Specialty Outsourcing along with Business Process Re-Engineering (value added services)

A dissertation submitted in partial fulfillment of the requirements

for the award of

Post-Graduate Diploma in Health and Hospital Management

by

Dr. Shweta Singh

International Institute of Health Management Research

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Certificate of Internship Completion

Date:……..

TO WHOM IT MAY CONCERN

This is to certify that Mr./Ms./Dr. _____ has successfully completed his 3 months internship in our organization from January 16, 2012 to April 16, 2012. During this intern she has worked on…….(task performed) under the guidance of me and my team at…….(organization). …….(any positive/negative comment)

We wish him/her good luck for his/her future assignments

(Signature)

_____(Name)

_____Designation

Certificate of Approval

The following dissertation titled "**Specialty Outsourcing along with Business Process Re-Engineering (value added services)** " is hereby approved as a certified study in management carried out and presented in a manner satisfactory to warrant its acceptance as a prerequisite for the award of **Post- Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation

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Certificate from Dissertation Advisory Committee

This is to certify that **Dr.Shweta Singh** , graduate student of the **Post- Graduate Diploma in Health and Hospital Management**, has worked under our guidance and supervision. He/She is submitting this dissertation titled" **Specialty Outsourcing along with Business Process Re-Engineering (value added services)** " in partial fulfillment of the requirements for the award of the **Post- Graduate Diploma in Health and Hospital Management**.

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

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New Delhi	Address
Date	Date

Abstract

Specialty Outsourcing along with Business Process Re-Engineering (value added services)

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This Post Graduate Management Project was performed to study the application of outsourcing and Business Process Reengineering (BPR) for revenue enhancement and BPR concepts to the restructuring of Orthopedics department of a multispeciality hospital of northern India. The hospital is restructuring from a normal orthopedic department to the orthopedic super clinic by implanting the joint replacement speciality. The reengineering project developed a series of deliverable results during the study. The outsourcing and reengineering has developed a specialized super clinic , which is expected to provide high quality treatment to the patients and increase in over all revenue collection of the department. A business plan cost impact model was developed to help the facility assess the impact of changes on the cost of delivering healthcare. This model uses standard expense data pulled from the facility provider organization accounting system. Using the model, the projected revenue enhancement from the project range from between to . The study has shown that outsourcing and Business Process .
Reengineering concepts were useful in the restructuring of orthopedics department. They provided a good framework for the restructuring and have generated a series of useful deliverable products that are expected to guide the implementation of of joint replacement super speciality.

ACKNOWLEDGEMENTS

Without the support, guidance and patience of the following people this dissertation would not have been completed who deserve acknowledgement beyond words.

First and foremost I would like to express my gratitude to Mr.Ajoy Khanderia,CMD 2a-Capital Advisory(I) ltd, for giving me permission to commence this study in the first instance, to do the necessary research work and to use departmental data.

I would like to devote my thanks to my respected mentor Mr.Sachin Chaudhary (Sr.Consultant) for his unconditional support and guidance throughout the project without which this work would not have materialized.

I would also like to thank Ms.Sonia (HR), for giving me this wonderful learning opportunity by giving me this valuable project and for all the help they have given me during my internship period.

I am grateful to Mrs.Anandi Professor-IHMR for being my mentor whose guidance helped me sail through many hurdles, I am sincerely thankful to him.

Finally, My sincere thanks to Dr. Rajesh Balla (Dean, Academics) who have been the driving force behind the successful completion of my Internship and Dissertation.

No words of gratitude are sufficient to appreciate the assistance of the hospital staff for their consistent support and motivation. They were always there to help and support me at each and every step to make the project highly beneficial and meaningful for me.
At 2a-Capital, I came across people who gave shape to my efforts and who were crucial in making my dissertation even more meaningful.

Last but surely not the least from the bottom of my heart I wish to thank my family and my friends for being who they are. Without their support and encouragement I would have not attained all that I have so far. I hope I have lived up to their expectations

Dr. Shweta Singh

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ACRONYMS/ABBREVIATIONS/KEY-WORDS

HIS- HOSPITAL INFORMATION SYSTEM

EBITA- EARNING BEFORE INTEREST,TAX,AMORTIZATION

BPR- BUSINESS PRCESS RE-ENGINERING

DBMS- DATA BASE MANAGEMENT SYSTEM

TAT- TURN AROUND TIME

BP-BUSINESS PLAN

OPD- OUT PATIENY DEPARTMENT

IPD- IN PATIENT DEPARTMENT

UHID- UNIQUE HOSPITAL IDENTIFICATION NUMBER

ICU-INTENSE CARE UNIT

OT- OPERATION THEATHER

ECG- ELECTROCARDIOGRAM

CCU- CRITICAL CARE UNIT

TKR- TOTAL KNEE REPLACEMENT

THR- TOTAL HIP REPLACEMENT

NABH-NATIONAL ACCREDIATION BOARD OF HOSPITALS

KPI- KEY PROCESS INDICATORS

MIS- MANAGEMENT INFORMATION SYSTEM

Part I: Internship Report

1.1 INTRODUCTION

CLIENT ORGANIZATION:

Client Hospital is a multi-specialty, 250 bedded, NABH accredited multi-specialty state-of-art medical center, in northern India established in year 1994, it became one of the first institutes in India to attain ISO 9001 .It is one of the very few medical centers in the region with high class facilities for Cardiac care, Renal transplant, Joint replacement, Obesity surgery etc. in the Large building with 30,000 sq. ft. built up area .

Different super specialty services which it offers are:

Cardiac care & Cath Lab : Angiography • Angioplasty • Echocardiography • Stress echo cardiograms • Stress Exercise tests • Pacemaker • Cardio version • Hotler Monitor • Electrophysiological Studies • Ambulatory Blood Pressure Monitor

Renal Science: The Center of Excellence for Nephrology and Urology, specializes in all aspects of Nephrology such asLithotripsy • Medical Expulsive Therapy • Ureterorenoscopy / RIRS (retrograde intrarenal surgery) • Percutaneous Lithotripsy (PCNL) • Laparoscopy • Open Surgery • Renal Transplant • Nephrectomy • TURP • Torsion Testes • DJ stenting under GA • DJ stent removal under LA • Prostrate Biopsy • Cystoscopy L.A. • Cystoscopy G.A. • Optical Urethrotomy under LA

Digestive Diseases: is equipped with Modular OT and endowed with latest equipment and back of the ICU, CCU and Dialysis unit . Colon interposition, Lap TVGJ Diagnostic and therapeutic UGI endoscopy including EVL• SCT • SEMS placement • esophageal dilation • Polypectomy GU & DU Sct • Diagnostic and therapeutic Sigmoidoscopy & Colonoscopy including Polypectomy colonic SEMS placement • internal hemorrhoids ligation • Diagnostic and therapeutic ERCP including stone removal • SEMS placement • CBD Stricture dilatation

Obesity Surgery: Hospital is an OSSI (Obesity Surgery Society of India) recognized surgery center in India.weight loss surgery program includes : Extensive pre-operative evaluation and preparation • Psychological evaluation • Pre and post-op behavior modification program run by our psychologist, dietician, in • weekly support groups • Personal trainer Diet counseling with our registered dietician • Life long follow up

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- Issue identification
- Root cause analysis
- Solution design
- Implementation

- Dashboard setting and monitoring

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- Planning for HMIS Implementations
- Selecting HMIS Software
- Providing System Administration and Technical Support
- Project Management

Revenue Enhancement:

Create an action plans and strategies to enhance revenue and achieve long team growth by increasing patient flow, maximizing utilization of current resources, and exploring the addition of new services.

- Demographic Analysis
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- Competitive Analysis
- Affiliation opportunities
- Strategic positioning and "Go to Market strategy"
- Brand positioning strategies
- Marketing strategies to support New product / Facility development

Cost rationalization

Cost rationalization vertical helps the hospitals become operationally excellent and market responsive by proposing proven strategies that significantly reduce overall supply chain cost, increase EBIDTA Margins and foster operational agility and adaptability.

- Supply Chain Strategy
- Supply Chain Cost Assessment
- Process Improvement Projects
- Technology Selection and Implementation

- Supply Chain Analytics
- Procurement and Sourcing

Joint replacement practice organization:

Global Leader in joint replacement Inventor of OS needle used by orthopedic surgeons worldwide, practice organization along with his team has performed over 25,000 joint replacements. Presently they perform more than 300 primary joint replacement and 7-8 revision joint replacement surgeries every month. They brought laminar air flow and body exhaust systems to joint replacement surgery in India and established the first Indian hospital with a Class 100 operation theater making knee replacement surgeries much more safe and successful.

1.2: Routine Work

I am posted as a assistant consultant at the organization. During this time period I learnt many new things. During first month of my posting is to collect all the data regarding the project and to handle communication with the client. I also attended in two marketing camps organized at client location.i also attended steering committee meetings and noted the important issues needs to be address.i organized three workshops in which team as a whole carve out a document of advanced hospital processes.i also the part of training provided regarding the visio and presentation skills.

My work is also to do market research by the help of internet to crave out the area of business.profiles of different hospital formulation ,their revenues and infrastructure information gathering is also part of my work.

Day to day follow up with the outsourced organization , addressing their issues and visiting their site is also my work.

Worked to formulate the questionnaire to evaluate the hospital supply chain.

1.3 Managerial Task

Worked as a assistant to senior in formulation of business documents.

Timely follow from client w.r.t their requirements.

Handling independently the calls from the client and facility provide organization.

Developed content for the company website and did all follow up with vendor.

Formulation of the business plan in association with the senior.

Formulation of the document on private equity investments in healthcare this year.

