

# Cost of Zero

April 16, 2015 at 5:46pm

Edit

The Internet:

The 21st century has welcomed a high tech revolution from the dawn of the silicon valley during the late 20th century - most of us were born at a time when Computer's were made ubiquitous out of the Silicon Valley startups only to carry on the baton further into what can be referred as the Internet Revolution. Subtly put what followed the Industrial Revolution of the yesteryears is something that created a lot of business sense to the venture capitalists that founded corporations in the United States of America by capitalizing on the idea called the world wide web (www) or what we all consider as The INTERNET. I want to dive a little bit into the history of what propelled the idea of the world wide web - mind you Internet was nascent at the time when I studied Computer Networks at my Engineering School. But interestingly the very first video I happened to watch and like on youtube was about the making of the Internet:

<https://www.youtube.com/watch?v=9hIQjrMHTv4&index=19&list=FL5YZc8YcS0KKgX3ITwAdlCg>

Indeed a game changer to our societies, especially for those who think out of their mind to create a concept and make it a reality. This was the technology that gave the buzz word "hi-tech" some sort of a kick starter. Sharing Time was a concept that attained fruition back in 1960's when Computers were programmed for multi tasking computations. The transmission of information was so human during that time when Computer networks overtook humans in the field of information delivery. The scientific, military and commercial approaches to this concept lead to the invention called the INTERNET using Computer Networks. This closely guarded Network Controlled Protocol later evolved to as Transmission Controlled Protocol (TCP) which became the all pervasive Internet Protocol (IP). What existed as transmission network within university campuses transformed globally through underground optic fibre and over ground satellite transmission hardware connections which forms the present day Internet TCP/IP hardware framework. The adoption of the infamous DSL modem hardware and then to wired broadband network, right around the time when I began to work for a high tech company:) is history. It was also a time when wireless internet was possible with the successful adoption of wi-fi enabled laptops that even today is helping me to draft this note in spite of a decade being over already.

Cost of FREE:

This virtual world of Internet - was the time when the buzz word "Netizen" started going circles as if people were belonging to a whole new global village - all made possible through standard pricing slabs offered to us by - Telephone Internet Service Providers (ISP). It was a fairy tale kind of a feeling whereby one had the information he/she requires at the click of a button on your laptop. Today it is possible to send e-mails, make Voice over IP phone calls, do online banking transactions, watch-upload-and share video streams, video chats, and even post reviews about the quality of those services and all of that has made us to believe in the freedom which we now take them for granted. Unlike any other revolution the world has witnessed, the Internet (or) the World Wide Web triggered a massive opportunity to provide and consume information by and to the people in an English speaking world. To top it all such services came for FREE - such as the likes of the Google Search, Yahoo Search, Hotmail, Yahoo Mail, etc to name the famous few. This was available to Netizens as a FREE service as long as one had an Internet Connection through the local ISP. The ISP's in India at the start of the 21st century were offered by both public and private listed Telephone companies. It was possible to access any website(URL) after paying a monthly fee to the respective ISP. An ecosystem was in the making with a lot of American Internet Service Companies namely Google, Yahoo, Youtube, Skype etc started to offer Internet services such as



Sriram Vaid

Notes by Sriram Vaid

All Notes

TAGGED

Edit



Embed Post

SPONSORED

Create Ad



On-demand Technology

[nextjuggernaut.com](http://nextjuggernaut.com)

Mapping the User Journey step by step for an on-demand technology platform.

1. E mails
2. Search for Information
3. VoIP / Video Chats
4. Online Video Streaming
5. GPS Maps with location services and coordinates

The commercialization of the Internet lead to the dot com bubble which eventually gave rise to some popular and FREE Internet Services like Hotmail, Yahoo Search, Yahoo Mail, Google Search, Gmail, Youtube, Skype, Vimeo, Netflix, Social Networking Sites like Facebook, Twitter etc. The Cost of FREE business model worked fantastic through tiered advertising revenues generated for these Internet Companies. It is undoubtedly the most innovative business model of the 21st century.

