

“Implications of Network Neutrality in the Light of Make in India Digital Drive”

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Abstract

Internet is everywhere, without it no organization can think of business in this fast moving world where survival of the fittest in the world market finds its niche with the delivery of not only right information to right person at right time and place but also the dissemination of information over the internet should be impartial i.e. Network Neutrality or Net Neutrality.^[1]

Network neutrality is the principle that all Internet traffic should be treated equally.^[2] According to Columbia Law School professor Tim Wu, the best way to explain network neutrality is as when designing a network: “that a public information network will end up being most useful if all content, sites, and platforms are treated equally.”^[3]

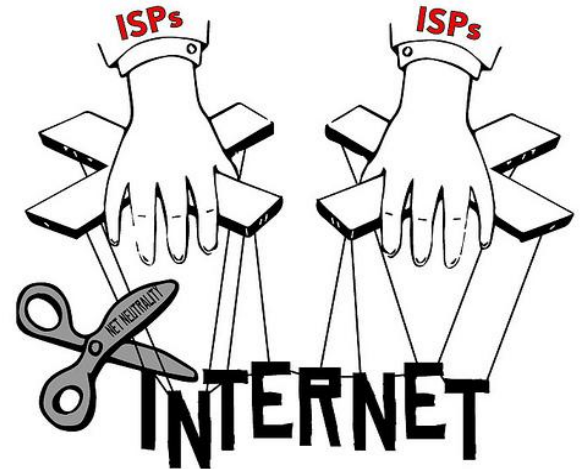
This paper discusses about the implications of the network neutrality in the light of the Make in India digital drive. In other words, the objective is to discuss whether the dream of making India, truly a digital India as part of Make in India project will be successful if all the internet service providers in India give their customers equal access to all lawful websites and services on the Internet, without giving priority to any website over another.

Keywords: Digital India, Net Neutrality, Make in India, Internet for all, Save the Internet

INTRODUCTION

Should the Net Be Neutral?

This very hot debate took its very first flight when a survey of operator practices in US was conducted in 2002.^[4] In that year, evidence of a discrimination problem became clear from several sources, including consumer complaints about operators who ban classes of applications or equipment, like servers, Virtual Private Networks, or Wi-Fi devices^[5], and in filings at the Federal Communications Commission by application developers.^[6] The survey advised that operators indeed had implemented significant contractual and architectural limits on certain classes of applications. Operators showed an unfortunate tendency to ban new or emerging applications or network attachments, like Wi-Fi devices or Virtual Private Networks, perhaps out of suspicion or an (often futile) interest in price discrimination. On the whole the evidence suggested that the operators were often pursuing legitimate goals, such as price discrimination and bandwidth management. The problem was the use of methods, like bans on certain forms of applications, which were likely to distort the market and the future of application development.^[7]



Global Threats to Net Neutrality

In the light of the foregoing facts and the possible threat to the Internet with regards to its unbiased use globally, many rules were made and adopted but the latest rules adopted by the Federal Communications Commission^[8] on February 26, 2015 – the FCC’s Open Internet rule gave strongest ground as far as legal foundations are concerned. The new rules will protect no matter how they access the internet-over mobile or desktop computer.

Few of the glimpses of above said rules^[9]

No Blocking:

Broadband providers may not block access to legal content, applications, services, or non-harmful devices.

No Throttling:

Broadband providers may not impair or degrade lawful Internet traffic on the basis of content, applications, services, or non-harmful devices.

No Paid Prioritization:

Broadband providers may not favor some lawful Internet traffic over other lawful traffic in exchange for consideration of any kind—in other words, no "fast lanes." This rule also bans ISPs from prioritizing content and services of their affiliates.

To ensure an open Internet now and in the future, the Open Internet rules also establish a legal standard for other broadband provider practices to ensure that they do not unreasonably interfere with or disadvantage consumers' access to the Internet. The rules build upon existing, strong transparency requirements. They ensure that broadband providers maintain the ability to manage the technical and engineering aspects of their networks. The legal framework used to support these rules also positions the Commission for the first time to be able to address issues that may arise in the exchange of traffic between mass-market broadband providers and other networks and services.

But policy makers in other regions of the world like Europe and India are on the track of making new rules that could threaten net neutrality. Few months back, the European Council, which is made up of the 28 national governments of European Union members, adopted a proposal that would allow telecom companies to charge Internet businesses like Google fees to deliver their content to the users faster as compared to smaller companies that could not afford to pay that preferential payment.

