

Net Neutrality in India – Problems and Prospects

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Abstract: Net Neutrality is extremely important for small business owners, start-ups and entrepreneurs, who can simply launch their businesses online, advertise the products and sell them openly, without any discrimination. It is essential for innovation and creating job opportunities. Big companies like Google, Twitter and several others are born out of net neutrality. With increasing Internet penetration in India and given that we are becoming a breeding ground for start ups and entrepreneurs, the lack of net neutrality should worry us greatly. Besides, it is very important for freedom of speech, so that one can voice their opinion without the fear of being blocked or banned. To put it out straight, if there is no net neutrality, the Internet won't function as we've known it too. It will mean Internet Service Providers (ISP) will be able to charge companies like YouTube or Netflix as they consume more bandwidth, and eventually the load of the extra sum will be pushed to the consumers. Similarly, ISPs can then create slow as well as fast Internet lanes, which will mean all websites cannot be accessed at the same speed and one can do so only on paying an additional sum. For instance, currently, you have a standard data package and access all the content at the same speed, irrespective of whether its an international website or Local. Similarly, ISPs can also charge extra for the free calls you make using services like WhatsApp, Skype and others, and eventually the load of additional payable sum by the OTT players will be pushed onto consumers.

Keywords: Internet Neutrality, Service providers, communication and TRAI.

1. Introduction

Firstly, we need to understand what exactly net neutrality is. Net neutrality means Internet that allows everyone to communicate freely. It means a service provider should allow access to all content and applications regardless of the source and no websites or pages should be blocked, as long as they aren't illegal. It's like a fixed-telephone line, which is equal to all, and no one gets to decide who you call or what you speak. Another aspect of net neutrality is level playing field on the internet. This means, all websites can co-exist without hampering others. All websites are accessible at the same speed and no particular website of application is favoured. For instance – like electricity, common for all. Net neutrality also means all web sites and content creators are treated equal, and you don't have to pay extra for faster Internet speed to a particular site/service.

What will happen if there is no net neutrality?

To put it out straight, if there is no net neutrality, the Internet won't function as we've known it too. It will mean Internet Service Providers (ISP) will be able to charge companies like YouTube or Netflix as they consume more bandwidth, and eventually the load of the extra sum will be pushed to the consumers. Similarly, ISPs can then create slow as well as fast Internet lanes, which will mean all websites cannot be accessed at the same speed and one can do so only on paying an additional sum. For instance, currently, you have a standard data package and access all the content at the same speed, irrespective of whether its an international website or National. Similarly, ISPs can also charge extra for the free calls you make using services like WhatsApp, Skype and others, and eventually the load of additional payable sum by the OTT players will be pushed onto consumers.

Objectives of the study

- To study the Net Neutrality importance in the current scenario.

- To know the International and National Views on the Net Neutrality.
- To find out the problems and prospects of Net Neutrality in India.

Methodology

The study was based on secondary sources of data such as from journals, research scholarly published papers, articles, websites, published books etc. The study has been conducted on various modes which are problems and prospects of international marketing environment.

2. Net Neutrality – International Scenario:

“The Internet is becoming the town square for the global village of tomorrow”-Bill Gates

Internet has created new business models reshaping the economic society globally. The Internet economy has created value through ideas incubated by start-ups in content and application development. The network operators have attempted to create a value proposition by leveraging their control over network traffic. The competitive conflict between application providers and network operators has been witnessed world-wide and has given birth to the issue of Net Neutrality. The Committee felt that it would be instructive to understand and learn from the policy and regulatory responses adopted by countries and regulators globally. The Committee studied the legislative and regulatory provisions in different countries on Net Neutrality in particular and approach to the Internet in general from the open sources. This section encapsulates the study of the international scenario.

The Committee noticed that only a few countries have taken a firm position on the issue, and in a few other countries the issues surrounding Net Neutrality were being deliberated. Net Neutrality is a complex issue and has different nuances specific to a country depending on its social, political and

economic conditions. Accordingly, each country adopts different responses to the issue. On the basis of measures undertaken on Net-Neutrality, nations can be divided in the following three categories:

- a) Countries which have taken no specific measures as the existing mechanism is often considered sufficient to address the issue e.g. Australia, Republic of Korea, New Zealand.
- b) Countries that have adopted light-touch regulatory measures through transparency, lowering switching barriers, minimum Quality of Service (QoS) requirements etc. e.g. European Commission, Japan, United Kingdom.
- c) Countries that have taken or propose to take specific legislative measures to enforce Net Neutrality principles (no blocking, no discrimination in treatment of traffic etc), subject to reasonable traffic management and other exemptions. e.g. Brazil, Chile, France, Netherlands, Singapore, USA (FCC rules).

