

# A Study on Sustainable Competitive Advantage by Managing Service Quality at a Multi Speciality Corporate Hospital, Chennai

\* *G. Dharani Priya*

\*\* *G. Jabarethina*

## Abstract

Organizations are faced with a lot of changes in the current scenario. Sustainable competitive advantage allows the maintenance and enhancement of markets and maintains the competitive position of an organization. It ensures the long-term growth of the organization and results in stronger brand, greater pricing power and operational efficiencies, increases customer loyalty and enhances the ability to attract, retain, and motivate employees. A hospital is much more complex than other manufacturing organizations, since it undertakes medical and health responsibilities that deal with the lives of people. The whole chain of service delivery characteristically involves numerous communications between patients, health care providers, and other employees. The success of private hospitals depends on patients' perceptions on the quality of products and services provided by the service personnel in hospitals. Service quality becomes increasingly important to measure how well the services delivered meet patients' expectations. This study was based on the factors of Porter's model, that is, cost, technology, people, capability, and resources ; and the SERVQUAL dimensions, that is, reliability, assurance, responsiveness, tangibles, and empathy to achieve excellence in service quality. The excellence in service quality automatically enhances the path to sustainable competitive advantage and thus results in stronger brand ; greater pricing power and operational efficiencies ; increases customer loyalty and enhances the ability to attract, retain, and motivate employees.

**Keywords :** competitive advantage, differentiation advantage, service quality, SERVQUAL, sustainable competitive advantage

**JEL Classification:** I11, L19, L8, O43

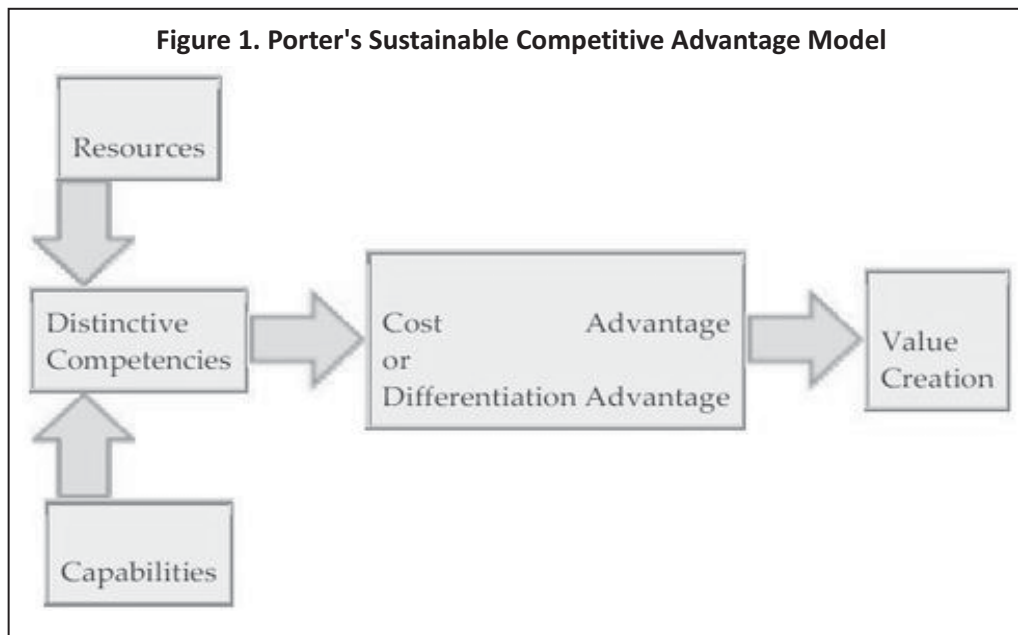
**Paper Submission Date :** January 15, 2016 ; **Paper sent back for Revision :** May 23, 2016 ; **Paper Acceptance Date :** June 18, 2016

A hospital is much more complex than other manufacturing organizations since it undertakes medical and health responsibilities that deal with the lives of people. The entire sequence of service delivery characteristically involves numerous communications between patients, health care providers, and the other employees. The success of private hospitals depends on patients' perceptions on the quality of products and services provided by the healthcare personnel. Service quality has become increasingly important to measure how well the services delivered meet patients' expectations. There is a problem in measuring service quality due to the difference between patients' expectations and the actual care provide by the service providers. Patients' desired health outcomes will not be the same as the actual care received from the service providers.

