Benefits of Giving Infrastructure to the Vendors

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Abstract: **As we all know that in India Telecom Companies are going through huge loss this is due to the fact that they lack in infrastructure so as to support the new architecture. India is still deprived from various emerging technologies. Financial status of India was degraded because of 2G scam, it was a scam involving political leaders and government officials in India illegally charging mobile telephone companies for frequency allocation licenses, which they would then use to create 2G spectrum subscriptions for mobile phones. Central Bureau of Investigation (CBI) investigated the loss of INR 309845.5 million (US$5.1 billion). Because of this scam, Today Indian telecom sector invests less on the infrastructure so as to support the same. But we are aware of the fact that India is having the second largest customer base, so the need of the hour is to demand the technology as well as the infrastructure from the company itself so that we need not to change the existing infrastructure which results in huge profit margins. So the idea behind this is, if the organization is getting the technology and infrastructure required infavour it would give its customer base to the inventory company. Altogether both the companies will report huge profits and can divide the revenue generated as per their shares in the end.**

Keywords: **2G, CBI, inventory, scam, infrastructure.**

1. INTRODUCTION

The Indian telecom sector has been one of the fastest growing in the world. Total telephone subscriber base and 601 million & growing steadily. As the world becomes more interconnected, digitized and globalized, telecommunication infrastructure is taking on an unprecedented level of importance. The mobile infrastructure in particular – networks, devices, services and in applications is growing fast. As of 2010, in developed countries, mobile subscribers outnumber fixed ones by more than two to one, in emerging markets that ratio exceeds five to one. Projections call for over 7.1 billion mobile-connected devices by 2015–approximately equal to the world's population in that year. No connected technology dominates the end-user segment like mobile. It is, in a very real sense, part of the foundation of a new, smarter planet. These staggering numbers bring with them great opportunity and many companies are working to capitalize on it. Nevertheless, there are significant challenges. Revenues are not keeping pace with the cost of providing services. In 2010, global mobile data traffic tripled, while revenues increased by only two percent. Therefore it is necessary to generate capital and the main source for the same is deploying the emerging technologies on the same infrastructure provided by the company. On the other hand linking our customer base (any telecom organization) to the architecture provided by the organization. This will help to save investment done to make the old architecture to be compatible with the new technology.

2. LITERATURE REVIEW

According to Economic Times (2010) Indian mobile phone market is set to surge ahead since urban India has a teledensity of 30 whereas rural India has a teledensity of 1.74. It indicates that the market is on ascent, with more than 85000 villages yet is come under teleconnectivity. J D Power(2009) conducted a study on "Customers increasingly want telecom services and products to be bundled" based on responses collected from 11, 911 customers nationwide and examined the overall customer satisfaction on six factors – customer service, reliability, billing, image, cost of service, offers & promotions. GirishTaneja & NeerajKaushik (2007) conducted a study on "Customers perception towards Mobile service providers: An analytical study aims to deduce the factors that customers perceive to be the most important while utilizing the services of a mobile service provider. With respect to infrastructural application, Hughes referenced reverse salient, or that which slows the development of a new infrastructure not specific to the infrastructure itself, i.e. a technological challenge stemming from a political challenge. He contends that the solution to the initial problem, that being one of politics, for example, need not focus on politics at all but can address itself directly to the technology in question (Hughes, 1983).

3. NEW TECHNOLGIES GET UNIMPLEMENTED

For an instance, as we all know that Intel is producing wimax technology and BSNL is having a good customer base but because of lack of architecture various technologies get unimplemented so the better way is to ask for architecture also, and connect the same architecture with its customer base.

This will generate revenues and saves lot of money in improving the old architecture

4. CONCEPT OF MULTIPLEX CINEMA

Earlier there were cinema halls which were used to showcase a picture of specific banner. By the end of 2010 concept of multiplex cinema came, they ensure the film distributor that they will provide only film to them. Architecture as well as a customer base will be provided by the multiplex cinema authorities and the revenue generated will be divided equally such that the authorities won't have to pay any amount to the distributor while film allocation, this brings new effects to be picturized and to be presented in front of audience (acceptance of new technology). Similar concept should be used in Telecommunication sector in order to improve services.

5. NEXT GENERATION NETWORK (NGN)

The reducing Average Revenue per User (ARPU), increasing demand of value added services, and convergence are the main drivers for promoting Next Generation Network (NGN). With the deployment of the Next Generation Network, users have one or many access providers providing access in a variety of ways, including cable, DSL, Wi-Fi, Wi-Max, fiber, etc. into the NGN. The NGN concept of "one network, many services" underlines the necessity and explicitly forces a technology-neutral approach with service-agnostic licensing. NGN challenges the traditional methods of handling interconnections, interconnection usage charges, quality of service, numbering and security issues. Operators in India have already initiated their move towards NGN by implementing IP based core network for optimization of their product portfolio, and rationalize the costs associated with running the systems.

The migration to NGN is likely to be in stages and will require huge investments by operators. NGNs such as 3G and LTE provide a technical foundation for Convergence which directly impacts the B/OSS industry as it transforms the service delivery and manageability concept in ICT sector. These factors are driving the demand for next generation B/OSS systems which can scale up to any limits in order to provide exceptional quality and service experience for the end customers of the 3G and LTE service providers. These technologies would only results in profit if they were implemented on the right architecture at the right time else newer versions will degrade the previous technologies.

6. CLOUD COMPUTING (INFRASTRUCTURE AS A SERVICE)

The capability provided to the consumer is to provision processing, storage, networks, and other fundamental computing resources where the consumer is able to deploy and run arbitrary software, which can include operating systems and applications.

