A Digital India with E-Commerce Revolution in Rural India (Transform India Digitally and Economically)

A Anooja*
NIMS Institute of Management and Computer Science
NIMS University, Jaipur
*anooja_88@rediffmail.com

Abstract

E-Commerce is prospered and stands for booming growth in Rural India. Their success depends on the understanding of the market, quantity of consumers and offering various features. This paper gives an impact of digital India in the future of E-Commerce in Rural India; represent the various opportunities for vendors, consumers, E-Commerce Industries and factors influencing trust in rural Indians. We found that the Overall E-Commerce will increase drastically coming years in the emerging market. While rural area availability of internet or broadband is lower as compare to urban area but Government's dream project Digital India will control or fixed this gap which increases the mass of consumers for E-Commerce world through spreading business using social commerce (Facebook Commerce, Twitter Commerce), mobile commerce etc. with adopting Digital India project features like creation of digital infrastructure and digital literacy. Combination of E-Commerce and Digital India project make easier contact can be made to anywhere in the world in seconds. By online trading, businesses open themselves in global marketplace. Indians should call Digital India Vision or Digital Bharat Vision or Digital Hindustan Vision projects moving forward. This paper is concerned with current scenario of internet users in India, how government campaign "Digital India" can connect maximum number of rural Indians to all over the world through Internet and how E-Commerce Industries can convert this mass of rural Indians for trading.

Keywords: E-Commerce, Rural and Urban India, Digital, Internet Access, Government, Growth.

Introduction

Indians are born industrialists and India is one of the largest consumer markets in the world, but the quantity of consumer and vendor in India shows huge variation in terms of urban – rural consumer or vendor education level and facilities in rural area. According to "Bringing the internet to rural India's business community" by moska nazib Report Sachin Pilot, the minister of state for communications and information technology says "India is a country which has more than 600,000 villages and connecting these areas with internet broadband will have a paradigm shift." Very low bandwidth, Interrupted internet connectivity and low income are some reasons of poor Internet Access in rural area. Indian Government is trying to facilitate rural Indians through some ambitious campaigns like e-governance, digilocker, e-basta etc. Through internet India have good opportunity to achieve the better economic status and E-Commerce growth.

Digital India is one of the Indian governments Project which ensuring the government services are available to citizens electronically by reducing paperwork. And also includes connect rural areas with high-speed internet networks. Digital India Advisory group chaired by the Ministry of Communications and IT will monitor and control this scheme. Digital infrastructure for providing high speed secure Internet in rural area of India.
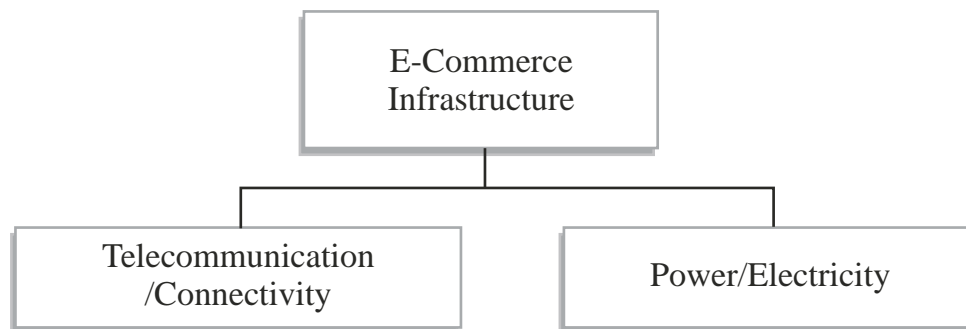
E-COMMERCE

E-Commerce or electronic commerce, deals with the purchasing and selling of Products and services over an electronic platform, mainly the internet. E-Commerce has various categories such as Business to Business (B2B), Business to Consumer (B2C), Consumer to Business (C2B) and Consumer to Consumer (C2C) (Source: E-commerce in India accelerating growth).

E-commerce is an ability to allow business to communicate and to perform transaction anytime and anyplace. The power of e-commerce allows geophysical barriers to vanish, making all consumers and businesses on earth potential customers and suppliers. eBay and Amazon E-Commerce companies are good example of e-commerce businesses are able to post their items and sell them around the Globe or world.

The E-Commerce sector growth was based on rapid technology adoption like increasing use of devices like smartphones and access to the internet via broadband, 3G, etc. which led to an increased online consumer base which helps to this growth.

