Report On

Applying SERVQUAL model to measure online customer satisfaction
in online healthcare services

By

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ID: 19104167

An internship report submitted to the BRAC Business School in partial fulfillment of the

requirements for the degree of

Bachelor of Business Administration

BRAC Business School

Brac University

October 2023

Declaration

It is hereby declared that

1. The internship report submitted is my/our own original work while completing degree at Brac University.

2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.

3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.

4. I/We have acknowledged all main sources of help.

Student's Full Name & Signature:

_____
Irwan Shariar Jisan
19104167

Supervisor's Full Name & Signature:

_____
Dr. Nusrat Hafiz
Lecturer, BRAC Business School
BRAC University

Letter of Transmittal

Dr. Nusrat Hafiz

Lecturer,

BRAC Business School

BRAC University

Kha 224, Merul Badda, Brac University, Dhaka 1212

Subject: Submission of Internship Report

Dear Ma'am,

It gives me great pleasure to inform you that I have completed my internship report on " Applying SERVQUAL model to measure online customer satisfaction in online healthcare services" as a prerequisite for the Fall 2023 internship program. It was a great opportunity and I tried to follow my supervisor's direction and meet all the criteria. The academic training, I got here will help me in my future endeavors.

I would like to express my deepest appreciation to you for your constant advice and assistance over the course of this report. Your feedback on the report, given its limitations, is highly appreciated.

Sincerely yours,

Irwan Shariar Jisan

_____

Irwan Shariar Jisan

ID: 19104167

BRAC Business School

BRAC University

Non-Disclosure Agreement

This agreement is made and entered into by and between Zaynax Health Ltd. and the undersigned student at Brac University

Irwan Shariar Jisan

………………………………….

Signature

Acknowledgement

Working at Zaynax Health Ld. for 12 weeks was an incredible experience for me. As an HR major, it provided me with real-world insights into the industry and assisted me in connecting my university learnings with my actual job.

I would like to thank my internship supervisor, Dr. Nusrat Hafiz, for her help and advice throughout the internship period. The ideas and help she provided were critical in preparing this report.

I also want to thank my work supervisor, Khadija Tul Akter, HR Specialist at Zaynax Health Ltd, for the help in broadening my knowledge not just in the industry but also in a variety of other fields.

Finally, I would like to thank Brac University for all of its academic assistance over the previous four years, as well as the Office of Career Service and Alumni Relations for assisting me with the appropriate paperwork for my internship.

Executive Summary

The report consists of three chapters. The first chapter is an overview of the internship experience in the organization. The second chapter is about the organization in which the internship was performed. Finally, the third chapter is the topic selected for the report, which is "Applying SERVQUAL model to measure online customer satisfaction in online healthcare services". Firstly, in the first chapter, I talked about the experiences and knowledge I gained from the internship and what the organization gained from me. Later in the second chapter, I discuss the organization's practices as well as its situation. Lastly, in the third chapter, I have discussed the current situation of online healthcare service in Bangladesh and how it is becoming a necessity for people. Furthermore, I talked about how Zaynax Health Ltd. can broaden their service its assurance and supervision procedures.

Keywords: SERVQUAL, Online Healthcare, Customer satisfaction, Doctor Consultation, Telemedicine, Remote healthcare.

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List of Acronym

HR   Human Resource

Ltd   Limited

Swot   Strength Weakness Opportunity Threat

T&D   Training and Development

PTO   Paid Time Off

B2B   Business to business

B2C   Business to Consumer

SEO   Search Engine Optimization

RDBMS   Relational Database Management Systems

HIPAA   Health Insurance Portability and Accountability

SPSS   Statistical Package for the Social Sciences

Df   Degrees of Freedom

SD   Standard Deviation

Chapter 1: Overview of Internship

1.1 Student Information

Name   :   Irwan Shariar Jisan

ID   :   19104167

Program   :   BBA

1st Major   :   HR

2nd Major   :   Marketing

1.2 Internship Information

1.2.1 Period, Company, Department

My internship was done at Zaynax Health Ltd. which is a sister concern of the Zaynax group in Bangladesh and it is the first health super application and online doctor service provider for everyone. On April 14, 2023, I began my 12-week internship program which ended on July 14, 2023. I was given a job with the HR team during this time, there were three people on this team including me. The operations were operated from the corporate head office at Star Center, Plot-2A, Block SE(C), Road- 138, Level- 3, Gulshan 1, Dhaka 1212.

1.2.2 Internship Company Supervisor's Information:

My supervisor at Zaynax Health Ltd. was Khadija Tul Akter, HR Specialist. She received direct reports from the team each and every day. I also had to report to my senior executive, Syed Zarif Nafi who is also a member of the HR team.

1.2.3 Job Scope

The HR team was responsible for handling the HR & Admin division of Zaynax health and the other concern of the Zaynax group which is an ecommerce site named zDrop Bangladesh Ltd.

Basically, the responsibility of the HR team was to manage different day to day tasks of the overall company. From monitoring the attendance to keep track of the employee and keeping the requisitions for employees in every department and aligning with the top management. Also, making them aware of what is currently processing. Also, some tasks like making arrangements for new joiners from their seating positioning to providing necessary details and letting them know about the policy of the company. Payroll setting is also a major task of the HR team for every month by aligning with the accounts and finance department. As it is a health-related company, they had to do campaigns in different areas where they needed to visit. The transportations requisition is done through the process of HR.

As an intern, I got the opportunity to learn several things by working with the HR team. Furthermore, I was assigned to accomplish different tasks in the HR department. They are:

- Importing regular attendance report from the server
- Creating Job description
- Calling/ Mailing for interviews
- Conducting Interviews of all the departments
- Follow up calls of the interview applicants
- Creating regular conveyance bill and fuel bills
- Taking care of the administrative task
- Arranging seating positions of new joiner
- Providing necessary details to the new joiners and assisting them
- Maintaining the inclusion and exclusion report
- Maintaining employee inventory where all the employee details are kept
- Assisting in payroll management
- Creating monthly requisitions

1.3 Internship Outcomes:

1.3.1 Student's contribution to the company

In different companies, the input of the intern might not be important but it's kind of different in this organization as the number of HR personnel is very limited. In this organization, the HR department is managed by the HR specialist under whom I am doing my internship. So basically, I am assisting the HR team with almost all sort of HR & Admin tasks. Technically, I am being treated as the core HR personnel. I was able to learn a lot from the team and try to use it to accomplish the task that is given to me. I helped the team to process the day-to-day report creating and also managing administrative tasks which was later reviewed by my supervisor. Most importantly, the employee inventory has to be updated on regular basis. Furthermore, the joining, appointment letters and other applications were created by me which was done under the supervision of my line manager. Finally, the reports were mostly formed using the information I got from the organization.

1.3.2 Benefits to the student

In my opinion, the greatest benefit a student can gain from this internship is learning experience. For the first time, I was able to gain knowledge about how a local company in Bangladesh works. Second, I was able to understand the importance of dividation of task. Third, I was able to understand the importance of documentation and why it is important to manage and collect employee data. Finally, I got to know why an organization requires a HR team to balance the workforce. For the people who are currently in job field might not find this important. However, as a recent graduate, these learning opportunities have provided me with insight into the corporate world and what to expect in the future.

1.3.3 Problems/Difficulties (faced during the internship period)

Being involved for a new firm might be exhilarating, but there are obstacles to overcome. Being a new business, Zaynax Health Ltd. could not have relied on established protocols or policies. This can have resulted in a lack of precise instructions for assignments and confusion regarding the job and obligations. HR duties are typically broken down into particular roles like hiring, relations with workers, benefits management, etc. in a developing firm. It appears that these duties might

not be something that was fairly divided throughout the internship. This might have forced me to handle a variety of HR duties, making it difficult to concentrate and perform well in one particular area. Interns frequently experience different facets of a business's operations. Nevertheless, as I was not prepared for the administrative component, receiving both HR and administrative chores have seemed too much to handle. It can be difficult to balance multiple obligations, which may have prevented me from giving each work complete attention.

It's important to remember that internships are often created to offer opportunities for instruction and practical knowledge. There may have had a lot of work to do and possibly less opportunity for development when I was given tasks usually performed by executives. Typically, interns are anticipated to assist with supervision and direction.

1.1.4   Recommendations

Zaynax Health is Bangladesh's first health super application and online doctor service provider which is dedicated to providing quality healthcare for everyone. It was launched back in 2020. As a start-up company, this company is doing pretty good. Recently, it got a gold medal and awarded as the prestigious Bangabandhu innovation grant. There are few things that I can recommend. Firstly, as this company is running online based business, this should increase its online presence more to create a brand value. Strong online presence helps to increase customer which eventually bring more revenue. Also, more expert and experienced people should be hired who can take the business to next level. A startup company needs people who have experience on the same field to create value. Moreover, the existing employees should be trained more. Also, employees should get the chance to work from home on certain days which might help to improve productivity.

Chapter 2: Organization Part

2.1/2.2 About Zaynax Health Ltd.

The first health super application in Bangladesh, Zaynax Health, offers 360-degree Digital Healthcare Solutions for all healthcare need. For everyone in the nation, we are dedicated to improving access to, affordability of, and convenience with healthcare. Zaynax Health is a one-stop shop for all of your healthcare needs, offering a 360-degree healthcare marketplace (Zaynax Health, 2020). People may use Zaynax Health to connect with everything they require to take exceptional care of themselves and their families, including the ability to assess health issues, identify the ideal doctor, schedule diagnostic tests, order medications, store health data, and learn new ways to monitor their health.

A variety of services are available through the Health Super Application to help users better take care of their health. Users of the online doctor service can consult with licensed doctors from the convenience of their homes, around-the-clock. By eliminating the need to stand in long queues, the online doctor appointment service makes it easier for patients to schedule appointments with doctors of their choice. In order to save time and avoid having to physically visit a pharmacy, consumers can get their medications online through Zaynax Health and have them delivered right to their home. In addition to making lab tests simple, the health packages also make healthcare more accessible and inexpensive (Zaynax Health, 2020).

Zaynax Health is the sister concern of the Zaynax Group. Zaynax Group is one of the top private sector business in Bangladesh serving valued clients in the steel, power, financial, infrastructure, media, entertainment, e-commerce and healthcare sectors.