1.4 Learnings

What is consulting? Consulting as the synonym for an entire branch is in itself a highly differentiated segment of the service sector, encompassing the professional counseling of companies, institutions and persons on all kinds of professional topics. The consulting services and concepts are regularly aimed at providing solutions for the clients' specific problems. Among the standard consulting problems are the development, implementation, financing, operating and optimization of a company's or institution's processes and management, legal questions, taxation, all kinds of staff qualification measures and the general optimization of resources.

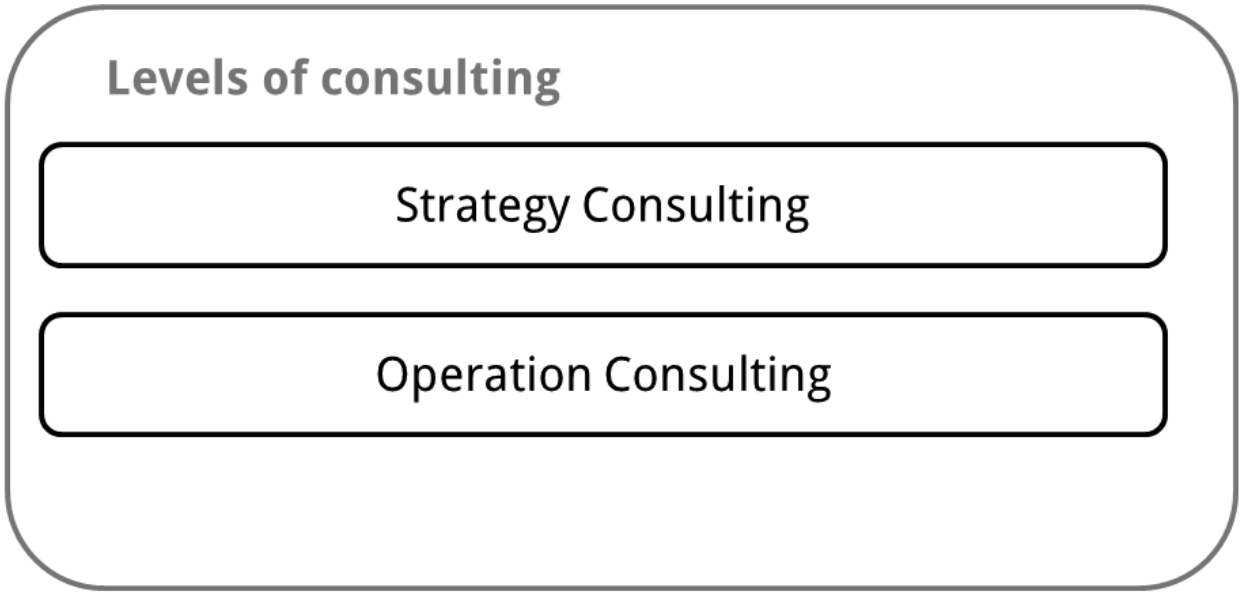

Fig 1:Levels of Consulting

Strategic Consulting:

- Capital cost rationalization
- Commercial due diligence
- Infusion of private equity
- Valuation
- Market assessment
- Information technology road maps
- Revenue enhancement

Operational consultancy:

- Operational cost rationalization
- Process improvement
- Implementation of HIS/IT
- Accreditation
- Material management/SCM

Capital cost rationalization:

In capital-intensive industries, profitability metrics are focused on the return on investment (ROI) formula:The rationalization of the use of capital is a key concept for all industries in which capital intensity is an essential factor. Capital in company operations is usually divided into three main categories:

1. Fixed assets

2. Inventory

3. Cash management

If the difference between revenue and costs is constant, halving employed capital will lead to the ROI being doubled. Within the PIMS framework (Profit Impact of Market Strategy), capital intensity is said to be one of the single most important factors for profitability in a large number (over 3,000) of business units. This relationship can be looked at in different ways.

Capital Turnover Value added per employee

ROI = Revenues – costs Capital

There is therefore every reason to work constructively and creatively with the use of capital. Many factors can affect the level of working capital. There are three factors that tend to increase tied-up capital in a business and which at the same time fall within the scope of management control:

1. The marketing organization's ambition to increase sales through short delivery times and improved service.

2. A distribution system that has been developed with many inventory points.

3. The efficiency of the production process in handling both inventory and fixed assets.

Commercial due diligence:

"Due diligence" is a term used for a number of concepts involving either an investigation of a business or person prior to signing a contract, or an act with a certain **standard of care.** It can be a legal obligation, but the term will more commonly apply to voluntary investigations. A common example of due diligence in various industries is the process through which a potential acquirer evaluates a target company or its assets for acquisition.

Valuation

Valuation is the process of estimating what something is worth. Items that are usually valued are a financial asset or liability. Valuations can be done on assets (for example, investments in marketable securities such as stocks, options, business enterprises, or intangible assets such as

patents and trademarks) or on liabilities (e.g., bonds issued by a company). Valuations are needed for many reasons such as investment analysis, capital budgeting, merger and acquisition transactions, financial reporting, taxable events to determine the proper tax liability, and in litigation.

Market assessment

- ***Identifying market size*:** how many institutions in that area providing superspeciality level of services in neurology in that area.
    - Drain in and drain out of patients from that area for neurological treatment.
    - Number of procedures done in a day/week/month.

Market growth rate: research on growth of such treatment modalities in the targeted area.

- Formulation of a forecast of business by extrapolating historical data in the future.

Market profitability: research on average market profit potential.

- Buyers power
- Suppliers power:
    - Cost of these procedures in the targeted area.
    - Number of doctors having expertise in the field of neurology.
    - Referral network
    - Success rate

- ***Industry cost structure*:** detailed study on industry cost structure to identify the success factor and develop the strategies.

Target market:

- ***Geographics*:** The location, size of the area, density, and climate zone of customers.

- ***Demographics*:** The age, gender, income, family composition and size, occupation, and education of your customers.
- ***Psychographics*:** The general personality, behavior, life-style, rate of use, repetition of need, benefits sought, and loyalty characteristics of your customers.
- ***Behaviors*:** The needs and wants your customers seek to fulfill, the level of knowledge, information sources, attitude, use or response to a product of your customers.

Competitor research:

- Internet Competitive Research
- Media Competitive research
- Ear-to-the-ground Competitive Research – in the field research
- Analysis of data to form a report

Information technology road maps

A technology roadmap is a plan that matches short-term and long-term goals with specific technology solutions to help meet those goals. It is a plan that applies to a new product or process, or to an emerging technology. Developing a roadmap has three major uses.It helps reach a consensus about a set of needs and the technologies required to satisfy those needs; it provides a mechanism to help forecast technology developments and it provides a framework to help plan and coordinate technology developments.

The existence of product managers in the product software industry indicates that software is becoming more commercialized as a standard product. This manager is responsible over the whole line of software requirement management, defining of products and their releases and this with all internal and external stakeholders involved. In this context, product road mapping can be placed to aid software product managers in planning and placing their products with the use of scientific and technological resources. For managing and using the technological resources technology planning can be used**.**

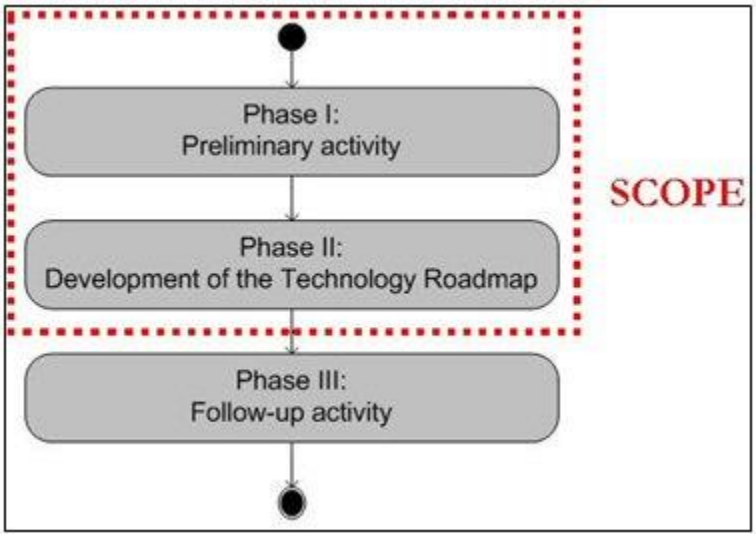

Fig: IT road map phasing

OPERATIONAL:

Process improvement:

Process improvement is an aspect of organizational development (OD) in which a series of actions are taken by a process owner to identify, analyze and improve existing business processes within an organization to meet new goals and objectives,such as increasing profits and performance, reducing costs and accelerating schedules. These actions often follow a specific methodology or strategy to encourage and ultimately create successful results. Process improvement includes the restructuring of company training programs to increase their effectiveness.

Process improvement is also a method to introduce process changes to improve the quality of a product or service, to better match customer and consumer needs.

Methods:

Benchmarking

Business process re-engeneering

Process re-design

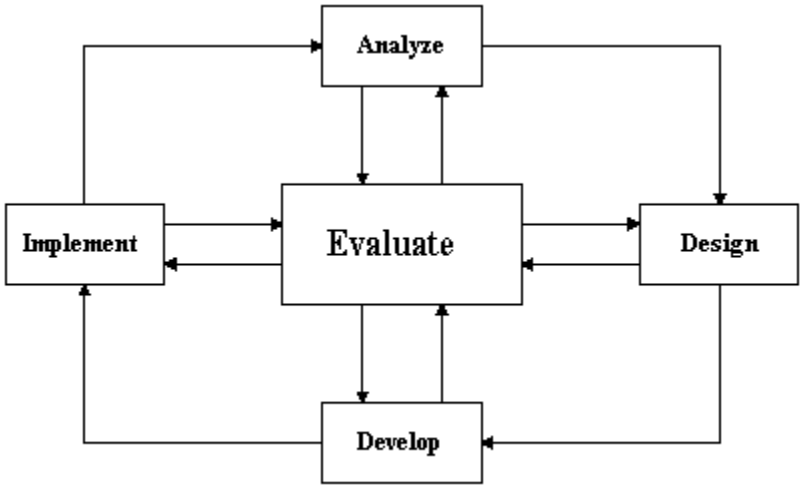

Fig 1

1.Benchmarking: Benchmarking is the process of identifying "best practice" in relation to both products (including) and the processes by which those products are created and delivered. The search for "best practice" can taker place both inside a particular industry, and also in other industries (for example - are there lessons to be learned from other industries?).

