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**"A DIGITAL TRANSFORMATION ON THE EXTREMITY IN INDIAN  
HEALTHCARE"**

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## **ABSTRACT**

Digital transformations in healthcare are becoming more and more essential, leading to the production and collection of mass health data, fueling healthcare disruption. Therefore, the analysis of healthcare agencies in which this report has been found examines the digital revolution in the healthcare sector. The study discusses digital transformation, how digital transformation adds value to any customer interaction, how digital innovations are transforming industries, India's digital opportunity, Indian healthcare, how the Indian healthcare sector is growing, government initiatives, India's major investments, health care issues and challenges, and India's expanding healthcare.

## **INTRODUCTION**

India has a compulsory multi-payer health model paid through a mix of public and private health insurance and the element of almost all public hospitals financed by revenue. Both Indians, even minimal, sometimes symbolic co-payments in some facilities, pay for the public hospitals system. In 2018, the federal government of India initiated a comprehensive health insurance scheme. This includes the lowest 50 percent (500 million individuals), which provides free healthcare including in private clinics, of the people employed in the non-organized market.

Digital transformation represents the use of digital technologies in the context of transforming services and enterprises, replacing digital or manual processes with modern digital technology or replacing older digital technology. Digital technologies may not merely enhance and promote conventional approaches, but may enable – in addition to productivity through automation – new types of innovations and creativity.

Digital Transformation (DT) means "a mechanism aimed at enhancing the company by combinations of knowledge, computing, networking and communication technology by dramatic adjustments in the characteristics of the organization." Digital transformation has an effect on several areas of enterprises, for example, digital capital procurement; the development of digital growth initiatives, changing internal organizational structure and defining appropriate benchmarks and objectives in different streams of business analysis (eg, information technology, policy, and marketing), this phenomenon has become a common subject and is greatly revolutionizing the business field. The health care industry (HC) has been one of the major sectors in which digital transformation has existed for many years, and applies to all facilities offered by healthcare providers to protect the physical and emotional wellbeing of patients.

Nominally, India has made dramatic improvements to its people' welfare and well-being. The average life expectancy for 2018 was 69 years, which is expected by the Indians born in 1951 for 37 years. <sup>137</sup> Yet the land ranks 125th in life expectancy among all countries. In Brazil, Russia, China and South Africa, <sup>138</sup> Indian women are now three times more likely than people to die at birth and more than ten times more likely to die in the United States. In infant mortality, early feeding, and the rest of public health, India also tracks other large emerging economies. There is a pervasive prevalence of infectious diseases, including the largest tuberculosis rate in the World, most HIV/AIDS cases outside Africa and three-quarters of all malaria in Southeast Asia. Indians are less likely than women in China or the United States to escape breast cancer and are more likely to succeed in early cardiac attacks.

### **Digital transformation**

Digital transformation is the way to develop modern business processes, culture and consumer interactions leveraging digital technology to fulfill changing needs for business and market. Digital transformation is this revision of the market in the digital world.

Common functions such as distribution, promotion and operation are transcended. Digital transition instead starts and ends when you learn of clients and communicate with them. When we transition from paper to tablets to smart business management apps, we are able to rethink how our consumers are involved in emerging technologies.

There is no need to launch the company processes and transform them later for small companies. Your company will be proven in the future. It is not viable to construct an enterprise of the 21st century on sticky and hand-crafted books. Thinking, organizing and digitally developing would make you agile, scalable and ready for development.

Some businesses take a step back and ask if they do the correct thing. When they start digital transformation, we must first address a basic question before looking at hawks and how you turn the business: how we came from paper and pencil record keepers to global companies based on digital technology.

## **Indian Healthcare**

The healthcare industry in India is at an intersection and is on the verge of fast medium-term expansion. But overall, Indian healthcare costs are still the lowest and many of the major problems are to be met both in terms of accessibility of the healthcare service and patient care safety. Thus, the current scenario offers our private sectors a big opportunity, but our government can also play an indispensable role in promoting this growth. As regards terms such as revenue generation and jobs, the healthcare sector is one of the largest services sectors in India. The Indian health sector expanded by an annual compound rate of 16% in the 1990s, this sector's overall valuation exceeds \$34 billion. This amounts to 34 dollars per capita, or around 6% of GDP. The Indian healthcare sector is projected to hit a level of 79 billion US dollars by 2012 and 160 billion US dollars by 2017. The Indian health sector is projected to expand by around 15% year-on-year due to several factors such as rapid infrastructure development expansion, increased healthcare demand, increasing end customer knowledge, and the introduction of novel insurance, payment, and funding policies. In India, healthcare expenditure represents more than 5% of India's GDP. The public expenditure is just around 1% of the country's GDP while we speak in a ratio. This suggests that the role of universal health care is not just weak but also ineffective. In the Indian health system, however, the private sector plays a predominant position. The private sector contributes about 80% of our country's overall expenditure. Private hospitals that feed the opportunities are able to gain a substantial share of the demand resulting from insufficient government capital spending. Moreover, demand for hospital services has grown quickly because of driving factors for growth in the health sector, including increased population, increasing health problems associated with lifestyles, globally cheaper treatment costs, the impact of medical tourism, better insurance penetration, increased disposable income, government initiatives and the public interest.

