Example by StudyDriver

Source: https://studydriver.com/health-card-systems/

Health Card Systems Example

Health Card Systems

History:

In 1993 Advantage Data Systems was founded to develop a smart card for the health care industry .The founding group consisted of health care professionals from private practices in Oklahoma city , Oklahoma U.S.A . These professionals had all experienced a need within their practice of medicine for a convenient method for patients to carry their health information. As practicing health care professionals, they were dealing with patients who could not remember their medical history or provide an accurate recollection of their medication or allergies on a daily basis. Providing patients with a tool to keep an accurate record of their medical history was the goal upon which Advantage Data Systems was founded. With this goal in mind several technologies were investigated in order to determine the one most applicable to the project. Although several technologies had positive attributes, a smart card for health care provide myriad of benefits. By using a smart card for the health care card, ADS could achieve its goal to provide a convenient and reliable method for patients to carry their medical history.

System Definition:

It's a patient identification card with high level of data and transmission security, large memory capacity, flexible programming options, and standardized interfaces. It contains all the health information about the patient. It helps to reduce fraud, streamline administration, improve communication, and enhance the quality of treatment. Our industry-specific, cost-effective processing, allows us the ability to focus on your unique requirements and to tailor our programs and services to meet your special criteria for processing. Take this opportunity to also understand why leading industry Associations, Organizations and Societies in the Healthcare, Personal care and Wellness markets have selected Health Card Systems for their own processing as well as endorsing and promoting Health Card for their membership. The flexibility of the HCS Patient Card also permits the storage of multiple access codes, allowing affiliated hospital sites and clinics with different computer systems to retrieve vital patient information from the same card. Worldwide, the costs of healthcare are exploding. The main reason is that advanced medicines and technology are boosting life expectancy. As people get older, the care they need becomes more frequent and more expensive. To be able to finance this positive effect of higher life expectancy, the existing healthcare systems must be made more efficient. One means is the introduction of card-enabled e-health networks.

Why I need Smart Health Cards?

There is much longer story why we don't already have Health Smart Cards in our pockets. It is not because of the technical reasons or cost of the system at all. It is more about politics, people resisting Smart Health cards fail to understand benefits such technology brings to the table. Smart cards would save countless lives if implemented. Consider this: Germany has population of about 80 million people. Until smart cards were implemented every year about 50-60 thousand people were dying because of medical errors, mostly wrong prescriptions. Sounds like awfully a lot of dead people and it really is! There were only about 5 to 6 thousands of deaths caused by traffic accidents in the same time, whole Germany. Now consider USA, population is 4 times bigger, if the smart health cards aren't existing, you draw your own conclusions... Comparing the situation at Palestine, there is occupation

and Israel's assassination of the Palestinians, so the hospitals could not diagnose the patient's condition and to deal rapidly. So we need to use the health cards so as to treat patients rapidly as much as possible, to save the largest number of patients' lives. Cards, by design, are protected against tampering; they can't be copied or counterfeited in any way. The smart health card has implemented in the whole Western Europe (Germany, France, Belgium, Austria, Slovenia...), Taiwan, and Puerto Rico, Canada, Israel, South Africa, India...more. • Smart cards are small, they fit everybody's pocket • Smart cards are very secure, can't be read, copied, manipulated, counterfeited or duplicated • Smart card protect privacy where needed • Smart cards are re-writable • Smart card can contain digital log with location, date, time, person's stamp to record every transaction • Smart card can contain digital prescriptions, no mistakes with handwriting, quantity or quality of medications • Smart health card could be used anywhere, on the street by medical emergency crew to quickly learn about allergies and treatments, even if injured person is un-capable to interact with anybody • Smart card can be set that certain profile of medical personnel can see only certain portion of card data • Insurance, administrative and personal ID data are available • Long sign ups at doctor's offices can be avoided, just insert card into the smart card reader • Only after doctor presents his own medical professional smart card, his card and patient's card verify each other. After cross-verification transactions can take place • Small and inexpensive balance reader can read emergency data any time, anywhere • Smart health cards speed up medical administration, put it in right format (HIPAA), process claims faster and more precisely • Smart cards save hundreds of millions in administration, insurance, public funding, government money • Smart health card is actively fighting medical fraud and critical errors saving money and lives due to the availability of emergency data. Smart card supports both languages English and Arabic. Also it has a huge database in compare with current systems which are programmed on access. It is easy to Update, Privileged Access, Accurate and Quick Registration. Electronic signing of the data can ensure that there is no subsequent alteration to guarantee the integrity of the records. Smart health card Increase in productivity among staff due to less time dealing with paperwork, so patients don't have to wait for service.

Who will benefit from Health Smart cards?

o Every person giving or receiving healthcare (patient). o Ministry of Health. o Insurance companies or

Government insurance institutions. o Medical institutions. o Government overall when cards are massively applied. o When massively applied, every person in the country since savings will be huge.

