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Healthkhoj - In Search of Swasth¹ Bharat

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ABSTRACT

Case Synopsis: This case aims to cover some of the challenges, start-up organizations in the healthcare domain, face in getting potential customers to adopt a digital platform for health services delivery. HealthKhoj.com is one such entrepreneurial venture that entered the health services space with a clearly differentiated value proposition and planned to get the urban educated customer to adopt their health platform, but faced challenges like societal biases, the tendency to seek and get unsolicited medical advice from one and all and the inherent trust deficit towards a machine telling us what we must do in a medical situation. Considering this scenario in the urban segment, HealthKhoj's quest to take their service to the rural sector, seems a herculean task. The three founders now look to adopt diverse strategies to enable the platform make inroads in their quest to make the country 'swasth'. Learning/Teaching Objectives: To illustrate how a start-up company provides value to its users to sustain itself in business with the help of new technologies in health services delivery, quickly and efficiently, in a country as vast and as populated as India. It includes different requirements of urban and rural consumers and the challenges therein. It highlights the importance of deciding on a business strategy while retaining the flexibility to change according to the changes in the environment.

Introduction

Ratnesh and his business partners were worried. Repeated attempts at increasing customer adoption of their digital platform for health services delivery was not really giving them the results they had expected. They had tied-up with sales promotion firms, advertised on most channels they perceived their target segments would subscribe to, even extended attractive early-bird offers, but the numbers were just not looking up. A carefully thought out Segmentation, Targeting and Positioning (STP), clearly articulated differentiators, a thorough study of market, with external paid help, of

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competitive dynamics in this space, all of this was done with satisfying results. HealthKhoj received good response in terms of number of Application (app) downloads. It brought a high patient engagement and high involvement model to the market. Engagement with the patient was made possible with different channels such as website, app, phone, email, social media and text. Each patient's engagement was for weeks as they sought to understand their condition better and find transparent options for their hospitalization. Though it was not for the first time, it received a case from outside India wherein a baby needed a liver transplant. The cost of such a surgery in that baby's home country was humungous. So the baby's parents decided to look for the treatment in India. HealthKhoj helped them connect with a world class paediatric organ transplant specialist and got their queries answered. The total cost of care was brought down to 45% of the cost in their home country². May be the case like this changed their focus or business model to concentrate more towards Surgery market space. It was clear from their redesigned and more informative website, shifting away from app, mentioning "Ask HealthKhoj for Help - Take informed decision in finalizing the right hospital for the surgery" and "Best Surgeons. Verified Quotes. Second Opinion." They made substantial changes to their website, messages were clear, partner hospitals were added. They were trying to increase their base through traditional marketing channels, media, though not newspapers, but through surgical magazines and digital media and word of mouth. They were also working on oversees partnerships. They had more searches for heart, kidney and liver surgeries, hip replacement, gastric bypass, cancer and spinal fusion. The vertical they wish to concentrate was international patients and medical tourism. HealthKhoj had become a bridge between the customer and the doctor. It wanted to and was trying to bring in NBFCs and/or banks in to the framework to provide loans for surgeries at affordable interest rates as many a time, surgeries involved unexpected heavy expenditure.

HealthKhoj was already 3 years old. A lot of investment went in to it. The expectation from HealthKhoj was to give them such a remuneration, to compensate their time, energy and capital which they must have received from their left out highly rewarding and remunerative corporate jobs. They had changed their business focus from general health to Surgery. The issues of HealthKhoj were their model was a patient centric model and not a hospital centric model, because of which though there were many enquiries, and patients were very much engaged and equipped to make an optimal choice through the transparent information provided related to doctors and hospitals, through website, mails and phone calls, the turnout ratio seemed to be 1/100 or 1/1000 or drop out ratio was very high. Without some satisfactory results, they could not further raise funds to scale up. Their focus on urban population, through digital platform seemed to be right. As already 3 years passed by they had less time to change the path. Now it should give results. What else to be done to make it give results was the agenda for the three partners?

