## STRATEGIC ANALYSIS AND RECOMMENDATIONS FOR HEALTHCARE INSURANCE CRM SOLUTIONS

by

Firas Albazaz

and

Yuanhong (Nancy) Wei

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## **APPROVAL**

Name:	Firas Albazaz
Degree:	Master of Business Administration
Name:	Yuanhong (Nancy) Wei
Degree:	Master of Business Administration
Title of Project:	Strategic Analysis and Recommendations for Healthcare Insurance CRM Solutions
<b>Supervisory Committee:</b>	
	Jill Shepherd
	Associate Professor
	Faculty of Business Administration
	Simon Fraser University
	Mark Frein
	Adjunct Professor
	Faculty of Business Administration
	Simon Fraser University
Date Approved:	Dec. 6/04

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## **ABSTRACT**

Market forces are pushing the healthcare insurance industry to change business processes, reduce administration costs and work efficiently. The executives in the payer organizations have recognized that technology adoption is the key to achieving the above improvement. Pivotal Corporation (the company) has observed the huge business opportunities in the industry these changes represent and decided to vertically expand its CRM software solutions into this niche market; however the company is facing significant challenges by doing so.

We recommend the company strategically allocate its internal resources and employ its competencies vigilantly to develop and sustain its current competitive advantage, and provide the company with strategies to adopt TQM methodology to improve its healthcare CRM solutions and to successfully implement CRM software. Finally, we suggest that the company can continue its vertical integration effort, enhance implementation services, and adopt new market channels to achieve long-term success. We suggest the executive team should carefully manage the above changes.

## **DEDICATION**

To my loving wife and my family for their love, support and encouragement. Thank you for helping me finishes my MBA degree.

#### Firas Albazaz

This paper is dedicated to my parents who have raised and educated me for over twenty years.

They are also my good friends and mentors. Many thanks to my husband who is never tired of hearing from me and always supports me. I would like to share the joy with them that I have now successfully received the MBA degree.

Yuanhong (Nancy) Wei

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## 1 INTRODUCTION

#### 1.1 The Aim of the Introduction

The purpose of this chapter is to introduce Pivotal's history and background. This is followed by a review of the concept of CRM (Customer Relationship Management) and the challenges faced in applying this strategy. This chapter discusses the key elements and issues related to implementing a CRM solution for a health insurance provider. It also looks at the state of the health insurance industry in terms of economic and political growth and development. The chapter examines the demand of CRM in the health insurance industry. All of this background information leads finally to a statement of the project's aim and scope.

## 1.2 Structure of the Chapter

The chapter is structured in layers. It first reviews Pivotal's history and the strategic decision that the company took to enter the health insurance market. Next, it discusses the concept of CRM in general; what it means to the customer and how it can help improve overall business processes.

The chapter then examines CRM for the health insurance industry and what challenges face such implementation, followed by an analysis for the health insurance industry and the demand for CRM solutions in that industry.

## 1.3 CRM Made Simple

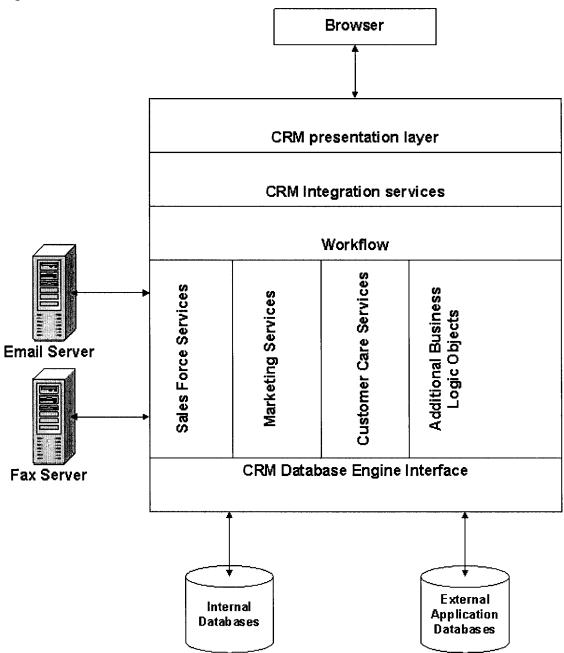
#### **1.3.1** What is CRM?

CRM stands for Customer Relationship Management. It is a business strategy used to learn more about customers' needs and behaviours in order to develop stronger relationships with them<sup>1</sup>. The main goal of CRM is for it to be used as an aid for businesses to integrate their operations and gain insight into the behaviour of customers and the value of those customers.

Companies have spent, or are about to spend, huge amounts of cash on Customer Relationship Management (CRM) systems. According to an October 2000 report by the Aberdeen Group, the CRM market totalled \$8 billion in 1999 and was forecast to grow to \$24 billion by 2003; data is not currently available to verify that forecast. Companies want to leverage technology to deliver better services in a more timely fashion than their competitors (see Figure 1).

<sup>&</sup>lt;sup>1</sup>Deck ,Stewart, "What is CRM?", CIO magazine, CIO CRM Research Center, May 01, 2001. Available from: http://www.cio.com/crm/edit/crmabc.html

Figure 1 - CRM Software Structure.



Many CRM implementations fail because businesses use CRM as a sales automation tool only. Those businesses continue to focus inwardly, emphasizing better management of their business at the expense of a better customer experience. A successful CRM implementation depends on understanding the new business culture and supporting its growth. The CRM solution should provide the sales representative with leads, order status, account history, information that draws them to the system and helps them sell more.

It is important to remember that the idea behind the CRM is to keep the focus on the company's customers. This can be accomplished by having a complete, unified view of the customer. This means taking all of the information that resides in various systems within the company and streaming it to make it easily accessible to each person that interacts with the customer.

CRM is a process that influences a new business culture focused on winning and keeping the right customers. A good implementation of a CRM solution should focus on improving the organization business processes by using the CRM technology, and reducing the time and the cost for these business processes. The CRM solution builds value for the organization by creating a common client-focused knowledge base.

### 1.4 Pivotal's Background

Pivotal Corporation was founded in 1994 in Vancouver BC. Pivotal develops customer relationship management software. The company operates in 35 countries and has more than 1700 customers worldwide<sup>2</sup>. In 1996 Pivotal released the first version of their CRM software and shipped it to 170 customers within the first year. The software won several awards. In the following year Pivotal continued developing the core CRM software and added a wireless

<sup>&</sup>lt;sup>2</sup> Pivotal Corporation. web site. http://www.pivotal.com

component and back-office integration. The company conducted a successful IPO in 1999 and the customer database expanded to 700 customers.

In 2000, Pivotal identified the Micro Vertical as a niche market. This market includes Homebuilders, Financial Services, Healthcare, and Life Sciences customized CRM products. Pivotal decided to enter the Micro Vertical market in order to expand their client base and become a leader in that niche market. Pivotal was one of the early movers into the Micro Vertical market segment. The company's vision for the Micro Vertical product is to develop a customized version of the CRM product that targets specific markets. Pivotal identified the health care insurance industry as a major industry for the Micro Vertical group products.

Pivotal estimated the Micro Vertical product sales to be 25% of their total product sales (see Figure 2). After marketing the Micro Vertical product, Pivotal found that the Micro Vertical sales reached 50% of their total sales (see Figure 3).

Specific To Industry (MicroVertical)

25%

25%

Common Across Industries (out-of-the-box)

Figure 2 - Pivotal Market Share Estimation for the Micro Vertical Sector

Source: Pivotal internal document, by permission

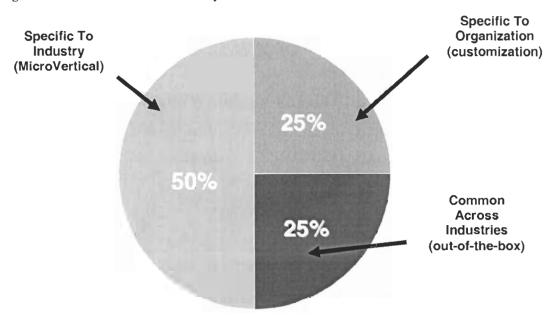


Figure 3 - Pivotal Market Share Reality for the Micro Vertical Sector

Source: Pivotal internal document, by permission.

#### 1.5 CRM for Health Insurance

The CRM solution is aimed at helping health insurance organizations prepare proposals and process applications in a faster and more accurate way, also helps the organization understand the needs and habits of its members and provide better services to their members in a more time efficient manner. By effectively integrating the operational, financial, marketing, sales and customer service functions, the CRM system aims to make it easier for everyone inside the organization to work together and share critical information. The idea of CRM is that it helps businesses use technology and human resources to gain insight into the behaviour of customers and the value of those customers.

The CRM solution for the health industry market should integrate the back-office operation with the front-office operation to increase organization efficiency. It should also integrate the multiple business channels and provide the clients and agents with easy 24 hour access from anywhere to the information they need. The solution can provide clients with personalized information, based on their needs and the level of their enrolment in the health insurance plan.

#### 1.5.1 Pivotal Healthcare CRM

Pivotal Healthcare is built to serve the demanding requirements of the healthcare insurance enterprise. It is a powerful and highly flexible application platform that provides a complete set of front office automation and external constituent enabling applications. Pivotal's aim is to deliver software and services that produce meaningful increases in revenues, profit margins and customer loyalty for healthcare insurance companies.

The Pivotal Healthcare Insurance Suite is a comprehensive front office solution that enables insurance organizations to streamline sales, marketing, underwriting, enrolment and renewal of individual and group health insurance plans. The product gives customers the ability

to serve and manage agents/brokers, members and employer groups with good efficiency and effectiveness.

#### 1.6 CRM Dilemma

An understanding of what CRM is and what it can do for an organization is the vital starting block for effective CRM implementation. Despite the hype surrounding CRM, many attempts to successfully adopt CRM have failed to produce the expected results and returns on investment. It is important to point out that such failures are by no means solely due to the software, hardware, solution or technology that runs CRM in the organization. There are many contributing factors for the CRM implementation failure; the most common ones of which we discuss below in the order in which they occur as CRM is implemented:

• Unrealistic expectations: CRM can not and will not automate the hard work of winning customers and keeping them. Many organizations fail to understand the concept of total customer relation management. Different departments understand CRM differently; for marketing it takes on a marketing hue, and for customer support it is different and so on. An enterprise-wide understanding of what CRM is and what it can do for that organization is the vital starting block for effective CRM implementation. In other words, CRM requires a shared business culture through the entire organization. The organization needs to focus on improving the business processes by taking advantages of the CRM software and not the other way around.

- Poor planning: Many organizations fail to spend the right amount of time and money planning for CRM implementation. Often the planning does not look very far into the future of the organization. The result is poor integration, limited benefit for the organization, and no opportunities to build on the solution. An effective CRM plan will assess requirements, processes, plan a pilot and phased adoption, look into the enterprise-wide CRM needs of the organization, and find ways for measuring returns.
- No employee buy-in: The true value of CRM applications is derived when senior management and employees are fully committed to the investment, because many management and organizational processes must be reengineered to support the strategy. Unless the employees understand the value of the customer-centricity and are involved in the CRM initiative from start to finish, the CRM solution will not be put to the use it was designed for. To achieve such buy-in, the starting point is with the top management. If they are seen to be endorsing the initiative, it is easier to obtain buy-in at lower levels. A successful CRM implementation strategy should take into consideration the employees' feedback, participation and representation at the planning, development and implementation phases.
- Lack of a customer-centric vision: True CRM means a company evolves into having a customer-centric focus rather than a product or service focus. Many organizations regard CRM as automation processes for the company's marketing, sales, support or call centre functions. The organization should organize itself around segments of customers rather than organize around what it sells, which means the implementation of CRM may require a substantial change in organizational culture.

All of the reasons for failure can be summed up into one root cause: the belief that the company can buy a Customer Relationship Management solution. In spite of all the marketing

hype, managing customer relationships is not a technological solution. It is a business culture with well-defined and implemented business processes, measurable business objectives, and an ability to quickly and efficiently adapt to the changing customer demands for products and services.<sup>3</sup>

Building a customer-centric enterprise takes time, planning, and a dedication to change at the front and back end of a company. Too often companies use CRM as a quick fix without putting in the required time and effort to ensure its success.

## 1.7 Business Opportunity: The Healthcare Insurance Industry

#### 1.7.1 State of the Healthcare Insurance Industry

Driven by the resurgence of run-away medical inflation, growing competitive, economic and political pressures, the healthcare industry continues to be in the midst of an unprecedented period of consolidation, realignment and restructuring. The regulatory pressures, the cost of doing business spiralling out of control, increased competition, and the increasing move to consumer-directed healthcare have all contributed to payers facing increasing difficulty in improving their profit margins. Meanwhile, market forces have pushed the healthcare industry to become more efficient and to provide higher levels of service to all of their key stakeholders.

Key stakeholders – employers, providers, agents, members, and new consumers – are demanding a level of integration and service that is unprecedented. They want payers to find ways to dramatically improve efficiency and service quality, and to better leverage information. They demand a better, faster connection to higher quality data, and want faster response times. However, payers confront many systematic obstacles to collaboration and sharing information with key stakeholders. As a result, most healthcare insurance companies suffer from

<sup>&</sup>lt;sup>3</sup> Hershey, Linda, "Why CRM Implementations Fail. What Part Don't You Understand?" Accessed October 2004 from: http://www.realmarket.com/required/lghcons1.pdf

organizational inefficiency, and the expensive and unfortunate consequence is a gradual breakdown of valuable stakeholder relationships.

Reconciling the paradox of increased demand for better service and increased pressure to reduce costs comes down to one thing: becoming smarter when it comes to integrating business, data and people, and doing it now.

#### 1.7.2 The Demand for CRM

The latest market and industry intelligence indicates increasing levels of demand within the healthcare industry for CRM systems to enhance relationships, create lasting competitive advantage and to leverage economies of scale across the "care chain" of patients, providers, payers and suppliers. With stakeholders demanding a care network, CRM has emerged as the Internet-powered tool that has the potential to clear these obstacles.