Benefits to the Hospital

• Huge potential for revenue growth in terms of loyal patients and other sources. • Tremendous reduction of Doctor's diagnosis and analysis time. • Saves huge sums on avoiding unnecessary and voluminous paperwork and other administrative overheads. • The health information of all the customers will be available in the hospitals system. • Can ensure that the patients buy the medicines from pharmacies approved by the hospital, as they would have the Smart Card Readers. • Prolonged medical attention cases like pregnancy, dialysis etc. can be tracked and checked for individual patients. • A technical advantage over their fellow competitors.

Benefits to Physicians

• Availability of current medical data at all times. • Ability to obtain critical healthcare information from an incapacitated or unconscious patient. • Improved communication and information sharing among healthcare providers, Physicians, hospitals, laboratories and pharmacies. • Reduced administrative workload. • Enables accurate data collection for research purpose, facilitating the evolution from Curative medicine to preventive medicine.

Benefits to Patients

• Ability to carry their virtual medical record with them at all times and releases it to which they choose. • Enables improved healthcare thanks to better-informed providers. • Enables faster treatments in emergency situations. • Eliminates need to remember specific terms, medications, and treatment names. • Eliminates unnecessary treatments, repeated producers and tests.

Benefits for Insurance Provider

• Faulty Claims can be avoided. • Better Customer service.

Who are potential customers to engage?

o Medical health insurance companies. o Ministry of Health. o Ambulances. o Hospitals. o Individual doctor's offices specially Dentists. o Pharmacies.

What is actually written into the patient's cards?

Cards are used as a secure portable mini data bases with: n Card information (serial numbers, issuer's codes and data). n Personal information (personal data like name and address. n Insurance information (coverage and insurance details). n Emergency data. n Medical data (information about medical conditions and treatments). n Chronic disease info (patient's data about possible chronic diseases). n Diagnosis. n Medications prescribed.

How system works?

Main software resides at hospitals' computers. Applicant takes blank smart card and creates new Health card. Card is written with initial control data and is given to the hospitals. n Hospitals takes card by card and personalizes cards by entering personal ID data and health data, and the insurance company add insurance details like type of coverage, contact details. They print card if it's not printed already. Now card is given to end user. Now anybody with a smart card can walk to any hospital/ clinics/ pharmacist/ Insurance companies where the information of patients can be read, write and updated. n patients carry the card with them at all times, giving medical personnel immediate access to their concise medical history, current medications, allergies, the names and telephone numbers of family or friends, and other information necessary for medical treatment decisions. n The patients can avoid delay in admission, giving same answer again and again, doing same tests again. Doctors can easily know the medical history of the patient, the diagnostic reports etc.

Health Card System:

n Cardholder uses card every time when he or she comes to health care facility. There are no forms to fill. Parts of the card may be protected by PIN that is known only to card holder. Doctors read a card and write back short notes if needed. They are also able to write prescriptions to the card. Same kind of information can be written into the data base so new card could be created in case original one is lost or stolen. n If there is a prescription involved patient comes to Pharmacy and they are able to read portion of the card with prescriptions and hand out proper prescription drugs to cardholder.

Some Questions that face us as interpreters

1. Is there a clear business case? Including financial and consumer behavior factors? 2. What type of information do we want to store in the cards (data or value)? 3. How many cards will be needed? 4. What are the security requirements? 5. Who will have access to this information? 6. Who will be allowed to change this information?

FAQ About Health Card System?!

1. What happens when a patient loses their card?

Card backups assure that the smart card system offers the same level of convenience as any other. If cards are lost or stolen, they can quickly be replaced. (And if a card is stolen, the thief can't use it or read any sensitive information from it because it is password protected.).In addition if a patient forgets his card for any circumstance, the hospital can access the system through the patient's full name or identification number assigned to it.

2. If data stored on the cards is also stored on line as a backup, why do you need smart cards at all?

There is an enormous difference between relying on smart cards as the primary source for data, and relying on a

remote on-line source. Since smart card backup information is only accessed when cards require replacement, very high security measures can be put in place without affecting the flow of information in the system. There are many other benefits that come from the fact that backups in a smart card system can be batch transmitted, minimizing system telecommunication costs.

3. How can you save time and money by using Health Card System?!

Access to previous examination results allows a faster diagnosis. Moreover, duplication of examination and tests of sure can be avoided.

4. How can programmer protect the special medical information of patients?

At the beginning it should be noted that the role of programmer is to design a system to make it easier for the user to diagnose and treat at the lowest cost, time, and therefore programmed after the completion of the program and guidance on how to use the relevant categories in turn, enter data for each patient .. In addition, the paper files are currently used may be exposed to damage or loss or theft while the information stored on this system is fully protected.

