

Mass Customization of Healthcare: Mapping Trends in Digitization of Healthcare Industry

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Abstract

The rising use of technology and internet has unlocked a new potential for the digital healthcare industry to create new pathways to reach out to the masses. Social media which is in its nascent stage is gaining a lot of importance in healthcare because of its ability to reach millions of people on a single platform at a low cost. In order to leverage social media for reaching millions of people, digital healthcare sector is utilizing these online platforms for offering healthcare services at patient's doorstep.

This study presents an understanding about the role and use of digital technologies in the Indian healthcare industry and also explains the role of social media networks in promoting the services of the digital healthcare industry.

83 users of social media located in Hyderabad were surveyed about the awareness, usage and willingness to use digital healthcare services and few experts who belong to the digital healthcare ecosystem were interviewed about the role of social media in their business. The interviews were conducted using snowball sampling and the survey was conducted using convenience sampling methods. An analysis of secondary data helped in mapping the ecosystem of the digital healthcare sector.

Introduction:

India is one of the fastest growing economies in the world and its healthcare expenditure has doubled by 15%. The Indian healthcare sector has become one of the largest in terms of both

revenue and employment. The major instrumental factors for attracting Foreign Direct Investments (FDI) into Indian healthcare industry are cost advantages, high demand for digital healthcare services and Government policies and support for business activities (Press Trust of India, 2013). Both the public and private healthcare players are increasing their ventures both in rural as well as in urban areas.

There is a need for more penetration in this sector given the fact that India is one of the largest countries in terms of population consisting of people varying in terms of ethnicity and culture. According to the Indian demographic index by 2020, the majority of the population will be people belonging to the working class and fall under age group of 29 (Riley, 2016). In order to serve this varied population, there needs to be shift in the outlook towards healthcare delivery (Juneja, 2014). In the recent times there have been rapid developments in the healthcare industry due to drivers such as greater access to healthcare facilities through digitalization, growing awareness about personal healthcare and fitness and rising income levels of the people. Digital healthcare would be a great catalyst in bringing about a radical change in the healthcare industry, revolutionising the sector to a greater extent in India. The digital health players provide a unique healthcare experience to all the people in the world. (Sathe,2016). By connecting healthcare providers with consumers, digital healthcare players are assuring the society of being able to facilitate the healthcare industry players in an improved manner. Leveraging on internet and technology, these digital health players also have the advantage of increasing patient engagement levels, improving service deliveries and in controlling costs. While creating convenience and affordability, digital healthcare players are also able to provide quality healthcare services to all. Offering a range of services below one roof, these health players are integrating all the healthcare services under a single destination. Also the growing shift towards an app- focussed environment is facilitating many healthcare providers to alter their healthcare delivery. All over the world in the year 2015, the digital health start- ups attracted \$5.8 billion.

Services starting from booking doctor appointments online or through call, getting lab tests done at home, booking homecare services which range from physiotherapy and nursing to ICU and chemotherapy facilities at home to getting medicines delivered at home, consulting for second opinions from medical experts through online consultations and discovering the nearest fitness and well-ness firms in local areas. Specialised healthcare apps are aiding patients to keep a track

of their calorie intake, note and record daily activities, store medical health records and also predicting future health issues. These mobile healthcare apps are not only empowering patients' to be independent in terms of personal health but are also increasing access to healthcare facilities. Healthcare providers are also able to increase footfalls and retain their patients by using mobile health applications.

Digital healthcare players store the medical information of every patient and send personalized health updates, reminders about medicines and doctor appointments to them. Patients are able to utilize these services just by instantly messaging the doctor at any time and from any place. They can as well even communicate with the doctor through a video call from any place; they are able to gain more personal attention and keep a track on their health with their doctor's guidance. In this way health care is being monitored and improvised by utilising the services of digital healthcare players. In this respect, social media can be an important channel the masses.

Social media sites connect billions of people together on one platform and enable people to exchange information at any time and from any part of the world. According to the global digital snapshot (Kemp, 2016), the total population of the world is 7.395 billion people and among them social media users are 2.307 billion. Among the total users population 1.968 billion people are active on social media sites through mobile phones. People tend to seek others views when they feel a prerequisite for an expert advice before taking a decision. According to a recent study done by Jamid Ul Islam (2014), Indians depend heavily on word of mouth before visiting any hospital or a clinic. So for a person to visit a particular hospital largely depends upon word of mouth and the opinions given by his friends or family members. This is because the healthcare industry in India is a referral market and consumers generally prefer the opinions of others first before choosing a particular healthcare provider.

By understanding these needs and requirements of consumers, healthcare providers are embracing social media networks to increase footfalls in the hospital or clinic in order to retain patients. They are striving towards increasing brand visibility and brand loyalty. Hospitals and local clinics are trying to position themselves in such a way that patients without a second thought would turn up to their hospital for any kind of a medical problem. For such a kind of positioning, healthcare providers must understand the role of word of mouth and opinion

leadership. There by healthcare provides are waking up to these facts and are investing huge amount of funds in managing online activities.

