

Analysing Net Neutrality with Indian Netizens' Perspective

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Abstract: Net neutrality is a sensitive cyber issue which expresses the right to Internet users to have net services without any discrimination on the basis of source, destination, or ownership of any kind of Internet traffic. This idea has laid the foundation for vigorous and high noted debate over public policy and private ownership across the many parts of the world over governmental regulation of the Internet or Internet access. The concept of Net Neutrality is new among Indian netizens (a term frequently used for internet citizens/users) which has become a matter of great concern among them and so has attracted a large media attention in a very short while. Nobody pay for electricity on the basis of which brand of appliances one uses, so why should one pay for the internet access on the basis of which brand – viz. whose website or app – one access? This paper is an attempt to put light on the debate of net neutrality and the need for keeping the Internet away from the petty politics and business profits. Further this paper, at the most of its part, has put deep analysis and rationale view over the overgrowing concern about Net Neutrality in India. Internet is unarguably Human Being's greatest invention of the past century which should be and must be fairly accessible to all netizens.

Keywords: Netizens, Net Neutrality, Telcos, ISPs, TRAI, Airtel Zero, Zero Neutrality, Termination fee, Internet Democracy

I. INTRODUCTION

Internet is one of the greatest gifts of human mind. It has revolutionized the knowledge building, fast information accessibility, quick online transactions and up to date availability of myriad innovative and mind boggling technologies of mining information & sharing data which has unarguably impacted the human fate today[1].

Internet, henceforth, has become a part and parcel of every netizen's life today which impacts their life in the same way as impacted by the air, water or electricity.

So the big question of this hour is what happens if the accessibility of Internet is controlled by certain individuals or bodies, it will be clearly the loss of Mankind's freedom of expression, livelihood and definitely the loss of great human invention. Net neutrality provides individuals, start-ups, small companies, and advocacy groups a wonderful platform to fulfill their business aspirations and needs which undeniably lead them to compete with big business houses and brands. This is how companies like Google, Facebook, Flipkart, Skype and many other such Internet services could evolve to Internet honchos despite of humble beginnings. If deep-pocketed corporate honchos get permit from Telecom Regulatory Bodies (could be rightly pronounced as telcos) and ISPs (Internet Service Providers)

to make "special deals" for exclusive or efficient access to their so called websites and apps (short term used for software applications) by customers, they could definitely crush disruptive and humble start-up competitors. That would directly squelch innovation and so be frightening nightmare for consumers in the long run.

So the idea of Net Neutrality is unarguably undeniable and so can't be challenged or curbed in any way. Let us understand what Net Neutrality is all about and how it has grabbed up the attention and utmost concern of the entire Internet fraternity in a long run.

1.1. WHAT IS NET NEUTRALITY?

Net Neutrality defines an open Internet and, in particular, is the guiding principle behind the usage of Internet which means "the principle to preserve one's right to communicate freely online" [2]

- i. Net Neutrality means that an Internet should be made available and accessible to all users in the equal manner without any discrimination on the basis of source, destination, or ownership of any kind of Internet traffic.

- ii. It simply means that ISPs should take it ethical account to bring Internet to us in fair manner with open networks and not blocking or making discrimination against any applications or web content that go air over those networks.
- iii. Just like a phone company shouldn't decide to whom one can make call and what one talks on that call, an ISP shouldn't be concerned about the web content one views or posts online.

1.2. HOW NET NEUTRALITY HAS SHAPED INTERNET?

Net Neutrality is the main principle behind the existence and the survival of what we know about the "Internet" of today [3]:

- i. With the "Net Neutrality" nature of Internet, netizens or other web users are free to connect to the website or service of their choices. ISPs have no issue about what kind of web content is flowing or carrying from their servers. It is due to Net Neutrality that it becomes possible for Internet to grow and expand in world which has allowed general mass to freely express themselves,
- ii. Net Neutrality, most importantly, has provided people a great source of earning by allowing them to start and consequently grow their business online. This requires you to build a website, host it and then simply start your service. If your service is good enough to attract web users, you will be able to earn well. The big proofs of this are Google, Facebook, Flipkart or countless such web services existing today which had started with very humble beginnings but all they have grown remarkably into Internet Giants just because of the "Net Neutrality" nature of Internet.

