

Business Plan - Clinical Mobile Application

MHI-552 Week 7 - Final

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Executive Summary

Keeping patients out of the hospital requires utilizing technology that improves patient outcomes and controls costs. My business strategy is called 2-WayCare mobile App. 2-WayCare App is a clinical mobile application that will provide a niche practical solution to hospitals and physicians on a virtual environment, in order to archive a comprehensive follow-up care of post-hospital patients.

2-WayCare App is a 'clinical' mobile application that will revolutionize the way doctors conduct post-hospital follow up care of patients, reduce rates of frequent hospital re-admission incidents and save tax payers billions of dollars annually. Reports and research carried out by healthcare experts in 2012 alone; found that one episode of a hospital re-admission incident cost Medicare \$33,929.00, while a non-readmission episode cost less than \$15,000.00 per incident (Frieden, 2012). In the beginning, my goal was to find a niche technology to streamline existing ways doctors and medical personnel's can manage post-hospital care of patients and more importantly, in a quick and hassle-free ways without resulting to unnecessary emergency room visits or hospital readmission incidents which cost huge medical expenses or bills to tax payers.

2-WayCare mobile App will be a harmless, ready-to- install mobile application on patient's mobile phone prior to leaving hospital from prior in-patient admission. Application can also be downloaded from a pre-installed mobile network in the hospital by patients, or at their own free time at the comfort of their home. A set of predetermined questions and answers based on patient's prognosis is set through a feature on 2-WayCare mobile App by a location administrator. Administrators can be physicians, designated nurse, clinical administrators, or anyone appointed to monitor patient's responses on a given time frame within a hospital, or on a medical network. 2-WayCare mobile App will be an application accessible from anywhere and

on the go. It is a clinical App designed to provide clinical intervention, and reduction of everyday human errors from frequent occurrence. Through a virtual mobile inter-face, 2-WayCare App can coordinate clinical wellness questions from the doctor; relay an instant, one-touch feedback response from a patient using a mobile phone, while at the comfort of their home.

After initial research on strategic framework, architectural design and potential user base analysis of 2-WayCare app, I have come to a conclusion that an initial capital investment of one hundred thousand U.S dollars (\$100,000.00) will be needed. This capital will be needed to create software architecture and mobile interface structure for a smooth take off of this business strategy. Healthcare organizations that will embrace 2-WayCare App as a policy care continuum, will not only improve the level of care delivery for their patients, but positive experience in reduction of post hospital readmission incidents depending on the demographics.

Objectives and Functions:

As a roadmap for a robust business plan, I plan to follow financial concepts of Cost-Benefit Analysis (CBA), and Cost-Effectiveness analysis (CEA) to build a solid foundation that will pilot my business from start to the finish line, a line where revenue streams will begin to outweigh cost of production and distribution.

The whole idea of business strategy is to harness a project of mobile application software that can streamline an instant communications between doctors and post hospital patients on a virtual clinical process. This process involves both direct and indirect cost in an effort to produce a robust, and secured clinical application that will change the way healthcare providers conduct a follow up care of post hospital patients. In the ensuing pages, I will try to offer a clear overall

budget estimates and revenue projections for providers and major healthcare organizations when 2-WayCare app is fully implemented.

Primary Benefits:

- Improve follow up care of patients
- Decrease hospital re-admission incidence
- Increase Medicaid dollar reimbursement benefits to providers
- Reduce emergency room visits
- Improve follow up communication between patient and provider
- Improve overall patient satisfaction
- Provides incentives for additional revenue to providers

Secondary Benefits:

- Increase patient's confidence with their doctors
- Reduce patient post hospital anxiety from post treatment ailments
- Facilitate increase in efficiency of care delivery
- Improve patient wellbeing and psychology
- Provides transformational care continuum of patients

Cost Projections:**Direct Cost:**

- Startup Cost: \$5,000
- Mainframe Application development: \$10,000
- Full time source code programmers: \$10,000
- Window Mobile interface development: \$10,000

- Android Mobile interface Development: \$10,000
- Network Connectivity development: \$5,000
- Software licensing: \$10,000
- Copy right registration: \$10,000
- Pro bono programmers: \$100,000

Estimated Total Direct Cost: \$170,000.00**Indirect cost:**

- Work area construction: \$3000
- Monthly cost to host application on public network: \$300
- Monthly Office supplies for daily operation: \$200
- Facility rent, utility payments and maintenance: \$3000
- Office computers: \$15,000
- Office furniture's: \$3000
- Purchase of servers to host application: \$10,000
- Part time Technical support staff salary and wages/month (x3): \$6000
- Goodwill – offer application to users for a free trial: \$40,000
- Product promotion and public awareness campaign: \$40,000
- Employee training to manage application hub station (x2): \$800 monthly.