Therefore considering all these factors, the Indian healthcare industry can tap to make a tremendous leap in the way healthcare services are being provided to all the people. Owing to the developments in technology, doctors and physicians working in hospitals and clinics can provide medical advice from any location. By means of outsourcing their marketing efforts, these healthcare providers can create a better positioning statement and increase their brand visibility.

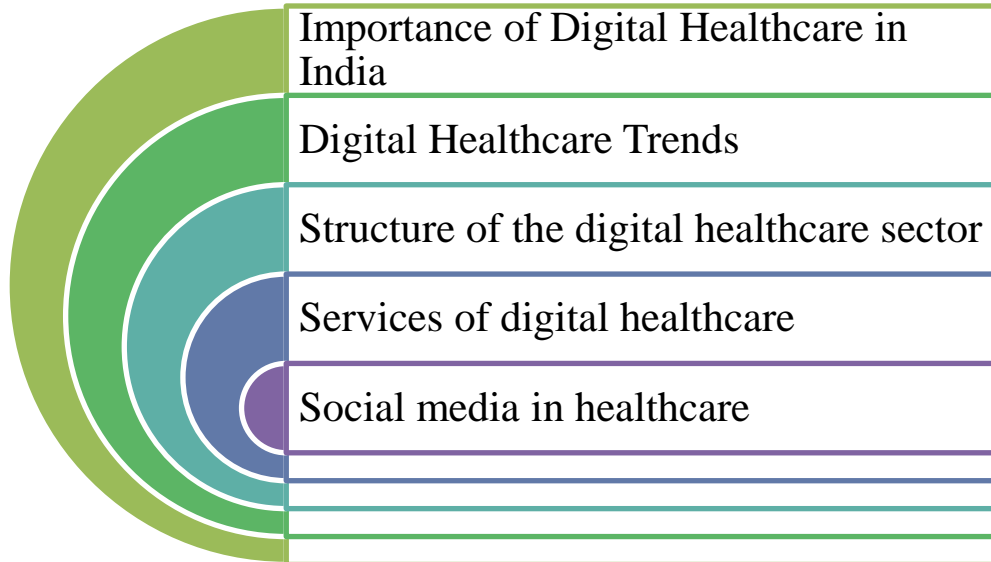
Review of literature:

Gap analysis

A lot of studies have been done separately about Indian healthcare industry adopting technology but very few studies have been done about digital healthcare being a game changer in the Indian healthcare industry. Studies have been done separately about the importance and the growth of the digital healthcare industry, but the entire digital healthcare industry's mapping has not been done. Considering the contribution of the current studies, gap has been found in this area of study, therefore I have chosen to pursue my research in this topic.

The digital healthcare landscape has been transformed worldwide. The approaches of healthcare delivery have been altered by the entry of digital technologies which have broadened the scope of healthcare industry. They have come up with solutions which provide a systematic and improved quality care. Due to scattered presence of various healthcare stakeholders such as hospitals, diagnostic centres, pharmacies, fitness and wellness firms etc., the digital healthcare industry has put in efforts to converge these players under one single platform. By using mobile applications and telemedicine patients can now access healthcare information and facilities from any part of the world. The digital healthcare players are integrating various healthcare stakeholders on one platform to make it easy for the consumer to access all the healthcare services at a single destination (Nuffield Trust, 2016).

Figure 1.1. Conceptual Framework



Importance of Digital Healthcare in India:

Under the global benchmarks, Indian healthcare falls way far below the benchmarked rank. According to WHO, in 2012 due to poor health and diseases almost 9.8 million people were dead. In terms of the number of childbirth deaths and deaths of children below five years of age, India leads the world in this number. India is ranked 11 among 190 countries in terms of healthcare parameters. Currently with the growing ageing population and encountered medical needs, India has a huge market potential. Also due to shortage of government funds and just 4% of GDP being spent on healthcare industry, the industry has been facing a crisis in terms of providing quality healthcare facilities to the people of the highest populated country in the world (Parik, 2016). In India 70% of the population lives in the rural areas and 80% of the healthcare infrastructure is present in urban areas. Many doctors who have been educated medicine in urban areas prefer to continue their medical practice in urban areas and those doctors who have come from the rural areas prefer to move to cities for better opportunities. Also due to limited funding from the Government, many people are not able to gain access to quality healthcare in their own local areas. In such a scenario digital healthcare can provide solutions to a large number of populations. The major challenges have become the opportunities for the emergence of digital healthcare services. Using internet, mobile, social media and data analytics patients can gain the benefits of quality healthcare services from any place and at any time (Healthcare in India, 2015)

In the coming years the Indian healthcare industry is going to increase in its market size to USD 280 Billion by 2020.

Few of the major growth opportunities in this sector are as follows:

- Progressive demographics
- Rising disposable incomes
- Growing incidence of lifestyle diseases
- Developing middle class and growing healthcare consumption
- Dissemination of health insurance
- Increasing investments from PE funds
- Heterogeneous delivery models
- Increasing travel advantages for medical value etc.