1.3. WHAT IF NET NEUTRALITY IS VIOLATED TODAY?

In the absence of "Net Neutrality", Internet's entire control will be restricted in the hands of ISPs which if happen, will definitely hurt the idea of free speech and will impact adversely to the innovation and development of Internet [3]

- i. ISP will get immense power to derive extra benefit from Internet traffic by charging you for the websites or web services you are using. Your internet bill will definitely shoot up and the apps you love to get candid with may no longer accessible to you. Today if one buys a one GB data-pack, one can use it to have any web content one wishes for. But without net neutrality, one will be charged a different rate for each service. For instance, one will be charged 4 paise per 10 KB (say) for browsing while 10 paise per KB for VoIP calls which would be something like your

milkman charging you Rs. 30 per litre if you make tea but that milkman charging you Rs. 60 per litre if you make milkshake.

- ii. The Internet will not exist as we know it today without net neutrality. You will have to pay for the websites you access in India, say Rs 500 while you will have to pay more, say Rs. 900 for accessing international websites or there may be different connection speed for accessing different kind of web content depending on the amount you are paying for a given service or "add-on-package".

There will definitely be a spell doom for innovation over Internet as a result of lack of net neutrality. This can be taken in this way that ISPs may charge companies for enabling quick and efficient access to their websites which if not paid by the companies will surely slows access to their websites. This will bring inequality among the Internet Giants (like Google, Facebook, Flipkart to make better access of such plan) and the start-ups (who will have to look for other options to attract web users).

1.4. WHAT IS THE STATUS OF NET NEUTRALITY IN THE NATION LIKE USA?

"Net Neutrality" has been a contentious issue among network users and ISPs in the Unites States since the 1990s [4][5]. It is noteworthy that there were no legal restrictions against net neutrality violation practices in the US until 2015[6][7][8][9]. On February 26, 2015, the FCC made a historic verdict by ruling in the favors of net neutrality by doing the reclassification of broadband as a "common carrier" under Title II of the famous Communications Act of 1934 plus Section 706 of the Telecommunications Act of 1996 [10][11][12]. The FCC had finally published the final rule on the US's new "Net Neutrality" regulations on April 13, 2015 [13][14].

1.5. WHAT IS THE STATUS OF NET NEUTRALITY IN PAN-ASIA?

"Net Neutrality" traffic control measures are permitted in Japan, Singapore and Hong Kong as long as they seem to be fair and open. As compared to this, South Korea, in contrast, allows network operators to block web traffic or let them to charge web users extra fees for accessing certain applications. The reason for such a different approach in South Korea is mainly attributed to South Korea's desire to become world leader in terms of 5G services, network equipment and technology [15].

1.6. WHAT IS THE STATUS OF NET NEUTRALITY IN INDIA?

India has neither any cyber law nor have any regulatory body to check net neutrality. However, in recent times, TRAI (Telecom Regulatory Authority of India) has presented itself as a supreme body for checking the user

access to Internet. As a result of this, TRAI has been severely criticized by Indian netizens in recent times. Internet is used in neutral manner so far in country but no legal law for confirming net neutrality has been proposed yet. The process of legalizing net neutrality has begun due to a massive online movement carried by Indian netizens aftermath of controversial debate on Airtel Zero but it is not certain whether it will be formulated. It is because there are many issues and challenges before legalizing net neutrality on paper in India where it requires a complex route of debates, voting & passing of net neutrality bill in two contrast houses of Indian Parliament. Interestingly, no such bill on net neutrality is proposed on table of Indian Parliament, formulation of net neutrality law is definitely far away from sight.