Healthkhoj.Com - The Genesis

Like so many others in the start-up space, the genesis of this company happened when 3 buddies who were in school together and then gone their own ways – an engineering degree, a management education from a top-drawer business school, solid corporate jobs – got back in touch with a common urge to break the mould and get started with something more meaningful³. All of them were very enterprising, and shared a dream to serve the nation and improve the standard of living of this country. As a trigger on the personal front, the snuffing out of the young and promising life of one of their friends due to misdiagnosis and lack of timely intervention prompted them to choose the healthcare segment for the start-up venture. At that instance they heard/read about rather unbelievable stories of well-educated, economically well-off and seemingly rational people who adopted some most unlikely measures to find a cure to their ailments, especially of the more serious types. One such was the case of a professor friend of one of the partners, who took her husband to an organization called 'Newdiet4health' which recommended complete fasting without even water, except a glass of leaf/fruit juice once a day for 15 continuous

days for curing a chronic kidney ailment. At the end of the course, her husband's creatinine levels increased and electrolyte levels had dropped to life threatening levels and he had to be rushed to a reputed tertiary-care hospital and put on immediate dialysis. And this was as recently as 2012. This and more such stories sent shudders down Ratnesh's spine and he really wanted to do something for such, otherwise sensible people, who adopted such extreme measures in times of desperation.

To begin with, they perceived a business potential, in the healthcare system in India, as India lagged behind the world in the health indicators (see Table-1). They believed that the increased prosperity of India, in its post liberalization period, on the one hand and unmet need for quality health services, on the other as per their experiences in India, would make India a big market for medical and health facilities. From some reports they got the information that, on the patient side, 70% of the time they go to the wrong healthcare provider, due to misplaced understanding of their health conditions, thus prolonging the care cycle, increasing out of pocket expenditure, causing anxiety to the family and loss of productive time. They wanted to help both the sides of the system by providing a more relevant matching of patient condition to the care provider. This would bring down the cost of care and time taken for care on one hand, and benefit hospitals by freeing up their capacity to treat more patients on the other, thereby optimizing the limited resources available in this country and in turn easing the overall burden of diseases on the people, through HealthKhoj.

Their shared backgrounds helped in their minds thinking along similar lines. They wanted to provide economical access to good healthcare, the crying need in this country, and decided to approach it through technology, the ideal vehicle for taking healthcare, and their dreams, places, breaking the traditional norms. Market surveys showed that the players who had taken a lead in this area were primarily directory service providers who rarely went beyond helping prospective patients find doctors nearest to them. Ratnesh and his friends wanted to go much beyond this, helping people who did not even know what type of doctor they needed and could only spell out their symptoms. At its core HealthKhoj would serve to assist its users to make informed choices. They focused on the diseases which had longer care cycles such as Cancer, Diabetes, Respiratory Illnesses, Mental disorders and so on. As Ratnesh shared, patients received value in the decision making tools that HealthKhoj provided. The conversations with healthcare providers that HealthKhoj connected them with, were enabling their access to the whole care cycle – choose the right doctor, right diagnosis, without wastage of time, resulted in reducing the cost of health care. HealthKhoj first started to concentrate on well educated people, belonged to higher strata of society, who are astonishingly illiterate when it came to medical matters. Based on this premise, the idea of HealthKhoj was born in the year 2014. HealthKhoj was set to change the way healthcare services were delivered and consumed, by bringing different service providers in the patient care cycle together, making people access everything they needed.

Hence, the first segment to target for growth was the urban, tech savvy, English educated population residing in metropolitan India, and it seemed to be a right idea as Indian Urban population was increasing very fast (see Exhibit-1). Their awareness levels and affordability for superior quality healthcare would be comparatively high. To add to that, these folks were perennially short on time and looking for ways to get access to quality healthcare in the quickest possible time. HealthKhoj assumed, they would also be more willing to trust technology-enabled healthcare. The demographic and psychographic parameters seemed perfect for HealthKhoj to concentrate on urban India and Bangalore in specific.

The Healthcare Landscape in India and Strategy Alignment of Healthkhoj

Ratnesh and team thoroughly studied the health profile of India in terms of prevalence of disease, causes of death, and Government's agenda towards the improvement of health conditions in the country, public and private expenditures on health and the Government's approach to improve health facilities in the country, research reports and guidelines by international organizations.

Prevalence of Disease and Government of India's Agenda

They identified that India faced a "triple burden of diseases" – an unfinished agenda of communicable diseases, emerging non-communicable diseases related to lifestyles and emerging infectious diseases (*National Health Profile 2015*, p. XI)⁴. India had high incidence of tuberculosis, diabetes and deaths due to communicable diseases and maternal, prenatal, and nutrition conditions and injuries in comparison with the world average (see Table-2). The Goals of National Health Mission (NHM), Ministry of Health and Family Welfare, Government of India, synonymous with the objectives of 12th Plan, talked about basic facilities, portrayed the unmet need for health services in the country (see Exhibit-2). All parameters indicated that there was a heavy unmet need for basic health services and Government's attention was only on basic health services.