Name of Organization   : Zaynax Health Limited

Type of Organization   : Private Limited Company

Number of Offices   : 3

Managing Director   **:** Zaeem Ahmed

Chief Operating Officer   : Parvez Ahmad

Address	: Star Center, Plot- 2A, Block SE(C), Road- 138, Level- 3, Gulshan 1, Dhaka 1212
No. of Employees	: 90
Website	: https://zaynaxhealth.com/
Email	: hr@zaynaxhealth.com

2.3 Management Practices

2.3.1 Leadership style

Zaynax Health follows the participative leadership as the organization's leadership style. By encouraging a collaborative and active environment, participatory leadership is essential to the success of an online healthcare business. This organization does two types of business, B2B & B2C. So, assigned employees has to make plans on their certain division according to their business policy. This leadership style encourages staff members to actively contribute their thoughts, knowledge, and skills, which boosts the organization's capacity for creativity and problem-solving (Hawley, 2023). Participatory leadership encourages a sense of ownership and accountability among team members by incorporating them in the decision-making process. This fosters a sense of shared vision and purpose among the workforce.

Participatory leadership helps to develop trust, strengthen teamwork, and encourage open dialogue among staff, leading to increased collaboration and smooth service delivery in an online healthcare organization, where excellent communication and coordination are important (Hawley, 2023). Additionally, by empowering people to advance their knowledge and abilities, this leadership style fosters career advancement and job satisfaction. An online healthcare organization that embraces participative leadership fosters a culture of innovation, adaptability, and continuous improvement, ultimately enhancing its capacity to provide high-quality and patient-centered care in the digital sphere.

2.3.2 Mission and Vision

Zaynax provides employees to showcase their skills and expertise which can lead them to effective and efficient solutions (Choudhury, 2022). Through this process the organization can involve employees in decision making process which ensure best outcomes. Their mission is to make healthcare accessible for all through the best-in-class technology integration with innovative healthcare solution

Those who can influence the employees to work with the decision-making team can create a mindset of ownership and can be committed towards the team. This Purpose aligns with Zaynax Health's commitment to become socially responsible and being a partner to the customers. Such people who help in shaping the organizational strategies can create positive change to the society. It helps the organization to get advancement of technological knowledge, exchanging other knowledge using innovative solutions. Zaynax Health can make sure that all the employees are working together to provide high quality health care service (Zaynax Health, 2020).

It's a purpose driven organization with socially responsible partner who are there to convenient care by making things efficient. This strategy enables the development of healthcare and can be accessible to everyone while merging with the Zaynax health mission.

2.3.3 Human resource planning

Human resource planning is an important process for organizations like Zaynax Health Limited to ensure they have the right people with the right skills in the right places at the right time.

Identifying HR needs: Zaynax Health ltd. HR predicts the future requirements by analyzing the strategic goals. This includes several factors like, growth prediction, new project placement, technological advancements and differentiations of healthcare business.

Job Analysis and Job Design: Zaynax Health Limited has to go through a job analysis to get more information about the responsibilities and abilities of the positions including the credentials that is important after the HR needs have been identified. This aids in constructing job descriptions and specifications that form the basis for the HR process like hiring, selecting and evaluating performance procedures.

Talent Acquisition: HR mostly focuses on hiring and finding talented people. For this the advertisement has to be posted on proper websites and professional networks and should be more collaborated with business and different organizations. Also, it has policy of internal recruitment methods such as promotions and transfers.

Selection and Hiring: After getting applicants, the company runs a selection process with the assigned department head of the company to look for suitable applicants. This process has some steps like, screening the CV, conducting interviews, different tests and lastly doing background check. The main goal is to make sure that the candidate has all the required qualities, skills and cultural fit.

Training and Development(T&D): After hiring employees, Zaynax health arrange training session for that particular position to grow their skills and capabilities. This mostly done by the supervisor. The training session can let the employee know about policy, rules & regulations. Additionally, training opportunity, seminar, workshop programs occur weekly and monthly to help the employees to grow professionally and adapt the organizational practices.

Succession Planning: Zaynax health identifies the gap and creates a pipeline of talented individuals to the empty positions in future. Succession planning is basically preparing employees for future leadership positions by high-potentials and skilled personnel. This helps the organization to fill up the positions when someone resigns, promoted or retires.

Performance Management: Performance management helps to evaluate employee's performance and monitor their progress. Through this process, organization can get performance expectations, performance appraisals and can provide them regular feedback regarding their work. This also helps the employee to improve their opportunity and career development. Also, organization objectives and culture can be aligned with individual's goal.

Monitoring and Review: The HR procedure is a continuous process at Zaynax Health Limited. The company continually evaluates and reviews its HR plans and actions to ascertain their effectiveness and make the necessary adjustments. This approach includes reviewing employee survey results, tracking key performance indicators, and staying abreast of industry trends and best practices.

2.3.4 The compensation & appraisal system

In order to honor and motivate its cherished employees, Zaynax Health has developed an extensive system of compensation that includes a variety of elements, such as salary, perks, and incentives. At Zaynax, employee remuneration is thoroughly planned, considering into account important elements including a person's expertise, market rates, and certain job categories within the company. With this careful planning, every staff member is paid properly and in line with industry standards, which not only acknowledges their efforts but also strengthens their loyalty to the business. Zaynax Health offers its qualified employees a range of appealing perks in along with attractive compensation. The most significant of all these is the supply of medical coverage, a crucial service in the healthcare industry.

Additionally, the business is steadfastly dedicated to assisting its staff members in finding a balance between their professional and personal lives. The offer of paid time off (PTO), which includes both sick days and vacation days, serves as an example of this dedication. Having this structure in place, staff members may take care of their own personal and medical concerns while worrying about how it would affect their capacity to make ends meet (Cross & Daniel, 2019). This promotes an employment atmosphere that is extraordinarily satisfying to those who work there and both productive. Zaynax Health goes above and beyond for the comfort of its staff by providing company automobiles for business-related travel. These business vehicles are available for use by staff anytime they have conferences, meetings, or campaign-related events to attend.

Zaynax Health has also put in place an effective system of rewards based on performance since they understand the importance of staff motivation and productivity. These rewards are a potent motivator for workers to perform at the top of their game, which ultimately benefits the business as a whole.

It's significant to remember that Zaynax Health's range of wages differs according to the position of employment. Examples of this include department heads, who are entrusted with important duties and management tasks, are paid competitive salaries between $80,000 and $150,000. The average starting salary for executives, who hold a variety of responsibilities with variable seniority and competence, is between $20,000 and $50,000. Riders and office assistants, who are essential to the organization's regular operations, are paid between 10,000 and 20,000.

In conclusion, Zaynax Health's main goal is to offer workers a wide range of benefits that not simply match but frequently surpass the requirements of the industry. This strategy plan is specifically created to draw top people and encourage their long-term commitment with the company. Zaynax Health makes sure that its employees feel supported and inspired in attempting to make a contribution to the business's ongoing success in the medical field by providing attractive wages, an extensive advantages investment, possibilities for advancement in their careers, and focused on results encouragement.

2.3.5 Training and development

Zaynax Health places a high priority on making sure new hires have an in-depth comprehension of the healthcare sector and the company's own regulations. They have put in place a formal orientation program for recruits to accomplish such. This curriculum aims to present a comprehensive understanding of the business and its guiding principles.

The planning of numerous workshops is a crucial component of their staff growth approach. These conferences are planned as required and include an extensive spectrum of subjects. In this regard, Zaynax Health proactively schedules meetings to hold educational events whenever a new product or service is introduced. This makes sure that each worker is knowledgeable about the most recent products and can convincingly explain the advantages to clients.

Zaynax Health establishes specific goals for developing abilities in line with their dedication to staff advancement. These goals are specifically designed to support staff development and job excellence. These objectives influence staff members in their growth as professionals, whether or not it is by helping them improve their marketing tactics, their communication skills, or their understanding of a particular sector of the economy. The fact that Zaynax Health's locations are spread out presents an issue. They have adopted webinars for training as a solution to overcome. They can effectively spread knowledge and promote uniform educational settings throughout every discipline thanks to this strategy.

Zaynax Health's sales personnel must undergo extensive training because the company engages in both business-to-business (B2B) and business-to-consumer (B2C) sales. They receive the abilities and information necessary to draw in and keep consumers through this training.

Zaynax Health makes use of the knowledge of its team leads, who have years of training, in arranging the training session. To make certain that salespeople are well-equipped to fulfill the expectations of the markets they serve, these seasoned specialists offer internal instruction.

2.4 Marketing Practices

a) Marketing Strategy: Zaynax Health mostly focus on spreading awareness, attracting customers and building trust from the customers. As an online based business, this involves in digital marketing field as well. Those are SEO marketing, content marketing, social media marketing and virtual marketing. Also, there are several partnerships with other organizations. This helps to increase the brand value and brand visibility (Tajmim, 2023). As they work for both business to business and business to consumer, they have to keep clear concept for both sections.

b) Target customers, targeting and positioning strategy: Target customer for this business is quite direct. Depending on their offering they provide their service to the target market. For example, they can target individuals who seek for convenient healthcare service which include online doctor consultations, telemedicine, medicine delivery and health package (Dhaka Tribune, 2023). Additionally, their target market is in different sectors. Such as corporate offices, elderly people, people in remote areas who have little access to traditional healthcare services. Moreover, the targeting and positioning strategy involves in identifying the USP of virtual healthcare. Also, factors that help in positioning has 24/7 availability and qualified healthcare service providers.

c) Marketing channels: For marketing purpose, digital platforms are the best possible solution. Having a user-friendly mobile application and informative website is what Zaynax is keeping their position in the market. Also, it arranges campaign in remote areas to get more attention from the audience. Building partnership with relevant companies who are working with similar field can also help in increasing brand visibility. (Tajmim, 2023).

d) Product/New product development and competitive practices: For any startup business, it's important to involve in enlarging the online platform and features. Zaynax regularly launches new product and also expand their business (Choudhury, 2022). They started their business as an online healthcare service where they used to provide online doctor consultation. Then they started telemedicine service and now they hired a pharmacist to provide pharmaceutical facilities named

Zaynax Pharma. Also, they are now providing 24/7 medicine delivery service which is done through the same mobile application. As this is the first Bangladeshi healthcare application, it has very less competitors in the industry. Recently they launched another service called care giver which will provide service to the elderly people. Moreover, they are planning to set their business up in aboard. Through this journey they can become a multinational business from large business.

e) Branding activities: Such online healthcare business is made based on building trust and showing professionalism. To get such identity, Zaynax is increasing its marketing and doctor's availability. Also, the amount of tele sales employees is well experienced to get their desired amount of attention (Choudhury, 2022). Also, apart from virtual presence they are creating more high-quality content and visually appealing website and mobile application. From hiring experienced IT engineers, they are putting more effort to get the full customer satisfaction in return.

f) Advertising and promotion strategies: Zaynax Health is creating educational content for social media platforms like, Facebook, LinkedIn, and Youtube (Choudhury, 2022). This can help to get a wide range of customers from online marketing. Also, they are collaborating with influencers to let people know about the service that they provide. As Zaynax fully runs their business online. So, these marketing help them in getting the attention of online users.

g) Critical Marketing issues and gaps: As an online healthcare service, there are several issues that need to be clarified. First of all, building trust with the customers and keeping the same or better service is kind of a challenge which needs to be kept in track. Also, Zaynax need to ensure the privacy of their customers. So, all problems have to told with a transparent communication. Also, a large amount of people of our country are still not tech oriented. Here, they need to have some sort of learning. Also, providing the delivery service on certain time with this level traffic might also can be an issue.