Digital Healthcare Trends:

Maneesh Juneja, a Digital Health Futurist said the following words about digital healthcare,

There is a great deal of optimism in Digital Health, but also considerable uncertainty, confusion and suspicion with regard to if and when the convergence of emerging technologies will actually make a difference, not just for patients, but for everyone involved in improving human health. It's important that we focus on science driven innovation, but we also need to rethink how we validate new products & services within Digital Health. Many leaders in health & social care desire innovation, but only on their terms and conditions, which is a mind-set that could impact Digital Health initiatives. The next 10 years promises to be a time of transition, turmoil and turbulence where some of the innovators of today may become the dinosaurs of tomorrow. One of the signs of success for me in Digital Health will be the growing emergence of patients as innovators. The pace of change will only quicken, and I'm excited to be part of a global community that wants to impact the lives of 7.4 billion people. (onalytica.com, 2016)

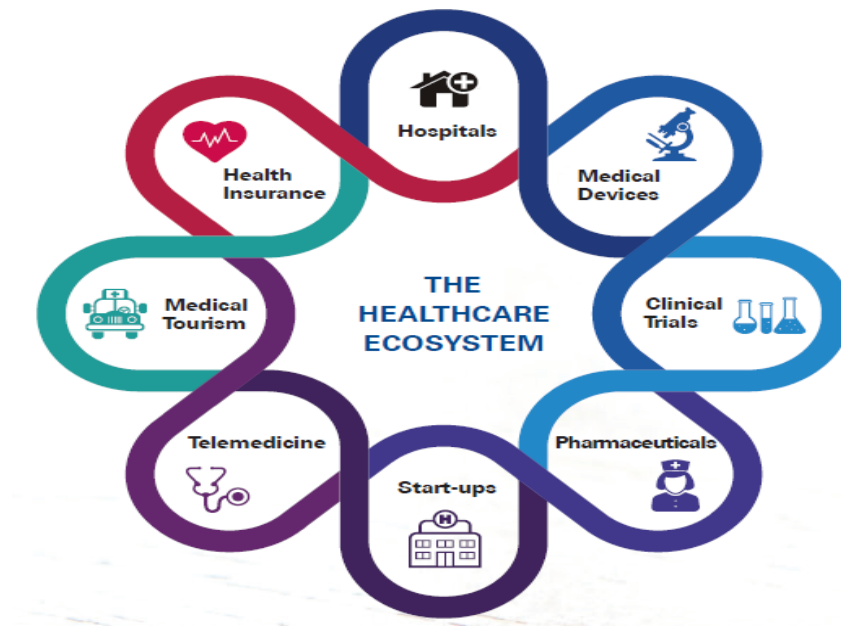
Changing in the consumer preferences, market conditions, economic and political conditions are the major factors impacting the operations of healthcare industry. Consumers now prefer checking their bank accounts, purchasing movie tickets, shop apparels, food, groceries etc.

through their mobile phones. In order to gain cost advantages, greater efficiencies and stakeholders support many companies are now integrating both backward and forward. Economic conditions are changing dynamically due to changes in the government regulations and banking policies. Political conditions alter the business environment and the operations of the industry. Several such macro factors keep altering the way businesses operate. In such a background the digital healthcare industry which is creating a revolution all over the world is expanding itself with technological advancements and innovations. The recent drivers which are impacting the digital healthcare industry are due to advancements in technology and innovation. Sensors and wearables, mobile health applications, gamification, big data analytics and social media are the drivers altering the healthcare industry.

Structure of digital healthcare sector:

The players of the healthcare industry in India traditionally had been limited to hospitals, private clinics, pharmaceuticals, diagnostic centres, fitness and wellness firms. But now with the advent of digital connectivity the entire healthcare ecosystem has been transformed. The approach towards healthcare has been altered due to technological advancement. The new healthcare ecosystem consists of not just these five players but also consists of medical devices, clinical trials, medical tourism, telemedicine and start-ups. The picture given below shows the current healthcare ecosystem.

Figure 1.2: Healthcare Ecosystem



Source: (KPMG, 2016)