But how would one expect an Internet Service Company to earn profit and sustain just by giving away such service as FREE - In other words, what is the cost of FREE ? To the ordinary Netizen, the cost of paying his/her ISP to get access to Internet is the total cost that puts a burden to his/her wallet. Thats not quite true. While such services were provided to the Netizens, the Internet companies derived a lot of insight about the various details such as IP address from which the person is emailing, location address while accessing a map location, date and time stamps of the video transcripts that remain preserved in the archives of the privacy protected data center servers of that corporation. While it is true that all such information is encrypted it still remains to be in the archives of that private company and is accessible anytime upon request from the US Government, the ICANN - acronym for the Internet Corporation for Assigned Names and Numbers ([www.icann.org](http://www.icann.org)) was created on 18 September 1998 - head quartered in Los Angeles, California as a Non Profit Organization for charitable and public purposes. The ICANN remained under the direct influence of the US Department of Commerce until 2009. It can inferred that the ICANN operates strictly under the MoU that exists between the US government and this non profit body. The Internet is a market now and offered a potential business opportunity to those players who sought of it as the last man standing on earth. To this date there exists a widespread criticism to this governing body as it is the only one controlling the policies of the 21st century Internet from the US. Top Level Domains(TLD's) are determined by ICANN. The domain name .com (dot com) remains to be the Top Level Domain(TLD) in the Domain Name System of the Internet. Why? Because it is derived from the word "commercial" indicating that its original intended purpose was to promote commercial interests using the Internet. It was first implemented in 1985 and remained under the administration of US Department of Defense. But today it is operated by Verisign, More details can be found at:

<http://en.wikipedia.org/wiki/.com>

It is not very transparent to me how similar is the loading speed/latencies of TLD's that is different from a .com such as .org, .edu, .gov, .in and the likes ??? A clear case of DNS monopoly exists - and a typical argument to defend such monopoly would be to claim that by not having such a thing it would only lead to a fragmented Internet. Isn't the Internet already fragmented by capital rich global Internet corporations?

How could then one regard the World Wide Web often referred as the Internet to be operating on the principles of equality and neutrality? This is just one edge of our double edged sword.

Cost of ZERO:

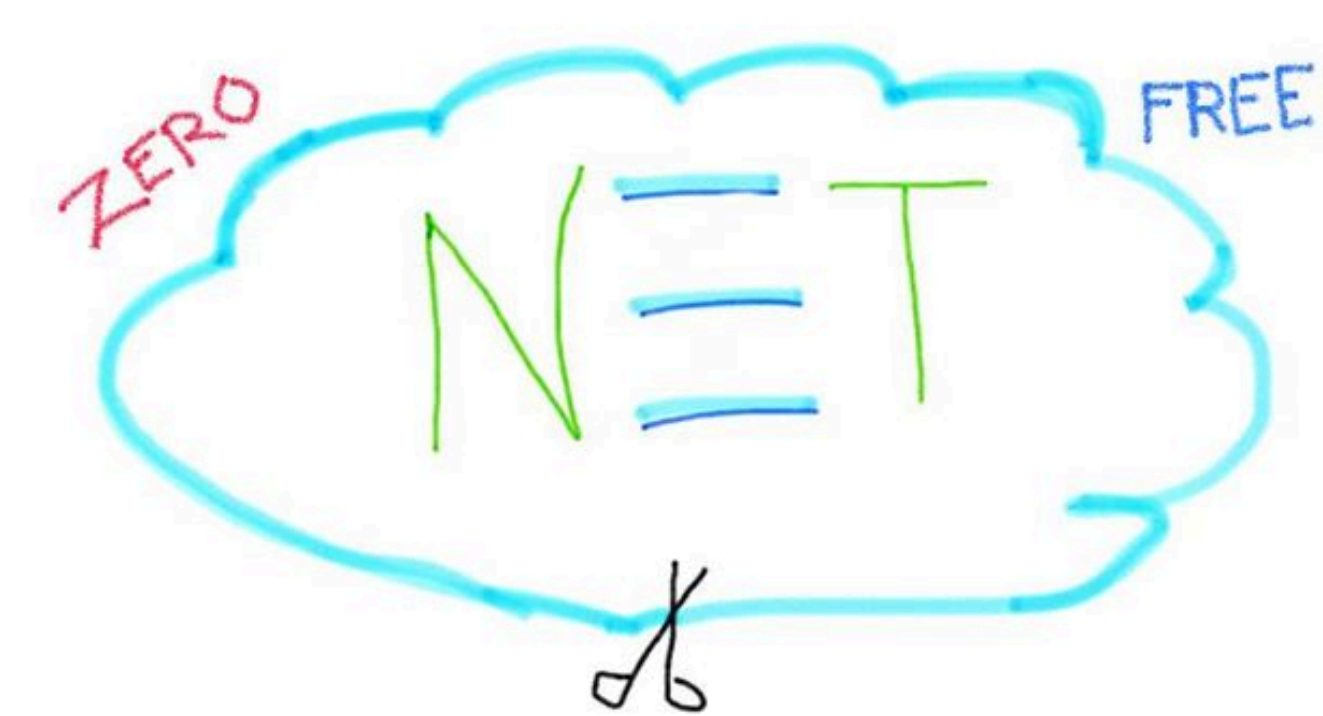
Equality is the state of being equal in status, rights and opportunities. But Neutrality is the state of not supporting or helping either side in a conflict [or] disagreement etc which could be possible only in the absence of decided views or opinions or expressions.