## 1.8 Project Aim and Scope

This paper provides research and analysis for Pivotal's healthcare insurance industry solution, which is aimed at promoting productivity and lowering operation costs of the industry. The paper starts by reviewing the external forces that impact the healthcare insurance industry in U.S. Following this, an inspection of its business processes which identifies the weaknesses that lead to the demand of CRM healthcare product is provided. In addition, a review of the future strategic path for Pivotal CRM health insurance product is provided. The company's core competences to delivery the product, and thus survive in the competitive market are also examined. Finally, the paper analyzes the health insurance market in terms of the current paper based business processes, with a comparison to the potential CRM business processes. The comparison helps identify the benefits and the savings that could occur by implementing the CRM solution. In conclusion we focus on how the health insurance payer can reduce the number

of paper touches in the health insurance application approval and renewal processes by implementing the CRM solution.

The scope of the project is large: we cover the external analysis of the healthcare insurance industry, the external analysis of the CRM software industry and the internal analysis of Pivotal Corporation to provide a comprehensive report.

## 2 EXTERNAL ANALYSIS

### 2.1 Introduction

#### 2.1.1 The aim of External Analysis

Having introduced the market and company in the previous chapter, an analysis of the macro-environment surrounding the healthcare insurance industry is presented. The changing environments of both the evolution of the CRM industry and the transformation in healthcare insurance industry increase the complication of analysis. As well, because the analysis involves two industries, the overlapping area has to be elaborately constructed. These factors increase the value of conducting an external analysis before the business process analysis that is addressed in the next chapter.

The aim of this chapter is to discuss the key external forces and issues that the company must consider in its effort to build a successful CRM healthcare product in the competitive market. This chapter focuses on identifying the changing issues both in the CRM software industry and in the U.S. healthcare insurance industry. The basic thesis is that many industries and sectors are now characterized by a rapid pace of change to the extent that competitive advantage on one particular basis will not last for any significant period of time. It is therefore essential to continuously strive to find new bases for competing.

#### 2.1.2 Structure of the Chapter

The chapter is structured in three dimensions. It historically reviews the trends in the CRM software industry and explains the reason for expansion into the healthcare insurance industry. Next it discusses the macro-environmental influences on the healthcare insurance

industry and the strategic issues faced when striving toward an unstable market with the aim of succeeding long-term. Finally, the chapter analyzes the competitive environment of CRM healthcare insurance products. It concludes that in order to keep up with the fast changing pace in the healthcare industry and to gain the lasting competitive advantage in the market, the company should continuously understand customer's needs and improve their CRM software products.

### 2.2 The Trends in CRM Software Industry

### 2.2.1 CRM Software Industry Evolution

At the early stage, the computer based information technology system was adopted for inventory control. Then the system became highly computer based and was developed to manage the logistics and operation of companies such as inventory management, and purchasing, which was known as MRP (Materials Requirement Planning). Subsequently, MRP II (Manufacturing Resource Planning) and ERP (Enterprise Resource Planning) were developed to extend the impact of MRP. They expanded to include almost all back end functions including accounting, human resources, supply chain management and became more sophisticated.

Rather than automated back end functions like MRP and ERP, CRM systems provide IT solutions to front-end functions. At the beginning, CRM evolved from the Sales Force Automation (SFA) market, which was in turn born out of contact management. Contact management gave sales people a place to keep information about their prospects; such as addresses and phone numbers. A way to keep track of conversations with these prospects and a way to set reminders for follow-ups was also required. By integrating all of this information with their personal calendars, sales people could manage their time and customer interactions more efficiently.

The first stage of CRM systems focused on separating departments' needs. These CRM systems addressed the needs of isolated departments such as the marketing department, sales and

service, tech support, or the call centre. One system would extract a list of customer names for direct mail purposes, whereas another would focus on collecting customer information for marketing initiatives. Yet a third system would provide case management to the technical support team or call centre personnel.

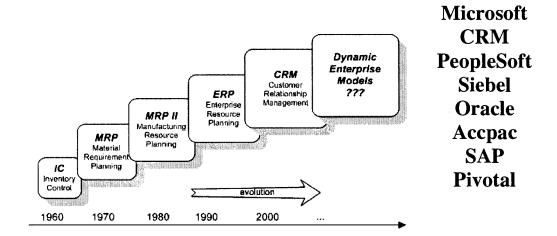
The second stage in the development of CRM supported integration of all customer information for a complete 360-degree view of the customer and all customer interactions. This stage included e-commerce systems development, enabling customers to serve themselves through the company web site. These developments opened new opportunities for collecting customer information.<sup>4</sup>

The next step in e-CRM systems integrated customer-facing applications (Web, customer support, and so forth) with the back-end systems that run the business (ERP, supply-chain management, and so forth) (see Figure 4).

<sup>&</sup>lt;sup>4</sup> Brown, Laura,& Gravely, John, "The CRM Landscape: Why Now", Nov 7, 2003. Available from: http://www.informit.com/articles/article.asp?p=101739

**Figure 4 - CRM System Evolution** 

## CRM – the systems evolution



#### 2.2.2 The Trend to Vertical Integration

Customer Relationship Management vendors are launching industry-specific (vertical) suites that let companies deploy the software faster than generic packages, and without as much costly customization work.

Pivotal Corp. sells specific CRM products for Financial Services, Healthcare, Home Builders and Life Sciences. Customers of generic CRM suites typically spend at least four months customizing 25% to 30% of the functionality; those who buy vertical suites spend about two months customizing 10% to 15% of the applications, according to Pivotal's previous CEO Bo Manning.

A software package that is vertically tuned to a specific industry generally delivers greater benefits, specifically more efficiently at a lower cost. Vertical Integration products help companies save money on customizing the CRM product, making an already customized CRM product more affordable to implement. Pivotal designed its Healthcare product to deliver the majority of what the consumer needs in an out-of-box format, specially designed for the healthcare insurance industry, while providing the consumers with the ability to customize the product at a lower cost.

The generic CRM package did not adequately deal with the consumers' needs. However, for example, the product does not allow the underwriters to generate contracts, while the Healthcare Vertical product allows the consumer to generate contracts and provide them with the required tools to manage their business. This example shows how difficult it is to manage the tension between customization and knowing what to customize and the cost of provision.

#### 2.2.3 The Expansion to Healthcare Insurance Industry

Several CRM software companies entered the Healthcare insurance CRM product market, each aiming at acquiring a bigger share of that niche market. The vision for the CRM Healthcare products is to enable the group and individual health insurance providers to attract, retain, and service members with superior speed and efficiency. This is achieved by providing leading edge solutions that deliver personalized experiences across every touch point in real-time, while managing collaborative relationships between employer groups, members, agents/brokers, and employees and guiding intelligent transactions across multiple distribution channels.

## 2.3 Healthcare Insurance Industry Analysis

#### 2.3.1 The Industry Overview

According to reports in Euromonitor<sup>5</sup>, the healthcare insurance market in the US grew 1.9% from US\$63.1 billion in 2001 to US\$64.3 billion in 2002. Medical/hospital insurance remained the largest sector in the healthcare insurance market, accounting for 78.1% of the total market value in 2002. The US healthcare insurance market remained fragmented, with the five largest companies in the market accounting for only 34.9% of the total market value in 2002. Over the review period, the healthcare insurance market experienced further consolidation as large companies acquired smaller companies in an attempt to achieve higher sales and greater market share.

The healthcare insurance industry is feeling the strain of increased competition, demanding customers, rising medical costs, and new governmental regulations, including Health Insurance Portability and Accountability Act (HIPAA). In this difficult economic climate, the rising costs of health care have caused frustration for payers, providers, and payees, with the contact centre often bearing the brunt of this frustration. Payers must find a way to service customers and handle their claims quickly and accurately, in the most cost-effective manner possible. To keep costs down, payers are looking for operational efficiencies in customer care and their claims processing operations. Unfortunately, several initiatives, including "one and done" efforts to reduce repeat contacts, have often had negligible or even negative impact on call volumes.

In order to analyze this changing and complex industry, a PESTEL analysis is used below as it is a simple way of developing a comprehensive but structured overview of a business sector.

<sup>&</sup>lt;sup>5</sup> Euromonitor International, "Healthcare Insurance in USA", October 2004. Available from: http://www.euromonitor.com/Healthcare\_insurance\_in\_USA\_(mmp)

### 2.3.2 Macro-environmental Influences – the PESTEL Analysis

We categorize environmental influences into five main types based on the PESTEL framework: political, economic, social, technological and legal. The analysis provides a summary of key forces at work within healthcare insurance industry at the level of the macro-environment.

#### 2.3.2.1 Political

The increase in overall health care costs has propelled this issue to the front of the 2004 political campaign. A report from News Batch<sup>6</sup> discovered that health care costs are now approaching 15% of the American economy. Most American families have sensed this economic reflection since employers are increasingly unwilling to absorb the bulk of this increase. Health insurance costs have doubled in the last several years and are escalating at a rate even greater than the cost of health care. Overall national health care costs are likely to increase even further with the implementation of Medicare prescription drug coverage. The report also indicates that publicly funded medical care in the U.S., which serves only about a quarter of Americans, is equal to the cost of public systems in Europe that covers everyone.

In the recent U.S. election, health care reform was a hot topic frequently debated by the major candidates. In the campaign, the winner President Bush, pledges to address the health cost crisis through a variety of measures such as providing for tax deductions for health savings accounts premiums, medical malpractice reform, expanding Medicaid, and tax credits for the purchase of insurance for those not covered under an employer's plan. If Bush implements these health care proposals, the impact on health care industry will be significant. The health care reform will provide huge opportunities for the healthcare insurance industry as well as bringing more challenges to lower costs and increase efficiency to the industry in next few years.

<sup>6</sup> News Batch, "Health Care Policy Issues", September 2004. Available from: http://www.newsbatch.com/healthcare.htm

#### 2.3.2.2 Socio-cultural Factors

The report from Catholic Health East<sup>7</sup> indicates that in the remainder of the decade, two demographic factors will greatly impact the demand for health services and healthcare insurance; the swelling of the elderly and upper-middle age population and the anticipated international immigration. By 2010, baby boomers will be clogging the health care system and government resources will be stretched thinly. In the U.S., health care spending is expected to consume 17% of the Gross Domestic Product, up from 8.9% in 1980, 12.2% in 1990 and 13.1% in2000. In addition, the nation's population is expected to grow by nearly 10% (~25 million people) due to the influx of international immigrants. The increasing population will expect to expand the healthcare insurance market.

#### 2.3.2.3 Economic Factors

The report also discusses the economic issues as follows: the U.S. gross domestic product increased from \$8.3 trillion in 1997 to more than \$9.9 trillion in 2000; the percentage increase overall was less than the percentage increase in medical care expenses; the medical care CPI in 2000 was 260.8 compared to 167.3 for all other items excluding medical care. The latest indicators (August 1) suggest that the economic recovery, that seemed to be picking up steam in the first quarter, slowed during the second quarter and economists warn of a "double-dip" recession, especially if consumer spending starts to wane.

Health care cost inflation is at a ten-year high. Employers and the U.S. government have borne the brunt of rising health care costs. Studies indicate that health insurance premiums continue to rise at a faster rate than medical costs, with almost a 4.5% gap in 2000. Overall, employers reported average premium increases from 2000 to 2001 of approximately 10.2% and

<sup>&</sup>lt;sup>7</sup> Strategy Development Department in Catholic Health East, "Healthcare Strategic Environment Scan 2003", October, 2002. Available from: http://www.che.org/publications/pdf/Environmental-Scan-2003.pdf

between 2001 and 2002 of 15.6%. Caught between shrinking margins and rising health care costs, employers will once again accelerate the adoption of higher cost-sharing benefit plans.

#### 2.3.2.4 Technological

Revolutions in IT infrastructure and solutions enable the healthcare insurance industry to embrace technologies to change their way of doing business, thus improving their competitive advantage. IT infrastructure can integrate existing disparate sources of information, connect different branches and offices, and provide easy and consistent access via an intranet, extranet, internet, or even wireless devices. In addition, more and more Software vendors are providing specific technological solutions for the industry, such as CRM, Content Management, and Business Intelligent solution, which very specifically cater to their needs.

Meanwhile, market forces are pushing the healthcare industry to become more efficient, to lower costs and to provide excellent levels of customer service. This has resulted in vertical integration among healthcare organizations, physicians, hospitals, home care, labs, imaging centres and health plans. The collaboration requires technologies to support intensive transorganizational business processes across healthcare insurance organizations. These major market forces ensure that the Internet will be integrated into the U.S. healthcare insurance system. In response to market forces and the demands of consumers, competitive healthcare insurance organizations will increasingly use the above IT infrastructure and solutions to promote their services, improve their operations, and meet demands for greater choice and broader access to information.

#### 2.3.2.5 Legal

In August 1996, the U.S. Congress reached a milestone by enacting the HIPAA, Public Law 104-1918. The goals of HIPAA are to improve elements of the healthcare system in the U.S. and included:

- Improved portability and continuity of health insurance coverage.
- Administrative simplification across the healthcare industry to improve its efficiency and effectiveness.
- Prevention of waste and abuse in health insurance and health care delivery.
- Promotion of medical savings accounts.
- And increased access to long-term care services and coverage.

HIPAA requires companies to comply with a variety of regulations related to standardization, security, and privacy. In effect, HIPAA is forcing a re-engineering of claims-related business processes on the industry. The electronic commerce initiatives of healthcare providers and payers would strive to comply with IT requirements of HIPAA. There is much more than meets the eye in meeting the requirements of HIPAA. While all of health care organizations have to comply with the regulation, they will increasingly need IT solutions to satisfy customer's needs and improve their competitive advantage.