Net Neutrality: The Indian Ambience

The topic of "net neutrality" came to spotlight in India in December 2014 when Airtel, a mobile telephony service provider announced the additional charges for making voice calls from its network using apps like Whatsapp, Facebook, Skype etc^[10]. However, the issue of net neutrality started creeping in 2006 itself when TRAI published a paper on it by inviting opinions from stakeholders whether regulatory interventions are required or left to market force.^[11] Bharti Airtel's Director of Network Services, Jagbir Singh in July 2012, recommended that large Internet companies like Facebook and Google should contribute a part of their revenues to telecom companies. According to him, Internet companies were enjoying huge profits from small investments, whereas the telecom companies were actually investing in building networks. This move of Airtel faced harsh criticism on social networking sites due to which later on 29 December 2014, Airtel announced that it would not be implementing planned changes, pointing out that TRAI would be soon releasing a consultation paper on the issue.^[12] On 27 March 2015, TRAI released a consultation paper on over-the-top services (OTT) and net neutrality for public feedback.^{[13][14]} The last date for submission of comments was 24 April 2015 and TRAI received over a million emails.^[15] Another scheme that violates net neutrality is launching of Internet.org in India with Reliance Communications by Facebook in February 2015 that aims to provide free access to 38

websites through an app.^[16] To add to this list in April 2015, Airtel announced “Airtel zero” scheme under which if an app sign contract with them then Airtel will provide that app free of cost to its customer.^[17] Flipkart decided to join the scheme but again due to negative response from the public and being criticized for its action it pulled out its hand from this scheme. All these schemes time and again have breached the net neutrality in India.

LITERATURE REVIEW

Bruce M. Owen has enlightened in his paper on “The Net Neutrality Debate”^[18] that regulator and regulations have time and again been an obstacle in the path of technological innovation as it gives power to the present producers by preventing entry of new competitors, which in turn reduces incumbent’s own enticement to innovate. According to him, sad history of failure of attempts to regulate old AT&T under traditional utility regulation principle should be an eye opener for us that the “net neutrality” remedy is a cure far worse than the feared disease.

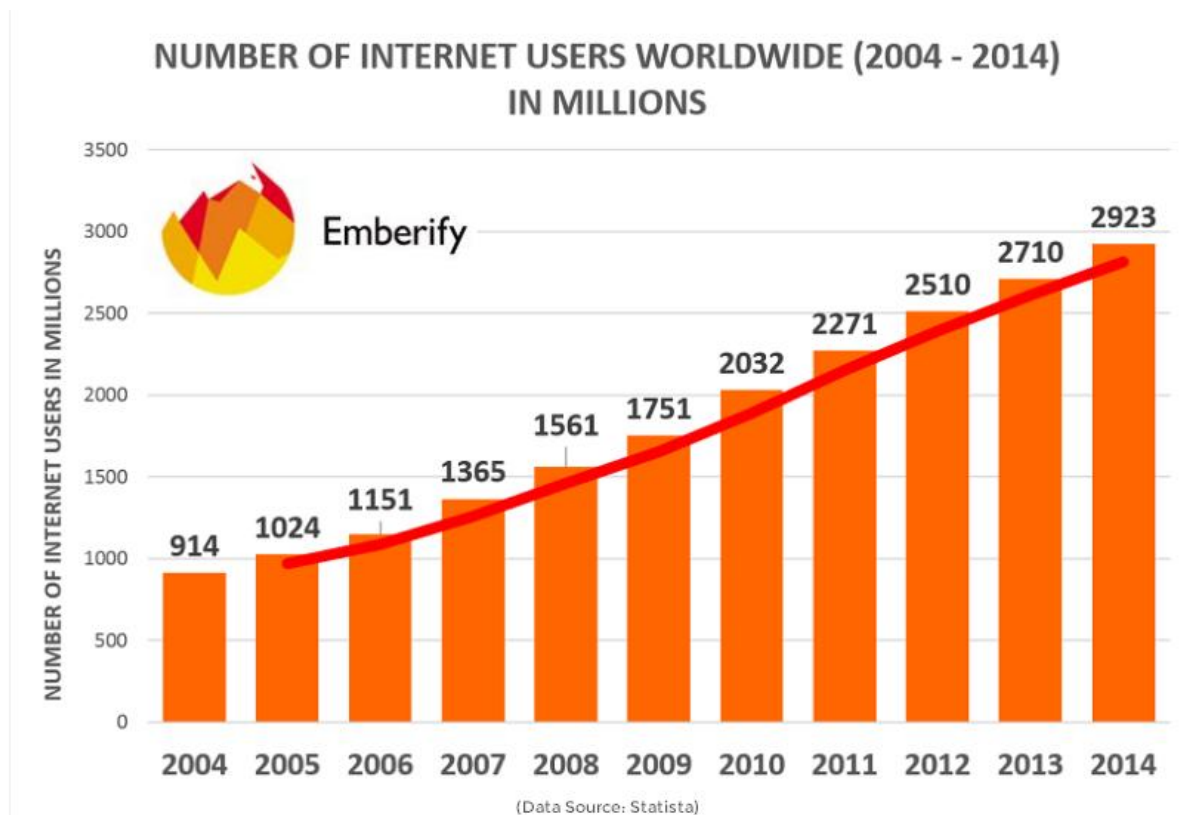
Robin S. Lee and Tim Wu in their paper on “Subsidizing Creativity through Network Design: Zero-Pricing and Net Neutrality”^[19] emphasized on the theory of two-sided market which suggests the de-facto ban on termination fees on the content providers by the Internet service Providers and hence supports the zero-pricing aspect of net neutrality. The theory of two-sided markets provides bedrock for the skyscraper building of new content and spurs innovation while avoiding crumbling of the Internet.

