

Annual Report: International Telecom Seminar

Communique'19

➤ **Name of the Committee** – Seminar Committee

➤ **Objectives of the Committee** –

- To organize the flagship event of SITM successfully.
- Branding of college amongst aspiring students.
- To invite renowned dignitaries in the ICT industry from India and abroad.
- To showcase the talent of students in the industry.
- Leveraging tie ups with different companies to enhance placements of SITM.

➤ **Names of the Students in the Committee** –

Senior Committee	Ad-Hoc Junior Committee
RISHABH SHARMA	AASHISH BENDE
RISHIKA THAPLIYAL	BIDISHA NANDI
TARUN TAKKAR	ISHAN GUPTA
OINDRILA MAZUMDAR	NAMRATA KUNDU
ANIKET PATIL	PRACHI VAIDYA
TEJAS KAMBLE	REVATHY PRASAD
AYESHA KAPOOR	SUMAN SAHOO
	SUYASH RAI
	VARHSA GANJOO

➤ **Faculty in charge name** –

- Communiqué 19 Convener **Prof.Avinash Aslekar**
- Communiqué 19 Co-Convener **Ms.Bhakti Vyawahare**

➤ List of Activities Undertaken

1. Transcript writing and Topic Selection

International Telecom Seminar – Communique 2019

The preparation for International Telecom Seminar 2019 commenced from the month of June with the process of budget allocation for the event.

The essence of the event is its panel discussions and keynote sessions which give a glimpse of futuristic trend in the ICT industry. The topics for panel discussions were decided and finalized in the month of June which finally lead to the unveiling of the theme of the event

“Impetus Futuro – Widening Horizons, Developing Perspectives”

Panel Discussion:

- 1. 5G Fluctuating Fortunes: Traversing Through Unknown Terrains**
- 2. The 21st Century Crew: Paving Way for a Changing Workforce**
- 3. AI Maturity: Rising above the Woulds, Coulds and Shoulds**
- 4. Deciphering Personal Data Protection Bill: Compliance, Conceptions and Constraints**

Once the topics for panel discussion and the theme were locked, the process of identifying the probable speakers was initiated.

A specific team was appointed for designing the poster and brochures of the event which were to be sent along with the invitation to the speakers and companies participating in the event. Finalizing of speakers was done during the month of July and August. An event of this magnitude demands association with various brands. Hence call for sponsorship were made.

To reach maximum audience of interest, social media platforms like LinkedIn, Facebook, Twitter and Instagram were used. Along with social media, a Student Interaction Program was conducted where different teams visited various educational institutes to promote the event and invite the students to attend the same.

ITS 2019 witnessed the commencement of events at a national platform namely: Brand Race and Sacred Case. This being a pilot event received a great response nationwide. The finalist for both the events were called on day of event for final showdown and felicitation ceremony. Other events included “Build It” and “Guess the Logo”.

The students and corporates attending the event were provided with welcome kits which were procured in the month of August. Final preparation of the event began in the month of September which included internal branding, logistics and facilities for the guests.

1. Speaker and Sponsor Database and Invite

The team next involved themselves in creating a database of suitable corporate speakers for the event via extracting contacts through LinkedIn. The invitation to the speakers were initiated by the senior team members in the mid of July. To make our event a grand one we also created a database of Sponsors and approached them with our event asking for sponsorship in various domains like Food & Beverages, Media, Corporate Gifts, Banks etc. This year the team successfully got a good number of sponsors saving a good amount for various other uses.

2. External activity SIP

For any event to be grand, people need to talk about it and there should be a buzz anticipating the day of event commencement. For this, team Communiqué got brochures of the event printed along with a corporate kit and sent them to corporate via an activity called the Corporate Interaction Program which helped us create a buzz in the corporate world. To gather an audience for the event we had a program in the second week of August called the Student Interaction Program in which the team along with other volunteers went to various Engineering Colleges and a few MBA colleges around the city and created awareness about our event encouraging the students to register themselves for it. Our team managed to not only rope in engineering students from EnTC, Computer Science and IT but also other streams like Chemical and Mechanical.

3. Internal Preparation for the Final day

After this the internal preparation for the event started which included sending invites to our very own Faculty members and Super-Senior team. Various committees worked together for Internal Branding in the campus and Branding on Social Media which helped us create a buzz about the event. An audio-video was prepared to showcase what exactly we have in our bag for everyone to see because we believe the attention of the audience is most captured by graphics. While the event approached nearer, preparations for Travel arrangements and Accommodation of speakers was carefully looked into by the team. Travel arrangements were also made for the students who had registered themselves from the city.

4. Logistics related to the final event:

The banners and posters of the event, Corporate and Student kits and all other arrangements were much in place as we awaited the event. The 21st of September, 2019 was the first day of Communiqué 19.

The event ended on 22nd and was a huge success with the legacy taken forward from year 2018 to 2019. Dynamic situation handling helped the team to stand against all the odds and drive the event to greater heights.

□ **Major achievements:**

- Our flagship event Communique was webcasted live on 21st and 22nd of September 2019.
- We saw seamless integration for smooth functioning between various committees. Though the budget was approved late all the activities were on track. The final settlement of the reimbursements was done in minimum number of days and the 2-day event was managed with no glitches.

