

To evaluate the market potential for Hospital Information System (HIS) in and around Mumbai.

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I. Introduction:

With the growing awareness about healthcare products and services, Hospitals are gaining a lot of importance. Hospitals are complex organizations with a number of departments and units coordinating with each other for patient care and all allied services. With the growth of IT as backbone for all the data processing, HIS (Hospital information system) is gaining popularity and becoming an integral part of hospitals.

The research paper is based on a market research conducted for Central Mumbai to identify the presence and need of Hospital management system.

Keywords: HIS, IT in healthcare.

Literature Review: There are a few researchers who have tried to explore the area in terms of working papers and brief discussions on the subject.

(Poggio, Frank L. **Healthcare Financial Management** 46.6 ,Jun 1992) through his discussion on physician recruitment says that physician recruitment can be done through HIS. HIS can help physician recruiting in many ways, and then they both can work hand in hand to generate the desired results for the hospital.

(Sipkoff, Martin. **Drug Topics** 152.11,Oct 13, 2008) describes a case of HIS implementation in Virginia hospital Center in Arlington, investing \$14 million.

K, G V R. **International Journal of Innovation, Management and Technology** 3.4 (Aug 2012): in his study tried to assess customer satisfaction of HIS to identify the status of information quality in hospitals and develop a integrated information system model by taking inputs from users of HIS for quality improvement.

(Correll, Richard; Ummel, Stephen L. **Healthcare Executive** 7.1 ,Jan/Feb 1992) talks about guidelines to help health care executives make prudent and efficient decisions in purchasing an HIS.

(Diss.Xue, Yajiong. Auburn University, ProQuest, UMI Dissertations Publishing, 2004) in his research studied the development process of Hospital Info. Systems (HIS) in China's Hospitals.

II. Research Gap:

Since HIS is in itself a new and emerging concept, there are a very few researchers who had a chance to get into this domain. As a result, there are very few papers and studies based on this area in India. So there is a huge research gap which can be identified clearly.

Objectives Of Study: This study has following objectives -

- ① To find out market potential for HIS in Central Mumbai.
- ② To understand current IT environment in healthcare industry.
- ③ To understand the usage of Hospital Information System.
- ④ To find out loopholes in currently used HIS software.

III. Research Methodology:

Every Research is based on a standard sequence that determines its initialization, flow and completion.

Research Methodology is a way to systematically solve the research problem. When we talk of research methodology we not only talk about research methods but also consider the logic behind the methods we use in the contexts of our research study and explain why we are using a particular method or technique and why we

are not using other so that results are capable of being evaluated either by researcher himself or by others. The research has importance to determine the contribution and success of using HIS for Hospitals. With the results of the research, it is possible to give valuable insights about the importance of using HIS. Our research is **Applied Research** which contains practical questions.

Applied research is done to solve specific, practical questions; for policy formulation, administration and understanding of a phenomenon. It can be exploratory, but is usually descriptive. It is almost always done on the basis of basic research. Applied research can be carried out by academic or industrial institutions. Often, an academic institution such as a university will have a specific applied research program funded by an industrial partner interested in that program.

Our research has **Structured approach**:

The structured approach to inquiry is usually classified as quantitative research.

Here everything that forms the research process- objectives, design, sample, and the questions that you plan to ask of respondents- is predetermined.

In our research the questionnaire, which contains different questions relating to the system in hospitals is made and it is been asked to the staff of the hospitals and the required information is been gathered.

Hypothesis :

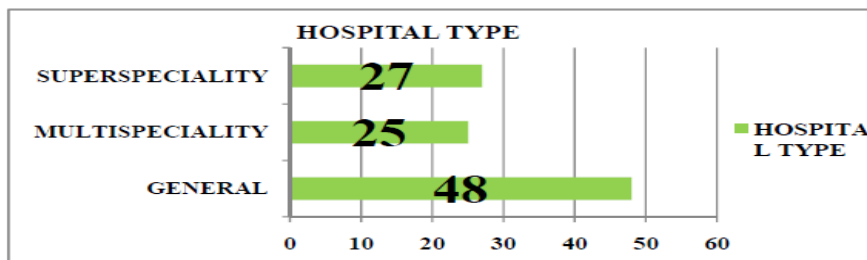
We have taken following hypothesis while carrying out market research.

Ho1: There is market potential for HIS in Central Mumbai.

Ho2: There are loopholes in the currently used HIS.

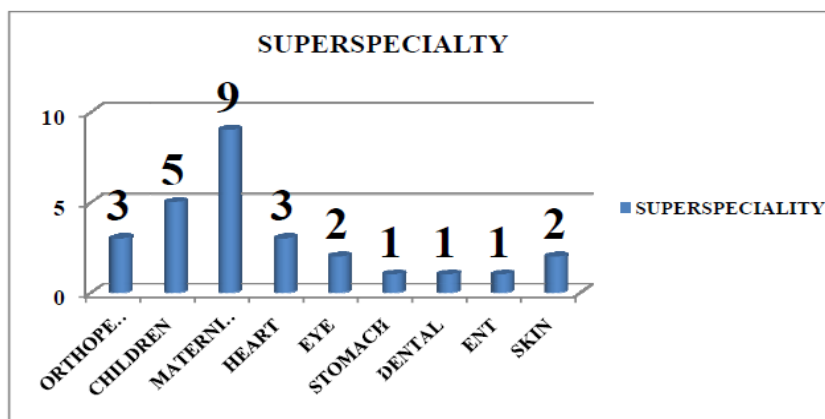
IV. Data analysis:

QUESTION: What is the type of hospital?



