

AN ANALYSIS OF TRENDS IN TELECOM SECTOR IN INDIA

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Abstract:

This paper mainly focuses on the upcoming trends in Telecom Industry which clearly states the digital transformation helps the Telcos move from perish to flourish. The **telecommunication industry** is going through a transformational phase of development – to acclimatize itself as per the new technological and cloud trends.

We strongly believe Telecoms are essential for our society and its development – they connect us in many ways at many locations around the globe. Telcos have been mastering this for decades. However, this excellence comes at a great cost and the burden of great responsibility, being the main driver of our digital world. We, as subscribers, are hard on Telecoms as we would not accept a second of downtime and, if possible, get the entire service for free.

New technologies like the Internet of Things (IoT), 5G Services, Augmented Reality (AR), Virtual Reality (VR), Micro services and more necessitate that telecom providers realign their business strategies and restructure themselves as per the cloud era, in terms of operations, architecture and networks as well.

Keywords: Telcos, Internet of Things, Augmented Reality (AR), Virtual Reality (VR), 5G services.

Literature Review:

1. “In the past, in Telecoms, we’ve witnessed a considerable amount of technology decisions and software implementation architectures that were not considered logical from outsider experts’ point of view. For example, some would on board traditional (legacy) software integration approaches, just to accommodate current service contracts or legacy systems’ investments. This time is over now. In the next 3 years, Telecoms will transform their enterprise systems and digital B2C channels into modern and agile platforms. These will provide Telecom employees with analytics-driven operational decision-support capabilities and would deliver seamless back-end integration capabilities through micro services. We believe the top performers would actually go even further: enabling self-service ad-hoc advanced analytics for the vast majority of the user roles and delivering cloud-native containerized business functions.”

-Krum Daskalov | VP Advanced Analytics and BI | Scale Focus

2. “Telecoms are “traditional” enterprises that struggle while trying to cope with the churn, caused by below-the-belt competitors’ offerings and OTT services. In 2018 – 2021 we will continue to promote to our customers the Lean approach to developing winning predictive pricing solutions. We see the API economy entering the Telecoms, allowing the various LoBs to independently develop their own apps, and thus leveraging the current DW/BI, MPP and Big Data investments.”

-Wolfgang Klotzki | Co-Founder and Managing Director | Clint world GMBF

3. “In the 2018-2021 period more and more important decisions will be moved to the department level or within dedicated “start-up” teams within telecoms. These LoB decision makers and users will use Data Mining and Predictive Analytics deliberately or without even realizing it. Consider an analytical CRM solution that is smart enough to proactively create reminders for cross-sell opportunities and thus fires an activity in the campaign management solution. This analytical approach would also enable Telecoms to get to know their client needs better and offer custom services – based on their preferences.”

-Apostol Mushmov | Founder and Managing Director | 11235 Ltd.

4. “We believe that core telecom services will continue to dominate the value contribution to the mid-size and large enterprise business in 2018-2020. Traffic in core networks will increase significantly because of the huge growth of mobile data as well the adoption of new services such as IoT and 4K video. Nevertheless, the focus of the telecoms should stay with the customer: offering turn-key solutions to businesses via Integrated (Managed) Services and improving the customer journey throughout the whole lifecycle. Unfortunately, it is still quite often the case when customer experiences decline significantly, for example when the customer is trying to churn and end his/her subscription.”

-Todor Georgiev | Business Development and Technology Director | Novatel

5. “After the enforcement of the new roaming rules that ended roaming charges in the EU, there are plenty of regulatory developments impacting the telecommunications sector in the years ahead. Telecoms will have to comply with the upcoming legislative changes that will significantly influence and are likely to change Telecoms both within and outside the EU. Telecoms face GDPR, ePrivacy Regulation, EECC Directive, Net Neutrality and many others regulatory rules. Stakes are high, not only in the EU, but on a global scale. Thus, Telecoms are starting to embrace these regulatory pushes and are turning them into subscriber-focused benefits. For example, some MNOs are re-factoring their self-service portals and are embedding a user-friendly consent management solution in compliance with the GDPR.”