#### 2.3.2.6 The Structural Drivers of Technology Adoption

From the above PESTEL analysis, some implications of relevance to healthcare insurance industry can be generated. All forces from different directions are pushing the industry to adopt new technology and to change its business processes (see Figure 6). More details follow:

<sup>&</sup>lt;sup>8</sup> Health Insurance Portability and Accountability Advisory, "HIPAA Primer". Accessed October 2004 from: http://www.hipaadvisory.com/regs/HIPAAprimer.htm

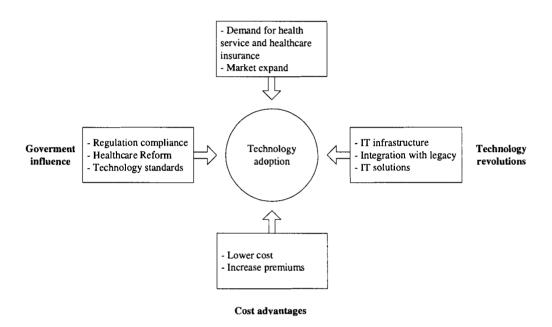
- Government influences play major roles in the industry change. Through release of the regulation, HIPAA, the government set the deadlines and requirements to standardize transactions and data by using technologies. Moreover, the American presidential election will accelerate healthcare reform. All the above political issues will provide huge opportunities for healthcare insurance companies. But the opportunities will be realised through lower costs and increased efficiency, which can be achieved by using well-designed technologies and strategies.
- There is increasing demand for healthcare insurance service because the population that needs insurance services is increasing. However, the current inefficiencies and legacy systems afflicts the industry. While the market is expanding and the number of claims is increasing, the companies that have not implemented proper technology solutions will suffer from a losing market share and competitive advantage.
- Technology adoption will bring obvious cost advantages if implemented in a thoughtful manner. By adopting new technology infrastructures and solutions, the insurance companies should be able to eliminate touch points, increase response time, and thus lower associated costs. After improved response times have been established, insurers might be able to raise premiums for specific customers and products, to increase profit margins.
- The rapid revolution in the information technology industry provides the possibility of technological adoption by insurance companies. The speed of advancement of technology speeds up adoption increasing the chances of a successful implementation.

As a consequence, executives in healthcare insurance companies regard technology adoption as an organizational strategy aimed at succeeding in the market rather than merely a

technology strategy. In the following chapters the industry's response to these environmental forces and insights into the industry transformation are discussed.

Figure 5 - The Structure Divers of Technology Adoption

#### Poplulation increase



### 2.3.3 The Healthcare Insurance Industry Transformation

#### 2.3.3.1 The Needs for Process and Technology Transformation

As a transaction-intensive industry, health insurance has benefited, and will continue to benefit, from the efficiencies that technology brings to traditionally paper-driven processes. Inefficiencies plague health insurance according the statistical data available, owing largely to the absence of standardized processes across the industry. Many industry experts comment that the health insurance industry needs to follow the example of the banking industry to make the transition from one insurance carrier to another as easy for a doctor as going from one ATM to another is for a banking customer. To achieve this, industry leaders need to establish standards

and invest in initiatives to help their healthcare partner transition to the next generation of healthcare technology.

#### 2.3.3.2 Transformation Trends

Technology occupies an increasingly important part of organizational strategies. This trend stems from the current state of the macro-environment and its impact on the insurance sector; specifically the vulnerable position of specific insurance segments, increased competition, as well as opportunities created both by political issues and by recent technological improvements.

Streaming the claims processing and hence improving overall efficiency is particularly vital. The Insurance industry loss adjustment expenses (LAE) climbed from 12.1% of premiums in 1995 to 14.1% in 1999, according to Forrester Research Inc. The research and consulting firm also reports that 48% of carriers surveyed said it took at least three weeks to process an insurance claim. Forty six percent of the surveyed companies identified technology implementation as the option available with the greatest potential to reduce costs.

Achieving differentiation in an increasingly competitive environment has become an imperative for many companies. Information used by companies in their highly analytical processes, primarily aimed at understanding risk exposures, evaluation of claims, and underwriting selection, plays an extremely important role in achieving differentiation. Well-designed technology-oriented strategies can increase companies' potential for acquiring faster and higher-quality data information.

<sup>&</sup>lt;sup>9</sup> Xhabrahimi, Mirjan, "Insurance Technology on the Front Burner", MIB Group Inc., October 2004. Available from: http://www.mib.com/kd/html/Insurance\_Tech.html

#### 2.3.4 The Strategy for success

#### 2.3.4.1 The Demand for CRM

As previously discussed, while market forces are pushing the healthcare insurance organizations to adopt technologies, the industry is transforming from a paper-driven process industry to a technology-oriented process industry. When executives made the decisions to design their IT systems in the past, they should have recognized that those IT solutions could only promote efficiency and provide electronic processes. They could not meet all their requirements in the competitive market place in the long term. In practice, they require IT solutions, not only to improve the efficiency by streamlining the business processes and standardizing the data model, but also to differentiate business strategies, and even to provide sustainable benefits in the long term.

CRM software solutions have come to be known as potential differentiators. CRM vendors differentiate themselves by balancing customization versus lower developing cost, and by providing different implementation services and change management. They increase customer loyalty by building a sustainable customer relationship over the long run, as well acting as IT strategies that stimulate the redesign of business processes. The demand for CRM software in the healthcare insurance industry presents huge opportunities to CRM vendors. To meet the demands in the healthcare insurance industry, almost all CRM software vendors have created vertical integration solutions for the industry.

#### 2.3.4.2 CRM Benefits

Healthcare CRM solutions enable healthcare organizations to successfully manage member, provider, employer group, and agent/broker relationships throughout their entire life cycle and across all touch points. CRM offers all health insurance functionalities that enable efficient business processes, and guides intelligent transactions across multiple distribution

channels. In addition, CRM solutions integrate all constituents with legacy system and networks. The insurance companies can succeed with CRM by defining a customer-centric strategy, using appropriate metrics, ensuring the organization is aligned with its objectives, redesigning processes as needed, and using appropriate technological tools as enablers.

#### 2.3.4.3 The Barriers for Adoption

Although the benefits of CRM are obvious and some healthcare insurance organizations have successfully adopted CRM, there are barriers that discourage some organizations from adopting the technology. The most common barriers are implementation, and the nature of the business. In addition, other concerns like security issues bring difficulties to adoption.

Many healthcare insurance organizations see CRM strategies as technology solutions.

One of the most common barriers is implementation. Some healthcare insurance organizations do not implement adequate strategies because they do not identify their customers, do not segment their needs, and thus do not serve their customers in the most effective and efficient manner possible. This is usually because these organizations do not have the right mix of professionals who can relate to healthcare management as a profit-making enterprise and as a health insurer. They either implement CRM without the right kind of IT professionals, or they do not properly train their existing IT professionals to understand the new CRM system adequately.

• The insurance industry is very accustomed to paper-based work and has old legacy systems, some of them over twenty years old. The nature of the industry more easily accommodates accumulated changes than revolutions. The resistance to change management stems not only from employees but also from the executives. For example, one executive of the company's client said that they would not like to cut their sales force after having implemented CRM system, since they saw them as their organizational force.

Although the above barriers may slow down the speed of technology adoption, the increasing demand from insurance organizations to lower costs, to perform task more efficiently, and to boost profit margins, will ultimately force these organizations to overcome adoption barriers. Indeed, insurance companies have learned to carefully select and implement proper CRM systems to minimize the risks of technology adoption and the expense of IT, which further increases the competition in the healthcare insurance CRM market.

# 2.4 Competitive Analysis for CRM Healthcare Insurance Products

# 2.4.1 Sources of Competition – The Five Forces Analysis

The state of competition in the health insurance CRM market depends on five forces: threat of entry, rivalry, threat of substitutes and the bargaining power of suppliers and buyers (Porter). Their collective strength shapes the growth and profit potential in the industry. What follows is such an analysis.

# 2.4.1.1 Threat of Entry

Industries that show higher than average profits and growth attract more suppliers, unless there are barriers against entry. The current barriers in the CRM market industry include the ability to integrate the CRM software with the back-office production software, and to offer a

complete suite of business operation such as the Microsoft CRM and database product that includes a CRM product, which allows the client to integrate all their operations easily and in one database.

Pricing is also another barrier to entry. Vendors that have achieved economies of scale are able to keep the price low, which makes it harder for new players to match the price. The high switching cost creates a big barrier for the new CRM vendors to acquire clients who already use CRM software, the CRM application integrates with back-office data and legacy software, which makes it harder for consumers to switch to new CRM products. The high switching cost includes the cost of buying the new software, customization, converting the data and training employees to use the new software.

#### 2.4.1.2 Threat of Substitutes

The threat of substitutes is high. There are many CRM products on offer. Buyers can easily access information and reviews about these products on the Internet. Consumers have the option to lease CRM software on the Internet and pay a monthly fee, reducing the cost of implementing the CRM solution for the consumers, but without the flexibility the customization of CRM software can provide. Large corporations may not be able to take advantage of this new service because of the delay that occurs in processing time when operating through the Internet.

# 2.4.1.3 Bargaining Power of Suppliers

The CRM market is served by many suppliers making it competitive. For small and medium sized vendors in the CRM industry, strategic partnerships are an integral part of business. The CRM software integrates with many operations and database systems creating the need for partnership. Pivotal has strategic alliances with Microsoft that supplies the Windows technology and the database that Pivotal CRM software integrates with. Obviously, Microsoft's power in the software market encourages Pivotal to try to maintain a very strong relationship with Microsoft.

# 2.4.1.4 Bargaining Power of Buyers

The buyers in the CRM market are fragmented in terms of geographical location, industrial and demographic sectors. Today's technology allows software companies to market their products around the globe. Buyers shop for CRM applications that can integrate with their operations and back-office systems. Buyers are looking for CRM solutions that can fit their industry needs and can be used with little customization, so the buyer can reduce the cost of implementing a CRM solution. The small size buyers can switch from one CRM solution to another with less complication because of the low cost of implementing CRM solutions for the small size companies; while, for large sized buyers, the cost of CRM implementation is higher, making it harder for them to switch to another CRM solution.

#### 2.4.2 The Market

Healthcare payer organizations (payers) are actively pursuing and implementing tactical solutions for Customer Relationship Management (CRM). Payers must determine what cultural and structural changes are needed to gain benefits from organizational collaboration to deliver a CRM strategy. CRM leaders change the culture, behaviour and structure of the enterprise to focus on the needs of the customer. Only a program of managed change that builds the internal organization into a force of collaboration across all departments will transform an enterprise and build a customer-centric culture.

The healthcare payer CRM market is still underdeveloped in comparison with other industries. The complexity of payer relationships with their customers, combined with a fragmented CRM vendor landscape, has resulted in a slow rate of adoption. The CRM market that supports the full customer enrolment, renewal and claim cycle is in a high-growth market stage for healthcare payers. This stage is characterized by prevalent market perception, accelerated growth, new competitors, and transitional market share. With only a handful of vendors just a few

years ago, the market is now inundated with many small niche players and large CRM suite vendors (see Table 1)

Payers can find CRM offerings from purely niche CRM vendors that have domain expertise and depth of healthcare functionality, or from large CRM suite vendors that have a much broader strategy and include functionality for all three CRM business processes - sales, marketing and customer service.

Most of the vendors have products that support small employer groups, large employer groups and individual products. With the exception of PeopleSoft (which only supports large-group products), all other vendors indicate that they support small- and large-group products. The key area of focus is currently on the ability to support individual products. With the significant cost pressure placed on payers, greater power is being placed in the hands of the healthcare consumer.

The bottom line is that healthcare payer organizations will focus on optimizing sales business processes for brokers, consumers, and small and large employer groups. However, payers will find it more difficult identifying and selecting technology-enabled selling vendors that meet their current and future business needs. The market for CRM capabilities remains fragmented, with many vendors offering varying levels of functionality. Payers must identify short-term tactical decisions and long-term strategies to reflect the CRM vendor landscape.

Table 1 - Representative CRM Suite Vendors Offering Healthcare CRM Product

Vendor	Product	
Customer Potential Marketing (CPM)	DSS Workbench	
Group		
E.piphany	E.piphany E.6	
Onyx Software	Onyx Enterprise CRM	
Oracle	Oracle E-Business Suite	
Pegasystems	PegaHEALTH Customer Process	
	Manager Suite	
PeopleSoft	PeopleSoft Enterprise CRM	
Pivotal	Pivotal Healthcare	
Siebel Systems	Siebel Marketing Enterprise	

Source: Gartner Research (July 2004), by permission

# 2.4.3 Competitor Analysis

The CRM industry is highly competitive: there are many big players in the CRM market. Pivotal's competition in the mid-market division comes from several vendors competing in that market. Table 2, lists some of those vendors that compete with Pivotal. The vendors listed in the table offer integrated CRM software applications, as well as other products or services. The CRM industry is a high growth industry that continues to grow every year. To be able to compete in this market Pivotal needs to frequently study their competitors' CRM products.

Figure 7, compares several CRM vendors based on functionality and the price per seat for the CRM software.

Table 2 - CRM Vendors Comparison

Vendor	Vendor Overall Rating	CRM Application Type
E.piphany	Promising	CRM suite
Microsoft CRM	Promising	CRM suite (small business)
Onyx Software	Promising	CRM suite (mid-market
		business)
Oracle	Promising	CRM suite
Pivotal	Promising	CRM suite (mid-market
		business)
Salesforce.com	Promising	CRM suite
SAP	Promising	CRM suite
Siebel Systems	Positive	CRM suite
Synygy	Positive	Incentive and compensation
		management

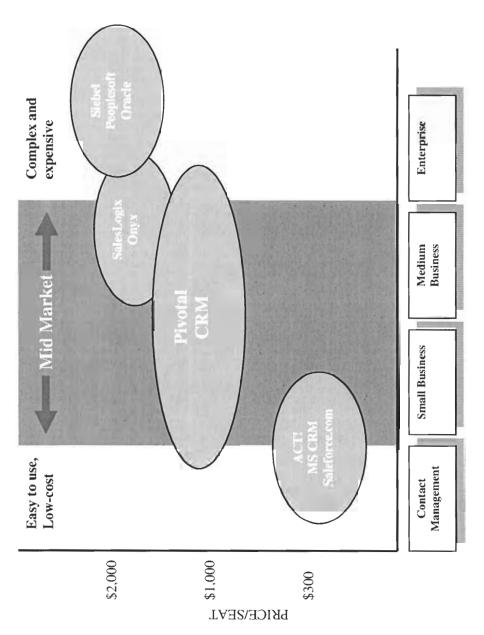
Source: Gartner Research (June 2004), by permission

Vendors with a clear focus, solid products and an advantageous market position are rated "positive" or "strong positive".

Vendors or product lines that lack these qualities are rated "caution" or "strong negative."

Vendors that have potential will be rated "promising."

