

The effect of mobile
technology
intervention as
business solution to
customer sat...



**ASSIGN
BUSTER**

THE EFFECT OF MOBILE TECHNOLOGY INTERVENTION AS BUSINESS SOLUTION TO CUSTOMER SATISFACTION A Thesis Presented to The Department of Information Technology QUEZON CITY POLYTECHNIC UNIVERSITY In Partial Fulfillment Of the Requirements for the Degree BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY Alfaro, Raffy T. Fresco, Marvin A. Martinez, Lord A. Pia, Rina U. Tripulca, Girlie Anne O. APPROVAL SHEET

In partial fulfillment of the requirements for the degree BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY, this thesis entitled " THE EFFECT OF MOBILE TECHNOLOGY INTERVENTION TO AS BUSINESS SOLUTION TO CUSTOMER SATISFACTION", has been prepared and submitted by Alfaro, Raffy T. , Fresco, Marvin A. , Martinez, Lord A. , Pia, Rina U. , Tripulca, Girlie Anne O. , who are hereby recommended for oral examination. PROF. LUISITO D. SORIANO Thesis Adviser Approved by the Committee for Oral Examination with a grade of __ on March 2011 PROF. MARC VOLTAIRE A. PADILLA, MIS Chairman, Thesis committee PROF. edwin macaspag PROF.

MARIA AURA C. IMPANG MEmbermember Accepted and approved in partial fulfillment of the requirements for the degree BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY. PROF. MARC VOLTAIRE A. PADILLA, MIS Director, Information Technology Department DEDICATION We dedicate this research most especially to our Lord God Almighty who gave us life, to our Parents who always there to support us, to our Professor who patiently mentor us to fulfill this research. To our friends and Love Ones who inspired us. Thank you for giving us this privilege to prove and improve ourselves through all walks of our life.

<https://assignbuster.com/the-effect-of-mobile-technology-intervention-as-business-solution-to-customer-satisfaction/>

ACKNOWLEDGEMENT The proponents would like to acknowledge the study to the persons and to GOD for making them, by His grace, accomplish this piece of work. Our heartfelt gratitude to everyone in the team who helped and cooperated to make this study possible, as well as to few “ GOOD SAMARITANS” who willingly contributed their time and resources without expecting something in return. The proponents also extend their heartfelt gratitude to the following persons who have contributed their share in the realization of this study: Engr. Mark Voltaire A.

Padilla, QCPU Director, Information Technology, for giving us a chance to continue this research; Prof. Manuel Luis C. Delos Santos, MSCS, their thesis adviser, for his encouragement and suggestions for the refinement of the manuscript; Prof. Norilyn C. Castro, their technical adviser, for her guidance in the pursuit of this research; Dr. Eduardo Aldana, Medical Director, for the permission to conduct the research in the Novaliches District Hospital; To their Classmates and Friends, for the suggestions, Comments, and constructive critics have been a big help;

Above All, to the ALMIGHTY LORD, the source of truth and wisdom who had given their strength to endure and wisdom which nourished their souls and minds so that everything was accomplished at the right time; Finally, to their respective Families, a word is not enough to express their deepest gratitude to their unconditional Love, support and encouragement. They are constant critics and mentors, nevertheless the wind beneath the feeble wings.

ABSTRACT Title: THE EFFECT OF MOBILE TECHNOLOGY INTERVENTION TO AS BUSINESS SOLUTION TO CUSTOMER SATISFACTION

Proponents: Alfaro, Raffy T. : Fresco, Marvin A. : Martinez, Lord A. : Pia, Rina U. : Tripulca, Girlie Anne O. Adviser: PROF. LUISITO D. SORIANO Degree:

Bachelor of Science in Information Technology Date Completed: March 2011

Mobile technology is among the most widely used technologies today. Mobile technology provides a wide variety of benefits and advantages to its users, the top of which is that a person is no longer confined in a particular place to conduct his or her business, for these transactions can be done while on the road.

Mobile technology also allows faster communication, check order availability and working flexibility in real time. Many of the benefits of using mobile technology center on improving communication. Cell phones keep businesses and employees connected with each other and customers both at the office and on vacation. It gives individuals the ability to communicate instantly and respond quickly to business situations.

There are numerous advantages of using mobile technology to engage with customers as the devices can give businesses contact with demographics which were previously inaccessible such as customer, mobile phones, it is important that businesses understand that they must be interactive and dynamic manner as modern-day customers are more technologically. The purpose of this study was to know the effect of mobile technology to Novaliches District Hospital and to the patient. Another aim was to know the demographic profile of the respondents in terms of their gender, age, civil status, and educational attainment.

To determine if the patients will be satisfy with the mobile technology, to know if there is a significant effect using mobile technology than the existing process and to determine the difference between the existing process and the process applied by mobile technology to the end user and to the hospital.

TABLE OF CONTENTS Title Page	i
Approval Sheet.....	ii
Dedication	iii
Acknowledgement	iv

Abstract..... v List of

Tables.....xii List of Figures.....