The general categorization listed in the previous paragraphs hides some of the nuances that need to be highlighted in the context of the debate on Net Neutrality in India. These country-specific nuances are detailed below:

- Chile was the first nation to enact Net Neutrality principles into law in July 2010. The main legal principles laid down are that: (i) ISPs may not arbitrarily block, interfere with, discriminate against, hinder or restrict the right of any Internet user to use, send, receive or offer any legal content, application or service on the Internet, or any kind of legal Internet activity or use; (ii) ISPs may undertake traffic management and network administration that does not affect fair competition; (iii) ISPs shall protect the privacy of the users; (iv) the users are free to add or use any kind of instrument, device or equipment on the network, provided they are legal and do not harm or adversely affect the network or quality of the service (vi) ISPs shall ensure transparency by publishing details of Internet access offered, its speed and the quality of the connection, making a distinction between national and international connections, and shall include information about the nature and guarantees of the service.
- Norwegian Post and Telecommunications Authority (NPT) published “Guidelines for Internet Neutrality” in February, 2009, after consultations with major stakeholders. The guidelines define three principles, namely: (i) Internet users are entitled to an Internet connection with a predefined capacity and quality; (ii) Internet users are free to send and receive content of their choice, use services and run applications of their choice, connect hardware and use software of their choice that does not harm the network; (iii) Internet users are entitled to an Internet connection that is free of discrimination with regard to type of application, service or content or based on sender or receiver address; (iv) Traffic management on an operator’s own network to block activities that harm the network, comply with orders from the authorities, ensure the quality of service for specific applications that require it, deal with special situations of temporary network issues.
- South Korea is the most wired country in the world with the largest optical fibre penetration and the highest internet speeds. The country has not officially adopted any

legally binding decision on Net Neutrality but has published —Guidelines for Network Neutrality and Internet Traffic Management”, which includes the right to use lawful content, application, service, and non harmful devices or equipment freely.

- UK follows a light-touch regulatory approach. OFCOM has not imposed strict restrictions on traffic management, but instead relies on existing regulation and market structures. ISPs follow a voluntary code of practice which was developed by stakeholders. However, few of the major ISPs have refused to sign the Open Internet Code of Practice.
- Brazil has recently passed a legislation known as the Marco Civil da Internet (The Civil Internet Regulatory Framework) in April 2014 which gives legal backing to enforcement of Net Neutrality principles.
- The debate on Net Neutrality has occupied regulatory, political and judicial mind-space in the United States of America (USA) for some time. The Federal Communications Commission (FCC), the communications regulator in USA, declared a set of regulations for an open Internet in 2010. The necessity for these regulations arose from disputes that arose between ISPs and application service providers (e.g. Comcast v Netflix). These regulations were challenged in U.S Courts by ISPs and were struck down in January 2014. Thereafter, FCC came out with a consultation paper in May 2014 that asked for a response, amongst other questions, to a query as to whether ‘paid prioritisation’ that permits ISPs to charge content providers to provide greater bandwidth for their end-users, should be allowed. FCC was swamped with over a million mails in response to the consultation paper. The recent FCC rules announced in February 2015 have been decided by the regulator with a slim 3-2 majority and have been promptly challenged in U.S Federal Courts on grounds of breach of constitutional guarantees – the First and the Fifth Amendments. The FCC regulations adopt 3 bright line rules for Net Neutrality i.e. “no blocking”, “no throttling” and “no paid prioritization”. Reasonable network management practices are permitted only for managing the technical and engineering aspects of the network and not to promote business practices. ISPs are also required to publish consumer friendly information about their practices to maintain transparency.
- Despite differences, certain common principles can be identified across the countries who have taken active position on Net Neutrality. These include no blocking, no throttling, no paid prioritization, freedom of access and to receive or use content, no discriminatory practices, reasonable traffic management and support for innovation. Other issues that find common mention are the need for transparency, prescription of QoS, low cost of switching etc. However, on some issues like zero rating and VoIP, countries have taken widely varying position. For example in USA, VoIP as a managed service does not come under the Internet Rules, in Brazil blocking of VoIP is not allowed, in UK and Italy there is no restriction on differential charging of VoIP and in South Korea, TSPs/ISPs can charge for mobile VoIP.
- Apparently, countries all over the world are grappling to find balance between competing positions and interests in Net Neutrality debate, while maintaining sufficient leeway for larger public goals. Very few countries have opted for