### **Digital transformation adds value to every customer interaction.**

The way companies operate and in certain instances, whole different categories of industries are created through the digital transition. Company's take a step back to review all that they do through digital change, from organizational processes to consumer experiences in person and digitally. They rise important questions like "We should adjust our systems in such a way that they can make smarter choices, efficiencies that change games or better consumer experiences.

We are still strongly in the modern age and companies of all kinds create smart, efficient and innovative forms for technology to be leveraged. A good example is Netflix. It began as a postal service and threatened the video rental business. Then digital technologies allowed broad-based video streaming Today, Netflix has all of the conventional cable and development networks and studios, providing an increasing on-demand catalogue of programming at highly favourable rates.

Netflix was able to digitize video material not only exclusively for its subscribers but also to obtain an unparalleled overview of viewer behaviors and tastes. They use these details to tell everything from the creation of their customer interface to the making of first-class shows and films in their own studios. This is a technology transition to action: use the tools available to inform the way a company is running.

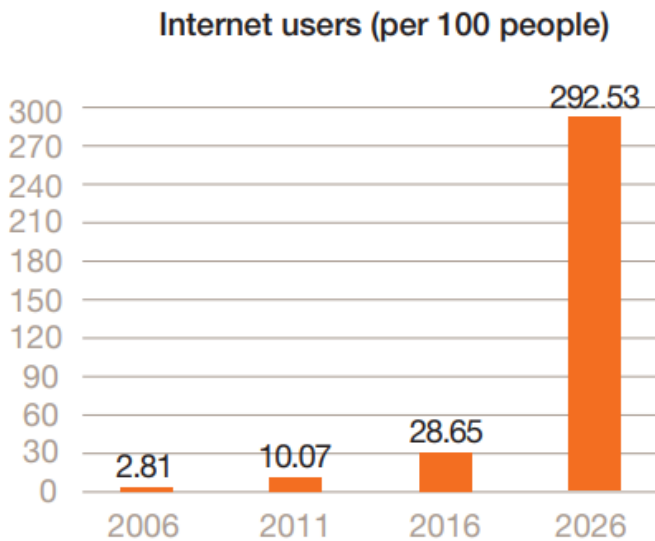
**Digital innovations are transforming industries.**

Employees are not the only people that are often able to view workplace records easily and easily. Machines are becoming cleverer themselves, too. The processing, development or testing processes are transformed through artificial intelligence (AI), the Internet of Things, cloud computing and sensors of all sizes and capacities almost every facet of industry in all industries.

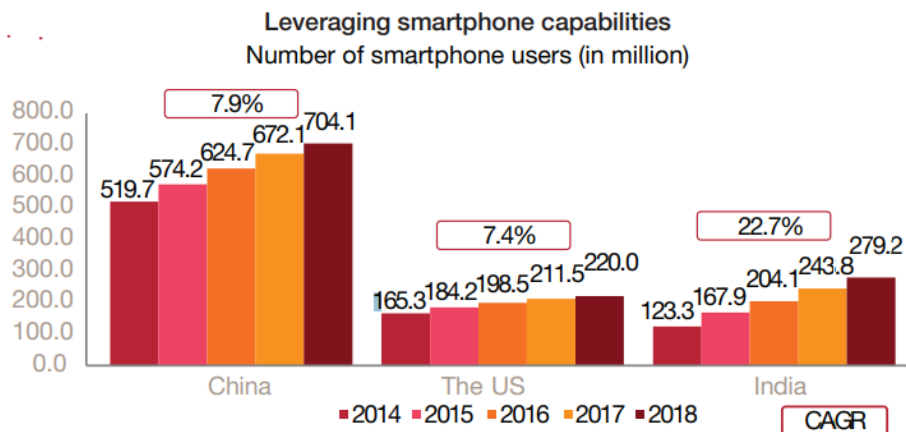
There are still references. Digital technologies such as AI and IoT drive all sorts of advances in manufacturing everything from household products to vehicles and trucks. Adaptive to changing customer demand, optimized production methods. Code based in the cloud provides visibility to the distribution supply chain in real time. Machine-based visualization expertise provides crucial information to assist sales planners; marketing companies and budget builders to best do their job. This and many other inventions such as these change, from any possible perspective, our way of doing business.