..... xiv CHAPTER I. THE PROBLEM AND ITS BACKGROUND Introduction1

Background of the Study2-3 Theoretical Framework 4 Conceptual Framework

5 Statement of the Problem6 Hypothesis Scope and Delimitations of the

Study 7 Scopeof the Study Delimitations of the Study Significance of the

Study 8 Definition of Terms 9-10 CHAPTER IIREVIEW OF RELATED

LITERATURE AND STUDIES Foreign and Local Literature Foreign and Local

Studies Synthesis CHAPTER IIIRESEARCH METHODOLOGY Research Methods

Used Population and Sample Size Sampling Technique Description of the

Respondents Instrumentation30

Data Gathering Procedures31-32 Statistical Treatment of Data32-33

CHAPTER I THE PROBLEM AND ITS BACKGROUND This chapter is composed

of the background of study, theoretical framework, and conceptual

framework, statement of the problem, hypothesis, scope and delimitation,

significance of the study and definition of terms. Introduction Nowadays,

many businesses are using different technologies to become more

productive and convenient to their customer. In this matter, the proponents

can say that the economy of the world is in line with the development of high technology to ensure customer satisfaction.

Mobile technology is among the most widely used technologies in this generation. Mobile technology provides a wide variety of benefits and advantages to its users, the top of which is that a person is no longer confined in a particular place to conduct his or her business, for these transactions can be done while on the road. Mobile technology also allows faster communication, check order availability and working flexibility in real time. Many of the benefits of using mobile technology center on improving communication.

Cell phones keep businesses and employees connected with each other and customers both at the office and on vacation. It gives individuals the ability to communicate instantly and respond quickly to business situations.

Customer relationships have been conceptualized in terms of past interactions and the expectation of continued future interaction. In other words, a relationship exists when an exchange is assessed not in isolation, but as a continuation of past exchanges likely to continue into the future. These relationships are characterized by customer satisfaction as a desire for future interactions.

The expectations of relationship continuity are based on the customer's satisfaction experience with the organization, which necessarily includes the effectiveness of the mobile technology the relationship in improving customer satisfaction. Background of the Study Novaliches District Hospital starts a two-storey building located inside the compound of Quezon City

<https://assignbuster.com/the-effect-of-mobile-technology-intervention-as-business-solution-to-customer-satisfaction/>

Polytechnic University. The services offered of Novaliches District Hospital are Ob-gyne, Pediatrics, Medicine, Electrocardiography (ECG), Surgery, Anesthesiology, Energy and Engine Technology (ENNT), Rehabilitation Medicine, Pathology, Radiology, Ultrasound, and Dental.

There are numerous advantages of using mobile technology to engage with customers as the devices can give businesses contact with demographics which were previously inaccessible such as customer, mobile phones, it is important that businesses understand that they must be interactive and dynamic manner as modern-day customers are more technologically. Most of the time, people who wants to ask information on the information area loses their patience and unwilling to wait for the long process of just asking information.

They tend to ask on other employees, security guard and even to the doctors and could be a reason for the employee or doctors to do their job inefficiently, this scenario happens every day and hospital management are looking for possible solution to solve this issue. The proponents of this study came up with a proposal to develop a system applied by mobile technology to help us define the difference between process of making query using mobile technology and the existing process.

This study will show if transactions or queries using mobile technology are easier and convenient than the existing process of making queries. This study will help the proponents to determine if there are more people goes with the flow of fast innovating technology or remains still on the normal process they typically do because they had already memorized these

processes. Theoretical Framework According to Rust and Subramanian, customer satisfaction brings many benefits as satisfied customers are not very price sensitive, buy additional products, are less influenced by competitors and stay loyal longer.

They stated that customer satisfaction has been deemed directly to affect customer retention and companies' market share. In banks, service quality, service features, and customer-complaint handling determine customer satisfaction. Some factors that affect satisfaction are extended hours of operation and competitive interest rates as confirmed by the study of Levesque and McDougall. In addition, there are researchers who discuss the links between satisfaction, loyalty, and profitability.

They are proponents of the theory called service management, which argues that "customer satisfaction is the result of a customer's perception of the value received in a transaction or relationship relative to the value expected from transactions or relationships with competing vendors. Pertaining to this theory, Hansemark and Albinsson stated: "Loyalty behaviours, including relationship continuance, increased scale or scope of relationship, and recommendation (word of mouth advertising) result from customers' beliefs that the quantity of value received from one supplier is greater than that available from other suppliers".

They continued: "Loyalty, in one or more of the forms noted above, creates increased profit through enhanced revenues, reduced costs to acquire customers, lower customer-price sensitivity, and decreased costs to serve customers familiar with a firm's service delivery system". This

customer satisfaction process diagram illustrates the satisfaction process and has tips on process improvement. This theory helps the proponents to have process guidelines on how the customer be satisfied by the Figure 1. 0 The Theoretical Framework of Customer Satisfaction [pic]

Figure 1. 1 The Theoretical Framework of SMS Messaging This study is interrelated on how would be the SMS messaging works and what are the common components of mobile messaging. Basically, in mobile messaging there is need of Subscriber Identity Module (SIM) card that is used for identifying particular mobile users are also called Global System for Mobile (GSM) subscribers. The SIM is a small removable Smart Card (SC), the size do a credit card, and contains an integrated circuit chip with a Microprocessor, Random Access Memory (RAM), and Read Only Memory (ROM).