5. Some patients need to seek treatment abroad. How can he get all the medical information about his health which already save on the health card that none of software can read it except yours that doesn't find abroad?!

If the patient needs to travel out for treatment. The file of health history will print to him and stamped from the hospital and the Ministry of Health.

Business Plan

HealthTech Administrative Plan

v HealthTech PURPOSE AND BACKGROUND:

In 2009, We Think about this Idea for our country, because of specializing in creating an ideal fit of the Patient Identification Card with the existing (Hospital Information System). Our innovative marketing programs increase patient satisfaction by providing simple solutions to admission questions. The HCS Patient Card System provides reduced admission time and increase accuracy while strengthening patient loyalty. The flexibility of the HCS Patient Card also allowing affiliated hospital sites and clinics with different computer systems to retrieve vital patient information from the same card.

v HealthTech Ownership:

The Owner of this project are The CEO " Hamza Hindi " he gets the Idea and starts to do it by get a Hand of 5 people who liked this idea and start to do the idea to the real life which are Mariam Nu'aimi, Vivian Khair, Haytham Sbeih, Rasha Al-Sabbah, Marwa Qaraqe'. Hamza Hindi Put Cash money to do the project by 20% and the five by 30% and the other 50% is a fund from a Foreign Company. So it is Shareable Resources and Profit by many sides, all of us works to let this company success .and it can be an ideal way to get the most out of the investment by purchasing only the shares or time you require from an asset. All other aspects are split, both the benefits and the costs, among a limited number of shareholders or members in our company. 1. Hamza Hindi: He has done his BA from Bethlehem University then worked for a Bethlehem Chamber Industry & Commerce. He's an excellent web designer. He has strong Photoshop and flash skills 2. Haytham Sbeih: He has done his BA from Bethlehem University. He has worked on different platform including Java. 3. Vivian Khair: She has done her BA from Bethlehem University. 4. Mariam Nu'aimi: She has done her BA from Bethlehem University. 5. Marwa Qarage': She has done her BA from Bethlehem University. 6. Rasha Al-Sabbah: She has done her BA from Bethlehem University. There are three main part of business at this moment and these responsibilities will be distributed as follows— Sales & Marketing, Purchase, Operation and PR: - All these activities will be handled by Rasha Al-Sabbah, Mariam Nu'aimi, Marwa Qaraqe'. Software development, testing, documentation and installation: - These activities will be handled by Haytham Sbeih, Vivian Khair. Hardware, Integration and full

service installation: - These activities will be performed by Hamza Hindi.

v HealthTech Vision:

HealthTech will be a leader in health care quality and safety, recognized by all as the best place in the region to receive care...and work.

v HealthTech Mission:

HealthTech will be a national leader in health care, exists to provide quality health services to all those in need.

v HealthTech Values:

HealthTech Health System realizes and is committed to the mission and vision through: Integrity: We are honest, open in our communications, and consistent in doing what we say we will do. Compassion: We provide a caring response to the physical, emotional and spiritual needs of all. Safety: We practice safety behaviors and error prevention techniques to ensure the safety of our patients, visitors and co-workers. Accountability: We accept individual and collective responsibility for everything we do. Respect: We recognize the dignity and worth of the individual, acknowledging the diversity of needs, experiences and talents of each person. Excellence: We strive to achieve the best in everything we do.

v HealthTech Organization chart:

v HealthTech Schedule of tasks and responsibilities:

In our Company we have A CEO manager which will Perform Jobs and Duties for all other Managers and Staff, every Manager work on a plan which will be overview by the CEO, the other managers also watches the Staff and their work.

HealthTech Schedule of remuneration:

Ø CEO: Monthly Salary: 2500\$ yearly Salary: 30000\$ Works Five Days in a Week, about 6 hours in a day from 9-3. Ø Any under title of Manager: Monthly Salary: 2000\$ yearly Salary: 24000\$ Works Five Days in a Week, about 8 hours in a day from 8-4. Ø Staff: Monthly Salary: 1000\$ yearly Salary: 12000\$ Works Five Days in a Week, about 8 hours in a day from 8-4. Ø Cleaners And Service sector: Monthly Salary: 263\$ yearly Salary: 3156\$ Works Five Days in a Week, about 8.5 hours in a day from 7.5 - 4. Marketing Plan "Depends on 4P's"

PRODUCT

v What is the Product? It's a patient identification card with high level of data and transmission security, large memory capacity, flexible programming options, and standardized interfaces. It contains all the historical medical health information about the patient, such as: blood group, diseases, medicines and all allergic cases that must be noticeable...Etc. Cards, by design, are protected against tampering; they can't be copied or counterfeited in any way. Smart cards are small; they fit everybody's pocket so the patient can move without fatigue or discomfort. v What is the name of the Product?