**Introduction to India’s Digital Opportunity**

In India, too, this movement has been seen by the increasing proliferation of smart phones and Internet. In India YoY, currently between 20% and 30% CAGR, the use of smart phones and the Internet continues to grow. In several estimates, India's population of smartphones will double the US population in the next few years.



Source: World Bank, PwC analysis



**Source: eMarketer, December 2014**

**Note:** Internet consumers are people who in the last 12 months have accessed the Internet (from anywhere). The Internet can be used via a screen, cell telephone, digital staff, gaming machines, digital TV, etc.

More Indians use 2G/3G/4G and mobile Internet cell phones to achieve essential health and nutritional needs. As a consequence, users want an omnipresent experience from businesses. The vibrant entrepreneurship and start-up community of India further enhances these causes. In the Global Innovation Index, India ranks 3rd among middle-income economies, Investments in this community from the public sector are contributing to this excitement through the Startup India initiative. These digital drivers have paved the way for India that is more disruptive, committed and digital. While these digital factors are quite new, India has had other longer-term markers, for example a rising growth, which have helped to push this digital change.

### Growth in the Indian Healthcare sector

#### Government Initiatives

At the conclusion of the Twelfth Five-Year Plan, the Government agreed, from the existing 1.4%, to boost public expenses to 2.5% of Gross Domestic Product (GDP). Government programmes in the public health sector have over time registered several remarkable achievements focusing on improvements in quality hospital services, rural health centers, etc. A 100% FDI for health care and emergency facilities under automatic route is allowed. For the upgrade and improvement of health services, the National Rural Health Mission (NRHM) has allocated US\$ 10.15 billion. To cover the revamped building costs of six new AIIMS (All India Institute of Medical Sciences), such as institutions, and an upgraded 13 established government medical colleges, in March 2010. A further US\$1.23 billion was allotted by the Government.

#### Major Investments of India

- Hospitals expect to double the bed size in 2013 by up to USD 158.32 million.
- Apollo Hospitals Enterprise Ltd. expects to spend over \$204.04 million in the next two years in the hospital chain - 226.70 million dollars.

- The BCG Group intends to construct BCG Health Square in Palarivattam in Kochi, Kerala by August 2011 to a multidisciplinary health centre. The long-term planning of the organization is to build an approximately 88.91 million USD health village of 750,000 ft.
- The network of hospitals Fortis Healthcare is planning to spend 146,81 million dollars to construct 2,100 additional beds.
- GE Healthcare expects to spend 50 million US\$ in additional diagnostic services development facilities.
- Over the next three years Manipal Hospitals expects to double its size to 8,000 beds with an investment of 45,23 million USD.

## **Health Care issues and challenges in India**

### **Issues**

- Free health care for all the people of India is provided by the health sector and demand is continuing to increase.
- Cardiovascular conditions increase morbidity and mortality.
- Health care must embody international guidelines and standards when keeping local health interests into consideration.
- Clear benchmarks with success objectives should be established to efficiently control capital for each region.
- Patients co-opt for compliance and speed of rehabilitation as allies in their treatment.
- Daily reviews to increase overall efficiency from consumers (patients).

### **Challenges**

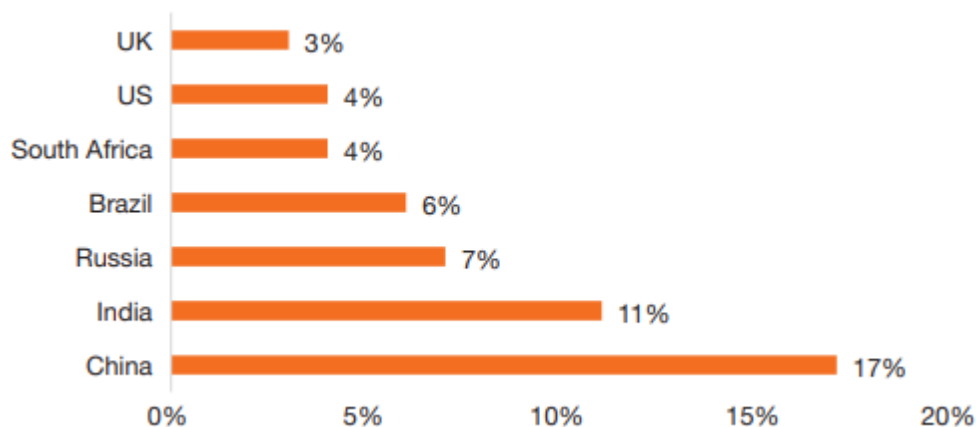
- Service Culture Development.
- Decide main and fundamental principles, create a vision.
- The next move is to determine the main objective and core principles of hospitals after deciding the vision. Translate vision into concrete objectives which will help the company work and optimize it.
- The efficient resource management team successfully relies on company sector management expertise and strategies.
- A strategic health system for priority areas which transcends different political associations centered on healthcare needs.
- Daily reviews to determine patient satisfaction level.