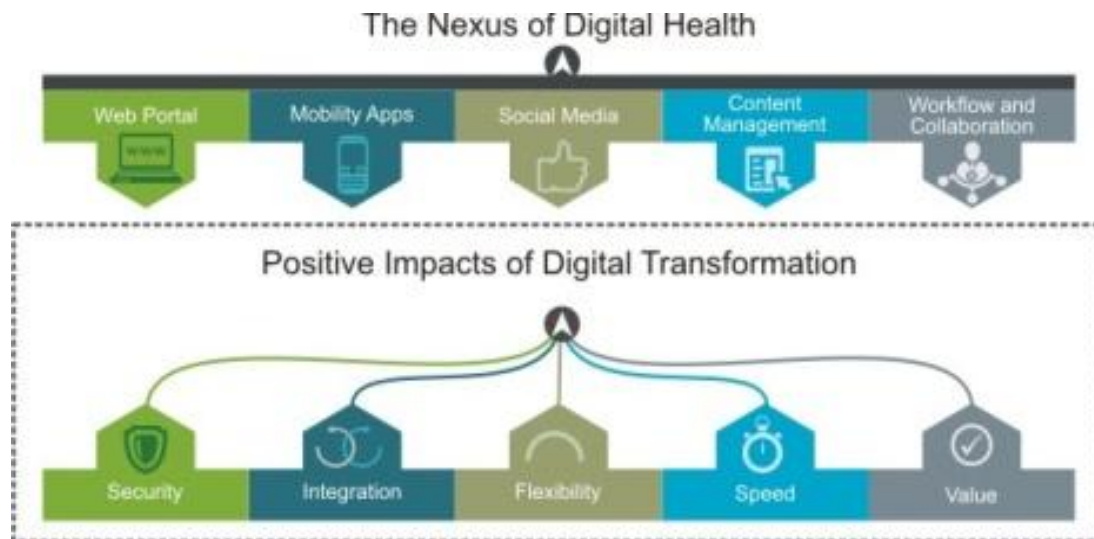
The entry of digitization has brought in a lot of changes in the industry. In order to provide affordable healthcare facilities to all the people, new healthcare players have emerged. The digital era has brought in new innovations that have improved the connectivity between doctors and patients. The demand for home healthcare services are raising and many start-ups are venturing into this market to gain their share. Telemedicine which works through telephonic services serves to provide quick and easy access to doctors and hospitals. Healthcare providers are leveraging lessons and best practices of e-commerce players to know the ways in which they can attract and retain patients. With the help of data analytics, they are managing maintenance of patient details for storage as well as for predicting future health issues. Utilizing the growing opportunities of app-based environment, healthcare providers are reaching to the doorsteps of patients. At the same time consumers too are positively responding to technological advancements which are creating more access, convenience at affordable prices (Michael Huskins, 2014). Patient care is being digitized and many health start-ups have come up with various healthcare services in the recent times. According to a research done by Deloitte, the market value of the Indian healthcare industry is expected to rise to \$280 billion from \$100 billion at 23% CAGR. A significant adoption of medicine e-commerce, telemedicine and

electronic health records are likely to play an important role in the growth of this sector (livemint.com, 2016). These have enhanced the capabilities of the digital healthcare sector in providing better services to its customers.

Services of the digital healthcare sector

The Indian healthcare ecosystem has been impacted by the digital healthcare trends and the outcomes anticipated due to this massive digital wave are enabling healthcare providers to provide quicker and superior healthcare benefits to consumers. They are able to create value by integrating all the healthcare services on one digital platform and are ensuring high data security of consumer's medical information by maintaining confidentiality.

Figure 1.3: The Nexus Digital Health



Source: (ITC Infotech, 2016)

Consumers are being provided with various digital healthcare services such as online booking of appointments, monitoring of health and personal care by using mobile health applications, accessing to doctors and hospitals through mobile phones, using wellness related apps to stay updated about being healthy, predicting health related problems through reports available from data analytics, using wearable devices lets the patient understand his calorie intake, the number of miles he/she walked, heart rate of the patient and also the glucose levels present in the body and also medicines and treatment costs available online lets a patient take informed decisions about healthcare.

The fundamental objectives for many companies to use social media sites are for increasing brand awareness, building community, for improving customer engagement levels, for generating leads, for recruitment and for getting direct feedback from customers (Gowda, 2015).

Currently with the increasing importance of social media worldwide, healthcare is incorporating social media in its grasp to provide better access and convenience to all its healthcare stakeholders. Healthcare stakeholders here refer to all the players playing a crucial in the current healthcare sector. This provides hospitals a great opportunity to improve the overall healthcare experience. In order to understand what kind of information patients look for on social media sites, hospitals can make their presence on these platforms and answer their queries. Creating access to minimum health care facilities to all is the long term goal of Indian healthcare industry. Along with the technological advancements in the field of medicine, use of internet and social media is considerably increasing. Social networking sites such as Facebook have revolutionized healthcare interactions between hospitals and patients. Twitter, Google, YouTube, LinkedIn and other major social media networks are playing a very vital role in providing healthcare information.

Research Methodology:

Objectives of the study:

- To know the degree of consumer awareness about healthcare players through social media networks.

- To understand the usage patterns of consumers using social media networks to access services of healthcare players.
- To map the offerings of players in the healthcare sector in Hyderabad.
- To analyze the market opportunities in the healthcare sector.

Research Design and Implementation:

The research undertaken is an exploratory study as very few studies have been done in this area. For the course of this research, mixed methodology has been adopted, which involves both qualitative and quantitative type of data. The qualitative data has been collected from secondary data which includes mapping the service offerings of digital healthcare players existing in Hyderabad, Telangana. Three expert interviews have also been collected from the digital healthcare segment, who have been adept in using social media marketing for their respective companies. The quantitative data has been collected from a survey conducted on social media users who belonged to Hyderabad. The demographics considered for the survey were gender and age. The survey was conducted to understand the consumer awareness and usage of healthcare services through social media. Descriptive statistics was used to understand the frequency of social media sites preferred by consumers in accessing healthcare information. Various other variables such as the awareness about digital healthcare services, usage patterns for preferring digital healthcare services and the post- usage behaviour of users of social media accessing digital healthcare services.