---

\* *Business Analyst*, Client Network Services Inc.(CNSI), Center for Technology and Innovation (CTI), Chennai, Tamil Nadu. E-mail : dharanipriyag@gmail.com

\*\* *Assistant Professor*, Sri Ramachandra College of Management, Sri Ramachandra University, Porur, Chennai. E-mail : jabarethina@gmail.com



## Porter's Sustainable Competitive Advantage Model

Competitive advantage allows an organization to outperform its competitors. It is considered as the secret of success and has been defined as “the quality that brings about success” (Porter, 1985, p.318). Michael Porter identified two basic positional advantages : cost advantage and differentiation advantage. It is created by using resources and capabilities to achieve a differentiated product/service. Thus, a competitive advantage enables a firm to create superior value for its customers and superior profits for itself.

The Figure 1 depicts the process and components of Porter's sustainable competitive advantage model. An organization must have superior resources and capabilities than its competitors to create distinctive competencies. These competencies enable customer responsiveness which can be leveraged to create cost or differentiation advantages. By performing the process of activities that Porter identified will create value for an organization.

Wright, McMahan, and McWilliams (1994) stated that a sustainable competitive advantage is distinct from the competitive advantage by the way of providing services which are incapable of duplicating the benefit of competitive advantage of other organizations. So, the competitive advantage is considered sustainable only when all initiatives of competitors to duplicate the advantage have ceased. Based on the above model, five dimensions are identified to achieve a sustainable competitive advantage. They are services, resources, capabilities, people, and technology.

## Service Quality

Parasuraman, Zeithaml, and Berry (1988) found five dimensions of service quality and they named their survey instrument SERVQUAL. The items in SERVQUAL are grouped into five distinct dimensions including:

- (i) Reliability :** Ability to perform the promised service dependably and accurately.
- (ii) Responsiveness :** Willingness to help customers and provide prompt service.

**(iii) Assurance :** Knowledge and declaration of employees and their ability.

**(iv)Empathy :** Courtesies, individualized attention the firm provides for its customers.

**(v) Tangibility :** Physical facilities, equipment, and appearance of personnel.

## Review of Literature

**(1) Competitive Advantage :** Barney (1991) stated that the value, rareness, imperfectly imitability, and non-substitutability are the four empirical indicators of the potential of a firm's resources to generate sustained competitive advantage. Oliver (1997) suggested that a firm's ability to manage the process of resource decisions and selection is the main factor that enables it to achieve sustainable advantage. According to Andaleeb, Siddiqui, and Khandakar (2007), the significant contribution of nurses to patient satisfaction must be considered. Bangladesh had only 11 nurses for 100,000 people as compared to 94 in India and 103 in Sri Lanka.

**(2) Service Quality :** Thawesaengskulthai, Wongrukmit, and Dahlgaard, (2015) explored the medical services and service quality of a hospital in Thailand for the patients who came from four major continents (i.e. Asia, Europe, Australia, and North America). The data were collected from 80 countries and the sample size was 2189 patients at six hospitals in Thailand which provided health care services to international patients. The results revealed that service quality had a major impact on the retention level of customers at the hospital and service satisfaction. Maninta and Srivalli (n.d.) investigated about 284 customers from two large full service restaurants in Southern India. The study results supported the important relationship between service quality and customer satisfaction, service quality, and repeat patronage.

Kaura, Durga Prasad, and Sharma (2015) examined the service quality factors of banking sector such as price, fairness, convenience, customer satisfaction, and customer loyalty. It also explored the role of customer satisfaction and the mediating role between service quality dimensions. A cross-sectional research was conducted on 445 retail banking customers through a questionnaire in Rajasthan and India, who had availed of at least one information technology-based service. Factor analysis and regression analysis were used. The results revealed that service quality dimensions had a positive impact on customer satisfaction and customer loyalty.

Andaleeb (2007) revealed that bringing about a change in the attitudes of doctors, nurses, and support staff was very important for improving satisfaction among patients and hospital care. To bring a change in attitudes, hospital managements have to focus on proper recruitment procedures, training, supervision, and reward systems. The study results revealed that patients' perceived service quality was rated lower than expected, which revealed that the patients' expectations were not being met during medical treatment. Abuosi and Atinga (2013) suggested that client-centered training programs need to be conducted to help clinicians deliver good care to patients.

## Statement of the Problem

Sustainable competitive position in the market is an important aspect for all organizations. Differentiation advantage is one of the key factors for them to achieve a sustainable competitive advantage. Therefore, it is very important to measure it based on Porter's model. A hospital can run successfully only if the needs of the patients are identified and fulfilled. This can be achieved through service quality. By achieving excellence in service quality helps in satisfaction and retention of patients' trust towards a hospital.

## Objectives of the Study

- (i) To study the five parameters that influence sustainable competitive advantage based on Porter's sustainable competitive advantage model with respect to : Cost, technology, people, capability, and resources.
- (ii) To study the five dimensions that influence service quality : reliability, responsiveness, empathy, assurance, and tangibles.
- (iii) To analyze the effect of sustainable competitive advantage and service quality in a corporate multi-speciality hospital in Chennai.