-Teodora Bobcheva | Attorney at Law | ScaleFocus

6. “We intend to continue our focus on cost reductions, driving savings through automation, supply chain, benefit design, digitizing transactions and optimizing network costs. In addition, the ongoing transition of our network to a more efficient software-based technology is expected to continue driving favourable expense trends over the next several years.”

-AT&T Inc. Annual Report

7. “We are implementing AI to help us to identify where these breakpoints are, and help to repair those in an automated way without human intervention. This goes for hardware failure, software failures.”

-Dr. Mazin Gilbert | AT&T

8. “Telecoms are changing extremely fast to bring more value in the constantly disrupted digital connectivity industry. In the next 3 years our mission is to continue supporting the Bulgarian business by becoming also a hi-tech partner, which offers IoT, Cloud Solutions, IaaS, ICT integration services and white-label mobile apps.”

-Aleksandar Vasilev | Head of ICT Business and Wholesales Data Department | Mobiltel

Discussions:

Top Trends in the Telecom Sector are:

1) Premium Content and Cross-Industry alliances in the Telecommunication Industry.



Telecoms want to get back on the front row: in other words, less being the underlying vessel for delivering voice and data services, but more about managing and providing exclusive content. We could soon expect that Telcos would own the companies that are producing entertaining content, for example, popular TV shows, live sports games, etc.

Many of the Telecommunication companies are heavily focused on investments in high-quality broadcasting content, yet this trend comes with a cost. And the price is usually calculated in billions. Diversifying the portfolio of services is good, yet every spending should bring the company the desired outcomes, without damaging the vision and values. It appears that telecom players, who stayed focused on the telco-native infrastructure updates took the better decision as subscribers did not favour being bound to a single content provider.

2) Telecommunication Industry will fully unleash the power of 5G.

Pioneering players in the telecommunications industry have enabled 5G services. Chasing the G's appears to be a good strategy as in each new wireless standard telecoms see opportunities for revenue growth. But one should not only focus on speed increase: 5G detaches the network infrastructure hardware and software, thus enabling new possibilities such as ad-insertion, caching and high-quality content delivery.

The demanding market for mobile live streaming and broadcasting requires fast and reliable wireless connections. 5G seems promising for the live broadcasting industry since it is expected to provide a faster, more reliable, secure and agile wireless technology. 5G also promises to bring the trustworthiness, scalability, security and universal mobility across the telecommunications industry, which would boost several services, directly connected to IoT. As superior mobile broadband, 5G aims to empower massive IoT, offering the network capacity and performance in numerous applications of IoT in the most diverse contexts.

3) Optimize with no compromise:

Telecoms continue to struggle with decreasing revenues and have to make tough decisions. It recently came out that a well-known European telecom is planning to cut around 7,000 jobs to stay efficient. Furthermore, rumours have it that the goal is to employ some 2,000 young staff. This is an on-going problem, which many telecommunication industry players have been facing in the past years.

Considering the virtually exhausted IT/digital jobs market a lot of experts find work in telecommunication companies not challenging enough and focus on cooler digital companies. Thus, telecoms will have no other choice but to face the dilemma of whether to automate some of their processes or start doing some job-rotations, by

empowering employees to gain new skills and knowledge as well as develop their careers. Job rotation policies are preferred by many organizations, who want their staff to remain, engaged, motivated and ready to jump-in and help in various situations. There is no right or wrong answer here; however, telecoms will have to face this on-going challenge and solve it one way or another within the next couple of years.

4) Commoditizing Augmented Reality and Virtual Reality for Telecommunication Industry

Augmented Reality (AR) is gaining more power and popularity every day. The core purpose of AR is to empower digital visualizations on real images. Many trendy games are using it to make the user experience even more enriching and real. Face filters on Instagram, Snapchat and Facebook are some of the simplest examples of the everyday usage of AR. Augmented Reality had one of its peaks in 2016 when Niantic released **Pokémon Go**, which later turned into a blockbuster. We expect this trend to grow bigger in the upcoming years, thus creating a demand for more sophisticated applications. This will enlarge the provider's devices and gadgets' portfolios. Smartphone users will start embracing Augmented Reality more than ever. We expect the majority of AR usage to involve creating viral content through smartphone cameras.