Findings and Discussions:

The key findings of the study state that there are several driving forces that are impacting the digital healthcare sector in India. The secondary data reveals that the players in the digital healthcare sector offer multiple services to consumers. Some digital healthcare players exhibit diversification by offering multiple service lines while some others exhibit depth by offering multiple services under one line of service. They mainly use the digital and social media platforms such as Google Search, Facebook and YouTube to reach them. While the findings from the consumer survey reveal that though the majority of the consumers use similar online platforms for accessing healthcare services, the awareness among them about digital healthcare services is quite less.

Discussion:

The Three P Model

In order to understand the broader perspective of the exploratory study, data was collected from consumer survey, secondary data and interviews. The findings of the study are triangulated and analysed using a three P's model which has been adopted from an Infosys report(2015) on Digital Healthcare Ecosystem. The original model has been modified slightly for the sake of convenience for the study.

Figure 1.4.: Three P's model



Providers

The first P in the three P model refers to “Providers” of digital healthcare services. These providers offer digital healthcare services by integrating the healthcare ecosystem both vertically and horizontally so that it facilitates in unifying the physical and virtual space with the support of data analytics in a harmonious way. The findings from the secondary data reveal that there are several digital healthcare aggregators who offer multiple services on a single online platform. Certain specialised in-home healthcare service providers offer a wide range of services at the consumers door step and they are classified under multiple service providers while the other companies who offer two or one specialised services are classified under dual and single service providers respectively. In order to reach out to the target market these healthcare companies like many other companies are leveraging on social media networks. Irrespective of age, almost everybody is present on social media sites. Infact according to a study by emarketer (2013), by 2017 it is estimated that 2.33 billion people will use social networking sites and Indian users would increase by 37.4%.

With this escalating growth in using social media sites, many digital healthcare aggregators are adopting social media marketing strategies for increasing their brand visibility and customer

engagement. In this regard data was collected about few of the popular digital and social media activities undertaken by few digital healthcare companies operating in Hyderabad, Telangana. Their digital and social media activities focussed on educating consumers and increasing brand awareness. In order to dive deep into the subject matter, five personal interviews were taken from various executives belonging to different healthcare concerns. The interviews were conducted in order to understand the various digital and social media marketing strategies adopted by these companies.

The data revealed by these companies was that there is a rising usage of digital marketing and social media marketing in healthcare industry. As the industry is considered to be a referral market, consumers preferred to seek suggestions and check reviews given by patients on social media networks before selecting services of a healthcare provider. Online platforms are used majorly by these healthcare providers because they aid them in reaching a wider audience at low cost. Only by a few clicks and a post, these companies state that they are able to directly get in touch with the final consumers. Majority of the these companies targeted customers who belonged to the age group of 21 to 27 because they were considered to have high disposable income, are willing to spend money, are internet savvy, are mobile internet users and are easy to reach on social media sites. So, for increasing brand awareness and customer engagement, these healthcare companies have adopted digital and social media marketing techniques in order to micro- target customers belonging to various demographics. To gain visibility, the most widely used online platforms for advertising healthcare services are Google ad words, Facebook, YouTube, LinkedIn and Twitter.

Patients

The second P in the three P model refers to “Patients” who are demanding digital healthcare services at their doorsteps. In order to understand the awareness and usage of accessing healthcare services through social media sites, a consumer survey was conducted. The total number of respondents were 83 and among them 67 respondents belonged to the age group of 20- 30 while the other remaining respondents belonged to age group above 30. The findings from the survey stated that a majority of the consumers belonging to the 20-30 age group use Google Search and Facebook on a frequent basis (daily) to access healthcare information for five main purposes: increasing knowledge, self-care, exchange of advice, social support and for doctor-

patient communication. The secondary data and interviews on the other hand reveal that healthcare providers, in concurrence to the consumer group, use YouTube in addition to Google search and Facebook to promote their service offerings. In regard to awareness and usage of digital healthcare services, consumers were asked about four digital healthcare services in particular-

- Booking appointments
- Online blood donation registrations
- Diagnostics tests at home
- Expert opinions (refers to online consultation with medical experts)

In particular only these four services were considered for the study because as per the secondary data analysis, majority of the healthcare providers offered these four services the most and under in-home healthcare services, diagnostics test at home is the commonly offered service. So, in reference to these digital healthcare services, few of the consumers stated that they were aware of booking appointments online but were less aware of other services and others who are aware and have used these services, stated that they were satisfied with these services in terms of ease in usage, privacy concerns and saving of time and cost. They also stated that they are willing to repeat using these services. With specific reference to the awareness and use of electronic health records, majority of consumers stated that they were unaware of digitizing health records and preferred to use physical files for storing their medical records. In order to understand the rising dependence on online reviews and ratings, majority of the consumers were asked if they check online reviews given by patients about healthcare providers on social media sites. For this majority of the consumers stated that they do check and also stated that they are a little less willing to provide feedback to healthcare service providers. So, in this regard healthcare providers need to actively engage themselves and maintain more transparency on social media sites in order to encourage timely feedback from customers. Also in regard to rating a doctor, consumers stated that they would rate a doctor based on the service, fee charged, infrastructural facilities of the clinic or hospital in which the doctor practice, medical qualifications possessed by the doctor and on the follow-up done by the doctor. Among these parameters, service provided by the doctor is considered the highest while rating doctors.