II. CURRENT ISSUE OF NET NEUTRALITY IN INDIA?

The concept of net neutrality doesn't exist legally in India. TRAI is only authorized to regulate telecom industry in India but it has tried to monopolize the Internet accessibility in India and in the wake of this it has come up several times with its own set of rules to enforce net neutrality. For instance, TRAI, in 2006, had invited comments from industry bodies and telcos regarding the concept of "Net Neutrality". However, TRAI hasn't formulated any regulatory rules to enforce net neutrality. Despite of being deprived of such legal laws of protecting net neutrality, Indian ISPs are generally adhered to the principal of net neutrality over the usage of Internet. Though some incidents have been experienced in past regarding violation of net neutrality by some Indian ISPs, such incidents are by far very few. Recently during first week of April, one of the country's biggest telco had come up with the idea of formulating "Airtel Zero" which was aiming to make tie up with Giants in online services of country to publicize only their contents on Internet while blocking other sites besides charging consumers for web content they make use of. The company had to take a big U-turn after massive online criticism and underrating of their web content and apps by netizens. This has brought a great consideration among Indian netizen about the legal need for protecting and maintaining net neutrality in country. As a result of this TRAI had to propose a consultation paper containing around 20 questions meant to be responded by Indian netizens by 24 April, 2015. Interestingly, TRAI received 2 lakhs emails within a week. But the countrymen shocked to learn that TRAI had published all such mails before the final verdict to come out. This was followed by a report published in one of the leading daily of country that the telecom and IT ministry of country was going to make net neutrality as part of license rules [16].

III. EVOLUTION OF THE NET NEUTRALITY CONCEPT

With the advent of the Skype and other "OTTP (over the top)" Internet services and apps such as Whatsapp, Twitter YouTube and Facebook, the Telecom Honchos' lucrative

"voice and text" services started experiencing unpleasant pressure. They, in turn, with the collaboration of other ISPs, moved ahead to fight back by either chocking access to some of the fascinating OTTs, or entering into "special deals" with them to enable faster access to their websites and apps by customers.

3.1 WHEN THE CONCEPT CAME INTO EXISTENCE

The idea of operating Internet like a public "road" is supported by various netizens across various parts of the world, especially in the United States — which is meant to carry all traffic without discriminating any traveller, regardless of what shape, size or. But the historic question of regulating Internet usage first appeared under the US's FCC (Federal Communications Commission) telecom policy which undermines whether the Internet should be regulated like other public utilities such as water or electricity? According to its Internet usage policy, it was ruled that ISPs (Internet service providers) like Comcast and Verizon must treat all Internet content equally, including Facebook & twitter, News sites, cloud-based business activities, Netflix videos, role-playing games, peer-to-peer sharing of music files & photos on Flickr, even, much to the amazement, pornography and gambling activity. FCC insist that Netizens are fully qualified to run all manner of applications and devices with any sort of Telcos' rules and norms, and further emphasized that no content provider, in anyway, would be provided preferential treatment or any sort of faster "lane" over others. ISPs (Internet service providers) would never be allowed to block any content nor allowed to charge them at any differential rates.

It was a clear indication that ISPs could not surpass the ethics of selling faster services to any business house which is willing to pay them. It was a clear sign of FCC to prohibit telcos and ISPs from regulating the Internet market, which critics say, if not prohibited, would stifle innovation and legitimate commercial activity.

Net Neutrality simply implies that all data should and must be allowed to zip through the "pipes" of the Internet in a fair manner and on an equal basis which appear to be natural features of the system. But, it is quite amazing that this principle of so called "network neutrality" was not more than a deliberately crafted feature enshrined in the FCC's 2010 "Open Internet Order" which faces a lots of challenges in the present scenario. During September 2013, a lawsuit before the United States Court of Appeals for the District of Columbia Circuit had pitted the FCC against Verizon, was delivered in January 2014 which apparently struck down the FCC's rules.

On 10 November, 2014, in his historic announcement to preserve "net neutrality" and to ensure prohibiting ISPs from slowing or blocking websites or affecting it anyway. President Barack Obama made a statement that "No service should be stuck in a 'slow lane' because it does not pay a fee." He further added "That kind of gate keeping would undermine the level playing field essential to the Internet's growth." [17]

On 26 February, 2015, FCC voted in favour of new set of rules to enshrine the principle of “net neutrality,” amazingly with a draft by the name of “Open Internet Order” which was released on 12 March, 2015. It has followed undoubtedly a long period of political pressure, litigation and speculation that led to the enshrinement of FCC’s original open Internet rules finally at five years later.

