IMC 2018 Knowledge Sessions Synopsis

Day	Time	Agenda	Hall	Key Takeaway and Discussion Points
Day 1	12:35 – 13:10	**The India Story (Stack 3.0) - Connect, Create, Innovate**	Inaugural	The session summed up the challenges faced by the Indian telecommunications sector such as standardization, regulatory issues, data privacy, fierce competition, falling prices, infrastructure issues, etc. affecting the overall growth. The discussion was on the ways and methods to deal with such challenges and unleash the potential of the Indian telecommunication sector and serving the untapped Indian market. Majorly, the panel highlighted areas of improvement such as use of IP back haul network, collaboration with the government, innovations, education, etc. that needs to be focused upon in order to develop scalable and adaptable ecosystem.
Day 1	14:40 - 15:40	**The Evolving Regulatory Landscape in the New Digital Ecosystem-Regulatory Brief**	Inaugural	The panel discussion revolved around the effectiveness and efficiency of the regulations in the new digital era. The effect of new technologies such as 5G, IoT, M2M and AI, on regulators and regulations was discussed at large. Primarily, the regulator's approaches in different geographies was the key learning and outcome of the session. It was discussed how the regulators of the major economies are looking forward for a reactive or moderately regulated market which reduces the regulatory uncertainty and barriers in order to encourage investments and new services. The panelists also discussed upon key issues such as data privacy, data security, data localization, etc. and regulatory environment around it with customers as central focal point.
Day 1	14:40 - 15:40	**Enabling Futuristic Networks - Reducing complexity to Redefine connectivity**	Connect	The panel discussed the orchestration and automation of technologies such as 5G, which is characterized by extremely low latency and exceedingly high bandwidth. Densification and Virtualization were a few areas of testing and development, as discussed by the panel. They proceeded to discuss the benefits of the spine leaf design, which is pushing out the hierarchical tree data center networking model thereby reducing the distance between edge and user. Operators today, as per the panel, need to leverage this approach towards servicing consumers and development of massive MIMO would catalyze the functioning of new age use cases such as connected cars, connected homes etc. by transforming the way data is analyzed and processed.
Day 1	14:40 - 15:40	**Digital Identity - A revolution or a threat**	Create	The discussion focus was on Aadhar and other digital identities present in India and worldwide. The panel discussed about how initiatives of digital India has led to financial inclusion where there is an urgent need for regulations around access to information/ jurisdiction through use of digital identities. The panel also highlighted the importance of data localization. 'Dichotomy in digital identity' and its comparison to global standards still remains a concern in India. Further the panel discussed the need for a legal framework and its implementation along with its inter- operability and leveled playing field due to transition towards digital economy.
Day 1	14:40 - 15:41	**Building Next-Gen Digital Infrastructure for the Masses**	Innovate	The panel discussion was on building next generation infrastructure for supporting an evolving digital ecosystem to make the daily lives of users easy. The panel discussed the use of an optical network and the way 5G should evolve in order to develop next generation infrastructure to support evolving technology. The panel also discussed the challenges pertaining to the rollout of 5G in India like high cost of transmission for 5G as compared to 4G, low reach of internet services in rural areas creating rural divide, low percentage of tower connectivity through fiber and the need for high spectrum for 5G rollout, to name a few.
Day 1	14:40 - 15:42	**Gadgets of Tomorrow-Connected Intelligence**	Digital Studio	The discussion was focused on the possible benefits of intelligent devices and the ways in which they'll effect everyday life. The panel also discussed the challenges arising for incorporating a vast network of connected devices and the security issues that may accompany it during integration of such devices. According to the panel, IOT and AI are emerging technologies which will make the devices future ready and simultaneously give them the ability to innovate, with time. The panel highlighted that after introduction to 5G, machines would be able to communicate faster with each other and other such impacts of 5G on the gadgets of tomorrow. They concluded by describing that India has a very high potential of adopting 5G earlier than expected and hence operators and manufacturers must formulate a structured approach for adopting 5G to provide a better user experience.

Day 1	15:50 - 16:50	**ASEAN & BIMSTEC Conclave**	Inaugural	The esteemed dignitaries from the ASEAN and BIMSTEC region discussed upon the connectivity and digitalization across various countries and the specific projects and policies in place to strengthen the interaction and technological cooperation between the ASEAN and BIMSTEC countries. Promoting physical and digital connectivity in the region, is a priority area under the BIMSTEC framework. India is also working towards extending its national knowledge network to all BIMSTEC countries to foster collaboration and innovation among educational and research institutions in the region. India looks forward to strengthening its relations in the region through hosting extrinsic networks and benefitting from the ongoing economic and physical integration underway in the region.