An analysis of the findings from the consumers' survey seen with the secondary data and interviews lead to the following suggestions for healthcare providers with regard to using digital and social media platforms for promoting their services:

Healthcare providers need to post more healthcare information frequently on Google Search, Facebook and YouTube as they are considered to be the most preferred and reliable social media sites for accessing healthcare information and services.

The survey revealed that various purposes for which consumers use social media networks for accessing healthcare information:

- 41.4% of them stated for increasing knowledge about healthcare
- 38% of them stated for self-care
- 37% for exchanging medical advice
- 34.1% for social support and
- 31.3% for doctor- patient communication

So in order to grab the interest of consumers, healthcare providers can post information relating to consumers interests.

With specific reference to promoting digital healthcare services, only few consumers are aware of digital health care services such as booking appointments, online blood donation registrations etc. And those who have used these services are satisfied and are willing to use such online healthcare services. Therefore health care providers need to advertise more about online blood donation registrations, diagnostic tests at home and expert opinions (refers to online medical expert consultation) on digital and social media platforms in order to enable customers to use digital healthcare services.

Consumers have less awareness about digitizing health records and prefer to store their prescriptions in physical files. So in order to increase awareness, healthcare providers need to educate consumers about the benefits of electronic health records.

In order to build and maintain healthy relationships with consumers, healthcare providers need to respond immediately to consumer feedback on social media sites as majority of the consumers

stated that they feel hesitant to provide feedback to providers because of delayed responses but do check the reviews given by other consumers who have availed the services.

Consumers stated that they would rate a doctor based on the service, fee charged, infrastructural facilities of the clinic or hospital in which the doctor practice, medical qualifications possessed by the doctor and on the follow- up done by the doctor. Therefore, healthcare providers need to ensure that their doctor services are in accordance with consumer expectations.

Out of the 83 respondents, only 21 gave varied kinds of opinion regarding the healthcare information they require from healthcare providers for making better choices. A word cloud that depicts these suggestions as is given in figure 5.15 are listed below

- Authorized and authentic information about healthcare
- About doctor timings
- Simple ailments
- Health tips
- Common tips
- Alternative and emergency medicines
- Alternative therapies, first-aid education
- Share success stories and rates
- Send push notifications
- Daily reminders for regular monitoring
- Use social media
- Offer customized health insurance packages
- Maintain security issues
- Less fund raising campaigns

Push-Factors

The third P in the three P model refers to “Push- factors”.The information in the literature review reveals that the digital era has brought in new opportunities and challenges for the Indian healthcare industry. The concept of digital healthcare has come into picture due to the changing environmental conditions and the major trends driving the growth of digital healthcare

worldwide are big data analytics, artificial intelligence, sensors and wearable technology, genomics and social media. By leveraging these push-factors healthcare aggregators are able to offer a wide range of services starting from door deliveries to monitoring health and fitness on an hourly basis on a single mobile internet platform. The push factors have facilitated the integration of the physical and virtual spaces and have created the convenience of accessing all the healthcare services under one digital platform. These trends have enabled the market to bring new offerings like by using sensors and wearable devices, healthcare providers can predict patient's health risks way in advance even before a doctor's advice. In regard to this, a recent article published by Infosys article (2015) clearly gives a clear working of how few of these push- factors such as big data here is being used by the digital healthcare providers in providing preventive healthcare to consumers. The article states about how the present healthcare system which works on a curative model identifies a particular patient's health problem only after he or she gets a symptom or falls ill and diagnosis is done only after visiting a doctor. While the digital healthcare sector has brought in wearable devices, sensors and data analytics which in advance predict patients health and also provide an alternative solution for patients. The scenario of preventive healthcare can be suited a situation like this:

“Imagine a patient is having a busy week at work and he can feel that throbbing headache and uneasiness in the chest, but chooses to ignore. But an hour later, the patient gets a call from his personal caregiver, explaining the gravity of the situation and requests him to visit the physician urgently.”(Jain et al., 2015)