The objective of benchmarking is to understand and evaluate the current position of a business or organisation in relation to "best practice" and to identify areas and means of performance improvement.

The Benchmarking Process

Benchmarking involves looking outward (outside a particular business, organisation, industry, region or country) to examine how others achieve their performance levels and to understand the processes they use. In this way benchmarking helps explain the processes behind excellent performance. When the lessons learnt from a benchmarking exercise are applied appropriately, they facilitate improved performance in critical functions within an organisation or in key areas of the business environment.

Application of benchmarking involves four key steps:

(1) Understand in detail existing business processes

(2) Analyse the business processes of others

(3) Compare own business performance with that of others analysed

(4) Implement the steps necessary to close the performance gap

Benchmarking should not be considered a one-off exercise. To be effective, it must become an ongoing, integral part of an ongoing improvement process with the goal of keeping abreast of ever-improving best practice.

Chapter 1 : Introduction

1.1 Project:

Over the last few decades, medical sciences have made great strides leading to radical improvements in the modes of investigations, therapeutic activities and surgical procedures. Rapid technological developments that have overtaken the healthcare sector in the latter half of the twentieth century. Diversity of locational requirements which are influenced by the local climatic conditions ,cultural beliefs and practices, attitudes and prejudices of the community and above all the faith in health practices. The resultant effect has been seen in provision of design solutions that either enhanced the impact of delivery of care and/or made the delivery of care more efficient. This contribution to the humanity is a tribute to the interdisciplinary approach in the health facility planning and design process. It also marks the significance of tailoring the design solutions to the care needs of the individuals, both – sick and otherwise, and all those who are involved in the healthcare.

Healthcare is one of India's largest sectors, in terms of revenue and employment, and the sector is expanding rapidly. During the 1990s, Indian healthcare grew at a compound annual rate of 16%. Today the total value of the sector is more than $40 billion.

The need of specialty treatment arises in india very dramatically the projected reasons behind it are

- **Increase in Population**
- **Shift in demographics**: 60 percent of the population in the younger age bracket and an expected

increase of geriatric population from current 96 million to around 168 million by 2026. This representsa huge patient base and creates a market for preventive, curative and geriatric care opportunities.

- **Rise in disposable income**: Households in the above INR 200,000 per annum bracket can benefit from an increase in disposable income from 14 percent in 2009-2010E to 26 percent in 2014-2015 making healthcare more affordable.

- **Increase in incidence of lifestyle-related diseases**: There is likely to be a marked increase in the incidence of lifestyle-related diseases, such as cardiovascular, oncology and diabetes, when compared to the communicable and infectious diseases
- **Rising Literacy**: Growing general awareness, patient preferences and better utilization of institutionalized care as a result of increase in literacy rates.

In India there are appox. 5,000 hospitals as a result there is also an emerging hospital competition , so to stand out hospitals are employing different strategies , opening a new super specialty unit is also one of them. Setting up a new specialty is required a lot of strategic planning i.e. business plan , marketing plan. So that a estimate can be craved out.

1.2 Business plan

A **business plan** is a formal statement of a set of business goals, the reasons why they are believed attainable, and the plan for reaching those goals.

Business plan -is a written description of your business's future. A document that describes what you plan to do and how you plan to do it and conveys your business goals, the strategies you'll use to meet them.Document that can convince the reader that the business can produce enough revenue to make a satisfactory profit and therefore attractive as an investment opportunity

The purpose of a Business Plan : to explain clearly your business idea to convince funders that it is likely to succeed and to give you money to give clear plans for the future of the business to help you control the business.

A business plan has three primary functions:

1. To serve as an Action Plan-A business plan can help to move you to action .A business plan will help you to pull apart the pieces of starting a business and examine each piece by itself. So instead of one large problem , you have a sequence of smaller problems. And by solving the small problems ,the large problem is automatically solved.

2. To serve as a Road Map-business plan can be an invaluable tool to help keep you on track and moving in the direction you want to go. it is very easy to lose sight of your objectives and goals -

-a business plan can help to keep you focused. A business plan can also serve to help others to understand your vision, including suppliers, customers, employees, friends, and family.

3. To serve as a Sales Tool a business plan can serve as a sales tool. You will probably need outside financing to start your business, and a business plan is the tool you need to convince investors to come on board.

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1.4 Rationale for the study:

The rationale of this project is to imply the concept of outsourcing and Business Process Reengineering (BPR) model and BPR concepts to the restructuring orthopedics department of a multispeciality hospital in order to enhance the revenue. As discussed above, the project is structured around the revenue enhancement. The structural components are represented by the business plan. The process component is the BPR model used to achieve the restructuring of health care. The model is discussed in detail in the Methods and Procedures section below. The outcome component of the project will be reflected in the proposed changes to the organization as reflected in the deliverable products of the reengineering process.

1.5 Problem statement: The driving factor of implantation of a joint replacement unit is revenue enhancement .The existing ortho department of hospital is not able to produce significant revenue. The magnitude of change required mandates a dramatic restructuring of health care delivery. Additionally, the staff must implement decisions to meet these constraints rapidly.

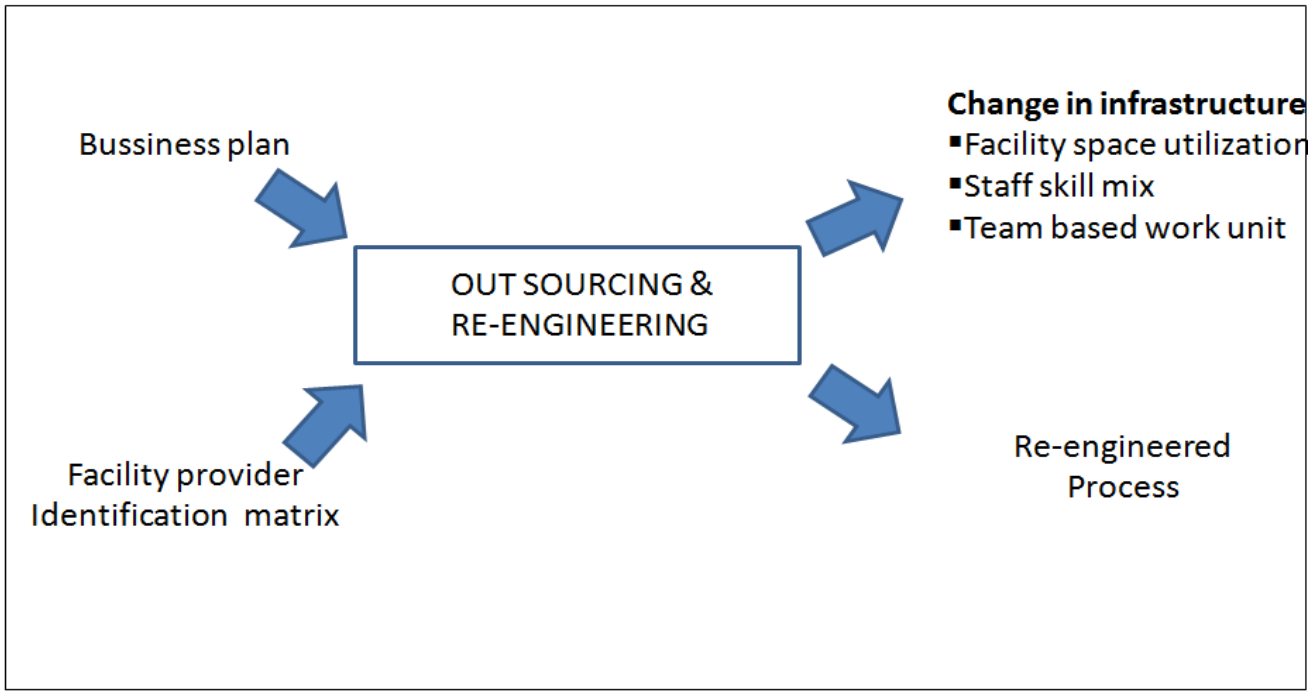

Fig 1: Theoretical model of project

1.6 Review of literature:

1.6.1 Out sourcing:

Outsourcing is the process of contracting an existing business function or process of an organization to an independent organization, and ceasing to perform that function or process internally, instead purchasing it as a service. Though this practice of purchasing a business function--instead of providing it internally--is a common feature of any modern economy, the term outsourcing became popular in America near the turn of the 21st century. An outsourcing deal may also involve transfer of the employees involved to the outsourcing business partner but it doesn't have to.

Outsourcing is an effective cost-saving strategy when used properly. It is sometimes more affordable to purchase a good from companies with comparative advantages than it is to produce the good internally. An example of a manufacturing company outsourcing would be Dell buying

some of its computer components from another manufacturer in order to save on production costs. Alternatively, businesses may decide to outsource book-keeping duties to independent accounting firms, as it may be cheaper than retaining an in-house accountant.

It is sometimes confused with offshoring which is “a company taking a function out of their business and relocating it to another country.” Outsourcing, on the other hand, can be either foreign or domestic.