□ **Key learning's:** When we have a plan and a belief of executing and meeting the timelines set then all the work is done properly without any chaos and there is very less amount of tension. This is exactly how things shaped up during our journey through Communique'19. Also, junior involvement throughout the seminar benefitted both seniors and juniors because:

- Juniors gave inputs in all decisions made by the seniors.
- Juniors felt themselves more involved and thus would be able to efficiently handle the functioning next year.

Also all committees should be in sync with each other for smooth functioning of the work. Keeping a good relation with all the committees especially with CIT, Alumni, Branding and Acads is important. Seeking help from the Branding team to create awareness about the event has been integral. Keeping in sync with both CIT and Alumni about the speakers was also important. In a pressure situation, we must analyze, take help from people and react calmly about it. Integration between senior and junior team was very good as we were involved in most of the activities and we could help the seniors in every possible way. Decision making ability should be supreme as dynamic decisions have to be taken as the date of the event comes closer. There should be a great precision in dealing with corporates as right amount of information needs to be shared with them and it must be seen that corporate gets everything which is required for him/ her .

□ **Major issues faced:** We saw an issue of last-minute cancellation of speakers. A speaker had to cancel as he missed his flight.

A speaker might cancel his visit on the last minute that is on the day of the event too hence dynamic situation handling is must. Also the speaker should be given a good hospitality on the event day so that he/she is pleased and has no chance of agitation.

Another issue that was faced was of late budget approval which needs to be taken care of. All the topics and themes were getting decided even though the final approval from the university was left and that helped a lot in making the event successful as everything was decided upfront. SIP was conducted very late and hence we could not give more number of days to a particular college. We needed to shift from one college

to another quickly and get the best count. Also, some students had their university exams and some students had 10 days' vacation which affected the count a lot.

Committee contribution to SITM and students -

1. **ITS The flagship event** - The role of the committee has always been to give effort, achieve brilliance and creativity through work and consolidation so that the excellence of being a flagship event of the college should remain at par with its status.
2. **Trending topics** - The committee has sharply monitored the current industrial and market trend which evolve with technology and expansion of the ITC domain. The topics are interactive with both group discussions followed by panel discussion. The renowned people from the industry have been reviewing the topics as the most important and game changer phases of the technology ecosystem and the market.
3. **Corporate head from the industries top MNC, ICT** domain visit the college and they look up to the event as one of most prestigious and dignified platform for discussion on current trends, topics and the intra and inter changeable aspects of the industry. Hence this attraction of corporates has given us an open door toward creating a healthy and professional relationship with the corporates and gives us the scope for inviting them for the placements.
4. **This event has brought the whole student fraternity together on a single platform to work** with each other making it the backbone of the flagship event. This is the only event where the whole college together works as a team creating a humongous platform for the corporates.
5. **Branding is one of the elemental pillars** which have been strongly executed in a very broad margin by the committee so that it can attract more corporate from the industry and can hold the status and benchmark it has created. This also drives more students each year to participate in this event.

☐ **Inventory-**

1. Mobile Phone
2. Drawer and almirah keys
3. Corporate Folders
4. Glass Set and Tray

☐ **Database of the committee-** All the Database has been handed over to the junior committee.

☐ **Any other items to be handed over to Junior team – NA**

☐ **Whether all accounts related balances are clear-** Yes

- **Suggestions for improvement to junior batch** – The budget should be approved early on and proper team work is a must. Each and every task should be done under supervision of the mentors. Every enquiry mail from the Alumni or any corporate needs to be acknowledged without fail.

SCHEDULE: 21st SEPTEMBER 2019

TIMING	AGENDA
08:00Hrs- 09:10Hrs	Student Registration
09:10Hrs- 09:25Hrs	Lamp Lighting Ceremony
09:25Hrs- 09:35Hrs	Inauguration Speech by Prof. Avinash Aslekar , Convenor, Communique'19
09:35Hrs- 09:50Hrs	Welcome Address by Prof. Abhijit Chirputkar , Director, SITM
09:50Hrs - 10:20Hrs	Chief Guest's Address by Shailendra Kumar Mishra , Pr. Advisor, TRAI
10:20Hrs- 10:40Hrs	Unveiling of Prevision'20, TBR and Prayukti
10:40Hrs- 11:00Hrs	Networking Break
11:05Hrs-11:35Hrs	Prevision' Presentation
11:35Hrs-12:05Hrs	Keynote Session by Shwetank Tamer , Director - Pre-Sales and Project Delivery, OnMobile Global Ltd.
12:05Hrs-13:05Hrs	Lunch Break
13:15Hrs- 14:00Hrs	Panel Discussion 1 – 5G Fluctuating Fortunes: Traversing Through Unknown Terrains
	A. Rajesh Gangadhar - Head of Wireless Broadband Converged Platforms, Sterlite Tech
	B. Subhas Mondal - Chief Architect (5G), Wipro Ltd.
	C. Manish Pandey – Partner Director, Nokia Software
	D. Rishi Tejpal - Lead Analyst (Telecom), Times Internet
	E. Shwetank Tamer – Director, Pre-Sales and Project Delivery, OnMobile Global Ltd.
	F. Alka Selot Asthana – CTO, Bharti Infratel Ltd.
	G. Errol Dale Pinto - Business Head, VodafoneIdea
14:00Hrs- 14:15Hrs	Q&A Session
14:15Hrs- 14:45Hrs	Keynote Session by Paresh Shetty , President, Vodafone Idea Ltd.
14:45Hrs- 15:05Hrs	Networking Break
15:10Hrs- 15:55Hrs	Panel Discussion 2 – The 21st Century Crew: Paving Way for a Changing Workforce
	A. Vikash Dubey - Head HR, Persistent Systems
	B. Narendra K Saini - GM & Head - Product Management, Technology & Services, Unlimit
	C. Vikram James - Head of Talent Acquisition, Springer Nature Technology
	D. Ashish Mediratta - Senior Director – HR, Tata Communications
	E. Tejas Gokhale - Vice President, HR, Vodafone Shared Services India
	F. Parag Sawant – Head - IT Strategy and Planning, RIL