H.Kenneth Cheng, Hong Guop and Subhajyoti in the paper “The Debate on Net Neutrality: A Policy Perspective”^[20] found that if the net neutrality concept is removed the broadband service providers will be on the gaining side because they will be able to extract preferential fees from the content providers. Also, incentive to expand infrastructure capacity for broadband service provider under the umbrella of net neutrality are higher than the no neutrality regime as under net neutrality broadband service provider always invests in broadband infrastructure at socially optimum level but either under- or over-invests in infrastructure in absence of it.

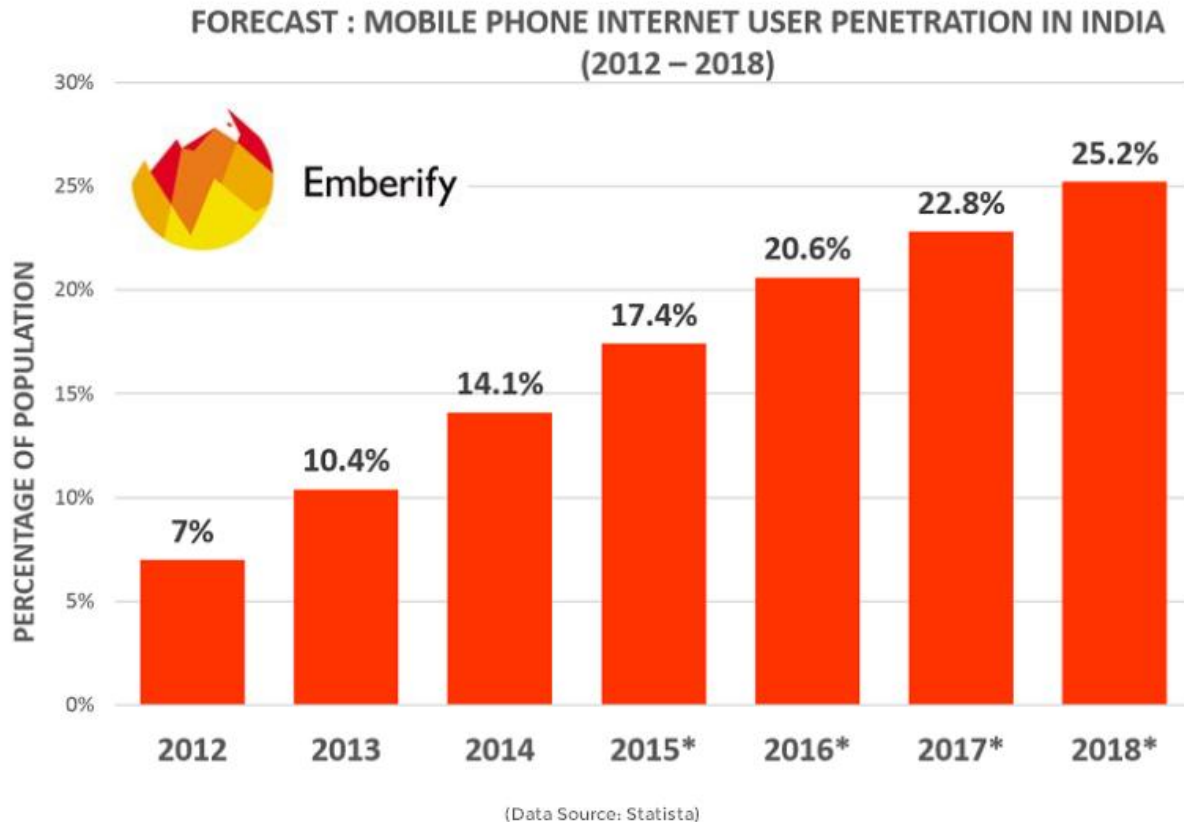
Not much research has been conducted in this so far because it is one of the latest issues that has come into limelight, thus having a great scope of further studies with the suggestions of its implementation and its impact over the Indian Economy.