Estimated Total Indirect Cost: \$121,300.00**Total Investment Cost: [$\$170,000 + \$121,300 = \$291,300.00$]****Revenue Opportunities: (possibilities)**

- A shear of Provider's monthly reimbursement from insurance company: 15% /patient

As the business proposal for 2-WayCare mobile application, my goal is to ask for a 15% revenue share per every patient, for every reimbursement received from health insurance companies.

- Direct reimbursement from providers per patient enrolled – dollar (\$) to be determined

My goal for a start, and within the first twelve months, is to ask for a quarterly fee of \$30 per every patient that enrolled to use this application from their provider. In this way, providers can immediately create their business account on 2-WayCare network portal and begin to offer this application to their patients without upfront fees to integrate or implement necessary application for 2-Waycare App to function properly on a provider computer server.

- Pay per use revenue from patients – dollar (\$) value to be determined.

In most cases through word of mouth, or consumer promotional outreach, outpatients may be interested to sign up to join their individual provider network on 2-WayCare application, in order enhance instant back to back communications with their physicians.

- Reoccurring revenue from public subscription - dollar (\$) value to be determined.

As the word spread across consumer circles, performance of 2-WayCare application may bring the interest of private uses. My projection is to offer the application on a subscription base of \$9 per month per each user.

- 50 – 70% direct acquisition of application by insurance companies/hospital organization.

My biggest plan is to develop 2-WayCare Application to a level that performance feedbacks can draw interest for acquisition of application by large healthcare organizations and insurance companies. Larger organizations can easily incorporate all features of 2-WayCar App to serve a

large pool of patients and consumers across the United States, and possibly on the international scenes depending on the size of business presence of such an organization.

Revenue Projection:

This cost analysis is based on the essentials of prevailing market projections from dynamic and overwhelming public usage of mobile applications. These estimates are based on the premise that the end product of my business plan will provide reliable, and dependable clinical features that will alter the way patient's recovery from post hospital procedures and episodes, are managed by both providers and patients alike. Defining the projections for these estimates is extraordinarily important because targeted population is less likely to have alternative application unlike my business plan. This will increase the likelihood of more patients and users embracing the product during trial, and final introduction of the product for unrestricted uses.

I plan to follow accounting concepts from the principles of Cost-Benefit Analysis (CBA) to evaluate, and identify program areas and make necessary adjustments in order to achieve product desired objectives as timely as possible. While CBA emphasizes identifying and evaluating progress of input and outcomes, I will draw on the knowledge of the principles of Cost-Effective Analysis (CEA) to analyze opportunities cost of using similar product in the market wherever available.

This informed further needs to embrace principles of externalities and opportunity cost. Knowing cost of externalities are very important to effectively measure and quantify competing business interests, and in order to position my business on a strong footing to withstand dynamic market forces (Penner, 2004).

Operating Budget Projection: Projected FY 2014 Income Statement:

Patient Revenue	FY 2014
In patient Services	\$ 2,790
Outpatient Services	12,720
Gross Patient Revenue	15,510
Deductions from Patient revenue	
Contractual Discounts	2,345
Provision for Charity / Goodwill	3,789
Total Deductions:	6,134
Net Patient Revenue	9,376
Revenue from Medicaid reimbursement	5,000
Other Operating Revenue	230
Total Operating Revenue	14,606

Operating Expenses:	\$
Salaries & Wages	2,467
Employee Benefits	780
Service Contracts & Professional Fees	560
Office Supplies	255
Depreciation & Amortization	1,000
Rents & Leases	2,000
Other	750
Bad Debt	900

IT Chargeback	140
System Chargeback	21
System Allocation	217
Total Operating Expenses	10,090
Net Non-Operating Revenue	3,000
EBIT	4,516
Interest and Taxes	950
Net Income /Loss	8,466
Operating Margin	58%
EBITDA \$	2,467
EBITDA Margin	17%
Total Revenues	\$ 17,606
Total Cost	\$ 11,040

The methods used in tabulating above Income Statement for FY 2014 include anticipated projections of natural, and functional financial statement classification methods. Reasons for choosing these classification methods are that both methods provide clear approach that closely examines incoming and outgoing business activities accruing financial expenses in an organization (Pener, 2004).