Infrastructure: Figure 1 indicates broadly E-Commerce requires for connectivity- Telecommunication infrastructure and for Electricity- Power infrastructure. At present scenario shows rural area lacking from internet or connectivity facilities as well as Electricity.

Figure 1: E-Commerce Infrastructure

Emerging Technologies: There are five technologies (Roggio, Armando, Could These 5 Technologies Change Ecommerce? 2014) describes drastic change how, when, and why shoppers make e-shopping.
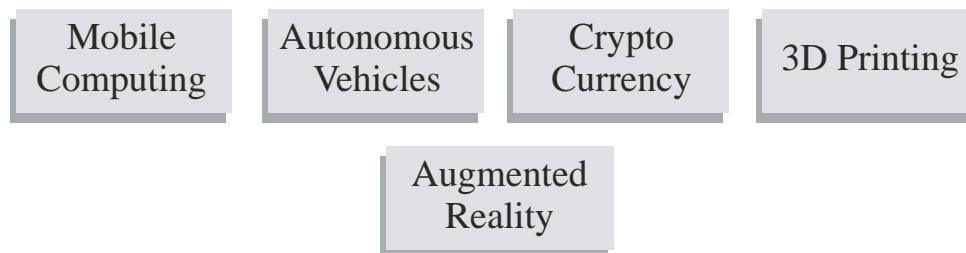
Figure 2: E-Commerce Technologies (Source: Armand Roggio, Armando, Could These 5 Technologies Change Ecommerce? 2014)

An E-Commerce company uses different ways to increase number of customers and vendors. IAMAI (Internet and Mobile Association of India) states that E-Commerce industry is fast raising, changes can be seen in year. The e-com sector in India has grown by 34% (CAGR) since 2009 to touch 16.4 billion USD

in 2014. The sector is expected in the range of 22 billion USD in 2015. With the new strategies of government business confidence has significantly improved.

ANALYTICAL STUDY OF INTERNET ACCESS SCENARIO:

Chart No. 1 indicates (Source: Internet users by country trends). However, in relation with its population, significantly low only 19% Indians use the internet but fast-growing internet population of 243 million in 2014 is an indicator of the sector's huge growth.

This indicates through the internet use in India the potential growth of the E-Commerce industry will also increase. It is evident that in absolute terms India's internet users are short by only 36 million as compared US and higher than Japan, Brazil and Russia.
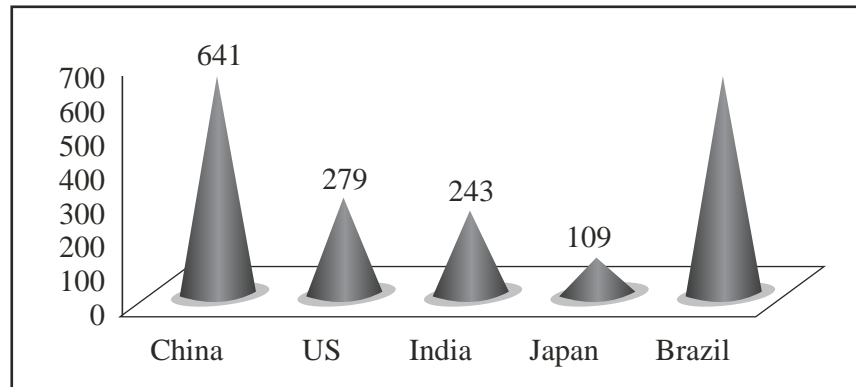

Chart No. 1: Top Five Countries of Internet Users (in Millions)

Source: http://www.internetlivestats.com/internet-users-by-country

Rural India has been playing a vital role in overall economic growth, social growth and E-Commerce growth of India. Globalization in information technology represents the success in this digital world. More than 69 % of the Indian lives in rural area, so the involvement of rural people may affect the growth of E-Commerce related industries.

