



Role of Digital Revolution Strategy in Healthcare Sectors in India

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Abstract

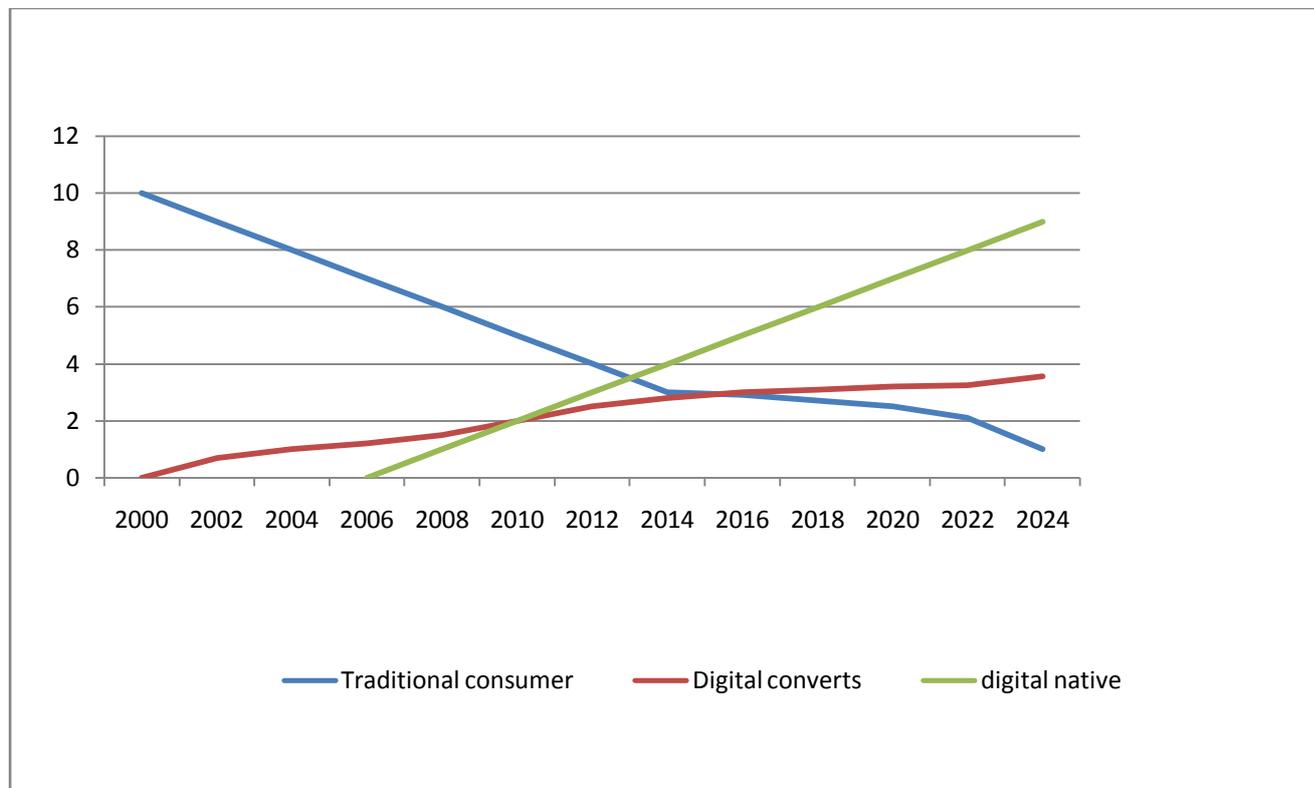
Nowadays for automating processes digital technology in health sector is very powerful for development. As a result, digital-oriented consumers have already outnumbered traditional consumers increased from 2014. Companies are also increasingly looking towards integrating the SMAC model (Social Mobile Analytics Cloud) and digital mindset. India is ranked 3rd among middle income economies in the global innovation index. The public sector's investment in the culture, through the startup India initiative, is adding to this interest. Because private sector has launched mobile application, adopted telemedicine, and setup innovation centers in India. Some new technologies that are gaining wider acceptance in Indian healthcare industry is discussed like- Study for big data, Smart cities, and electronic medical record.

Introduction

Digital technology seems to have clearly disrupted healthcare by changing the way care delivery model provide outcomes, harnessing data to drive decisions and automating processes so that they keep up with the pace of business. India's digital connectivity is expected to grow from 15% in 2014 to 80% access in 2034, with rural Internet users increasing by 58% annually. This trend can drive the adoption of telemedicine and other digital technologies, thereby increasing access to healthcare. With this growing digitally literate population, India has set the stage for the next wave of digital disruption and investments in healthcare in the world.