Day 1	15:50 - 16:50	**Smart Cities: - Automating the way we live**	Connect	The panel discussion revolved around the role of ICT and IOT for the implantation of Smart Cities, which aim to reduce human intervention across utility management and resolve problems related to water supply, electricity supply, transportation, waste management. The smart cities mission in India has already set-up 11 fully operational command and control centers which has resulted in reduction in crime rate by 20%. The panel also discussed how data security and privacy concerns are being tackled by differentiating between Open and Sensitive Data and how Infrastructure and systems should be able to adapt to the rising consumption due to introduction of 5G and the subsequent Data Explosion.The panel also pointed out how fiber today is being used as a shareable resource and how collaborative consumption can limit the need to construct fiber highways.
Day 1	15:50 - 16:50	**Enabling the IoT ecosystem - Shaping an Automated Society**	Create	The panel discussion put forth views on the need to enable robust and scalable IoT ecosystems in India and the industry's contribution towards the same. The panelists also discussed a few use cases/ examples highlighting their contribution towards automated society. Additionally, the panel also highlighted the requirement of high bandwidth, low latency and strong partnership in order to enable an strong IoT ecosystem. Major challenges around IoT ecosystem such as secure network, network infrastructure, bandwidth and fiber utilization were also touched upon. Further the panel also discussed upon the government initiatives around IoT.
Day 1	15:50 - 16:50	**Augmented & Virtual Reality - What does the future hold?**	Innovate	The panel discussion was focused on the future application of Augmented and virtual reality. The panel highlighted the factors that can boost the future market of augmented and virtual reality such as innovative content and high quality experience. As per the panelists, 5G can be a key enabler in spreading augmented and virtual reality to the end users by providing low latency and high bandwidth. The panel also discussed the role of 5G in providing high speed internet to run and operate virtual reality applications and help the augmented and virtual reality industry grow in India.
Day 1	15:50 - 16:50	**Make From India**	Digital Studio	The discussion was centered on the current capabilities of the Indian market in terms of the skill set and regulatory landscape for manufacturing in the telecom sector. Also discussed was the effect of such initiatives on the Indian economy and the various government incentives given to expedite the R&D efforts in this field. The panel also highlighted the need for domestic R&D centers and science parks, increased Indian registered patents and enhanced engagement of startups. The future of domestic manufacturers and industry examples of make from India handsets were also presented by the panelists.

Day 1	17:00 - 18:00	**The Digital Natives - Transforming Technology and Content**	Connect	As per the panel, creation of content has transformed immensely post 4G. A steep fall in the price of data over the past 2 years has caused the consumer base to expand including Digital Immigrants (i.e. people from higher age bracket and people outside of tier 1 & tier 2 cities) due to which content consumption and creation patterns have changed. As brought forward by the panel, the traditional consumer has changed and organisations should not be caught up in digital Darwinism. Smartphone penetration has allowed millions of people to create content and, hence, competition in content creation. Also discussed was how the level of personalization has increased to an extent where content is no longer segmented section-wise, but as per person and how user-targeted content is available on all platforms.
Day 1	17:00 - 18:00	**Evolving network Models - Intelligent Transport**	Create	The discussions focus was on intelligent transport networks, their transformation and how core telecom network is required to move to the next generation network. As per the discussion, in order for transport networks to be omnipresent, they would require a backhaul connectivity and a potential network which will provide capacity and multi spectrum bands. One of the main challenges in intelligent transport would be disruptive costs. The panel went on to discuss the challenges of equipment manufacturers from high capex and automation, to deployment of field. The panelists also spoke about requirement of regulation for high capacity, network slicing, clock solution, intelligent network, self- healing network for high utilization etc.
Day 1	17:00 - 18:00	**RupeeTech ₹TECH - Is Cash still the King ?**	Innovate	This panel discussion focused on the role of digital technology in making the economy cashless. As per the panelists, a wide spread of smartphones, internet services and bundled offers have enabled a cashless ecosystem in India. A big factor that has boosted the cashless economy in India is demonetization, as per the panel. Due to challenges like security threat, inferior infrastructure and lack of digital education in India, cash is still the major mode of transaction. As discussed by the panel, the government will need to take adequate steps to improve the existing infrastructure to boost the digital payment growth in rural and semi urban parts of India.
