

# SKETCHING OUT THE SOURCES AND DURATION OF AWARENESS AMONG THE PEOPLE ABOUT THE HEALTHCARE INNOVATIONS

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**Abstract** *Health care costs are one of the biggest issues in all over the world today. Health care entities or service providers have to come up with creative ways to survive, while making sure they pay attention to the things that define who they are. So as per the regulations and expenses, Health care professionals must address specific management strategies. Strategies include standardization of processes and supply items. The main focus of research study revolves around the organizational innovative management strategies to improve their products and services.*

## 1. INTRODUCTION

Increase in service costs and the compulsion of providing healthcare to all sections of the society irrespective of their purchasing power are the two major challenges that healthcare industry is confronted today. Nowadays, Healthcare organizations are scrambling to find ways to cut costs. Healthcare providers are continuously feeling the pressure to manage costs and provide new treatments and better outcomes for patients.

In any Healthcare industry where success is increasingly driven by satisfaction scorecards, reliable access to key talent is essential for meeting the demand for quality service. At the same time, the difficulty of ensuring a reliable supply of clinical and professional talent is challenging the status quality of traditional talent acquisition strategies.

Information Technology (IT) plays a core role in almost in every health care area. Be it providing quality services to the patients at reduced cost, maintaining patient history, adjudicating payer claims, providing referral and pre-certification services, case management, digital imaging for paper forms or generating electronic medical records (EMRs) for speedy and accurate processing of information.

In Healthcare industry, talent shortage is perhaps the most important factor affecting organizational success and it will remain a key challenge over the next two decades. In addition, healthcare providers will face a growing senior population that demands new and Expanded services. Due to the talent shortage and the growth of the senior population, the demand for talent will stretch many organizations to their limit.

The good news is that with the right combination of creativity, flexibility, and passive candidate recruiting capability, organizations can take the steps needed to improve the healthcare innovations.

As per current status “Instead of looking forward to what’s coming in the years ahead,” the public were under frustration, anxious and even angry because they’re afraid that they’re not going to be able to afford new technologies and procedures.

Uncertainty is a corollary of change. Even if the change is good and beneficial, its lack of acceptance by the relevant stakeholders can bring in the uncertainty in the consequence of the change. Every technological innovation brings with it some concomitant uncertainty due to the change in the existing business workflow and processes.

Nowadays, Healthcare industry also faces the dilemma between pursuing the competitive advantage of cutting edge technology and the risk of uncertainty associated with it.

## 2. OBJECTIVE OF THE STUDY

This research study involves in the **Sketching out the Sources and Duration of awareness among the people about the Healthcare Innovations**. The study involved in the identification of the various technology innovations, trends, innovation in action, insight, concepts & tools, creating and testing new ideas for healthcare industry in the current scenario.

The following core objectives were taken into consideration during the research study,

- Methodology to evaluate Sources and Duration of awareness among the people in the society about the level of technological innovations.
- To study the earlier and new innovations scenerio in the society.
- To bring out the Individual’s perception towards the technological innovations.

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- To analyze the whether people are comfortable with the innovation trends, through graphical representation.

The following research goals were taken into consideration upon any assessing any innovation through technology,

- Methodology to evaluate the appropriate level of technological innovations.
- To assess the adaptability of the new innovations in the society.
- To bring out the Individuals perception towards the service cost & quality.
- To analyze the whether people are comfortable with the innovation trends.

### 3. INNOVATIVE MANAGEMENT STRATEGIES OVERVIEW

#### 3.1 History of Innovation

In earlier stages of 18<sup>th</sup> & 19<sup>th</sup> centuries, the innovation cycle used to be very long. Today, the innovative cycle is compressed and is much shorter. This change can be due to the advances made in the software simulation, ready availability of venture funding and encouragement given by venture industrialists in commercializing innovative ideas.

Bringing about technological innovation is easier said than done. For any innovations—people, technology and processes that form the backbone of business are receptive to the inherent change that innovations brings about, the challenge of compressing innovation cycles can be easily countered. In the current state business where there are overlapping industries, technologies depend on each other. In earlier days, one innovation is dependent on another. Moreover, most of the industries were not studying the core aspects of interlinking factors which involved in the existing technological progresses while evaluating the new technologies.

Nowadays, some healthcare industries were focus on the older innovation and initiate the new ideas in the existing technologies. Due to this survey, various approaches were found and studies state that it will be good for the quick launch of the innovations trends. For example, one innovative idea that might have seemed impossible at one point in time might become a reasonable commercial product with technological advancements in a couple of years as a result of other complementary innovations. Often the impact of the innovation depends on complementary inventions.