Figure 1.5.: Digital Healthcare Process

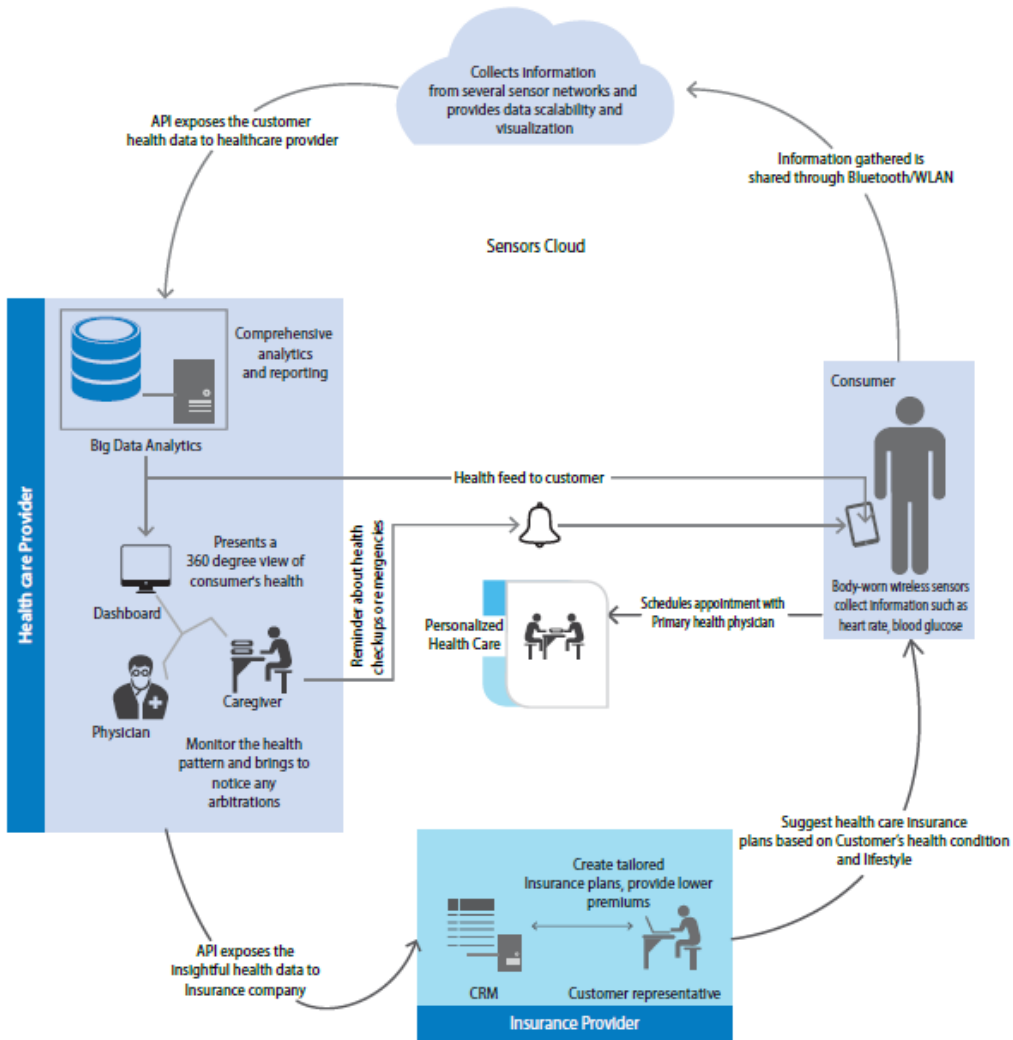
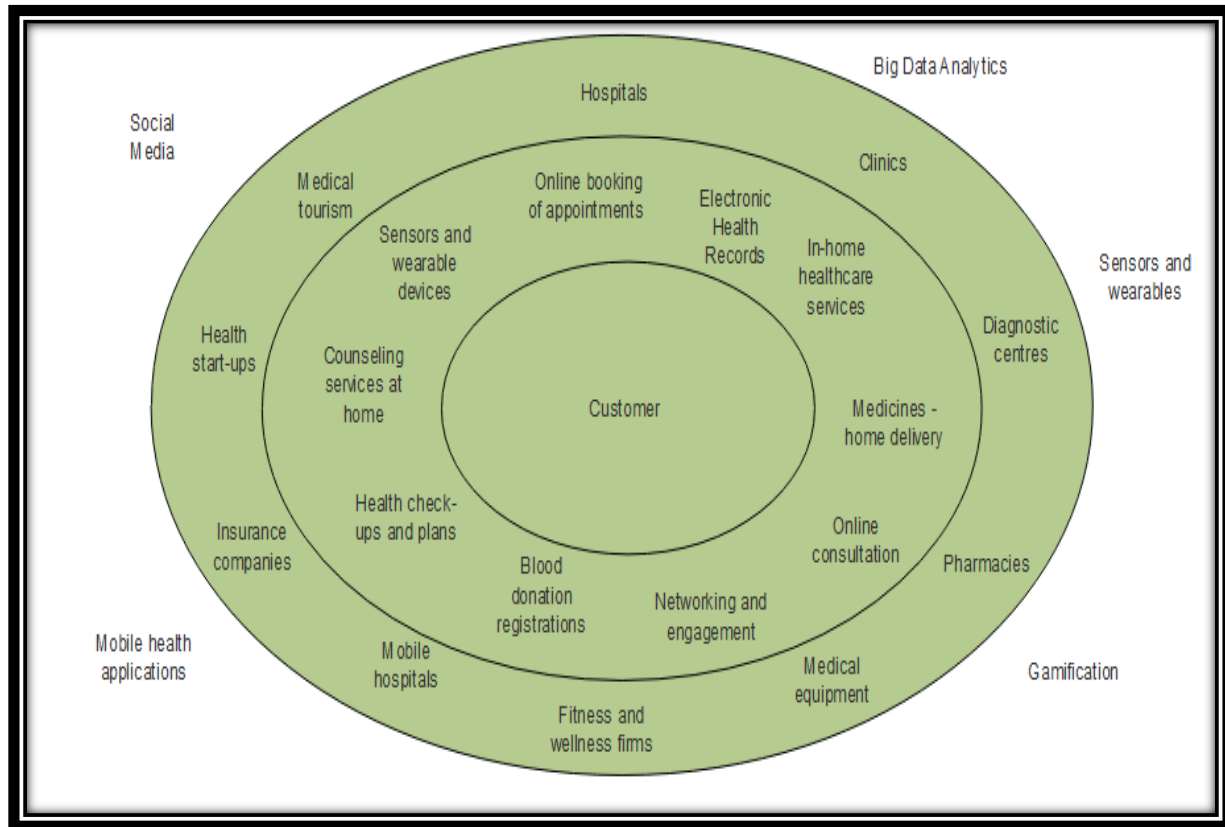