Though there was a substantial achievement in controlling communicable diseases, they still contributed significantly to the disease burden of the country. Decline in morbidity & mortality from communicable diseases had been accompanied by a gradual shift to, and an accelerated rise in the prevalence of, chronic non-communicable diseases (NCDs) such as cardiovascular disease (CVD), chronic obstructive pulmonary disease (COPD), cancers, diabetes, mental health disorders, etc. Based on available evidence, the leading causes of mortality in India were CVD-24%, COPD-11%, cancer-6% and diabetes-2% (National Health Profile 2015, p.57). The global burden and threat of non-communicable diseases was one of the major challenges for development in the 21st century. There was an international consensus to strengthen and facilitate multisectoral action for prevention and control of non-communicable diseases through effective partnership. The outcome document of United Nations Conference on Sustainable Development titled, "The future we want" committed to strengthen health

systems towards provision of equitable, universal health coverage and promote affordable access to prevention, treatment, care and support related to NCDs especially cancer, CVDs, chronic respiratory diseases and diabetes. It was also committed to establish or strengthen multi sectoral national policies for prevention and control of NCDs (*Prevention and Control of NCDs in India*, p.1)⁵. On the one hand Government was committed to prevent and control NCDs but, as the task of communicable diseases, was unfinished, its concentration was still on providing basic medical facilities to large masses and achieve targets related prevention and control of communicable diseases and reduction of infant mortality, maternal mortality, anemia etc.

Public Expenditures on Health

India had lowest public expenditure on health in comparison with other countries of the world (see Exhibit-3). It was not only less than average of low income countries but was also lower than its neighboring counties like Bhutan, Nepal, Sri Lanka and Bangladesh. Lesser the public expenditure on health the Out-of-Pocket (OOP) health expenditure by households would be higher and they look for better utilization of their limited resources.

Private Expenditures on Health

In India, 5% of GDP was spent on health and of this, 80% was in the form of OOP expenditure. OOP medical expenditure incurred during 2011-12 was Rs. 145.71 per capita per month for urban and Rs. 95.18, for rural India. Over 60% of OOP expenditure was on medicines, both in urban and rural India. The cost of healthcare was increasing over the last couple of decades. This increase in healthcare costs led to growing inequity in access to quality healthcare services (National Health Profile 2015, p. XIII). The lowest consumption expenditure group spent Rs. 16.12 per month per capita and highest consumption expenditure group spent Rs. 494.19 per month per capita in India-Rural, in India-Urban the corresponding figures were Rs. 21.6 and Rs. 658.6 respectively (see Table-3). Ratnesh Pandey was aware of the NSSO report, which mentioned that high OOP in India led to vicious circle of health-care debt and one in every four households in the country had taken loans to pay medical bills.

HealthKhoj Making use of the 'Digital Revolution' to Make India Healthy

Across the globe, the number of internet users got more than tripled in a decade - from 1 billion in 2005 to an estimated 3.2 billion at the end of 2015. More than 40 per cent of the world's population had access to the internet, with new users coming online every day. Digital technologies - the internet, mobile phones, and all the other tools to collect, store, analyze, and share information digitally - have spread quickly. This meant that businesses, people, and governments got connected than ever before. Nearly 70 per cent of the bottom fifth of the population in developing countries own a mobile phone than have access to toilets, electricity or clean water. "Digital technologies have spread rapidly in much of the world. Digital

dividends-the broader development benefits from using these technologies-have lagged behind. In many instances digital technologies have boosted growth, expanded opportunities, and improved service delivery. Yet their aggregate impact has fallen short and is unevenly distributed" (World Development Report, 2016, pp. viii-2)⁶. For further more digital penetration, Government of India had taken up Digital Saksharta Abhiyan (DISHA), one of the important projects under Digital India Programme. The project was youth-centric and essentially aimed at making one person in every family digitally literate. For the year 2016-17, Government of India intended to make 6 crore (60 million) people digitally literate (sampark.gov.in). The world was experiencing a greatest information and communications revolution in human history and India was no exception to that. To take advantage of the rapid technological change and to make the world more prosperous and inclusive, one of the first inclusions should be health. HealthKhoj was set to make use of this digital revolution.