1.6.2 Reengineering Defined

The term reengineering initially gained widespread notoriety following the publishing of Hammer and Champy's Reengineering the Corporation in 1993. This book was written to help managers achieve dramatic improvements in performance by revolutionizing their operational processes (Champy 1995). A survey of large American businesses in 1994 indicated that 69% were undertaking reengineering projects and half of the remainder were considering such projects (Champy 1995). Hammer and Champy define reengineering as "the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical measures of performance, such as cost, quality, service, and speed (1993)." The target of reengineering in this definition mirrors the so called "iron triangle" for health care; cost,quality, and access. The Government Accounting Office defines reengineering as "a systematic, disciplined approach for achieving dramatic, measurable performance improvements by fundamentally reexamining, rethinking, and redesigning the processes that an organization uses to carry out its mission (GAO 1995)." Another common term used synonymously with reengineering is Business Process Reengineering (BPR). This term emphasizes the fact that it is primarily the business processes of the organization that are reengineered. In addition to industry, government has become significantly involved in reengineering. A great deal of emphasis on reengineering in government is driven by the Government Performance Results Act and the National Performance Review, championed by The Vice President Al Gore (Caudle 1995). These two programs not only put the spot light on government inefficiency, but have illustrated that government organizations can benefit from many of the same type of management tools used in the private sector. In 1995, The General Accounting Office (GAO)

published the Business Process Reengineering Assessment Guide to help "assess how well federal organizations are managing the tasks associated with reengineering (GAO 1995)." The Department of Defense (DOD) has likewise invested heavily in the concept of reengineering. In 1990 the focus on improving business processes was initiated and a group was chartered to help DOD managers reengineer their organizations (Corbin 1996).One ofthe results of this group was the development of a software package called "TurboBPR" which assists DOD leaders in developing and implementing reengineering projects. In addition to the activities of this group, the Defense Technical Information Center (DTIC) has organized a "virtual college" of reengineering materials and information. The Electronic College of Process Innovation serves as a clearinghouse of process improvement and reengineering related materials and is available via the World Wide Web at http://www.dtic.mil/c3i/bprcd.

1.6.3 Reengineering Success and Failure

Although reengineering has been widely applied, stories of failures are all too prevalent. A review of current literature reveals numerous factors which lead to successful implementation of reengineering programs.One study of 25 businesses in the United Kingdom revealed six factors as critical determinants of reengineering success (Maull 1995). These factors were the project scope, development and application of metrics, use of information technology, human factors, the architecture of the business processes, and the alignment of the program with the strategy of the organization. One researcher cited the two principle reasons for failure are "functionality risk and political risk: respectively, the organization's inability to understand its uncertain future strategic needs, and its inability to make painful and difficult changes in response to these future strategic needs (demons 1995). Armistead, writing from the experiences of operations management suggests that there are striking similarities between the work of business process reengineering and the functions of operations management. Specifically, he notes similarities between "the use of the process paradigm and the concepts and techniques for designing, managing, and improving operational processes (1995)." With regard to keys to successful process reengineering, Armistead emphasizes the importance of commitment by top management and a cross-disciplinary approach.The National Academy of Public Administration in Washington, D.C. has developed a detailed reengineering guide titled Reengineering Results:

Keys to Success From Government Experience. This document details "six critical success factors" whichinclude:

• Understand Reengineering

• Build a Business and Political Case

• Adopt a Process Management Approach

• Measure and Track Performance Continuously

• Practice Change Management and Provide Central Support

• Manage Reengineering Projects for Results

(Caudle 1995)

These success factors indicate that reengineering success is predicated on a detailed understanding of the reengineering process, attention to the environment surrounding the effort, and careful monitoring of the implementation.In his 1996 book, Leading the Health Care Revolution: A Reengineering Mandate, Gary D. Kissler lists a number of causes cited for reengineering failure. Amongthe causes listed are:

• Inadequate Management of Resistance

• Attempting Painless Reengineering

• Lack of Understanding About Reengineering

• Too Narrow or Broad of Scope

• Consensus Based Approval for Reengineering

• Ignoring Infrastructure Realignment (Staffing, budget, resources)

Kissler echoes many of the same themes as the other authors. With a good sense of the important management and leadership factors required in process reengineering, the model for reengineering can now be developed.

1.6.4 Reengineering Modeled

Reengineering was defined above as "the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical measures of performance, such as cost, quality, service, and speed (Hammer and Champy 1993)." The component parts of this "radical redesign" are rooted in the processes of an organization. Reengineering is based on developing the most efficient and effective processes possible for carrying out the value added work of the organization. The framework for reengineering follows a simple building block approach. Kissler uses the "Executive Staircase" model shown below in figure 1 to demonstrate this approach (Kissler 1996). The foundation of all reengineering activity is the corporate vision and strategy. These two components determine what business the organization is in and what it desires to be as it moves into the future.

Based on the strategic plan of the organization, and the strategic plans of the higher headquarters (MHSS and AMEDD), the organization must determine "key capabilities." Key capabilities represent a way of doing business which will position the organization as a leader in the eyes of their customer. Examples of key capabilities in health care include excellence in cost, quality, and access to care (Kissler 1996). Key capabilities result from focusing on and excelling at the performance of the organization's core processes (Kissler 1996).

A core process is defined as "a group of interrelated, measurable, cross-functional business processes that create an output valued by a customer (Kissler 1996)." Caudle further contends that the core processes are the "most vital" for the organization to perform (Caudle 1995). Examples of core processes in health care include emergency services, outpatient care, and preventive medical care (Kissler 1996). "Core processes" are formed by the combination of "business processes."This leads to the most basic building block in the reengineering model, the"business process." The business process is such a vital link in reengineering, mostliterature now refers to reengineering as Business Process Reengineering (BPR). Abusiness process is a

"collection of related, structural activities, a chain of events, thatproduces a specific product for a particular customer or customers (Caudle 1995)." Thekey components are the customer's need and the activities required to fulfill that need.

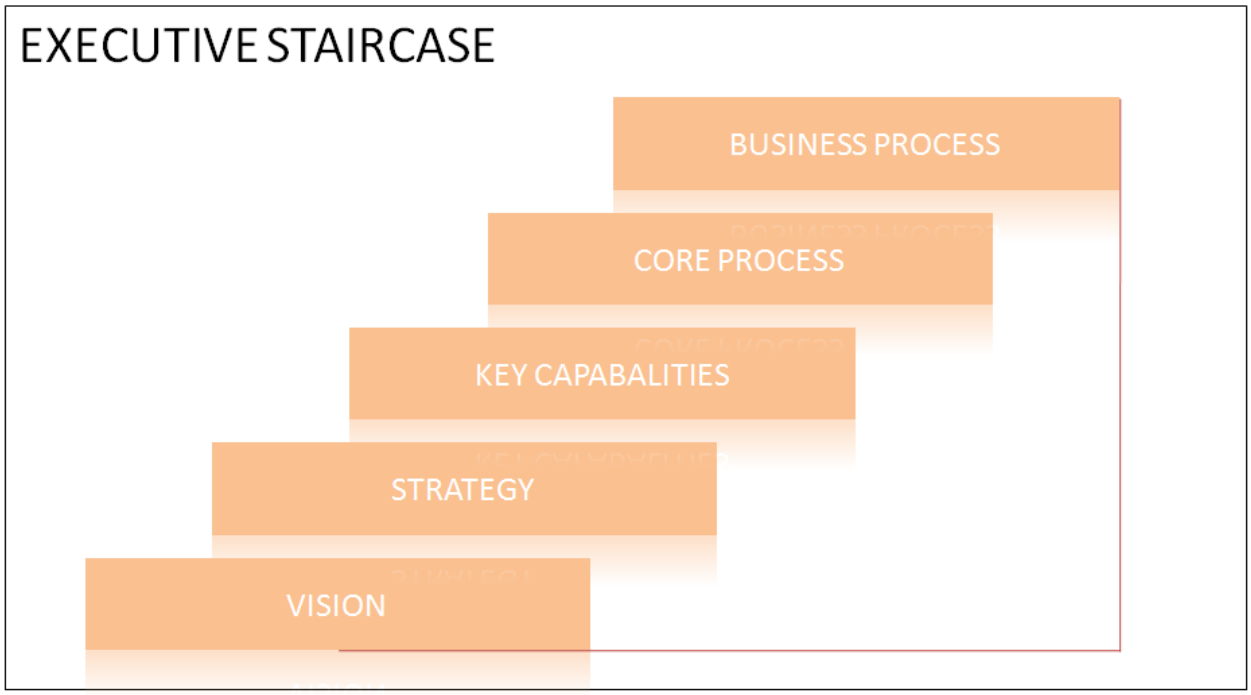

Fig 2. The Executive Staircase. *Adapted from Gary D. Kissler, Leading the Health Care Revolution; A reengineering mandate (Chicago: Health Administration Press, 1996), 39.*

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particular customer or customers (Caudle 1995)." Thekey components are the customer's need and the activities required to fulfill that need.

Kissler defines a business process as "a group of measurable linked activities that transform an input into an output valued by the customer (Kissler 1996)." The GAOconsiders three types of business processes; mission or external customer facing, support,and management processes (GAO 1995). To insure a clear focus on the externalcustomer, organizations should concentrateon those business processes which are visibleto the key external customer and that add value in this customer's view (Kissler 1996).