## Research Methodology

The research has been carried out in a corporate multi-speciality hospital, Chennai. Descriptive research is used to describe the characteristics of the population or phenomenon being studied. The period of the study is two months -March & April 2015. Convenient sampling method was used to collect data from patients and stratified random sampling methods were used to collect data from the employees ; 300 respondents participated in the study ; out of which, 150 respondents were patients and 150 were employees. Primary data were collected through using a structured questionnaire. Employee questionnaire was based on the parameters of Porter's sustainable competitive advantage model, and the patient questionnaire was based on the SERVQUAL dimensions.

A pilot study was conducted by us with 30 samples of patients and the results were derived from the Cronbach's alpha value of 0.884 which shows more reliability ; 30 samples of employees were considered, and the results were derived from the Cronbach's alpha value of 0.956, which shows more reliability. Analysis of variance (ANOVA), chi-square test, correlation, arithmetic mean, standard deviation, and percentage analysis were used for analyzing the data using SPSS v16.

## Results and Discussion

### (1) Demographic Analysis

**(i) For Employees :** 37% of the respondents were men and 63% of the respondents were women ; 88% of the respondents were undergraduates and 12% of the respondents were postgraduates ; 42% of the respondents had 0 to 1 years of experience, 31% of the respondents had 1-2 years of experience ; 15% of the respondents had 2-3 years of experience ; 7% of the respondents had 3-4 years of experience ; and 5% of the respondents had 4-5 < years of experience ; 50% of the respondents were ward secretaries and 50% of the respondents were nurses.

**(ii) For Patients :** 52% of the respondents were men and 48% of the respondents were women ; 57% of the respondents were visiting the hospital for the first time, and 43% of the respondents had visited the hospital more than once.

### (2) Factors Influencing Sustainable Competitive Advantage Based on Porter's Sustainable Competitive Advantage Model : An Analysis Based on Employees' Opinions

➤ **H01:** There is no significant difference between employees' opinion on cost.

The Table 1 indicates that the respondents gave a maximum mean score of 3.86 for providing prompt services to

the patients at the right time and a minimum of 3.41 mean score was given for the patients did not perceive high prices as a sign of inherent service quality. H01 is rejected at the 1% level with regard to experience and all the factors relating to cost except copying the pricing strategy from other health care providers. It is evident through the opinion of experienced employees that sustainability is possible by implementing imperfectly imitable pricing strategy.

🔗 **H02 :** There is no significant difference between employees regarding their opinion on technology.

The Table 2 indicates that the respondents gave a maximum mean value of 4.01 for modern equipment, facilities of the hospital ; a minimum of 3.34 mean score was given for the reduction of workload since the implementation of technology. The  $p$  - value is less than 0.01, and H02 is rejected at the 1% level with regard to experience and opinion on updating of modern equipment in the hospital, updating technology, and management conducted adequate training for the effective use of technology. The H02 is also rejected at the 5% level. The result shows that the hospital management was not up to the mark in bringing in new technology machines to the hospital.

🔗 **H03 :** There is no significant difference between employees regarding their opinion on people.

**Table 1. Employees' Opinion on Cost**

COST	Overall		Experience group	
	Mean	SD	F	Sig.
The hospital is providing prompt services to the patients at the right time.	3.86	0.64	6.04	0.00**
Offering services at low price will ensure a sustainable competitive advantage.	3.43	0.86	5.14	0.00**
Low pricing strategy will not affect the quality of service.	3.47	0.95	3.77	0.01**
It is easy to copy the pricing strategy from other health care providers.	3.53	0.72	1.43	0.23
Offering service at a low price does not attract low income group only.	3.74	0.81	3.71	0.01**
Some Patients are willing to pay a premium price for high quality services.	3.65	0.88	3.44	0.01**
Patients do not perceive high prices as a sign of inherent service quality.	3.41	0.82	6.90	0.00**

Note: \*\* denotes significant at 1% level.

**Table 2. Employees' Opinion on Technology**

TECHNOLOGY	Overall		Experience group	
	Mean	SD	F	Sig.
The hospital has all kind of modern equipments.	4.01	0.92	8.92	0.00**
Updates in technology is excellent.	3.83	0.77	4.50	0.00**
The technology has reduced the work load of employee.	3.34	0.97	3.77	0.04*
Technology enables me to complete all procedures without any delay.	3.39	0.94	1.35	0.26
Specializing in a certain field in health care delivery using technology will ensure competitive advantage over rivals.	3.55	0.70	0.53	0.71
The services and procedures using technology by other departments causing rework.	3.45	0.88	1.66	0.16
Management conducts adequate training for the effective use of technology.	3.69	0.93	3.44	0.01**

Note: 1. \*\* denotes significant at 1% level.