specific legislations for enforcement of Net Neutrality provisions. In its recently released report –2014 Web Index”, Web Foundation has found in its study across 86 countries that 74% of countries lack clear and effective Net Neutrality rules and/or show evidence of price discrimination. The international best practices along with core principles of Net Neutrality will help in formulating India specific Net Neutrality approach. Considering the large internet user base and the critical role that Internet plays in our economic, social and political space, India should take a rational approach and initiate action in making an objective policy, specific to the needs of our country. The timing for this is apt, taking into consideration the exponential growth of content and applications on the Internet.

3. Net Neutrality In India

Taking the recent events into account, its time net neutrality is imposed in India too.

Since the past couple of years, the instances of Internet censorship in India have increased manifold. In 2011, India adopted the new ‘IT Rules 2011’ that supplemented the IT Act 2000. These rules made it mandatory for Internet intermediaries to remove objectionable content within 36 hours of receiving complaint. But the terms included were vague and open to interpretations. These rules received sharp criticism, but they have prevailed. In 2011, government also drew flak as it asked major sites like Google, Facebook and Yahoo to ‘pre-screen’ content and remove any objectionable, defamatory content from going live.

Government requests for banning content has also been on rise over the past couple of years. On the other hand, with the increasing popularity of instant messaging apps like WhatsApp, Viber and others, telcos had started making noise against the accelerated adoption of these services. Throughout last year, they’ve have been quite vocal about their dislike for over-the-top (OTT) services, who have been cannibalizing their main revenue streams – calls and SMSes.

There was buzz around a fee being imposed on popular OTT services, but the matter fizzled out soon after TRAI rejected telcos’ proposal to do so. In a bid to make up for the losing revenue, Airtel decided to play evil Santa on Christmas 2014 and announced an extra charge on making VoIP calls. The Twitterati had gone all out condemning Airtel for the act, and the service provider had to soon retract its decision. Net neutrality got yet another blow in India with the recent announcements from Reliance and Airtel.



In India, Facebook has teamed up with Reliance Communications in an effort to bring Internet.org to smartphone as well as feature phone users. But at the Mobile

World Congress, telecom service providers such as **Vodafone, Airtel and Telenor** have made their discomfort clear when it comes to offering free Internet services over expensive telecom networks.

In order to compete with Reliance, Airtel announced Zero marketing platform allowing customers to access apps of participating app developers at zero data charges. Now, you may be wondering what is wrong if someone wants to offer free Internet? Free internet sounds tempting, but you need to be aware that you are only getting free access to services/apps which have struck a deal with the telcos. App developers and services flush with funds will not find it an issue to pay telcos for data charges. But this can leave app developers, specially start ups, who cannot afford Airtel or Reliance’s data rates at a definite disadvantage.

- In India, the concept of net neutrality doesn’t exist legally. However, ISPs try to moderately not violate any laws. They’ve approached Trai for the losing revenues and are awaiting Trai’s decision on regulation IM app by OTT players. Most decisions here are made by DoT and Trai. However, it would be a good move to get things legally on paper, while Internet access in India is still at its infancy.
- The Internet from the very beginning signified interconnectedness sharing information and providing a platform for fostering innovation. Internet has functioned on the –end-to-end principle” characterised by ‘dumb’ networks carrying information to ‘smart’ terminals. Internet has been a medium that has created innovation in technology, business and governance. Internet has thrown up several challenges for public policy but it should not lead to restrictions both on network creators or network users that unnecessarily and unjustifiably stifle experimentation and further innovation in technologies and business models either in telecom networks or the larger economic world.
- The open, democratic nature of the Internet has kept information and content accessible by the user largely unrestricted. There is a view that diluting neutrality of the ‘Open Internet’ may compromise the independence and diversity of information. With the explosive growth of social media and the use of Internet as a platform for expression of thoughts and opinions, it has been argued that the equal access to Internet is integrally linked to freedom of expression. The question as to whether the carrier (ISP/TSP) should have the ability to choose the content that gets delivered to the user, and affect the basic architecture of the internet, has formed a significant argument in favour of Net Neutrality. The majority view is that only the user should have the unbridled right to access the lawful contents on the Internet without the carrier having the ability to discriminate – either through price, speed or quality - content available on the Internet. Some proponents of Net Neutrality while accepting the need for traffic management have argued that disclosure of practices (voluntary or mandated) adopted for traffic management by carriers should be supplemented by a right of the user to seek additional information from them with an objective to secure Net Neutrality.

