asked Ms. Smriti Parsheera if anti-trust laws can keep up with the technology.

Ms. Smriti Parsheera began by stating that the word 'algorithm' is an umbrella term that consists of various subsets. Not all algorithms have the same outcomes or technologies. Therefore, for policy intervention, it is critical to understand what algorithm is at play. Within algorithms, it's important to understand what kinds of algorithms, neural networks, machine learning etc. are deployed in a particular instance. While there are certain instances or "black box cases" where there is a lack of understanding as to why certain outcomes are created, that is not the case for most algorithms or even supervised machine learning. Therefore, to determine liability it's

important to first understand what technology is at play and then determine conduct based on that.

Additionally, all of the AI we encounter today is what is called 'weak AI'. The question of a 'strong AI' is unknown in that some people think that the development of strong AI with a conscience may be impossible. With liability, the question is about the designers and deployers of the systems and the ones who decided which problems are worth solving, and what outcomes are to be reached. Those people will be liable and therefore that is not the big issue. The issue is whether we can prove the conduct that we set out to prove. It is crucial to understand which kinds of algorithms are used in certain instances and then deconstruct them from there.

One examples of gaps in the existing law is regarding "agreements". Cases have been dismissed because although there was anticipation or hint of certain conduct, it was not possible to show a meeting of minds. Next, is the hub and spoke model wherein the airlines case is asking the question if there is one software vendor providing services to several airlines then is there a possibility of collusion i.e., horizontal arrangements are being made through a series of vertical arrangements. However, the CCI found that since there is a human element it was enough to close the case. In her view, although there is some application of the human mind the extent of its application is not clear. In what percentage of cases did people apply their mind and change the suggested prices? These values could be crucial in determining whether collusion took place.

Finally, the idea of competition review process is that there should be an idea of 'settlement'. Because it's hard to prove collusion where algorithms are involved, there is a signalling effect if investigations can be started.

Prof. Amit Kumar Padhy asked Dr. Thibault Schrepel if other regulators should make use of blockchain-using algorithms.

Dr. Thibault Schrepel said that the Digital Markets Act prohibits certain practices. These aren't against the technology but certain use-cases. The European Commission defines AI as software. But he does not think regulators should disregard the difference between different software and algorithms. He showed the different types of algorithms that come under the umbrella term 'AI'. There are three different types of instances of algorithms in competition law. In the first scenario, humans decide without the help of computers. In the second, computers do the colluding, but humans are behind the computer. In the third, the computers themselves decide what to do and interestingly, there are no European or US cases on scenario number 3. While there are many

academic papers written on it, there is no case. For a regulator with limited resources, maybe the third scenario is not as relevant then.

Prof. Amit Kumar Padhy then asked Prof. Rahul Singh if we are striking a fair balance between innovation and competition law goals. How would we prove collusion when it comes to blockchain?

Prof. Rahul Singh said that similar to the airlines case, proving would be hard. On regulation, he said that society has put some amount of trust in the CCI which would have to find a way to balance over and under regulation.

Prof. Amit Kumar Padhy then asked how blockchains function and whether the current regime is enough to cover the changes that blockchains bring.

Ms. Tatheer Fatima said that blockchains are inherently neither 'pro' nor 'anti' competitive. Because of its inchoate nature, there is very little empirical evidence. The reason blockchain gained traction is because of the idea of decentralisation. Similarly, competition also seeks to free participants from concentrations of power. Ultimately, both want decentralisation of economic opportunities without control being in the hands of a single dominant participant. Therefore, there is potential for blockchain to actually work with and supplement competition law. Proactively engaging blockchain developers, miners, stakeholders and making them aware of the likely concerns of competition law is important. The need of the hour is strong advocacy and regulatory sandboxes so that competition requirements can be coded into blockchain which would promote both the interests of blockchain stakeholders and the level of competition.

Prof. Amit Kumar Padhy asked if we can imagine a future of friendly relationship between algorithms and competition law? If yes, what are the modifications the law might need?

Dr. K.D. Singh reiterates that competition law is futuristic in its ambit due to India's late-mover advantage. The law framed is overarching and therefore, the law does not need any change. In fact, tinkering with the law would only muddy the waters and confuse the stakeholders. The law has to be technology-agnostic and cannot change according to the technology. The question of being friendly towards the algorithms does not arise because, in its application, the CCI applies the law without any animosity to technology.

Since the Karnataka High Court rejected the challenge by the CCI against certain e-commerce giants and before that the Delhi High Court on social media giants, it is a testament to the fact that the law is sufficient, and that the higher judiciary has reposed full faith in the framework of the law and its application by the agency.

The floor was then opened to questions.

Q. In a study on blockchains, the CCI has recognised that this technology can raise concerns on collective dominance which India does not recognise. What is your take on this?

Ans. Dr. K.D. Singh answered that the issue of collective dominance was deliberated, and it was considered expedient that currently there was no need for the new concept in the statute. Group dominance talks about entities that are structurally related to each other and is recognised. But collective dominance i.e., between entities that are not related to each other is not recognised. If they are jointly doing something anti-competitive then the framework under Section 3 is robust enough to include this. Otherwise, it will create a lot of uncertainty. The CLRC recommendations are also against the introductions since the existing frameworks are enough.

Q. Can smart contracts be used for automatic compliance? More generally, are conventional principles transferable to platforms or do we need new approaches?

Ans. Dr. Thibault Schrepel replied that smart contracts can be used to automate compliance. He also personally thinks that neo-classical economics has failed us. Because our analysis is static, we are not capturing market dynamic and complexity.

Q. Does blockchain make it easier to share anti-competition information? Can blockchain be used to track government transactions to reduce corruption?

Ans. Dr. Thibault Schrepel said that blockchain does make it easier to share such information. It also checks corruption and has been used in refugee camps, for example, to track the distribution of food and water.

Prof. Rahul Singh asked Dr. Thibault Schrepel if there is any reason why the token effect curve behaves differently compared to network effects in blockchain. He also asked how the token effect is different from discounting.

Answering the second question, Dr. Thibault Schrepel said that network effects take time and there is a tipping point. Therefore, companies hold dominant positions for a long time. But in blockchain, users are joining rapidly. So, it is different from discounting which is costly for companies. Blockchain developers design and issue a token for no cost and if it is a failure, since the cost was zero, you can start again. Where lawyers have a role to play is to see if the token is security and then enter the space of financial law and the regulations that come with it. If every token is a security, then you may kill the token effect a little bit. A token effect might be why in a few weeks they are competing with the big tech questions.

Dr. K.D. Singh then responded to the comments made on the airline case. Because the decisions were due to highway blockage between Delhi and Chandigarh, people started using flights to fly between Delhi and Amritsar or Delhi and Chandigarh. Because of this background, the director-general did a thorough investigation. Primarily because it was heading for closure, in that situation it was not viable to reveal the pricing algorithms and other commercially sensitive data. All airlines were using different software, and manually feeding their historical data. The judgement brought this out and fundamentally addressed the overwhelming finding, which was that there was human interaction and different algorithms.

Prof. Rahul Singh asked Ms. Tatheer Fatima if there are Indian examples of blockchain utilised and if we should be thinking about it more.