It stores mobile subscriber identifying information. It is inserted in mobile unit by the subscriber when he or she wants to use it to make or receive a call. By moving a SIM card from one mobile terminal to another, a mobile subscriber can use this latter terminal and be charged for the calls that are placed on it. Conceptual Framework On the basis of the forgoing concepts, theories and findings of related literature, studies, presented and insights taken from when conceptual model is develop as shown below. Figure 1. 1 The Conceptual Paradigm of the Study INPUT A.

The demographic profile of patients in terms of their Age, Gender, Civil Status, Educational Attainment. It is important to know the demographic profile of the respondents to see the comparison and to recognize their differences. The proponents gathered the demographic profile of patients in

order to relate their status as respondents. B. Effect of mobile technology to Novaliches District Hospital and to the patient The proponents studied the effect of mobile intervention in Novaliches District Hospital as a tool to measure patient satisfaction. This study will help the respondents to get information in an easy way.

C. Patient satisfaction with the use of mobile technology Nowadays, mobile technology is very in demand to many people especially in the field of communication. The proponents measured that with the use of SMS application the customer will satisfy in making query. D. Significant effect using mobile technology than the existing process The proponents analyzed if there is a significant effect using mobile technology than the existing process of Novaliches District Hospital. The respondents are the one who is capable to experience the effect of this study. E.

Difference between the existing process and the process applied by mobile technology to the end user and to the hospital. The proponents compared the existing process and the process applied by mobile technology to determine the difference between the two processes. PROCESS A.

Determining the research method to be used The research methods used by the proponents are the descriptive method, population and sample size, and sampling techniques. B. Describing the Respondents The respondents of this study are the Patients with their demographic profile. C. Preparation of Instruments

The proponent prepared instruments for primary interview to collect information through Observation, Interview, Survey and Inquiry. D. Data

<https://assignbuster.com/the-effect-of-mobile-technology-intervention-as-business-solution-to-customer-satisfaction/>

Gathering Procedure The proponents gathered data procedure through Formulation of data questionnaires and Survey Form, Validation and Distribution of data questionnaires and survey forms, Retrieval, Encoding Data solution using scale Techniques and formulas, Interpretation of data through data analysis and Evaluation of data results. E. Statistical Treatment of Data In the statistical study, the proponents decided to use the mean, percentage, frequency and ranking.

Using percentage, ranking and mean in statistical study the work provides most accurate data and information in the conducted survey using the questionnaire. OUTPUT The effect of mobile technology intervention as business solution in Novaliches District Hospital to customer satisfaction. Statement of the Problem This study was focused on the effect of mobile technology in Novaliches District Hospital specifically, the study sought to answer the following questions: 1. What are the demographic profiles of the patients in terms of their Age, Gender, Civil Status, and Educational Attainment? 2.

What is the effect of mobile technology to Novaliches District Hospital and to the patient? 3. Is there a patient satisfaction with the use of mobile technology? 4. Is there a significant effect using mobile technology than the existing process? 5. What are the difference between the existing process and the process applied by mobile technology to the end user and to the hospital? Hypothesis The proponents assumed that with the use of mobile technology there is a significant effect to operation of Novaliches District Hospital that would satisfy their patients. Scope and Delimitations of the

Study Scope of the study

<https://assignbuster.com/the-effect-of-mobile-technology-intervention-as-business-solution-to-customer-satisfaction/>

This research is interested for public hospital wishing to determine what patient satisfaction from quality of service is provided to them. It includes observation, interviews and proto-typing as a step by step approach in an exploratory fashion to get knowledge about the work performed at the hospital, and to find areas of IT use that could be studied, put into context and improve. This proposal will determine how much time and effort will be lessen using mobile technology instead of the normal process in making queries. It will relate how people would react to the changes of daily living because of the rapid progress of our technology.

Delimitations of the study This research only offers querying services for the patients and relatives of Novaliches District Hospital. Updating of information is not available for this end user. This proposal cannot provide exact percentage of people that will appreciate mobile technology because not all human are capable of buying a mobile phone. This can only measure the number of peoples who use the system but not who goes in the normal process. It cannot determine the social status of the person who uses the system and it is impossible to get feedback from a patient who doesn't use the system. The study only accepts local numbers.

Significance of the Study The proponents conducted this study to learn more about the flow of the hospital; procedures and determine of the new systems fits with needs of the hospital. Hospital. The Hospital has a new standard way of giving information to the patients and relatives, they have good quality services that can satisfy the patients and visitors need by the system. They can also give a good feedback for the patient because of the good service they can give because of the system. Patients. Faster response for queries
<https://assignbuster.com/the-effect-of-mobile-technology-intervention-as-business-solution-to-customer-satisfaction/>

can accommodate more than one person at a time. Staff of the hospital. The staff of the Hospital likes the new system because it lessens their works like talking to the visitor or patient about the information they want to know. Also the employees can be more productive on other task. Researchers. The researchers improve the skills and knowledge to solve issues for applying Information Technology and to enhance their programming knowledge in developing system software, also in research. Future Researchers. This study can be learning for those who will develop a technology related to the field of telecommunication, the output of this study can be useful resource material to all BSIT students which they can utilize and develop further.