2. \* denotes significant at 5% level.

**Table 3. Employees' Opinion on People**

PEOPLE	Overall		Experience group	
	Mean	SD	F	Sig.
Hospital is giving personal attention to the staff.	3.30	0.90	4.67	0.00**
The relationship within the department is good.	3.67	1.09	1.23	0.30
My interdepartmental relationship is good.	3.66	1.02	2.78	0.03*
The working environment of this hospital is excellent.	3.51	0.89	8.43	0.00**
Management provides adequate information about the periodical progress of this hospital.	3.45	0.87	10.79	0.00**
I can improve my performance due to good working condition of this hospital.	3.70	0.96	5.45	0.00**
This hospital would be your first preference to work or to refer anyone to work.	3.59	0.97	11.07	0.00**

Note: 1. \*\* denotes significant at 1% level.

2. \* denotes significant at 5% level.

**Table 4. Employees' Opinion on Capability**

CAPABILITY	Overall		Experience group	
	Mean	SD	F	Sig.
I understand the specific needs of the patients.	3.89	0.71	5.50	0.00**
The accuracy level of my record maintenance regarding my work is excellent.	3.88	0.67	4.93	0.00**
I can showcase my full potential in my work.	3.87	0.61	2.61	0.04*
I have the capacity to understand the current services of this hospital.	3.75	0.81	9.64	0.00**
The training programs have an impact on my knowledge of my work.	3.79	0.65	5.68	0.00**

Note: 1. \*\* denotes significant at 1% level.

2. \* denotes significant at 5% level.

The Table 3 indicates that the respondents gave a maximum mean value of 3.70 for the improvement of their performance due to good working conditions of the hospital, and a minimum mean score of 3.30 was given for the personal attention given to the staff in the hospital. The  $p$  - value is less than 0.01, and the H03 is rejected at the 1% level with regard to experience and the personal attention given to the staff by the hospital management, the working environment of the hospital, the transparency in providing information about the periodical progress, the ability to improve the performance due to good working conditions of the hospital, and the hospital was among the best places to work at. This shows that the management has to improve in people management skills. The H03 is also rejected at the 5% level with regard to the excellence of interdepartmental relationships. Relationship within the department can help employees to work better, but interdepartmental relationships will enable them to achieve better service quality.

🔗 **H04** : There is no significant difference between employees regarding their opinion on capability.

The Table 4 indicates that the mean value of 3.89 is for understanding the needs of the patients and a minimum value of 3.75 is for understanding the capacity of the current services of the hospital. H04 is rejected at the 1% significance level. There is a significant difference between experience and understanding the specific needs of the patients, the accuracy level of employee record maintenance, capacity to understand the current services of the hospital, and the impact of training programs. The  $p$  - value is less than 0.05, and the H04 rejected at the 1%



**Table 5. Employees' Opinion on Resources**

RESOURCES	Overall		Experience group	
	Mean	SD	F	Sig.
I tried to fully utilize my existing capacity with the available resources.	3.7	0.80	7.18	0.00**
It will be difficult to manage if the competitors are using the same development.	3.16	0.68	5.37	0.00**
Competitive environment is highly essential for the growth of the Organization.	3.88	0.59	1.19	0.32
Enhancing the patient delight is essential for achieving sustainable competitive advantage.	3.83	0.87	6.36	0.00**
I know the ways to achieve competitive advantage.	3.56	0.89	7.19	0.00**
Adequate skilled personnel are required in order to gain competitive success.	3.67	0.82	3.65	0.01**
Opening number of branches is not the main force influencing the competition in the market.	3.71	0.65	6.87	0.00**
Adequate resources will improve the brand image of the hospital.	3.57	0.70	9.58	0.00**

Note: 1. \*\* denotes significant at 1% level.

2. \* denotes significant at 5% level.

significance level. The significant difference shows that there are lots of gaps in understanding patients, services, maintaining records, training programs, and so forth in the hospital.

🔗 **H05:** There is no significant difference between employees regarding their opinion on resources.

The Table 5 indicates that respondents gave a mean value of 3.88 for the necessity of the competitive environment for the growth of the organization and a minimum mean value of 3.16 was given for the difficulty in using the same development as competitors. The  $p$  - value is less than 0.01, and H05 is rejected at the 1% level with regard to experience and the opinion of the respondents on all the factors relating to resources except the opinion on competitive environment for the growth of the organization. The disagreement among the experience groups reveals that there were lots of gaps with respect to utilization of existing capacity with the available resources, difficulty in managing competitors using the same development, enhancement in patient delight, knowing the ways to achieve competitive advantage, requirement of skilled personnel to achieve competitive success, more branches opening in the market is the main force to influence competition, and the brand image of the hospital can be improved with adequate resources. Without having valuable, rare, and non-substitutable resources, a hospital cannot provide better service quality and cannot achieve a suitable competitive advantage.