4. Problems and prospects of Net Neutrality

The Telecom Regulatory Authority of India (TRAI) recently released a consultation paper on over-the-top (OTT)

applications, triggering a public debate on the topic of Net neutrality—a complex and multi-faceted issue.

One aspect of the Net neutrality debate is whether the throttling of certain types of traffic by network operators should be acceptable under certain conditions. The motivation for throttling lies in the fact that some applications and their users are heavier on the Internet in that they generate more traffic and consume more bandwidth. But because the Internet is a shared resource, this results in poor performance for everyone at peak hours. So although throttling seems to be a bad idea for users, if we think about who gets more benefit out of the Internet, those who are using it disproportionately more or those who need it for generating higher societal welfare.

Network operators need this flexibility with their pricing to manage network congestion and monetize their resources. Similarly, to cope with the impact of voice over Internet protocol (VoIP) on their traditional revenue stream of voice telephony, operators should be able to explore competitive pricing mechanisms and new revenue streams from content providers. But having said that, if operators start to treat the same type of traffic differently for different websites, e.g., slowing speeds or charging differently for access to Google versus Yahoo, then it can be a slippery slope. But market forces are sufficient to prevent such outcomes, just like they have in the past. However, even if it does happen, it can be easily addressed with targeted legislation instead of proactive enactment of stifling new rules.

Another aspect of the Net neutrality debate is about the creation of fast lanes and paid prioritization with two tiers of service. Given that certain type of traffic need faster delivery, such as video streaming, while others such as emails and file transfer don't, it is natural to think in terms of having different lanes with different speeds and prices. However, some argue that if a two-tiered Internet were to be allowed, investments in the lower tier will dry up. Consequently, new Web entrants who don't have the capital to pay for fast lanes will not have the same advantages that YouTube and Facebook had. But much of this concern about lack of investments in the slow lane under paid prioritization can be resolved through requirements on proportional investments in the different tiers—again, an argument for targeted legislation rather than ham-handed regulations. In other words, the network operators would be required to ensure a basic level of service in the lower tiers and can invest in capacity upgrades in some acceptable proportion in the two tiers. This can allow new start-ups to offer their services in the lower tier and then move up to the higher tiers if they need those speeds when their user base grows. Start-ups always face an uphill battle because the deep-pocket incumbent content providers already enjoy what are essentially Internet fast lanes as they have direct interconnections with network operators through peering agreements and content delivery networks, which enable them to offer better speeds to their users. The assumption that not having fast lanes will create a level playing field for all is not only based on a simplistic mental model of how the Internet works, but also ignores the fact that the large incumbents clog the network with traffic on a shared lane

that degrades the user experience even for the entrant's service.

To truly reduce the cost of Internet access for consumers and improve broadband penetration in India, adequate flexibility with pricing is desirable. In the telephone networks, 1-800 toll-free numbers allow businesses to subsidize users' access fees, but that same mechanism is missing for Internet data services. Smart data pricing practices, including dynamic pricing, sponsored data and zero rating, can help create a win-win for both consumers and network operators. Facebook's Internet.org and Airtel Zero are useful initiatives in this direction, as they will foster greater competition between content providers and subsidize users' access costs.

Much of the proliferation of digital services in India can be attributed to the fact that the telecom sector has been a healthy market with large private investments, high competition among operators and the cheapest pricing plans in the world. To sustain this momentum, it is important for the Indian government to step back from enacting stronger Net neutrality laws and instead let the market decide the outcome. Trai should neither try to help operators recover losses from their traditional revenue streams by bringing OTTs under the licensing regime, nor should it place itself in a position of regulating what pricing plans network operators can and cannot offer.

Now we access internet and various applications in the future is now under question. The debate raging across the country now and being watched across the world keenly is on the issue of Net Neutrality. The Telecom Regulatory Authority of India has in the meanwhile come out with a consultation paper on the regulatory framework on what is known as Over The Top (OTT) services. Even as this paper is being scrutinized many questions raised in it are being looked into. The debate has become furious after some telecom companies like Airtel and Reliance, and websites like Google and Facebook are said to be already violating the idea of net neutrality.