SCHEDULE: 22nd SEPTEMBER 2019

TIMING	AGENDA
08:00Hrs- 09:10Hrs	Student Registration
09:10Hrs- 09:25Hrs	Welcome Address by Prof. Abhijit Chirputkar , Director, SITM
09:25Hrs- 09:55Hrs	Chief Guest Address by Mr Vipin Tyagi , Executive Director and Chairman of the Board at CDOT
09:55Hrs- 10:10Hrs	Academic Awards
10:10Hrs- 10:30Hrs	Star Alumni Awards
10:30Hrs- 10:50Hrs	Networking Break
10:55Hrs-11:40Hrs	Panel Discussion 3 – AI Maturity: Rising above the Woulds, Coulds and Shoulds A. Sunil David – Regional Director(IOT), AT&T C. Prakash Narayanan – Vice President - RPA and AI Tech Delivery, Barclays D. Pradeepta Mishra – Director-AI, Lymbyc E. Rahul Gupta – Director - Strategy and M&A, Cognizant F. Rohit Maheshwari - Head Of Strategy and Products, Subex G. Sameer Dhanrajani – Chief Strategy Officer, Fractal Analytics
11:40Hrs- 11:55Hrs	Q&A Session
11:55Hrs- 12:25Hrs	Keynote Session by Robin Kaushik , Head of Solutioning and Delivery, Ericsson
12:25Hrs- 13:25Hrs	Lunch Break
13:30Hrs- 14:15Hrs	Panel Discussion 4 – Deciphering Personal Data Protection Bill: Compliance, Conceptions and Constraints A. Satish Kumar Dwibhashi – CISO, Wibmo B. Na.Vijayashankar – Chairman, Foundation of Data Protection Professionals in India (FDPPI) C. Venkata Satish Guttula – Director – Security, Rediff.com D. Dr. Sriram Birudavolu – CEO, Cyber Security Centre of Excellence, DSCI E. Neeraj Aarora – Advocate (AOR-SC), Arbitrator and Cyber Evangelist, Supreme Court F. Sridhara R. Sidhu - Senior Vice President and Head of Information Security Services Group, Wells Fargo
14:15Hrs- 14:30Hrs	Q&A Session
14:30Hrs- 14:50Hrs	Vote of Thanks by Ms. Bhakti Vyawahare , Co-Convenor, Communique'19
14:50Hrs- 15:05Hrs	Valedictory Address by Rishabh Sharma , Chief Student Co-ordinator, Communique'19

INAUGURATION CEREMONY:



KEYNOTE 1: Shwetank Tamer, Director - Pre-Sales and Project Delivery, OnMobile Global Ltd.



KEYNOTE 2: Robin Kaushik, Head of Solutioning and Delivery, Ericsson



KEYNOTE 3: Paresh Shetty, President, Vodafone Idea Ltd.



Panel Discussion 1 – 5G Fluctuating Fortunes: Traversing Through Unknown Terrains



Panel Discussion 2 – The 21st Century Crew: Paving Way for a Changing Workforce



Panel Discussion 3 – AI Maturity: Rising above the Woulds, Coulds and Shoulds



Panel Discussion 4 – Deciphering Personal Data Protection Bill: Compliance, Conceptions and Constraints



Communique`19

International Telecom Seminar

Annual Report



Mr Avinash Aslekar (Convener: Communiqué)

I welcome you all I will like to extend my heartiest welcome to our chief guest Mr Shailendra Kumar Mishra we have panel of experts dignitaries delegates students from different institution from Pune I welcome you all to communicate my team we have with us Rajesh Gangadhar, Subhash Mondal, Shwetank Tamer who is our alumina. I am proud of you also Shridhar Siddhu, I welcome you as well. The concept behind this international telecom is we try and capture essence of latest description in the market and then we try to formulate the theme which is woven around it and then we bring the experts from industries and try and understand in what direction the industry has been go this include the digital and telecom sector, Now this year when we started thinking about you know formulating the themes for this year we would understand what will drive the future of telecom industry in the age of digital transformation backed by artificial intelligence, 5G and data protection is promising a glorified future but the thing is the clouds are not clear whether how successful it will adopt or not and there are many issues related to 5G as well regarding the coverage, issue related to spectrum then who will be the takers and what will be the used cases now along with 5G areas coming up is artificial intelligence now is being adopted in a I would say initially non critic application but the thing is industry application is also rising to can we apply it to much higher level where the business can get benefit out of it along with 5G IoT is also coming up that is also creating a lot of data and that is creating issues relating to securities so the personal data protection becomes very imp. Communiqué 19 targets to the evolving dynamics of the pave way for a better future and hence and the theme for this year is Impetus future widening horizon developing perspective so in the next two days we have interesting panel discussion on 5G fluctuating fortunes the changing workforce application will be smarter the devices will be smarter they will communicate new profiles would be coming up and for the millennials we have total workforce and how to manage that would be challenge the second panel discussion is the 21st century crew paving the way for changing workforce third panel discussion on AI maturity now regarding AI at certain places it has been applied we are not very sure whether it is being