2.5 Financial Performance and Accounting Practices

I was obligated to abide by the firm's rigorous policy on the confidentiality of financial records and accounting data throughout the duration of my internship at Zaynax Health Ltd. Sadly, this regulation forbids the sharing of particular financial information, such as annual statements and accounting processes. In conformity with corporate policy as well as industry norms, I was not given access to private financial or accounting records while I were an intern. As a result, I am

reluctant to offer a thorough evaluation of the business's financial results or make comments regarding certain accounting procedures.

I want to make it clear that I completely recognize and comprehend the significance of protecting the privacy and safety of such private data. I have cooperated with all agreements regarding confidentiality throughout my internship because the organization's dedication to safeguarding its accounting information is an essential component of how it operates. Regardless of the restrictions on talking about financial and accounting matters, I have learned a lot about the company's activities in additional domains, which has enhanced my internship's general educational knowledge.

2.6 Operations Management and Information System Practices

2.6.1 Use of Information systems

At the moment, Zaynax Health Ltd utilizes an analog inventory management system. This is a typical method of gathering, storing, and analyzing inventory-related statistics. For startups, manual procedures may be effective, but as the organization expands, they may become ineffective and susceptible to error. By streamlining managing stocks, lowering errors, and providing real-time data on the status of stocks, a warehouse data base would be implemented. This would improve making decisions and avoid surplus and shortages.

For the payroll and accounts/finance divisions, the organization operates a portal. The data contained in the system used for handling personnel payroll administration, accounting operations, as well as reporting is probably included in this gateway. These programs may monitor spending, calculate payroll, and produce accounting documents for interested parties. It is crucial to guarantee data confidentiality, precision, and adherence to budgetary constraints.

Top management receives periodic reports from Zaynax Health Ltd on the state of the business. Using specialist programs or instruments for data collecting, processing, and report preparation is probably involved here. Making use of analytics or statistical technologies helps streamline this procedure and give those making decisions useful information.

2.6.2 Use of Databases or Office Management Software:

Despite the omission of the exact database system that was employed, relational database management systems (RDBMS) are frequently employed by businesses for storing and handle organized information effectively. For keeping medical files, data on inventories, money movements, and various other important data, systems are essential (Tejeda, 2023)

For duties like organizing documents, correspondence via email, and working together, the organization may employ outlook productivity suites like Microsoft Office or Google Workspace. These resources help boost worker output and cooperation.

2.6.3 Quality Management, Resource Allocation, and Operations Management

In order to keep the mobile application's quality high, the nutritional value leadership group is essential. Engineers are in charge of making sure the program complies with regulatory requirements, is error-free, and offers an enjoyable experience for users. They probably employ quality administration techniques and technologies including bug monitoring, assessment, and ongoing enhancement strategies.

In the provision of medical treatments, efficient planning is essential. In order to efficiently handle schedules for patients, medical professional accessibility, and allocation of resources, the business ought to have planning applications or systems in operation.

Allocating supplies requires controlling hardware, people, and facilities to improve the provision of services. Specialists in healthcare can be allocated to the appropriate duties and resources can be used effectively with the help of a productive distribution of resources mechanism.

A healthcare service provider's operational leadership includes improving procedures, tasks, and commodities. It guarantees that the demands of those receiving treatment are addressed and that the amenities are supplied effectively (Ellis, 2017). System optimizing, capacity estimation, and effectiveness evaluation may all be involved. In conclusion, Zaynax Health Ltd. manages many facets of its healthcare service business using an amalgamation of manual and digital information technologies. Reliability and effectiveness could be improved by introducing advanced data infrastructure, notably for managing inventories and monitoring. The organization's quality assurance staff is also in charge of making sure that the application for mobile devices is both

operational and of a high standard, a requirement essential for client pleasure as well as complying with laws.

2.7 Industry and Competitive Analysis
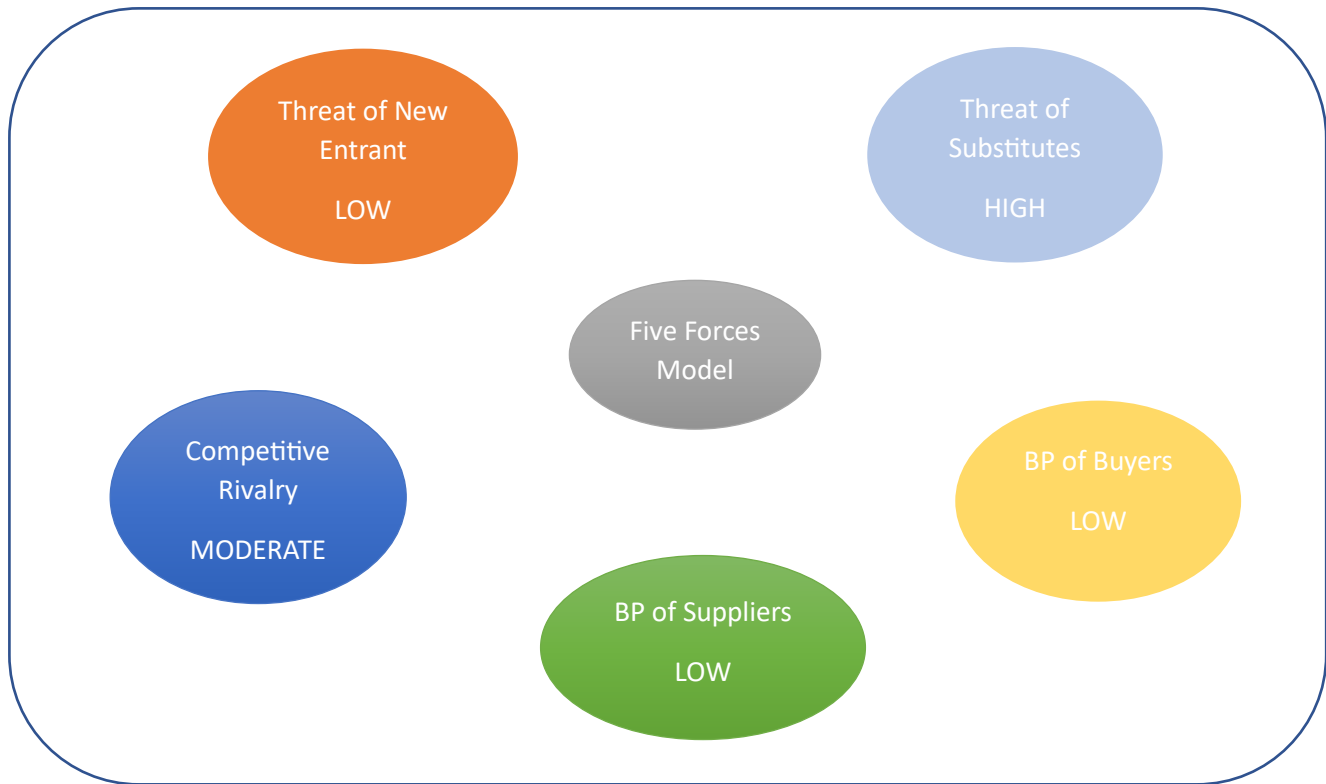
2.7.1 Porter's Five Forces analysis

Figure 1 Porter's Five Force

- **Threat of new entrants: Low**

    In Bangladesh, the threat of new entrant is quite low. The reason behind is the barriers for new comers to enter as they will have to have a huge capital investment and also a strong network of healthcare professionals. Lastly, the government license is also a threat since the process of getting the license is quite critical in Bangladesh as everything needs to be perfectly aligned.

- **Bargaining power of suppliers: Low**

The bargaining power of suppliers is quite low since there are a lot of healthcare professionals in the industry. All the other companies are trying their level best to cope up with the current industry. The only target they have is to satisfy and attract more customer on this field since they have the shortage of that. Without any other doubts, the applications are trying to increase their reach So, they can't force to increase the bargaining power.

- **Bargaining power of buyers: Low**

  Since there are competitors in the market for Zaynax health, the Bargain power is simply low as the consumers can switch to new business. When the consumers can create a pressure to the vendors to lower their price this process is known as bargaining power of buyers. Currently, in Bangladesh there are several similar service providers are emerging with similar customer base which is affecting every other companies. This is where the companies are getting compelled to lower their prices as they can shift to another company who provide similar service.

- **Threat of substitutes: High**

  The threat of substitutes is high as there are other companies who are providing the similar facilities for online healthcare service. When the availability of the similar product increase, it shares the customer base. Due to simple mistakes and some little structural change can create a high impact by shifting the customer to the substitutes. So, Zaynax should always try to bring innovative features which is difficult to imitate and can attract customers more.

- **Rivalry among existing firms: Moderate**

  This rivalry is moderate. This is one of the five forces to shape the competitive intensity. The strategic thinking requires to analyze all five forces. There are several companies who are providing online healthcare service in Bangladesh. But there are few close competitors. Among them only Zaynax health has the feature to provide service to the individual consumers. Also, they are constantly innovating new features to their business.