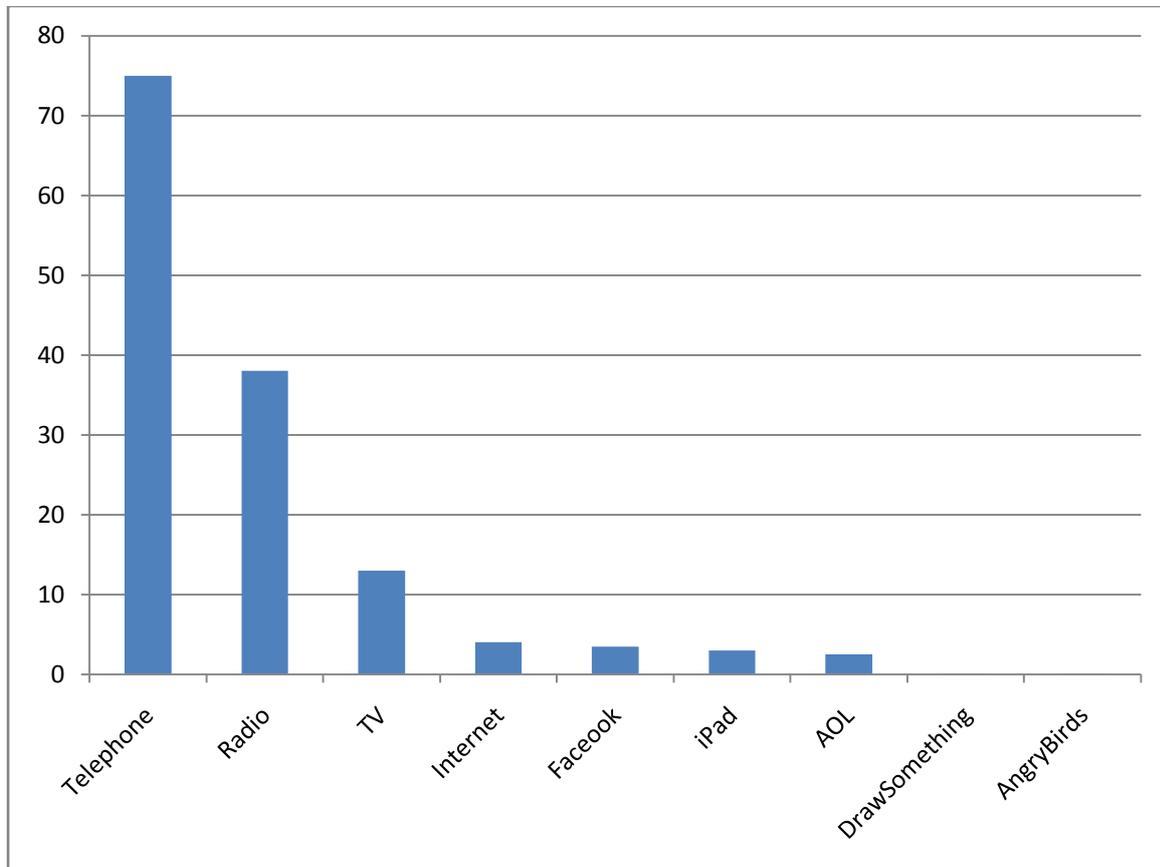
India is becoming increasingly more connected and is able to solve more and more complex societal problems through increased collaboration and information sharing. Technologies ranging from the most common Smartphone to clinical advancements in 3D printing have driven this trend and continue to evolve over time. As a result, digital-oriented consumers have already outnumbered traditional consumers as shown in graph below