Ms. Tatheer Fatima said that the government e-marketplace used blockchain technology to make information more accessible to SMEs. She believed the coffee board is also working on one. Therefore, blockchain helps in bringing information where there is little, for parties on the lower rungs of the information chain.

Prof. Rahul Singh then asked Ms. Smriti Parsheera about 'tech exceptionalism' and if competition law can keep up the pace with technology.

Ms. Smriti Parsheera said that given competition law is a principle-based law, there is scope for interpretation. For example, 'unfair terms' is broad enough to be interpreted at the discretion of the CCI. Mechanisms like settlement and better collection of evidence can also help the CCI. Friendliness between algorithms and regulators can be achieved if the information is collected by regulators through APIs, web scraping etc. Because this is data in the public domain regulators can dynamically collect search results or price listing without asking the companies themselves.

Dr. Thibault Schrepel added by saying that technology can also help agencies. Market screening tools, APIs and web scraping is one way to detect more infringement. In the US and Europe very rarely is infringement detected. Another way is agencies can train algorithms with their own case laws. With regards to mergers regulators only look at turnovers and market shares, and not the technology involved. Finally, agent-based modelling is also a way agency can make use of technology. Machine learning and AI can improve these models. This is more effective than for example, what the European Commission did in the Google case, which was asking Google to design their remedies which took many years. Therefore, technology can be helpful, and that is one positive note. Although there are problems, there are also opportunities in this space.

Theme 2

Legal Tech Startups

June 12-13, 2021

Theme 2, Panel 1: Legal Tech Startups and the (Promising?) Future Business Prospects

Panel:

1. Mr. Bhavin Patel (Consultant, Bayside Tech)
2. Mr. Sachin Malhan (Co-founder Agami)
3. Mr. Shashank Bijapur (CEO, Spotdraft)
4. Ms. Vinita Varghese (GC, Urban Company)

Moderator: Mr. Nikhil Kanekal (Head of Marketing, Crediwatch)

Mr. Nikhil Kanekal expressed his gratitude and then proceeded to provide some context and lay down the groundwork for the topic.

He mentioned that the session would discuss legal tech startups in a wider framework of the intersection between law, technology, and business and the value creation that emerges out of it. When we talk about legal tech startups, it is also necessary to discuss business leadership on the part of legally trained professionals and how some of us can become agents of change and ecosystem builders. He laid emphasis on the nature of training that legal practitioners and professionals which includes both a liberal-arts and a professional training, calling them "Interdisciplinary Ninjas".

He then went on to discuss the things that the legal professionals as a tribe bring on to the table. There are 4 sets of characteristics that are embedded into us in the course of our professional training. *Firstly*, legally trained professionals tend to be very articulate and have clear and understandable communication whether it's written or oral. *Secondly*, their logical thinking and analytical abilities are also very good, helping them break down problems and build solutions. *Thirdly*, they have the ability to dive deep into the subject making use of their excellent researching skills and they are also able to parse through complex matter and summarise them simply using their articulation abilities. *Fourthly*, they bring on to the table critical stakeholder management with their ability of empathetic and multi-dimensional understanding of the problem. These 4 interesting characteristics are what separates us as a professional class. Business and technology have been out there for a long time. By marrying law into it, we are enriching various spaces and sectors, finding and creating new methods of value discovery and leadership, and providing agency and expertise to the ecosystem.

Mr. Nikhil then introduced the panellists after which the floor was opened to the panellists.

After expressing his gratitude, Mr. Sachin Malhan started the discussion by talking about his journey and the importance of such experiences. As they shape the way we see our world, it is necessary to reflect on them and also to engineer our life in a way so that we have different experiences because these different dimensions make a huge part of us. He then recommended the book, 'Range' by David Epstein to understand how to thrive in a world that demands such interdisciplinary learning and constant learning and unlearning as against the world that demands expertise.

He then began talking about his journey. He entered law school in a pre-technology/pre-computer era and how suddenly in 1999, there was a technology boom. He mentioned how he and Bhavin collaborated to create Law School Tutorials (now Career Launcher) that trains over 80% of people who go to the National Law Schools. The time between 1999-2005 was the time where individuals were shifting from being consumers to creators of technology. Today, the age we are in, the sophistication of technology, and its effects on us are so profound. It's not just information management but it borders on intelligence. It gives one the agency to use the technology and play with it because you become familiar with the underlying thought process. The legal practitioners cannot afford to say that we are using the technology but there's no need to know about it because too much is going into it and by treating it as a 'Black box', you are surrendering your agency.

He then went on to share the lessons he learnt from his entrepreneurial experiences. He talked about he tried to create a 'Nabster' inspired software for visually impaired internet users so that they could easily share their audiobooks with its help. Even after having a clear hypothesis, he later realised that these people were not interested in sharing audiobooks but were rather interested in chatting. Drawing on this experience, he talked about how it's necessary to get out of one's headspace and get out there and learn what the people want and be empathetic. One may have a vision but it has to align with what the people want. He then talked about how it's necessary to expose oneself beyond one's role as a product or service entrepreneur and see what is it like to create a field/ecosystem. It is usually assumed that entrepreneurs are superheroes who can create in any environment but that's not usually true. It is true that they are resilient and have the ability to stay persistent and learnt but it's that much harder especially in ecosystems that don't support them, where access to even basic data is difficult. Thus, one needs to create the favourable conditions to thrive in such an ecosystem. He drew this from his experiences in Ashoka Changemakers.

He mentioned how right now he's working with the idea of what it takes to develop a supportive ecosystem for entrepreneurs in law and justice. He then talked about how change rarely happens with a white paper or a policy brief. One can't shoot arrows with a document. It's the messiness of the makers' spirit wherein you see your vision being decimated and then being rebuilt. It is necessary to thrive in this uncertainty and develop attributes that will help you stay in the game. You have to develop your mindset of staying true to your vision, understanding where your source of inspiration lies, and learning from the human experiences of what you have created.

He then went on to talk about where we are on the legal tech journey. He mentioned how when people come with a vision to join this industry, they tend to join companies and law firm practitioners dealing with things like ODR, case management, admin, workflows, etc. This is a very Europeanised/Americanised understanding. But legal tech is much more than that, it's also known as 'Justice tech' because it also deals with how it can contribute to legal services. It can help citizens with legal services, ODR, legal literacy, and small businesses. It can help the government by way of digital courts and Lok Adalat and entitlements and grievances.

This perspective shift is important because it is only once we recognise the scope that we can be creative with it. With where things stand currently, he divided it into three compartments namely idea, proof of concept, and growth. The Idea stage is where the ideas are very nascent and in the beginning stage. These include ideas about AI Legal Issue Chatbot, Legal Aid Automation, Digital Court Systems, Legal tech Marketplaces, Legal Financing, and Insurance, etc. The proof of concept is the stage where the concept is developing and there's proof that it works. This includes legal research, Automated ODR, Contract Creation, Practice Intelligence, Public Participation in Law making, etc. The third is the growth stage which is developed and there is scope for more growth and investment. This includes Contract Management, Intermediated ODR, Due Diligence Debt Resolution, Workflow Management, Digital Documentation, Online Lok Adalat, etc. The problem lies in the first stage that is seed/early-stage financing is, hard to find. Sachin's feedback is to design the ideas to be resilient because you don't know when the opportunity comes knocking at your door.