1.6.5 Patient Focused Care

At nearly the same time that Hammer and Champy were publishing their work, J.Phillip Lathrop introduced the concept of "patient focused care" as a model forreorganizing health care (Lathrop 1993). In his book, Restructuring Health Care, Lathropoutlined a paradigm for assessing and reorganizing the delivery of health care in thehospital setting which revolved around meeting the needs of the patient in a new way.The basic premise was to organize the delivery of care around what the patient valued.Lathrop contended that the delivery of services in hospitals was largely driven by whatwas convenient for the various departments in the facility. Further, this concept led to thedevelopment of a multitude of highly specialized technical workers in these centralized departments. The result was an evolution of processes which required the transportationof patients to numerous areas throughout the facility and the massive duplication ofpositions not providing direct patient care such as receptionists and clerks (Lathrop1993). Like the reengineering models discussed above, Lathrop emphasized theevaluation of processes for delivery of care, the business processes of health caredelivery. One of the key premises of the patient focused care model is that economies ofscale are not productive across most health care settings (Lathrop 1993). Whilindividual departments may benefit from centralization, the effect on service to the patientis generally negative. In the words of one author, "The patient may receive excellentservice at each segment of care, but because they have to visit many different parts of thehospital their experience is not necessarily smooth or timely (Nicholson 1995)."

Thepatient focused care model encourages the "redeployment" of services out to where thepatient receives the bulk of their care.

1.6.6 Health Care and Reengineering

Stepping off from the reengineering concepts used by general industry, and incorporating many of the concepts of the patient focused care model, health care leaders have begun to pursue health care reengineering. The need for reengineering in healthcare has been articulated by many. Health care leaders must now begin to change the focus of planning and decision making to begin with an external focus, continue by examining the future demands for service, and conclude with a look at internal needs (Morell 1995). Edward O Neil writes that a great deal of effort has been placed on reducing the cost of health care by squeezing better prices on health care related commodities, but "70% of provider organizations' costs are related to personnel (1996)."Process reengineering allows leaders to seek efficiencies in this larger portion of the budget (O Neil 1996). Operating under the assumption that cost, quality, and access exist in a direct relationship, many leaders assume they are using the most efficient delivery structure (Mc Connell 1996). The inferred result is a leadership fear that any significant reduction in cost facilitated by a reduction in staff would result in unacceptable reductions in quality and/or access. The consequence of avoiding these significant reductions in cost, available from changes in staffing, has been an incremental approach to improving organizations. Incremental improvements or changes are a major tenant of continuous quality improvement commonly used in health care organizations.

1.7 OBJECTIVE:

1.7.1 General objectives:

- Business maximization
- Revenue enhancement

1.7.2 Specific objectives:

To design a frame work to select the hospital from which joint replacement unit is outsourced.

To design a frame work of business plan for the selected speciality.

To design the re-enginereed process for the selected specialty.

Chapter 2: The Research Design/Methodology

Qualitative research is a system of inquiry which seeks to build a holistic, largely narrative, description to inform the researcher's understanding of a social or cultural phenomenon. Qualitative research takes place in natural settings employing a combination of observations, interviews, and document reviews.

Data is collected by the participation observation and oral histories method.

2.1 Participation observation: is defined as "the systematic description of events, behaviors, and artifacts in the social setting chosen for study" Observations enable the researcher to describe existing situations using the five senses, providing a "written photograph" of the situation. BERNARD (1994) lists five reasons for including participant observation in studies, all of which increase the study's validity:

1. It makes it possible to collect different types of data. Being on site over a period of time familiarizes the researcher to the community, thereby facilitating involvement in sensitive activities to which he/she generally would not be invited.
2. It reduces the incidence of "reactivity" or people acting in a certain way when they are aware of being observed.
3. It helps the researcher to develop questions that make sense in the native language or are culturally relevant.
4. It gives the researcher a better understanding of what is happening in the culture and lends credence to one's interpretations of the observation. Participant observation also enables the researcher to collect both quantitative and qualitative data through surveys and interviews.
5. It is sometimes the only way to collect the right data for one's study .

2.2 In-depth interview

The in-depth interview is a technique designed to elicit a vivid picture of the participant's perspective on the research topic. During in-depth interviews, the person being interviewed is considered the expert and the interviewer is considered the student. The researcher's

interviewing techniques are motivated by the desire to learn everything the participant can share about the research topic. Researchers engage with participants by posing questions in a neutral manner, listening attentively to participants' responses, and asking follow-up questions and probes based on those responses. They do not lead participants according to any preconceived notions, nor do they encourage participants to provide particular answers by expressing approval or disapproval of what they say. In-depth interviews are usually conducted face-to-face and involve one interviewer and one participant.When safety is an issue for the interviewer, the presence of two interviewers is appropriate.In these situations, however, care must be taken not to intimidate the participant. Phone conversations and interviews with more than one participant also qualify as in-depth interviews,but, in this module, we focus on individual, face-to-face inter

2.3 Limitation of the Study:

- Research quality is heavily dependent on the individual skills of the researcher and more easily influenced by the researcher's personal biases and idiosyncrasies.
- Rigor is more difficult to maintain, assess, and demonstrate.
- The volume of data makes analysis and interpretation time consuming.
- It is sometimes not as well understood and accepted as quantitative research within the scientific community
- The researcher's presence during data gathering, which is often unavoidable in qualitative research, can affect the subjects' responses.
- Issues of anonymity and confidentiality can present problems when presenting findings
- Findings can be more difficult and time consuming to characterize in a visual way.

Revenue breakup of client hospital across the super specialties:

SUPER SPECIALITY	REVENUE FY '11
Cardiac care & Cath Lab	**30%**
Renal & nephrology	**19%**
Weight management	**14%**
Hernia clinic	**15%**
Orthopedics	**9%**
Digestive diseases	**13%**

Revenue of different super specialties of client hospital:

Table:1 *Revenue breakup*

As the above figures suggests that the joint replacement unit is not performing well at the client hospital. When detail study is done the reason behind it is , they are lacking the brand name in it(doctor) as well some newer technologies as well.Client want to introduce joint replacement super clinic to this existing orthopedic department.

2.4 OUTSOURCING:

a.Identification of focus and non-performing speciality

b.Identification of of known leader of joint replacement surgery

c.Formulation of business plan

d.Alliance partnership legal documentation

a.IDENTIFICATION OF FOCUS AND NON-PERFORMING SPECIALITY

This was done by the client officials on the basis of revenue of the the year and some more market research.

b. IDENTIFICATION OF OF KNOWN LEADER OF JOINT REPLACEMENT SURGERY

Three hospitals are identified from client side to outsource the facility. Task is to identify the one out of these five for which funnel approach is taken into practice. Questions based on the brand attributes is formulated and asked among doctors at client location and some private practitioners of referral network in the city and patients/attendants who are present at client location. On the basis of this and the EBTIDA of the hospitals a matrix is plotted.

a. Questions are formulated on the brand attributes:

sample size: 80

doctors:40 patient/attendant:40

Brand attribute are which are identified are recognition , it will give overall boost to the name of client organization. The general questions are asked from doctors , patient/attendants that how much they are familiar to the name of this hospital. Process it will indicates about the waiting time .Patient satisfaction questions about the treatment experience of yours or any of your relative is asked. Accreditation is another attribute of brand as today people are aware of national reorganization given to any organization. And the last but not the least techno advancements of the organization.

On the basis of which a graph is plotted represented below. Hospital number 2 is chosen as it is good in recognition having streamed lined processes , doctors fame and patient satisfaction is also on satisfactory note. Accreditation is ongoing process in the hospital. Hospital 2 is largely supported by the advanced technology.

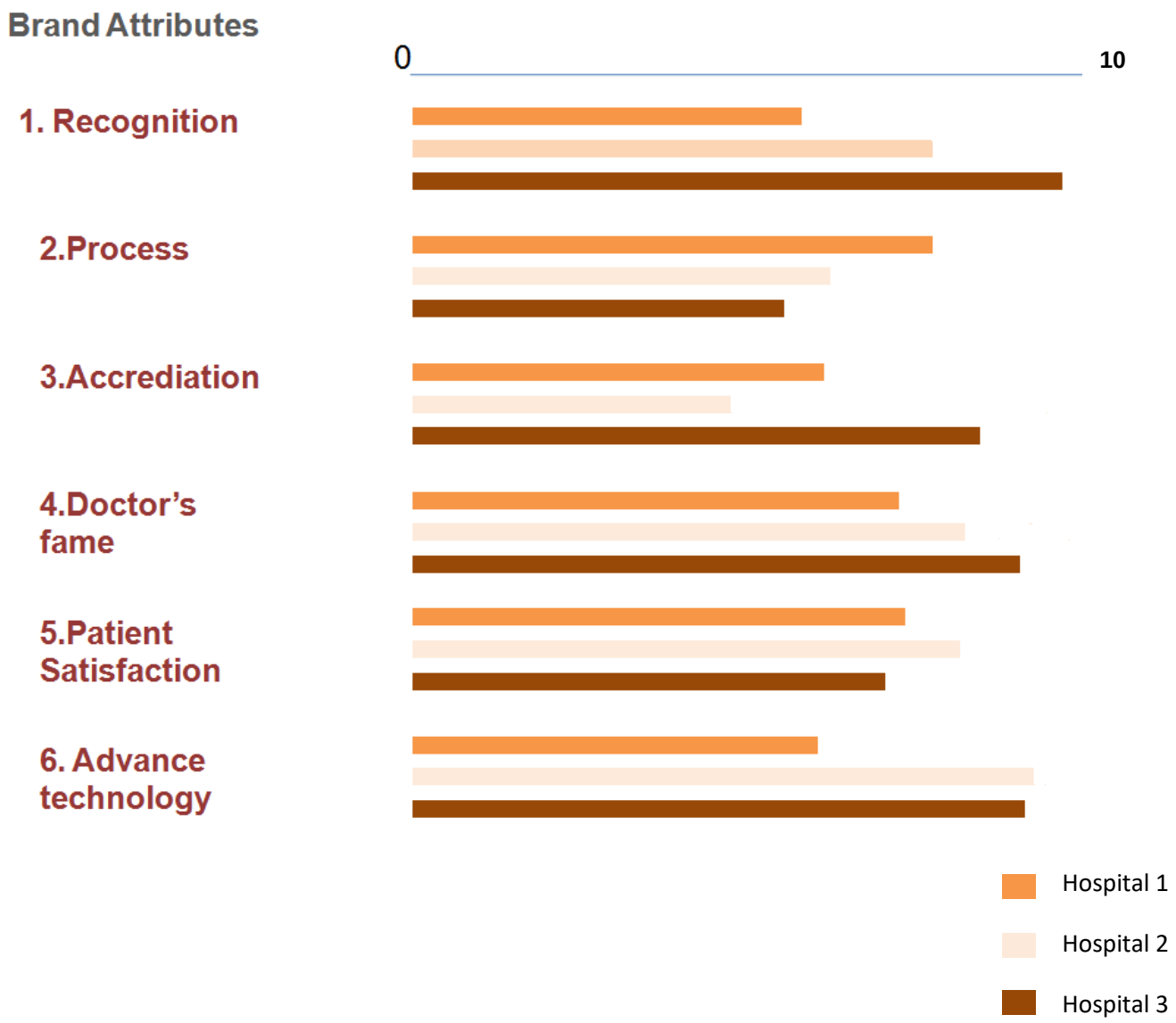

Fig:3 Graph plotted for facility provider evaluation

Formulation of business plan:

Business plan -is a written description of your business's future. A document that describes what you plan to do and how you plan to do it and conveys your business goals, the strategies you'll use to meet them.Document that can convince the reader that the business can produce enough revenue to make a satisfactory profit and therefore attractive as an investment opportunity.

To see the temple of business plan refer to appendicies

ALLIANCE PARTNERSHIP LEGAL DOCUMENT:

A external legal consultancy is hired to carve out a contract between the client and facility provider.

The document is highly confidential, cannot be disclosed.

2.5 BUSINESS PROCESS RE-ENGNEERING (value added services)

Reengineering defined as "a systematic, disciplined approach for achieving dramatic, measurable performance improvements by fundamentally reexamining, rethinking, and redesigning the processes that an organization uses to carry out its mission. This is a step –wise approach shown in the figure.

2.5.1 Scope of process: The core process is to streamline the admission process for new outsourced specialty.

The scope of process is that to make the admission process more efficient so that it can give support to the new introduced speciality.To minimize the waiting time durin the documentation of the admission.

To automate the process where ever possible, thereby to increase the patient satisfaction and overall to give the hospital a brand name advantage.

2.5.2 Current process analysis (AS-IS) :

Few new changes are incorporated in the current (as-is) admission process of the client in order to make the specialty more streamed lined in respect to process also.

AS – IS Process

There are some additions done to the AS-IS process of the client admission process. These additions are the interms of check list/conditions , MIS report generation , scope of HIS.

Scope of Automation (should follow an order)

- Admission can be done through system by accepting request online

- Admission planning can be done on an excel sheet or online
- Patient clinical information can be captured online
- Bed status can be viewed online

2.5.3 Reports

☆ **MIS Reports/ Census Reports:**

- Total no. of Admissions
- Total no. of Planned & unplanned admissions
- Total no. of Cash & Credit patients

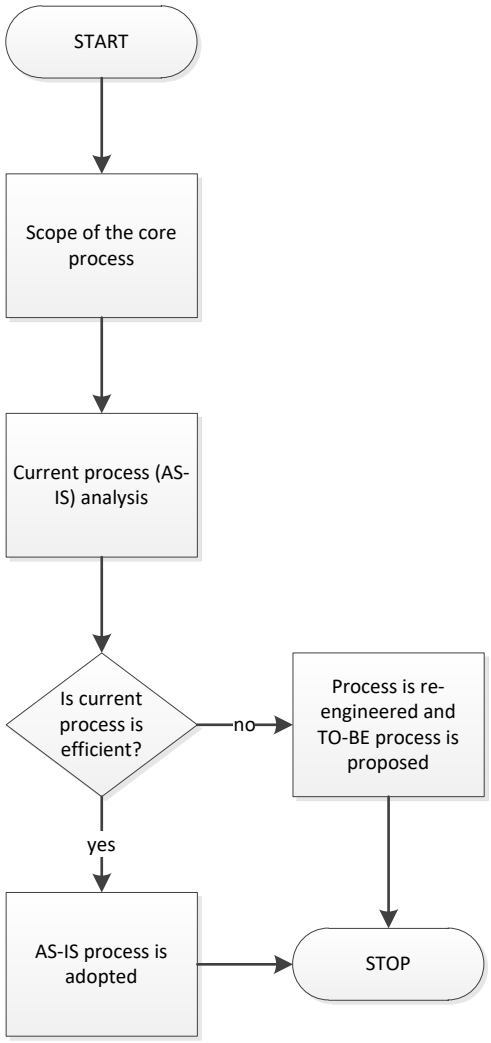

Fig 4: Re-Engineering Process Flow Chart

Conditions/ Check list:

1. Classification of patients in to planned & unplanned admissions
2. Classification of patients in to Cash & Credit patients
3. Tariff Application / Allocation of room as per availability –
    a. If the patient has asked for higher category bed, and it's not available , then the patient will be de-graded to lower bed category and will be charged for the low tariff bed
    b. If the desired bed category is not available & patient is willingly opt for higher category bed, then patient will be upgraded to higher bed category & will pay the amount

Derived Reports:

Sl No	KPI	Unit of measure
1	No. of admissions per day	No.
2	Percentage Cancellations for booked Admissions	No.
3	TAT for Planned Admissions - (request to room allocation)	%
4	% patients admitted within 20 mins - booked - (arrival to room allocation)	%
5	% Booked patients	%
6	Avg. time taken for transfer - walk-ins/booked - (allocation to reaching room)	Mins

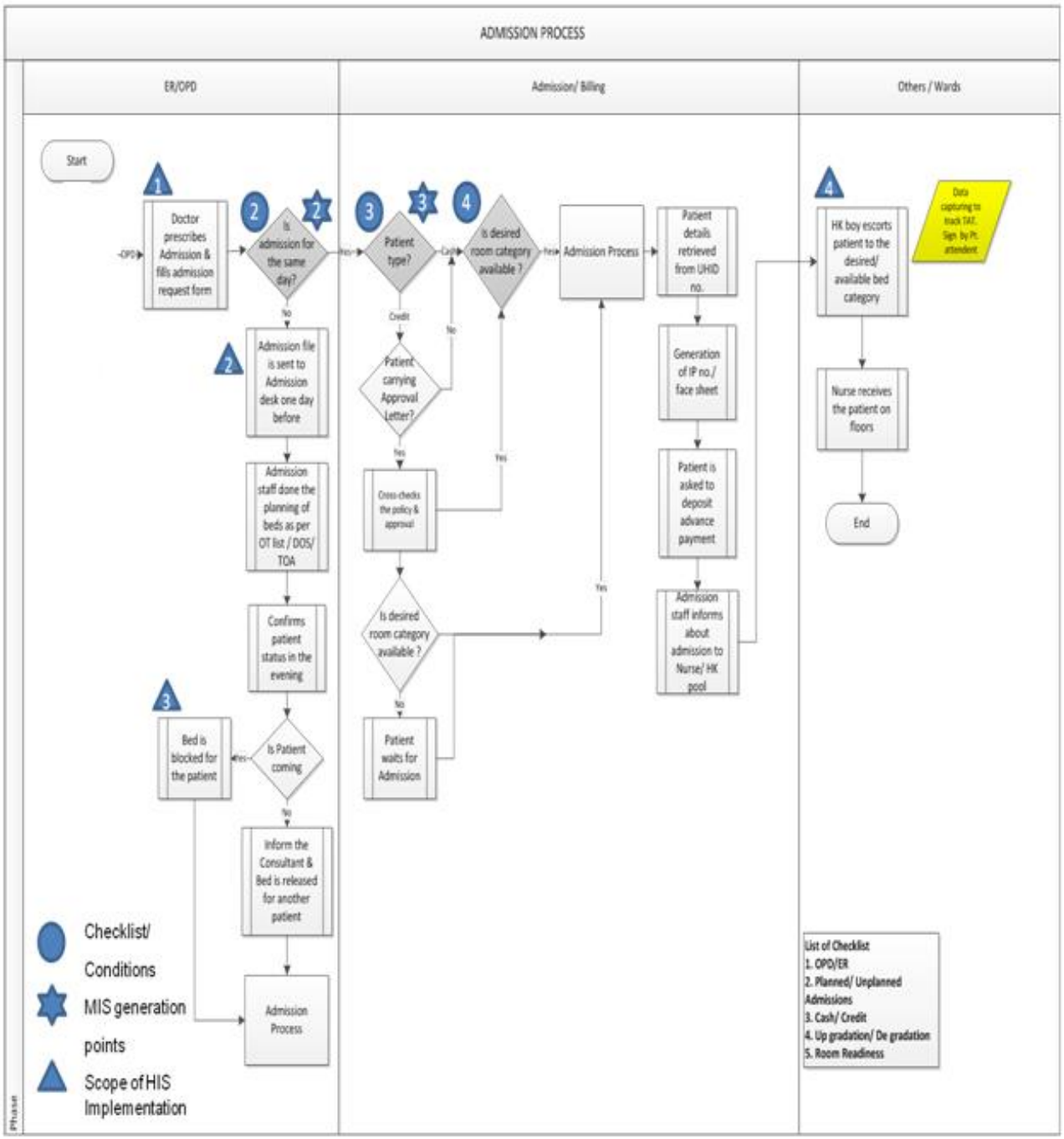

Fig 5: visio diagram of to-be admission process

CHAPTER 3 : Result and Finding

As this project is implemented 10 days back so results in terms of revenue cannot be carved out. So a case study on benefit realization is done at the client location.