Growth in the digital age

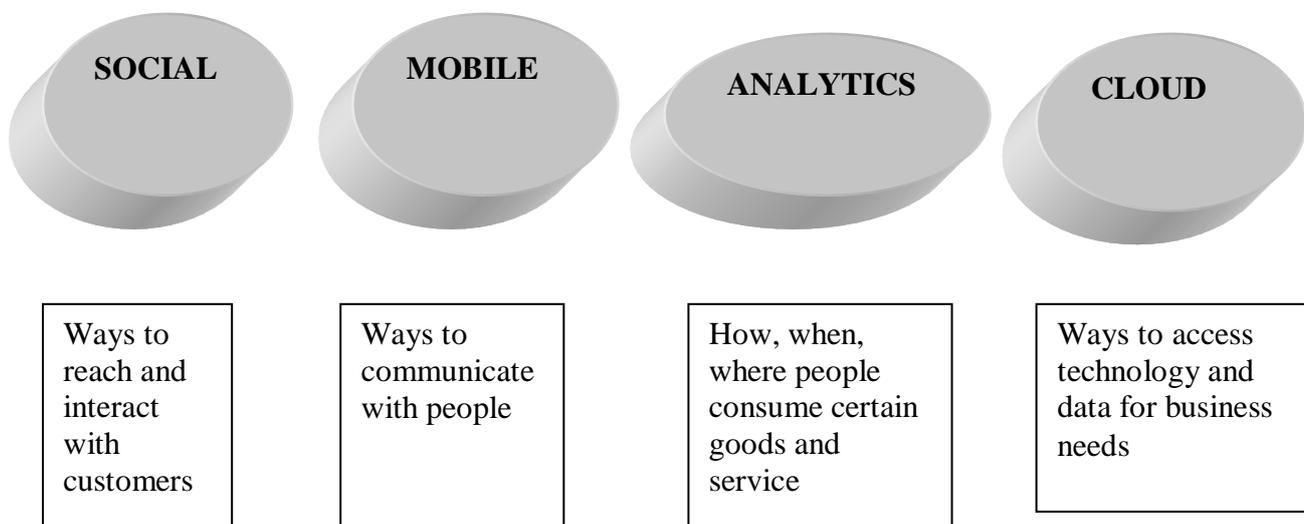


If we compare speed of adoption of technologies, it took the telephone 75years to reach 50 million users, whereas Face book achieved the same number of users in only 3.5 years.

Digitalization Adoption



As a result, even business models are changing. Companies are increasingly looking towards integrating the SMAC model and digital mindset, as this will enable them to uncover new value drivers.



Each of the SMAC components can be enhance consumer engagement with the company, but all components together can positively disrupt consumer engagement with the company. Indian health care's with its customers through a medium and input and stores the data from that interaction into the (cloud) and use an tool to derive insights for creating the right consumer offerings.

India health care system have many model, some of the major ones includes, like social media, wearables, mobile apps and big data also.

Digital adoption is being driven by, greater connectivity and collaboration, increased accessibility to information and services, personalization of products and services. Consumers expect companies to use these new business models and these digital technologies to provide a better overall customer experience.

Smart phone and Internet penetration are revolution for healthcare industry so India is witnessing this revolution. Some studies predict that India's Smartphone population will surpass that of the US in the next few years. In India mostly Peoples are using their Smartphone's with 2G/3G/4G technologies and broadband Internet to obtain basic necessities such as food and healthcare.

India is ranked 3rd among middle income economies in the Global Innovation Indians The public sector's investment in this culture, through the startup India initiative, is adding to this interest. Day by Day India's economy continues to expand, with GDP increasing at a CAGR of 3%, and GDP per capita set to rise to 2,054 USD by 2026 of the back of more economically stable population .Because India's growing population and economy clearly present tremendous opportunities for more digital integration, especially in the healthcare sector.

Healthcare in India is prime candidate for investment especially through digital interventions, and this trend is already picking up in this market India currently has the second largest CAGR in healthcare (11%) among all BRIC countries (China ranks first) Healthcare is one of the fastest growing industries and is expected to expand at a CAGR of 18.3 % during 2012-20 to reach 280 billion USD.

In India Digital technology adoption is already gaining prominence healthcare industry, with efforts from both the public and private sectors. The government has started many programs.

The private sector has launched mobile apps, adopted telemedicine, and set up innovation centers all around India, among other measures. These initiatives have been largely influenced by a rising number of digital health start-ups.

A digital strategy refers to the use of the convergence of multiple applications to disrupt business processes and ensure enhanced and sustainable access to service for all. Such a strategy can be applies in healthcare. Technology is not the solution itself; rather, it enables the development of

healthcare solution. Improved patient care and provide growth. Some of the most widely discussed digital technologies that are being used to create healthcare solutions in India are

M-health by mobile

M-health is probably one of the largest sectors within digital healthcare in India, with an estimated market size of 2,083 crore INR in 2015 which is set to rise to 5184 crore INR by 2020 Acceptance of m health is increasing simultaneously. A study showed that 68% of doctrines is emerging markets recommend m health and 59% of patients are already using it. Mobile apps, especially those connecting doctors to patients and enabling remote consultations are major segment within free healthcare

India's remote healthcare delivery market was estimated at 7.5 million USD in 2011 and as expected to grow at a CAGR of 20%. These products help increase access to healthcare for remote and rural population's developments

A wireless health monitor that measures blood pressure , oxygen saturation, pulse , body temperature , blood sugar , blood cholesterol and total hemoglobin count with a mobile application on your Smartphone.