NET NEUTRALITY: THE REAL STAKEHOLDERS**A threat to the Start-up Ecosystem**

Startups are taking India by storm and galvanizing the picture of India in global market. All this is because of the vast customer that they can pitch through the internet. Beauty of internet is that anyone with a computer and an internet connection can start his own business and reach the new heights in Business world. Firstly, the number of Internet users in the world is on a steady rise. If we look at the statistics from 2004 up to 2014, we see that the number of users has been growing at a tremendous pace. As of 2014, the number of Internet users worldwide stood at 2.92 billion people, up from 2.71 billion in 2013.^[21]



Shifting the focus to India now, where the topic of net neutrality is still trending, there's been a rise in the mobile phone Internet user penetration share. From a statistic of 7% in 2012, a figure of 14.1% was attained in just two years. It is projected that in 2015, 17.4% of the total population in India will use mobile Internet, and this number will grow to about 25.2% by 2018.^[21]



To sum it up, we can see that world is embracing internet like never before, which signifies its importance for the small business and start-ups to make their online presence vital. Without net neutrality all the innovation will take back seat and ideas will no longer be turned into reality resulting into crushed ambitions of millions of young entrepreneurs. Net Neutrality is of the utmost importance for small business owners, startups and entrepreneurs, who can simply launch their businesses online, advertise the products and sell them openly, without any discrimination on the basis of cost or speed. As India's vibrant entrepreneurial ecosystem is emerging, it would do well to understand the role of startups and create support for them to succeed with first and foremost requirement of providing them a fair playing field which is possible only through net neutrality.

A threat to Digital Marketing

Digital marketing is so powerful because the Internet has removed the middle man. Earlier, with traditional marketing medium; the evil media company was in the middle of the business owner and the customers. Business owners had to pay the media companies an advertising fee to reach the audience. The medias – TV, Radio, Newspaper and Magazines had access to the audience and they guarded it well. The Internet enabled

the business owner to reach the customer directly for free using content marketing or at a very low cost using Marketing. Now the middle man wants to come back. This time it is not the media companies but the ISPs who control access to the audience. They are going to set the rules. With such an ecosystem only the people who already have the money will be able to have the reach they want. A group of 3-4 people wanting to innovate from a small room in Bangalore cannot compete with the big giants. The playing field will not be level again. Without innovation from small timers, there is no competition. Without competition, there is no innovation in big companies. In the end, we will end up paying more for mediocre products and services and disruptive innovation which has been improving our lives will come to a grinding halt.

A threat to Digital India plan

Honorable Prime Minister Mr. Narendra Modi spoke extensively of his vision for Digital India, a program to transform India into digital empowered society and knowledge economy It would ensure that government services are available to citizens electronically. It would also bring in public accountability through directive delivery of government's services electronically. This will be for preparing the India for the knowledge based transformation and delivering good governance to citizens by synchronized engagement with both Central Government and State Government. Digital India's main objective is to provide an equal platform of opportunities and bringing citizens to same level by digitally connecting them and creating a digitally empowered society which can be possible only through unbiased internet.

The main ongoing highlights of Digital India campaign are:^[22]

1. The programme aims to widespread the use of internet to each nook and corner of India by providing the coverage to 2.5 lakh Gram panchayats by the end of December 2016 and by turning 1.5 lakh post offices into multi-service centers. At the same time, it will be ensured that 2.5 lakh schools get facilitated with the free wifi services and there are web-based platforms to encourage "2-way communication" between government and public.
2. Mobile coverage is being provided for 42,300 remote villages of India for supporting the ongoing effort of increasing network coverage in the country and to fill the gaps.
3. The era of "e-governance" is being introduced with this campaign by implementing methods like "online applications and tracking", "use of online repositories", "use of Payment gateway platforms" and using IT to automate different government processes and reduce paper work.
4. Other small projects under this campaign which are being run are wi-fi in universities, free wi-fi spots at tourist centers and in cities with population greater than 1 million,etc.

The question arises, is all this possible without net neutrality???