3.2 HOW THE CONCEPT OF NET NEUTRALITY AROUSED IN INDIA?

Airtel, one of the India’s biggest telecom Honchos, launched Airtel Zero during the first week of April 2015 and ensured preferential treatment to those websites who pay fee for it. Further Airtel promised to provide free consumer browsing as well as special promotional campaigns for such companies who subscribed to it’s plan which was clearly a move seen by many of netizens across the country India as grossly violating the concept of “net neutrality”, which fundamentally envisages and ensures that all data and websites should be and must be treated and so charged equally [18].

The first company to join Airtel Zero was Flipkart. But it had to rollback it’s decision due to barrage of criticism faced by it online where social media activists actively joined the brigade of Indian netizens to boycott Filpkart’s website and so it’s app which resulted in downgrading of its app rating in app stores. The company later issued the statement of not joining any such deal with explanation coming from its CEO that they realized net neutrality could get compromised in the future which they were not supportive of. As a result, Airtel had to scrap up its ambitious Airtel Zero project

IV. HOW MEDIA REACTED TO THE CRY OF PROTECTING NET NEUTRALITY IN INDIA?



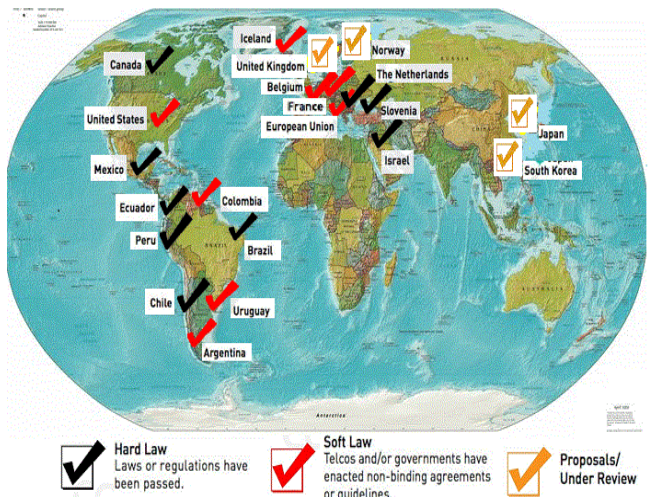
A leading daily has recently spoken about the need for protecting net neutrality by Indian policymakers in India by prohibiting telcos from charging extra fees from consumers for internet services as it can hurt netizens, common man and online business start-ups a lot. It further added that: "One of the significant reasons for the success behind the

popularity and the expansion of internet is that one can easily access it per one’s wish."

The New York Times said in its editorial 'Global Threats to Net Neutrality' that the worst thing policy makers could do to the Internet would be to permit telcos not to mess with that. The editorial took the example of the EU (European Union), which through its net neutrality proposal would permit to charge fees from internet businesses like Google and Netflix to deliver their web content to netizens faster than that couldn’t be afforded by smaller business start-ups. Hence there is utmost need to protect it. The editorial also mentioned that India's telecommunications regulator has also asked for comments on whether it should adopt a provision similar to what Europe is considering. The regulator asked if telecom companies should be able to charge users extra fees for services like YouTube, WhatsApp and Skype on top of the fees people already pay for access to the internet. It said "These proposals would hurt consumers because access to some services would cost more money. They would also hurt smaller Internet businesses that could not afford to pay fees to get preferential access".

In India, internet activists have organized a campaign against the regulator's proposal that appears to be having some impact. "The government would study the issue closely before adopting final rules, noting that the internet belonged to all of humanity and not to a few," the minister of communications and information technology, Ravi Shankar Prasad, recently said on Twitter. The editorial said that in Europe and India, proponents of weak net neutrality rules appear to have bought into the misguided notion that higher charges are necessary to keep telecommunications companies in business and, further, that the companies have a right to impose them.