According to him, it's the changing expectations of the consumers and producers that are driving the ecosystems and these expectations are shaped by data, technology, and the innovation culture. To get there, there are some building blocks. The ones that demand the most work are the creation of open technology, interdisciplinary understanding, and capital, especially at the idea stage. Others include problems to solve, mentorship, and data availability.

He discussed that his organization Agami is working with the creation of open technology and data availability. What they are trying to do is to turn it into an opportunity to engage with students and other stakeholders to develop on it. In India, unlike the USA, we don't have an institution developing this public good. Agami has already kicked off the "Summer of Data" series, in collaboration with the Centre for Law and Technology at National Law School, Bangalore, where students can participate in creating very critical datasets. This allows the students and others to engage with the ecosystem and gives them agency. Finally, he recommended the attendees to look at 'Agamiscapes' that mentions the innovation in the field.

Mr. Shashank Bijapur then began by introducing himself and his company 'Spotdraft', which is an end-to-end contract automation drafting platform. It helps businesses manage, analyse and collaborate on contracts better. He then went on to talk about his journey of technology and contracts and experiences that shaped his life. It started on 31st December 2013, wherein, during his practice as a lawyer, he was working on a contract and saw the headline about Elon Musk's plan to build self-driving cars. It dawned upon him that where the world was progressing towards manufacturing self-driving cars, he was copy-pasting contracts. He realised that the things that he did as a lawyer were incredibly slow and difficult with no technology to their save. Other fields like banking and accounting, etc had their purpose-built software, unlike the legal field. He asked himself the question of why there is nothing in the legal field that makes the mundane work easier. Professions like accounting, architect, photography, etc went through this shift from manual to automatic but not law. The only shift we got was a patch to MS word in 1993 called Track Changes which is still similarly being used by the lawyers.

He then elaborated upon how he was taught in law school that law is code and code is the law that you are supposed to follow. But the larger question was about how to bring these together. How do you execute the contracts the same way you execute code that is bug-free? There is some similarity because even lawyers are essentially programmers, writing fairly structured content for an outcome similar to how codes are made. It was when he met his co-founders that they realised the essential similarities between the two. The 'event-driven call backs' in coding were known as 'In the event of a breach', 'exception handling' known as 'notwithstanding anything to the contrary, 'Github' as 'Track Changes, 'Config files' as 'Term Sheet' and many more such examples. They realised that there was a way to put this together on an end-to-end platform. The job was to go from taking these various aspects of contract management and streamlining them in one place so that lawyers can practice what they learnt in law school instead of engaging in grunt work that can be done by a machine. This was his journey; how to make something purpose-built for the lawyers and make their life easier which led him to create Spotdraft.

Mr. Kanekal thanked Mr. Bijapur for sharing his journey and for his interesting insights into the same. He then invited Ms. Vinita Varghese to share her views.

Ms. Vinita Varghese began by sharing how she is a little bit unique compared to the previous panelists as unlike them she has retained the vanilla roots of being a lawyer, working as an in-house general counsel for Urban Company. However, she explained that she's constantly in touch with technology and how it forms an essential part of the work she does. She talked about how now we are very far away from getting e-signatures and looking at web docs because now the interaction between law and tech has become profound. Startups are expanding and lawyers are finding themselves in these new spaces. Covid- 19 has also expanded the horizons for both startups and legal tech.

She then went on to answer the frequently asked question of whether tech would make lawyers redundant. Answering in negative, she talked about how legal work includes both grunt work like proofreading and value-adding work like advisory and innovative capabilities of lawyers which can't be done by technology. Technology can only assist the job like IBM is doing for Ross, but it can't replace the profession. The grunt work can be done away with so that young lawyers are also empowered to utilise their time and knowledge more wisely. This evolved technology can help her, her peers, and all the other budding legal practitioners who are able to identify these technological gaps and are ready to work upon them.

She then discussed what it is like to be working in-house, grappling with tech, and how it's why thought leadership and conscious thinking are necessary to be inculcated as part of our education to avoid dealing with the growing pains of tech. She discussed various issues, such as how do we ensure informed consent in click-wrap agreements, issue of storing data of a person, etc. She said that questions like how to ensure smooth cross-border transactions in case of foreign investments and how to ensure payments from the customers continue to persist. As a lawyer, one needs tech solutions at every level to work through these questions. One interacts with technology at all times and with it not being a part of the curriculum, a lot of learning is required on our part. It's necessary to go back to basic principles and integrate them in your job because they form a fundamental part even of the vanilla lawyer work.

She finally talked about consumer expectations and open technology and how as a consumer, she wants vendors that can provide the most creative and fastest solutions to her problems. She also mentioned how fortunately various AI providers take bucket lists from legal practitioners to get the required work done in time. She ends by saying that the interaction and exposure are there and

all one needs to do is ask the right question, the answer to which will let you know of your capabilities.

Nikhil thanked her for her interesting insights. He also gave context to what Mr Patel was going to talk about. Mr. Patel deals with the intersection of legal education with technology and business. He calls it, "examining the limitations of technological and computational methods in working with legal systems". He analyzed how formal logic can be used to solve the problems in the legal system.

Mr. Bhavin Patel started by addressing a question as to whether lawyers should know how to code, to which his answer was yes. To elaborate, he went on to talk about how lawyers have ample critical thinking skills but not analytical thinking. This leads to the gap and divergence between those who are able to work with computational methods and code and the rest of us, who are lawyers. But why does the gap exist? He then posed another question about whether similarity is sameness, to which his reply was that at least code and contracts are similar and same. This is because both are texts, both flow from top to bottom, have certain conditionalities, infinite regression can happen, and many other similarities. But just because there is a similarity between the two systems, is it right to say that we can wholly apply technology to law? If yes, then what Ms. Vinita said about technology not being able to do value-adding work is just a matter of time.

He then proceeded ahead by asking a question as to whether the law is a part of humanities or social science. The answers were mixed. Then comes the question of how do we understand the fundamental nature of law and thus how do we approach this understanding of the application of technology in law. To help everyone understand this, Mr. Bhavin decided to trace back the history of technology and formal logic, a history that goes way beyond 1999. It also depicts his understanding of where analytical thinking comes from, how it's applied in the field of technology, and to what point can it help us. It's about law, logic, and limit. He began by explaining how lawyers usually mix the essentially different concepts of 'Truth' and 'Proof'. There is a divergence and as lawyers, we are not concerned with truth because we don't have a way to arrive at it but what is important for us is 'proof' because that is something we can establish. He then talked about James Fritzjames Stephen who drafted the Indian Evidence Act, 1872 and how the rules he wrote down still apply to what can be considered as proof. What is mentioned in the act is not 'Truth' but the concept of 'Beyond Reasonable Doubt'. This showed that the legal systems were able to identify this divergence and found a way around it.