Heath Card System.

v Is the Product seasonal? No. Because it is used over time. v Does the consumer remember the name of the Product? Yes, he remembers it. The name of the product is easy and related to its use. v The life cycle of the Product? The life cycle of the product is related to the patient life. So, when the person died his card is discarded. v Is it possible to add new elements to the product? Yes, we can update the software as the new needs of customer which may face us such as: Adding new fields to the system, improve the interface of the system and the card, online service provider. v What is the extent of customer satisfaction to the product? By the result of the questionnaire which contains 100 samples. We found that 92% of the Palestinian nation is accepted the idea and they are ready to support and use this product. v Is the target group is sensitive to quality? Yes of course the

group is sensitive to quality.

PRICE:

What is the strategy that you want to follow in order to set price? Since we are trying to provide common product for all the customers we will have similar price for every target customers. But not all the target customers welcome our idea with the same excitement; in that case we will go for making facilities for our customers. We have basically three offers- Software, Readers and Cards. The software will be sold and installed at 3 price levels, for hospitals at \$20,000, pharmacies at 2,000, medical centres and insurance companies at \$5,000. The reader will be sold at 32.5% margin which will come around \$33. The card will be sold at \$1.5. Moreover, we must notice the breakeven point in order to determine our profit. v What are the considerations that need to be considered when pricing? In order to set the price we have to take in consideration: 1) Cost: The Pricing structure must cover all costs and provide an acceptable profit margin. 1. Research and Development department costs. 2. System Analysis costs. 3. System Design costs. 4. Programming hardware and software costs. 5. Machines needed such as: card readers, smart cards and Computers costs. 6. Wages costs. 2) Competitor prices: It's important to consider the competitor price. However, there's no direct competition so we are free to set our price. 3) Image: In order to make our customers perceive our product as a high quality items are best to be set. 4) Channels of distributions: There is no need to consider it because our distribution model will be of direct selling.

v What are the prices of competition goods?

There are no direct competition goods. We have indirect competitor which is any company that use smart card and readers. Most of these players are for other businesses like software development, campus, hotels, ATM machines, reader and they are interested in bigger projects. Names of indirect competitors: · Palestine Elevators Company. · Israeli Companies · Al-Quds elevators Company.

v What are the strengths and weaknesses of competitors?

Most are the competitors who are in the market are well established player in the market in the related businesses. They have good relationships with the existing suppliers but they are not concentrated in Smart Card business only, especially Health Smart Card is hardly a good idea for them. They chase the big projects only. We will have solution for small players at very small cost. We will make money in readers and smart cards. Simultaneously we will focus big hospitals for their turnkey project. So far not a single player who is in Health Card provide these information on net, we will differentiate there and will provide full information on the network which will be accessible by log in. This is the right time to enter into Health Care Smart Card where one side standard of living is increasing on the other hand people are becoming more aware of the health.

v Who is your target group?

The target customers include patients who need to go to hospitals, diagnostic centres, Clinics, Pharmacy, Insurance companies. So, our target could be the end users (patients) which is 2448433 person or the organizations and companies such as hospitals which are 52, Medical centres which are 537, Pharmacies which are 910, Insurance companies which are 8 in west bank. We will begin in the big cities like Ramallah, AlKhalil and Nablus and then continue to the rest. v What is the income level of the target group? According to the result of our questionnaire the income level of the target group (end users) is between 1000-3000 Nis. v What are the costs to produce the Product? \$3804280 which is the Cost of research, programming, machines and cards, implementation, testing and maintenance. v Is the Product essential or a luxury good? It is essential because by using this system we can save life, time and money. v Is the target group is sensitive to price? No, it isn't. v To what extent the price reflects the quality of the product? High quality product means higher price to be set.

PROMOTION

v What is promotion? Promotion involves disseminating information about a product, product line, brand, or

company. v What is the purpose of the promotion process? To persuade the target markets to use this system which enabling people to increase control over the determinants of health and thereby improve their health .To reach a state of complete physical, mental and social well-being an individual or group must be able to identify and realize aspirations, to satisfy needs and to change or cope with the environment, v What is the policy that we want to follow? 1. We will have a website which will have all the information of our products and services. Later on, we will strengthen our websites by storing patient's information online. In our websites we will also provide general information about the health care facilities in Palestine, about different diseases, different health care professional, about diagnostic centres & chemists. 2. Moreover, We will directly go to the customers and present our product and services by Work shop. 3. We will leave brochures and leaflets to the hospitals, pathology labs & chemists. 4. In addition to, we will use posters at different cities. 5. By Media: newspaper, medical magazines, Jawwal sms, T.V., Radio and Facebook we can spread our idea and promote to the product. 6. Also, We will take help of Specialist who are already working in different companies to advertise our product and services 7. More than everything we will focus on mouth publicity by providing excellent product and services at affordable prices. v What is the budget established for the promotion? About \$114054 for the first year, \$29000 for the second year and \$10416 for the third year. v How to distribute those elements of the budget on promotion? By printing brochures, hosting server for a website, posters, newspaper, medical magazines, Jawwal sms, T.V. and Facebook etc. v What a way of promotion is the most appropriate for the target group? By meeting teams of hospitals in order to persuade them and showing them how the system will benefit them. Moreover, we can reach to the end users by posters and Jawwal sms. v What is the time plan for the promotion? 9 months