2.7.2 Swot Analysis

Strength	Weakness
Zaynax Health is the first application to provide online healthcare service to both B2B and B2C. It has a strong network of healthcare professionals in different sectors. It provides a variety of services including doctor consultation, telemedicine, prescriptions, medicine delivery, care giver. It is very user friendly and affordable to regular consumers. Provides first care-giver service in Bangladesh.	Since this is a new startup, it has not achieved the level of recognition as Praava health. Currently, they are doing business in Bangladesh and has not expanded outside. Technical issue occurs due to internet Some of the packages are costly. It has some limitations regarding different sectors.
Opportunity	**Threat**
The online healthcare industry is currently growing in Bangladesh. So, there are huge opportunities on this field. This organization can grow their business outside Bangladesh It can innovate new feature and service to compete with the competitors and attract more customers. It can make more features available Make patients feel as much comfortable as possible by making it more convenient	New competitors can create a threat for Zaynax health. New telemedicine service can make it very difficult for Zaynax to compete. Also, the government can implement new rules and regulations to the healthcare service which can affect Zaynax health to operate. Network issues can make the application unable to use Data privacy maintaining should be the first priority

Table 1: Swot Analysis

2.8 Summary and Conclusions

2.8.1 Summary

Zaynax Health, in Bangladesh for healthcare super apps, is committed to revolutionizing healthcare price as well as availability. Using their extensive medical industry, they offer a variety of services, such as online consultations, delivery of medications, and healthcare tracking. Comprising three locations and almost 100 people, they are a sister company of the Zaynax Group and has a solid basis and a wide range of skills. In line with their B2B and B2C business concentration, their participative leadership style encourages collaboration, innovation, and a shared vision (Tajmim, 2023). The goal and ethos of Zaynax Health rely heavily on staff enthusiasm for successful outcomes and accountability in society. Their concentration on collaboration and creativity guarantees they stay at the cutting edge of medical advancements, and eventually benefit the residents of Bangladesh. Zaynax health provides its employees the opportunity to contribute knowledge and skill. This is because they follow the participative leadership style. Through this, they can build trust, develop team working ability. Also, it encourages to work with the company mission and vision. The HR planning process includes several sectors like hiring, selecting, training, development, succession planning, monitoring and reviewing.

2.8.2 Conclusion

Zaynax Health Limited uses a thorough strategy for human resource management, putting a special emphasis on matching capabilities with long-term objectives. They place a strong emphasis on job succession, development, and recruiting talent. Their advantageous salary and evaluation process place an emphasis on luring top talent and inspiring staff. They adopt a complex strategy for marketing that includes using digital media, focusing on various categories of customers, and forming alliances. Despite being powerful, they struggle with issues including maintaining confidence, protecting privacy, and logistical problems. Zaynax Health is ideally situated for growth and technological advancement in Bangladesh's health care sector.

Owing to substantial investment needs and stringent regulatory authorization, Zaynax Health competes in a sector of the Bangladeshi healthcare market with relatively small dangers of new competitors. Due to market competition and a desire to draw and keep consumers, both providers and buyers have limited negotiating leverage. Creativity is essential for success because there is a high threat of substitutes due to the fierce competition among many identical companies offering services for the same clientele. The competition among established businesses is minimal, with Zaynax Health standing out by providing both B2B and B2C services and consistently developing its offerings.

Zaynax Health's characteristics in their SWOT analysis comprise its trailblazing position, an established roster of medical specialists, and a wide variety of services. In comparison with opponents, awareness of the brand is significantly lower, and the company has a smaller global footprint. Possibilities exist in Bangladesh's expanding online healthcare market, the possibility for global development, and ongoing creativity. Challenges, nevertheless, include emerging telemedicine solutions, fresh rivals, and future legislative adjustments.

Overall, Zaynax Health exhibits good management of personnel techniques, places a priority on involvement and growth, and has taken an advantageous position within the country's changing medical environment.

2.8.2 Recommendations

o   Take steps to ensure the web infrastructure is adaptable, practical, and easy to browse. The way users interact with the service can be enhanced and more individuals may choose to utilize company's offerings and attract to a designed effective layout.
o   Should provide telehealth solutions, such as expert virtual consultations. This is especially crucial in a world because remote medical treatment is becoming more and more required and popular.
o   Establishing an accurate procedure for booking appointments so that users may simply make sessions with medical professionals.
o   Give customers the ability to cancel or reschedule appointments and give them a safe platform for managing and have accessibility to their computerized medical files. Make certain that the

records in question are properly preserved, adhere to all applicable privacy laws, such as HIPAA in the US.

o Create instruments and evaluations which let individuals perform online wellness exams, assisting with recognizing their requirements and hazards for wellbeing.

o Provide pharmaceutical amenities, such as prescription ordering and delivery, if appropriate. Check that pharmacy rules are followed.

o To inform the audience, produce and distribute top-notch health-related content in the form of blogs, YouTube videos, including visuals to protect information about patients, hospitals make significant investments in technology. The credibility and confidence can be seriously harmed by security breaches.

o Incorporate with external health tracking tools, such as monitors or activity monitors, if at all possible, for collecting and analyzing information about patients for a more thorough medical treatment encounter.

o Might offer telecommuting or counseling via the internet in light of the rising need for psychological treatments. If your service serves a diverse customer base, be sure that it supports several languages.

o Provide competent and receptive customer service, incorporating chatbots that operate as well as live conversation alternatives for immediate support.

o For the purpose of making the reimbursement procedure for individuals who have insurance coverage more efficient, develop collaborations with providers of insurance. Taking responses from customers and implement ongoing service improvements in accordance with their requirements.

o To steer clear of legal problems, keep abreast of medical services rules and regulations regarding compliance.

o In order to reach the people, you want to reach, create a solid advertising strategy. To improve the way, you appear on the internet, use internet advertising, social networking sites, and keyword optimization to grow your professional circle and offer more services, connect with medical facilities and personal medical providers.

Chapter 3

3.1 Introduction:

The traditional methods of delivering healthcare are evolving due to the growth of internet platforms for the exchange of health information. Online healthcare practices are expanding due to the diverse delivery features offered by Internet technology, which also provide improved and faster reachability. Users utilize these forums for a variety of reasons, including health information gathering, finding medical help, interacting with consultants, and making purchases of healthcare-related goods and services (Panda & Mohapatra, 2021). Online healthcare services have given people a fresh hope for the future of the healthcare business. By altering the manner of communication between the doctor and patient regarding accessibility of treatment. Currently, the online healthcare industry is trying to combine the power of technology and telecommunications to offer multiple options. Some of the services that online healthcare services can provide are online medical advice, diagnostic testing procedures, medication ordering, health information database, health monitoring Over the last 50 years, the development of increase in health services has improved the health of Bangladeshis (Imdad & Saif, 2021). Median age is 72 years. In addition to this, falling rates of maternal and newborn mortality are also the social indicators that are showing signs of progress (Imdad & Saif, 2021). Special thanks to these applications that took healthcare institutions too far. Moreover, marketing techniques are being used to invite new customers so that they can join their online communities to take this industry further. Companies should provide a guarantee to the users to keep their information safe and secure. Sustaining relationships with individuals via fostering trust is one of these applications' main issues. Due to these modern applications it has become easy to get over geographical constraints. Also, it has shortened the time for patients to wait before visiting a doctor (Torrey, 2019). For such systems to succeed, a strong security infrastructure must be built. Additionally, the availability of technology and the internet is not the same for everyone. In order to bridge the gap, the government should provide equal opportunities for all. Additionally, health care providers need to adopt innovative measures to ensure automation of efficient workflows. To be effective, the system also requires adaptation to new digital technologies to better understand patient processes. Reduced waiting time, improved precision, performance, and the fusion of disparate technologies in creative ways are included in the objectives of digital health advancements. (Bernstein, 2021). This project is

basically making people work remotely by synchronizing with the current digital world. Fortune Business Insights predicts that the global healthcare market will grow at a compound rate of 23.5% per year. The total will be $185.5 billion over the next six years. (Fortune Business Intelligence, 2023).

Patients' information storing and keeping privacy is one of the biggest concerns in this healthcare service (Kleczyk, 2023). Online healthcare services have emerged themselves which results in enhancing the accessibility of their services. However, additional challenges are very much common in such services specially in a country like Bangladesh specially maintaining customer loyalty and improving the service delivery (Islam A. & Biswas T., 2014). High level customer satisfaction is tough to achieve. Service quality is frequently assessed using tools like SERVQUAL. The basic problem is to identify the actual service quality aspect (N., 2019). The use of these tools in digital healthcare is currently gaining more and more attention.

Recently some startups are rising to ensure the service. This aim to evaluate the customer satisfaction by using service quality framework which includes five dimensions. They are tangible, reliability, assurance, empathy, responsiveness

3.1.1 Research objective:

This research will examine SERVQUAL's applicability to measure client satisfaction. It seeks to address questions about

- How this tool can be used to assess the effectiveness of services provided in online healthcare services
- The factors that are affecting consumer satisfaction with online healthcare service
- How the findings can be interpreted into actionable information to increase standards and satisfaction levels with online healthcare services.

To accomplish these goals, this will review current research on SERVQUAL, online health services and patient satisfaction with health care. This will be followed by empirical research and analysis of customer feedback and satisfaction levels. This study aims to offer helpful information for medical professionals, legislators and participants to enhance the standard of digital healthcare

services. So that it can expand the overall healthcare experience for online customers by bringing the spotlight on the usage of SERVQUAL in online healthcare services.

3.1.2 Literature review:

To satisfy any customer base the first step is to know what the customer wants. Also, their demand and needs should be clearly explained. To get such an indicator, in the 1980s, A. Parasuraman, Valarie Zeithaml, and Leonard Berry developed a model which can help understanding the service quality better and also can improve the overall satisfaction (Parasuraman, Zeithaml, & Berry, 1985). After 13 years of research, they set the standard for customer satisfaction based on customer expectations and actual experience. If service providers are able to meet customer's needs, they can achieve their goal of service quality. (Asubonteng et al., 1996). This SERVQUAL model has five dimensions. These are tangible, reliability, assurance, empathy, and responsiveness. (Izogo, E. E., & Ogba, I. E., 2015).