Nowadays, the technology innovations related to people – patients, providers (physicians / hospitals), business

sponsors, end users, claim processors, software vendors audit / compliance personnel, underwriters, policy makers, insurance agents / brokers etc. Over the last few years, there has been a rapid change in the healthcare industry, especially in the innovation trends, advanced technology and online-based applications have modernized the society in the healthcare sector.

#### 3.2 Current Scenario of Healthcare Industry

**Understanding Technological Innovations:** Healthcare providers and customers are interacting in a common space to create more health as well as wealth. Essentially, Health is wealth usually in the form of money or property.

- 1) Innovations exist when two groups interact;
- 2) Those who are seeking healthcare innovations and

Those who have capital to provide innovation technology. Sometimes it takes decades to find out the new usage of the existing technology. For example, Aspirin has been a very common medicine for pain killer for years, but it is recently that one discovered its potential to prevent heart attacks. It is therefore important to not wait till the innovation materializes to take it to commercialization but to program and manage innovations to an extent that commercialization seems a cakewalk for the business stakeholders.

However, during the last decade, a critical worldwide shortage of professional talent has emerged as a central issue in corporate workforce planning due to the innovation in the Healthcare industry. Sustained global business growth, changing demographics, and worldwide competition for talent have made it far more difficult to achieve ideal staffing and service levels. Nowhere is the problem more severe than in the healthcare environment, where talent shortages put lives at risk. These shortages will extend beyond doctors, nurses, therapists, technicians and others on the front lines. They will also encompass management, administrative and technical expertise as well. Due to the fast innovations in the healthcare industry and to heavy workload for the managers who lack the time to think strategically will increase staff tension and reduce employee satisfaction. Currently, recruiting and retaining qualified executive leaders, middle managers and clinical professionals rank as top concerns for virtually all healthcare organizations for implementation & execution of the innovative technology.

Most of the innovations will be reviewed for certain instances like Innovations usage, benefits, people impact, technology impact and process impact. Advancements in medicine have radically changed the business of healthcare. Technology has added years to lifespan and enhanced the quality of life.

As more and more of the Innovations in the health care business is proceeded this way, the concept of a technology implementation to the customer and acceptance of the system will be difficult but it takes long pathway to accept in the society.

**4. Research Methodology:**

**4.1 Study Area**

**4.2 Sampling Procedure & Data collection**

**4.3 Frame work of Analysis**

**4.4 Data Analysis & Interpretation**

Research is a careful investigation or enquiry especially through search for new facts in any branch of knowledge. Descriptive research has been used which involves surveys and fact findings.

4.1 Study Area: *The study area refers only Hyderabad city, Andra Pradesh.*

4.2 Sampling Procedure & Data collection: *The data were collected through different sampling technique (refers to different ways of sampling approach) and Primary data through an interview schedule was used as a tool for collecting the data.*

4.3 Frame work of Analysis: *Percentage Analysis.*

4.4 Data Analysis and Interpretation.

**Sampling Procedure:** *Sampling was carried out in Hyderabad city, Andhra Pradesh, India.* The data was collected through various sources like advertisements, Industry Websites (response through internet), friends & relatives and direct interviews. During study, the data was collected as a whole and segregated into various parts. Then, the collected data was organized and reviewed. Relevant data were taken into consideration and few data were kept for reference purpose. The scrutinized data were considered and tabulated in the final stage of the report. Further, Histogram graphical representation was made to interpret the results from the collected data.

The current study reveals that the customers awareness of the healthcare market innovations, trend in markets were studied and represented below,

**Histogram representation**

**Inferences**

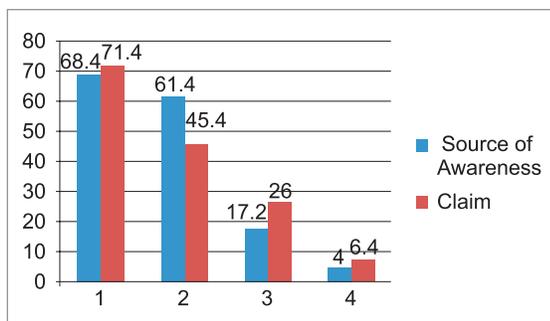
From the above data represented in the table 1, it represents that Healthcare innovations 342 (68.4%) of the respondents became aware through advertisement, 307 (61.4%) of the respondents through Industry Websites.