E-Commerce industries have to apply various strategies to influence or attract the rural customers and to get benefits from a huge sized untapped market.

|	Aug-12	Aug-13	Aug-14	Aug-2015 (Est.)
▨ Rural	38	60	92	138
■ Urban	99	130	165	216
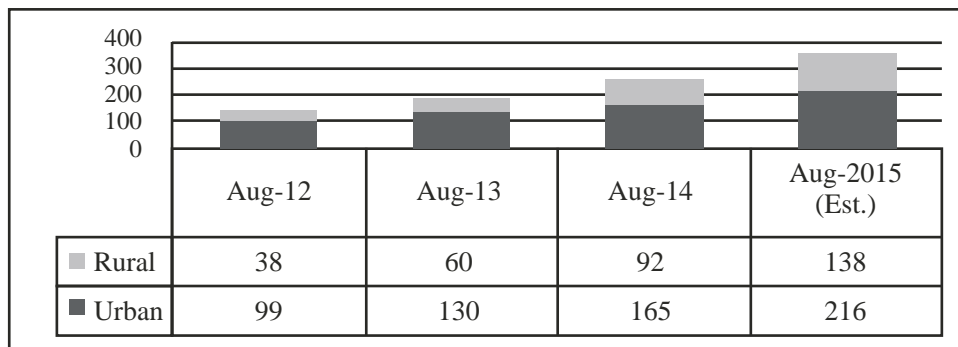
Chart No. 2: Distribution of internet users geographically in India (million)

E-commerce in India accelerating growth paper states healthy growth of rural Indian internet users are now increasingly accessing internet either on their mobile phones or computers. As per Chart No.2 it is

very clear the users of internet is going to enhanced significantly as compare to previous years it is a good sign for the E-Commerce in India.

E-COMMERCE INDUSTRIES DYNAMIC ALTERATIONS AND RURAL AREA OF INDIA

The rural areas are consuming a large number of industrial and urban manufactured products. E-Commerce industries would be reviewed and made alterations of their techniques or models. According to slide presentation on "Using E Commerce to Fuel Rural Growth in India" by Sohag Sarkar (www.slideshare.net) proposed 5-Star model:
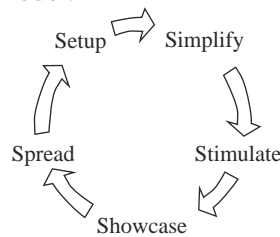
Figure 3: 5-Star Model

Industries have always been fascinated by rural India, but due to lack of internet access rural market not establishing properly. In last few years some big companies like ITC, Tata etc. shown their presence in rural areas to get advantage of big opportunity in E-Commerce. Rural India also grabs the benefits of this medium by providing Internet Facilities.

The article "snapdeals logs on rural India" in TOI (2014)] says E-Commerce companies already plans to tap into rural or slum areas in India like Dharavi in Mumbai and villages in Rajasthan and Haryana. Snap deal plans to set up approximate 5000 e-commerce kiosks across 70,000 rural areas in India. These kiosks will include PCs and tablets for people to go online and shop.

Snap deal has entered into a partnership with IndiVillage focusing on rural areas, to promote skill development and employment opportunities in rural communities. Mr Kunal Bahl Co-Founder and CEO of Snap deal believes that by tapping into the rural market, company will be able to get 50-100 million new customers in the next three years.

Snap deal isn't the only company looking to enter into India's rural market. Others like Amazon India, Flip kart etc. have been also proposed that the government should spread better internet connectivity in rural areas which would in turn boost and empower E-Commerce in these areas.

Google and Amazon have both industries been experimenting Figure 2 mentioned technologies providing same-day delivery services, 3D printing etc. Own 3D printers wish to buy downloadable designs etc. and same-day delivery trend is have a significant impact on Internet retailing or E-Commerce.

World of business becomes more digital. E-Commerce is becoming more popular, accessible and fastest growing retail Market and the internet as an efficient medium for buying products and services are driving E-Commerce growth. Digital Advertising will also become a reason for growth.

OTHER PORTALS/PROJECTS OR INITIATIVES

E-Choupal: E-Choupal is a business initiative by ITC Limited that provides Internet access to rural farmers also perform major role to make India digital. 6,500 E-Choupal centres across 40,000 villages has emerged as the gateway of leaving farms – wheat, rice, pulses, soya, maize, spices, coffee etc.

E-Seva: One stop- non-stop Government to citizen Services.

Taarahaat: E-Marketing for the rural Populace.

Gyandoot: Innovative and information kiosks in Rural area.