As we can see that for all these objectives of “Digital India” campaign internet is the prime requirement. And internet without net neutrality is handicapped in fulfilling the above goals. The net neutrality can only ensure the success of “Digital India” drive. If all the 2.5 lakh Gram panchayats have the internet provision but they have to pay the price for accessing websites on it then what’s the use of such facility made available to them??? We have to ensure net neutrality so that each and everyone should be able to get benefitted from the internet services and be able to freely explore the world of internet for his use. Almost all of the above have net neutrality as their backbone. Digital India campaign depends on “high-speed” internet for its success as it is the core utility with which National Telecom Policy 2012 envision providing affordable and reliable broadband on demand by 2015 and 175 million broadband connections by 2017. A web economy that will enhance affordability and increased access and delivery of multiple services at reduce cost is not possible without a neutral internet.

Conclusion

Technology, in both its evolutionary form and in its revolutionary form, has changed our lives drastically. India is on the path of development wherein with the campaign like Digital India its image is being projected as one of the emerging superpower country in the world. Today there is much excitement and expectation about the advent of Digital India—a major initiative of the government to transform the country into a digitally empowered society—which is centered on three key areas of digital infrastructure as a utility to every citizen, governance and services on demand, and digital empowerment of citizens. However, where are we today? Voice connectivity is only about 60% and data penetration far lower at about 20%. Digital India is closely connected to Net Neutrality. Net neutrality can only ensure the fulfillment of the dream of Digital India which aims taking India forward on the path of development. Net neutrality framework promotes and protects the innovation. In recent times, some of the products and services that have transformed the way we live, such as Tablets, smart phones, the Internet, social media etc., have been a result of revolutionary innovation. Innovation is the backbone of start-ups and they are in turn one of the major role player in the development of Indian Economy. Net neutrality will facilitate Digital India plan.

References

- [1] The term coined by Columbia University media law professor Tim Wu in 2003, as an extension of the longstanding concept of a common carrier.
- [2] Honan, Matthew (12 February 2008). "Inside Net Neutrality: Is your ISP filtering content?"
- [3] Wu, Tim. "Network Neutrality FAQ"
- [4] Wu, Tim (23 April 2005). "Network Neutrality, Broadband Discrimination"
- [5] Complaints about restrictions on broadband applications like filesharing applications or VPNs are common on discussion forums like DSL Reports. See, e.g., BROADBAND REPORTS, at <http://www.dslreports.com/forum/remark,3775421;mode=flat;root=sware> (July, 2002)- Retrieved June 07, 2015.
- [6] See Comments of the High Tech Broadband Coalition, In re: Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities (filed June 18, 2002), available at http://www.itic.org/policy/fcc_020618.pdf; see also FCC Ex Parte Letter, Aug. 22 2003, available at http://faculty.virginia.edu/timwu/wu_lessig_fcc.pdf.
- [7] Wu, Tim (23 April 2005). "Network Neutrality, Broadband Discrimination"
- [8] An independent U.S. government agency overseen by Congress, the commission is the United States' primary authority for communications law, regulation and technological innovation.
- [9] <https://www.fcc.gov/openinternet> Retrieved on June 08, 2015
- [10] "What Net Neutrality?". NDTV. 24 December 2014. Retrieved 24 December 2014.
- [11] "What is net neutrality and why it is important". The Times of India. 20 January 2014. Retrieved 29 September 2014.
- [12] "Airtel drops plans to charge extra for internet voice calls". The Hindu. 29 December 2014. Retrieved 1 January 2015.
- [13] "TRAI seeks views on net-neutrality". The Hindu. 27 March 2015. Retrieved 27 March 2015.
- [14] "Consultation Paper On Regulatory Framework for Over - the - top (OTT) services" (PDF). Telecom Regulatory Authority of India. 27 March 2015. Retrieved 27 March 2015.
- [15] "Trai publishes email IDs of netizens, site hacked". Deccan Chronicle. 28 April 2015. Retrieved 4 May 2015.
- [16] "Union minister Ravi Prasad tweets about net neutrality, says committee to look into matter". DNA India. 8 April 2015. Retrieved 8 April 2015.
- [17] "Airtel Zero: Another blow to net is net neutrality is only for airtel users..?/?neutrality". The Times of India. 6 April 2015. Retrieved 6 April 2015.

^[18]The Net Neutrality Debate: Twenty Five Years after United States v. AT&T and 120 Years after the Act to Regulate Commerce

Bruce M. Owen

^[19]Subsidizing Creativity through Network Design: Zero-Pricing and Net Neutrality Journal of Economic Perspectives—Volume 23, Number 3—Summer 2009—Pages 61–76

^[20] The Debate on Net Neutrality: A Policy Perspective Department of Decision and Information Sciences Warrington College of Business Administration University of Florida Gainesville, FL 32611-7169 U.S.A.

^[21]Net Neutrality and its Impact on Startups | Emberify Blog

^[22] <http://www.youthkiawaaz.com/>