This COVID epidemic has led to an increase in the use of telemedicine (Khan et al., 2021). The transmission of health services and information over the Internet and other associated technologies in the healthcare sector is known as online healthcare, a developing topic of health information technology (Haleem et al., 2021). These 5 dimensions are used in various industries which include healthcare. Through this, the company can improve their service quality (Zeithaml et al., 1990). The first dimension refers to industry's website design because it falls under a tangible element. This can impact the user experience by its functionality (Bhasin, 2021). To get a patient's trust and satisfaction, reliability is important. Also, it is necessary to have time to time delivery service (Udo et al., 2011). As this is an online based healthcare service, they should respond quickly to the consumers call which basically shows the responsiveness (Molla & Licker, 2005). Keeping the privacy of health information of the customers is the assurance element of SERVQUAL dimension (Pavlou, 2001). Providing care to the customers or patients through online healthcare is referred to as empathy (Yousafzai et al., 2003). This framework has been used in so much research. Two researchers named Nguyen and Pham (2018) discovered that increasing the tangibles and responsiveness can impact the user satisfaction by growing. Also, another researcher Edward Alan Miller. (2003) showed the importance of reliability and assurance for online healthcare on Chinese

telemedicine services. Senior citizens, people with low incomes, remote areas, disabled, and ethnic minority communities are the most affected by the negative consequences of the digital gap and disparity (Chowdhury et al., 2020). In recent years, Bangladesh has developed digital healthcare solutions. Due to the COVID pandemic, remote healthcare was the only best possible solution which could decrease physical contact. It helped to reduce spreading the virus transmission (Sinha & Quader, 2022). At the time there were few online healthcare services which used to offer such experience. Patients could easily contact doctors, they can book lab tests and can order medicines by making the sector more convenient to the end user. Furthermore, the government should take initiative to promote such solutions for healthcare. Since the starting of this telemedicine digital solution, it has changed the customer base to shift to this new system for the people. After the pandemic, it has got its priority to another level which helped to initiate a new healthcare startup to work online. Companies like Chaldal and Ousud have come up with their new medicine delivery service.

Visual services are what the senses feel, such as the appearance of a website, the ease of use of an app, and the behavior of the customer service team Research has shown that visual services play an important role in online customer satisfaction by (Parasuraman et al., 1985). In the case of online healthcare, tangible services can include the ability to easily book appointments, access medical records online, and communicate with healthcare providers via video chat or email. The ability of a service provider to deliver the promised service consistently and on time is known as reliability. It plays an important role in online customer satisfaction because customers want to feel that the services, they have paid for will be delivered (Zeithaml et al., 1985). In online health information, trust can be defined as the provision of accurate information, timely appointments, and prompt responses to patient queries. Answers are known as the service provider's ability and willingness to help customers when needed. Customers want to feel heard and appreciated, so this is another important factor that determines their level of interest when shopping online (Zeithaml et al., 1990). In the context of online healthcare, responsiveness can mean things like returning calls quickly, responding to emails in a timely manner, and handling patient issues efficiently and expeditiously. Delivery reliability is known as the ability of a delivery company to deliver goods in good condition and on time. Customers want to be able to receive their orders on time and in the expected conditions, so the internet plays an important role in customer satisfaction (Suchánek et al., 2015). Virtual health care can include issues such as reliable dispensing of medications and

timely and undamaged medications, timely dispensing of medications and test results on time. Empathy is known as the ability to understand and experience the feelings of another. Customers want to feel that they are being treated with empathy and understanding, so this is an important aspect of online customer satisfaction (Ismail et al., 2013). When it comes to online healthcare, empathy can mean different things to different people. For example, it may include properly managing patients' problems, understanding what they are upset about, and providing emotional support.

3.1.3 Research framework

Choosing an appropriate evaluation framework that defines the service quality measurement and evaluation framework is an important part of service quality evaluation. SERVQUAL model developed in 1988 by Parasuraman, Zeithaml, and Berry is the accepted and used framework (Parasuraman et al., 1988). It is determined by the difference between their actual perception of the service received (Parasuraman et al., 1988).

In a rapidly changing healthcare landscape, patient and user satisfaction is critical to delivering great patient experiences and improving trust in online healthcare systems. Many services, such as telemedicine consultations, appointment scheduling, prescriptions, and access to health information, are provided through online healthcare platforms. Research and adoption of new strategies so provide feedback is often used by online health professionals to gauge user interest and make necessary changes. These strategies can provide a welcoming environment for online health discussions and building lasting relationships with patients, by continually evaluating and improving their offerings (Parasuraman, Berry, and Zeithaml, 1991).

The research objective is to find out the elements that determine the customer satisfaction level. Here the SERVQUAL model is basically measuring the satisfaction level of online healthcare consumers. The dimensions of SERVQUAL will be used as independent variables and customer satisfaction will be the dependent variable. Tangibility, reliability, responsiveness, assurance and empathy are the five dimensions that the model works with to measure any service quality. Based on these, the researchers and organizations take crucial decisions to carry forward their observations.
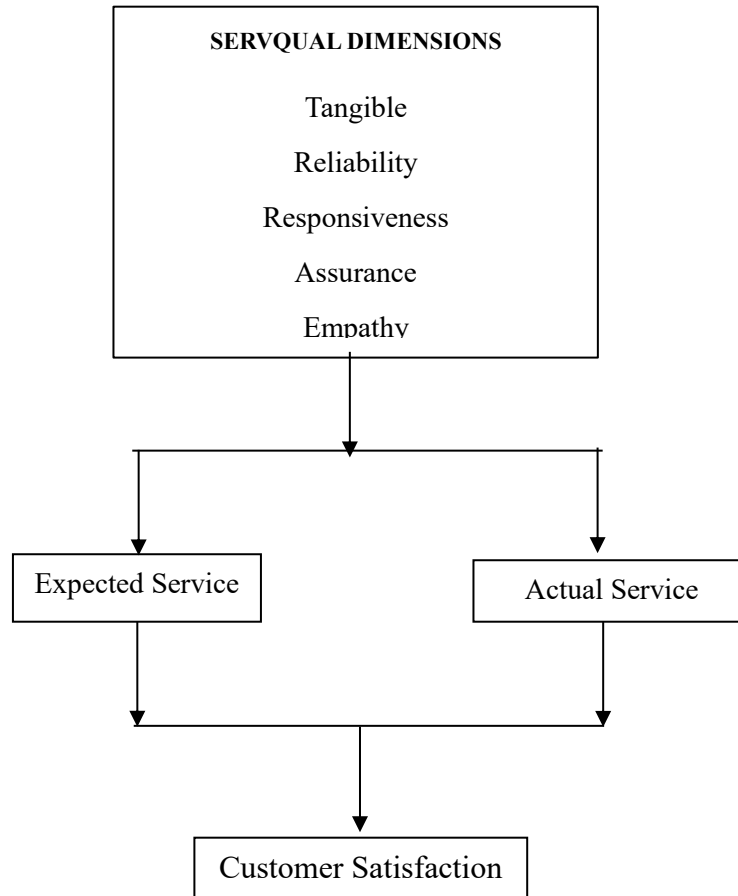
Figure 2: Research Framework

The above figure 2 shows the predicted outcomes which is measuring the customer satisfaction with service quality dimensions. From the framework, it has been found out the correlation between the online customer satisfaction and service quality with online healthcare through the SERVQUAL. The difference between what customers expect from a service and what they actually receive is frequently used to measure the service quality. When there is little difference between customers' expectations and their actual experiences, the level of service is high. On the other hand, if this disparity is wide, it suggests poorer service quality. This equation reveals information on how clients evaluate a service's effectiveness. Customers are more likely to be satisfied with the service if they feel that the execution of the service meets or surpasses their expectations. On the other hand, if the performance as seen falls short of their expectations (Oliver, 1993). Based on these, five hypotheses are given below,

H1: Online consumers are more satisfied when online healthcare provides tangible services.

H2: Online consumers are more satisfied when online health care professionals can be reliable.

H3: The responsiveness of the healthcare provider is associated with an increase in online customer satisfaction.

H4: Online customer satisfaction is higher when delivery companies provide higher levels of reliability.

H5: Empathy among service providers is positively related to online customer satisfaction.

The above hypotheses show the relationship with the five SERVQUAL dimensions. The user friendliness of the online healthcare falls under tangibles aspect of SERVQUAL. Consumers should be given the confidence of giving their information privacy and security. These service providers should be available whenever patients call them for their need which can give them responsiveness and can grow trustworthiness. Effective online healthcare must use digital channels to convey empathy, ensuring compassionate communication and personalized care. Online healthcare providers must assure access to telemedicine reliability and a consistent, accurate system.

3.2 Methodology:

3.2.1 Sampling and data analysis procedure

In this study, primary and secondary data were utilized. This survey was done in October 2023. The survey method that was used is non-profitability sampling technique. Mostly, corporate job holders participated in this survey as they got to use it from organizational medical benefits. From 13 questionnaires were distributed where 93 members participated and approximately 84.8% responded about using the online healthcare service. Five-point Likert scale was used to collect information. There were 70 (75.3%) male and 23 (24.7%) female in survey respondent group. From age 25-34 are the one who use this service more than other users (60.2%). This age group is mostly very much active in digital technologies. 26 respondents (28%) are aged around 18-24 who are basically students and young generations. 9 participants (9.7%) are from elder generation aged

around 45-54. 1.1% is above 65. The rate is low for this group is because of their low level of online presence. Similarly, the occupation of this respondent group are mostly corporate job holders (65.6%).

Corporate organizations have affiliation with different online healthcare companies who provide service to the employees. Among 93 respondents, 61 respondents are corporate job holders. More than 50% respondents are from urban area which is around 72 (77.4%). The other 21 (22.6%) are from remote areas. One of the major users should be from the remote areas after corporates as they have very little access to the doctors or consultants. This online healthcare would help such areas to take necessary and proper treatment. Another important thing to notice at is the income level of users. Here, almost every income level people use healthcare service whether their low or high.

Do you take online healthcare facilities?
92 responses
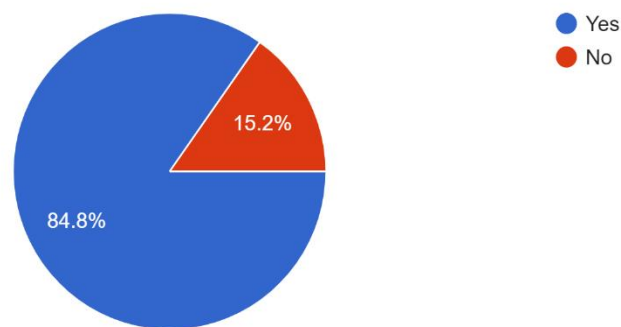
Figure 3 Percentage of participants who use online healthcare service

From figure 3, it is noticeable that from all the possible participants, 84.8% or 78 persons use this service from 92 respondents. While, 15.2% people don't use it regardless of their easy access to the service. For present digitalized society, this system should be widely spread as it can help people save time and energy and can easily access renowned consultants within a very reasonable price range. This respondent list also indicates that the growth of online healthcare is rapidly increasing with gradual strength. Though it might take some time for the remote area's people to adapt such system.