After this, he went on to discuss how logical and computational systems address this divergence. He began the discussion by talking about the 'Greeks' especially Aristotle, Plato, and Descartes,

postulates laid down by whom still govern mathematics and computations. Analytical reasoning was first articulated by Aristotle with the help of syllogisms where there is no error when you only apply analytical reasoning. Nothing much happened for the next 1000 years but then in Baghdad, al-Khwarizmi came up with a book about a way of sequencing decisions to solve problems. The book was 'al-Kitab al-mukhtasar fi hisab al-jabr wal-muqabala'. This is where we also get the words 'algebra' and 'algorithm' from. This was the time when analytical reasoning was getting solidified. Fast-forward 1000 years to Victorian England where ideas were rapidly developing. George Boole wrote a book called the 'Laws of Thought' and said that you can do whatever analytical reasoning you want to do just with the help of 'If', 'Then', And', 'Or', 'Not'. These are rules that are used in computational reasoning even today.

Then came Charles Babbage who decided to employ these rules to build a machine that performs calculations on numbers without a human mind. After this, he discussed about Ada Lovelace, the world's first computer programmer and a successful female in an ocean of men. She extended the operation to beyond numbers and on all symbolic systems. Bhavin took a detour and mentioned how even in the current scenario, women are highly under-represented and thus questions the direction in which progress in the legal tech field is going. All of this was exploited and put to use by Alfred Noynen (sic) and Alan Turing who architected the fundamental rules of computer hardware and making analytical systems work respectively.

This is where the similarity between law and technology stops. 15 years after Babbage, comes Russell and Alfred Whitehead who say that there are certain concepts in mathematics that can't be proven especially axioms. They decided to try and prove the axioms and while doing that they come up with paradoxes which shows that it is possible to create paradoxes in formal logic and finding a solution to those paradoxes is not possible by applying axioms because the axioms themselves don't have a proof. They said that the Set Theory won't make the cut and made the Theory of 'Types' and wrote a book called 'Principia Mathematica'. According to them, they had proved all axioms and thus made Mathematics complete and consistent. It was when Kurt Godel, who is considered as the technology's greatest nemesis postulated that even systems like formal logic, analytical and deductive reasoning and even mathematics is incomplete and inconsistent, is when things started to fall apart. Mr. Bhavin went on to say that the belief that formal logic and mathematics are consistent and complete is misguided at the very least and at the worst dangerous. The question that comes up is whether or not you can apply formal logic to law because similar to mathematics, the law has both axioms and paradoxes. There are gaps in approaches to understanding this. It's great to talk about law and technology but if one wants to do it, then it's necessary to understand both formal logic and the nature of law. It is only after this that you'll be

able to answer the question of whether rules of technology can go all the way to become applicable to the whole of the law. He doesn't know the answer either but is working on it and considers the question interesting enough for others to ponder upon.

Mr. Kanekal then tried to zoom in on what's happening in the world especially the west in Silicon Valley. Risk capital is being invested in emerging ideas and companies are rapidly developing. He mentioned reading two books. These were 'Super pumped: the battle for Uber' by Mike Issac and 'Billion Dollar Startup' by Mihir Dalal which talks about Flipkart's journey. He further said how there is a lot to be desired in terms of how product solutions, designs, go-to-market strategies for emerging businesses have to come to exist with an acute lack of awareness about humanities, social sciences, individual rights, privacy, etc. These are some fundamental concepts that have been left out by technology. The very technocratic approach to this issue of value addition leaves the fundamentals behind. What this session has unlocked for everyone is the point of technology's limitation and the larger point of how there's a need for an interdisciplinary mindset and ability to collectively create value.

The floor was then opened to questions from the audience.

Q. 1. What is the approach that should be adopted by law students today to learn about technology and the means involved to be at par with professionals like engineers and given the fact that we do not have organised training in the sector in our college curriculum?

Mr. Bhavin Patel- The second part of the question is not very important because we do not need to be on par with anyone. For the first part of the question, some people require guidance and some don't but the approach to learn about technology depends on the question you ask yourself. Why do I need to learn to code? Why is technology important? Once you answer these questions, then a little bit of research will lead you to great courses designed for various purposes.

Q2. How can we build products to bring substantial change in the context of ongoing technological advancement?

Mr. Shashank Bijapur- Lawyers are creators by virtue of what they do. To speak specifically in the context of building a product; it depends on two things. First is the entire ideation piece of what you want to do for which you are prepared by the law school. Second is the technical aspect which you need to know only as much that can help you do your work faster.

Ms. Vinita Varghese- It also depends on consumer expectations and the market's view of the gap analysis of where the product is required. This depends on your exposure and experience. Ross,

one of the largest law firms in the world is using AI to do core legal work. It might or might not pan out but there's learning coming out and this is where the space for entry lies.

Q3. Compared to western nations, is the Indian legal market less conducive for such startups? If yes, then how can it be bought at power?

Mr. Sachin Malhan- The law market in India is small and the enterprise market is growing. The question can be looked at from two perspectives. One could be that there are problems in India that are worth solving and the other could be that there is an opportunity to bring a global organisation out of India. Problems like access to capital and lack of social cushion exist in India but these formal problems of conducive support are compensated by the persistence, resilience, and the ability of experimentation that the market develops in you. The jury is still out on whether one market is more conducive than the other. But what is more important to understand is that you cannot determine the existence of opportunities just by reading about the markets. You need to engage with the market to understand it.

Q4. Sometimes, some of the contracts keep using the wrong language for years, and changing them would create a risk of unforeseen circumstances. Is contract automation technology capable of addressing it?

Mr. Shashank Bijapur- One of the systems that are being built is the ability to analyse historical contracts, to point the good and the bad in them, and to deduce a pattern. It aims to address these issues in a more automated manner. However, it is difficult especially in a legal ecosystem because you don't know while analysing those contracts if you're representing the buyer or the seller. These nuances and challenges are yet to be overcome.

Mr. Bhavin Patel- He mentions his recent experience of human supervised AI. Currently, you get a quality that is at par with that of an average lawyer. So, the question of pitfalls is very real because if the contract is imperfect, then there's nothing much the AI can do.

Q5. Approximately, how long is the gestation period of a legal tech startup? Are there any options to make financial stability?

Mr. Shashank Bijapur- Not just financial but also mental and physical ability is required to deal with the failures you encounter. There is no definite gestation period. It took 2 years for Spotdraft, took 5 years for some predecessors who are doing extremely well. It majorly depends on the market fit but if within the first 18-24 months, you don't see the traction you desired, then something needs to change.

Q6. In such startups, are there concerns around privacy and cybersecurity?

Ms. Vinita Varghese- These are high-level red flag concerns. With the speed that the startups are growing in the current times, these issues have become all the more important. Thus, being a privacy or cybersecurity professional can be good options with them being in high priority in the startup market.

Q7. On account of everything being virtual, Covid-19 might lead to a surge in legal tech startups, but the turbulence in the economy might also cut their funding. In terms of crystal ball gazing, which of these aspects is more likely to determine the future of these startups?

Ms. Vinita Varghese and Mr. Shashank Bijapur- There has been more interest in investments for some companies. Calamities act as a catalyst and thus funding has risen. Covid has accelerated growth in the sector and it's better than ever before.