Figure 6 - Pivotal CRM Product Positioning



FUNCTIONALITY

Overall the CRM market is maturing. Vendors are entering more difficult sectors such as healthcare insurance, so the healthcare CRM market is crowded. In this chapter, we review the situation in two industries, the CRM software industry and the healthcare insurance industry and discuss the area of overlap, the healthcare CRM market. We conclude that the transformation experienced in the healthcare insurance industry brings huge opportunities to CRM software vendors, but it is not easy to take advantages of these opportunities as more and more vendors are entering the market and wanting to expand their market shares. CRM vendors require a better understanding of the healthcare insurance industry and customers' needs if they are to compete successfully and in partnership with their customers. In the next chapter, the healthcare insurance industry in terms of it corporate and business processes is analyzed in more detail.

# 3 HEALTHCARE INSURANCE MARKET AND BUSINESS PROCESSES

## 3.1 Introduction

## 3.1.1 The Aim of the Chapter

In this chapter, the healthcare insurance industry is reviewed at a deeper level, in terms of market and business processes. The purpose of doing so is to understand how value is associated with the business processes. In turn, this allows for a better understanding of how a CRM solution could generate a satisfactory return on investment for healthcare insurance companies. In addition, through the business processes analysis and the SWOT analysis, major strategic issues facing healthcare insurance companies, which need to be managed by these companies in order to ensure performance improvement, are discovered. The general aim of the chapter is to present the current status of the healthcare industry in terms of what is required to improve operational performance. This detailed analysis, together with the more general analysis of chapter 2 serves as a cornerstone for the next chapter in which we assess the capability of the company to satisfy these requirements.

## 3.1.2 The Chapter Structure

Rather than looking at the industry as a whole, as in last chapter, here we vertically develop the chapter structure from the healthcare insurance market including the care chain, products, customers and market competition to business processes and to touch points (every time an employee touch or process the application is considered as a touch point) within processes. In the touch point sector, several key factors associated with processes and touches are mentioned, such as response time and cost. Based on the above analysis, the whole picture is looked at by

analyzing the strengths, weaknesses, opportunities and threats for healthcare insurance companies on the basis Pivotal needs not purely to market to insurance providers but to partner with them. Finally a list of issues which need to be managed and hence could form a source of advantage for a CRM supplier is generated.

# 3.2 Healthcare Insurance Market

The latest market research indicates increasing levels of demand within the healthcare industry for CRM systems to improve customers' relationships and create lasting competitive advantage. Driven by growing competitive economic and political pressure, the healthcare industry continues to push for finding ways to reduce costs and restructure the business processes. The market is pushing the healthcare industry to become more efficient and to provide better customer service. This situation has created new healthcare organizations that contain physicians, hospitals, labs, imaging centres and health plans.

#### 3.2.1 The Care Chain – Market Sectors and Working Mechanism

The North American healthcare vertical market sector is comprised of a group of constituents linking consumers, provider organizations, payers, and suppliers into a "Care Chain". The sectors roughly comprise the following:

# 3.2.1.1 Payer Sector

This includes organizations involved in one or more of the following activities related to individual and/or group health insurance benefits: Marketing, Sales, Underwriting, Enrolment, Administration, Customer Service, Broker Relations, and Provider Relations. These may include Insurance Companies, Third Party Administrators (TPA), Independent Insurance Agencies & their Agents.

#### 3.2.1.2 Provider Sector

This includes Integrated Delivery Systems (IDS), Health Maintenance Organizations (HMO), Preferred Provider Organizations (PPO), Independent Practice Associations (IPA), Physician Hospital Organizations (PHO), Management Service Organizations (MSO), Hospitals, Ambulatory Care Centers, Extended Care Facilities, Home Healthcare Agencies, Group Medical Practices, and Medical Clinics.

#### 3.2.1.3 Consumer Sector

- Employers / Consumers using applications purchased from the business unit for interaction with other "care chain" constituents (Providers, Payers, Suppliers).
- State/Federal/County Government using applications purchased from the business unit for interaction with other "care chain" constituents (Providers, Payers, Suppliers).

## 3.2.1.4 Supplier Sector

- Healthcare Information Technology SW Developers
- Pharmaceutical Companies / Biomedical Engineering Companies
- Clinical Services / Diagnostics Labs Imaging Centres

A consumer contracts with a healthcare insurance company for the purpose of obtaining health insurance. The insurance company covers the cost of doctor visits, hospital care, prescription drugs, etc. as outlined in the insurance policy or contract.

In the healthcare insurance business, the payers are the organizations that market and sell insurance coverage and then administer and pay the claims that arise during the coverage period.

A consumer who has purchased healthcare insurance is considered a "Member" of the healthcare plan for which he or she has paid.

The marketplace can be summarized in the following way: payers sell healthcare insurance plans that are detailed in a benefit booklet given to the consumer, along with an ID card that is used by the consumer to receive service from healthcare professionals.

#### 3.2.2 Product Lines

In addition to selecting a specific coverage, a consumer typically chooses a "Product Line", which defines what form the coverage will take. There are two types of healthcare insurance available.

## Traditional

A consumer becomes a member of a plan and then visits any doctor or hospital to receive services covered under the plan. The member pays for the service rendered and then submits a medical claim form completed by the doctor or specialist to the payer. The payer determines which services or percentages of services are covered under the plan and then reimburse the member accordingly. Due to higher administration costs, the premiums are higher than managed care, which is explained below.

## Managed

Managed Care is characterized by a number of features designed to control the costs of healthcare. This is done primarily by defining a fixed "Network" of providers and facilities to which a member can go in order to receive healthcare services.

Managed care plans fall into 3 basic types:

#### **Health Maintenance Organizations (HMOs)**

HMO members pay a fixed monthly fee, regardless of how much medical care is needed in a time period, in return for this fee, most HMOs provide a wide variety of medical services,

from office visits to hospitalization and surgery. There are exceptions, but most HMO members must receive their medical treatment from those within the network.

#### **Preferred Provider Organizations (PPOs)**

A PPO is made up of doctors and or hospitals that provide medical service only to a specific group. Rather than prepaying for medical care, PPO members pay for services per use. The PPO sponsor usually reimburses the member for the cost of the treatment, minus any copayment fee. In some cases, the doctor may submit the bill directly to the insurance company for payment. The insurer then pays the covered amount directly to the health care provider, and the member pays his or her co-payment amount. The price for each type of service is negotiated in advance by the health care providers and the PPO sponsor(s). <sup>10</sup>

#### Point of Service (POS) plans

A point of service plan is a type of system where no deductible is payable and usually only a small co-payment is incurred when a health care provider within the network is used .A primary care physician who is responsible for all referrals within the POS network must be chosen. If the choice is made to go outside of the network for health care, the patient is likely to be subject to a deductible, and the co-payment is a percentage of the physicians' charges.

#### 3.2.3 The Healthcare Insurance Customers

The majority of consumers in North America are covered under Group Insurance plans.

These are plans in which employers pay for and control employees' choice of healthcare insurance. If the employee wants healthcare coverage paid for by their employer they must accept the plan that is offered. This model is expanding, however, to include employers contracting for multiple types of plans from the same payer, or perhaps providing different plans from different payers, thus offering more choices to their employees. These choices may include employer driven provisions such as having medical coverage paid for by the employer, while optional

<sup>&</sup>lt;sup>10</sup> About Managed Care Health Insurance. Accessed October 2004 from: http://www.insurancefinder.com/healthinsurance/managedcare.html

coverage such as prescription drugs, dental, & vision coverage is available only if the employee covers part, or all, of the premium.

# 3.3 Business Process Analysis

A deeper look at the healthcare business process to see what value the organizations are offered by implementing CRM solutions is now taken.

## 3.3.1 The Health Insurance Business Process Overview

The processes and complexities involved in selling healthcare insurance for small or large groups are usually different. Healthcare insurance contracts typically run for a period of one year and have to be renewed annually. This allows the payer to adjust premium rates based on changes in costs and, where applicable, the claims experience of the group.

There are three different types of sales events:

## **New Business**

Defined as any quote requested by a prospective customer that does not currently have coverage with the payer.

#### Renewal

Defined as the annual re-rating of group contracts. All groups are presented with renewal rates and can alter coverage at this time.

# **Off-Cycle Benefit Change**

Defined as any changes to an existing customer's contracted benefits during the term of a contract.

There are two key steps to completing the sale of healthcare insurance to a group. First, there must be negotiation between the insurance sales person and the group's management or HR department to determine what plan(s) they will make available to the employees of their

company. This does not, however, generate any revenue for the payer, since there is not yet any membership in the plan. It is the number of members in the plan multiplied by the premium rates that determine the monthly premium for the group. Getting the company to agree on the plan structure can be considered the "wholesale" part of the sale.

The next step in the sales process involves the sales rep presenting, to the employees at the group, the benefits and the structure of the plan, and then convincing them to enrol in the plan. This is typically referred to as Open Enrolment.

All of the information and applications collected from the consumer in the sales office get forwarded to underwriting for final approval of rates based on the information provided. Some payers in some states are able to ask many questions about pre-existing medical conditions or past medical treatments, and then underwriting has the right to adjust rates accordingly.

When approved by underwriting, the paperwork is forwarded to the operations department who then starts the enrolment process. This includes setting up the group and members. Additionally, ID cards are created for all members, as are benefit booklets detailing the specific coverage and exclusions. A more formal group contract may also be produced at this time.

# 3.3.2 The Product Pricing

Unlike most products purchased, insurance products do not have a set price. In the world of insurance, the process of pricing a policy involves the complexity of creating base prices for the products and then creating a formula for "rating": the underwriting risk specific to the consumers requesting the coverage. Key demographics about the consumers are gathered such as physical location, age, sex, type of industry they work in, etc. These demographics are used by

the underwriter as inputs into the rating formula, which adjusts the base price of the product to a specific price for the consumers.

# 3.3.3 The Touch Point Analysis

Healthcare is one of the last industries to widely use paper records. A 1992 Arthur D. Little study identified almost \$30 billion in cost reductions that could be realized through the electronic transmission of patient, clinical and diagnostic information. The focus of the Healthcare insurance companies is to reduce costs by reducing administrative costs. Health plans that become more competitive will also free more capital to support initiatives designed to improve member health and medical outcomes. That opportunity creates a niche market for the CRM software companies. The CRM software can help the insurance companies reduce the amount of paper touches in the application business processes, which will help to reduce the cost of doing business.

The shift in market demand towards new value means that the inefficient paper-based processes carried over from the last decade now presents a significant threat to the future success of health plans that are faced with adopting consumer-focused business models. Amazingly, 90% of the 30 billion healthcare transactions that take place each year are still conducted by phone, paper, or fax. Over the last ten years, administrative costs have not dropped significantly. Most of these administrative costs arise from manual, inefficient paper and phone based processes that have yet to be automated.

#### 3.3.3.1 The Touch Point Calculation

Every time an employee receives processes or sends application papers, we consider that as a touch point. We can quantify value by first measuring, and then reducing the number of times employees have to touch or handle paper for every transaction. Health plans that learn how to improve their internal processes and productivity by streamlining paper-based transactions will

outperform competitors, gain market share by reducing processing time, and retain more employees and members.

For example, assuming that five stakeholders are usually involved every time a new member joins and is enrolled in a health plan. The broker, sales executive, sales assistant, and underwriter move the group or individual along the enrolment process from suspect to prospect to member. The process is presented in the following figure (see figure 7):



Figure 7 - Information Flow from Member to Underwriter

Source: Pivotal internal document, by permission

The prospective member fills out an application and gives it to the broker, who passes it on to the sales executive, who hands it off to the sales administrator. The sales administrator will enter information manually about the prospective member, which is then passed along to the underwriter.

The underwriters will evaluate the prospective member's information, classify it according to a rating system, and then determine what price to offer for the prospect.

Let us assume by way of example that the prospect forgot to enter required information on the form, something as small as the date of birth of a dependent. As a result, the underwriter has to set the application aside until the information can be obtained, which means that no business has been transacted.

The underwriter passes the form back to the sales administrator, who sends it back to the broker, who actively pursues the prospect to get the missing information. Once the information is obtained, the broker takes the form back to the sales administrator, who passes it back to the underwriter. The process takes at least ten touches, which is illustrated in the following figure (see figure 8):

Figure 8 - Information Flow Back to Member



Source: Pivotal internal document, by permission

The following basic equation can be used to calculate transaction costs:

# (Touches x Time) x Cost = Full Time Employee Value

Assuming that employees touch a small group application approximately 10 times in total and assuming that one touch takes approximately 15 minutes the following can be calculated. Using these numbers, if an administrative employee processes 50 applications per month, the costs of a fully burdened employee will be \$50,000.00 — a reasonable estimate. The calculation looks like this:

(10 touches x 15 minutes) x 50 applications = 7,500 minutes = 125 hrs = 5.2 days

An average employee works approximately 22 days per month, or 250 work days per year. In this example the administrative employee costs \$200.00 per day. The calculation for full time employee value looks like this:

Time x Cost = 
$$(5.2 \text{ days x } \$200.00) = \$1040.00$$

For the average administrative employee to process 50 applications, the cost is \$1040.00.

Now let us find the implications of reducing the number of times that the administrative employees touch applications by half — from 10 times to 5 times.

For every 50 applications processed, the time saved would be 2.6 days and the costs saved would be \$520.00.

The tables at Appendix I and II can be used to calculate the number of weekly applications for specific healthcare insurance agencies and to calculate the number of paper touches for each application. The table in Appendix VIII can be used to calculate the cost of total number of touches and the effect of reducing the number of touches on the final cost.

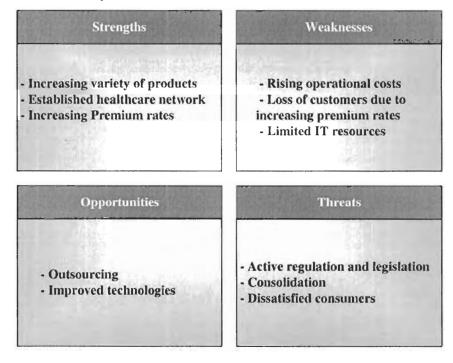
# 3.4 The Strategic Issues

Having understood the detailed business processes, we need to stand back and contemplate the payer's situation. The following SWOT analysis leads us to look at the payer's strengths, weaknesses, opportunities, and threats. Even though we have discussed some threat and opportunity issues in the last chapter, here these issues are mentioned again but from a different perspective that of whole picture of the payer's status rather than a fragmented view. This is important given we have established that to gain ROI from CRM, CRM suppliers must understand this whole picture.