successful but in small areas it is being applied what could have been and what should be done so there are n no. of possibilities that we would like to discuss as a part of panel discussion rising above the woulds coulds and should and the last PD would be on personal data protection bill which government is trying to introduce what will be the issues related to compliance will be the problems what will be the problems related to business regarding that finally we also want to comprehend on how the management has changed for the millennials now in fact by 2025 75 percentage of the world's workforce would be the millennials why the panel discussion on the 21st century crew has also been included. I would like to thank all of you for making this event and you are attending this event, I'm sure the next two days will be a great learning experience for all of you thank you !



Mr Shailendra Kumar Mishra (Pr. Advisor, TRAI)

Good Morning friends, good morning, Respected Dr SB Mujumdar, Prof. Avinash Aslekar, Prof. Abhijit Chirputkar, distinguished speakers, faculty and my dear friends. It gives me immense pleasure to be here amidst you, rather it's an honour to address such a distinguished gathering of intellectuals.

Symbiosis has been always a great seed of learning not only in Pune, I think in Asia itself as you have shown. If you go back in history, you will not find much gap between the launch of telegraph and telecom in this country. But then you will find that telecom servicers took up in rightness quite late in this country because perhaps it was a British legacy. We have very famous anecdotes of famous British postmaster generals who ridiculed, but then in last few decades the way technology has changed the Telcom field...you can't stay at a place, it is so tremendous that now today you are talking of 5G as Prof. Avinash Aslekar pointed out and even Prof. Abhijit Chirputkar

Since I was an insider, I can tell you there was so much resistance towards privatisation and corporatisation of DoT. When British telecom was corporatized, we did after 10 years. Before that when say British posts and telecom were separated, we followed it after 10 years. So, there

was a 10 years gap always. But then with the introduction of private sector into the whole stream, it broadened a lot of new entrepreneurial scope.

I can say from my personal experience is that many prestigious colleges aren't fulfilling the need which is there. And there is need even today. And today it is fulfilled by SITM and now you will be calling it Symbiosis Institute of Digital and Telecom Management. You are doing it, you are the leader and this is not to please you. You can verify it, you don't find any much of the activities often. We find some, there are courses and then there is some adjunct course. And you know telecom is becoming it is going to be like a critical infrastructure, like roads...it is already there...it's already there. I'm sure that panel discussions you'll be having it in more opportunity. I've also requested your professor to allow me to talk to people because that was my basic incentive to come here so that I can talk to you.

The seminar deals with 4 themes, broad themes and they are highly relevant today but my advice is let us be all anxious. There is no harm, anxiety is natural because AI is still developing but believe me it is going to come up but we should not fear and we should not get over odd by it. Today, Alexa may not help me out in doing something, today Google Assistant might fault. There will be lots of apps...they are coming up. Unfortunately, lot of applications are not being developed in this country they are happening elsewhere. There are issues about how it is being developed...I think we can also contribute. It is happening on standardisation in India...not only in AI, in telecom in general. I think some of the students, faculty and even the people sitting out in corporate world, people are there, I think there is a need where we start playing greater role and that making, then perhaps in India the anxiety about AI or even 5G would be lesser. So that has to be, I know that once I've said that it is not going to solve the problem but I only say that if you face the tiger, you'll have to face it.

So, there's no question that you run away from it or wait. So how do you do it? You study more, learn from others and learning will not be only just by 1 seminar, it can spur thoughts. You have to...in fact, lot of material is available today to everybody. A layman can understand about 5G, how it is developing...the later status. I will leave some papers with your professor. I urge you to read that. There are lots of articles coming about 5G and AI, not only in technical journals. Read what is happening what are the other ideas that are coming in journals like Economist. Like there was a very nice article, few issues ago about Vodafone's experiment with 5G. Not only Economist, ITU has done a lot of work. So, the problem is that say, even though as we debate in corporate world, with corporate world as a regulator, as a policy maker there is little time to read and work. Now there is a big gap because in especially our country...big gap means say, there is an academic world which has not been closed associated with the corporate world. Perhaps, there is some association with policy and regulation.