### **(3) SERVQUAL Dimensions - Analysis Based on Patients' Opinion**

🔗 **H06 :** There is no significant association between (gender wise) respondents' (patients) opinion on reliability.

🔗 **H07 :** There is no significant association between types of visits and patients' opinion on reliability.

The Table 6 projects that the respondents gave a maximum mean value of 3.97 for the communication about the treatment with the doctor and a minimum mean value of 3.34 was given for the experiences in diagnostic and ancillary services. The result shows that H06 is rejected at the 1% level with regard to gender and efficiency of the registration process. The  $p$  - value is less than 0.05. The H06 is rejected at the 5% level with respect to gender and communication about the respondents' treatment and associates anticipating and fulfilling the patients' personal preferences.

The H07 is rejected at the 1% level with regard to the types of visits and communication about respondents'

**Table 6. Patients' Opinion on Reliability**

RELIABILITY	Overall		Gender wise classification		Types of Visit Classification	
	Mean	SD	Chi square value	p- value	Chi square value	p- value
Efficiency of the registration process.	3.69	0.87	10.61	0.01**	5.07	0.17
Communication about your treatment condition by the doctor.	3.97	0.90	9.77	0.02*	24.97	0.00**
Overall experience of diagnostic and ancillary services.	3.34	1.18	1.52	0.82	17.16	0.00**
Efficiency of the billing process.	3.56	0.90	3.20	0.36	9.71	0.02*
Associates anticipating and meeting your personal preferences.	3.95	0.83	7.56	0.04*	6.35	0.10

Note: 1. \*\* denotes significant at 1% level.

2. \* denotes significant at 5% level.

**Table 7. Patients' Opinion on Tangibles**

TANGIBLES	Overall		Gender wise classification		Types of Visit Classification	
	Mean	SD	Chi square value	p- value	Chi square value	p- value
General upkeep and cleanliness of the hospital premises.	3.93	0.84	22.23	0.00**	10.31	0.02*
Upkeep of public washrooms.	3.56	0.95	18.96	0.00**	5.92	0.21
Comfort and the ease of parking.	3.67	0.90	22.24	0.00**	26.94	0.00**

Note: 1. \*\* denotes significant at 1% level.

2. \* denotes significant at 5% level.

treatment condition and the overall experience of diagnostic and ancillary services. The  $p$ -value is less than 0.05, and the H07 is rejected at the 5% level on efficiency of the billing process. These differences need to be addressed to achieve better service quality.

🔗 **H08**: There is no significant association between (gender wise) respondents' (patients) opinion on tangibles.

🔗 **H09**: There is no significant association between types of visits and patients' opinion on tangibles.

The Table 7 reveals that the respondents gave the maximum mean value of 3.93 for the general upkeep and cleanliness of the hospital premises and a minimum mean value of 3.56 was given for the upkeep of public washrooms. The  $p$ -value is less than 0.01, and the H08 is rejected at the 1% level with regard to gender and all the factors relating to tangibles. The results reveal that there is a need to improve the general upkeep and cleanliness of the hospital premises, upkeep of public washrooms, comfort, and the ease of parking.

The H09 is rejected at the 5% level. Hence, there is a significant association between types of visits and general upkeep and cleanliness of the hospital premises, and the H09 is rejected at the 1% level for comfort and the ease of parking. The results show that the number of visits increase the expectations regarding tangibles.

🔗 **H010**: There is no significant association between (gender wise) respondents' (patients) opinion on empathy.

🔗 **H011**: There is no significant association between types of visits and patients' opinion on empathy.

The Table 8 shows that the respondents gave the maximum mean score of 3.97 for the courtesy and compassion



**Table 8. Patients' Opinion on Empathy**

EMPATHY	Overall		Gender wise classification		Type of Visit Classification	
	Mean	SD	Chi square value	p- value	Chi square value	p- value
Courtesy and compassion by the doctor.	3.87	0.95	2.31	0.51	14.42	0.00**
Courtesy and compassion of the food and beverage staff.	3.30	1.03	7.94	0.04*	12.90	0.01**
Courtesy and compassion of the telephone operator.	3.90	0.76	29.48	0.00**	4.02	0.26
Courtesy and compassion of the registration associate.	3.80	0.81	9.14	0.03*	9.55	0.02*
Courtesy and compassion exhibited by doctor's secretary.	3.97	0.81	13.64	0.00**	12.54	0.01**
Helpfulness of the security staff.	3.77	0.97	19.38	0.00**	29.62	0.00**
Courtesy and compassion of the billing associate.	3.57	0.86	18.28	0.04*	24.90	0.00**

Note: 1. \*\* denotes significant at 1% level.