3.1 Case study: Benefit Realization of Implanting Joint Replacement Specialty

Aim: To find out the benefits achieved after the implementation of Joint Replacement Specialty.

Sample size: 35

Doctors/physiotherapist: 5

Nurse & paramedics: 20

Registration clerk: 5

Pharmacist: 5

Methodology: A close ended questionnaire is formulated and convince sampling is done.

Specific findings:

a.Work load and Working time

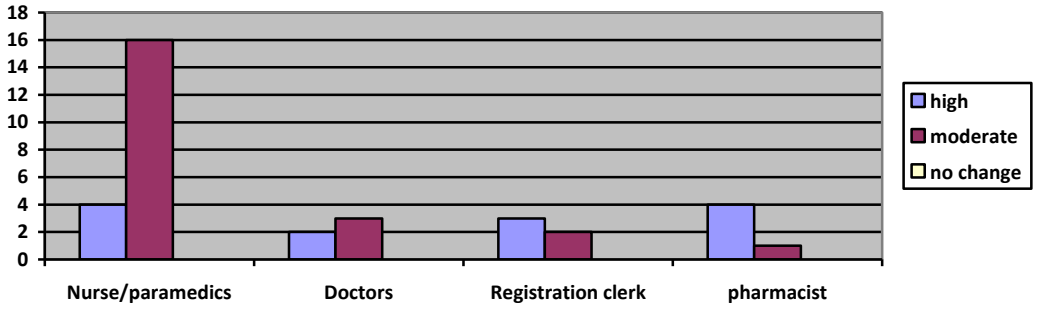

Fig 6

b. Training received

Fig 7

c.Change in profile

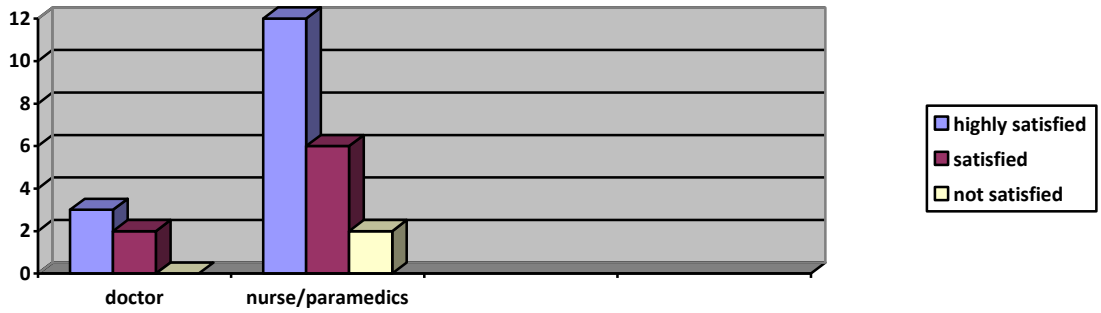

Fig 8

d.Comfort level with outsourced team

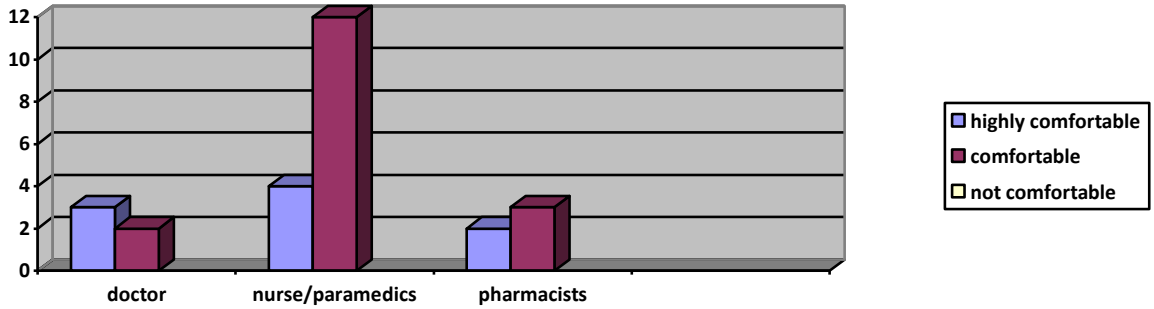

Fig 9

e.Knowledge Increase

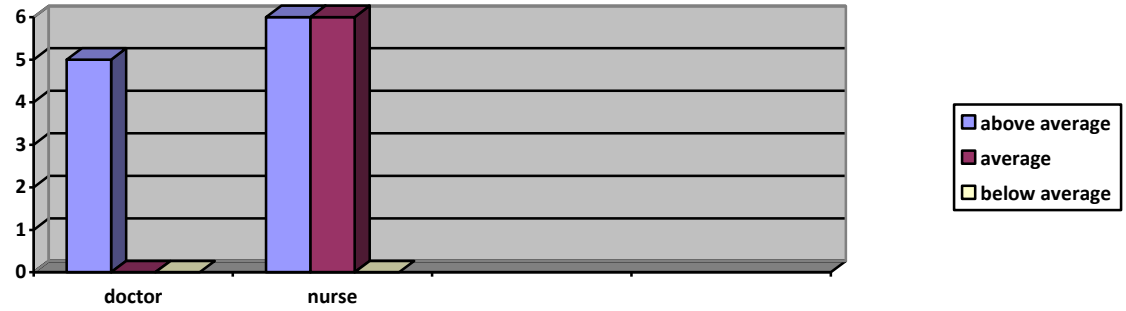

Fig 10

f. over all benefits to the organization

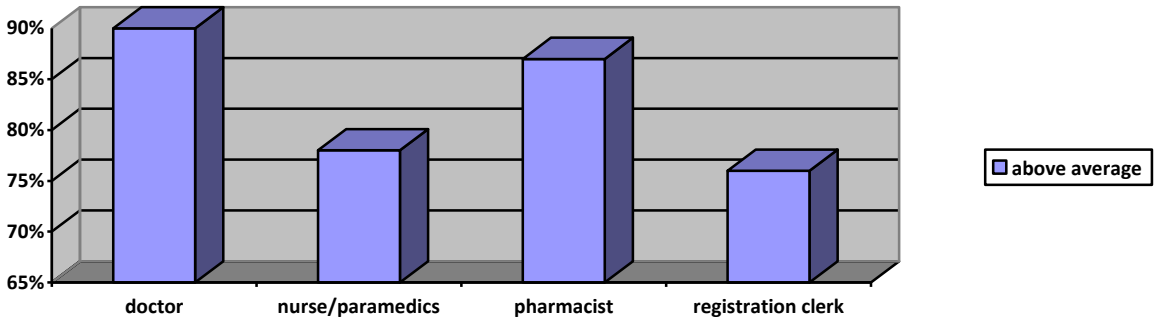

Fig 11

As the above findings indicates that over all staff who will deal with the new outsourced specialty had an opinion that this change is in the sake of them and the organization.

There is increase in the working time and work load as the same staff of ortho department had to handle this new specialty also.some of them are not comformtable with the new team.

Recommendations:

a. For increase in the work time and work load motivate the staff abd releate the change with the personal and professional development of individual.

b. Comfort level with the new team to increase this interactive sessions should be organized so that the ice should be broken.

c. Training sessions on how to take care of these patients should be organized , to increase the knowledge of staff.

CHAPTER 4: Discussion

While the reengineering activities at are still underway at client location, the outsourced facility has made significant progress and the reengineering activities have contributed greatly to that progress. The development of additions in the current process will serve as prototypes for other processes in the continued reengineering of the organization.Reengineering has become a common term client location, and involvement in the project In outsourcing the facility proceeds into the process reengineering stage of the project. A review of the progress to date will now be presented, still following the Structure-Process-Outcome format of the report.

Uncertainty is an operational reality for health care in general, and client is no exception. This uncertainty is consistent with the evolving study of chaos theory which has been applied to management of complex systems such as health care (Sharp and Priesmeyer 1995). Sharp and Priesmeyer write that chaos theory proposes there are likely a series of variables, rather than a single variable, causing changes in the system(1995). The reengineering project has attempted to consider several such variables within its structure. The project's structure was presented in the three elements of outsourcing, re-engineering(value added services) and benefit realization. The future state of each of these elements continues to be somewhat uncertain, but each are likely to impact the decisions and outcomes of the reengineering project.

Out sourcing:

As described in the earlier chapter the four steps there in the outsourcing. On the basis of revenue enhancement the focus specialty is identified. Brand attributes are identified to choose the right option to outsource the specialty and a graph is plotted.Bussiness plan is formulated for future and current projections.

Strategically outsourcing innovation can put a company in a sustainable leadership position. Leading companies have lowered innovation costs and risks 60-90 percent while similarly decreasing cycle times and leveraging the impact of their internal investments by tens to hundreds of times. Demand, the supply of scientists, growing interaction capabilities, and newer incentives are four powerful forces currently driving the innovation revolution.(James Brian Quinn 2000)

Re-engeneering(value added sevices):

The process component of the reengineering project has yielded a great deal of value for the organization. The development of scopes for the core processes has allowed the facility to focus on a vision of the organization in the future. The report generation option have provided both the team members and the command-group a better understanding of the business aspects of health care. The facility has a clearer picture of who they serve, what services they provide, and how much it costs to provide different aspects of those services.