Day 1	17:00 - 18:00	**GuruGyan - Mentoring Session for Startups**	Digital Studio	The speaker discussed the various initiatives undertaken by the government to promote start-ups in India such as: a) facilitating intellectual property rights for expediting examination of patents applications b) providing support in terms of tax benefits and levies, thus encouraging public sector to buy more products from the start-ups c) Introduction of GEM platforms which serves as a market place for all the registered start-ups. Also discussed were the new age technologies and the government policies and international partnershios around the same helping to build a strong platform for startups.
Day 2	10:00 - 13:40	**Global CEO Conclave - Networks of Tomorrow**	Inaugural	The panel began the discussion emphasizing on the innovations in the digital technology, today, that is driving the need for advanced networks and services. The world is moving towards a new era of connectivity with the onset of next generation technologies such as 5G, IoT, MIMO, etc. The panel highlighted that it has become imperative to develop a reliable and secured network that can serve the futuristic service demands and implementing such networks would require the whole ecosystem to participate and contribute towards sustainable growth. The panel also discussed emerging business models around next generation networks and how infrastructure sharing (both active and passive sharing), Network Scalability, improved storage capabilities, enhanced Security will contribute towards creating a full proof ecosystem to support the Networks of the Future.

Day 2	10:00 - 13:40	**Global CEO Conclave - Emerging Technologies**	Inaugural	The panel discussed about the key emerging technologies for businesses in view of the changes experienced globally, skillsets required for ease in implementation of these technologies, perceived benefits and the possible roadblocks which can be faced in implementation of the futuristic technologies. The panel highlighted that as the demand for bandwidth is going to grow, new type of interfaces have to be introduced. Networks will need to evolve to support SDN and new services while being intelligent to increase their capabilities to support new services. The panel also discussed about the capabilities of cloud computing and big data which will contribute in a variety of ways by using new technologies like Block chain and digital reality. The panel also highlighted that the Networks of the future will be complex and unmanageable by humans and therefore the use of AI & ML to manage such complex systems will be required.
Day 2	10:00 - 13:40	**Global CEO Conclave - Power of Content**	Inaugural	The panel discussion highlighted how there is a huge revenue opportunity in this field, due to more affordable pricing, faster networks and increasing number of devices that have penetrated the market. India has a huge success in montezing content, as discussed by the panel, as it enjoys being at the cusp of powerful content and technology. The focus these days for OTT players, for content generation is on customization and creation of relavant content to appeal to a wider section of consumers. Social media, as observed by the panelists, has also played a vital role and helped in content monetization. The panel discussed the various challenges such as monetisation, delivery and content creation, and the possible solutions to overcome such challenges. Smartly packaged content, i.e., good content at a fair price, is one such solution that was discussed.
Day 2	10:00 - 13:40	**Global CEO Conclave - Open Source Tech**	Inaugural	The panel discussion revolved around the potential for innovation as well as scope for expanding use cases for open source technologies in sectors like healthcare, infrastructure, military, telecommunication and IT. The panellists analysed why innovation in open source is much faster and that with the plethora of open source components utilized in technology development, it is imperative that a level of control is maintained while the software is used and distributed by the organization to detect vulnerabilities and data breaches. The panel also discussed a common misconception - that Open Source is less secure and later discussed that it, being democratic, ensures a secure ecosystem. It was concluded that open source is free but it can be monetized through upgrade and maintenance support which can result in a steady revenue stream.
Day 2	14:30 - 15:30	**Pro-Innovation Regulation and Privacy-Encouraging New Digital Business Models**	Inaugural	The panel discussion highlighted the regulatory environment in the fast changing and evolving world. The discussion touched upon the paradigm shift in the technology sector which is resulting in difficulties for the regulators to draft regulations. In the panelists view, regulators across the globe should not pro-actively regulate the market, in order to maintain the balance in innovation of the new digital business models. The discussion revolved around the various challenges the regulators are facing and the changes from the ecosystem would require relevant changes in the regulations. The Panelists also discussed data privacy, data society and data localization challenges and corresponding regulatory approaches.
Day 2	14:30 - 15:30	**The Emerging World of Analytics: Creating Business Solutions**	Connect	The panel discussed how big data greatly helps in making the networks today smart and intelligent and facilitates cost-effective operation and optimization. The analytics industry is estimated to be worth almost USD 71 billion by 2022 and the panel highlighted, how the adoption of big-data by telecom and financial services industry has increased manifold. It was also pointed out that to analyse the data, we need the right data and the appropriate skill-set and that analytics in telecom is a very niche field. Firstly, in terms of scale, it has a very large scope. Along with the quantum of data, there is also time sensitivity of data and the huge number of connected devices. The panel members discussed that if we can wisely use the data, the amount of value we can create for the society, for the customer and for ourselves is vast and analytics is at the core of delivering that value.