To measure quantitative data on customer satisfaction levels. To analyze the data set, SPSS was developed to perform simple linear regression analysis. In addition, secondary data were collected

from journals, books, and previous research papers on customer satisfaction and the SERVQUAL model.

3.2.2 Variable Measurements

From the present scenario of Bangladeshi online healthcare industry, sixteen items were set for five SERVQUAL dimensions to show how it impacts the customer satisfaction. Five dimensions tangibility, reliability, assurance, empathy and responsiveness of SERVQUAL are independent variables where only dependent variable is the customer satisfaction.

Reliability, responsiveness and empathy are based on three elements each, while assurance and tangibility are based on two items each. Moreover, for the dependent variable, three factors contribute to consumer satisfaction. The responses are ranked using a five-point Likert scale, where 1 is considered "strongly agree" and 5 is considered "strongly disagree." (Hafiz & Alam, 2016)

3.3 Findings

3.3.1 Validity and Reliability Analyses

Variable	Number of Items	Mean	SD	Cronbach's alpha
Tangibility	2	2.37	0.79	0.88
Reliability	3	2.44	0.70	0.82
Assurance	2	1.96	0.53	0.76
Empathy	3	1.94	0.71	0.76
Responsiveness	3	2.06	0.83	0.87
Customer satisfaction	3	2.41	0.88	0.78

Table 2 Reliability of Service Quality Dimensions and Service Satisfaction

The validity and reliability of the questionnaire are being evaluated. Cronbach's Alpha values for the latent variable are high in this model that include: tangibility (.88), reliability (.82), assurance (.76), empathy (.76), responsiveness (.87), and customer satisfaction (.78). As a result, the questionnaire's reliability level meets the critical value of 0.7 proposed by Nunnally and Bernstein (1994).

From table 2, the most dominating variable is the reliability which is (M = 2.44, SD = 0.70). It is followed by tangibility (M = 2.37, SD = 0.79), assurance (M = .96, SD = 0.53), empathy (M = 1.94, SD = 0.71), responsiveness (M = 2.06, SD = 0.83). All these measurements are rated as Good. Additionally, the customer satisfaction is also rated as good (M = 2.41, SD = 0.88).

3.3.2 Regression Analysis

To examine the relative effects of the service quality aspects on customer satisfaction, a simple regression study has been carried out. Table 2 shows that 0.232 of the variances (R Square) in customer satisfaction (the dependent variable) was explained by the SERVQUAL model's dimensions (independent variables). For customer satisfaction at the 95% confidence level, the F statistic is 5.192

Dependent Variable: Satisfaction					
	Sum of Squares	Df	Mean Square	F	Significance
Regression	9.504	5	1.901	5.192	.000[b]
Residual	31.485	86	.366		
Total	40.989	91			

Table 3 Result of Regression Analysis of Service Quality Dimensions

39

R Square = .232 Adjusted R Square = .187

A: Predictors: (Constant), Empathy, Tangibility, Responsiveness, Assurance, Reliability.

The coefficient of determination (R^2) means that the regression line does not fit the data properly and the relationship between the model and response variable is not strong. Therefore, it can be said that the model is in complex relationship. Even though the independent and dependent is quite linear, but still it might not be able to describe everything in dependent variable. One major reason for this can be human behavior. We cannot reject the null hypothesis since the overall significance F-test value (F = 5.242) is more than the selected significance level (Significance =.000[b])

Independent Variables	Standardized Coefficients (β)	t-stat	Significance
Tangibility	-0.90	.541	.590
Reliability	-.020	-.130	.897
Assurance	-.247	-1.839	.069
Empathy	.187	1.087	.280
Responsiveness	.356	2.553	.012

Table 4: Result of Regression Analysis of Service Quality Dimensions

According to Table 4, the regression analysis supports H3 & H5 not H1, H2, H4 which means the responsiveness and empathy have supported the 1% significance level. It has statistically significant relationship with the dependable variable. The other variables do not meet the level in this analysis. The customer satisfaction has positive relationship with responsiveness and empathy (H3: β = .356, t = 2.553; H5: β = .187, t = 1.087)

3.4 Results and Discussion

The result shows that the dimension which is very dominant is reliability. Following the reliability dimension, when patient receive proper service, their satisfaction increases. Also, the amount of service and other benefits that they provide should be as per promised. Moreover, the other dimensions apart from reliability, empathy and responsiveness is essential to increase online customer satisfaction. Additionally, the way they get treated creates a big impact on the image of the company. The customer service provider should be careful while dealing with the patients regarding their needs, and similarly the consultants should also show empathy while giving them treatment. Dealing with care with individual should be one of the mindsets of the doctors. When customers become comfortable with the doctors and customer service providers, they make positive impact on the company. This dimension relates with empathy.

Such online healthcare service providers have to keep themselves ready 24/7. They should be ready to serve patience whenever they are called. Also call center should prepare themselves for the patient regarding their needs and provide them the consultants that they need. Here the response rate should be fast to get the positive impact since it's an online healthcare service. People might need it on emergency basis, so important measures should be taken care of.

In online healthcare service the tangible dimension has very little impact. Customer mostly take their service through phone call and they use mobile application to make it to more features. From the study, it is clear that the medical sector needs empathetic and fast, responsive attitude, the quality of the service that they provide. These two dimensions are the major value creator.

One noticeable thing from the demographic analysis was that most of the respondent who used online healthcare service are corporate job holders. Basically, the companies are providing online healthcare service for their employees' welfare. Some of the respondent where from remote areas. But the number was not very less, though they need it the most. A country like Bangladesh, where remote areas are full of people, here having the online healthcare service opportunity is a must. Not everyone gets the chance to visit cities for doctor's consultation (Ouma & Herselman, 2009). So, such customers should feel convenient while using this service through phone call or mobile application, which is basically tangible component of the service and showing activeness and property treatment will make people confident regarding the service, which relates the empathy

and responsiveness component of SERVQUAL. Throughout all the process, the main objectives will be served that is customer satisfaction.

3.5 Limitations

There are several limitations on this. The online healthcare service company is quite new concept in Bangladesh and it does not provide accuracy on startups. Since it's a new startup, people are not that much aware which resulted in gathering less accurate data. Also, people might not have used it that far to provide their exact feedback which is the biggest drawback of this research. For this reason, further study should be done after a certain period of time when people get used to use it. Also, more cities and remote areas should be covered to gather more data. Moreover, to enhance the descriptive power of the model some predictors should be there. Additionally, similar kind of service should be observed more.

3.6 Conclusion

This paper helps to investigate and assess the relationship of SERVQUAL with customer satisfaction based on online healthcare service. The study shows how it impacts from moderate to high level customer satisfaction through SERVQUAL model in online healthcare service. This will benefit the untapped area of online health care delivery using SERVQUAL. To make it a successful customer should provide positive responses and spread positive word of mouth speeches to attract more customer base that can create great impact.

In recent years, online healthcare companies are increasing in Bangladesh. They may offer more convenient ways for customers to use it. Ultimately it will help to grow revenue. Meanwhile, the government and other legal procedure should be done properly to get more feature and market for customers. More and more campaigns should be done to remote areas since those populations are neglected to get a decent treatment from renowned doctor or consultants. Affiliation should be made with corporate organizations to provide their service and also, students should get a package too for their minimum treatment. The results can be particularly useful for companies or organizations that modify certain aspects of designs to ensure better performance by highlighting

the most important parts of the model for service delivery the business has improved on customers and subsequently customer satisfaction levels have improved.

Reference:

1. Asubonteng, P., McCleary, K. J., & Swan, J. E. (1996). SERVQUAL revisited: A critical review of service quality. Journal of Services Marketing, 10(6), 62–81. https://doi.org/10.1108/08876049610148602

2. Bhasin, H. (2021, April 27). The Servqual Model—Definition, Dimensions, Gaps and Advantages Service. Marketing91. https://www.marketing91.com/servqual/

3. Bernstein, C. (2021, March). What is digital health (digital healthcare) and why is it important? Health IT. https://www.techtarget.com/searchhealthit/definition/digital-health-digital-healthcare

4. Berry, L., Parasuraman, A. P., & Zeithaml, V. (1994). Improving service quality in America: Lessons learned. Academy of Management Perspectives, 8. https://doi.org/10.5465/AME.1994.9503101072

5. Chowdhury, S. R., Sunna, T. C., & Ahmed, S. (2020). Telemedicine is an important aspect of healthcare services amid COVID-19 outbreak: Its barriers in Bangladesh and strategies to overcome. The International Journal of Health Planning and Management, 36(1), 4–12. https://doi.org/10.1002/hpm.3064

6. Choudhury, T. S. (2022, November 2). Zaynax Health: Revolutionising digital healthtech services in Bangladesh. The Daily Star. https://www.thedailystar.net/supplements/smart-bangladesh-inclusive-tomorrow/news/zaynax-health-revolutionising-digital-healthtech-services-bangladesh-3158476

7. Cross, O., & Daniel, C. (2019). Compensation Management and Its Impacts on Organisational Commitment.

8. Ellis, L. D. (2017, August 17). 4 Health Care Trends Clinical Operations Leaders Need to Understand. https://postgraduateeducation.hms.harvard.edu/trends-medicine/4-health-care-trends-clinical-operations-leaders-need-understand

9. Foodpanda, Zaynax Health to make healthcare more accessible for delivery partners. (n.d.). Dhaka Tribune. Retrieved October 28, 2023, from https://www.dhakatribune.com/business/322925/foodpanda-zaynax-health-to-make-healthcare-more

10. Fox, S., & Duggan, M. (n.d.). 35% of U.S. adults have gone online to figure out a medical condition; of these, half followed up with a visit to a medical professional.