My business Income Statements focuses on revenues, expenses and profits for FY 2014 when the business plan is projected to be fully in operations. FY 2014 shows a flurry of financial activities that represents the organization business practice and performance. The Income Statements shows itemized entries in summarized formats, making it easier for better understanding by

provider's, outsiders, and those with invested interest who may want to know about the current and future financial viability of my business plan. With estimated Total Operating Revenues of \$14,606,000 and \$11,040,000 as projected Total Cost of doing business in FY 2014, indicates positive future revenue potentials for my business plan come 2014.

It's important to note that while 2-WayCare App is designed to help to alleviate problems associated with lack of free flow of communication between providers and post-hospital patients, the business strategy is also focused in making money for potential investors willing to infuse capital to make 2-WayCare App a household name in the medical industry. The projected financial –income analysis, provides a convincing data insights as initial guidelines to what is to come when my 2-WayCare App fully takes shape in user environment. My business plan also provides something to looking forward to including potential client mix. Penner (2004) explained that understanding and evaluating a business market share cannot be overemphasized if a product is to be successful in both short and long term goals. “A market share identifies the estimated market share, clients and client mix, payors and payor mix, the strengths and weaknesses of actual potential competitors, and the demand for a product or service.”(Penner, 2004, pg. 230). All these important elements will be incorporated as a guiding roadmap in all phases of my business plan and organizational structure.

Myths about 2-WayCare App

- Will not interfere with physicians traditional and professional roles.

I anticipate there will be some people including nay Sayers, and within the medical community who may want to carry out the notion that the introduction of 2-WayCare app is unnecessary because it will add to already saturated IT systems in the hospital, and providers especially

doctor's, may not have the time or needs for such additional patient versus doctors interactive mobile application. This may be true in some situation, but there are presently no such application to enhance effective clinical follow up in the medical industry, and more so, provides opportunities for providers to increase revenue reimbursements from Medicaid. And more importantly, cost which could have been deducted by Medicaid as additional cost for treating post-hospital readmission of patients will be retained as a revenue to providers.

- Will not take jobs away from nurses and physicians assistants.

If there is anything to worry about, it should not be worries about medical professionals working in doctor's office losing their jobs. 2-WayCare App will make the jobs and responsibilities of nurses much easier. Instead of a nurse sharing their tight schedules running from one patient consultation room to another, just to ask a patient a simple question of --how have you been feeling since you had your last medical procedures? This type of simple questions could have been easily communicated virtually using the 2-WayCare mobile Application interface without having anyone squeezing out their time and congested office space. While this practice has long been accepted as normal, but for how long can it continue when precious time are been wasted by providers and patients themselves.

- Will not infringe on patients' rights and privacy

I am very aware there will be fears, worries and potential problems with patient's privacy, especially when transmitting private clinical questions on the mobile interface and environment. 2-WayCare Application will be designed to utilize the best known security software to embed all its functional applications to make it very hard for security intrusion and compromise of patient's records and privacy.

- Will not hinder patients direct face-face consultation with their doctors

2-WayCare App will only provide instant avenues on the mobile interface for doctors and patients to communicate important clinical matters from prior patient's visits such as, recent medical procedures undertaken by patients. But will not act as intermediary between providers and patients when there are needs for regular patients check up with their physicians.

- 2-WayCare App will not short change providers revenue

Another myth about 2-WayCare App will be that allowing patients to communicate clinical needs and updates to their doctors while at the comfort of their homes, takes revenue opportunities from doctors and nurses. This is one area that will meet strings and pockets of resistant are in the medical community. Let's be frank, every one of us has either a friend or family members who are doctors and nurses, and it's no hear say that everyone one of these aspiring or practicing medical professionals has one most important goal in their minds, that is to make as much money as possible from carrying out their professional oath of office. This is one area of behavior that is endangering innovation of new IT process. This arises too often and continued unabated because of fears that new technology will short change doctors and nurses. Because of this standing practice, new IT strategy will be considered as dead on arrival simply because somebody, or a group of people have decided that it's important to maintain status quo on the expense of true cost saving mechanisms.

- 2-WayCare App will not usurp the role of patient's regular check-up appointments with doctors.

The main goal of 2-WayCare App is to provide timely follow up care of post-hospital patients, saving Medicaid and patients extra cost for unneeded emergency room visits, and readmission

incidents. It will also help to reduce re-admission and free up needed hospital beds for more critical medical patients. This application will aid in the reduction of some of patient's anxiety when they experience post hospital symptoms, and has no immediate way to communicate their strange feelings back to their physicians without visitation appointments, or out of pocket copayments from un-needed emergency room visits.