Day 2	14:30 - 15:30	**HealthTech - Age of Cyborgs**	Create	The discussion was centered on how an unprecedented technology shift has accelerated the transition from traditional healthcare to smart healthcare. The panelists highlighted that now-a-days human race is living in a world where technology will forecast how often and when our body will showcase symptoms of illness. The disruption in health industry has led the players to focus on business models catering to operational excellence (online health reports, data points, predictive algorithm). The panelists also discussed the need of regulations and protocols required to enable mass industrialization and innovation. Further, panelists highlighted the importance of data privacy in health sector.
Day 2	14:30 - 15:30	**Value Creation through Digital Marketing**	Innovate	The panel discussion was around the value added through digital marketing in the present scenario to organizations. As per the panelist, today digital marketing has become important for both B2B and B2C in order to expand their reach to the customers. As compared to traditional marketing, digital marketing is more adaptive so as to target individual customers. Digital marketing, as discussed, enables feedback mechanism to draw real-time insights to envisage customer-focused/ centric marketing strategies. Digital marketing strategies are to be made based on the reach of different promotional channels, investment on behavioral analysis of customers and powerful content that will bring success to organizations.
Day 2	14:30 - 15:30	**B2C Enagagement**	Digital Studio	The panel discussed the possibility of 5G being introduced in India by 2020 and the increase in benefits and opportunities that 5G will offer in comparison to 4G. Panelists also considered the document published by the Steering Committee of DoT to be a roadmap for 5G in India that guides the entire Telecom Industry. Also, the panelists believed that the low level of last mile fiber penetration in India can be the only challenge for 5G adoption as it requires large bandwidth to the last mile.
Day 2	15:30 - 16:30	**Artificial Intelligence: Innovation, Investments, Ethics and Responsibilities**	Connect	The panel analysed case studies about the adoption of AI in new business offerings, internal processes, and how the use of AI has been extensively seen in the manufacturing & logistics industry wherein the user can manage and plan efficiently through continuous monitoring. It was also examined how the value of AI will be realized when AI starts getting used in industries such as healthcare and education. The panel discussed the most challenging part of implementing AI is making people understand what data they have and how much the acquisition cost they are paying for getting the data into a trained model. As per a recent Gartner study, Revenue from AI is estimated to be around 1.62 Billion Dollars today going up to 31 Billion Dollars 2025.
Day 2	15:30 - 16:30	**Industry 4.0 : Building Factories of the Future**	Create	The discussion had put forth views on the context of Industry 4.0 and its transformative impact in the manufacturing industry across global and Indian geographies. Also discussed was the competency factor of companies who aim to or are in-progress to move towards Industry 4.0 technology adoption and what were the challenges (system perspective, people management etc.) faced during this transformation. Also discussed was the regulatory landscape, time required to deliver and government initiatives for 5G introduction. The role of 5G and new avenues of opportunities were also highlighted during the discussion. The panelists also discussed few use cases/ examples by highlighting their contributions in the manufacturing sector.
Day 2	15:30 - 16:30	**Future of Enterprise - Serving the Millennials**	Innovate	The panelists focused on the current scenarios where organizations are moving at a very fast pace where they are trying to enable their businesses with evolving technology like M2M and green devices. In order to achieve this objective, organizations need people who can understand the ecosystem and the evolving need of the organizations. The consumption and buying patterns have seen a paradigm shift, and companies are employing increased adoption of digital technologies that cater to the newer generation of consumers- the millennials. Just like millennials, it is important for companies to adopt a feedback theory to become successful. Organizations should focus on tapping into the current millennial trends in order to have happy consumers/ employees/ sellers.

Day 3	10:00 - 13:15	**Special Plenary Session on 5G - Governement Perspective**	Inaugural	The discussion was centered around the various government initiatives across the globe for technology adoption in the form of 5G and how the NDCP 2018 seeks to unlock the transformative power of the digital communications network. It was also discussed how the deployment of 5G is will connect machines, cities, people etc. The panelists also spoke about the steps India can take to be not just aa mere consumer, but a global 5G contributor and an equal partner of 5G technology. Also noted during the discussion was the action taken by the government to double the fiber roll out since 5G represents the most paradigm shift in the telecom sector.