## 3.4.1 The SWOT Analysis for Healthcare Insurance Industry

'SWOT' stands for Strengths, Weaknesses, Opportunities, and Threats. Strengths and weaknesses look internally at what the business can do. Threats and opportunities are external, focusing on the conditions of the real world (see figure 9: The SWOT Analysis). The SWOT analysis informs us where the payers need to improve and indicates what resources in these companies and in environment are available to aid in the improvement process, including CRM.

Figure 9 - The SWOT Analysis



# 3.4.1.1 Strengths

- The variety of insurance plans is increasing. Except for the traditional health plan, healthcare payers (healthcare insurance companies) provide more product lines like HMO, and PPO. These plans provide more choice to customers that combine the cost benefits of managed care with the freedom of traditional plans, which attract more consumers, especially low to medium income clients.
- A healthcare network has been established. As we have discussed in previous sectors, a care chain has been established, which is comprised of a group of constituents linking consumers, provider organizations, payers, and suppliers. The well-established network enables payers to easily choose suppliers and distribution channels to market their products, thus differentiate themselves in the marketplace.

Premium rates are increasing. From the payers' point of view, the increasing
premium rates create more profit margins for healthcare payers. This has enabled
many of them to become profitable in the past years. However, the increasing
premium rates have two fold impacts. The negative impacts are discussed below.

## 3.4.1.2 Weaknesses

- Operational costs are rising rapidly. Operational costs consist of administrative costs, associated with operational expenses and business processes, such as customer service, claims management, and enrolment, etc. Companies find it difficult to drive these costs down due to their inefficient operations, or poor operations management. Even some companies that have invested in technologies to improve their business process may not receive an instant return. These high operational costs have eroded the profit margin and brought financial difficulty to these payers.
- Increasing premium rates drive away the low and medium income employees. Ellen Beck<sup>11</sup> give an example that in 10 years, if the average wage increases 4.5 percent, but the average cost of health insurance grows at 10 percent, less than it is increasing now, then employers will drop the benefit and people will drop coverage because they cannot afford it.
- Limited IT resources committed to technology investment. Even though every executive understands the importance of technological investment, they still invest in IT conservatively. To drive user interest and achieve return on investment (ROI), healthcare payers must continue investing. However, there is increasing competition for budget usage. Many other commitments such as new product development weigh heavier than IT in budget expenditures.

<sup>&</sup>lt;sup>11</sup> Beck, Ellen, "Analysis: what's ailing U.S. healthcare?" United Press International, June 21, 2004. Available from: http://www.upi.com/view.cfm?StoryID=20040621-010906-8408r

# 3.4.1.3 Opportunities

- The marketplace enables payers to outsource their information systems (IS) and business processes. The economics and speed of "offshore" development have led many payers to outsource much of their IS development efforts. Business process outsourcing is a current trend in which payers also externally source a complete business function, not only the IS operations supporting the business function. With expanding business and technology challenges, payers are outsourcing to BPO vendors who are responsible for delivering the expected business results.
- Technology is improving to the point that paperless business transactions are available. Packaged third-party software applications have matured. This is enabling healthcare payers to focus their budget resources on related IT initiatives and focus more resources on increasing user adoption.

#### **3.4.1.4 Threats**

- Regulatory and legislative activity continues to be very active. Regulatory agencies and legislative bodies impose, or threaten to impose, greater demands and industry oversight in the form of legislated information standards, business performance, and reporting requirements. Payers have to continuously comply with these new regulations.
- The small and medium companies are finding it harder to survive in the market due to consolidation. Large international and domestic financial services and insurance companies are buying up smaller companies at a record pace.

 Consumers are dissatisfied with many healthcare payer' services, processes and costs. They complain about double-digit increasing premium rates and poor service quality. They require good service quality, more health plan products, and low premium rates.

It can be concluded from the above analysis that healthcare payers are currently forced to react more responsively, more effectively and to work in greater partnership with external constituents to improve their operational performance and to survive in a volatile environment. Technological adoption is as important as other organizational strategies. It should, and is able to, play a crucial role in these healthcare insurance organizations' transformation.

# 3.4.2 The General Attempts to Improve Performance

Generally, healthcare payers have attempted to improve their business performance.

Gartner<sup>12</sup> reports the important business and technology themes that all enterprise must address to succeed. In 2003, examples were the real-time enterprise, privacy and security, business process outsourcing, offshore outsourcing, e-business implementation and return on investment, and emerging technologies that facilitate effective business transformation. In 2004, payers focus on improvements in revenue cycle management, supply chain management, customer relationship management, healthcare delivery, payer management of healthcare benefits and a continuing focus on emerging technologies that can disrupt, improve or supplement established healthcare IT solutions.

# 3.4.3 The Improvement Issues

The strengths and weaknesses of healthcare payers have been established, and the opportunities and threats faced by the insurers have been detailed. After several initiatives to

<sup>&</sup>lt;sup>12</sup> Young, Janice, "Client Issues for Healthcare Industries", Gartner Inc., November 21, 2003. Available from: http://www.gartner.com

improve the situation and to increase their core capacities to survive in the marketplace and win, most of healthcare payers regard the following actions as organizational strategies:

- Building or enhancing a real-time enterprise (RTE), an organization that competes by
  using up-to-date information to progressively remove delays in managing and
  executing its critical business processes as defined by Gartner<sup>13</sup>.
- Aligning technology strategies with business strategies. Healthcare automation requires the alignment of technologies and standards, new health plan business processes and external customer/partner involvement.

As payers try to establish a real-time enterprise by automation strategies, the following major issues should be considered:

- How and when to exploit information technologies and applications to improve operational performance, and customer service through better transaction automation and information sharing
- How to move the organization business model and processes from a paper-based environment to a responsive automated environment
- Technology and business alignment are easier to talk about than achieve. As an example, many Internet initiatives report poorer-than-projected user adoption because of the lack of alignment between Internet technology and services and payer business processes. Few payers fully embrace the importance of technology and non-technology automation success factors.

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<sup>&</sup>lt;sup>13</sup> Klein, Jim, "The RTE Is a Compelling Vision for the Healthcare Industry", Gartner Inc., September 26, 2003. Available from: http://www.gartner.com

- Elapsed time reduction in real-time enterprise is closely associated with the quality of service experienced by the customer, and is generally easier to measure than the cost for the complex multiple-entity processes.
- The healthcare payer automation strategy must be based on automation of the entire transaction process, not just what has historically been within the payer's scope. To succeed, the automation strategy must first be defined and continually reinforced as an entire initiative that includes external constituents as key business partners in the success of the initiative.

Meanwhile, the company as a CRM vendor should consider the above strategic issues proactively. In the next chapter, how Pivotal can provide solutions to healthcare payers' requirements, what core competences they need to be equipped with to help them attract payers, and what challenges companies are facing to succeed in the very crowded marketplace are discussed.

# 4 INTERNAL ANALYSIS

# 4.1 Introduction

# 4.1.1 The Aim of the Chapter

In previous chapters, the external environment of the company was observed and the target industry – healthcare insurance - analyzed, to generate an understanding of the environmental changes and the customers' needs for CRM products. In this chapter, how the company positions itself in the market, what are the company's opportunities, what it wants to do, and what can be done within what time-frame, is introduced. The aim of this chapter is to evaluate what competencies and resources the company has, and what it needs to develop in order to compete in the highly competitive CRM software market.

## 4.1.2 The Chapter Structure

We first evaluate the company top-down at three different levels, management, internal resources, and customer orientation. At the management level, we are aware of the capacity of management team and their strategic decisions, and we assess whether the management team could lead the company to become a leader in this tough new market of healthcare over the long-term. Next, by further investigating the resource capacity, we analyze whether the company has enough infrastructure, financial resources and special competence to compete with other strong competitors in the market. Thus, the internal resource analysis informs us where the company needs to place more effort. Finally, we look at the whole organization and find that customer orientation is one of the major characteristics of the company. We clarify how this characteristic can benefit the company and what can be learnt from the internal analysis. In addition, through

our internal research and observations, we learn how the company enhances its competitive advantages in a variety of ways.

The research is based upon meeting with executives and other key personnel in the company, informal chats and visits, browsing its internal websites, and our personal observations.

# 4.2 Management Capabilities and Objectives

The analysis of the management capabilities and objectives is conducted in the light of the knowledge generated in Chapter 2. The CRM market is a highly aggressive market, vendors are pushing to increase their customer base and reduce their costs, and this push will force some CRM vendors to exit the market. To be able to survive and win in such a competitive market, the vendor needs a strong management team that can adapt to market change and help acquire a higher market share. We start by evaluating Pivotal's management team.

Pivotal's goal is to be a market leader in the mid-enterprise CRM market. To reach this goal Pivotal needs to strengthen their internal capabilities to provide better products and services for their customers. To be able to reach a high level of customer satisfaction, Pivotal needs to take full advantage of their internal resources.

## 4.2.1 Management Team

Pivotal's senior management has an extensive knowledge of, and experience, in the software market. The experience of Pivotal's CEO, senior vice president of products, executive vice president of worldwide services & support, and executive vice president of worldwide sales & field operations combined, represent many years of developing, supporting and marketing high end software applications.

The president and CEO, Divesh Sisodraker is responsible for the strategic direction of Pivotal worldwide. This includes technology development, sales and marketing, professional

services and administration. Before joining the technology industry, Sisodraker held senior financial roles with KPMG and HSBC Investment Bank. Sisodraker is a chartered accountant, and has been Pivotal's chief financial officer since October 2001. Sisodraker became CFO after a successful 18-month term as Vice President of Corporate Development during which time he was responsible for leading market development initiatives, including acquisitions and major partnerships.

Bruce Kenny, senior vice president of products, brings years of management experience in the R&D field. Bruce is leading the company's strategic R&D and customer success initiatives. As vice president of product and program management, Kenny was responsible for certain aspects of the product lifecycle including product strategy and planning, product development, and product marketing.

Joe Dworak, executive vice president of professional services and support, is responsible for providing good service and support for Pivotal's worldwide client base. He brings over 17 years of experience in supporting information technology and CRM products, and was previously a partner with Deloitte Consulting, leading their fast-growing CRM practice.

The management team provides quality leadership to the employees. The managers often share their experience in the software industry with the employees and guide the middle management team to achieve the required result. Most of the senior managers are customer focused; they spend some time dealing with the customers to under the customer needs. The management team frequently takes some time off to join executive training session, or to take an executive management seminar. The executive managers share the knowledge they gain from the training with the middle management team. As such senior management strive to update their knowledge and share their experience.

# 4.2.2 Target Market

Pivotal is targeting the mid-enterprise CRM market. The goal is to acquire the largest share in this market to create a sustainable competitive advantage over its rivals. Pivotal targets customers around the world. However, attention is focused on mid-enterprise CRM for North America consumers and the plan is to dominate that market. Once that market is firmly established, other markets can be pursued outside of North America. Pivotal tends to price their product at a competitive price which increases their market share and improves profitability, whilst not being so low on price that buyers might worry about the quality of the product.

#### 4.2.3 Micro Vertical Market

Pivotal identified the Micro Vertical market as a niche market and decided to enter that market early to gain the biggest share of this CRM market. The Micro Vertical market will also help Pivotal to reach economies of scale. Pivotal offers targeted solutions for the financial services, healthcare, homebuilders, commercial banks, real state, medical devices and asset management. Pivotal is more focused now on the Micro Vertical market than they were a year ago, and have acquired resources and technologies in order to improve the market share in these vertical industries. Pivotal has shown that they can react quickly to knowledge about new market opportunities.

## 4.3 Internal Resources

# 4.3.1 Infrastructure

Pivotal's global presence around the world (North America, Europe, Asia) allows Pivotal to leverage the economy of scale that this reach provides and supply 24/7 customer support for their clients. In order to have good and effective communication between Pivotal's global offices, the company spent a great amount of money building and developing its network infrastructure.

Based on our research and discussions with the Pivotal team, the internal infrastructure was found to be sufficient to sustain the high growth rate of this organization.

The lean organizational structure enables the organization to adapt quickly, and facilitates efficient decision-making. The structure allows Pivotal to expand into new niche markets, increase market penetration through partnerships and streamline business processes. Pivotal's office in India allows the company to provide offshore resources at a level of good quality and at a lower cost. This responsiveness and flexibility is a distinctive strength of Pivotal.

Pivotal's corporate culture and environment helps them to hire the best people in the field. The good facility design and location helps the company to motivate the employees. There is a big opportunity for employees to learn and grow at Pivotal, which provides an exciting and challenging work environment where great people can shine and received the reward and recognition they look for. The company works hard to promote its corporate image by becoming involved with community projects and events.

# 4.3.2 Financial Resources and Acquisition of Chinadotcom

Financial resources are an important factor for the organization to expand its spending on R&D and marketing. Pivotal is in a better financial situation this year compared to last year. Pivotal ended the 2002 fiscal year with 18.2 million net income loss compared to 15.5 million net income gain in the year 2003.

Chinadotcom (CDC) acquired Pivotal. This acquisition provided Pivotal with the financial support and cash flow required to increase the growth in the CRM industry. CDC Software is a global software provider with a portfolio of market-leading companies. The company has over 1000 employees and operations in more than 14 countries worldwide. The

operating groups within Chinadotcom include companies focus on enterprise applications software, mobile applications, portal operations, and global services.

Pivotal will operate as a distinct business unit within CDC Software. Pivotal will continue to retain its strategy, brand, architecture, CRM products, vertical products, headquarters, go-to-market capabilities, and people. Pivotal will also pursue synergies among CDC Software operating companies. The company can use CDC marketing channels and partners to promote the healthcare CRM solutions for more clients and look for a bigger market share.

Pivotal was able to reduce their expenses in the year 2003 compared to 2002 to 37 million from 41 million and that helped to increase the net income. The acquisition helped Pivotal to strengthen their financial situation and focus on improving the CRM product and increasing their market share.