Then there was a say, a session about deciphering Personal Data Protection Bill. You know everybody can add to it, consultation was there. In fact, we also started consulting and there were people who said why you are doing it? In fact, our key stakeholders, they said, "arey there is already a committee why you are getting into it? You should not do". But we felt we should get into it. Primarily there are many issues but primarily there are two issue ultimately hinges on the balance of ensuring the privacy of the citizens, privacy rights and also ensuring that security of not only the country and the individual securities should not be compromised, it is not misused. So what we did that we tried to find out a solution and android based phones we were able to start and it was basically on crowd sourcing model and we thought that if True Caller can do it, we can also do it. Perhaps True Caller takes away your lot of data and then you are invested with this. We thought that perhaps normally the solutions by regulator and

policy makers are maybe government, they are not as efficient. But then we were more confident because our chairperson, current chairperson is a technology savvy person. So, he is there and he is quite up to date...so we thought that we'll engage Microsoft, IBM and all and they will come out with a solution where your data is not taken away and misused further. This is one of the say solutions and I would say I'm very thankful to industry...they came willingly forward and Vodafone, Idea...VodaIdea, Airtel, Jio, everybody came forward...there was some resistance in public sector but then everybody came forward and I'm sure that it will be providing some relief to our customers...I'm not still very sure that we will be able to give you full solutions.

Now the most important, these things are all academic actually...AI maturity, 5G Fluctuating Fortunes. I'm sure that your faculty will guide through certain core things. I'm also ready...you ask me and I'll share whatever we study...there's no harm...but the most critical thing is that "The 20th Century Crew: Paving the way for a changing workforce". It's already changed...now it's a challenge for the corporate sector, challenge for the policy makers...everybody to deal will millennials. They are the people who are going to run the show. So, challenges for millennials and bigger challenges for us. Now you can't say that humare zamane mein aisa hota tha...so they use a different lingo...even as I speak I know say, a millennial can't control...he has to look at his phone...so who chalta rahega...aap rok nahi sakte...urge hai. Things have changed the way he works the way he studies. So perhaps the industry has to change and see. Now it's not that what I'm talking is not happening...there are companies...you go to Google...I've visited them...they are changing...you just see that how they have made their workstations and people go...see I know two boys who have joined Google...they don't come back...it's very difficult...they are so happy there. They have a cubicle, they will sleep, they will not come back...their parents are there nearby...they said we are happy here. So, 24 hours they are there. They sleep they work...so now things are changing. They are happy we don't know why...we keep on telling them arey morning walk ke liye jana chahiye...you should be regular. They are saying we are happy here we have a gym I go to gym at 12 'o' clock in the night. Perhaps you have to also see that when you land up in a job...when you are coming...so you have to maybe...there has to be some kind of dialogue. Another problem which millennials are going to face and companies are going to face is that...for which neither regulator nor policy makers, not they themselves can provide a solution which was going to last in forever. Actually, that solution is being provided by institutes like Symbiosis which provide you the confidence, the tools, the intellectual tools...where one road ends, you take another. Now things are changing. Now...see, people talk of disruptions. Even in government, I would say things are changing as much. You can't remain in the same shape in the industry...especially in Telecom. Things are changing and they will change every day. So, what...how do you tackle? Only thing is that as the Upanishad said...they say that swadhyay pravachanvyam maa pramaditavya that is what everything was done...maybe when the students passed out from Gurukul...the teacher would say he'll tell ok aacharya ki puja maa baap ki puja karo and then last mein he said swadhyay pravachanvyam maa pramaditavya...from self-study and from discussions never ever hesitate...you must continue to do it. If you don't do it...very very soon you will become outdated and out of place.



Mr Vipin Tyagi (Executive Director and Chairman of the Board at C-DoT)

“Direction without energy cannot go far and energy without destination cannot reach destination.”

That’s why in the modern-day telecom technology, we need to have three major dimensions to our work, so that we are in strategic control, we see the changing world environment and see what is happening in India. We need to have advanced capability creation and sustainable economic contribution. There are two dimensions of competitive transformation of country, one is the domestic growth and the other one is exports. India has not been doing well in the export’s domain. The only thing we have been successful exporting is the manpower, in telecom especially. After having so much investment in education, if we are stuck in low value jobs and do not do enough for the country and economy, the whole pyramid is going to collapse. Value addition is what will sustain. So do not import and trade, we need to innovate, build, and create business models and companies.

A study which was published by ITU, done by Antelope consulting in US on how much money people can spend on telecommunication related technologies showed that as the countries were progressing, between 1% and 4 % is the limit in which people can spend, bring into light the matter of sustainability. This means that we have to make it affordable we have already done a good job here but now we have to, transform the services. We can achieve that by caring, sharing, changing and growing. We have to care for our customers, our consumers and our society. Share, because you have to reduce the cost. By sharing the infrastructure, by sharing in the community, by creating devices which are used but not necessarily owned, sharing will bring down the cost. Changing, the way we think and innovating new, advanced and affordable technologies and growing with the changing global environment.

5G is coming. What is 5G? 1 million second latency, 500km mobility, spectrum efficiency of 3 times over 4G, 100mbps user experience data rate, minimum 20gbps peak data rate, area

traffic rate of 10mbit per square meter, network energy efficiency of 100 times of 4G and connection density of devices 10^6 million devices per square km... this is what is 5G. In the year 2020, 3G will be up, 4G will be up and 5G will be coming. It is not there yet and consequently you have many trials going on. LTE is expanding tremendously and 5G is on the corner. In fact this is the time for standard essential patent. The time maybe gone for radio, but there is still time for core.