From the context of the Internet which is widely perceived by Netizens as the place to feel free and expressive, it can be argued while Net Equality still remains a wishful thinking based on the reasons mentioned above, Net Neutrality should be a given choice by default. That said, the adoption of smartphone based apps as a medium to make profits becomes the latest commercial trend set up by the ecosystem of Semiconductor Hardware Manufacturer,

Mobile Service Provider/Mobile Network Operator(MSP) and the Independent Software Vendor(ISV) [or] the APP Developer community. Now the ISP's become MSP's - WiFi Laptops/Ultrabooks become 3G/4G Smartphones - Software Applications become Mobile Apps:) The inclusiveness of this new mobile broadband ecosystem creates the data plan tariff race amongst different Mobile Service Providers (MSP's) - the list includes various Telecom companies. Clearly this pricing is done to offset the total cost of their investment/ownership in auctioning mobile spectrum bandwidth and so it becomes pertinent to note the difference in the understanding of an ISP business revenue model versus MSP business revenue model. Earlier during the inception of dot com bubble, ISP's grabbed the opportunity to offer access to Internet as a service by charging fixed monthly rentals and usage rates. This was helpful to them as it not only promoted their telephone businesses but also encouraged consumers to adapt to the Internet ecosystem. However with the successful penetration of wireless mobile broadband technologies (3G and 4G) along with the introduction of smartphone hardware and apps, the Mobile Service Provider is willing to go with Zero Rating - Why? Thats where the money is...

The reason (not rhetoric) behind Zero Rating is underpinned with the assumption that customers will have to rely only on mobile networks to access the Internet which is quite true in various developing countries - But this is not true in India as the access to Internet is a dual pronged approach either by using WiFi wireless broadband connections using ISP's or/and by using Mobile wireless broadband connections using 3G and 4G bandwidth services. This is the current scenario..Fragmentation/Balkanization of the Internet as it is referred is also technically feasible with the Zero Rating feature which clearly would only help money rich giving rise to a privileged class once again. Thus dividing the Internet on the basis of a closed, proprietary yet privileged would only result in Netizens becoming captives of a Corporate Lobby in the end - whether you call it FREE or ZERO.

Hence the Cost of ZERO makes a Case for Net Neutrality in India while the Cost of FREE makes a Case for Net Equality for the rest of the world.



Whose Net is it anyways?

Comment  Share