Definition of Terms The following terms are conceptually or operationally defined to enhance the understanding of the readers of this paper.

Accessibility. The quality of accessing the information and having it at hand when needed by the end user. **Admissibility.** Acceptability or system acceptance by the end users. **Announcement.** It is a public statement about something what is happening or going to happen. **AT Command Set.** The set of command used to control the modem. **Customer Relationship Management System.** Is a widely-implemented strategy for managing a company's interactions with customers, clients and sales prospects.

It involves using technology to organize, automate, and synchronize business processes—principally sales activities, but also those for marketing, customer service, and technical support. The overall goals are to find, attract, and win new clients, nurture and retain those the company already has. **GSM Modem.** Is a specialized type of modem which accepts a SIM card, and operates over a subscription to a mobile operator, just like a <https://assignbuster.com/the-effect-of-mobile-technology-intervention-as-business-solution-to-customer-satisfaction/>

mobile phone? From the mobile operator perspective, a GSM modem looks just like a mobile phone. GSM Global System for Mobile Communication.

Is the most popular standard for mobile telephony systems in the world. IT Experts. Group of individuals qualified to validate a system due to their expertise and competence on their field of study. Query. Is a form of, questioning in a line of inquiry. Reliability. It is a system quality of being dependable. Security. Is the enforcement of boundaries to ensure confidential information. Services. Non-monetary programs provided by companies that benefits clients. Short Message Service Center. Is a network element in the mobile telephone network which delivers SMS message.

Stability. It is a system quality or attribute of being firm and free from system error. It also describes a smooth running system. SWOT. Type of analysis that researcher's uses SWOT standards to strengths, weakness, opportunity, and threats. Timeless. It is a system quality describing the speed of retrieval. Vb. net. software that the proponents used for creating the system especially in admin controls. List of Abbreviations GSM. Global System for Mobile Vb 8. 0. Visual Basic VB. Net Visual Basic. Network SMS Short Message Service AT Attention and Tells

ERD Entity Relationship Diagram GPS Global Positioning System SIM

Subscriber Identity Module UML Unified Modeling Language CHAPTER II

REVIEW OF RELATED LITERATURE AND STUDIES This chapter attempts to review several literatures pertinent to the research in order to conceptualize the problem. Most of the literatures & studies have been written by local & foreign Writers to address certain points of the study. These are useful in

<https://assignbuster.com/the-effect-of-mobile-technology-intervention-as-business-solution-to-customer-satisfaction/>

improving the researcher's vision about the subject. Other materials presented in this chapter were taken from internet journals.

Foreign and Local Literature Foreign Patient Satisfaction " According to Marilou Lleva in her thesis a review of Medical Literature relating to the term " Patient Satisfaction" shows little research on the topic in the 1990's. However, things began to pick-up dramatically in the early 1980's. Between 1990 and 2000, there was a five-fold increase in the number of articles devoted to this topic. It is worth nothing that the most Patient Satisfaction studies are based on patients experiences at one time encounter rather than their experiences overtime.

In addition, discussions in the literature make it clear that quality of care is not what is being measured in patient surveys. In fact, many surveys intentionally avoid asking patients how they feel about the quality their care presumably. Because, patients are not in position to judge there nurses technical skills. It appears that what is being measured is typically a combination of the patient's expectation before the visit, the patients experience at the visit and the extent to which the patient experienced a resolution of the symptoms that led him or her to make the visit. According to Tiffanee Padgett Study, exam the perception of rural patient levels of satisfaction which primary care providers and their practices in the S. E. U. S. It clearly demonstrated that there is no difference in satisfaction or preferences of one provider over another in this rural community of Northern Florida thereby supporting the null hypothesis as Physician shortages continue to be a problem in rural communities, non-physician providers remain essential to provide adequate quality healthcare coverage. " As <https://assignbuster.com/the-effect-of-mobile-technology-intervention-as-business-solution-to-customer-satisfaction/>

emphasized by Donabedian (1980). the founder of quality assessment, patient satisfaction as measure of quality of care is if fundamental importance as it gives information on how successful the health care service system has met the values and expectations which only the client or patient can express. " " According to Woodside, Frey, and Daly (1989) provided early evidence to support the premise that patient satisfaction may directly affect volume. The authors conducted an exhaustive literature review of service quality and satisfaction measurement.

Based on this review, they developed a framework of relationships among service quality, customer satisfaction, and behavioral intention for service purchases. Service quality, customer satisfaction, and behavioral intention data were collected from patients discharged from two hospitals. Patient satisfaction scores increased, helping boost outpatient visits in one year from 608, 689 to 631, 332. " " According to Rust and Zahorik, (1993) Valuable contributions to expanding our understanding of the connection between patient satisfaction and organizational performance outcomes can also be found in groundwork laid in earlier research.

They identified elements of service satisfaction that may significantly affect customer loyalty and market share; however, the focus of their research was on retention of existing business versus new customer development. While retention of patients for future business purposes is important, attraction of new customers for outpatient services, surgical services, and obstetrics clearly translates into increased volume through ancillary referrals. " "

According to Andoleeb, Scotti, Harmon, and Behson 2007, stressed how the

public is inclined to pay more for care from quality institutions with which they were satisfied.