In case of IOT, there are some typical players. The Service provider licencing, device regulations and applications, where the most important aspect is the regulations and standardization. Standardization will bring about order in the overall environment and so telecommunications standardization requires cost effective solution. Standard process do not inhibit the innovation. Standardization is good for innovation. With standardization we can use a common service layer which can be connected to another common service layer of another country and the communications will be done smoothly. Now we have chance of making an original Indian standard, which was not possible before and a big debate has been going on for the last 3 years and it might come in next 2 years.

Gandhi had said, "Today there is such an onslaught on India of west machinery that to India to withstand it successfully will be nothing short of miracle." This brings us to the concept of Khadi electronics. Let India manufacture boards. There will be regional assembly done by engineering institutions and village level entrepreneurs will take, sample and test the boards. This will be a huge success as the investment will be very low and it will contribute to the community.

India is a big market. We have hardware and software expertise and a number of educational institutions. But problems arise due to the fact that we are consumers not creators. Only 0.85% of the entire GDP of the country is what is spent on R&D. This makes us unable to compete with other countries. We need more investment including investment in the private sector and start up level. India also needs better disaster management. In the coming 6 months C-DoT will have done trial runs in 12 states including Kerala and Tamil Nadu for a disaster management network. 1, 30,000 Gram Panchayats have C-DoT design technology, by using just $1/3^{\text{rd}}$ of the fibre requirement hence reducing the cost. Nation building through latest technology should be the passion for everybody. The youth of India should direct their passion and invest more time and energy in the development of the country.

Panel Discussion 1 – 5G Fluctuating Fortunes: Traversing Through Unknown Terrains



The digital world takes quantum leaps with every new development and it brings us closer to making 5G a tangible reality. You've probably heard "5G" a lot recently. It's been in a lot of stories. So, in communiq'19 which is one of the biggest telecom seminar, 5g had to be the first topic of discussion by the panelists. The panel was moderated by Mr. Rajesh Gangadhar, who is the head of wireless convergence at Sterlite technologies limited. He starts by speaking about the event and quotes "I think this is one of the most professionally run event that we have seen without a doubt" He starts the discussion by asking does anybody know what 1G was? He answers it was known by AMPS which stood for advanced mobile phone service.

Before starting the discussion on 5G he asks to first have some discussion on the current stats of 4g as we are in the 4g realm right now. To which Mr. Errol Dale Pinto replies as far as 4g is concerned it takes me back to Hindi movie which was made in 1989 and they foresaw what was going to happen technologically. He compares the song of the movie Ram Lakhan 'one two ka four' to the absence of the word 3G in any telecom discussion which was supposed to be the stairway to the heaven. He also states that "three years since we have 4G we have seen a lot of oftakes , if we look at usage 3 years back you were sitting at about 250-300 mb per subscriber but we currently doing 10 GB per subscriber per month as far as data is concerned which means basically you all are spending about 240 digital minutes per day on your phone it is not a very good sign. He also shares information on the penetration level of 4g which is 45-50% currently and predicts that by 2025 this number would go up to 90% and 5G will also be standing at 10-12% by then.

Mr. Rishi Gangadhar then asks Mr. Rishi Tejpal to throw some light on the same according to industry perspective. He starts by speaking that we are not done with 4G yet and gives example of rural areas where there is no 4G yet not even 3G and even speaks on evolving the existing 4G networks by latest technologies like massive MIMO, software defined networks and LTE advance pro. He also states that by 2025 15% of global users will be on 5G which is roughly

around 1.5 billion but this doesn't mean we will be done with 4G, 4G will continue to grow significantly with 5G.

Then Mr. Rajesh Gangadhar asks Ms. Alka Selot Asthana to throw some light on the challenges on the infrastructure of 4g and 5g. She speaks about several limitations like fiber rollout which is currently at 30% and says this is so low for 4g only so how can we even consider it for 5G. She also speaks about the cost of the 5G spectrum which is quite prohibitive considering the current fiscal health. She also asks the students to study the use cases of 4G and 5G in India so that they can find out Indian specific solutions that would be monetized more willingly.

Then Mr. Rajesh Gangadhar shifts to Mr. Shwetank Tamer to share some thoughts from consumer perspective. To this he replies from a consumer experience artificial intelligence, virtual reality and gaming which is a very big billion-dollar industry will get benefit from the deployment of 5G and to support this he even gives an example of Barcelona's Mobile World Congress where it was shown how a virtual reality game worked on 5G.

Then Mr. Rajesh Gangadhar asks Mr. Subhas Mondal to share some knowledge on the evolvement of technologies in 5G ecosystem. Mr. Subhas Mondal starts explaining by using the term OFDMA (Optical Frequency Division Multiple Access) which is common to 4G and 5G and tells the main difference in the last mile access perspective is massive MIMO He adds that massive MIMO is bringing in a capability of spatial multiplexing which increases the spectral efficiency. He also discusses about the power efficiency for which ITU is actively trying to give guidelines for the same.

Then Mr. Manish Pandey who comes from a software background first takes up a philosophical perspective on 5G and what are the changes transitioning from 3g to 4g to 5g has made up on our lives and also adds that we are blessed to see this evolvement in our life span. He also talks about smart cities and says that we can take inspiration from Hollywood movies that how a fully developed smart city will have changes in our lives. He also states that "This is one of the most exciting time of our lives and we are so proud to able to witness it and contribute to it".