The consumer does not manage or control the underlying cloud physical infrastructure but has control over operating systems, storage, deployed applications, and possibly limited control of select networking components. This generally deals internally but external architecture needs a serious attention during its installation. This could also results in better and efficient performance. Infrastructure as a Service (IaaS) abstracts hardware (server, storage, and network infrastructure) into a pool of computing, storage, and connectivity capabilities that are delivered as services for a usage-based (metered) cost.

Its goal is to provide a flexible, standard, and virtualized operating environment that can become a foundation for PaaS and SaaS.

IaaS is usually seen to provide a standardized virtual server. The consumer takes responsibility for configuration and operations of the guest Operating System (OS), software, and Database (DB). Compute capabilities (such as performance, bandwidth, and storage access) are also standardized. Service levels cover the performance and availability of the virtualized infrastructure. The consumer takes on the operational risk that exists above the infrastructure.
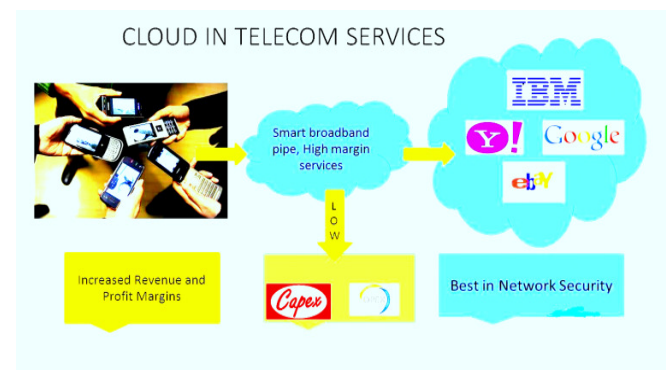
Above picture clearly shows us that if the infrastructure is being provided by the cloud, it will certainly help in the upliftment of telecom sector. Every organization invests a large amount of money on its architecture and if technologies are incompatible with the same architecture they result in a huge loss. So the better idea is to deploy all those new technologies on the same platform on which the technology is based and this can be done if we are getting the technology as well as the architecture from the same organization.

7. UNDER PENETRATION IN RURAL AREAS

Telecommunication infrastructure is relatively poor in rural areas, and the cost of putting up new infrastructure is substantial. Apart from the telecommunication infrastructure,

the basic infrastructures (roads, water, and electricity) required to run the system are absent, or their availability is very poor. This in turn increases the cost of operation. For example the power supply comes from diesel generators, whose maintenance and running cost are substantial. Apart from the cost of infrastructure, the lack of availability of trained manpower trains to the costs. The teledensity in rural areas is just 41.45% as compared to 147% in urban areas. This is more than 100%, and it demonstrates a digital divide. But because urban areas are reaching their saturation point in terms of subscriber base, operators have no choice but to look for opportunities in rural areas.

8. CONCLUSION

Low market penetration and decreasing profit margins for telecom operators in the emerging markets have made infrastructure sharing an attractive proposition .National regulators in countries like Bahrain have gone a step further in support in infrastructure sharing by publishing a range of tower sharing template agreements on their websites. The major benefits of sharing passive infrastructure for operators are: Infrastructure spending allows operators to cut down on capital expenditure. Infrastructure cost for operators is estimated to decline by 16% to 20% The tower companies, on the other hand, derive regular annuity income infrastructure sharing can be instrumental in allowing a number of operators to enter remote regions that would normally have very high rollout costs. Ever-increasing demand to roll out 3G/Wimax/LTE networks has been putting a lot of pressure on the infrastructure spending of operators. Reduced costs of infrastructure can allow more money to be spent on enhancing infrastructure Network operation cost, results in rationalization of operational cost due to reserves produced by sharing site rent, power and fuel expenses. Enhanced focus on service innovation, Alleviates pressure of network rollout and cost management from operators, allowing them to focus on customer service in a highly competitive and customer-centric industry. This becomes especially important in a regulatory environment demanding fast rollout of services. Lower entry barrier: Active and passive infrastructure sharing will result in lower entry barriers, allowing smaller players to penetrate the market. Infrastructure-sharing regulation has proven to be a critical lever contributing to the growth of the telecom sector. Operators should closely examine the economic benefits and develop their internal positions on the subject. Regulators, on the other hand, should encourage infrastructure sharing and issue necessary policies to ensure effective adoption and alignment by competing operators. Infrastructure-sharing regulation has proven to be a critical lever contributing to the growth of the telecom sector. Operators should closely examine the economic benefits and develop their internal

positions on the subject. Regulators, on the other hand, should encourage infrastructure sharing and issue necessary policies to ensure effective adoption and alignment by competing operators. Regulators should introduce necessary safeguards and enforcement tools. To ensure compliance and successful adoption of infrastructure-sharing obligations, regulators should assess and communicate the overall benefit of infrastructure sharing and ready themselves to resolve eventual disputes. Customer base is the most essential factor on which the whole concept of an organization is build. Therefore by infrastructure sharing both customers as well as the organization will result in profit. This would also provide new technologies to be implemented around India in the particular sector. Telecom business is heavy on Capex, and as much as 40-60% of the Capex is utilized for setting up and managing the Telecom infrastructure. With ARPU and Revenue per tower declining over time, sharing of Tower and other infrastructure is imminent. By sharing infrastructure, Operators can optimize their Capex, and focus on providing new and innovative services to their subscribers. In the long run, this is what will differentiate them from the competition. By outsourcing the day-to-day management of your Telecom infrastructure to Infratel, your Opex costs are hugely reduced. The cost-savings can be used to increase your reach, provide innovative services, and improve customer satisfaction, all of which will result in higher ARPUs

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