Mr. Sachin Malhan- There has been quite an increase in investments. Investments have doubled down in the 'Proof of Concept' and 'Growth' areas especially in areas of digitisation and automation because of the sense of security. Seed funding in ideas that are more experimental has whittled down due to the lack of security.

Q8. What is the future and legality if we can deliver agreements through digital signature?

Ms. Vinita Varghese- Real estate sale agreements are currently prohibited in this manner. The sector is prone to fraud and that's why in-person attendance is required. The sector also makes up for multiple revenue channels for the state. Thus, in near future, there is not really any sign of change.

Mr. Bhavin Patel- Not all property rights are prohibited to be transferred in such a way. In the state of Maharashtra, low-level transactions like leave and license agreements are permissible via digital signature.

The session then moved on to closing comments by the panelists.

Mr. Sachin Malhan advised everyone to engage more deeply. He talks about how this is not about learning a course on law and technology but about coming in contact with the field. Go beyond the armchair thesis part and get into the making of it. It'll be very beneficial to start engaging from the college times itself.

Mr. Shashank Bijapur seconded him and added on by saying that working with or on a legal startup doesn't mean taking courses but putting it to practice. Just because you are a law student, it is not

necessary for you to work only in legal startups. Experience is what matters. Keep a keen eye on problems and how you're required to solve them. Build something of your own, something that you are interested in.

Mr. Kanekal posed the question about the key ingredients to be a founder.

Mr. Bijapur replied by saying that resilience is the most important attribute to keep you in the game. One should be very passionate about what one wants to do and but at the same time should know when to stop.

Ms. Varghese talked about how it is necessary to look at the two ends of this equation. One is the principles approach i.e. the knowledge about the problem and what we are trying to solve. The other end is to not let oneself be engulfed by text and be more aware of the ecosystem. It is also very necessary to know the basics of law and technology to be able to give answers to questions posed.

Mr. Patel advised everyone to stop thinking about themselves as a lawyer, journalist, coder, etc. These are just labels. He urged everyone to instead focus on what they are curious about and pursue it.

Theme 2, Panel 2: Transforming the Legal Practice in 2020s

Panel:

1. Dr. Aditya Sondhi (Senior Advocate, Karnataka High Court)
2. Mr. Hrishikesh Datar (Founder and CEO at Vakilsearch.com)
3. Mr. Karthik Mahalingam (Head of Corporate Governance at Flipkart)
4. Mr. Shivam Singla (Founder of Leegality)

Moderator: Mr. Rishi Shroff (MD's Office at JSW)

Harshit Goyal- He began the session by thanking the Panelists and the Attendees for attending the session. He highlighted that this panel discussion was primarily concerned with the Legal Tech Startups and the various stakeholders concerned with it. He then introduced the Moderator, Mr. Rishi Shroff, and handed over the floor to him.

Mr. Rishi Shroff- He thanked the panelists and presented a road map for the discussion. The panelists were divided in terms of three categories of stake holders; Judiciary- Mr. Aditya Sondhi, In-House Counsels- Mr. Karthik Mahalingam; Tech Businesses- Mr. Hrishikesh Datar and Mr. Shivam Singla. The panel discussion primarily dealt with three broad themes. The first theme was concerned with understanding the present position of tech in law and the opportunities tech provides to the various stakeholders. The second theme primarily revolved around the challenges involved with adopting tech in law, and what can be done differently for the same. Since the attendees were predominantly students, the third theme touched upon the changes that can be introduced in education and the possible impact of tech on future job prospects. Mr. Shroff, then, went ahead to introduce the panelists and conducted two polls to gauge the view of the attendees.

Poll 1- Apart from legal databases, have you had the opportunity to use or see in action any legal tech product?

Results- Yes- 43%

No- 57%

Poll 2- Are you concerned that the increasing prevalence of technology in law will make it harder for lawyers to get jobs in the next five years?

Results- Yes- 49%

No- 51%

Opening Comments

Dr. Aditya Sondhi said that tech was here to stay here in the practice of the law. According to him, the interface of technology in law and court was inevitable, but the pandemic has accelerated the adoption of tech in law. Thus, it is a no brainer to say that tech is quite important for law. Though Dr. Sondhi was primarily concerned with the speed and gravity with which tech is being used in the practice of the law. The deep question which needs to be addressed is whether we are more prone towards letting the technology in or keeping it out. According to him, the question doesn't have a binary answer of a simple yes/no. To answer the question, we need to identify the core and non-core dimensions of the practice of the law.

Core dimensions primarily deal with advocacy and decision making, such as- Client interaction, drafting, research, examination of witnesses, preparation of evidence for the case, oral arguments, written submissions and decision making by the Courts. The core dimensions should remain human and the introduction of AI to these requires careful deliberation. According to Dr. Sondhi, human discretion, ethics and human interchange cannot be interchanged with technology. Essentially, the practice of the law should remain human and humane at the Courts. Non-Core elements can be understood as case management, research support, case information, listing, e-filing, payment of court fees, production of certified copies etc. According to Dr. Sondhi, letting technology in can be the default when it comes to non-core elements. These elements are function of efficiency, and the interface of technology can largely improve this facet of justice delivery.

The question that needs to be kept in mind while using technology is: Whether we are using it to improve the speed and efficiency, or we are using it as a crutch. Dr. Sondhi cautioned against the latter. Law Research, he believed, should remain a non-technology exercise. Research databases and search engines can, at the best, give the requisite material faster, but cannot be used to determine the applicability of the judgement to the facts of the case. The other important issue that needs to be kept in mind is that of the element of control over technology. Judicial functions are treated as solemn; they cannot be delegated. Dr. Sondhi was concerned over the fact that by using technology, we might provide back-door access to tech outfits in justice delivery. This raise concerns related to privacy and the possible control that can be manifested by the AI. With the increasing use of tech in law, a greater onus has been placed on the law schools to teach about the human element of the law. Technology cannot change the core of the profession particularly advocacy. The ethics, cerebral and intellectual elements shape the counsel. Thus, it becomes imperative that law schools, while discussing technology, focus on teaching the human element of the law as well.

Mr. Rishi Shroff- Thanked Dr. Sondhi and invited Mr. Mahalingam to talk about his views on the use of technology in the corporate sector.

Mr. Karthik Mahalingam expressed that Law and Technology is a no-brainer. Technology is the need of the hour, but the extent of which we adopt it is the question that we need to engage with. He provided a disclaimer that all of the views he expressed were his personal opinions and not of any organization. Based on his experience as an in-house legal counsel in the business place, he believes that a large part of a typical lawyer's role, especially in certain practices, can be easily commoditized and automated. Though, the incentive to adopt the technology in these practices is minimal. He took the example of a law firm and highlighted that it charges on the basis of hours and automation creates the problem of transposing the costs to the client and the possible reduction in the billing. There is much more value in using associates for structuring higher-end complex issues. Legal Tech, according to Mr. Mahalingam, is relevant for both law firms and in-house. Although the market for the same is small, it is gradually growing.