Figure 2: Intersection of wearables, big data, and healthcare providers

(Source: Jain et al., 2015)

So here the call from the personal caregiver could prevent the patient from facing an adverse situation and the occurrence of a serious health problem and at the same time he is also able to receive a customized insurance coverage plan which suits his health condition and lifestyle. So in this way a change in dimension of a curative healthcare model to preventive healthcare model is taking place due to the growing impact of push- factors on the healthcare industry (Jain et al., 2015).

Figure 1.6. The Indian Healthcare System



Globally all the industries have been enormously impacted by the digital era. It has brought in new opportunities and challenges across all the industries. Many companies are constantly adopting newer styles and methods to stay competitive in the digital market. The digital era has paved way for much technological advancement in the field of healthcare. Currently due to the rapid changes in the technological and business environment, the healthcare industry too is adopting newer ways of increasing efficiency and performance.

The healthcare ecosystem which earlier consisted of only eight major players- hospitals, clinics, diagnostic centres, mobile hospitals, pharmacy, fitness and wellness firms, medical equipment and insurance- have grown with entry of digital healthcare sector. By minimizing costs and increasing revenues, the industry is attracting new players to enter the healthcare market. The scope of the healthcare industry has expanded and now consists of not just seven, but ten and the

new healthcare players are medical tourism, telemedicine and healthcare start-ups. These new players have entered the healthcare industry in order to fill the gap of providing quality healthcare services to people living in the remote areas of India, where people do not have access to even basic healthcare facilities. By blurring the boundaries of the healthcare sector, these new entrants are changing the scope, operations and the competitive ability in the healthcare industry.

Leveraging on high internet and Smartphone penetration, these players have taken advantage of this growing usage of internet and smart phones levels in India. Also the rising demand created for convenience and door delivery services by e-commerce companies, has increased the demand for digital healthcare services. The digital players offer healthcare services such as online consultations, booking of- doctor appointments, home healthcare services, diagnostic tests at home, order medicines, counselling services at home etc. Currently because of the increase in importance about health and fitness, consumers prefer to understand and take independent decisions about their health. People can avail for online services such as online blood donation registration, storing and maintaining electronic health records, tracking of heart rate, diet and calorie intake through mobile phones from any place and at any time. Fitness devices have enabled consumers to keep a track of their health on a day- to- day basis.

Today based on the information provided by electronic health records, sensors and wearable devices, mobile healthcare applications etc. healthcare providers are able to capture patient's health conditions immediately. By using big data analytics, digital healthcare providers are able to predict future health risks. They are able to provide legitimate preventive healthcare information from experts directly to consumers. By leveraging on this health information, insurance providers offer a customized insurance plan which suit the patient's present health condition and lifestyle. In this way the Indian healthcare industry is revolutionizing its healthcare delivery due to changes in the technological social and business environment.

Conclusion:

On a final note, digital healthcare providers have huge opportunities in the India as the working population in India is going to increase in the next 3 years. Rising in disposable incomes, growing number of mobile internet users, increasing in demand for door step services and changes in the consumption of lifestyle related goods are the driving factors for the growth of

digital healthcare services in the future (Economic Times, 2014). Leveraging on the emerging healthcare trends, digital healthcare providers can serve the market with better and customized healthcare services at the consumer's doorstep. The digital revolution in healthcare will not only boost the revenue of the Indian healthcare industry but also provide more employment and career growth opportunities in Indian healthcare industry. And ultimately the dream of a - *Swasth Bharat* (Healthy India) will be closer to fruition as the digital healthcare penetrates lower segments of the market by driving the costs down.

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