11. Hawley, M. (2023, September 18). Participative Leadership: What Is It and Does It Work? Reworked.Co; Simpler Media Group, Inc. https://www.reworked.co/leadership/what-is-participative-leadership/

12. Haleem, A., Javaid, M., Singh, R. P., & Suman, R. (2021). Telemedicine for healthcare: Capabilities, features, barriers, and applications. Sensors International, 2, 100117. https://doi.org/10.1016/j.sintl.2021.100117

13. Imdad, K., & Saif, A. Z. M. (2021, January 13). Five decades of growth in the healthcare system.
The Daily Star. https://www.thedailystar.net/opinion/news/five-decades-growth-the-healthcare-system-2026689

14. Izogo, E. E., & Ogba, I.-E. (2015, February). (PDF) Service quality, customer satisfaction and loyalty in automobile repair services sector. https://www.researchgate.net/publication/269988354_Service_quality_customer_satisfaction_and_loyalty_in_automobile_repair_services_sector

15. Islam, A., & Biswas, T. (2014). Health System in Bangladesh: Challenges and Opportunities. American Journal of Health Research, 2, 366. https://doi.org/10.11648/j.ajhr.20140206.18

16. Ismail, A., Ridzuan, ahmad azan, Rose, N., Abdullah, M. M., Rahman, M., & Francis, S. (2013). Examining the relationship between service quality and customer satisfaction: A factor specific approach. *Journal of Industrial Engineering and Management*, *6*. https://doi.org/10.3926/jiem.548

17. Kleczyk, E. J. (2023). Importance of Patient Privacy in Healthcare Analytics Research. In Ethics—Scientific Research, Ethical Issues, Artificial Intelligence and Education. IntechOpen. https://doi.org/10.5772/intechopen.1001305

18. Miller, E. (2003a). The technical and interpersonal aspects of telemedicine: Effects on doctor-patient communication. Journal of Telemedicine and Telecare, 9, 1–7. https://doi.org/10.1258/135763303321159611

19. Molla, A., & Licker, P. (2005). Licker, P.S.: eCommerce adoption in developing countries: a model and instrument. Information and Management 42, 877-899. Information & Management, 42, 877–899. https://doi.org/10.1016/j.im.2004.09.002

20. Mohammad Monirujjaman Khan, Sabik Tawsif AnjumIslam, & S. M. Tahsinur Rahman. (2021, March). The Use of Telemedicine in Bangladesh during COVID-19 Pandemic. https://www.scirp.org/journal/paperinformation.aspx?paperid=107536

21. Nusrat Hafiz & A. S. A. FERDOUS ALAM. (2016). (PDF) Applying SERVQUAL Model to Measure Online Customer Satisfaction in Package Delivery Services. https://www.researchgate.net/publication/301546751_Applying_SERVQUAL_Model_to_Measure_Online_Customer_Satisfaction_in_Package_Delivery_Services

22. N., R. (2019, February). (PDF) SERVICE QUALITY AND ITS DIMENSIONS. https://www.researchgate.net/publication/333058377_SERVICE_QUALITY_AND_ITS_DIMENSIONS

23. Nguyen, L., & Le, T. (2020). E-Health Literacy of Medical Students at a University in Central Vietnam. Indian Journal of Public Health Research & Development, 11, 1299. https://doi.org/10.37506/v11/i2/2020/ijphrd/195001

24. Oliver, R. L. (1993). Cognitive, Affective, and Attribute Bases of the Satisfaction Response | Journal of Consumer Research | Oxford Academic. https://academic.oup.com/jcr/article-abstract/20/3/418/1838986

25. Ouma, S., & Herselman, M. (2009, April). (PDF) E-health in rural areas: Case of developing countries. https://www.researchgate.net/publication/290364319_E-health_in_rural_areas_Case_of_developing_countries

26. Parasuram, A., Berry, L., & Zeithaml, V. (1991). Refinement and reassessment of the SERVQUAL instrument. J Retailing, 67.

27. Zeithaml, V., Parasuraman, A. P., & Berry, L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*.

28. Parasuraman, A. P., Zeithaml, V., & Berry, L. (1985). A Conceptual Model of Service Quality and its Implication for Future Research (SERVQUAL). The Journal of Marketing, 49, 41–50. https://doi.org/10.2307/1251430

29. Parasuraman, A. P., Zeithaml, V., & Berry, L. (1988). SERVQUAL: A multiple- Item Scale for measuring consumer perceptions of service quality. Journal of Retailing.

29. Pavlou, P. (2001). Integrating Trust in Electronic Commerce with the Technology Acceptance Model: Model Development and Validation. Seventh Americas Conference on Information Systems.

30. Panda, A., & Mohapatra, S. (2021, July). (PDF) Online Healthcare Practices and Associated Stakeholders: Review of Literature for Future Research Agenda. https://www.researchgate.net/publication/353598573_Online_Healthcare_Practices_and_Associated_Stakeholders_Review_of_Literature_for_Future_Research_Agenda

31. Stefano, N., Filho, N., Brarrichello, R., & Sohn, A. P. (2015). A fuzzy SERVQUAL based method for evaluated of service quality in the hotel industry. Procedia CIRP, 30, 433–438. https://doi.org/10.1016/j.procir.2015.02.140

32. Sinha, & Quader, S. (2022, February 15). Next-generation healthcare systems and telehealth. The Daily Star. https://www.thedailystar.net/recovering-covid-reinventing-our-future/fourth-industrial-revolution-and-digital-transformation/news/next-generation-healthcare-systems-and-telehealth

33. Suchánek, P., Richter, J., & Králová, M. (2015). Customer Satisfaction, Product Quality and Performance of Companies. *Review of Economic Perspectives*, *14*.

https://doi.org/10.1515/revecp-2015-0003

34. Tajmim, T. (2023, August 29). Zaynax Health: Delivering affordable healthcare access. The Business Standard. https://www.tbsnews.net/bangladesh/health/zaynax-health-delivering-affordable-healthcare-access-690698

35. Tejeda, V. (2023, October 11). Benefits of Using Database Management Systems (DBMS). Pipeline Blog. https://pipeline.zoominfo.com/operations/6-benefits-of-using-database-management-systems-dbms

36. Torrey, T. (2020, February 14). Learn the Real Reason You Spend So Long Waiting for the Healthcare Provider. Verywell Health. https://www.verywellhealth.com/why-do-i-wait-so-long-at-the-doctors-office-2615092

37. Telehealth Market Size, Share, Growth | Trends Analysis [2030]. (n.d.). Retrieved October 28, 2023, from https://www.fortunebusinessinsights.com/industry-reports/telehealth-market-101065

38 Udo, G. J., Bagchi, K. K., & Kirs, P. J. (2011). Using SERVQUAL to assess the quality of e-learning experience. Computers in Human Behavior, 27(3), 1272–1283. https://doi.org/10.1016/j.chb.2011.01.009

39. Xu, B., & Ren, W. (2021). Understand Online Medical Consultation Based on Dialogue State Tracking. Proceedings of the 2020 4th International Conference on Computer Science and Artificial Intelligence, 168–174. https://doi.org/10.1145/3445815.3445843

40. Yousafzai, S., Pallister, J., & Foxall, G. (2003). A proposed model of e-trust for electronic banking.

41. Zaynax Health | First Health Super App & Online Doctor Service in BD. (n.d.). Retrieved October 28, 2023, from https://zaynaxhealth.com/

Appendix

What is your age?
94 responses

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

60.6%
9.6%
27.7%

What is your gender?
94 responses

- Male
- Female

24.5%
75.5%

Where are you located?
94 responses

- Urban area
- Remote area

23.4%
76.6%

49
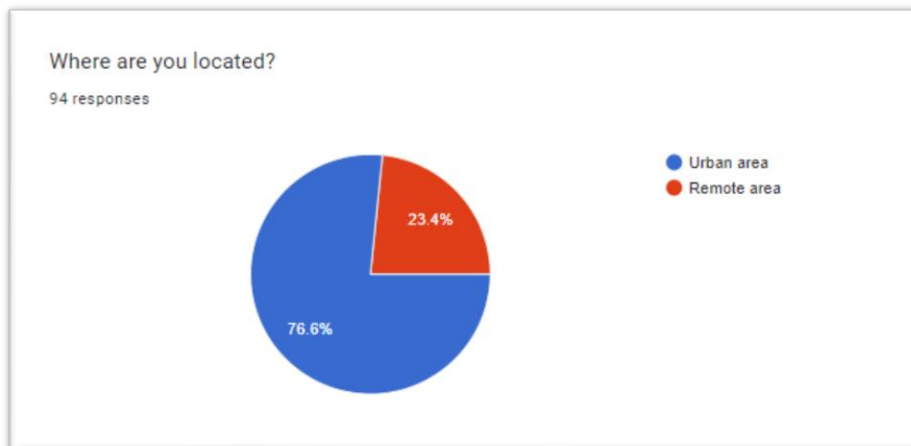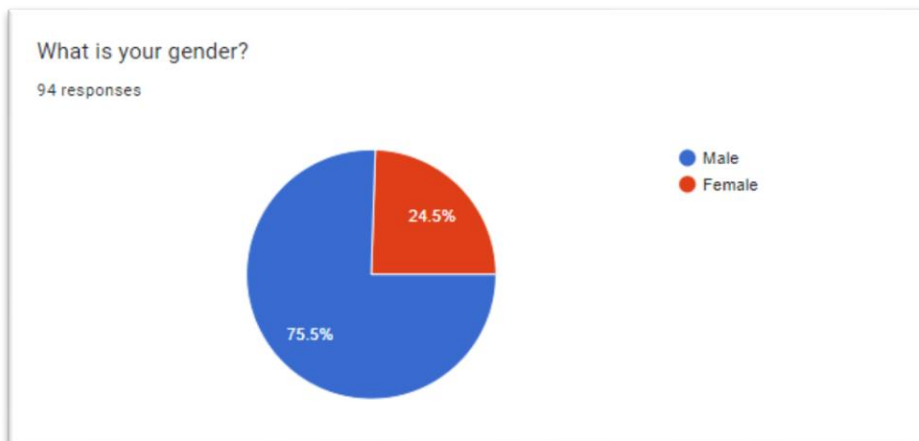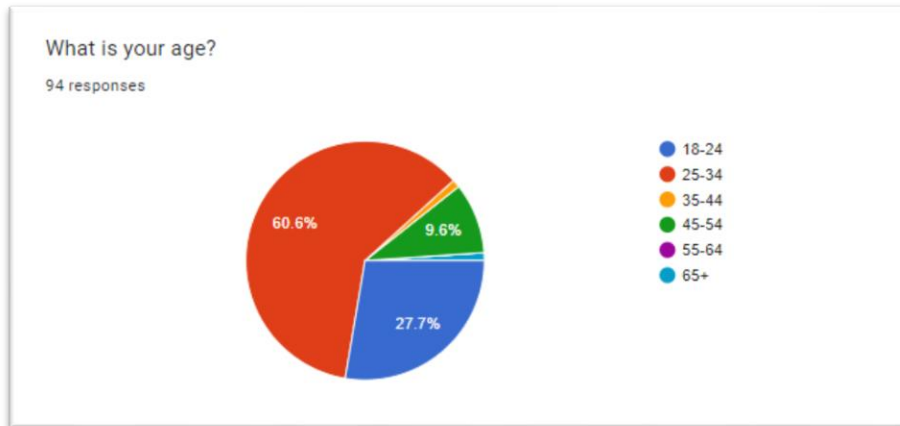
What is your highest level of education?