Place:

We will target all west bank, we will begin in the big cities like Ramallah, AlKhalil and Nablus, after that we will penetrate the other cities. And because we will be targeting all hospitals and health centers, it would be easy for people to access to hospital nearby and get the product. For long term goals we want to be the sole Health Card provider in the country and to penetrate other health sectors. How will the product/service be distributed? Which partners will be needed in the distribution channel? Our distribution model will be of direct selling. The selling

person from the company will be directly going to the customers and presenting our product and services. We will provide them after sale services. After serving a reasonable market in a city we will have branches in different part of the city so that customers can easily avail our services.

Analysis of SWOT

1) Strength:

The strength of Health Card System entering into the Palestinian market at this time is a good one for it, since there is absolutely no competition in Palestine at the time. So, HCS is the first system which enters into this market; we will have established much strength that allows us to remain ahead of the competition. So, we will be as monopolist. Our brand name will stuck in customers mind as a good image. Moreover, this system is designed by our company so we don't buy it from foreign programmers. In addition, our system supports both languages English and Arabic. Also, the security pattern is so strong so no one can hack our system.

2) Weakness:

First of all Government's ability may not support our system because of its high expenses and costs. In addition our system isn't international one; so if the patient needs to travel abroad he will take his medical file as papers.

3) Opportunity:

First of all we can spread our product in order to penetrate all the cities of Palestine. We have a good chance by target the Arab World. We also have the opportunity to develop brand loyalty by offering smart cards that really will save human being life, time and money. In addition, we can improve this system so as to be credit/debit system.

4) Threats:

The threat that might face us is the new entrants to the market that threaten to erode the market share. So the competition will increase. May be that other systems will be more available so the customers have a wider variety of choices. Identity theft is also could be a threat that faces us and the consumers.

Production Plan:

1- Production Process:

Health system production occurs at three levels which are: primary, secondary and tertiary. The primary level finishes after having all the materials which are important in order to start applying our programs such as: computers, certain software, smart cards, and smart card readers. Secondary production includes the production of programmable software of the health card system. The final step is how to make the card readers are ready to be used by hospitals (program the hardware).

2- Fixed Assets:

Building à Monthly rent: \$500 Machinery, other equipment, tools 3 computers: \$2280 1 laptop: \$1185 1 Scanner: \$80 1 Printer: \$130 Total: \$3765 Furnishings (including for office and warehouse):\$ 3947 Motor vehicles (Car):\$10000 Lifetime of the fixed assets is range between 5-10 years. Payment Conditions: The payment condition is cash.

3- Suppliers:

The raw material suppliers will be determined via internet and we will contact them over there. Actually, we will import the raw material "Card-Readers & the smart cards" from China so there will be shipping cost and delivery time which we must take into consideration. The cost of the card-Reader is \$24.95 and we decide to sell it in \$33

so as to gain 32.5% profit in one reader. On the other hand, the cost of card is \$0.70 and we'll sell it in \$1.5.

4- Licenses and Permits Required:

* Licensing requirements & Permits: We need license from the Ministry of Health in order to apply our system nationally. In addition, we need permits of Chamber of Commerce to start our job and having certificated employment contract, and from municipality as to have work permits. * Workplace or environmental regulations: We also need a lease in order have the office and start working * Insurance coverage: Indicate that we have insurance on the shipping raw material, our office and our health (with NIC national insurance company).

5- Labor Costs:

Our workforce costs is \$150000, insurance costs is \$5760.

6- Location & Facilities:

The location of our office is convenient to our customers; it is located at the center of Bethlehem at AL-Mahed Street where the parking is available. According to our office it will be provided with equipments in order to complete our production process. Moreover, it will be ready in order to welcome our customers and handle important meeting with other companies. A rent expense is \$500 per month.

7- Targets & Capacity:

There is a big different between our company and others in the production process. Our production process is confined in programming the software of the health card system which will need 3-4 months then evaluate and testing the program so as to fixed any errors and then start sell it. According to our forecasting sales: Year1à We will cover all the hospitals at the west bank so we will sell 52 software. The price of the software is \$20000 so our sales for the first year will be \$1040000. Year2àwe will sell our software to all medical and health centers "539"

centers". The price of the software is \$5000, so our sales estimated to be \$2695000. Year3àPharmacies and insurance companies will be our aim; the number of pharmacies is 910 and the price of the software is \$2000 so our sales estimated to be \$1820000. On the other hand the number of insurance co. is 8 and the price of the software is \$5000 so our sales estimated to be \$40000.