In healthcare innovations related to Claim processes / end users / Hospital innovations / others, 357 (71.4%) of the

**Table 1 Source of awareness on Healthcare Innovation**

Sources of Awareness	Healthcare Innovations		Claim processes/end users / Hospital innovations / others	
	No: of respondents	Percentage (%)	No: of respondents	Percentage (%)
Advertisements	342	68.4	357	71.4
Industry Websites	307	61.4	227	45.4
Friends & Relatives	86	17.2	130	26.0
Others	20	4.0	32	6.4

Source: Primary data



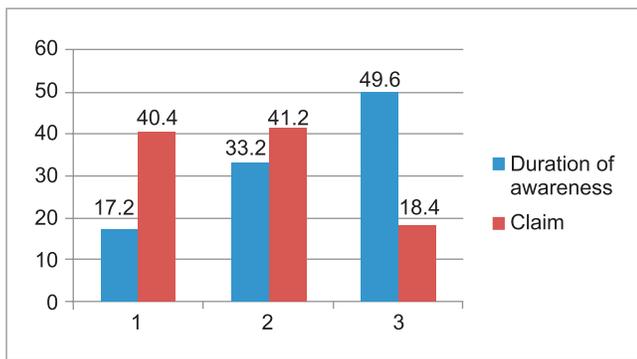
respondents became aware through advertisement, 227 (45.4%) of the respondents through Industry Websites. Then, if we see the area of 130 (26.0%) of the respondents became aware through Friends & relatives. So in current scenario of the competitive world, the Healthcare innovations were concentrating in the technology to serve the people in a short time rather than the long term benefit. The above clearly indicates that the healthcare players are growing in the Industrial sector by introducing the new innovations and systems to attract the customers mind and the society and thus by increasing the market trends aggressively.

**Histogram representation**

**Table 2** Duration of awareness of Healthcare Innovation

Duration (in years)	Healthcare Innovations		Claim processes / end users / Hospital innovations / others	
	No: of respondents	Percentage (%)	No: of respondents	Percentage (%)
Above 5 years	86	17.2	202	40.4
3 to 5 years	166	33.2	206	41.2
Upto 2 years	248	49.6	92	18.4
Total	500	100	500	100

Source: Primary data



**Inference**

From the above data represented in the table 2, it represents that Healthcare Innovations 248 (49.6%) of the respondents became aware up to 2 years whereas 166 (33.2%) of the respondents are between 3 years to 5 years.

In Claim processes / end users / Hospital innovations / others related areas, 206 (41.2%) of the respondents became aware between 3 years to 5 years, 202 (40.4%) of the respondents become aware Upto 2 years only.

Then, if we see the area of last 5 years the trend was constant and it was not much reduced. The above data clearly indicates that the healthcare innovators were eager to invest in the innovation technology and to earn profit in short period of time.

**5. INNOVATIVE MANAGEMENT STRATEGIES – CURRENT SCENARIO**

In a perfect world, every player in Healthcare industry would always deal honestly and fairly with every other player. The field would be perfectly level, giving everyone the same access to information and opportunities. In current scenario,

the Healthcare innovators are thinking to introduce the technology innovations in short time in the following ways,

1. **The sooner the better, considering the unpredictability of the Healthcare Industry.**
2. **Early Technology Innovations**
3. **Regularly Innovations**
4. **Innovations benefit for long term and not for short time**

The customer’s attitude and acceptance of the technology shall be changed day to day based on the Healthcare player’s announcements of new products at different period of time, but the study shows that actually the customers are not really aware of them in details.

**5.1 Modern techniques – Innovative Technology Strategies**

Usually technology innovation has the pathway of step by step by step process from conception of innovation through innovation sustainability to successful management of technological innovations. Based on the survey and interaction with the healthcare industrial personnel’s, we derived the following phases were important for any Technological innovation,

**Phase – I**

- A) Innovation Methodologies:
  - Business opportunities
  - \* Management committee formation
  - \* Identification of the core business team
  - \* Identifying potential business capabilities & Performing benefit Assessment

**Phase – II**

- A) Innovation Identification:
  - \* Task force formation

- \* Business opportunities presentation
- \* Identifying an Approach & Idea collection

### Phase – III

- A) Innovation Assessment and strategies:
- \* Impact analysis & Strategy Planning
  - \* Survey of the market & Finalizing assessment

### Phase – IV

- A) Product Promotion and commercialization:
- \* Commercialization analysis
  - \* User training & Awareness & Identification of the growth
- A) Innovation Delivery:
- \* Programme management planning
  - \* Contingency planning & Project execution
  - \* Tracing project goals
  - \* End to End product validation

### Phase – V

- A) Benefit Realization & Innovation sustainability:
- \* Full Migration
  - \* Execution as per plan
  - \* Capture the lesson learnt & Maintain Innovation product

## 5.2 New Innovation Vs customers' scenario:

Inference from the above survey:

LEARN + INNOVATION + IMPLEMENTATION + SUSTAINABILITY = PROFIT

**The New Technology Innovation deals with the following issues:**

- Importance of innovations in the market
- Initial innovators offerings
- Role of Healthcare market
- Major Healthcare markets worldwide
- Markets and financial innovations
- Healthcare market regulatory requirements
- Role of the government treasury

**The following schematic diagram indicates the process flow model of any technological innovations:**

**Healthcare research** is an essential activity for companies because it enables them to provide products and services that are useful for the targeted consumers. One big advantage of healthcare research is establishment of proper communication between the new innovations and the customers. The customer reactions to various services provided by the companies can be measured as a result of healthcare market research. The companies can thus do away with wrong policies and look to take the right steps. The healthcare can also locate the right opportunities through market research. If the company undertakes healthcare market research before launching a new innovative product or service then it stands a better chance of getting a good sustainability. Risk minimization is another reason for undertaking healthcare research. Through this research, the exact needs of the market and the general public can be gauged and the products and services can be made very demand oriented. The companies can also analyze whether they are making progress in the right direction.

Healthcare research should be done as early as possible in order to avoid problems in the future. Before technology innovation in the healthcare market, healthcare research needs



to be undertaken. Research involves finding the competitor companies and innovation comparison that would best suit the need of the customers. The company profile needs to be studied and the size of the company is another important parameter of healthcare market research. Healthcare innovations strategies can be sub-divided into primary, secondary (short-term), and secular (long-term) trends. Healthcare innovations usually define the risk involved in the implementation and sustainability in the society. The risk is the integrated part of the innovations. The higher the potential of innovation, the higher is the risk associated with it. It can be easily said that the risk distinguishes an innovation from the sustainability and acceptance by the customers.

Any innovation in healthcare markets comes with the following types of risks.

- User-friendly, Time benefit, Market Risk, Industry Risk & Business Risk.

Healthcare innovations are directly influenced by the rise and fall of the Industry market. Other than the financial condition of the economy, technological innovations are also influenced by various other external factors. The customers like patients, doctors, others need to be aware of the various innovations and update their needs regularly.

## 6. CONCLUSION

Change is the only constant in today's world and every industry has to innovate and invest in new technologies and sustain in the ever changing environment. Healthcare is no exception to this. During the course of the study, it was found that there was increase in the technological innovations by the healthcare industries especially short term investment to get more profit. Based on the research study data, it was clearly states that in the recent past 2 years more technological innovation are evolved and knowlegde among the people also increasing. Moreover, some percentage of people was not aware completely about the healthcare innovations and nature of the impact. But, if we look into the claim ratio above the past 5 years it was more, nowadays people were not properly claiming the requirements. Many of the people in the society were not involved in the claim activity. Based on the advertisement and the promotional activities most of the healthcare innovations were established. Further, the innovators are not completely transparent on their policies and procedures to the customers and only through special offers they are managing the implementations in the society. So customers also need complete education about innovations before implementation by the innovators. Based on this research study, primary data review &

research survey of the healthcare market we have derived that customer knowlegde on the innovations to be improved and innovators should implement the new innovations in some phase process to nurture technological innovation, suggestions & planning which in turn helpful for customers to think for implementation & benefits of the innovation in the safe manner.

A six step process was derived based on this study before implementing the innovation are represented below,

- 1) Setting innovative goals
- 2) Understanding clearly real innovation risks
- 3) Designing an innovation portfolio to a certain limited boundary
- 4) Evaluating markets & innovation value benefits carefully, regularly
- 5) Selecting specific innovation only
- 6) Managing & monitoring the selected portfolio

Some of the factors influencing the new innovations in the various situations by changing the real situation were listed below, but not limited to

- Customers behavior & acceptance to new innovations
- Innovation pattern & preference to be completely understandable to customers
- 100 % Involvement in understanding the needs
- Don't rely on Market players offers related to innovations during launch

## Outcome of the study

A constant effort is essential to promote the Technological innovations; benefits and innovation sustainability with customer satisfaction will always enrich the total countries economy.

## 7. REFERENCES

1. *Drucker, P.F., (1993) Innovation and Entrepreneurship, Collins.*
2. White paper addressing the Healthcare talent shortage – FS\_Healthcare\_WP.pdf.
3. Managing technological by Vedpuriswar, A.V., Chowdhary and Ghori, A.S.K.
4. [www.ehealthinitiative.org](http://www.ehealthinitiative.org)
5. <http://www.novaces.com/systemcpi.php>
6. SAVE International 2005 Annual Conference Technical Presentation Abstracts