94 responses

- High school
- Some college
- Bachelor's degree
- Master's degree
- Ph.D.
- Other

48.9%

43.6%
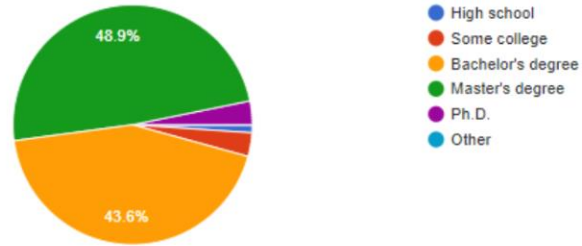
What is your current occupation or job title?

94 responses

- Corporate Job
- Business
- Teacher
- Engineer
- Student
- Truck driver
- Private practice

26.6%

66%
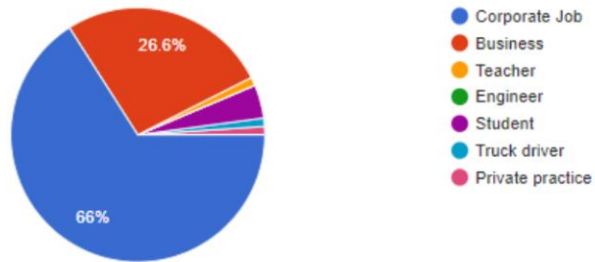
What is your income level?

92 responses

- 15000-30000
- 30000-40000
- 40000-50000
- 50000+

25%

12%

29.3%

33.7%

Do you use the internet, at least occasionally?

94 responses

- Yes
- No

97.9%

Do you take online healthcare facilities?

93 responses

- Yes
- No

16.1%

83.9%
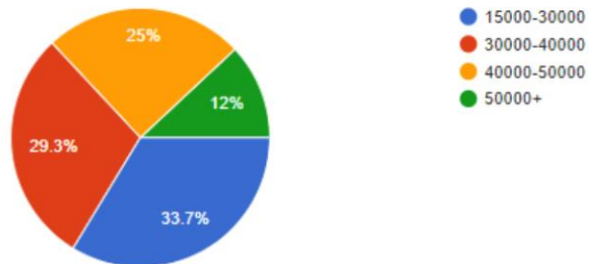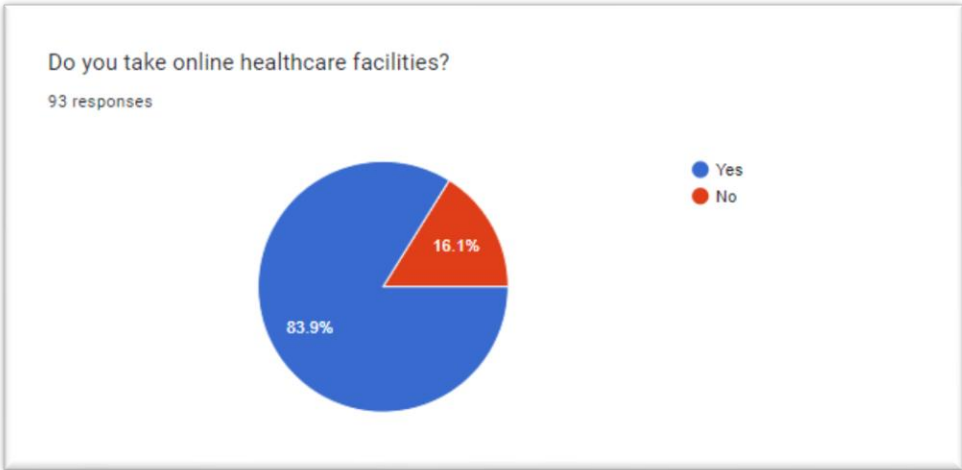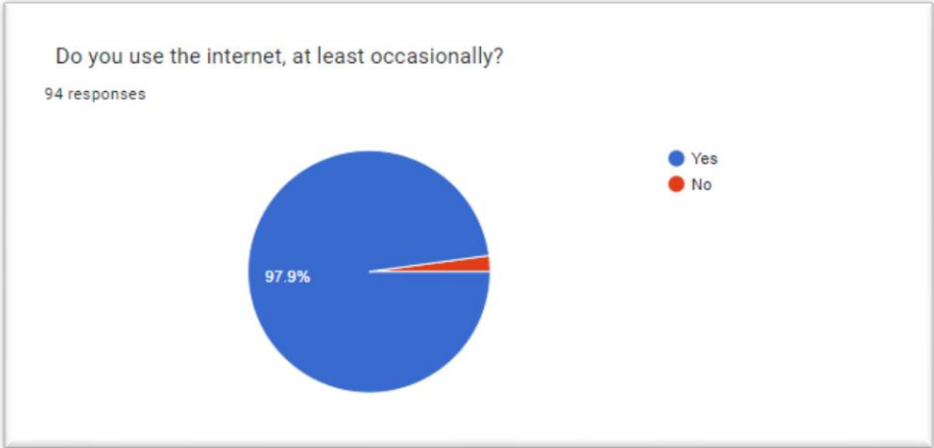
Figure: Survey Question

Tangible

Legend: Strongly agree | Agree | Neutral | Disagree | Strongly disagree

Categories: Visually appealing mobile application | User friendly mobile application | Works properly without causing breakdowns

Reliability

Legend: Strongly agree | Agree | Neutral | Disagree | Strongly disagree

Categories: Services realized as promised and accurate | It keeps accurate records | Consultants are trustworthy

Assurance

Legend: Strongly agree | Agree | Neutral | Disagree | Strongly disagree

Categories: Consistency of services provided. | Knowledge of employees about the work that are doing | Resolve complaints for the inconveniences

Survey Questionnaire

Survey Response

SPSS Data View

Tangibility	Mean	SD	Cronbach's Alpha
	2.42	0.7	0.878
	2.31	0.87	
	2.365	0.785	

Reliability	Mean	SD	Cronbach's Alpha
	2.62	0.69	
	2.27	0.74	0.816
	2.42	0.68	
	2.436666667	0.70333333	

Assurance	Mean	SD	Cronbach's Alpha
	1.85	0.61	0.76
	2.07	0.45	
	1.96	0.53	

Empathy	Mean	SD	Cronbach's Alpha
	1.82	0.78	
	1.93	0.64	0.758
	2.08	0.7	
	1.943333333	0.70666667	

Responsivenes	Mean	SD	Cronbach's Alpha
	1.86	0.71	
	2.49	0.93	0.865
	1.83	0.86	
	2.06	0.83333333	

Cus Satisfaction	Mean	SD	Cronbach's Alpha
	2.16	0.89	
			0.777
	2.29	0.89	
	2.77	0.87	
	2.40666667	0.88333333	

SPSS Analysis

Statistics

		Visually appealing mobile application	User friendly mobile application	Services realized as promised and accurate	It keeps accurate records	Consultants are trustworthy	Consistency of services provided.	Knowledge of employees about the work that are doing	Doctors provide personalized care that makes them feel special
N	Valid	92	92	92	92	92	92	92	92
	Missing	1	1	1	1	1	1	1	1
Mean		2.4239	2.3152	2.6304	2.2717	2.4239	1.8478	2.0761	1.8152
Std. Deviation		.69904	.87617	.69087	.74278	.68314	.61008	.45049	.78347

		Doctors provide personalized care that makes them feel special	Understand the specific needs of patients	The service is convenient for every patients	24/7 Facilities to all patients	Fast response from the consultants	Getting information about the facilities and services is easy	Ease of scheduling an appointment	Responsiveness of the customer service team	Quality of the care received	Overall value for money
N	Valid	92	92	92	92	92	92	92	92	92	92
	Missing	1	1	1	1	1	1	1	1	1	1
Mean		1.8152	1.9348	2.0870	1.8587	2.5000	1.8261	2.3152	1.8261	2.2935	2.7717
Std. Deviation		.78347	.64287	.70558	.71991	.93174	.87214	.64500	.87214	.89612	.87835

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.878	.890	2

Tangible (Cronbach's Alpha)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.815	.818	3

Reliability (Cronbach's Alpha)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.761	.782	2

Assurance (Cronbach's Alpha)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.758	.760	3

Empathy (Cronbach's Alpha)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.865	.864	3

Responsiveness (Cronbach's Alpha)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.765	.758	4

Satisfaction (Cronbach's Alpha)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.482[a]	.232	.187	.60506	.232	5.192	5	86	.000

a. Predictors: (Constant), Responsiveness_Average, Reliablity Average, Assurance Average, Tangiility Average, Empathy Average

b. Dependent Variable: Satisfaction Average

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.504	5	1.901	5.192	.000[b]
	Residual	31.485	86	.366		
	Total	40.989	91			

a. Dependent Variable: Satisfaction Average

b. Predictors: (Constant), Responsiveness_Average, Reliablity Average, Assurance Average, Tangiility Average, Empathy Average

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2.064	.398		5.181	.000	1.272	2.856
	Tangiility Average	.089	.172	-.900	.541	.590	-.252	.431
	Reliablity Average	-.027	.147	-.020	-.130	.897	-.320	.266
	Empathy Average	.210	.186	.187	-1.087	.280	-.160	.581
	Assurance Average	-.396	.214	-.247	-1.839	.069	-.820	.028
	Responsiveness_Average	.315	.124	.356	2.553	.012	.068	.563

a. Dependent Variable: Satisfaction Average

Charts

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Satisfaction Average