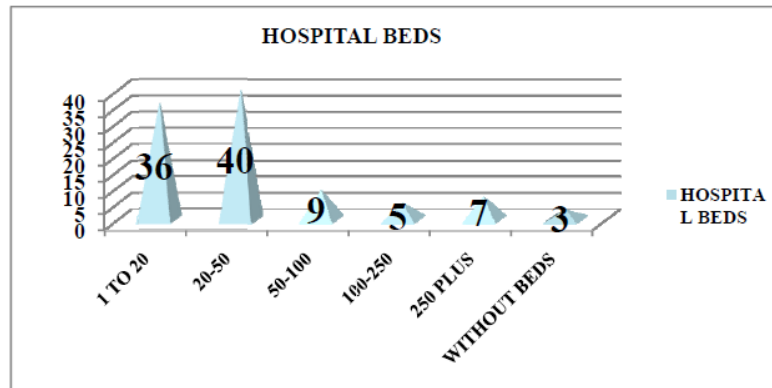
This graph gives the classification of hospitals as per their type. Here, we can see that there are more General hospitals in Central Mumbai compared to Super specialty and Multispecialty hospitals. So, HIS for General hospitals will be beneficial in Central Mumbai.

QUESTION: What type of Super specialty?



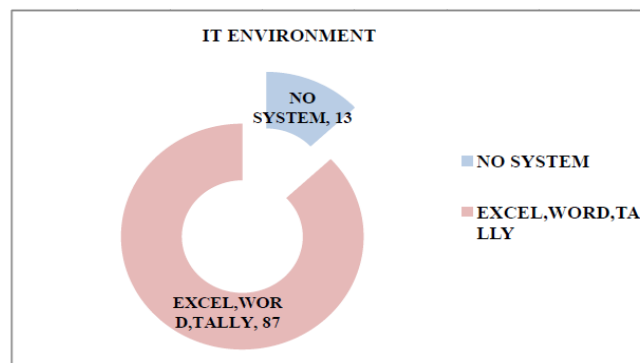
This graph gives classification of 27 Super specialty hospitals. Here, we can see that there are more maternity and IVF centre compared to other super specialty hospitals. So, HIS for maternity hospitals are beneficial in Central Mumbai.

QUESTION: What is the operational size of the hospital in terms of number of beds?



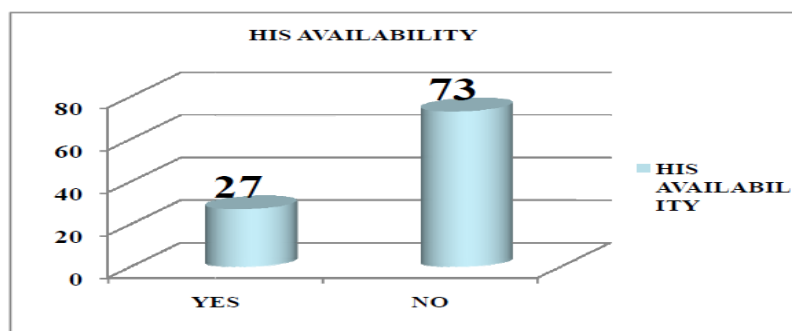
This graph gives classification of the hospitals as per number of beds available in them. Here, we can see that there are more hospitals having beds as 20-50. So, they can implement various modules of HIS as per their needs in these hospitals accordingly.

QUESTION: What is the current environment (IT Environment) at hospitals?



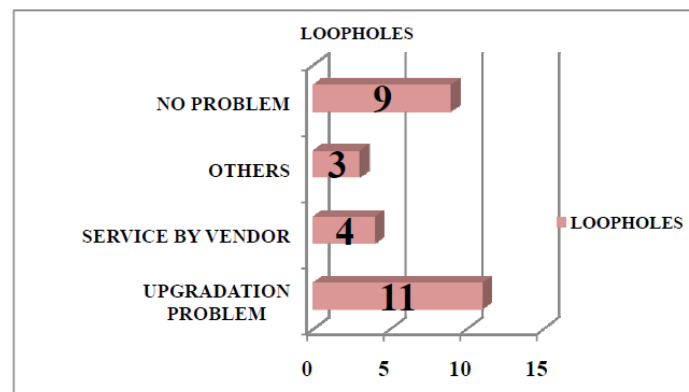
This graph gives the current IT environment in hospitals. Here, we can see there are more hospitals which are using computer system for their daily work. So, we can say that they might be comfortable to have HIS for their hospitals.

QUESTION: Are you currently using any HIS software?



This graph gives classification of hospitals as per HIS availability in them. It shows that 27 hospitals have HIS, while 73 hospitals do not have it. So this 73 and many of the hospitals are developing rapidly, so they can use HIS in future.

QUESTION: What are the loopholes in current HIS?



This graph shows the loopholes in the currently used HIS. Here, we can see that many of the hospitals in the Central Mumbai have various loopholes in their HIS. Here, we can see that in most of the hospitals the upgradation of the HIS as major issue

V. Conclusion:

From the above Data Analysis, we accept both the hypothesis and we have made the following conclusions:

There is a Market Potential for HIS.

There are loopholes in the currently used HIS.

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