Net neutrality is the principle that Internet service providers and governments should treat all data on the Internet equally, not discriminating or charging differentially by user, content, site, platform, application, type of attached equipment, or mode of communication. Neutrality proponents claim that telecom companies seek to impose a tiered service model in order to control the pipeline and thereby remove competition, create artificial scarcity, and oblige subscribers to buy their otherwise uncompetitive services. Many believe net neutrality to be primarily important as a preservation of current freedoms.

Proponents of the principle of net neutrality hold that all traffic on the Internet should be treated equally or in other words, service providers such as Airtel should allow access to all content without favouring any particular product or website. The net neutrality debate becomes even more relevant in case of India where the penetration of smart phones is increasing and efforts are on to bring more people to the Internet, through the digital India campaign. Presently, there are no norms for net neutrality in India.

While on the other hand, the telecom/Internet Service Providers argue that they have made huge investments in broadband capacity, and, therefore, they should be allowed to charge for the services, which generate lot of traffic. Preventing the service providers from charging for over-the-top services (OTT) services would mean that they would reduce their investments in building networks.

Currently, there are no laws enforcing net neutrality in India. Although TRAI guidelines for the Unified Access Service license promote net neutrality, it does not enforce it. The Information Technology Act 2000 also does not prohibit companies from throttling their service in accordance with their business interests.

The violation of net neutrality will mean telecom companies could now be in a position to ensure some sites are served faster than others. It could also mean it becomes costlier to use certain applications. Most importantly, it could endanger the very feature of the Internet that has over the years made it possible for countless start-ups to dream and act big. So by rejecting net neutrality, which will enable telcos to play the gatekeeper to a valuable resource, we will be shutting the door on the entrepreneurial aspirations of millions. That's because the only way for them to compete with the big moneyed Internet players would be to match their spends to make the Internet work for them. The absence of net neutrality will definitely benefit the telcos while at the same time harming the market by unleashing monopolistic tendencies.

Findings, Suggestions and Conclusions:

- The international best practices along with core principles of Net Neutrality will help in formulating India specific Net Neutrality approach. India should take a rational approach and initiate action in making an objective policy, specific to the needs of our country. The timing for this is apt, taking into consideration the exponential growth of content and applications on the Internet.
- Innovation and infrastructure have both to be promoted simultaneously and neither can spread without the other. The endeavour in policy approach should be to identify and eliminate actions that inhibit the innovation abilities inherent in an open Internet or severely inhibit investment in infrastructure.
- The primary goals of public policy in the context of Net Neutrality should be directed towards achievement of developmental aims of the country by facilitating "Affordable Broadband", "Quality Broadband" and "Universal Broadband" for its citizens.
- User rights on the Internet need to be ensured so that TSPs/ISPs do not restrict the ability of the user to send, receive, display, use, post any legal content, application or service on the Internet, or restrict any kind of lawful Internet activity or use.
- In case of VoIP OTT communication services, there exists a regulatory arbitrage wherein such services also bypass the existing licensing and regulatory regime creating a non-level playing field between TSPs and OTT providers both competing for the same service provision. Public policy response requires that regulatory arbitrage does not dictate winners and losers in a competitive market for service provision.

- Tariff plans offered by TSPs/ISPs must conform to the principles of Net Neutrality set forth in guidelines issued by the Government as Licensor. TRAI may examine the tariff filings made by TSPs/ISPs to determine whether the tariff plan conforms to the principles of Net Neutrality.
- Since its emergence the Internet has existed as a vibrant marketplace marked by innovation and increased consumer welfare. By providing consumers with faster download speeds, the broadband service industry has expanded these gains and allowed for new technologies such as VoIP, IP-TV, video conferencing, music downloads, and more. The recent classification of broadband service providers as "information services" has moved the broadband market closer to a free competitive marketplace. This classification was made with the understanding that the broadband service market today is a dynamic competitive marketplace. It has freed broadband providers from "common carrier" restrictions and provided an increased incentive for capital investments. Some consumer rights advocates, however, view the new classification as a potentially devastating blow to the future of the Internet. They fear that the classification will end net neutrality and put a "chokehold on the Web."
- These fears about the end of net neutrality are misplaced because ample protections exist in a competitive market and antitrust laws act to further this competition. In a competitive marketplace, producers are at war with each other over consumer dollars. Especially given the high fixed costs of developing and improving infrastructures, broadband providers have strong disincentives to engage in behaviour that will anger consumers. Furthermore, where the competitive forces of the market fail because of local monopolies or collusion among competitors, the antitrust laws provide a remedy for those harmed and a strong disincentive for broadband providers to engage in anticompetitive practices.

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