Drshtee: IT enabled services

E-COMMERCE AND DIGITAL INDIA (EMPOWERING INDIA THROUGH ONLINE MEDIA)

According to the Forrester global online population forecast for 2014 to 2019, in 2013, 206 million online users in India, nearly half are mobile-only Internet users. This number will only increase in the future as more people in rural India access Internet through their mobile devices first.

For implementation of the Figure 1 infrastructure, Figure 2 technologies and Figure 3 model rural India must have the facility of internet.

Digital India is a dream project of the government blessing for the citizens and Industries of India could help in connecting the various past and present projects to bring India to a global platform. Through this project government services are available for urban and rural citizens digitally or electronically. It will help to digital innovation and create positive impact in the people lives rural and urban. It will attract investment in all product manufacturing industries. Andhra Pradesh is the first State to have opted this implementation.

World's largest software maker Microsoft Corp. is willing to help government to convert the country through technological innovations. They will bring their marquee cloud services - Microsoft Azure, Dynamics and Office 365 starts local data centres in India. The Digital India project aims to transform our country into a digital economy with participation from rural or urban citizens and businesses. This will ensure that all government services and information are available anywhere, anytime, on any device that is easy-to-use, highly available and secured. Digital India Project removes digital gap between the rural and urban India.

As per the report of Suresh Venkatachari in Budget: Incentivise innovations to drive Digital India cost-effectively the Union Cabinet provide Rs.1 lakh crore to take it forward and complete by 2019, connecting the rural areas and bringing all under the same network. This programme is expected to provide Broadband services to 2.5 lakh villages and 4 lakh public internet access points. Mobile Phones are used as a backbone to make this program successful.

Rural area requires consumer or vendor understanding, product customization, relevant pricing, and innovative modes of advertising and promotion—increase consumption and open up new markets. Companies have to choose some innovative strategies that can influence the rural markets electronically. E-Commerce companies can attract rural Indians through mobile apps or website in regional or rural languages through Digital India Facilities. In 2013 only 5% of the E-Commerce transactions were made through a mobile device but today more than 13% of all E-Commerce transactions happen using mobiles ,which is not only develop convenience of customer but also building customer loyalty for various brands or products.

E-Commerce website provides Information directories with the list and sub headings of product and services to make it easy for serious information seeker to find the requirement of the customer and vendors. E-Commerce websites have to make payment modes easy as possible for customers for increasing conversions and sales. Through Digital India rural Indians will also make payment through either internet banking or mobile banking or debit card or cash on delivery easily.

Through Digital India Rural Citizens will enter in E-commerce world there they will get Global Market and Companies will get a lot of consumers and vendors. Two projects under digital India -MobileOne

projects helps to ticket booking services. E-Education helps to increase digital literacy projects helps to increase Consumers as well as vendors. E-Commerce is attracting customers from Tier 2 and 3 cities, where people have limited access to brands and internet but have high aspirations. According to E-Commerce companies, these cities have seen a 30% to 50% rise in transactions.

DIGITAL INDIA POWER TO EMPOWER- METHODOLOGY

According to report Digital India: for digitally empowered society and knowledge economy states [10] that Project uses some proven technologies like Cloud, Machine-to-Machine (M2M), Analytics, Mobile (web-based interface). Today, Indians live in an era of Smart Phones, Internet and social technologies and they are powered by cloud. Cloud Technique is to be promoted. The department of telecommunications C-DOT, launched broadband products developed for the Digital India initiative-

Ten states including Maharashtra, Madhya Prasad, Rajasthan, West Bengal, Haryana and Chhattisgarh, are ready to facilitate. Today, Indians live in an era of Smart Phones, Internet and social technologies and they are powered by cloud.

❖ Long Distance WI Fi systems have developed to extends Wi-Fi and IP connectivity to the remote parts of India in a less cost and power-efficient manner, and it's able to provide 100 Mbps broadband speed.

❖ The solar-powered Wi-Fi system operates in bands of 2.4 GHz and 5.8 GHz. It's specifically designed for outdoor environments where there is no guarantee for continuous power like in rural areas, hilly areas, highways and in tunnels. It can also be used as link for Wi-Fi hot spots, cellular base stations, ATMs etc.

❖ While the 100 GBPS OFC link will used for increasing demand of superior bandwidth, high speed and power efficiency.

❖ C-DOT's less expensive next generation network (NGN) solution used for changing telecom scenario and enables to make a smooth transition through time division multiplexing (TDM) technology to advanced Voice over Internet Protocol Telecom technology.