On the question of whether technology can replace legal job prospects, Mr. Mahalingam believed it is tough to replace experience and institutional knowledge. He supported Dr. Sondhi's point that the human element of the law is important. The way the algorithm is coded represents the human element.

Drawing upon his discussions with people in legal tech across various geographies, Mr. Mahalingam highlighted that there is a universal requirement for legal tech to be applied. Legal Tech is a subset of Legal Operations, which is basically the set of business activities that can minimize the spending on an easily automated task. In general, not many have been able to convince the business stakeholders that the use of technology is worth including for purposes of financial planning, better management and analytics. There was estimation that the legal services market is expected to cross $ 1 Trillion by the end of 2021, however, the share of legal tech in it is small. The problems associated with legal tech market are related to funding, reach, conversion, finding the right product market fit and getting customers. The key to these is resilience and perseverance. When it comes to academics, significant advancements have not been made yet. However, some Law Schools have come up with courses that specifically focus on Legal Tech as a profession. The actual pool of candidates in Legal Tech is still quite limited. Even when the polished players, like Akira, approach multiple law firms with the same product, each law firm has a different way of approaching it. The reason behind this is that the sample data sets which are

available with the law firms are very basic and each law firm has to build on it, using its own proprietary knowledge and skill.

Mr. Rishi Shroff- invited Mr. Hrishikesh Datar to express his views.

Mr. Hrishikesh Datar- Pointed out that there is a false dichotomy that has been created when we talk about law and technology. With the way the world is evolving, technology is an enabler to anything that we do. He respectfully disagreed with Dr. Sondhi's stand on the question of letting technology in or keeping it out. According to Mr. Datar, it is a choice that we do not have the luxury to make. The question that whether increasing use of technology might affect the job prospects, though pertinent, creates an artificial fear in the minds of the to be lawyers. Technology, AI and machine learning are changing what it means to be a human. Technology, now, deals with the basic cognitive and thinking tasks. The emphasis should be put on what is the next phase of human consciousness around the law. We need to think about how to elevate the practice of law and delivery of justice, in the time saved by using technology. According to Mr. Datar, Law could be looked at as a tool for social good and as a tool to resolve dispute. Thus, law can be looked at in a more commoditized manner. India lacks behind in terms of the time it takes, the quality of justice provided, and the overall experience when it comes justice delivery. We should measure the satisfaction of the litigants who approach the legal system in the same manner as we measure customer satisfaction. The average experience of a litigant is poor.

In this context, we need to acknowledge that we have been able to build a certain working rule of law. However, we haven't been successful in transferring the working apparatus into something that delivers justice rapidly and is able to serve the interests of the people in the manner it is supposed to serve. Technology can do a tremendous amount of job here. On the transactional side, it can rapidly allow small businesses and individuals to get work done, say- incorporation, trademark file, document drafting. On the other side, it can help the lawyers and judges in delivery of justice by facilitating resolution of justice in a rapid time frame. Thus, law and technology should not be looked like a dichotomy.

Technology should be treated as an enabler. The question that we need to ask ourselves is what goal we have, as a country, set to achieve in the legal sphere. Technology can allow judges to take the decisions faster by providing the nudges based on the past trends. Moreover, technology can help speed up the justice delivery process by assisting the lawyers with research. We need to work backwards from the goal that we have set for our legal system, and the pertinent question that needs to be asked in this process is: Can technology be used to accelerate the process? Technology shouldn't be feared off but should be used as an accelerator to achieve lofty ambitious goals.

Mr. Shivam Singla- It is interesting to find that Consilience, this year, also dealt with the component of Business. It is crucial to understand the impact that law and tech have on business, as well as the third component. Mr. Singla's experience has been fairly around how businesses and individuals in the economy interact with the legal system. The development of Legal Tech in India has skipped a few stages. When we talk about AI and ML, we are skipping a few stages as we have not been able to digitize most of the processes yet. For the last Government Information Technology Act that has been there since 2000, has recognized digital- evidence, documents, signatures. However, two decades after that we see, both across the economy and the judiciary, that we have not been able to digitize most of the processes.

So, if we were to look at technology as solution and its development post a decade, by skipping steps, we create a potential fear of it taking away jobs. The stage we are at right now, at least for the next decade, the technology will be fairly limited to solving problems. Technology has been credibly used to digitize the documents in the businesses. Tech has improved efficiency up to 90-95% by reducing the clerical job and has also reduced the time frame for the same. So, when we talk about non-core aspects of law, as Dr. Sondhi pointed out, technology should be let in. Technological changes don't happen over a night, they are steady processes. We are still far away from the point in LegalTech where we could have a fear that technology will take up the job of a lawyer. Most processes are right now at the digitizing space. With the pandemic, more faculty in the legal fraternity are now comfortable with adapting to the technology.

Mr. Rishi Shroff- thanked Mr. Singla and invited Dr. Sondhi to express his take on the position of technology assisting the judiciary.

Dr. Aditya Sondhi- Speaking in the capacity of a counselor, Dr. Sondhi highlighted that the migration to technology has already happened. The concept of VC hearing has become the default setting. With the shutdown of courts, there would have been no justice delivery if the entire concept of VC hearing was not adopted. We include dispute and non-dispute scenario along with transactional and litigation scenarios in one, and then try to redefine what it is to be human. Technology can change us at the core, but the pertinent question is- should it? It is, constitutionally, a difficult position to accept that we can outsource the delivery of justice. Countering Mr. Datar, Dr. Sondhi took a contrasting stand that technology shouldn't be used to assist the judges in finding out the facts of the cases.

Such a job is fundamental to a counsel. By using technology for the same, the job of the counsel would become redundant. It is difficult to accept the stance that in cases, specially, in criminal cases and writ petitions, an app will assist the judges to decide the case by highlighting the important facts. An app cannot tell the judges what the conduct of the parties is, which is of paramount importance. The demarcation, of what is core and what is non-core, has to be done very carefully. We cannot commodify justice delivery and treat the litigants as customers. There has been an over-emphasis on the speed of delivery of justice. Getting a speedy judgement might not ensure justice. In trying to reduce the disposal time, we do not appreciate the evidence, read the brief, apply the law and consider the law, we may not deliver justice. Such a judgement would not stand. The aggrieved party will straight away take the judgement to a higher court and thus, we may end up multiplying the litigations. At heart, practice and decision making are human.

Mr. Rishi Shroff- Technology might help with the democratisation of law as it gives access to non-lawyers. He invited Mr. Mahalingam to express his views that can technology be used in the corporate-business environment to solve problems before they reach litigation.

Mr. Karthik Mahalingam- The pertinent question is how many companies, be it law firms or in-house counsels, have actually used technology compared to the universal company that is available. Are the companies, listed on stock exchange, really using technology to sign their contracts or are they still using the age-old concept of wet signature. If, say, a person is working on M&A transaction, given the number of complexities, we need to focus on whether we are using the vendor for diligence. For diligence, we can either use a lawyer or can use technology intervention wherein all the documents are scanned for the keywords. Technology intervention cannot be the be all- the end all- and, like a junior associate, can miss details. To execute the job properly, both are needed. The first input can be from the technology and then a review can be done by the human to check for apparent errors. There are firms in India which have started using technology but face the problem of deciding what should the costs be since the work is done faster. When we treat law as a business, we are bound by the bottom-line profit margin.