Telemedicine

Telemedicine is the use of technology for remote diagnosis, monitoring and education. Now telemedicine is usually categorized under remote diagnosis, the size of its market in India allows us to consider it as an independent segments India's telemedicine market was valued at 100 million USDD in 2011 and is expected to grow by over four times by the end of 2016. Telemedicine has helped bring down provider and patient costs as well as provide care in the most remote areas. As the figure below shows, India is ahead of the curve on the global scale

In India top providing hospitals have integrated telemedicine capabilities , and one is working with the central governments to open 60000 telemedicine centers similar capabilities are being seen on the public side for example the Karnataka State Telemedicine Networks Project with ISRO and medical institution side tale healthcare activities at the sanjay Gandhi postgraduate Institute of Medical Science , Lucknow.

Digital and Social Connectivity

Now social connectivity is an upcoming trend. Social media is prominent in India, with the average person spending 25% of his/her time on social networking sites, courtesy of improved telecom infrastructure. In healthcare specifically, this has been in the form of patient support communicates and knowledge portals on the patient side. On the provider side, this has prompted the emergence of digital chatter platforms where medical professionals share knowledge and ask for help. There are

also communication technologies that help connect doctors around the world for both a second opinion and training.

Wearable

Now day's wearable's in healthcare were devices that could track diet and fitness activity and were known to improve diet and exercise outcomes. Now, wearable's are being increasingly used to measure basic health parameters such as heart rate. The overall healthcare wearable's market in India is currently valued at 30 crore INR and is expected to increase in value as wearable technology is beginning to expand. Example: there is a wristwatch that acts as a personal emergency response system and relays medical and GPS data to remote serve.

While the above technologies have a relatively concrete foundation in India, some of the technologies that are gaining wider acceptance in Indian healthcare industry are discussed below:

1. Study for big data:-

Big data is slowly entering the Indian healthcare landscape. Different healthcare players are now realizing the value of combining consumers insights and internal company data to inform and optimize their product offering, and are accordingly increasing investments in the necessary tools. In this was the healthcare system can pull consumers towards them and share these insights to work with other players in the space

2. Smart cities: Cities have begun to use technology to enhance the use of resources within existing infrastructure.

3. Electronic medical records (EMR):- EMRs are beginning to be adopted by healthcare providers. This digitization has paved the way for advanced IT systems, such as health information system and cloud computing to increase remote and ubiquitous accessibility to patient data. This should help reduce medical errors and improve health outcomes.

Conclusion:- In this system continuous innovation are under way in following areas-like,1-Bringing your own device for healthcare providers to managers their patient data.

2- Owing a disease for a comprehensive solution to management and possibly a cure for a disease.

Increasing innovation is leading to the growth of digital and healthcare partnerships between the public and private sector, including the set-up of mobile medical units and partnerships between the Indian governments and international players.

References

1. National Commission on Macroeconomics and Health. Report of the National Commission on Macroeconomics and Health 2005. MOHFW, GOI. 2005
2. Planning Commission. Eleventh Five year plan (2007-2012) Planning Commission, GOI New Delhi.
3. Government of Tamil Nadu; Social Welfare and Nutritious Meal Programme Department. [Last cited on 2010 Aug 10]. Available from: <http://www.tn.gov.in/gosdb/deptorders.php> .
4. The Mahatma Gandhi National Rural Employment Guarantee Act; Ministry of rural Development, Government of India. [Last cited on 2010 Aug 10]. Available from: <http://nrega.nic.in/netnrega/home.aspx> .
5. Ministry of Health and Family Welfare, Government of India, New Delhi. National Population Policy. 2000
6. National Action Plan on Climate Change. Prime Minister's Council on Climate Change, Government of India, New Delhi. 2008
7. PwC. (2015). The healthcare agenda: Stakeholder collaboration for the way forward. Retrieved from [https://www.pwc.in/assets/](https://www.pwc.in/assets/Pdfs/publications/2015/the-healthcare-agenda.pdf)
8. Pdfs/publications/2015/the-healthcare-agenda.pdf
9. PwC. (2014). Emerging health: Paths for growth. Retrieved from [https://www.pwc.com/gx/en/healthcare/mhealth/assets/pwcemerging-](https://www.pwc.com/gx/en/healthcare/mhealth/assets/pwcemerging-mhealth-full.pdf)
10. mhealth-full.pdf
11. Sunday Guardian Live. (June 2016). 'Future of health apps in good shape, say doctors'. Retrieved from <http://www.sundayguardianlive.com/news/5255-future-health-apps-good-shape-say-doctors>
12. PwC analysis
13. PwC. (2015). The healthcare agenda: Stakeholder collaboration for the way forward. Retrieved from <https://www.pwc.in/assets/pdfs/publications/2015/the-healthcare-agenda.pdf>