Complexity and Scalability of Health Care Using Internet, and its Potential Impact Vis-À-Vis other Sectors as Suggested by World Development Report 2016

The potential use of internet was very diverse for businesses with different levels of complexities; scalability and competition, from domestic and foreign players as analyzed by World Development Report (see Tables 4 & 5). Though products of health care sector were identified to be more complex in terms of enforcement of contracts, were also identified to be more scalable to make a medium level potential impact in terms of delivering services by using digital technologies. With high entry barriers the existing businesses could enjoy less competition and the ensuing benefits.

The Opportunities, Challenges and Dilemmas of HealthKhoj

The Industry in which HealthKhoj planned and operated had lot of demand. The model (digital) which it adopted was innovative, modern and expected to give more returns, as Government of India and International Organizations were trying to promote digital technologies for inclusive growth. The discussed data showed a lot need to be done to bring health services in our country anywhere near global standards. Hence, it implied great opportunity. Everything seemed to be going good, in terms of growing demand for health care, growing numbers of tech savvy people, an innovative product, and sound strategy. On the investment front, HealthKhoj was bootstrapped⁷ with a comfortable runway. But, business did not grow as expected; which made them get shifted towards surgery segment. The current issues for Ratnesh, Ashish and Prabhash were:

 Will the concentration on surgery segment yield expected results? As very little was known about how much is spent on surgical care delivery globally and India. Anecdotal evidence suggested that per person expenditure on surgery varied enormously across countries. The cross-country and intervention-specific variation in expenditure made

- estimation of global and country-level expenditure on surgery challenging (thelancet.com).
- In matters of health, advice from an elder or a known person still ruled supreme. Word of mouth of family, relatives, friends and trusted colleagues was a big influencer. Self-medication, at least for perceived minor issues, was rampant. Digital platforms for Healthcare were fine for minor issues, but for major complications, digital platforms came last in the chain of trust. How to make the customers believe and engage with HealthKhoj?
- It was able to win confidence of some of the customers. It
 was a Facebook start up program, selected for Nasscom
 Incubation and invited for Startup India Program. But, how
 to make use of the credentials to grab the attention of its
 potential customers
- The next question was to include urban poor across India to increase the base of the business. These people occupied the same geographical area as the earlier segment, but economically were far removed. What they possessed was a smart phone where the app/digital platform could be comfortably downloaded. However, the challenges in this segment were:
 - a) Lack of knowledge of English
 - b) Awareness
 - c) Affordability of Genuine Sophisticated Modern Health Services

Though they do not have solutions to all the challenges in this segment, they decided to launch vernacular versions of HealthKhoj to increase the demographic depth and bring in more awareness. They made all arrangements to launch the Hindi version, to start with.

- To achieve true scale, and higher returns they would need to reach out to customers from abroad. That would, of course, need a different strategy and the rules of that game were quite different. That part of the strategy would only be set in motion once they got sufficient funding and for that funding to come their way, HealthKhoj had to build a good customer base, show them true value and get the right kind of sound bites in the media. All this would make the VC community sit up and take notice and only then the much needed dollars would come their way.
- Another strategy they thought of was tie up with Government. But, they were unable to go ahead with. Government was trying to provide 'healthcare for all', on the one hand and spending on digital penetration on the other. HealthKhoj team felt, the need to combine these two and they were ready with the technology to bring awareness and connect patients and health care services. It would be good if they partner with Government as it was actively looking for private players to help them take health services to the masses. But, working with Government or coordinating with Government in India was not easy, as it is generally understood, for its bureaucracy, lobbying etc.

Another issue for HealthKhoj was to get the best specialists
doctors and hospitals in town to sign up for their platform.
This was a challenge since they have been approached by
the other digital healthcare directory providers and these
specialists initially perceived HealthKhoj to be in the same
league. However, more often than not, after having a
discussion with HealthKhoj founders, they understood the

inherent value of the platform in reducing the overall disease burden of the country. Still it was tough to get doctors and hospitals on board as the model was patient centric and not hospital centric.

The solutions to these would have made HealthKhoj a successful start-up and made India Healthy. Its success must have been an accomplishment for everyone.