2. \* denotes significant at 5% level.

exhibited by the doctor's secretary, and a minimum mean value of 3.30 was given for courtesy and for offering beverage and refreshments by the hospital staff. The H010 is rejected at the 1% level with regard to gender and courtesy and compassion of the telephone operator, doctor's secretary, and helpfulness of the security staff. The H010 is rejected at the 5% level for the gender and the courtesy and compassion shown by offering beverage and refreshments, registration associate, and billing associate.

The  $p$ -value is less than 0.01, the H011 is rejected for types of visit and courtesy and compassion of the doctor, food and beverage staff, doctor's secretary, billing associate, and helpfulness of the security staff. The H011 is rejected at the 5% level with respect to courtesy and compassion of the registration associate. The significant difference on opinion in empathy shows the gap in service quality.

↪ **H012:** There is no significant association between (gender wise) respondents' (patients) opinion on responsiveness.

↪ **H013:** There is no significant association between types of visits and patients' opinion on responsiveness.

The Table 9 depicts that the respondents gave a maximum score of 4.01 for convenience and ease of making an appointment with the doctor and a minimum score of 3.72 was given for ease and comfort of finding their way inside the hospital premises. The  $p$ -value is less than 0.01, and the H012 is rejected at the 1% level with respect to gender and convenience and ease of making an appointment with the doctor, ease and comfort of finding your way inside the hospital premises, and time taken for consultation with the doctor. However, H012 is rejected at the 5% level for the gender and the opinion in response to patients' queries by the doctor's secretary.

The H013 is rejected at the 1% level towards the types of visit and ease and comfort of finding your way inside the hospital premises and time taken in consultation with the doctor and convenience. The H013 is rejected at the 5% level with regard to ease of making an appointment with your doctor and response to your queries from the doctor's secretary. The result shows that there is a gap in responsiveness, which may affect the image of the hospital and patient flow.

↪ **H014:** There is no significant association between (gender wise) respondents' (patients) opinion on assurance.

↪ **H015:** There is no significant association between types of visits and patients' opinion on assurance.

**Table 9. Patients' Opinion on Responsiveness**

RESPONSIVENESS	Overall		Gender wise classification		Types of Visit Classification	
	Mean	SD	Chi square value	p- value	Chi square value	p- value
Convenience and ease of making an appointment with your doctor.	4.01	0.68	9.72	0.01**	6.65	0.04*
Ease and comfort of finding your way inside the hospital premises.	3.72	0.88	20.46	0.00**	16.51	0.00**
Time taken for consultation with the doctor.	3.81	0.9	13.08	0.00**	12.73	0.01**
Response to your queries by the doctor's secretary.	3.88	0.84	6.77	0.03*	9.41	0.02*

Note: 1. \*\* denotes significant at 1% level.

2. \* denotes significant at 5% level.

**Table 10. Patients' Opinion on Assurance**

ASSURANCE	Overall		Gender wise classification		Types of Visit Classification	
	Mean	SD	Chi square value	p- value	Chi square value	p- value
Compared to other hospitals, how satisfied are you with this hospital?	4.23	0.66	1.16	0.56	6.50	0.04*
Overall service experience with this hospital?	4.29	0.73	9.71	0.02*	19.43	0.00**
How likely you would choose this hospital if need arises?	4.04	0.68	9.51	0.01**	24.84	0.00**
Recommendation of this hospital to your society?	3.75	0.95	8.39	0.04*	4.48	0.21

Note: 1. \*\* denotes significant at 1% level.

2. \* denotes significant at 5% level.

The Table 10 portrays that the respondents gave a maximum score of 4.29 for an overall service experience of the hospital, and a minimum score of 3.75 was given for the recommendation of corporate hospitals to the society.

The H014 is rejected at the 1% level for the gender and the respondents' opinion on likeliness to choose corporate hospitals if the need arises. The  $p$  - value is less than 0.05, and the H014 is rejected with respect to gender and overall service experience with corporate hospitals and recommending this corporate hospital to their society.

The H015 is rejected at the 1% level with regard to the types of visit and overall service experience with corporate hospitals and likeliness to choose corporate hospitals if the need arises, and the H015 is rejected at the 5% satisfaction level of the hospital as compared to other corporate hospitals.