# 4.3.3 Organization Capabilities (Core Competence)

Pivotal's core competence is the activities, skills and knowledge that result in their targeted CRM solution specifically designed to fill the needs of specific markets. The recognized brand, well defined niche market and the demand for the CRM product in that niche market helps Pivotal to be highly competitive in that niche market. The organization is focused on providing solutions that improve business processes and reduce the cost of doing business for their consumers (either have customers or consumers, but not both) in different industries. Pivotal spends time and money on analyzing and understanding the needs of their consumers and the consumers' business process, and this gives them a higher competitive advantage.

A history show that the company is able to adapt given it survived the technical crash and is now on a track to recovery, if not more than recovery. The organizational goals are well

aligned with individual performance. The strong leadership team and the consistent management practices help the company acquire the best people in the software industry field

The other notable strength of Pivotal is the high technical and professional skills of their professional service team. This team is able to provide on site support for the customer quickly and in a professional manner. This is based on competencies involving hiring, training, culture, and knowledge management.

#### 4.4 Customer Orientation

Customer orientation is the one of major characteristics of the company. As a CRM vendor, the company has learned from previous experiences and recognized that their products need to be built to fit their customers' needs, rather than catching the latest technology trends or catering for the company's own satisfaction. Below we delve deeper into customer orientation to highlight what are the aspects of the company that support and reinforce this valuable orientation.

#### 4.4.1 Customer Orientation

Customer Orientation is defined as<sup>14</sup> the focus on meeting the needs of internal customers or external customers. This service establishes specific customer satisfaction standards and actively monitors client satisfaction, taking steps to clarify and meet customer needs and expectations (both expressed and unexpressed). At lower levels the service involves courteous and timely responsiveness to the requests of customers, while at the higher levels it involves developing the relationship of partner and trusted advisor.

Through our research, we noticed that the company focuses on the services at two levels. Firstly, the company has over 100 partners in 35 countries who sell and service Pivotal' products.

<sup>14</sup> Information Services and Technology, "Development Resource Guide, Customer Orientation". Available from: <a href="http://web.mit.edu/ist/competency/tldev/customer-orientation.html">http://web.mit.edu/ist/competency/tldev/customer-orientation.html</a>

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These partnerships are built at three levels: consulting alliance, solutions alliance, and market alliance.

- The company consulting alliance program is for companies who recommend and implement the company's products and solutions to their client base. To augment professional services offerings, to offer best in class service to global customers and to provide local resources, the company seeks relationships with world class consulting firms and regional service providers to create a complete coverage model. Successful implementations and satisfied customers are a critical element of the company's corporate strategy and consulting alliances are a key to its long-term success.
- The company's solution alliance program offers access to cutting-edge marketing, sales, and business strategies that have made the company a global leader in the e-Business Relationship Management space. The solution alliance program is a comprehensive set of programs through which alliance members can develop, promote, and sell their products, services, and solutions in conjunction with other company products. The program demonstrates the company's commitment to total customer success. This certification process provides the customers with consistently high-quality integration between its relationship products and "best-of-breed" 3rd party products and services.

• There is great opportunity when the company joins forces with like-minded companies in complementary industries and verticals. Market share can be gained through affiliations with key companies within the e-Business and CRM industry. The company actively seeks partners who have influence in this market and are willing to co-invest in marketing initiatives to drive incremental market share, generate leads, and create brand awareness. Each relationship is unique and can deliver a unique value proposition. Partners are evaluated on their ability to contribute to the overall services or marketing solutions that are needed by the company's customers.

Also, the company puts great effort into responding to customer requests, especially during the implementation stage. It implementation services are discussed in the next section.

# 4.4.2 Implementation Services

It is widely recognized that the implementation service works as a major differentiator for CRM products. The company is committed to provide clients with a first-rate service and support through all phases of CRM solution implementation. During the implementation, the company not only provides fast and efficient support for their clients, but also helps them build their knowledge base on how to adopt the CRM solution to create a high ROI.

The company provides global technical support for all of its clients worldwide, which is the first line of defence for any problems with the clients' CRM solution. The global technical support is available to access from web, email, and telephone at 24\*7. At the same time, the company provides several Named Support Coordinators, Annual Remote CRM Audits, and periodic updates and upgrades for all licensed and supported products. In addition, the service defines Severity Levels from 1 through 4 and indicates the guaranteed response times based on the Severity Level, which satisfies clients to a great extent.

Except for providing the global technical support, the company proactively educates its customers and helps them build their knowledge base, which benefits customers in the long term. Firstly, the company enables its customers to try its products before buying them. The "try before they buy" lets customers know for sure that they are getting software that really fits their business. Secondly, the company has built a wide knowledge base through its website that can be accessed by registered customers. This knowledge base includes how to measure ROI, successful CRM implementation case studies, what preparations need to done before implementation, how to select CRM products, etc. Secondly, the company sends updated newsletters to customers monthly. Thirdly, the company sets up education courses and certificates for the purpose of formal education. After understanding CRM benefits and implementation processes thoroughly, customers have the opportunity to choose the CRM solutions that fit with their business environment and make proper preparations for the implementation and change management. The proactive efforts enhance the company's CRM implementation service, which effectively increases the company's competitive advantages in the marketplace.

By the end of June 2003, more than 1,700 companies around the world have licensed Pivotal products, and total revenues have increased to US\$56.0Million from US\$25.3Million in 1999. But in order to win in the long term, the company has to be consistently customer orientated.

#### 4.5 Internal Learning

After three months of internal research, we found the company is doing an excellent job of promoting, undertaking and transferring learning in the following ways:

- The company has built a comprehensive online knowledge base. The internal website provides a solid knowledge base and training resource for employees. At the same time, the external website helps its customers to understand its products and supports clients 24\*7, thus increasing marketing opportunities and sale power.
- Through the company's internal information system, employees deal with many issues such as travelling arrangements, technical support, purchase requests, etc. The information system indeed promotes operational efficiency and lowers costs for the global organization.
- In the Micro Vertical department, business solution managers are vertically arranged to manage different CRM vertical integration industries. However they work closely and share their experience and knowledge. It is hard to find very clear boundaries amongst what they do and how they work. The horizontal connections and vertical arrangements enable the departments to work innovatively and efficiently, as while solution managers focus on their own industries, they are also able to adopt successful experiences from other industries.
- The company attracts talents through its own methods. We observed several unique ways through which the company attracts and retains its knowledge workers. The company provides flexible working schedules for its employees. We also found that the working place is very quiet and that most of the staff concentrate on their work, until we discovered the company's family room and gym, where employees play and chat with each other.

The above strengths serve to reinforce each other, which build up systemically as the core competences of the company. For example, the capability of attracting talent contributes to key tactics like building knowledge bases and internal information systems. In reverse, the benefits

from the above tactics serve to attract talents to the company, and help retain these talents in the long term, since employees feel comfortable and effective when working in the company. We believe these above strengths will increase its competitive advantages and benefit it in the long term.

Until now, we have discussed both the macro-environments of healthcare insurance industry and CRM software industry. We then illustrated why and how these two industries have an overlap, the healthcare insurance CRM solution, and further discovered why the healthcare insurance industry needs CRM solutions to improve its operational performance and what they need. In this chapter, we also looked at whether the company has efficient capabilities to fit these needs, thus competing with other competitors in the market. Hereby, we are able to display a completed picture: the market forces have pushed the healthcare insurance companies to the stage that they have to adopt new technologies and new business processes to improve their operational performance, in order to survive in this volatile environment; the changes in the healthcare insurance industry are bringing huge opportunities and challenges to CRM vendors, thus the healthcare CRM market has become crowded and it is hard to be successful here. The capacities of Pivotal have enabled it garner initial successes in the healthcare insurance CRM market, but the company needs to continue to improve its CRM solutions to cater to the changes in the dynamic market, and enhance the capacities responsible for that success.

After creating this understanding of the whole picture, recommendations regarding both the healthcare insurance CRM solutions Pivotal should offer and, more generally, how the company can work to support this product offering are provided in the next and final chapter.

#### 5 RECOMMENDATIONS

#### 5.1 Introduction

#### 5.1.1 The Aim of the Chapter

Based on our external and internal research for Pivotal and the healthcare insurance CRM market in the previous chapters we have generated some recommendations that will help Pivotal stay competitive in the CRM market. In this chapter the recommendations provided are for the CRM solution products. These focus on implementing TQM to improve the business processes and to reduce administration costs. We define the processes and ways to improve these business processes in detail.

Since the implementation process works as a major differentiator for CRM vendors, this chapter will outline strategies to implement the company's CRM solutions for the healthcare insurance organizations, and provide recommendations to successfully implement and benefit from the CRM solutions. The chapter not only provides short-term recommendations to the company, but also reviews the strategic plans for the long-term success of the company on the basis that sustaining competitive advantage has both short and long-term implications.

#### 5.1.2 The Chapter Structure

This chapter is designed to provide recommendations for the company's short term and long-term success. We analyze all the data and the information gathered in the previous chapters to provide recommendations for Pivotal. The chapter starts with defining a strategy of implementing TQM solution and using that solution to improve the business processes and reduce the operational cost in healthcare insurance organizations. The TQM solution is aimed at helping

the company improve its current healthcare CRM solution by analyzing the customers' current and the future business processes requirements. Next, the CRM implementation strategies are reviewed. The chapter covers defining methods to pick the best CRM solution for the organization and how to analyze, redesign and improve the business processes by implementing the CRM solution. We also focus on what the organization needs to do before implementing the CRM solutions. Finally, the chapter provides recommendations for the long-term success of the company.

#### **5.2 Implementing the TQM Solution**

The company's healthcare insurance CRM solutions try to enable payer organizations to reduce paper touches, minimize the paper-based processes and streamline the overall business processes. After observing many successful TQM implementations for the financial services industry, the project sponsors suggested that we should think about how TQM solutions could work within healthcare insurance industry. But they are not sure whether the TQM could solve the problems in healthcare insurance industry and benefit their CRM products. Based on the suggestion, we did some research on successful cases of TQM and TQM methodologies. From our research, we found the TQM has solved similar business process problems in other industries, and the experience from that can be applied in healthcare insurance industry. So we recommend the company adopt a TQM solution to understand, analyze and solve business process problems in payer organizations, thus improving its CRM healthcare solutions. We expand on this implementation below:

#### 5.2.1 Introduction of the Related Methodologies

Several methodologies are involved in the TQM analysis process. We briefly introduce these methodologies before we illustrate the TQM implementation processes.

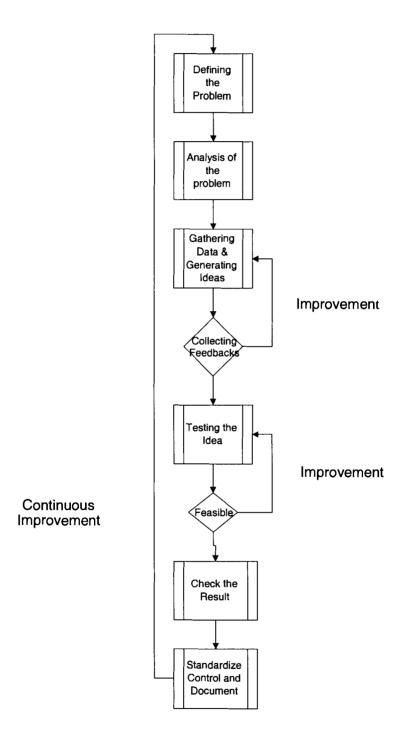
- DMAIC refers to a data-driven quality strategy for improving processes, and is an
  integral part of the Six Sigma Quality Initiative. DMAIC is an acronym for five
  interconnected phases: Define, Measure, Analyze, Improve, and Control.
- The goal of Six Sigma is to increase profits by eliminating variability, defects and waste that undermine customer loyalty. Six Sigma is a methodology that provides businesses with the tools to improve the capability of their business processes. The increase in performance and decrease in process variation leads to defect reduction and vast improvement in profits, employee morale and quality of product.
- SMED stands for Single Minute Exchange of Dies. The processes target to separate
  internal and external activities, convert internal activities to external activities, and
  streamline all activities. The goal of SMED is to improve productivity, higher quality
  levels, reduce throughput time, and lower operational costs.

At the following TQM implementation processes, we will use the above methodologies.

#### 5.2.2 The Implementation Processes of TQM Solution

The project of reducing touch points in the healthcare insurance industry can use the Seven Steps of Problem Solving methodology (similar to DMAIC), which works well in practice such as in financial services, to solve similar problems. To fit the situations we are facing for the healthcare insurance industry, we will customize the methodology to six steps in our current project. Please see the basic approaches in Figure 10.

Figure 10 - The TQM Solution Procedures



#### • Step 1: Defining the Problem

The problems can be defined by analyzing Appendix I and II, which we have discussed in chapter 3. The main problems in payer organizations are reducing the turnaround time from prospect to creating proposal, thus lowering the cost for healthcare insurance companies.

#### • Step 2: Analysis of the Problem

Based on the principles of SMED, we are trying to distinguish between Core Steps (major steps that could not be removed) and Support Steps (steps that could be eliminated by adopting new technologies such as CRM or prepared beforehand), then remove Support Steps to save time and cost.

By analyzing the business process by Appendix III: New Business Flow Chart, we are able to distinguish core and support steps. In Appendix IV: Distinguishing Core and Support Steps, we separate the core steps from support steps and calculate the percentage of cut touches and time saving, which are possibly the maximum percentage in theory. Then in Appendix V: Process Breakdown in Four Segments, we analyze the business processes in four segments and observe which steps and touches can be removed or replaced by adopting technologies. As a result, the removable steps and touches in practice would be obvious.

#### • Step 3: Generating Ideas

The ideas from George Stalk, Jr. and Thomas M. Hout<sup>15</sup> are that the time-based companies approach works differently than do traditional ones as following:

1. Time-based companies focus on generating a continuous flow of work,

<sup>&</sup>lt;sup>15</sup> Stalk, George, Jr. and Hout, Thomas M., "Competing Against Time (The Free Press, A Division of Macmillan, Inc. 1990), page 34

2. And change upstream practice to relieve downstream symptom rather than debottleneck to speed work.

So the basic idea to reduce turnaround time and to lower costs is by removing touches while compressing the time spent at all steps/touches (When we cut a step, the touches associated with the step will be eliminated). Therefore, firstly we determine the priority bottlenecks Appendix VI: The Bottlenecks in Priority. Then we decide where we can cut by adopting technologies.