## **India's Expanding Healthcare Industry**

One of the fastest-growing sectors in India is healthcare with an approximate market value of USD 100 billion in 2015. The high capacity for effects focused on the amount of challenges it poses in its accessibility, affordability and durability of health profiles allows this sector more appealing. Healthcare in India is a prime investment candidate, and this trend is already increasing, particularly through digital interventions. India reportedly has the second highest healthcare CAGR (11%)

BRIC Healthcare countries are a fast-growing industry and are projected to increase to 280 billion USD with CAGR 18.3% between 2012-20,

### India's healthcare CAGR



### Source: World Bank data

There is a need for significant interventions in this industry, which is driven largely by the pressures of the ageing population, a change in disease burden, rural inaccessibility to treatment, work shortages, low insurance coverage and poor public sector spending. It can be proven that digital media is a game changer.

### Investment in India's healthcare sector

In India, the health sector was able to survive the pandemic despite initial hiccups. We have been a world pioneer in numerous attempts to manufacture medicinal devices, devices, medicines and India's latest vaccine initiatives. India not only met domestic criteria, but also used the opportunity to provide assistance for other nations. Therefore, the healthcare market appears good as an investment vehicle. Any reasons that encourage potential business expenditure are:

- **Medical infrastructure in Tier II and III cities:** The lack of access to specialized facilities or the amount of beds available at the most bad hit periods of the pandemic emphasize the need for a healthcare infrastructure that can prove emergency in the future. Hospital chains and specialty centers, particularly in Tier II and III towns, are coming forward to create additional capacity. In these towns, several hospital franchises have begun to grow by establishing small clinics with renowned local physicians. This often goes hand in hand with the government's plans to raise hospital numbers. Beds per thousand inhabitants and closes the accessibility gap, particularly in suburban and rural regions,
- **Health insurance awareness:** In recent years, the knowledge of health insurance options has grown as more people per year participate in health insurance.
- **Government policies:** While expected to reach a universal healthcare cover under 'health for all' and plans like Ayushman Bharat and the National Digital Health Project, before the pandemic, they have accelerated exponentially. These attempts to render healthcare

inexpensive and open to the general public often provide private players the opportunity to expand their influence and involvement.

- **Medical tourism:** The Indian health system is appealing for international patients because of better treatment in comparison to countries in Western Europe and the United States at comparatively lower prices. By 2012, Bangladesh (22%) had the largest amount of medical FTAs (foreign tourist arrivals), while Maldives, Afghanistan and Iraq represented 17%, 9% and 8%.
- **Use of technology:** In today's times in particular, online meetings and technology channels are demanding. In August 2019, 'eSanjeevani' is an interactive web-based telemedicine solution launched by the Ministry of Health and Family Welfare. The objective is to equal health facilities by bridging the divide between urban and rural India.

## CONCLUSION

In this study the core management and market apps for Digital Transformation Technology by healthcare stakeholders should provide an integrative perspective on digitization in health literature and a possible future research strategy be identified. The study has generated five broad clusters in the field of healthcare management to identify the potential benefit of digital technology previously introduced by healthcare organizations and other stakeholders. The patient focus on the two sub-strains of patient empowerment and the impact that multichannel behavior has on consumer health and well-being; Finally, the understanding of digital transformation of medical care often involves digitizing knowledge and adopting HIT in existing medical facilities. In order to create a more comprehensive understanding of the digital transition of healthcare, study on the transformation in business model and the effect on the management of diverse interests needs to be undertaken. Lastly, combining patient control, the deliberate usage of emerging technology and data-based and predictive treatment would allow consumers, clinicians and insurers to move towards digital health models redefine their experience and improve results.

These digital drivers have paved the way for India that is more disruptive, committed and digital. While these digital factors are quite new, India has had other longer-term markers, for example a rising growth, which have helped to push this digital change. Digital transformation has an effect on several areas of enterprises, for example, digital capital procurement; the development of digital growth initiatives, changing internal organizational structure and defining appropriate benchmarks and objectives in different streams of business analysis (eg, information technology, policy, and marketing), this phenomenon has become a common subject and is greatly revolutionizing the business field.

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