Then Mr. Rajesh Gangadhar asks Mr. Errol Dale Pinto from an operator perspective where do you want to be take telecom services in the next four to five years. To which he replies by saying that what 5g has in store cannot be imagined. He says every sector from healthcare to automotive industry to disaster management to agriculture everything will be benefited by 5G and tells that 5g will ensure zero latency which will give a real time experience.

After which Mr. Shwetank Tamer gives four challenges on 5G deployment which are as follows:

1. Only 22% India is covered in fiber in 2018 whereas in advance countries who are rolling out 5G has 60% coverage of fiber.
2. Indian Telcom Operators' total debt is 62 Billion in March 2019.
3. Will 5G benefit Rural areas or provide connection in the areas where it is required?
4. Cost of 5G spectrum

Due to these reasons Terrains are really shaken in India. He adds that seeing the use cases of 5G it will be really interesting to see how the implementation takes place in India.

Ms. Alka Selot Asthana speaks about countering the challenges by sharing the infrastructure cost by different operators which will help implement 5G faster and economically. She also talks about implementation of use cases of autonomous cars in India with 5G which was countered by Mr. Rishi Tejpal by saying that it is something you can't think of as a viable use case of 5G in India.

Mr. Subhas Mondal shares his final thoughts about India having no voice in the global standards. Whatever is manufactured in Europe and America is dumped in our country. So, he pursues young talent of our country to wake up and make our own voice in the global standards and not to follow. He even talks about tackling the suicide problem of rural India by using Wi-Fi for last mile distribution.

Mr. Manish Pandey adds on an interesting fact about adoption of mobile broadband in developing countries. A 10% increase in mobile broadband has increased a developing nation's GDP by an average of 0.8% which can have a big impact on the economy.

In the end when there was a question on 5G auction and when it would be held? Mr. Errol Dale Pinto humorously replies by saying "MELODY KHAO KHUD JAAN JAAO".

Panel Discussion 2 – The 21st Century Crew: Paving Way for a Changing Workforce



While resistance to change continues and adopted in many organizations, the world is changing every day. In today's time when entire economies, organizations, and industries are transforming. We use antiquated organizational change management practices in our 21st-century world. The panel discusses the need for a generation of leaders who understand why change is important to the business and their accountability to implement it.

First time in history, we have more access to technology tools that give each of us a voice outside the corporate walls

The 21st-century employee shows up as one person. She does not buy into the work-life balance myth as she looks at how her work fits into her life. She has an understanding of who she is and the impact she would make in the world. In addition, this is not just about the millennial generation and younger people. This employee also includes older generations who are now redefining success and realizing that working 24/7 is no longer tenable or desirable.

The panel beautifully covers the need of the hour, how one must adapt to the changing workforce and how technologies are forcing the millennials to develop different skillsets that cater today's demand. Tasks that are monotonous can be easily automated; this can gradually make certain roles obsolete, hence being generic and sticking to a single domain won't help today's employee, the growth curve would become stagnant. One of the points Mr. Aashish Mediratta covered was related to the average lifespan of an employee in a particular organization, it has decreased from 4-5 years to 1.6 years, the biggest reasons is the advancement in technology, millennials, if not satisfied even with one of the factors say work-life balance, salary, changes his organisation.

On a concluding note, the panel advised on, what factor needs to be considered while deciding the carrier path in today's chaining world.

Panel Discussion 3 – AI Maturity: Rising above the Woulds, Coulds and Shoulds



Artificial Intelligence has been an area of fascination in such a way that it's a 40 billion dollar industry supported by different 147 VCs around the globe. By 2023 its going to be a 100 billion dollar industry. Around 75% of CXO's are going to implement AI in their respective companies.

AI got its future in every sector possible be it networking management, banking, retail, etc. AT&T as a service provider has around 260 petabytes of data being around every hour. AI helps in monitoring where the network can go wrong. With content being monitored, AI also helps in giving curate advertising as per customer expectations.

AI in many ways is strengthening the cyber security aspect of different companies. Machine learning is a tool or a subset of AI. Algorithms in machine learning are able to predict the threat in customer. Many organizations are trying to shift their stand from reactive care to proactive care.

Earlier times had dumb products and soft wares floating in the market. Many manual and tedious work were done by people. In current scenario we are seeing these dumb products are getting converted into connected products. With AI in picture all these connected products will now become intelligent products. These products will be designed and tailored to meet the needs of clients.

There is a paradigm shift in banking sector, AI and ML are coming up with RPA bots which are responsible for the detail and manual tasks which earlier used to take weeks to complete. Now customer just walks in and gets their bank accounts open within hours. Inspection of documents gets completed by these bots very quickly. Similarly, when someone come for loan then their credit score gets verified in much lesser time as compared to few years back when transactions of loan used to take more than because of its manual task.

If we talk about AI adoption, there are major four kinds of adoption which came across. These adoptions are;

Internet adoption –facebook’s recommendation , Youtube suggestion etc

Business Adoption – Lets owner about strategies going good or bad for the better health of business.

Image adoption – Computer vision and image sensing

Autonomous adoption – One of the important adoption’s among the four in which they aim to automate every monotonous task and process.

India as a country is lagging behind in adopting AI. USA and China are actively adopting AI in their ecosystem. AI is boosting their current economy model by bringing efficiencies and reinventing.