Day 3	10:00 - 13:15	**Special Plenary Session on 5G - Operators Perspective**	Inaugural	Session Cancelled
Day 3	10:00 - 13:15	**Special Plenary Session on 5G - OEM Perspective**	Inaugural	The panel discussed the various 5G standards, ease of its deployment and possible challenges in its implementation. The panel also discussed the 5G trials in India, economies of scale for 5G networks, energy efficient equipment and the advent of cloud based RAN (C-RAN). The panel highlighted requirements for new standards for transport network and emergence for fixed wireless networks. For India, 5G indicates to be a problem solver with applications that can be monetized as it is more agile, scalable and programmable in terms of densification, virtualization and optimization. Therefore, the mind-set and culture in terms of building practices around deployment of 5G and related technology of the whole ecosystem is critical to its success, as discussed by the panel.
Day 3	14:30 - 15:30	**Spectrum for Next Gen Technologies**	Connect	The panel discussed the importance of affordability and availability of spectrum given how the number of connected devices is going to increase manifold in the next 3-5 years. Also discussed was the huge financial burden the telecom sector is facing partly due to aggressive spectrum pricing and competition in the sector. The panel analysed that the cost of spectrum to the cost of backhaul has increased from 5% to 35% from 2005 to 2015 and that the spectrum prices should be considerably reduced. The panel also brainstormed on how the E-band and V-band can help in reducing access traffic and transfer it to backhaul traffic. Further, the panel also discussed the need for harmonization of spectrum required by all operators.
Day 3	14:30 - 15:30	**Driving Infinite Possibilities through Open Source Technology**	Create	The discussion focused on how Open Source has caused disruption by streamlining applications and solution development. Further discussions were on the capabilities of open source in unlocking the hidden potential of a cost driven infrastructure upgrade. Panelists provided used cases and affordability and sustenance of companies working on open source. The role of open source technology in the telecom ecosystem for seamless integration and transition of services were also touched upon by the panelists. Further the panel also highlighted a growing need for standardization, regularization and vendor development to explore and monetize the far-end opportunities by servicing it to the customers.
Day 3	14:30 - 15:30	**Metrics for futuristic Networks**	Innovate	As per the panelists, in order to establish the futuristic ecosystem, there is a need to develop a robust, advanced and reliable network to support the evolving telecom technology. As discussed by the panel, there is a need to look into the new opportunities in the value chain by building the future networks in a differential way. Operators should emphasize more on quality than quantity to build 5G ultra reliable future networks with low latency. In order to achieve this, organizations should focus on automation by developing 5G network in such a way that it can perform analytics on the data and generate useful statistics. Implementation of technologies like SDN and NFV can help in evolving high speed future 5G network, as discussed by the panel.

Day	Time	Session	Track	Summary
Day 3	15:40 - 16:40	**Blockchaining Our Lives**	Connect	Industry 4.0 and Blockchain are the two big game changers for a country like India where recently, a district in Andhra Pradesh was named as a blockchain district where all the certificates issued by the state government were recorded on blockchain. This was one such example presented by the panel. Further the panelists highlighted how to overcome the problems of data security and the data sets with high volume transactions. The importance of a centralized system was highlighted, where multiple partners come together and through the combination of block chain, AI and big data we can create a platform which can provide great experience to the customers.
Day 3	15:40 - 16:40	**Cybersecurity as a Collective Responsibility - Defining the road ahead**	Create	The discussion was centered on cyber security being one of the largest risks in the world. The panel discussed about the significance of stakeholder responsibility and enforceability to provide a seamless and integrated framework for ease in adoption of disruptive technologies and business. The panelists also stressed on the shift of focus towards mobility, standardization, capacity building, and operational friendly environment in the cyber space. Further, the panelists also discussed some use cases/ examples across industry players and discussed on the emerging need of general awareness, regulations/ standards, government initiatives, and IT Acts amendment's etc. for taking India to match the pace of at global front.
Day 3	15:40 - 16:40	**AgriTech : TechFARMERS**	Innovate	Panelists discussed the challenges that the farming industry is facing, related to climatic condition, water shortage and crop production. As per the panel, technology can play an important role to overcome such issues. However, it was highlighted that there are few barriers on technology adoption and that the real barrier is providing awareness to the end users. Applications based on IoT, robotics and artificial intelligence will be the enablers to strengthen agriculture practice and the economy of India. There is a need for government intervention to upscale the existing infrastructure and boost marketing oriented platforms to enable ease of doing business. In future, government initiatives and technology can help in implementation of technology enabled farming in India.