V. HOW OTHER COUNTRIES OF WORLD LOOK AT NET NEUTRALITY?



Chile

Chile is probably the first country which has enacted the law of net neutrality in its country in the year 2010. The law was a response to citizen's movement carried in favour of net neutrality that once became a burning issue in Chile. The movement was, in particular, the efforts of Neutralidad Si, a citizen group of Chile. In 2014, Subtel, the Chilean telecommunications regulator, had banned mobile operators from zero-rating as a result of the deals made between internet companies and mobile telecom operators to provide consumers internet at free of cost.

Netherland

Netherland is the first European country to pass net neutrality law in the year 2011. As a result, the EU (European Union) is learnt to have enacted laws that were passed by The Netherlands in a bid to offer a uniform telecommunications law for all nations as part of the European Union. Interestingly, the zero-rating deals between mobile operators and internet companies have also been banned as per new law of net neutrality in European Union.

Brazil

Brazil passed a legislation in 2014 to bring 'Internet Law' into effect, which apparently brought the principle of Net Neutrality in country's net usage scenario. A website <http://www.lexology.com> published a report to express the concern of net neutrality in Brazil and wrote that the principle of Net Neutrality as per Brazilian law was meant "that all online traffic must be treated equally by network operators regardless of its content, origin, destination, service, terminal or application".

USA

The FCC (Federal Communications Commission) has laid down new set of rules on net neutrality earlier during this February 2015. <http://www.cnet.com> published report that the internet service providers like AT&T, Comcast and Verizon would not be allowed to block lawful content, slow down website applications or services, or accept any fare or fees for favoured treatment under new law of net neutrality.

VI. ISSUES AND CHALLENGES BEFORE LEGALISING NET NEUTRALITY IN INDIA



The main issue before India policymakers are the loophole in their own system where any telecom agent can access its office and its corrupt managers to curb net neutrality in country. One such case has been experienced by Indian net

users was the proposal of Airtel Zero made by a leading telecom company to destroy net neutrality in India which couldn't be placed without a political support. But such proposal was scrapped amid vast protest on social networking sites and from million of Indian netizens accessing free web.

TRAI in India is only authorized to regulate telecommunications in country but not authorized to regulate Internet. Despite of this, it always comes up with its own set of rules to regulate Internet access in India. The latest such case is the issuance of a consultation paper consisting 20 questions spread across 118 complicated pages and wants you to send them an e-mail by 24th of April, 2015.

The most shocking case which appeared in the passing days was that of TRAI publishing all 2 lakhs mail which it received from Indian netizens in support of net neutrality before the Day of Judgment to take place on 24 April, 2015. It is understood that it is difficult to expect net neutrality policy to be taken in fair manner in India with such a loophole in the government machinery.

VII. HOW IMPORTANT NET NEUTRALITY IS – A DISCUSSION

The debate on "net neutrality" is a social, economic and political debate over the usage of public information network of Internet and the duties of Internet's private carriers (including telephone, cable companies and ISPs). Let us first understand how we have come across this concept of net neutrality and why there is a debate on maintaining it.

One can understand Internet as an information network providing intermediates between myriad groups of agents including users and content providers where users can also, at many times, act as content providers comprising all types of media, retailers, applications, and services available online). Since the spread of Internet through academia during 1980s and later on mass popularity during 1990s, it has worth maintained a sort of pricing structure that is probably unique among information network, how? The answer is simple – whether its users or any other content provider, one has to pay ISP's access fees (which are fixed fees that are mandatorily paid for getting on the Internet) and usage fees (which are variable fees that are paid on the basis of time or bandwidth usage). However, if we exclude all such charges, no one is supposed to pay any additional charges for using Internet. For instance, Google and Wikipedia are content providers but they do not directly pay for the ISPs of users they are reached by. Instead, they have to pay for their own Internet access & usage.

This started to change during mid - 2000s when questions about the rights of Internet carriers and content providers to charge/block certain network attachments or control access of emergent applications had arisen which led to a call to protect "network neutrality" during later decade. [19]

7.1 UNDERSTANDING ZERO PRICING & NET NEUTRALITY

During 2003, AT&T as an ISP demanded content providers such as Google and Wikipedia to pay AT&T for accessing its customers which if they failed to pay could compel AT&T to block traffic from such sites to its customers besides preventing AT&T's own customers from reaching such sites. Such kind of services in the context of telephone system could be referred to as fee known as termination fees. Take it as this way: AT&T would charge any of the content providers a fee in order to deliver their packets much like the way it charges other telephone networks a fee for "terminating" their calls.