Project Planning: Timeline of Project Activities

Month 1 Month 2 Week Month 3 Week Month 4 Week Week 1 2 3 1 2 3 4 4 1 2 3 4 1 2 3 4 Capital Equipment Marketing Inventory/ Supplies Financial Plan: Fixed Assets:- There are no Buildings but we will rent a small apartment, also we have 3 computers and 1 laptop, scanner, printer. We will purchase office equipments such as tables, chairs ...etc. We will buy a small car to travel between cities; also there are some Miscellaneous such as papers, ink, tea & coffee ...etc Fixed Assets Amount Machines, other equipments, tools \$3,765.00 Furniture \$3,947.00 Motor vehicles (Car) \$10,000.00 Miscellaneous \$1,000.00 Total fixed assets \$18,712.00 Current Assets:-We will take a loan from the bank which value is \$500,000, also we have inventory which contains smart card reader, smart cards. Current Assets Amount Start-up inventory \$9,495.00 Cash and bank assets \$500,000.00 Total current assets \$509,495.00 Operating costs (Fixed and Variable):- Our material costs contains the costs of the smart card reader, smart cards, the wages include the wages of one manager and five employees, we will rent apartment which cost is \$500 monthly, also we have water, electricity, and telephone bills, also Internet. We need petrol, oil, insurance for our car. We need also Bill-Board, brochures, Jawwal SMS, Work shop, web site ...etc for advertising. Costs First year Second year Third year Material costs \$1,613,417.25 \$156,820.65 \$23,604.10 Shipping costs \$414,881.00 \$40,070.40 \$4,055.60 Wages \$153,156.00 \$153,156.00 \$201,156.00 Rent \$6,000.00 \$6,000.00 \$6,000.00 Office material, postal expenses, telephone charges \$631.20 \$631.20 \$631.20 Taxes , fees \$143.00 \$143.00 \$143.00 Contributions and Insurance \$5,760.00 \$5,760.00 \$5,760.00 Energy, water, etc. \$726.00 \$726.00 726.00 Maintenance, cleaning, repairs \$3,156.00 \$3,156.00 Advertising \$228,916.00 \$29,076.00 \$10,416.00 Motor vehicle (petrol, oil, insurance, etc.) \$6,060.00 \$6,060.00 \$6,060.00 Travel expenses and allowances \$1,400.00 \$1,400.00 \$1,400.00 Other \$1,080.00 \$1,080.00 \$1,080.00 Total operating costs(Fixed & Variable) \$2,435,326.45 \$404,079.25 \$318,187.90

Estimated sales:-

The potential market size of a west bank can be calculated as follows— There are 2,448,433 people who need to have health card: If each card cost \$6 then the card market will be of \$14,690,598. There are 539 health care centres, and 8 insurance companies that will go for installation of health card system and on average system installation at a place will cost \$5000 for clinic centres. So the potential market will market of setting up system at health care centres will be of \$2,735,000. There are 52 hospitals whose average system cost will be \$20000 and the potential market will be of \$1,040,000. There are 910 pharmacies whose average system cost will be \$20000 and the potential market will be of \$1,820,000. So the potential of market is \$5,595,000 in West bank. If we go for online service provider the potential market will be from advertisement which might go \$50,000-\$70,000 a year. In the first year we will concentrate our software sales on the hospitals, in the second year on medical centers, in the third year on pharmacies and insurance Companies. Goods Quantity Quantity Quantity Unit Price Total sales Total sales Total sales First year Second year Third year First year Second year Third year Smart Card Reader 625.00 1,617.00 918.00 \$33.00 \$20,625.00 \$53,361.00 \$30,294.00 Smart Cards 2,282,605.00 166,395.00 1,000.00 \$1.50 \$3,423,907.50 \$249,592.50 \$1,500.00 HealthTecH Software - hospitals 34.00 0 0 \$20,000.00 \$680,000.00 0 0 HealthTecH Software - medical centers 0 539.00 0 \$5,000.00 0 \$2,695,000.00 0 HealthTecH Software - pharmacies 0 0 910.00 \$2,000.00 0 0 1,820,000.00 HealthTecH Software - insurance Co. 0 0 8.00 \$5,000.00 0 0 \$40,000.00