Andoleeb's study identified several variables that shape patient satisfaction with health services, including quality of communication, perceived competence of service provider, quality of facility, demeanor of hospital staff, and perception of cost and patient satisfaction. Accordingly, strategy formulation should focus on gaining a competitive advantage through delivering high levels of service quality, especially in an age of consumerism where perceived service quality is linked to patient satisfaction, which in turn may result in improved patronage" According to William Thomson Kelvin (1824-1907) " If you cannot measure it, you cannot improve it. "

Measurement of customer Satisfaction is a new significant addition to the new ISO9000: 2000 standard. Organization certified to this standard is now required to identify parameters that cause customer satisfaction or dissatisfaction and consciously measure them. " The proponents conclude that it is important to measure the satisfaction of customer to know their feedback to be able to improve the service of a business. Mobile Technology " According to Locke, in an article ([www. l. com. ac. uk/code/texts/locke.html](http://www.l.com.ac.uk/code/texts/locke.html)), Locke discussed the ergonomics of mobile phones being woefully inadequate for text messaging or SMS. He says that " the cumbersome input method and 160- character limit would seem to militate against any wide spread adaption of SMS as a communication medium, yet in fact these very limitations maybe led to practices and languages that actually reinforce and identify SMS communities. " " According to the book of Business of

Telecommunication by Gupta, Niraj K. , page 1, The Early Efforts, Communication brings meaning to life.

Speech and language evolved out of this basic need in human beings. As societies grew, the need to communicate messages over long distances became important. The Red Indians were the first to devise coded smoke signals; there were others who used drumbeats and pigeons. Thus began the story of what we now call telecommunication over a distance. " " By Morse and Wheatstone 1837 A key developments in the telecom came about when information was converted into coded electrical signals which were then transmitted over a distance using wires.

The first such instant electrical communication was provided with the invention telegraph in, and working independent of each other. " " Besides the early efforts, page 47-growth of cellular networks. Liberalization has driven the growth of new cellular operating companies in the Asia-Pacific. Through the first Asia-Pacific cellular network-an analog TACS (Total Access Communications System) network-was launched in Japan in 1979, most countries launched cellular networks only in the late 1980's or some even in the early 1990's.

By then, the global trend towards liberalization of the telecom sector was well established. From 50 cellular operators in the Asia-Pacific in 1992, the number grew to 113 in 1997. " " According to Alex Lambeek (Vice President, Nokia) said to his articles in titled Mobile Technology Driving change and Opportunity in Developing Countries" page 1 - In Kolhaphur, a hub of India's

lucrative industry, a local textile agent is using mobile technology to increase efficiency and maintain a competitive edge.

Nikhil Gadhia inputs a shopkeeper's order three bales of cotton- into his phone, and then presses send. He receives a text message from the manufacturer confirming his order is being processed. This reduces the amount of paperwork and administration and enhances efficiency of the whole order, distribution and sales management process. This easy-to-use software makes communication faster and more reliable. While this is just the beginning, it reveals the potential of technology to those who work across the whole spectrum of creative industries. " Most of us take the convenience of using a mobile phone for granted, but for billions of people, mobile devices and services can transform their lives. A recent study reported that adding an extra ten mobile phones per 100 people in a typical developing country boost economic growth in gross domestic product per person by 0.8 percent. " " At the same book and page-the mobile has become the single most transformative tool for development by Jeffrey Sachs. Director of the Earth Institute, Columbia University said age points.

People in emerging markets are using mobile technology in more powerful ways than those in the developed world. Their first-ever Internet experience will be on mobile phone and services like mobile email are seeing some of their highest adoption rates in developing countries. " Local Literature " According to Marilou Lleba in her study was conducted to determine the satisfaction of patients about the services provided in the Out-Patient Department of the Zamboanga City Medical Center.

The patients respondents were consecutively selected a questionnaire was developed to evaluate their satisfaction regarding the availability, accessibility and convenience of the Out-Patient Department services, including their perception about the behavior of staff, including a list of the amenities that they are important to them as clients. ” “ Mobile Manners Decline, Now the bad news. All this mobile technology — well, it’s not making us nicer. A survey by Intel indicates that mobile etiquette is on the decline. According to the survey, most Americans are irked with people’s misuse of mobile devices. 91% of U.

S. adults have seen mobile misuse, and 75% think mobile manners are getting worse. What do we mean by mobile manners, exactly? 73% consider using mobile devices behind the wheel to be the worst abuse of mobile technology. Other reported abuses include talking on the phone loudly in public and using a mobile device while walking on the street. Mobile technology affords us great convenience and responsibility. As a result, we have become more productive, which should make us more fun to be around. As determined as we are to make mobility a part of our lives, we must also be as committed to civility as well. “ Dramatically decreasing costs Since people in rich countries—where the digital revolution began—wanted to increase their own mobility and productivity, many of the fruits of this revolution were packaged into mobile devices and related services. Many innovations in hardware, software, wireless transmission, display, and Internet protocol, were possible because the cost of computing power had been decreasing exponentially for several decades, a phenomenon that will likely continue in the foreseeable future. ” “ According to Prof.