Digital India Pillars						
Broadband Highways	Public Internet Access	E-Kranti	E-Governance	IT Jobs	Electronic Manufacturing	Information For all

Figure 4: Pillars of digital India

Source: Come on India, it's time to make a digitally empowered Society: Digital India

When these initiatives Broadband highways, Public Internet Access, E-Kranti, E-Governance, IT Jobs, Electronic Manufacturing and Information for all (www.chaptersfrommylife.com) will reach the rural India, we will see a drastic modernity in our country. With the rise of Digital India tackling corruption is also going to be a lot easier.

SUPPORTERS OF VISION OF DIGITAL INDIA

❖ Intel-World's largest and highest valued semiconductor chip makers.

❖ Google, Nokia, Facebook and Microsoft are just few of the big companies supporting.

❖ According to vccircle article "reliance-industries-invest-39b-digital-space". Reliance Industries to invest \$ 39 B in digital space.During a launch of Digital India week, Mukesh Ambani has announced to invest over \$39 billion in the digital space, including wireless broadband infrastructure and manufacturing of mobiles, Aditya birla group (\$7 billion), Bharti Enterprises (\$16 billions), Delta (\$ 500 million) are also giving a promising note to make India digital.

❖ NIELIT has been undertaking various activities in Information and Communications Technology with snapdeal.

❖ Ravi Shankar Prasad awarded three states and 55 districts for essential contributions in digital India.

High speed internet shall be made available in all gram panchayats, digital identity, and government departments. It provides not only Easy access through common service centre within their locality but also Safe and secure cyber space in the country. Digital resources/services are available in Indian languages
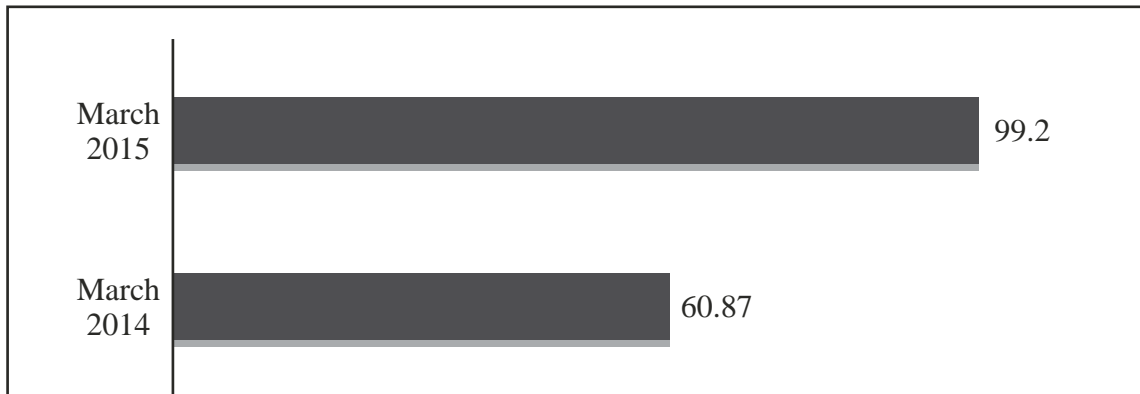
Chart No. 3 Broadband Users in million