Table-1: Causes of Death and Health Expenditure Data for India and the World for the year 2014 (Except when mentioned in the parantheses)

Indicator	World	India
Cause of death, by communicable diseases and maternal, prenatal and nutrition conditions (% of total)	23.01 (2012)	27.9 (2012)
Cause of death, by non-communicable diseases (% of total)	67.77 (2012)	59.8 (2012)
Health expenditure, total (current US\$)		97139876764.04
Health expenditure per capita (current US\$)	1060.99	74.99
Health expenditure, private (% of GDP)	3.95	3.28
Health expenditure, public (% of GDP)	5.99	1.41
Health expenditure, private (% of total health expenditure)	39.87	69.96
Health expenditure, public (% of total health expenditure)	60.13	30.04
Out-of-pocket health expenditure (% of private expenditure on health)	45.53	89.21
Out-of-pocket health expenditure (% of total expenditure on health)	18.15	62.42
Risk of impoverishing expenditure for surgical care (% of people at risk)	46.66	67.30
Health expenditure, total (% of GDP)	9.94	4.69
Health expenditure, public (% of government expenditure)	15.63 (2011)	5.05
Hospital beds (per 1,000 people)	3.6 (1990)	0.7 (2011)
Specialist surgical workforce (per 100,000 population)	30.57 (2013)	6.80

Source: http://databank.worldbank.org/data/reports.aspx?source=health-nutrition-and-population-statistics&preview=on#

Notes:

- Cause of death refers to the share of all deaths for all ages by underlying causes. Communicable diseases and maternal, prenatal and nutrition conditions include infectious and parasitic diseases, respiratory infections, and nutritional deficiencies such as underweight and stunting.
- Cause of death refers to the share of all deaths for all ages by underlying causes. Non-communicable diseases include cancer, diabetes mellitus, cardiovascular diseases, digestive diseases, skin diseases, musculoskeletal diseases, and congenital anomalies.
- 3. Total health expenditure is the sum of public and private health expenditure. It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation.
- 4. Total health expenditure is the sum of public and private health expenditures as a ratio of total population. It covers

- the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation. Data are in current U.S. dollars.
- 5. Private health expenditure includes direct household (outof-pocket) spending, private insurance, charitable donations, and direct service payments by private corporations.
- 6. Public health expenditure consists of recurrent and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds.
- 7. Private health expenditure includes direct household (outof-pocket) spending, private insurance, charitable donations, and direct service payments by private corporations.

- 8. Public health expenditure consists of recurrent and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds. Total health expenditure is the sum of public and private health expenditure. It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation.
- 9. Out of pocket expenditure is any direct outlay by households, including gratuities and in-kind payments, to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the restoration or enhancement of the health status of individuals or population groups. It is a part of private health expenditure.
- 10. Out of pocket expenditure is any direct outlay by households, including gratuities and in-kind payments, to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the restoration or enhancement of the health status of individuals or population groups. It is a part of private health expenditure.

- 11. The proportion of population at risk of impoverishing expenditure when surgical care is required. Impoverishing expenditure is definined as direct out of pocket payments for surgical and anaesthesia care which drive people below a poverty threshold (using a threshold of \$1.25 PPP/day).
- 12. Total health expenditure is the sum of public and private health expenditure. It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation.
- 13. Public health expenditure consists of recurrent and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds.
- 14. Hospital beds include inpatient beds available in public, private, general, and specialized hospitals and rehabilitation centers. In most cases beds for both acute and chronic care are included.
- 15. Specialist surgical workforce is the number of specialist surgical, anaesthetic, and obstetric (SAO) providers who are working in each country per 100,000 population.

Table 2: India's Health Parameters In Comparison With the World and Different Income Groups of Countries

		alence oking			a	Ca	ause of dea	th
	Male (% of adults)	Female (% of adults)	Incidence of tuberculosis (per 100,000 people)	Prevalence of diabetes (% of population ages 20 to 79)	Antiretroviral therapy coverage (% of people living with HIV)	Communicable diseases and maternal, prenatal, and nutrition conditions	Non-communicable diseases (% of population)	Injuries (% of population)n
	2012	2012	2014	2014	2014	2012	2012	2012
India	23	2	167	9.1		28	60	12
World	36	7	133	8.1	40	23	68	9
Low income			238	5.8	43	58	32	10
Middle income	38	4	150	8.5		23	67	10
Lower middle income	34	3	205	8.1		33	57	11
Upper middle income	42	5	84	9		10	81	9
Low & middle income	37	4	160	8.3		28	63	10
High income	33	19	21	7.3		7	87	7

Source: Prepared by authors based on *World Development Indicators- Health risk factors and future challenges*: http://wdi.worldbank.org/TABLE/2.20# (accessed on 02-06-2016)