Iqbal Z. Quadir “ The core lesson from the proliferation of mobile phones in poor countries is not about technology. It is about economics. ” He provides effective telephone access throughout Bangladesh and is often credited as having been the earliest observer of the potential for mobile phones to transform low-income countries. ” “ According to John Savarese pointed out some of these and said asks a young person for the time these days and chances are she’ll pull out her cell phone rather than glance at a watch.

This is a connected generation; small portable devices easily fit into your people’s life styles & keep them connected to the things they care about, whether by phone, instant messaging, or even internet”. The proponents conclude that many people now are wanted to choose mobile phone rather than any gadgets or devices. We all know that gadgets are used by many people but, mobile phones are most commonly known portable devices. You can surf internet using mobile phone, and can communicate inside and outside the country by sending instant message. Foreign and Local Studies

Foreign Studies “ According to Naila Fareen messaging, a relatively new concept has fascinated the interest of researchers, educators and developers in developing one’s interest in mobile messaging for education, counseling, banking, health care, entertainment and many other daily life activities. This study considers integrating the use of mobile technology to develop environmental awareness in socioeconomic countries. The objective of his study is to accomplish rigorous, relevance and quantitative review of literature related to mobile learning for health care.

Mobile devices are very common in every age group, especially in working group of communities. This facility helps the people in getting in contact with other people at any time anywhere in very inexpensive way. This Literature study describes the role of mobile devices for messaging in the form of text, voice and MMS among doctors and patients in less time and effort. People can get benefited from mobile phones for taking appointment, for doctor's opinion, for prescription and necessary indication from doctor about health via SMS, MMS and Voice Messages.

Based upon the study of current literature on mobile-messaging, this paper recommends a model from which doctors and patients can take benefit. It is hypothesized that mobile messaging would be a better option for health treatment. People are aware with Short Message Services (SMS), Multimedia Messaging Service (MMS) and voice messages therefore the people of socio economic countries can use this facility for health related treatments without going to the doctor in less time, effort and cost. " According to Dr.

Tomohiro Sawa when he started planning the new hospital ward construction in 2005, infrastructure was considered based on the use of integrated voice/data IP network from an early stage of planning, and wireless LAN was expected to be used for mobile handset connections. At a medical institution where highly confidential information such as electronic medical charts is exchanged, dividing networks into multiple systems for data system as well as voice system is not unusual; however, Mr. Sawa says " We determined that it was possible to realize a steady and secure environment using fast-evolving information and communication technologies where physical networks were integrated. " Local Studies " According to Gilbert A. Cabral, <https://assignbuster.com/the-effect-of-mobile-technology-intervention-as-business-solution-to-customer-satisfaction/>

Juven N. Dela Cruz, Dennis I. Marin in their studies the SMS-based inquiry system is a program that maintains all the records of students in a stand-alone computer and a dedicated mobile phone. It provides graphical user interface that authorized end-user to encode the grades of the students. Its other features are adding and uploading records, searching and viewing integrity and reliability of data.

The system was developed using Microsoft Access and Visual Basic programming language. Based on the results of the evaluation, it was concluded that the objective of the study which where to provide a user environment that allows the student to get the grades through cellular phone's SMS were achieved by the proponents. The overall mean of 4.38 with the descriptive evaluation of very acceptable confirms that the objectives were met. Its implementation is highly recommended. " The proponents can say that the study is related to the proposed study because of the SMS Based inquiry system that will be used to fulfill this study.

Using SMS Based inquiry system the respondents can send query through mobile phone just like in the related study. " According to Ana Paula M. Parallag in her thesis the SMS-based information system she used system analysis and design procedures in the development of the proposed computer based system. Rapid application was used to give faster development and higher quality systems than the traditional life cycle. To analyze the performance of the existing and the proposed system, appropriate materials and instruments consisting of observations, interviews, and questionnaires, were used to collect pertinent data. The proponents conclude that the study is related to the proposed system of the proponents <https://assignbuster.com/the-effect-of-mobile-technology-intervention-as-business-solution-to-customer-satisfaction/>

because of the SMS-based information system that will be used by the respondents and by the hospital to make this study possible. " According to Robert Bosch Inc. (Philippines) - service monitoring system (RBPH,-SMS) is a system that support and helps the three services departments of the company (Power tools, automotive, and blaupunkt) in their everyday service transactions. It also helps the different service managers in getting relevant information from these transactions in order to make well-formed decisions. "

The proponents can say that this study is related to the study of the proponents because of getting relevant information from the transaction conducted in the hospital. The proponents will use database as storage of information of the respondents. " According to the study on St. Benedict College - student management (SBC-SMS) deals with properly handling and management of information necessary to fully utilize the institution's valuable resources. It aims to solve the deficiencies and accounting dept. and thus making student info. A lot were accurate and consistent and readily available to all departments.

It's also has a report generation module that provides a more accurate and complete set of reports. "" According to Begino (2000) Concluded that public and private offices utilize information technology resources to improve and provide quality service to customers. Information technology resources also provides satisfaction and introduces new products and markets. Utilizing this provides timely, accurate data that lowers the operational processes and at the same time provides a user-friendly environment. " " According to Andres

(1991) stressed that communication is like breathing which is a natural function of man to keep himself alive.