At this stage, we populated the template by contacting clients and gathering data to feed into the spreadsheet. Then we can work out how to cut steps and analyze the processes, time, cost and other impacts by cutting steps and touches. (See Appendix VII: Comparison between Before Improvement and After Improvement, Appendix VII: Calculation of Cost per Step Before Improvement, and Appendix IX: Calculation of Cost per Step After Improvement)

#### Step 4: Testing the Idea

The testing stage is critical, since it allows modification of ideas and data models based on practical experience, and equally important, ensures suitability and feasibility of new methods.

Ideally run after cut steps model in a small insurance company and observe the deviation from the results to the model. Then back to spreadsheets and adjust the model for several cycles.

#### • Step 5: Check the Result

Access the results obtained and record the impacts on time and cost in Appendix X: The Improvement on Response Time and Cost.

#### • Step 6: Standardize Control and Document the Improvement Story

To make sure that the gains are held, control charts will be introduced here to monitor the continuous improvement. A special "Grind it in" session will be conducted by line personnel to

ensure that the control chart will be updated daily. As well, the above steps and data should be documented for next cycle quality control and process improvement.

#### Future Actions

Set up new goals to reduce turnaround time and lower costs, and continuously apply above steps, but based on the previous documentation, we could minimize rework.

#### 5.2.3 The Benefits of the TQM Solution

The above TQM solution enables the company look from the payers' point view to solve their problems. The major benefits from general TQM methodology are aimed at continued improvement, reducing variation and setting standards, helping to reduce cost and increasing productivity, and adopting new working attitudes by employees. In addition, the TQM solution will further enhance the company's relationships with clients and partners by providing them with better products and more knowledge bases. Hereby, the above TQM solution provides essential business solutions to the company's CRM solutions and leverages the company's strength of customer orientation. The CRM solution providers will be able to know where the business processes need to be and can be automated, and what the ideal way to redesign the business processes is. In addition, by calculating reduction of throughput time and cost, the marketing department can use the ROI and other time and cost impacts to educate its customers.

#### 5.2.4 The Constraints of the TOM Solution

Since the TQM approach is a management system, the clients' involvement and support are the key factors to success. So if managers in payer organizations can not pay enough attention to the improvement processes, the overall improvement results cannot be achieved. For the above TQM solution, we need a volume of data to analyze and generate results, thus customer participation is also a constraint to achieving a good analytical outcome. But the above constraints can be turned to Pivotal's advantage, since from our observations in the company the

executives actively communicate with their clients and educate them in ways that are highly accepted by the client. So the above general 'constraints' can be converted to differentiators in the company.

#### 5.3 Implementing CRM Solutions in Healthcare Insurance Industry

The CRM is a strategy that enables greater customer insight and provides a better and faster way to interact with customers. A successful CRM implementation requires analyzing the current business processes and identifying requirements for improved business processes and deciding which processes to improve.

#### 5.3.1 Defining the CRM requirement

Many companies fail to formally establish clear goals or objectives for their CRM solution. Firstly a start should be made by documenting the current business processes, and understanding these processes and the reasons for their existence. This is essential to form a base from which to determine desired goals and objectives for the new system. These objectives should be responsive to the current short comes and delays in the existing processes, such us slow paper work, poor communication, loss of information and slow customers' response time.

Once the objectives are understood, companies should find and design new ways of handling these processes to reach the required outcome. This needs to be followed by identifying and establishing specific goals for each of the various types of system users (sales, administration, customer service, marketing, management, etc) so that everyone knows exactly what is expected of them, why it is expected of them, and what result the successful realization of their goals will have on the enterprise.

#### 5.3.1.1 Key Employees' Participation in the Business Processes redesign

It is important to get the buy in from key employees in the process of planning and redesigning the business processes. These key employees may include managers, sales people, marketing and administrative people. If the key employees are not part of the redesign process then the consumer will fail to get a value from the CRM implementation. It is extremely important that managers become highly involved in the process of redesigning the business processes, sending a message to the rest of the employees that the company is committed to the new business processes improvement plan.

The new business process plan will help users understand the value of the CRM solution and believe in the value of the CRM technology. It will help both managers and users to define common goals for the business improvement plan.

#### **5.3.1.2** Show the Users the Benefit of the New Processes

The common problem with using new tools and new business processes is that users refuse to use them and keep doing things the old way. This happens because of the fear of change, or because the users do not understand the value or benefit of the new system. The new system and processes should make the user's life easier and their efforts more productive. The users must see the benefits of the new processes so they do use them and abandon their old ways.

Management must take the lead in driving the message home to ensure CRM success.

#### 5.3.2 Choosing the Right CRM

It is important to help the customers choose the CRM solution that fits their needs. The company should use its resources to develop a user friendly CRM solution that is easy to use and understand. An effective CRM system must be simple and intuitive so that basic users are not overwhelmed, but must also have upward functional flexibility required for more advanced users.

A good CRM system will help the customer identify the best clients, and get detailed information about the clients. It will also help the customer accurately project and respond to the clients' buying needs throughout the sales cycle. The CRM should provide better tools for the customers to improve the clients' service. This can be done by providing the customers with upto-date information at their fingertips. The right CRM system provides a single view of the customer across all touch points and channels, as well as delivering comprehensive reports of clients' behaviors and sales activity.

In summary, the CRM solution should be easy to customize to fit the customers needs, and it should also be easy to implement.

#### 5.3.3 Successfully Implementing the CRM Solution

Implementing a system is the hardest part of the process. Each person has their own way of doing things and those habits are difficult to change. To overcome all of the possible obstacles, CRM must become part of the culture of an organization and people must recognize that by using the system they are helping the team become more effective as a whole. The first goal is to make sure that the user group is proficient with the base functionality of the system. Users need to be able to comfortably duplicate what they have routinely been doing in the new system.

The first step of implementing a new CRM system is to determine a strategy. The implementation strategy should be developed with the software provider to determine and document the process used to roll the solution out to the user group. The project team should define the timeline for the project. The customer should pick the project manager and the project team who will work on the CRM implementation. Short, medium and long-term goals need to be established and monitored for each department and for the organization as a whole. Companies may find that they want to track one metric for inside sales, another for outside sales, and a third

for marketing. Some companies have chosen to motivate users by offering incentives and compensation related directly to system utilization.

Training is a major component of long-term success and should be budgeted for sufficiently. Training should be divided into multiple stages designed to fit the particular user group needs. Those stages may include beginner user training, advanced training, trainer training, goal-specific training, utilization reviews, and user groups to name a few.

The organization should focus on improving their professional support infrastructure to provide better and faster support for their costumers. In the last year Pivotal took the wrong decision of reducing the number of their professional services team to reduce the cost, the decision had a negative impact on consumer's satisfaction, several clients complained that the professional service was slow; hence Pivotal is hiring more people this year to improve the quality of their professional team.

The internal analysis helped us to understand Pivotal 's management style, and the great amount of time they spend reviewing the customers' business processes, analyzing the customers' CRM requirement and identifying the final goals and requirement for each CRM implementation project, to make sure that Pivotal CRM is the right solution for them. The professional team has a great amount of experience in planning for the CRM implementation. The professional team provides onsite and offsite training for the customers at different level.

#### 5.4 The Strategic Plans for the Long Term Success of the company

Having provided recommendations as to the company's current solution and implementation service, we try to look outside of the box, and look at the whole picture of the company, to generate long-term strategies for the company at different levels such as product

development, human resource management, the organizational structure, and competitiveness.

We believe these strategies will aid the development of core competences for the company.

- We believe that the company is moving in the right direction in providing vertical solutions to
  a variety of industries. The effort should be continued and improved consistently. The
  company needs to import more customers' involvement in the business solution analysis and
  developments, since only customers know what problems are underlying their businesses. So
  deep vertical integration and more customer participation will be critical for product
  development.
- Since the company has deep pockets after being acquired by CDC, the company should allocate more resources to its implementation services. The CRM software market is maturing. More and more vendors are entering this market, and many of them provide similar solutions. At the same time, the biggest barrier for organizations to implement CRM solutions is the high implementation failure rate. Especially in a hard economic period, most organizations are struggling with limited IT budgets. If the company can prove a high implementation rate to its customers, the competitive advantages of the company should be increased greatly.
- While the company is growing quickly, more and more departments are set up and middle managers are created. However, when a company gets more hierarchies, the communication sometimes is blocked. Indeed we have seen some symptoms of this during our project. To improve knowledge sharing and communication, the company should set up some formal knowledge sharing events or mechanisms to break down any blocks. At the same time, using a multifunctional team on the project will be an effective approach to the same problem.
- Even though CDC has distanced itself form the management of the company, the company can adopt CDC's power in some areas to market its CRM products. In addition, CDC could

help the company build its brand name in CDC's for areas like Asia, which will assist the company in expanding its market share.

Pivotal should not ignore big threats from Microsoft and other CRM vendors. According to rumours, Microsoft is aiming to crush all opposition in this market. Once Microsoft enters the CRM market in the near future, the competition of the market place will significantly increase. Given this market uncertainty, Pivotal should design five year or longer market strategies and product development plans, and allocate sufficient resources to conduct research and development on them. These new strategies will not necessary focus on CRM software products, but need to pay attention to other software product trends and market opportunities. In the worst-case scenario, CDC may impact the company in the long-term, for example steering Pivotal away from CRM to other software products.

The managerial challenges of implementing the above recommendations are huge. We suggest that the executive team of the company must carefully deal with following issues:

- When the company needs to build up new core competences to fit the dynamic market needs,
   the new core competences should be measured, defined, and integrated.
- How to stretch existing resource and competences is also a big challenge. The company have
  to hire and train talent to expanding current core competences. Management should pay more
  attention to manage and integrate new resources with existing ones.
- Having developed a strong capability to compete in the market, the company can not ignore
  its current core competences, but should appreciate and enhance them.

In conclusion, after conducting an external analysis of the healthcare insurance industry and an internal analysis of the company in the previous chapters, in this chapter we recommend the company adopt TQM solutions to improve its healthcare CRM products, thus increasing

its competitive advantage through its products. Then we emphasize that the company needs to differentiate itself in implementation services. Finally, we give recommendations on deepening vertical integration, how to enhance its implementation services, increase communication and knowledge sharing, and on expanding market channels for the long-term success of the company. As well, we mention that senior management should manage the above improvements by recognizing and embracing the managerial challenges associated with them and avoid assuming past success will guarantee future success, as much as our analysis shows Pivotal has every reason to make the most of the healthcare market.

# **APPENDICES**

Appendix I: Weekly Application Throughput

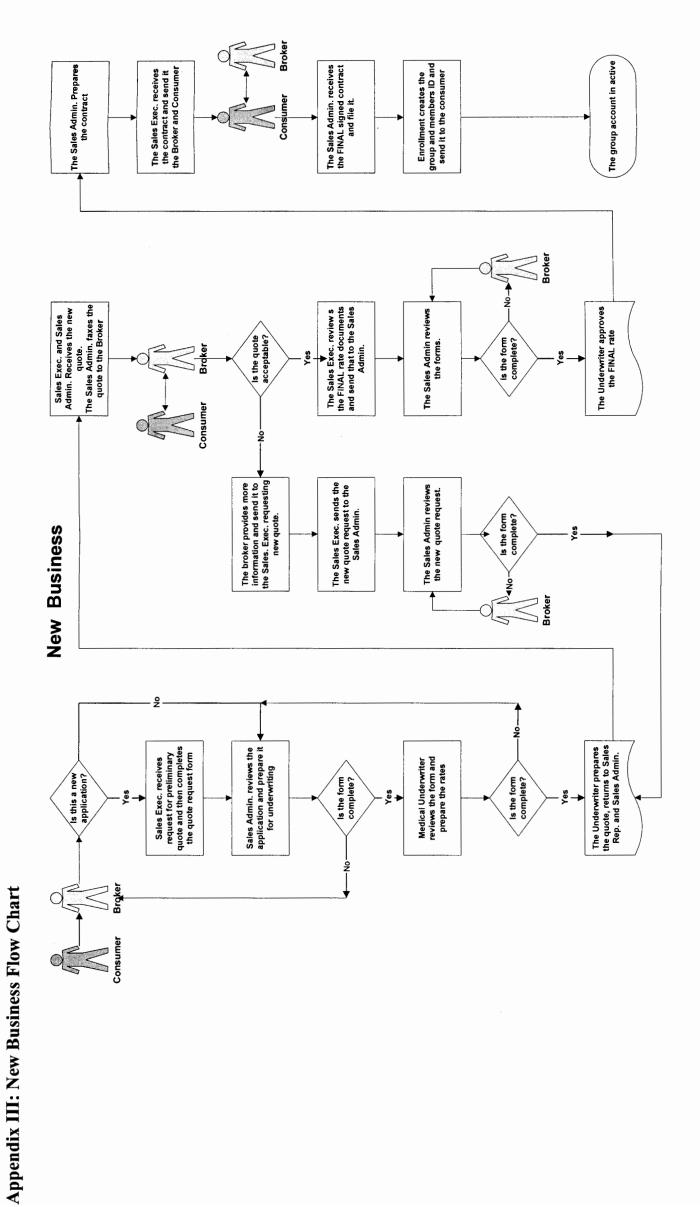
	Application	1st Week	2nd Week	2nd Week 3rd Week 4th Week 5th Week	4th Week	5th Week	Whole Month
Month 1	Submitted						
	In process						
	Closed						
	Average Days Spent on Each Application						
Month 2	Submitted						
	In process						
	Closed						
	Average Days Spent on Each Application						
Month 3	Submitted						
	In process						
	Closed						
	Average Days Spent on Each Application						
Month 4	Submitted						
	In process						
	Closed						
	Average Days Spent on Each Application						

Data input: Applications submitted per week; Applications in process per week; Applications closed per week; and Average days spent on each application. Data output: Application submitted per month, Application in process per month, Application closed per month, Average days spent on each application.