On the other side, B2B Augmented Reality apps will significantly change the way people perform their jobs: for example, imagine an engineer being able to find a broken FO link within a bunch of cables by simply holding up a smartphone and opening a specific application. This will significantly decrease the time required to perform troubleshooting, finding problems and fixing them. The end customer will be satisfied and the whole process will be more efficient.

Telecoms will also start using Virtual Reality (VR) technologies to reinforce their customer experience. Many Telcos have been struggling in this area for quite some time now. VR-powered platforms will assist them in providing unique entertainment experiences and will help them differentiate their products and services. For example, the X telecom company could use Virtual Reality to demonstrate its new product/service to customers. This is a rather interactive way of presenting a new premium smartphone device or releasing a new game app.

5) On-going Regulations for the Telecommunications Industry

The Telecommunications industry has been facing many regulation challenges due to the nature and complexity of the surrounding environment. Last year, the EU dropped down all roaming charges. This new policy, however, had significant pitfalls for the telecoms. Such trends in regulations will continue in the upcoming years as well. The hottest topic, circling around media nowadays is the GDPR regulations. According to critics, making the telecom GDPR-compliant will cost millions. Yet, failing to comply with it will bring even more headaches. All telecoms need to protect the personal data of their customers, to keep them from falling in frauds or being exposed to undesirable ads. We would expect many upcoming regulations, which would inevitably affect the telecommunications industry. The best advice we would give telecoms is to follow the trends and be flexible enough to quickly adapt to them.

6) Machine Learning and Artificial Intelligence for the win:

Artificial Intelligence (AI) and Machine Learning (ML) are two of the hottest concepts circling around the world in the past year. These two will also play a crucial role in telecoms development since they will help in automating and bettering many back-office operations and trivial customer interactions. Customer service chat bots, speech recognition, and voice services for customers as well as predictive maintenance are already in use of some of the biggest telecoms around the globe.

They sensed the benefits of bringing such technologies to their usage. Seeing the bigger picture makes it clear that telecoms are spending fortunes on customer support, maintenance, and better infrastructure. Trends in AI and Machine Learning will continue to impact these cost centers.

7) In-Flight Connectivity kicks in:

In-flight connectivity is becoming a game-changer for airline companies. Just as connectivity is transforming our daily lives, connected aircraft will redefine the way airline customer service operates. Research shows that the ability to use your smartphone while traveling by plane is among the top three considerations people have when choosing an airline. However, IFCS (in-flight connectivity systems) are also highly exposed to threats and breaches due to planes being a high-target of cyber-attacks. Thus, such service should be extra-secured, centrally managed and with a lot of specific billing and content management functionalities, applicable for in-aircraft usage. At first glance, the volumes expected from airline travellers could be easily neglected by some telecoms, but smart players with established agile products/services enablement methodologies would win this one and would be better positioned.

8) Digitization in customer support for improved efficiency:

Customer support is the most common service clients are looking for when calling their telecom's call centre. The whole process can be slow and unpleasant for both sides. Not to mention sometimes the issue remains, even after the call. For example, future analytics-based digital support centres are already in use by one global telecom. The telco set up a sophisticated system to track and foresee problems of customers. This new approach gives users self-service capabilities to solve questions and difficulties on their own, which reduced the number of support calls by 90%. These systems typically provide three levels of support. On the help-desk support level, we are expecting telecoms could achieve 75% of the calls to be resolved using self-service based on the current ML-trained knowledge-base. The other 15% can be resolved by using real-time chat (by using employees or AI to answer questions). This leaves only 10%, which need to be handled by an actual voice call with a support representative. Adopting this method will not only cut your costs in the long term but also improve customer satisfaction. What else could Telcos wish for?

Conclusion:

It all boils down to good alignment, strategic planning, and agility Trends come and go every day. That is why the advice to telecoms is to embrace new technologies and always be ready for yet another disruption adoption. Employ a customer focused and change-welcoming attitude across the teams. The companies should not count the dollars spent on pilot projects that is never put into production, but should count the opportunities they missed because of not acting on time. Look for, read and follow tech trends, the companies think to align with the overall strategy, systems, and vision for the future. Everything is individual, yet these game-changing trends will eventually affect the whole telecommunications industry.