Stop breathing and you stop being, in everything we do or not do, we also communicated something. In business, one of the factors in the attainment of profit is communication. It is said that the next to the need to improved profit is better communication. Communication is an act of conveying ideas to attain effective results. It is getting across the people in the organization and seeing to it that there is no gap existing in between in an effective communication strategy, it is the sender's responsibility to see to it that his message gets across. It is he who directs the path of communication. The proponents can say that Communication is one of the most important factors in business, by using communication strategy, two or more person (or organization) still having a good and better improvement for business, inside or outside. And when you communicate to each other, it can have better result for the sender and the receiver. " According to Sabio (2001), he concluded that utilizing the latest innovation such as the automated teller machine (ATM) provides convenience and satisfaction by satisfactory meeting the needs and expectations of costumers.

She also cited that a very high degree of satisfaction level was attained in delivering banking services as performed by the automated teller machine at any time and place, thus more costumers are availing of the services. " The proponents can say that utilizing the system provides satisfaction by satisfactory meeting the needs ad expectations of customers. It also said that more customers are availing the service when very high degree of satisfaction level was attained. According to Remiscal (1992) cited that there <https://assignbuster.com/the-effect-of-mobile-technology-intervention-as-business-solution-to-customer-satisfaction/>

is a strong need for an organized effort to guide and assist prospective industries in the choice of technologies that go along the particular stage of socio-economic development of the region. Such roles as the selection, transfer and adaption of technology will no doubt have a far-reaching result in accelerating development. " The proponents conclude that technology has a vital role in business especially in the field of industry. It's a sign that our country is inline in the development of technology. According to Cecile (1990) studied of the change in communication following a structural reorganization in government office. She found out that notable effects of the shift to gist structure were due to the absence of a communication Bottleneck led to an information overload on the part of supervisor on issue that arose in the conceptualization of the study on communication. It was found out that supervisors have a harder time to coordinate feedback and supervise coordinate. " " According Agar and Cu- Unjieng (2003) stated that Medical Students or Professionals are not old fashion nowadays.

They don't just read their thick books but also read from the internet or medical software tutorials. By the help of information technology, they can easily grasp knowledge" Because we are in the modern world today, the proponents can say that it is important for us to know how to gather information in many different ways especially by the use of technology. In the proponents study, gathering information and coming out with the records of patients can be done through computer. Synthesis Through the related literature and study that the proponent had gathered by the use of internet and books this study can make possible.

Former local and foreign research helps us to have an idea on the growing community of mobile users. Mobile technology is one way of communication to get information that we want to know. Patient satisfaction is one important factor to consider in the hospital, not only in hospital but also in all aspects that the patient involved. Reading articles about patient satisfaction using mobile phone gives us idea on how to satisfy them by giving mobile services. It helps the proponents to know how the information should be properly handled and managed.

Former research stated that mobile messaging can be transform for the use of education, banking, counseling, health care, entertainment and others. Utilizing the capability of mobile technology may satisfy clients and can be a reason for people who still use manual process of making transactions to start using mobile phones for convenience. The SMS-based inquiry system is a program that maintains all the records of students in a stand-alone computer and a dedicated mobile phone. This study guides the proponents to make their own SMS- based inquiry system. CHAPTER III

RESEARCH METHODOLOGY Methodology is an organizational process of gaining a clear and interpretable result from basic prediction of a correspondence behavior. It also identifies the state of the collective knowledge topic of the researchers from trusted sources. In this chapter, the researcher may use survey, interview, and other means of observation to gain accurate information regarding to their topic. **Research Method Used** The proponents used Descriptive research also known as statistical research, describes data and characteristics about the population or phenomenon being studied.

<https://assignbuster.com/the-effect-of-mobile-technology-intervention-as-business-solution-to-customer-satisfaction/>

Descriptive research answers the

questions who, what, where, when and how... The description is used for frequencies, averages and other statistical calculations. Often the best approach, prior to writing descriptive research, is to conduct a survey investigation. Qualitative research often has the aim of description and researchers may follow-up with examinations of why the observations exist and what the implications of the findings are. Population and Sample Size Population sampling is the process of taking a subset of subjects that is representative of the entire population.

The sample must have sufficient size to warrant statistical analysis. The population of Novaliches district hospital is composed of fifty (50) Patients. Sampling Technique The researchers will use the Purposive Sampling Technique in determining the sample size. Purposive sampling is a sampling method in which elements are chosen based on purpose of the study. Sampling technique in which the individual units are selected by some purposive method. Purposive sampling may involve studying the entire population of some limited group or a subset of a population.