Chart no 3 & 4-Telecom Ministry: Wrong Claims, Bad Maths and Digital India- Broadband users increase by 63% report state that through Digital India Mission growth rate Broadband users increase by 63% on one year.
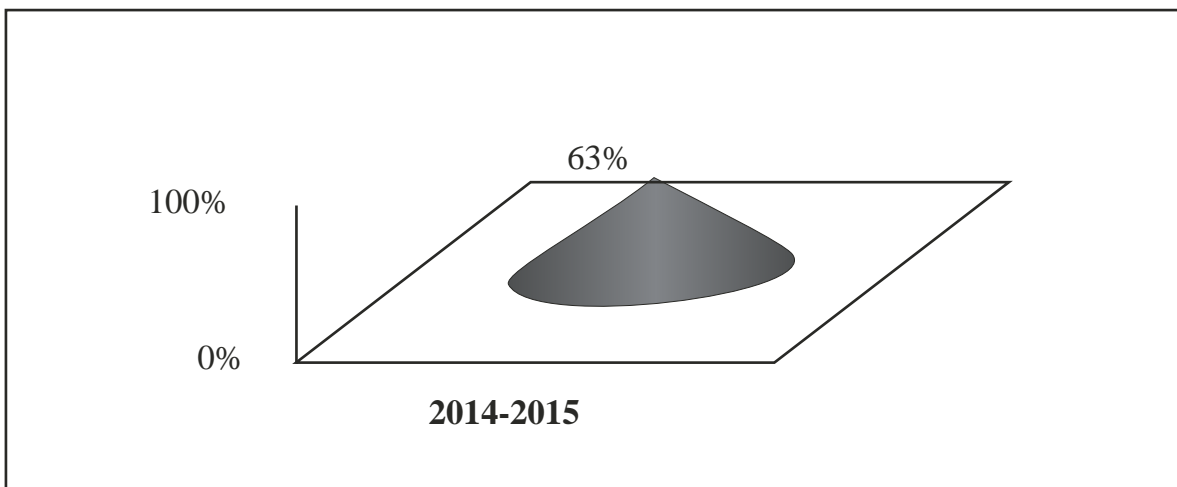
Chart No. 4 Growth Rate

DIGITAL FUTURE

Report of Serving India's Digital Consumer (2013) CII - AT Kearney White Paper on Serving India's Digital Consumer states some happenings in a digital India estimated by 2020-

- ❖ 600 Million Mobile Internet Users

- ❖ 200 Million Broadband Connected Devices

- ❖ 300 Million of users of instant messaging Services

- ❖ 900 Million monthly app downloads

- ❖ 80 Million annual m-commerce purchases

- ❖ 40%-50% Smartphone Penetration

CONCLUSION

The Digital India programme are looking promising and will revolute the E-Commerce sector through the internet and broadband to remote corners of India. It's not only increase trade, efficient warehousing and will also explore a huge market for product buying and selling. Most of the products consume and sold by rural citizens in local market that means the products may not get an effective price due to lack of demand for the products in the limited local market. Limited demand implies a low turnover resulting low income for the E-Commerce industries, as these consumers are not conscious of the quality.

To attract the mass of rural area E-Commerce Industries have to launch mobile apps to influence them as well as vendors for buying and selling products/Services through mobile internet. Rural Indians recognise the differences between the opportunities available to them through which they can aware about new products and services available in E-Market.

After implementing the dream Project "Digital India" India would become a very powerful in the digital world. Digital India Project innovate rural India and big revolution in E-Commerce world country wide; therefore they can interact with E-commerce industries easily. The entire scenario of India is changing through E-Commerce industries that should be brought to the international platform by achieving the Digital India Project, but this all depends on the success implementation of this Project otherwise it doomed to fall.

References

http://www.niticentral.com/category/infographics/page/2

http://www.bbc.com/news/business-13414762

http://blogs.forrester.com/jitender_miglani/14-08-06   amazon_india_and_flipkart_are_betting_big_on_india_ecommerce_growth

http://www.slideshare.net/ConfederationOfIndianIndustry/cii-at-serving-indias-digital-consumer.

https://musingsofjonty.wordpress.com/2015/03/30/come-on-india-its-time-to-make-a-digitally-empowered-society-digital-india

http://india.gov.in/spotlight/digital-india-digitally-empowered-society-and-knowledge-economy#tab=tab-1

https://en.wikipedia.org/wiki/E-Choupal

http://www.pwc.in/assets/pdfs/publications/2015/ecommerce-in-india-accelerating-growth.pdf

http://www.livemint.com/Home-Page/QgFspv8UzykQP99AukcSjI/Govt-launches-22-new-schemes-under-Digital-India-programme.html

http://www.internetlivestats.com/internet-users-by-country/

http://www.vccircle.com/news/telecom/2015/07/02/

http://www.practicalecommerce.com/articles/71645-Could-These-5-Technologies-Change-Ecommerce,

http://timesofindia.indiatimes.com/tech/tech-news/Snapdeal-logs-onto-rural India/articleshow/45142533.cms

http://factchecker.in/telecom-ministry-wrong-claims-bad-maths/

http://www.slideshare.net/sohagsarkar/using-e-commerce-to-fuel-rural-growth-in-india-by-sohag-sa

http://www.vccircle.com/byinvitation/2015/02/25/budget-incentivize-innovations-drive-digital-india-cost-effectively