## Suggestions

The following suggestions are based on the findings of employees' opinions on Porter's sustainable competitive advantage model factors:

**(i) Cost :** The patients perceive high prices as a sign of inherent service quality. According to Porter's model, the hospital can provide unique services at a higher cost and that should be inimitable by the competitors. Through this, the hospital can achieve a differentiation advantage.

**(ii) Technology :** Adequate training should be provided to the employees for using the existing technologies in the hospital. It can reduce the workload of the employees and it can also reduce the causes for rework.

**(iii) People :** Quick reward and recognition system can be introduced to increase the personal attention to the employees. There should be transparency in providing the periodical progress and current status of the hospital. This increases the inter/intra departmental relationship, employee recommendation capacity, and loyalty to the hospital.

**(iv) Capability :** In order to showcase their full potential, the employees can be guided, monitored, and appraised by their superiors. This increases the accuracy level of their work, continuous assessment of their participation in training programs and motivates them to showcase their full potential in the workplace.

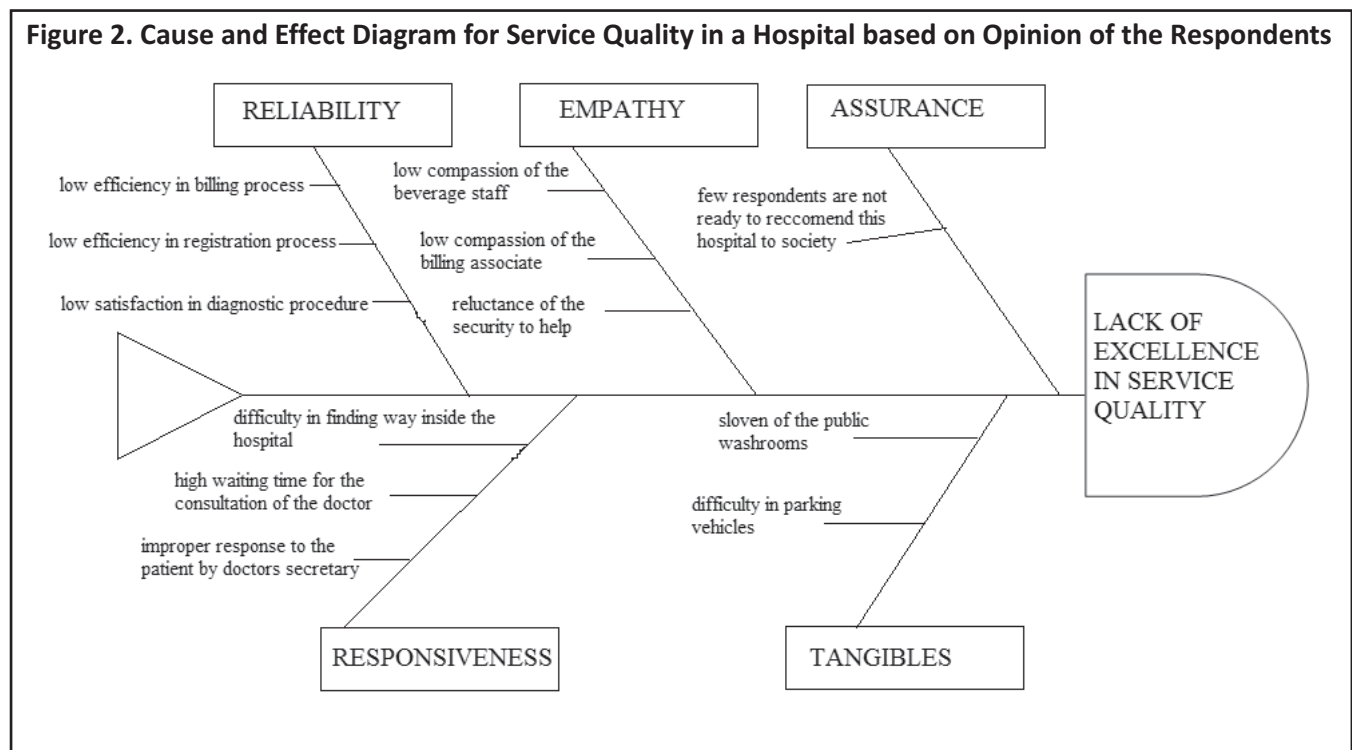
**(v) Resources :** The employees should know the ways to achieve the competitive advantage and these are proceeded by setting and achieving the objectives of the individual and the department. It ensures the sustainable growth of the hospital.

The following suggestions are based on the findings of the SERVQUAL dimensions on patients' opinion :

**(I) Reliability :** Health care professionals should be reliable while communicating with patients. There is a need for adopting technologies for improving efficiency in billing and registration processes. Reliable support should be given to the patients with diagnostic and ancillary services.