Exhibit-1: Expected Increase in Urban Population in India



Source: http://www.who.int/kobe_centre/measuring/urbanheart/india.pdf?ua=1&ua=1

Exhibit-2: Goals of National Health Mission

- 1. Reduce MMR to 1/1000 live births
- 2. Reduce IMR to 25/1000 live births
- 3. Reduce TFR to 2.1
- 4. Prevention and reduction of anaemia in women aged 15–49 years
- 5. Prevent and reduce mortality & morbidity from communicable, non-communicable; injuries and emerging diseases
- 6. Reduce household out-of-pocket expenditure on total health care expenditure
- 7. Reduce annual incidence and mortality from Tuberculosis by half
- 8. Reduce prevalence of Leprosy to <1/10000 population and incidence to zero in all districts
- 9. Annual Malaria Incidence to be <1/1000
- 10. Less than 1 per cent microfilaria prevalence in all districts
- 11. Kala-azar Elimination by 2015, <1 case per 10000 population in all blocks

Source: National Health Mission, Ministry of Health and Family Welfare, Goals: http://nrhm.gov.in/nhm/about-nhm/goals.html (accessed on 02-06-2016)

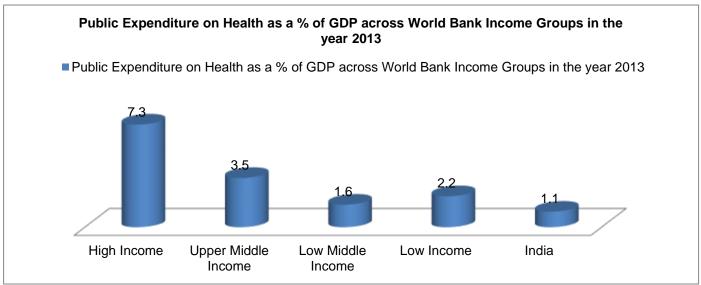


Exhibit-3: Public Expenditure on Health - International Comparison

Source: Prepared by authors based on National Health Profile 2015, p.216 (accessed on 31-05-2016)

Table-3: Monthly Per Capita Household Out-of-Pocket Medical Expenditure Across Consumption Expenditure Fractiles for 2011-2012

Consumption Expenditure Fractiles	Total Medical Expenditure Per Capita (in Rs.)		Medical Expenditure as Share of Non-Food Consumption Expenditure (%)		Medical Expenditure as Share of Total Consumption Expenditure (%)		
	Rural	Urban	Rural	Urban	Rural	Urban	
0-5%	16.12	21.16	7.8	7.4	3.1	3	
5%-10%	25.03	33.09	9.4	8.8	3.8	3.6	
10%-20%	31.3	46.9	10.1	9.6	4	4.2	
20%-30%	42.72	58.98	11.6	9.5	4.7	4.3	
30%-40%	47.45	73.64	11.3	9.6	4.7	4.5	
40%-50%	55.75	86.81	11.7	9.2	4.9	4.6	
50%-60%	68.26	119.69	12.5	10.7	5.4	5.5	
60%-70%	78.32	140.35	12.4	10.3	5.5	5.5	
70%-80%	105.53	170.81	14	9.9	6.4	5.6	
80%-90%	144.1	232.26	14.9	10	7.2	6	
90%-95%	221.33	342.72	16.5	10.1	8.7	6.4	
95%-100%	494.19	658.6	18.2	8.9	11	6.4	
All Classes	95.18	145.71	14.1	9.7	6.7	5.5	

Source: Prepared by authors based on National Health Profile 2015, p.208 (accessed on 31-05-2016)

Notes: Consumption expenditure fractiles are groups, 12 in this Table, in to which a population is divided according to distribution of values of consumption expenditure. 0-5% represents the lowest consumption expenditure group and 95%-100% represents the highest consumption expenditure group.