## Appendix II: Steps and Touches

		Individual	Time per	The # of
Steps	Step Name	Responsible	Step (hr.)	Touches
1	Receiving a request from a customer	Broker		
2	Sending the request to Sales Exec.	Broker		
3	Sales Exec. receiving the request	Sales Exec.		
4	Completing the quote request form	Sales Exec.		
5	Receiving the request form from Sales Exec.	Sales Admin.		
6	Preparing the form for underwriter	Sales Admin.		
7	Receiving the form from Sales Admin.	Underwriter		
8	Reviewing the form	Underwriter		
9	Preparing the quote	Underwriter		
10	Receiving the quote from Underwriter	Sales Admin		
11	Sending the quote to Brokers	Sales Admin		
12	Brokers sending the quote to the customer	Broker		
13	Negotiating the quote with customer	Broker		
14	Receiving updated info from the customer	Broker		
15	Sending to Sales Exec.	Broker		
16	Receiving the new quote request from Sales Exec.	Sales Admin.		
17	Reviewing the new quote request	Sales Admin.		
18	Receiving new quote request from Sales Admin.	Underwriter		
19	Preparing the new quote	Underwriter		
20	Receiving the new quote from Underwriter	Sale Admin.		
21	Reviewing the final rate documents	Sales Admin.		
22	Updating info in the final documents	Broker		
23	Receiving the final rate for approving from Sales Admin	Underwriter		
24	Approving the final rate	Underwriter		
25	Receiving the final rate from Underwriter.	Sales Admin.		
26	Preparing the contract	Sales Admin.		
27	Sending to Broker and Customer	Sales Admin.		
28	Signing the contract	Customer		
29	Receiving signed contract	Sales Admin.		
30	Sending the contract to enrolment group	Sales Admin.		

Data input: Time per Step (hr.), and the number of Touches.



Appendix IV: Distinguishing the Core and Support Steps

Steps	Step Name	The # of	Time per	Average	Core Step*	Support	Touches Cut by	Time Saved by
		Touches	Step (hr.)	Time per	(Y/N)	Step* (Y/N)	Eliminating	Eliminating
				Touch (hr.)			Support Steps	Support Steps
1								
2								
3								
4								
5								
9								
7								
8								
6								
10								
111								
••								
Total								
The percen	The percentage of cut touches:	uches:						
The percen	The percentage of time saved:	aved:						

Data input: Application submitted per month, Application in process per month, Application closed per month, Average days spent on each application per month.

Data output: Touches Cut by Eliminating Support Steps, Time saved by Eliminating Support Steps.

Appendix V: Process Breakdown in Four Segments

Segment: Paper	Paper			Segment:	Segment: Electronic input	c input		Segment:	Partial e-l	Segment: Partial e-businesses		Segment	: Straight 1	Segment: Straight through processing	cessing
Steps	Step	The # of	Time per	Steps	Step	The # of	Time per	Steps	Step	The # of	Time per	Steps	Step	The # of	Time per
	Name	touches	Step (hr.)		Name	touches	Step (hr.)		Name	touches	Step (hr.)		Name	touches	Step (hr.)
-				-				1				1			
2				2				2				2			
3				3				3				3			
4				4				4				4			
5				5				5				5			
9				9				9				9			
7				7				7				7			
∞				8				8				8			
6				6				6				6			
9				10				10				10			
11				11				11				11			
12				12				12				12			
13				13				13				13			
14				14				14				14			
15				15				15				15			
16				16				16				16			
17				17				17				17			
18				18				18				18			
19				19				19				19			
20				20				20				20			
:				:				:				:			
Total				Total				Total				Total			
Percentage	4)	%001	100%	Percentag	ခွင့			Percentage	e)			Percentage	ge		
Data inpu	t: The m	umber of T	Data input: The number of Touches, Time per	e per step.											

Data input: The number of Touches, Time per step.

Data output: The percentage improvement comparing the number of touches and time per step in paper segment.

### Appendix VI: Bottlenecks in Priority

Steps	Step Name	The # of	Time per	Non-	Bottlenecks in terms
		touches	Step	bottlenecks	of Time per Step in
			(Min.)	(Y/N)	Priority
1					
2					
3					
4		1			
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
•••		1.77			

Data input: The number of touches, and Time per Step.
Data output: Bottlenecks in terms of time per Step in priority.

# Appendix VII: Comparison between Before Improvement and After Improvement

Steps		1	2	3	4	5		20	7
Step Name		<u> </u>			<b>†</b>				Г
Best	The # of touches	1	i —		1		<u> </u>		┪
2001	Response Time per Step				<del>                                     </del>	1			Н
	Response Time per Application	<del> </del>		<b></b>	<del> </del>	-	<b></b>		1
Better	The # of touches	<del> </del>	<del></del>	<del>                                     </del>		<b>-</b>			┢
Better	Response Time per Step		<u> </u>	<u> </u>	1	<u> </u>	<del>                                     </del>	<u> </u>	┢
	Response Time per Application	<b>†</b>							H
Good	The # of touches	<del>                                     </del>	· ·	·		<u> </u>	1		۲
0000	Response Time per Step	_			1	1	-		H
	Response Time per Application	1			<del>                                     </del>		<del>                                     </del>		┢
Worse	The # of touches	†		[		<del>                                     </del>			H
***************************************	Response Time per Step		<del> </del>		<del> </del>	<del>                                     </del>	<del>                                     </del>		┢
	Response Time per Application	1		<u> </u>	<b></b>	<u> </u>	-		$\vdash$
Worst	The # of touches	<del>                                     </del>				<b>†</b>		<del> </del>	H
	Response Time per Step					<del> </del>			T
	Response Time per Application					<u> </u>	<b></b>		┢
Average	The # of touches	<del>                                     </del>		<del>-</del>		<del>                                     </del>		_	Т
	Response Time per Step		<b></b>		†	1		<b>†</b>	╁╴
	Response Time per Application			i		† — — — — — — — — — — — — — — — — — — —			Г
Steps	(After steps cut)	1	2	3	4	5		20	Ľ
Step Name				<del> </del> -	<u> </u>	<b>├</b> ──		<u> </u>	Ļ
Best	The # of touches			Ь——		—		<del> </del>	L
	Response Time per Step		ļ	ļ	ļ	<u> </u>	<b> </b>		Ļ
	Response Time per Application	1		<del>                                     </del>		ļ		-	<u> </u>
Better	The # of touches	<u> </u>	<del>                                     </del>	<del> </del>	├─-	ļ	<b>—</b> —		⊢
	Response Time per Step	<b>.</b>	<b></b> _	<u> </u>	<b>.</b>	<u> </u>	<del> </del> -	<b>ļ</b>	┞
0. 1	Response Time per Application	-			-	ļ			┝
Good	The # of touches			<del> </del>	ļ	<b>-</b>	-		┞
	Response Time per Step	<del> </del>	-	<del> </del>	<del> </del>	<del> </del> -	<b>!</b>	ļ	⊢
337	Response Time per Application		<b></b>	<b> </b>	<del> </del>	ļ		<del>                                     </del>	┡
Worse	The # of touches	<u> </u>			<del> </del>	-		-	-
	Response Time per Step	-	<del> </del>				<del> </del> -	ļ	⊢
337-	Response Time per Application	<u> </u>	<u> </u>	-	<b> </b>	-		<b>_</b>	Ļ
Worst	The # of touches			<del>                                     </del>	<b>├</b>	-	├──	<del> </del>	╀
	Response Time per Step	-		<u> </u>	<del>                                     </del>	<del>                                     </del>	├──	<del> </del>	┝
Avonogo	Response Time per Application The # of touches	<del> </del>		<del> </del>	}		<del>                                     </del>	<del>                                      </del>	┝
Average	Response Time per Step	<u> </u>	-	<del> </del>	-	┼	├	<del> </del>	╀
	Response Time per Step  Response Time per Application	<del></del>		<del> </del>		<del> </del>	<del>                                     </del>	<del> </del>	+
sted Time per Ste		1	L	1	Ь	L	L	l	_

Data input: The number of Touches per Step, and Response time per Step. Data output: Average response time per application, and Wasted Time per Step.

Appendix VIII: Calculation of Cost per Step Before Improvement

Step Name         Total time for each application         Cost of time for each application         Cost of time for each application         Administration         Administration employees         Cost of employ	Steps		2	3	4	5	 $\infty$	Total			
1)   Total time for each application   Annual Salary   Administration employees   Sales employees   Sales employees   Chidawnining employees	Step Name										
Thour (2)	Time per Step (hr.) (1)								Total time for each application		
Armed Salary   Administration employees   Armed Salary     Administration employees   Sales employees	Wasted Time per Step (hr.) (4)										
Autral Salary   Autral Salar	Direct costs	_									
Administration employees         Sales employees           258(1*2)         Linderwriting employees           258(1*2)         The number of applications per month:           358(1*2)         The average steps per application:           358(1*2)         Administration:           44ministration:         Transaction cost           44ministration:         Transaction cost           558(1*2)         Transaction cost           658(1*2)         Transaction cost           758(1*2)         Transaction cost           8         Transaction cost           9         Other overheads           10 other overheads         Transaction cost	Cost of employees per hour (2)								Ann	meal Salarry	Cost per Hour
Section         Sales employees         Underwriting employees         Underwriting employees           Sec (1*2)         The number of applications per month:         The number of applications per month:           The average steps per application:         The average steps per application:         Cost per month           The average steps per application:         The average steps per application:         Cost per month           The average steps per application:         The average steps per application:         Cost per month           The average steps per application:         The average steps per application:         Cost per month           The average steps per application:         The average steps per application:         Cost per month           The average steps per application:         The average steps per application:         Cost per month           The average steps per application:         The average steps per application:         Cost per month           The average steps per application:         The average steps per application:         Cost per month           The average steps per application:         The average steps per application:         Cost per month           The average steps per application:         The average steps per application:         Cost per month           The average steps per application:         The average steps per application:         Cost per month           The a	Administration employees								Administration employees		
Dybers         Underwriting employees           ES (1*2)         The number of applications per month:           The number of applications per month:         The number of applications per month:           The number of applications per month:         The number of applications per month:           The number of applications per month:         The number of applications per month:           The number of applications per month:         Cost per month           Administration         Administration           Thansaction cost         Paper           Paper         Telephone           The number of applications per month:         Cost per month           Administration         Cost per month           Administration         Cost per month           The number of applications:         Cost per month           Administration         Cost per month           Admi	Sales employees								Sales employees		
xes (1*2)       The number of applications per month:         The average steps per application:       The average steps per application:         The average steps per application:       Cost per month         Administration       Thansaction cost         The average steps per application:       Cost per month         The average steps per application:<	Underwriting employees								Underwriting employees		
The number of applications per month:   The average steps per application:   Cost per month	Total cost of employees (1*2)										
The number of applications per month:         The average steps per application:           The average steps per application:         Cost per month           The average steps per application:         Cost per month           Administration         Transaction cost           Paper         Paper           I Teleptone         Teleptone           I Teleptone         Total transaction cost           I Total transaction cost         Total transaction cost           I Total transaction cost         Total overheads           I Total overheads         Total overheads	Other direct costs			Щ							
The average steps per application:         The average steps per application:         Cost per month           Administration         Administration         Cost per month           Thansaction cost         Paper         Paper           It         Paper         Pethone           It         Pethonic         Pethone           It         Pethone         Peth	Total direct costs								The number of applications per month:		
Administration         Cost per month           Administration         Transaction cost         Paper           Paper         Paper         Paper           I         Paper         Telephone           I         Paper         Paper           I         Paper         Paper <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>The average steps per application:</td> <td></td> <td></td>									The average steps per application:		
	Overheads								Cost	st per month	Cost per application
	Administration								Administration		
	Transaction cost			Н					Transaction cost		
	Paper								Paper		
	Telephone								Telephone		
	Electronic								Electronic		
	Total transaction cost								Total transaction cost		
	Other overheads			Щ					Other overheads		
	Total overhead costs								Total overhead costs		

Data input: The salary of administration, sales, and underwriting employees, the number of applications per month, Other direct cost annually, Administration cost annually in terms of paper, telephone, and electronic, Other overheads annually, Revenue per year, The # of application per year, The number of employees.

Data output: Cost per step before improvement.

Appendix IX: Calculation of Cost per Step After Improvement

Steps	1	2	3	4	5		20	Total			
Step Name											
Time per Step (hr.) (1)									Total time for each application		
E L											
Wasted 1 Ime per Step (hr.) (4)					1	+	$\dagger$				
						+	$\dagger$				
Cost Per Touch											
Direct costs											
Cost of employees per hour (2)										Annual Salary	Cost per Hour
Administration employees							<u> </u>		Administration employees		
Sales employees									Sales employees		
Underwriting employees									Underwriting employees		
Total cost of employees (1*2)											
Other direct costs											
Total direct costs		į							The number of applications per month:	month:	
							_		The average steps per application:	n:	
Overheads										Cost per month	Cost per application
Administration									Administration		
Transaction cost							-		Transaction cost		
Paper									Paper		į
Telephone								_	Telephone		
Electronic									Electronic		
Total transaction cost							$\dashv$		Total transaction cost		
Other overheads						-			Other overheads		
Total overhead costs									Total overhead costs		

Data input: The salary of administration, sales, and underwriting employees, the number of applications per month, Other direct cost annually, Administration cost annually in terms of paper, telephone, and electronic, and Other overheads annually.

Data output: Cost per Step after Improvement.

Appendix X: The Improvement on Response Time and Cost

	]							
ınt	Cost per Step							
After Improvement	Response Cost Time per Step (hr.)							
A	The # of Touches							
'nt	Cost per Step							
Before Improvement	The # of Response Cost   Touches Time per Step (hr.)							
Be	The # of Touches							
Step Name						! !		
Steps		1	2	3	4	5	•••	Total

Calculation Before	Before	After	Percentage of Calculation	Calculation
			Improvement	
Total Steps				New Applications per Year
Total Touches				Total Time Saving per Year
Response Time	Response Time per Application			Total Cost Saving per Year
Total Cost per Applicat	Application			
	,			

Data input: Cost per Step Before, Cost per Step After, The # of Touches, and Response time per Step, and New Applications per Year.

Data output: Cost per application, Total Steps, Total Touches, Response Time per Application, Total Cost per Application, Percentage of Reduction of Steps, Touches, Response Time per Application, Total Cost per Application, Total Time Saving per Year, and Total Cost Saving per Year.

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