Strategies moving forward:

My Business Strategy will require minimal start-up capital resource to develop initial software architecture in the initial and ongoing phases as outlined in the Income statements. Assets acquisition is vital and important for interoperability of the application function in a strategic mobile environment. A robust organizational structure to effectively integrate maize of assets necessary to archive my IT objective will be needed. The dichotomy of strong and weak IT assets according to Glaser & Salzberg (2011) is dependent upon the effectiveness of each IT components (Glaser & Salzberg, 2011). Another element of my strategy will be to learn and utilize concepts from the five main functions of Porter's value chain which explores fundamental activities that is pivotal to a successful formulation, implementation, and management and marketing of an IT final product (Mintzberg, et al, 2009). There will be continuous improvements of the features of this IT strategy to meet the needs of changing times. "IT planning is a continuous process reflecting the continuous change in the environment and in organizational plans and strategies" (Glaser & Salzberg, 2011).

Process Evolution:

As an entrepreneur, I must acknowledge the importance of prudent in crafting my organizational structure. This structure is very important in order to successfully execute my business plan to a

logical conclusion. Asking prudent questions such as, Who, What, Where and Why my business plan is needed in the market place is a very strategic move in the present global market. My understanding of the roles of each of these four W's will be the bedrock of 2-WayCare App.

Who: Understanding who my business strategy will serve, help to pinpoint specific area of development, marketing and environment my product will be deployed.

What: It's of a strategic importance to research, or knows what type of application is needed to provided solution for an identified problem.

Where: This is as important as any other functions in a new business development. Questions such as 'where' can my mobile application be used and deployed, is a must-do option in order to avoid hick-up of process along the way. Knowing where a product is most likely to be used, helps each phase of implementation processes.

Why: This is the core of the initial entrance into my business or product plan. Why is 2-WayCare app being developed? Why not continue to use other products out there? Why add 2-WayCare app to already saturated market of clinical mobile application devices? If there are no clear answers to the 'why' of a product development, the chances of success may be slim. Each steps of the 4-W's must be in a continuous harmonious process through the life span of my business strategy.

Competitive Advantage:

Unlike any new product in the market today, especially portable mobile application utilities, features that provide advance system delivery must be incorporated in order to show consumers

why migration to 2-WayCare App system is a necessity, compared to existing or similar products in the market today. Some of the readily available features of 2-WayCar App which I believed will place my business strategy on top of the competition includes but limited to:

- Shared responsibilities on patients as well as providers
- Provides a hassle-free mobile clinical follow-up care of post hospital patients
- Provides revenue opportunities to providers through higher premium reimbursements from insurance companies.
- Provides opportunities for providers to avoid extra cost related to treating patients who returned back after an initial in-patient discharge.
- The first known outpatient mobile application that provides instant and interactive patient follow-up and check-up in a clinical environment that is outside the main hospital or providers offices.
- The first and a top-tier mobile application device that provides patients a way to receive interactive therapeutic treatment on their Mobile phone, while at the comfort of their home.
- It's a maintenance-free clinical mobile application to both providers and patients.

Conclusion:

The cornerstone of a successful product lies in the purview of the problem the strategy is created to resolve. I have the utmost believe and trust in 2-WayCare to provide this missing niche. A flawless virtual link doctors and patients can easily communicate in clinical mobile environments, and to provide needed clinical guidance and care of post-hospital patients, while at the comfort of their homes.

The big picture is to provide clinical technology that is robust and secured, facilitate, or leverage existing ways of timely clinical feedbacks from post-hospital patients, and avoid cost of hospital re-admission and unnecessary emergency room visits. When fully implemented, 2-WayCare App will revolutionize virtual mobile communication in a clinical environment.

References:

- Frieden, J. (2012, October 10). Post-Hospital Choice Can Save Medicare Billions. Medical News and Free CME from MedPage Today. Retrieved March 18, 2013, from <http://www.medpagetoday.com/PublicHealthPolicy/Medicare/35255>
- Glaser, J., & Salzberg, C. (2011). In The strategic application of information technology in health care organizations (3rd Ed.)
- Mintzberg, H., Alhastrand, B., & Lampel, J. (2009). Strategy Safari: Your Complete Guide Through the Wilds of Strategic Management (2nd Ed.) United Kingdom: Saffron House
- Penner, S.J. (2004). Introduction to Health Care Economics & Financial Management. Fundamental Concepts With Practical Applications. Philadelphia, PA: Lippincott Williams & Wilkins.