It is very interesting to know that today there exists a ban on termination fees (due to some historical practices) which is referred to as "zero-price" rule [20] which prohibits an ISP from charging any sort of additional charge to a content provider who wishes or wants to reach that ISP's customers. So the question arises here whether such kind of zero-pricing structure needs to be preserved, or whether carriers needs to be allowed to charge termination fees and get engaged in other kind of practices that could led them to reach netizens.

The common idea that is germinated from the phrase "network neutrality" can't be perceived as a deeply envisaged policy decision, but as a consequence of how the Internet had evolved and how it spread. Today the net users claim that the prices demanded by the telcos and the ISPs must be dealt by banning the termination fees so as to bring some sort of subsidy to content creation & provision. Such kind of subsidy is essential for bringing marvellous and appreciable innovation to web industry and information technology as is experienced in the recent years.

7.2 IF SUBSIDY PROVIDES INNOVATION SHOULD ISPs STOP FIXING PRICE ON THEIR OWN

"No". This should not happen and so is not happening in the present scenario anyway. The netizens are charged by ISPs for Internet access and Data Downloading rather than for using particular or preferential sites as in the case of Cable TV Channels. However, there are certain instances in the past where ISPs had provided limited access to certain kind of specific content. So in such only that ISPs are questioned or challenged whether they have acted consciously or want to put some sort of enforcement to web usage. Henceforth, in the light of this, ISPs must need to understand that Internet is a intellectual and information right of each and every human so they are legitimate to fix appropriate fees for Content sharing, accessing and usage as per social optimum. They can't move away from the Web ethics of acting partially for or preferring any of the Internet carriers. It would be better if both ISPs and Internet carriers/content providers act together to make internet more innovative, informative and service oriented that could reach to each and every users across the world. And this could be taken as CSR (Corporate Social Responsibility) initiative by them.

VIII. CONCLUSION

This paper has highlighted the issue of net neutrality and has discussed in detail about its evolution, need, existing debate and a discussion on the potential benefit of the zero-pricing aspect of net neutrality in India and around world.

The argument of bringing people into a digital fold through zero rating and internet.org by circumventing high data cost is quite misleading. Those who want to benefit from zero pricing will have access to particular company sponsored content only, which is nothing more than the old proverb - 'half a loaf is better than no bread' argument. If Internet Service Providers are allowed to hike net content prices by manipulating internet traffic, the question arises what is to prohibit them from surcharging a handsome price from their web customers in future? Allowing established web-based companies to leverage their substantial consumer base and tie up with ISPs to dictate who should access what is a recipe for disaster. This is precisely why a stand in favour of net neutrality needs to be made now before those with deep pockets hijack the digital revolution and dreams of Digital World, killing the goose that laid golden eggs.

We as authors deeply feel the need for protecting and maintaining net neutrality- not only at present time or in near future but as long as Internet survives. We hereby suggest following need and urgency to protect and maintain net neutrality:

- i. There must be a collective effort among ISPs, telcos and governments of various nations across globe to upheld the Universal principles of net neutrality and free internet accessibility.
- ii. There is an urgent need to understand the unrestricted right of user for making conscious choice to access web content in face of net neutrality.
- iii. India is the fastest emerging IT nation of world which demands quick adoption of ICT-enabled models plus innovation in IT sector in order to drive the so called "digital revolution" in country.
- iv. Telecom service providers (TSPs) shouldn't be allowed to block/censor any web content; they shouldn't be allowed to curb lawful internet traffic in anyway; and they shouldn't be allowed to determine the way users want to use internet so as to ensure the survival of Internet and its innovation.
- v. There is urgent need to define standards for doing business on Internet so as to ensure innovation in Internet usage and accessibility for commercial purposes.
- vi. There is an urgent need to maintain Internet democracy where any scheme, services or

innovative idea must be enforced after consulting netizens.

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