Jack Ma’s Mybank is a perfect example of this; it examines 3000 parameters of a customer in a fraction of seconds and sends credit money to their client. Mybank has a record of rolling out 250 million dollar in a single day.

Apart from corporates, AI is being implemented to solve societal issues of India. Recently Microsoft partnered with icrisoft to increase the yield of farmers for which they studied data of 45 years in weathers and helped farmers to sow seeds at right time and at right depth. Those farmers who followed Microsoft’s instruction experienced a 30% increase in their yield. On similar front LV Prasad eye institute uses AI to help patients leaving in villages near Hyderabad. This has helped nearby villagers to cure their illness without even actually visiting the doctor. AI are also being used in rural areas to examine the early symptoms of diseases like breast cancer.

AI can also be used to solve several crisis management in India like flood, earthquake, fire breakout. Swach Bharat is also backed by AI, people who are using sanitary stations set up by government just have to submit their feedback through whatsapp number which is already given in every station and this feedback helps government to keep a track on maintenance and cleanliness. This whole setup has helped government in saving 200 crores.

In future, its AI will be replacing around 15% of jobs worldwide but this doesn’t mean that there wont be any new different jobs coming in the market. Humans will be using their analytical skills to solve problem. In future we will be using a term Augmented Intelligence which will enable human to solve difficult problems with machines by using their empathy and problem solving skills. The algorithms which will be written in future will be validated from people of different sectors to implement the biasing in devices.

Panel Discussion 4 – Deciphering Personal Data Protection Bill: Compliance, Conceptions and Constraints



Such an insightful event about the forces driving our technological future would have been incomplete without the rightful focus on the data paradigm shift towards security that is happening in this era. Keeping in mind the importance of data security, the second panel discussion on 22nd September 2019 was on Deciphering Personal Data Protection Bill: Compliance, Conceptions and Constraints. The esteemed panel was moderated by Mr. Venkata Satish Guttula who asked the young audience about various terms related to data like GDPR, SPI etc and briefed them about the importance of data as a wealth to the nation besides Indian Government coming up with PDPB. He then guided the discussion to the panellists on the impact of PDPB and GDPR along with its effect on the personal data. The discussion was initiated by Mr. Na Vijayshankar, who told about the differences between both PDPB and GDPR. He put light on the various components under PDPB, the roles of data fiduciary, data principal and data trust core. He also told about the right to be forgotten and how the erasal of data impacts a person and the adjudicator of the data trust along with the audits which are required to be done every year. Following this, Mr. Guttula asked Mr. Shridhar Sidhu if there was any penalty decided under PDPB and what these penalties were. To this Mr. Sidhu replied with a thankful note to SITM for conducting such a professional event and expressed his gratitude to the organizing team. Later, he told about the compliance with respect to the global organizations and also the differences in the data classification and the governance strategies which affects the penalties in PDPB.

Mr. Satish Kumar Dwibhashi provided the details about the implementation challenges of PDPB specially for the smaller medium companies and how will they cope with the compliance cost. He told that the organizations will definitely deal with it and will try to understand how they can comply and the industry bodies which will support them, once it becomes an act. According to Mr. Dwibhashi, Privacy, security are two sides of the coin like they complement each other because one cannot achieve privacy without security and that the chief privacy officer of the organization has to work very closely including the legal, law, compliances

altogether. He ended his answer with the notion that there are changes but then there is a long way to go and there is a lot of exciting work going to happen in the coming period. After his insightful talk, Mr Sriram Birudavolu who represented Data Security Council of India which is the cyber security arm of NASSCOM praised the event and informed the audience about the Indian buzzing market for the data privacy products and the reforms of government risk and compliance on the same. He also told about the consent fatigue which entitles the path of data right from collection then storage, transmission and again dissemination and of course after that disclosure to the consent of a person about how that data can be utilized or morphed. He further talked about the interconnection of systems and data transformation which affects personal data.

Mr. Neeraj Arora when asked about the efficiency and usage of section 43A of Indian IT act and its references with respect to the data breaches and its failure, responded that Section 43A could not be enforced, could not be implemented because there was no mechanism, there was no authority who can take the action. Action can be taken only on the complaint of an individual and a burden of proof was on him. But under the new bill, the moment some personal data is lost that is covered under the definition of harm, an individual is not required to prove any other wrongful gain and loss. So, he concluded with this biggest difference. Further, going along the discussion Mr. Satish Kumar Dwibhashi discussed how does the government should ensure that breaches are reported because not many companies have reported any breach which is happening and they are keeping it under carpets. Later on, the difference between data governance framework and data security framework was discussed by Mr. Na Vijayashankar where he told the importance of community data and its protection. Mr. Neeraj Arora also shed some light on safeguarding the privacy on terms of personal as well as non-personal data. He also told that the government has to be very careful in balancing the commercial interest of the companies and that the same time their privacy.

Towards the end, the panellists gave positive closing comments about the personal data protection bill and responded to the various questions put by the audience, giving satiable answers to their queries. Lastly, the moderator, Mr. Venkata Satish Guttula gave the closing statement about how the public and the companies should be careful while sharing the data and explicit photographs etc. and our duty to refrain from sharing data without giving it a second thought. And with this, the audience applauded and the session was put to rest.