Provisional cash flow (\$) for the first year:-

Our cash flow contains the estimated sales for the first year, also our fixed and variable operating costs, and the Entrepreneur's wage. Month 1 2 3 4 5 6 Sales 131,320.00 281,320.00 281,485.00 241,650.00 621,815.00 641,980.00 Operating costs 86,847.02 135,818.02 136,319.77 136,172.52 349,815.27 348,571.02 Entrepreneur's wage 12,500.00 12,500.00 12,500.00 12,500.00 12,500.00 Provisional cash flow 31,972.98 133,001.98 132,665.23 92,977.48 259,499.73 280,908.98 Accumulated provisional cash flow 31,972.98 164,974.96 297,640.19 390,617.67 650,117.40 931,026.38 7 8 9 10 11 12 641,980.00 582,640.00 393,296.00 111,650.00 111,155.00 84,241.50 349,059.02 303,286.02 246,726.37 77,932.52 77,184.27 72,732.67 12,500.00 12,500.00 12,500.00

12,500.00 12,500.00 12,500.00 280,420.98 266,853.98 134,069.63 21,217.48 21,470.73 -991.17 1,211,447.36 1,478,301.34 1,612,370.97 1,633,588.45 1,655,059.18 1,654,068.01

Break-even point:-

Break-even point = Fixed costs Sale price - variable costs / unit Goods Sales Unit Price Total sales Variable cost per unit Contribution margin A percentage of sales Total Break-even point Smart Card Reader 625.00 \$33.00 \$20,625.00 \$24.95 Smart Cards 2,282,605.00 \$1.50 \$3,423,907.50 \$0.70 HealthTecH Software - hospitals 34.00 \$20,000.00 \$680,000.00 HealthTecH Software - medical centers 0 \$5,000.00 \$0 HealthTecH Software - insurance Co. 0 \$5,000.00 \$0

Lists of profits and losses:-

In the first three years our profit will be too low but we expect it to be too high in the coming years. 1st year(\$) 2nd year(\$) 3rd year(\$) Total sales 4,124,532.50 2,997,953.50 1,891,794.00 Total operating costs 2,435,326.49 404,079.25 318,187.90 Interest on loans 18,119.00 18,119.00 Depreciation 18,712.00 17,042.00 15,248.00 Gross profits (profits or losses) 1,652,375.01 2,558,713.25 1,558,358.10 Profit taxes 258,876.62 373,651.70 226,419.54 Net profit 1,393,498.39 2,185,061.55 1,331,938.56

Analysis of our Questionnaire

We make 100 copies of it; we pass it through Palestinian people in different ages. Our survey has 48 percent of males, 52 percent of females, 75 percent of them has an insurance, people w haven't insurance like to have an insurance is 87 percent.

We asked them

Would you like to shorten the treatment procedure of paper? , we found that the young people their ages are less

than 30 years are interested to shorten treatment procedure of paper, their percentage is 57.1%, the older ages are less interested to shorten treatment procedure of paper because it had become a habit and they are accustomed to it. The other questions we asked about paying fees for doing less paper work and the need to file a new health work in each hospital, the questions are: * Do you have the willingness to pay a nominal fee for this service fast? * Do you have a willingness to pay a fee that will give you treatment in all health centers without the need to file a new health work in each hospital? Most of them were answered that they are willing to pay an acceptable fee for this service for different levels of standard of living. Sex Frequency Percent Valid Percent Cumulative Percent Valid Male 47 47.5 48.0 48.0 Female 51 51.5 52.0 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0 · Education Frequency Percent Valid Percent Cumulative Percent Valid primary 5 5.1 5.2 5.2 Lower Secondary 7 7.1 7.2 12.4 Secondary 16 16.2 16.5 28.9 University 65 65.7 67.0 95.9 No learn 4 4.0 4.1 100.0 Total 97 98.0 100.0 Missing System 2 2.0 Total 99 100.0 · Age Frequency Percent Valid Percent Cumulative Percent Valid 18-30 56 56.6 57.1 57.1 31-50 33 33.3 33.7 90.8 51-70 9 9.1 9.2 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0 · Income Frequency Percent Valid Percent Cumulative Percent Valid <1000 17 17.2 17.3 17.3 1001-3000 45 45.5 45.9 63.3 3001-5000 22 22.2 22.4 85.7 5000< 14 14.1 14.3 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0 · Residence Frequency Percent Valid Percent Cumulative Percent Valid Village 37 37.4 37.8 37.8 City 48 48.5 49.0 86.7 Camp 13 13.1 13.3 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0 · Health insurance Frequency Percent Valid Percent Cumulative Percent Valid Available 74 74.7 75.5 75.5 Not available 24 24.2 24.5 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0 · Sociality Frequency Percent Valid Percent Cumulative Percent Valid Unmarried 52 52.5 53.1 53.1 Married 44 44.4 44.9 98.0 Divorced 1 1.0 1.0 99.0 Widowed 1 1.0 1.0 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0

1. Would you like to get health insurance?

Frequency Percent Valid Percent Cumulative Percent Valid yes 90 90.9 91.8 91.8 no 8 8.1 8.2 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0