Mr. Rishi Shroff- On the issue of law as a business, Dr. Sondhi highlighted the challenges it can create in the judiciary. For the business, Mr. Mahalingam highlighted that baby steps have been taken. Keeping this in mind, Mr. Shroff invited Mr. Datar to express his opinion on the issue of commercialization of justice with respect to the legal start-ups.

Mr. Hrishikesh Datar- If we were to look at the parking lot of the Supreme Court, commercialization is obvious with the biggest beneficiaries being all the BMWs and Mercedes. There are out-sized benefits to those who are able to, respectfully, manage the system well. It is clearly a rent-seeking environment today, as justice is dispensed on the basis of face value. Anything which is done with sincerity is noble. To consider nobility of law to be at odds with the business sentiments is to live in a happy delusion. The law is commercial and is business for people who practice it. Just because it is business doesn't mean that it cannot do social good. There is no dichotomy between what is social and what is commercial. In India, we have a tendency to accept the way things are and not question them. Blindly setting a goal with the existing infrastructure will lead to chaos and miscarriage of justice. However, if we as a country set a goal for speedy disposal, we would need to adopt a system that is amalgam of multiple things like, for instance, increasing the number of judges.

The key point is that we need to set a goal. It is not limited to court cases but extends to incorporation of companies as well. Since 2014, a lot of changes have happened which have improved the transactional side. Technology will be an integral part in making the goal happen. To the extent that application of mind can be partially assisted by technology, it can re-define what it means to be a human. The beauty of artificial learning is that it gets betters with time. The more it learns, the more it learns. We need to accept the premise that faster justice delivery is necessary, and, in that context, technology can have profound impacts.

Mr. Rishi Shroff- Directing the question to Mr. Singla, Mr. Shroff asked about how tech products have been adopted.

Mr. Shivam Singla- The Indian Legal ecosystem has faced the challenge of improper solutioning. The market has not been able to come up with strategies to persuade legal fraternity that the use technology is beneficial. However, it has changed substantially over the past four-five years. Good quality solutions can be identified in the market now. This has been coupled with the overall emphasis on digitization across sectors and the massive push that the government has put on technology. With ample education and demonstration of reliability of the technology, market has been more receptive of legal technology.

Mr. Rishi Shroff- The third theme revolves around what are the changes that need to be taken with respect to legal technology, especially on the side of education and government policy. Mr. Shroff invited Dr. Sondhi to present his views on the same.

Dr. Aditya Sondhi- The NLU model of education is detached from reality. It doesn't give the real image. It is dangerous to accept the system the way it is as it leads to prejudices. The law school curriculum doesn't break the prejudices very well. People are uncomfortable with the BMW culture at the Supreme Court. Practice of law cannot be seen as commercialization, because then, the focus shifts on purchasing power. It becomes a function of affordability. These trends do not improve justice. Thus, engagement with the philosophy of the law has to be far deeper.

The government has an important role to play, both as a litigant as well as a service provider. The government officers need to work with the Court while keeping the larger constitutional scheme in mind, rather than certain interests. We can have authorized official email IDs for uploading the documents, instead of sending them on a registered post. This requires government agencies to walk two steps forward. Most government agencies have G-Mail IDs, we cannot risk sensitive court documents on it. We can have e-filling, e-listing of cases to expedite the delivery of justice. Probably, a bot can list the pending cases to prevent the delay, but the bot ought not to read the draft to tell what is important. Government intervention might be required, in terms of think tank or policy design, to enhance the speed of delivery of justice.

Mr. Karthik Mahalingam- At least for the next few years, technology cannot replace jobs. We need to think about how we need to upscale ourselves for the new jobs that will be there in the future. Law students can do something in the business, tech-coding side or do academia. The career path for some of these jobs is not clear. But there is enough aspiration in the mind of the people to do beyond what they are able to do now. The Law Schools need to focus on the more practical and dynamic aspect of the law. Students need to be proactive about it. Mr. Mahalingam strongly advised against the growing Google culture.

Mr. Hrishikesh Datar- The NLS structure did divorce us from the reality of the profession. It is a bad thing, to the extent that it becomes difficult to adjust while practicing. However, it was a good thing too as it really taught the skill to question things radically. The college can do better in coupling with the legal practice. We need to question ourselves, on what we really are and what we aspire to be when it comes to delivery of justice. Technology can be a huge enabler in helping us achieve the end goal. Technology though hasn't been applied in law but can be used to accelerate the process.

Mr. Shivam Singla- The problem of the disconnect of the education to the real-world scenario is not just restricted to law but is all-pervasive. Legal curriculum cannot ensure that students adapt to the technical changes, as the speed of technical changes will always be faster with respect to the speed at which we can change the curriculum.

Questions from the audience

1. On account of everything being virtual, Covid-19 might lead to a surge in legal tech start-ups, but the turbulence in economy might also cut their funding. In terms of crystal ball gazing, which of these aspects is more likely to determine the future of these start-ups?

Mr. Shivam Singla- The most common way through which people get to know about the start-ups is via the media. Media predominantly talks about the funding. But, at the ground level, start-ups are more than that. They talk about the solutions and, where there have been good solutions, not much problem of funding has been there.

Mr. Karthik Mahalingam- Ability to convince investors about such topics is high and the ability of the investors to understand them is high when it comes to start-ups in general. Coming to legal tech start-ups, it is limited. For the right product market fit, investors are keen to invest.

2. Similar to law firms, should India follow a protectionist regime where foreign start-ups are disallowed?

Mr. Karthik Mahalingam doesn't believe much in the protectionist regime. There have to be certain reciprocal arrangements. We can benefit from what the foreign firms and corporate has to offer. The Indian Market is very different and difficult for a foreign law firm to crack in.

3. Whenever there's talk of technology, we have to keep in mind issues of the digital divide. Given the inaccessibility of technology, could legal tech end up creating silos of haves and have notes?

Mr. Aditya Sondhi- If we are talking about technology interventions, we need to democratize technology. If it is not performed, then technology will be at logger heads with the concept of justice. Taking the example of VC hearing, DR. Sondhi highlighted the importance of having a better net connection for the counsel. It also becomes the question of affordability. It might be more affordable for the first-generation lawyer today as they do not necessarily require office space. Clients are more comfortable with VCs. Though, it will be problematic if we go down the lane of determining who would be the better counsel on the basis of access to technology. We need to keep in mind the weakest consumer.

4. The corporate legal market of India is very small. Is it fair to say that start-ups won't have large data sets for training their algorithm and regarding Mr. Datar's point regarding the AI Learning to be far-fetched?

Mr. Hrishikesh Datar- We have 12 million Businesses which have registered for GST. On an average, each of these uploads 6-7 invoices per month. We have tremendous number of litigants and case files. The amount of data that exists for processing is huge, and thus, we don't not have that problem.

5. In terms of the type of technology products offered, what are the gaps that exist in the legal tech landscape in India at the moment? What sort of opportunities are available for new entrepreneurs?

Mr. Shivam Singla- The entire legal profession is up for scope for optimization.