Table 4: Classification of the Businesses Based On Complexity and Scalability Using Internet

Data-intensive activities	More scalable	Less scalable
Less complex products (easy-to-enforce contracts)	Retail and wholesale trade, transport, insurance, banking	Legal services
More complex products (contracts more difficult to enforce)	Agriculture, education, health care , hotels and restaurants, manufacturing, real estate, utilities	Construction

Source: World Development Report, 2016, p.74 (accessed on 31-05-2016)

Table 5: Economic Activities or Sectors With High Potential for Firms to Use Digital Technologies More Intensively and Protected From Foreign or Domestic Competition in Developing Countries

Potential		Entry Barriers					
Impact	Lowest	Medium	Highest				
High	-	Banking, insurance, retail and wholesale trade	Transport				
Medium	Manufacturing	Agriculture, hotels and restaurants, mining, technical services	Education, health care , real estate, utilities				
Low	-	Legal services	Construction				

Source: World Development Report, 2016, p.82 (accessed on 31-05-2016)

Concepts

- How a clear and well thought out market segmentation exercise can set the direction for proper targeting and positioning of offering
- The role played by consumer behaviour in ascertaining an appropriate STP strategy
- In today's competitive world, the critical importance of product differentiation, more so in terms of value to the customer, to increase the chances of success

 The importance of carefully researched and analyzed data to enable a start-up organization to tune its business strategy to market realities

Target Audience

 Postgraduate business administration students of both full-time and executive programs. It is of use in courses of Marketing Management, Services Marketing, Entrepreneurship, Business Strategy and Consumer Behaviour. In business schools in the western world, this can serve as a case illustrating entrepreneurial business strategy in emerging economies.

Suggested Student Assignment Questions

- 1. What are the key elements HealthKhoj should consider if they were to overcome their current constraint of slow uptake of their service?
 - Get reputed hospitals & consultants to adopt and then champion the HeakthKhoj app to their patients
 - Make the user interface easy for relatively less educated people
 - Focused awareness sessions, especially amongst younger generation
 - Time gap/number of clicks between opening the app and getting the desired information should be minimum
 - Testimonials by happy users
- 2. Can you suggest HealthKhoj management to learn from how digital technologies have helped other industry sectors?
 - Examples from banking & e-commerce can be discussed
 - Elicit responses from students as to how online banking has revolutionized the banking industry
 - Discuss how banking too had societal constraints to adoption, for example; data sensitivity, precious nature of money and chances of its theft and misplacement
 - Bring out the fact that 'trust' is the key factor for the success of a service offered on a digital platform
 - Similar discussion around e-commerce which has gradually seen people ordering articles like clothing, shoes, food and even consumer durables online, something that was unthinkable even 5 years back
- 3. Discuss ways in which HealthKhoj can achieve scale in their business.
 - Enter into agreements with State Governments, to link their app to various government portals
 - Get nursing and support staff at Primary/Secondary Health Center level trained on the app so that they can help rural patients
 - Enter into public-private partnerships to develop the app further (vernacular versions, etc.) and have technical support staff at town/village level
 - Get Government agencies to mandate usage of the HK app as the first point of contact with government health services
- 4. Analyze the 4Ps with regard to HeakthKhoj services (ask students to download the app or have a detailed surfing of the website, in advance for a discussion around this question).

- Product / Service: Can the service be offered in other forms? Is 'app' adoption a big constraint and will website access be more amenable to users? Is the app optimally designed? Are users getting what they want in the quickest possible time? Various flavours/versions, with differing levels of functionality, can be introduced
- Place: Should HK deploy business development professionals to 'push' their product in the market? Should they get into revenue-sharing models with hospitals/doctors who can act as their channel partners?
- Price: Value pricing to ensure people perceives their service to be different from that of their competitors.
 Version-based pricing, based on product offering, is asked for.
- Promotion: Dwell on the communication mix to reach out to prospective clients and influencers. Only online advertising may not be enough, do offline awareness campaigns too, to reach older people who may not be tech savvy. Advertising in healthcare industry journals will catch the attention of doctors & technology proponents. FM radio is a good way to reach youngsters too. Do sales promotions, tie-ups with diagnostic clinics, pamphlets (with daily newspapers), etc. to spread the word. Social media marketing, tracking user comments and feedback, is a continuous process.

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- 3. HealthKhoj was founded by Ashish Tiwari, Prabhash Thakur and Ratnesh Pandey. They completed their professional education from the top institutes of the country. Ashish Tiwari is an IIT Kharagpur graduate and worked on Big Data for one of the largest global insurers. Prabhash Thakur from IIT Bombay and XLRI, headed M&A for India at a large global technology company. Ratnesh Pandey from IIM Lucknow worked in the Marketing domain. They did their schooling from Sainik School, Rewa, Madhya Pradesh.
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- Bootstrapping is one of most effective and inexpensive ways to ensure a business' positive cash flow. Bootstrapping means less money has to be borrowed and interest costs are reduced.

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