**(ii) Tangibles :** Adequate maintenance is required in the following areas - washrooms, parking area, hospital ambience.

**(iii) Empathy :** Adequate training needs to be given to all employees to deliver the services to the patients with courtesy and compassion.



**(iv) Responsiveness :** Sign boards inside the hospital should be put up in regional languages to make it easy for the patients to find their way inside the premises. The hospital management should introduce online appointments as well.

**(v) Assurance :** The hospital management has to focus on improving its facilities to increase the level of patient satisfaction.

The Figure 2 portrays the various causes which are affecting the service quality dimensions and its effect on service quality. We made an attempt to explain the important findings based on analysis of data and projected through a cause and effect diagram.

## Conclusion

Service quality is more important as it distinguishes the organization from other service centers, and more customers come to get the services which satisfy the customers, and they turn into loyal customers. An organization cannot buy sustainable competitive advantage in the open market; rather, it is found in the valuable and rare resources, imperfectly imitable resources, and non-substitutable resources. The excellence in service quality automatically enhances the path to sustainable competitive advantage and thus results in a stronger brand, greater pricing power, and operational efficiencies, increases customer loyalty and enhances the ability to attract, retain, and motivate employees.

## Limitations of the Study and Scope for Further Research

The period of research was two months. Due to time constraints, the research was restricted to find the sustainable competitive advantage based on Porter's model among employees and service quality based on SERVQUAL dimensions among outpatients. The sample of the experimental group for each category was small ; only 150 samples for each category. Majority of the patients who came to the hospital were illiterate, which made it difficult for collecting data from them through a questionnaire.

A further study can be carried out with more samples in each category, including other demographic factors, inpatients, and secondary data may give some more insights. The findings of the study suggest that there is need for further statistical analysis on Porter's model, and SERVQUAL dimensions can be tested through multivariate analysis techniques.

## References

- Abuosi, A. A., & Atinga, R. A. (2013). Service quality in healthcare institutions: Establishing the gaps for policy action. *Int J Health Care Qual Assur*, 26(5), 481 - 492. DOI : <http://doi.org/10.1108/IJHCQA-12-2011-0077>
- Andaleeb, S. (2007). Caring for children: A model of healthcare service quality in Bangladesh. *International Journal for Quality in Health Care*, 20 (5), 339 - 345. DOI : <http://doi.org/10.1093/intqhc/mzn024>
- Andaleeb, S. S., Siddiqui, N., & Khandakar, S. (2007). Patient satisfaction with health services in Bangladesh. *Health Policy and Planning*, 22 (4), 263 - 273. DOI: <http://doi.org/10.1093/heapol/czm017>

- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99 - 120.
- Kaura, V., Durga Prasad, C. S., & Sharma, S. (2015). Service quality, service convenience, price and fairness, customer loyalty, and the mediating role of customer satisfaction. *International Journal of Bank Marketing*, 33 (4), 404 - 422. DOI: <http://doi.org/10.1108/IJBM-04-2014-0048>
- Maninta, K. N. & Srivalli. P. (n.d.). A study on factors influencing service quality in restaurants. *Annamalai International Journal of Business Studies & Research*, 6 (1), 1-9.
- Oliver, C. (1997). Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal*, 18 (9), 697- 713. DOI: <http://doi.org/10.2307/3088134>
- Ormanidhi, O., & Stringa, O. (2008). Porter's model of generic competitive strategies. *Business Economics*, 43 (3), 55 - 64.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple item, scale for measuring consumer perception of service quality. *Journal of Retailing*, 64(1), 12 - 40.
- Piercy, N. (2014). Online service quality: Content and process of analysis. *Journal of Marketing Management*, 30 (7-8), 747 - 785. DOI: <http://doi.org/10.1080/0267257X.2013.839571>
- Porter, M. E. (1985). *The competitive advantage : Creating and sustaining superior performance*. New York , NY : The Free Press.
- Porter's sustainable competitive advantage model*. (n.d.). Retrieved from <http://www.jbdon.com/porters-sustainable-competitive-advantage-model.html>
- Thawesaengskulthai, N., Wongrukmit, P., & Dahlgaard, J. J. . (2015). Hospital service quality measurement models: Patients from Asia, Europe, Australia and America. *Total Quality Management & Business Excellence*, 26 (9-10), 1029 - 1041. DOI <http://doi.org/10.1080/14783363.2015.1068596>
- Wright, P. A., McMahan, G. C., & McWilliams, A. (1994). Human resources and sustained competitive advantage: A resource-based perspective. *International Journal of Human Resource Management*, 5(2), 301 - 326.