An analysis is provided of the way the four models have been adopted and adapted in European health care systems over the past decade. After a short discussion of the major reforms in the European health care systems in the direction of regulated markets, deregulation and decentralization, the features of the four models are highlighted and it is explained how each of them can help to fill the «accountability gap» between health care providers on the one hand and patients, financiers and governments on the other. The quality system perspective of ISO, the quality management development perspective of EFQM, the health care organization perspective of accreditation and the professional perspective of *visitatie* can each be appropriate given the balance of power between parties in the health care system and the focus and scope of accountability. Although a general convergence between the four models can be observed, actual convergence will depend on their adoption in specific health system contexts. Potential pitfalls for further convergence are the differences in distribution of responsibilities for quality of care among the various European countries, the drift away from clinical decision making, bureaucratic tendencies and too much focus on efficiency and patient empowerment compared with attention to medical effectiveness.(**NIEK KLAZINGA 2007)**

Business pocess re-engineering (BPR) is one of the latest approaches to improving organisational performance. It evolved in the US private sector, and has been introduced to Britain and the British public sector, offering radical improvement from radical redesign. This article considers the nature of BPR (and there is more than one variety) and the suitability of its application to the public sector in general and to hospitals.(Packwood,Tim; Pollitt,Christopher; Roberts, Simon 2005)

Benefit realization:

Project benefits are clear, concise and relevant in 'value creation' terms from the Business Case onwards, and that they directly relate to your organizational strategy

• People are held accountable for achieving these benefits

• Benefits stated in a Business Case are actively measured throughout the entire initiative, ie

o During the project lifecycle (particularly if it is released in phases)

o After the project is closed

o When the product/output starts to be used

• Appropriate action is taken if required to alter direction (i.e. the organization changes course and the intended

project benefits are no longer relevant)

Simple Process Flow for Project Benefits Realization

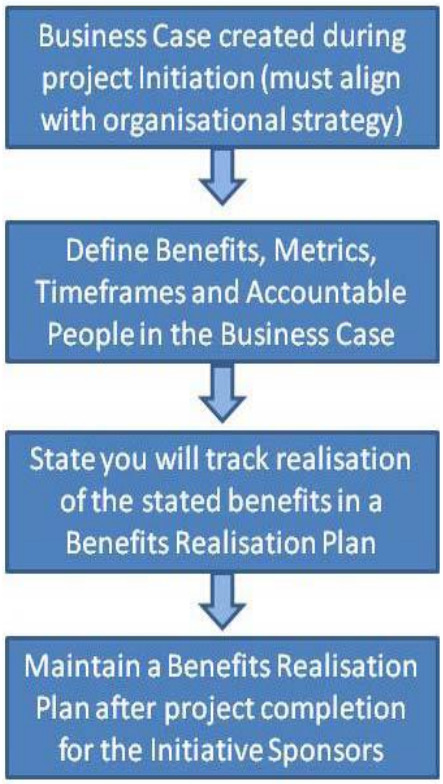

Fig:12 Process Flow for Project Benefits Realization

CHAPTER 5: Conclusion

The purpose of this project was to provide a case study of the application of outsourcing , business process reengineering (value added services) and reengineering techniques to implant a new specialty at client location . The reengineering project is still underway, but the case study has documented on benefit realization which have already been produced by the reengineering process. The application of facility outsourcing & process reengineering and its techniques has been beneficial to the restructuring of the facility.

The initial development of core process scopes and additionof different report generation indicate significant opportunities exist for reducing time expenditure and improving performance of the organization. Combining the savings projected from all of the business cases, savings between$860,000 to $2,640,000 have been identified. The final savings realized by the facility will be determined during the ongoing process reengineering stage and during the development of the comprehensive business plan for the organization.

The reengineering model selected insured broader participation by incorporating staff from both clinical and administrative areas on the teams. This multidisciplinary participation significantly reduced organizational resistance, a critical element cited in the literature (Caudle 1995, demons 1995, Kissler 1996).

The methodology has provided a valuable framework for the undertaking the outsourcing and re-engineering. The process focus has allowed the staff to break down the components of the organization into manageable pieces. The focus on performance measurement should position them forfavorable comparison and evaluation by public or private agencies. The prototype models generated should provide an executable series of activities for the organization to implement while realizing the savings required to meet the projected budgets of the future.

The benefit realization case study prove that the staff is adapting to the changes happening in the organization.Quesstionnaire which is formulated is clear and focused to the point of benefits. no

organization can florish with out the support of the staff.results of the post implementation of project shows that staff is taking change as a positive initiative.

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Appendix A

TEMPLET FOR BUSINESS PLAN

1 **Key procedures and representative charges**

S.No	Procedure	Twin Sharing (INR)
1	TKR	
2	THR	
3	Shoulder replacement	
4	Salvage & Limb reconstruction in skeletal tumors	
5	Minimally invasive hip replacements	
6	Minimally invasiveknee replacements	
7	Computer assisted minimal access kneereplacement	
8	Computer assisted minimal access hip replacement	
9	Pediatric hip surgeries	

2 **Proposed Footfall**

S.No	Procedure	Assumptions
	Total Footfall	
1	OPD Consultation	*10 patient for each IPD case*
2	OPD Investigations	*70% of OPD patients*
3	IP Patient Work	
3.1	**High-end Surgeries:**	*numbers as suggested by Dr.surya*
	TKR	
	THR	
	Shoulder replacement	
	Salvage & Limb reconstruction in skeletal tumors	
	Minimally invasive hip replacements	

	Minimally invasiveknee replacements Computer assisted minimal access kneereplacement Computer assisted minimal access hip replacement Pediatric hip surgeries	
3.2	**Low-end Surgeries**	*3 times of highend work*
	Procedure-1 Procedure-2 Procedure-3	
4	**IP Patient Work (Medical)**	*50% surgical and 50% medical cases*

3 **Revenues**

S.No	Procedure	Charges (Average)
	Revenues	
1	**OPD Consultation**	**500**
2	**OPD Investigations**	**1,000**
3	**IP Patient Work**	
3.1	**High-end Surgeries:**	
	TKR THR Shoulder replacement Salvage & Limb reconstruction in skeletal tumors Minimally invasive hip replacements Minimally invasiveknee replacements Computer assisted minimal access kneereplacement Computer assisted minimal access hip replacement Pediatric hip surgeries	-
3.2	**Low-end Surgeries**	
	Procedure-1 Procedure-2 Procedure-3	
4	**IP Patient Work (Medical)**	

4 **Shall have a visiting team of**

S.NO	Faculty	Units	Monthly Salary	Annual Package
1				0
2				0
3				0
4				0
5				0

5 **Hospital should have following faculty on full-time or locally available**

S.NO	Faculty	Units	Monthly Salary	Annual Package
1				0
2				0
3				0
4				0
5				0

6 **Minimum infrastructure required**

A	Name of Equipment	Unit	Unit Cost	Total Cost
1				0
2				0
3				0
4				0
5				0
6				0
7				0
8				0
9				0

B	Infrastructure	Unit	Unit Cost	Total Cost
1	Ortho OPD rooms			0
2	OT			0
3	ICU			0
				0

7 **Average time taken in procedure**

	OT Time	Stay Time
TKR		
THR		
Shoulder replacement		
Salvage & Limb reconstruction in skeletal tumors		
Minimally invasive hip replacements		
Minimally invasiveknee replacements		
Computer assisted minimal access		

kneereplacement

Computer assisted minimal access hip replacement

Pediatric hip surgeries

Appendix B

REVENUE PROJECTIONS

S.No	Revenues		Yr-1	Yr-2	Yr-3	Yr-4	Yr-5
1	**Revenues from Operations**						
	Total Operating Costs		-	-	-	-	-
S.No	**Operating Costs**	**Costs as % of Revenues**	**Yr-1**	**Yr-2**	**Yr-3**	**Yr-4**	**Yr-5**
1	Doctors Pay-out	40%					
2	Equipment provider - third party	8%					
3	Pharmacy, Consumables	0%					
4	General Consumables, Administrative costs	5%					
5	Salaries & Staff Welfare	16%					
6	Repairs & Maintenance	2%					
7	Utilities	2%					
8	Marketing (Sales & Prom)	5%					
	EBITDA	**22%**					

Appendix C

Questionnaire for benefit realization

Questionnaire: Doctor , Nurse

Personal details:

Name: Age: Sex:

Designation:

Questions:

1.Did your work time is increased by the implementation of new super specialty?

a. Yes b.No

2.if yes , how much it is increased?

a. below average b .average c. above average

3. Did you receive any training ?

a. Yes b.No

4.if yes, training is satisfactory?

a. below average b .average c. above average

5. Did your profile is changed?

a. Yes b.No

6.if yes,are you happy from your changed profiles?

a. below average b .average c. above average

7.Do you fell this change added benefit to your knowledge?

a. below average b .average c. above average

8. Do you fell this change added benefit to organization?

a. below average b .average c. above average

9.Do you noticed any change in quality of treatment of normal ortho patients?

a. below average b .average c. above average

10.Are you comfortable in working with new team of doctors of super specialty unit?

a. below average b .average c. above average

BENEFIT REALIZATION OF IMPLANTING NEW JOINT REPLACEMENT UNIT

Questionnaire: registration clerk

Personal details:

Name: Age: Sex:

Designation:

Questions:

1.Did your work time is increased by the implementation of new super specialty?

a. Yes b.No

2.if yes , how much it is increased?

a. below average b .average c. above average

3. Did you receive any training ?

a. Yes b.No

4.if yes, training is satisfactory?

a. below average b .average c. above average

5. Did your profile is changed?

a. Yes b.No

6.if yes, are you happy from your changed profiles?

a. below average b .average c. above average

7.Do you fell this change added benefit to your knowledge?

a. below average b .average c. above average

8. Do you fell this change added benefit to organization?

a. below average b .average c. above average

9.Do you noticed any change of footfall on normal OPD days ?

a. below average b .average c. above average

10. Are you comfortable in working with new team of doctors of super specialty unit?

a. below average b .average c. above average