Poll 2 was reconducted

Are you concerned that the increasing prevalence of technology in law will make it harder for lawyers to get jobs in the next five years?

Results- Yes- 38%

No- 62%

Closing Comments

Dr. Aditya Sondhi- The panel had a fascinating exchange. We need to be open and welcoming. Just because better technology is there, we cannot say that there will be better lawyers. Technology can shrink our brain and it is a dangerous way to go down.

Mr. Karthik Mahalingam- We need to harness our potential to get to the desired goal. The future of law is at question as well. Being a lawyer is no longer enough, we need to think about a variety of other things that might not even be related to law.

Mr. Hrishikesh Datar- There are abundant challenges for anyone setting up their own private practice or law firm. Commoditization brings clearly defined parameters in terms of quality and time. We need to start looking at the individuals as customers of legal service. As an independent nation, we are providing the services to an individual customer. If someone files a case, that person deserves to know how much time it would take and have access to lawyers who can fight on that person's behalf.

Mr. Shivam Singla- The entire ecosystem can be looked with an optimistic perspective. We can bring in massive efficiency. We can use technology to remove the bad aspects of law.

Vote of Thanks

Kabeer Jay- The conclusion that we arrived at indicates that there is a strong sense that there remains a lot of scope for this discourse. He extended his gratitude to every person behind the successful conduct of the event. Mr. Jay then thanked the panelists and the moderator on behalf of L-Tech and NLSIU.

Appendices

Appendix 1: Schedule of the Conference

JUNE 10, 2021

1700 IST	Welcome Address Harshit Goyal (Convenor, L-Tech)
1705 IST	Inaugural Address Justice Ravindra Bhat (Judge, Supreme Court of India)
1735 IST	Panel Discussion Theme 1, Panel 1: Dominion over Data: An Analysis of Modern Market Supremacy 1. Prof. Rahul Singh (Associate Professor, NLSIU) 2. Prof. Abha Yadav (Associate Professor, IICA) 3. Mr. P.K. Singh (CEO, Government e-marketplace) 4. Prof. Jacques Cremer (Professor and Researcher, TSE) 5. Ms. Jyoti Jindgar Bhanot (Adviser and Head of Anti-Trust Division 1, CCI) *Moderator*: Prof. Aditya Rathore (Assistant professor, BMU)
1855 IST	Vote of Thanks Kabeer Jay (Joint Convenor, L-Tech)

JUNE 11, 2021

1700 IST	Welcome Address Harshit Goyal (Convenor, L-Tech)
1705 IST	Panel Discussion Theme 1, Panel 2: Anti-Competitive Algorithms and the Challenges in Antitrust 1. Prof. Rahul Singh (Associate Professor, NLSIU) 2. Ms. Tatheer Fathima (PhD Candidate, NLUD) 3. Prof. Thibault Schrepel (Faculty Affiliate, CodeX)

	4. Ms. Smriti Parsheera (Fellow, CyberBRICS Project) 5. Dr. K D Singh (Director at Anti-Trust Division 1 and CPIO, CCI) *Moderator*: Prof. Amit Kumar Padhy (Asst. Professor of Law, Christ University)
1855 IST	Vote of Thanks Kabeer Jay (Joint Convenor, L-Tech)

JUNE 12, 2021

1700 IST	Welcome Address Harshit Goyal (Convenor, L-Tech)
1705 IST	Panel Discussion Theme 2, Panel 1: Legal Tech Startups and the (Promising?) Future Business Prospects 1. Mr. Bhavin Patel (Consultant, Bayside Tech) 2. Mr. Sachin Malhan (Co-founder Agami) 3. Mr. Shashank Bijapur (CEO, Spotdraft) 4. Ms. Vinita Varghese (GC, Urban Company) *Moderator*: Mr. Nikhil Kanekal (Head of Marketing, Crediwatch)
1855 IST	Vote of Thanks Kabeer Jay (Joint Convenor, L-Tech)

JUNE 13, 2021

1700 IST	Welcome Address Harshit Goyal (Convenor, L-Tech)
1705 IST	Panel Discussion Theme 2, Panel 2: Transforming the Practice of Law in the 2020s 1. Mr. Aditya Sondhi (Senior Advocate, Karnataka High Court) 2. Mr. Hrishikesh Datar (Founder and CEO at Vakilsearch.com) 3. Mr. Karthik Mahalingam (Head of Corporate Governance at Flipkart) 4. Mr. Shivam Singla (Founder of Leegality) *Moderator*: Mr. Rishi Shroff (MD's Office at JSW)

1855 IST	Vote of Thanks Kabeer Jay (Joint Convenor, L-Tech)

Appendix 2: Questions in the Concept Note

Theme 1 Panel 1

1. Is there a need to revisit the basics of defining relevant market to deal with the tech products that are globalized, zero-priced, data- reliant, multi-sided, hopefully interoperable, etc.?
2. What are various ways in which data can lead to dominance in terms of competition law?
3. What are various new ways through which the tech-based platforms abuse their dominant position? Is the competition law jurisprudence developed enough to tackle such abuses or should we look for remedies such as data portability that doesn't strictly fall under the purview of competition law?
4. Should the laws of developing and developed nations treat these issues differently?
5. With respect to big data, are the goals of privacy laws in line with the goals of competition law? If yes, in what ways can they reinforce each other?

Theme 1 Panel 2

1. Can algorithms collude in terms of competition law? How have various jurisdictions dealt with this issue?
2. What is the extent of the liability of the human agents behind collusive algorithms?
3. How do laws related to collusion interact with blockchain and smart contracts?
4. With a continuously evolving algorithm that is using more and more of machine learning, are the antitrust laws enough to keep such regularly developing technology under check? How can these and other challenges related to tacit collusion by such technologies be tackled?
5. What would be the terms of a fair trade-off between legitimate appropriability and antitrust regulation?

   Similarly, to achieve a fair balance between innovation and competition law goals, should the regulation be light-touch or more robust?
6. Can algorithms and regulators have a friendly relationship where the algorithms may enforce the competition law in ways that were never possible before?

Theme 2 Panel 1

1. What is the size and state of innovation in the Indian legal market?

2. What is the status of legal tech startups? Are they understanding the clients' needs? Does the market have the potential to provide them sufficient funding?
3. What does the future of such startups look like? Is it different in India and abroad? How is COVID-19 likely to affect such startups?
4. To what extent will tech replace lawyers? How can legal tech aid judiciary?

Theme 2 Panel 2

1. Are the lawyers adapting to change? What are the benefits/ drawbacks of adapting?
2. What kind of legal tech do different kinds of lawyers (GC, Litigating lawyer, M&A lawyer, PQE, Paralegals, etc.) need?
3. What are the largest costs for legal startups? Is there any government support?
4. Is law school education appropriate in this disrupted market? What other skills do they need?

For any query,
contact us at:
lawtech@nls.ac.in

Rapporteurs:

Theme 1 Panel 1: Priyanka Vishnoi
Theme 1 Panel 2: V. Sreedharan
Theme 2 Panel 1: Vidhi Shrivastava
Theme 2 Panel 2: Radhika Singhal