The researchers chose the respondents based on the purpose of the study. The respondents are individual patients in the hospital. Description of the Respondents The distribution of the collective data method is based on criteria: The respondents who are going to be benefited by the research are qualified by their demographic profile of the respondents in terms of gender, age, civil status, educational attainment. And the respondents are: Hospital Patients. Are most of the target respondents of the proponents due to this study where intended for most in the hospital. Instrumentation <https://assignbuster.com/the-effect-of-mobile-technology-intervention-as-business-solution-to-customer-satisfaction/>

Techniques Observation. This technique deals with observation of the subject or source of information. Observation can be conducted within the hospital and departments where process in the system is involve. Writing down incidents or activities or even the usual ways in the subject is the main way to get information. Interview. This technique requires personal interaction and communication in getting information from the respondents. Interview is usually conducted during visitation. Survey. This technique requires the respondents to answer a set of question to gather data and their about system.

It is conducted before and after the system is tested to their establishment. Inquiry or written documents. This technique deals with the inquisition of written documents such as company profile, forms, and other paper document from the company. Data Gathering Procedure 1. Formulation of data questionnaires and Survey Form Formulating set of questions and survey is very essential in data gathering procedure. Proponents prepared questionnaires first which are needed to supply the necessary information for completion of this research study. . Validation and Distribution of data questionnaires and survey forms To prospect respondents Questionnaire and survey forms have been presented to their technical adviser for checking and validation. After it has been validated, the evaluation sheets were distributed to the prospective respondents. Distribution of Questionnaires to them followed. 3. Retrieval, Encoding Data solution using scale Techniques and formulas. After the respondents finished answering set of questions, the proponents retrieved the questionnaires.

In order to derive accurate results, they made use of statistical tools using mean and standard deviation to evaluate results gathered. 4.

Interpretation of data through data analysis After the data had been collected, the proponents analyzed the results and the information gathered by tabulating data using tablets and some illustration. Evaluation of data results Proponents start the evaluation process for finishing the results. They examined the collected data and evaluated results by utilizing statistical tools. . Statistical Treatment of Data

In the statistical study, the proponents decided to use the mean, percentage, frequency and ranking. Using percentage, ranking and mean in statistical study the work provides most accurate data and information in the conducted survey using the questionnaire. The respondents must need to meet and turn their knowledge, comments, opinions and suggestions into research studies. This is converted into numerical data where information can be determined which exist the most. . Mean . The mean is one of the several indices of central tendency used to indicate the point on the scale of measure where the respondents' answers are centered.

Researcher will use the calculation of mean. This was used to determine the responses of the respondents. The means were interpreted using the range of values and their corresponding interpretation. Overall the grand mean is the average of all the weighted responses for the respective criteria. It will also be interpreted using Likert Scale. . [pic] . Wherein: . x = the frequency of response . N = the total no. of respondents . Σ = the summation .

Percentage . After gathering the entire questionnaire from the respondents, total responses for each item were obtained and tabulated.

<https://assignbuster.com/the-effect-of-mobile-technology-intervention-as-business-solution-to-customer-satisfaction/>

Percentage is the part of one hundred (100) wherein every quantity has corresponding weight. Each weight represents the significance. Percentage are used to express how large/small quantity is, relative to another quantity. . $P = T / N$. Wherein: P= percentage . T= total value N= number of percentage . Frequency Distribution . As the researchers gather the data, frequency distribution was use to tabulate the values that was taken from the survey questionnaire. A frequency distribution shows the number of observations falling into each other of several ranges of values. $F = f / n \times 100$. Wherein: . F = number of response . N = number of respondents . . The Likert Scale . The Likert technique represents a set of attitude statements. Subjects are asked to express agreement or disagreement of five-point scale. Each degree of agreement is given a numerical value from one to five. This was used by the researchers to get the result of the survey conducted. It uses the method of summing the ratings and tallying the answers of the respondents on the questionnaire in which it is the main basis of the scale.

The Likert's five-point scale, each corresponds to an equivalent range and ratings. . Table 3. 0 Likert Scale | Rating | | Verbal Interpretation | | | | 2. 34-

3. 00 | | Very Satisfactory | | | | 1. 67-2. 3 | | Satisfactory | | | | 1. 0- 1. 66 | |

Needs Improvement | | | ————— ii iii iv v vi vii 2 3 4 5 6 OUTPUT

PROCESS INPUT ? Determining the research method to be used: •

Descriptive Method Population and sample size • Sampling technique ?

Describing the Respondents Patients ? Preparation of Instruments •

Observation • Interview • Survey • Inquiry ? Data Gathering Procedure •

Formulation of data questionnaires and Survey Form • Validation and

Distribution of data questionnaires and survey forms • Retrieval, Encoding

Data solution using scale Techniques and formulas • Interpretation of data through data analysis • Evaluation of data results ? Statistical Treatment of data THE EFFECT OF MOBILE TECHNOLOGY INTERVENTION AS A BUSINESS SOLUTION TO CUSTOMER SATISFACTION The demographic profiles of the patients in terms of their Age, Gender, Civil Status, and Educational Attainment ? Effect of mobile technology to Novaliches District Hospital and to the patient ? Patient satisfaction with the use of mobile technology ? Significant effect using mobile technology than the existing process ? Difference between the existing process and the process applied by mobile technology to the end user and to the hospital FEEDBACK 7 8 9 10 11 12 14 13 17 18 19 20 21 15 22 23 24 25 26 27 28 29 30 31 32 33 34 25 26 35 36 37 38 39 40 41 42 ————— QUEZON CITY POLYTECHNIC UNIVERSITY