2. Does the hospital provide care in a manner distinct?

Frequency Percent Valid Percent Cumulative Percent Valid Excellent 10 10.1 10.2 10.2 Good 25 25.3 25.5 35.7 Average 36 36.4 36.7 72.4 Bad 27 27.3 27.6 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0

3. Would you like to shorten the treatment procedure of paper?

Frequency Percent Valid Percent Cumulative Percent Valid Yes 91 91.9 92.9 92.9 No 7 7.1 7.1 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0

4. Would you like to carry your record Patients in the form of e-card also carry an ATM card?

Frequency Percent Valid Percent Cumulative Percent Valid yes 91 91.9 92.9 92.9 No 7 7.1 7.1 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0

5. Does the hospital provide you with health care in an expeditious manner?

Frequency Percent Valid Percent Cumulative Percent Valid Excellent 7 7.1 7.1 Good 23 23.2 23.5 30.6 Average 46 46.5 46.9 77.6 Bad 22 22.2 22.4 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0

6. Do you have the willingness to pay a nominal fee for this service fast?

Frequency Percent Valid Percent Cumulative Percent Valid Yes 89 89.9 90.8 90.8 No 9 9.1 9.2 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0

7. Do you have the willingness to pay a nominal fee for this service fast?

Frequency Percent Valid Percent Cumulative Percent Valid Excellent 21 21.2 21.4 21.4 Good 56 56.6 57.1 78.6

Average 12 12.1 12.2 90.8 Bad 9 9.1 9.2 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0

8. Would you like to rest from the trouble of taking the files sick whenever you go to the clinic a doctor?

Frequency Percent Valid Percent Cumulative Percent Valid Yes 93 93.9 94.9 94.9 No 5 5.1 5.1 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0

9. Do you have a willingness to pay a fee that will give you treatment in all health centers without the need to file a new health work in each hospital?

Frequency Percent Valid Percent Cumulative Percent Valid Yes 91 91.9 92.9 92.9 No 7 7.1 7.1 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0

10. Would you like to be your patients available all the time?

Frequency Percent Valid Percent Cumulative Percent Valid Yes 84 84.8 85.7 85.7 No 14 14.1 14.3 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0

11. Would you like to provide you with treatment in different hospitals?

Frequency Percent Valid Percent Cumulative Percent Valid Yes 97 98.0 99.0 99.0 No 1 1.0 1.0 100.0 Total 98 99.0 100.0 Missing System 1 1.0 Total 99 100.0

Questions relations

Would you like to get health insurance?

Total Yes No Has an insurance Yes 93.2 6.8 100.0 no 87.5 12.5 100.0 Total 91.8 8.2 100.0 Sex Total Age Total Male Female 18-30 31-50 51-70 Does the hospital Excellent 40.0 60.0 100.0 40.0 50.0 10.0 100.0 provide care in a Good 40.0 60.0 100.0 44.0 44.0 12.0 100.0 Manner distinct? Average 44.4 55.6 100.0 66.7 25.0 8.3 100.0 Bad 63.0 37.0 100.0 63.0 29.6 7.4 100.0 Total 48.0 52.0 100.0 57.1 33.7 9.2 100.0 Sex Total Age Total Male Female 18-30 31-50 51-70 Does the hospital Excellent 40.0 60.0 100.0 40.0 50.0 10.0 100.0 provide care in a Good 40.0 60.0 100.0 44.0 44.0 12.0 100.0 Manner distinct? Average 44.4 55.6 100.0 66.7 25.0 8.3 100.0 Bad 63.0 37.0 100.0 63.0 29.6 7.4 100.0 Total 48.0 52.0 100.0 57.1 33.7 9.2 100.0

Would you like to shorten the treatment procedure of paper?

Yes 46.2 53.8 100.0 57.1 34.1 8.8 100.0 No 71.4 28.6 100.0 57.1 28.6 14.3 100.0 Total 48.0 52.0 100.0 57.1 33.7 9.2 100.0

Would you like to carry your record Patients in the form of e-card also carry an ATM card?

Yes 47.3 52.7 100.0 58.2 33.0 8.8 100.0 No 57.1 42.9 100.0 42.9 42.9 14.3 100.0 Total 48.0 52.0 100.0 57.1 33.7 9.2 100.0 Income Total <1000 1001-3000 3001-5000 5000<

Do you have the willingness to pay a nominal fee for this service fast?

Yes 88.2 86.7 100.0 92.9 90.8 No 11.8 13.3 7.1 9.2 Total 100.0 100.0 100.0 100.0 100.0

Do you have a willingness to pay a fee that will give you treatment in all health centers without the need to file a new health work in each hospital?

Yes 82.4 93.3 100.0 92.9 92.9 No 17.6 6.7 7.1 7.1 Total 100.0 100.0 100.0 100.0 100.0