



CUSTOMER RELATION MANAGEMENT:
CASE STUDY OF ONEEMPOWER
(THAILAND) CO., LTD.

by

Mr. Nuttapong Kitsamanmit

A Final Report of the Three-Credit Course
CE 6998 Project

Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Science
in Computer and Engineering Management
Assumption University

November, 2001

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The Graduate School of Assumption University has approved this final report of the three-credit course. CE 6998 PROJECT, submitted in partial fulfillment of the requirements for the degree of Master of Science in Computer and Engineering Management.

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November 2001

ABSTRACT

This Project report is written based on a case study of OneEmpower (Thailand) Co., Ltd. with the intention of author to enhance the CRM solution that help our clients improve corporate efficiency, effectiveness and profitability by applying customer relation management system to improve customer loyalty and develop customer information. With the benefit of integration of data from interviewing the system manager, and staffs in service department to provide consistent information across departmental organizations. And informations from internet, document, text, and journals. We could be successful in obtaining the growth in size and number of customers, building and maintaining customer relationship and managing customers information quickly.

Therefore, an idea of improving the customer relationship in this study was believed to be helpful and could be applied for other companies.

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Finally, I wish to express the special appreciation to my parents for their support, encouragement and great sacrifices during the creation of this project.

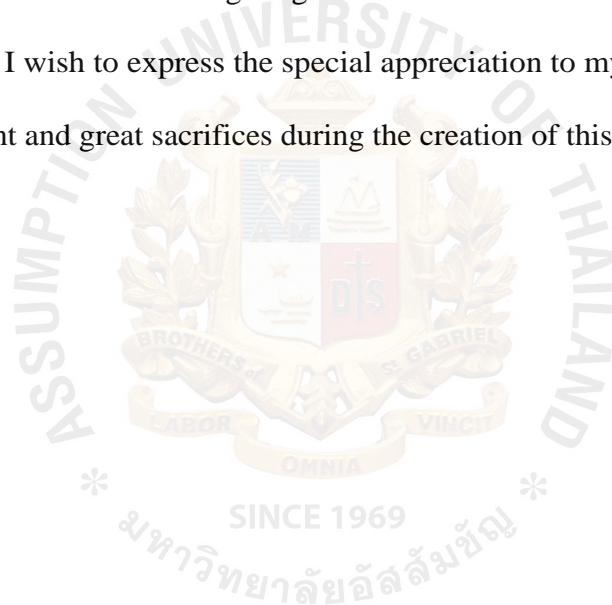


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I. INTRODUCTION

1.1 General

In today's increasingly competitive environment, customer relation management is critical to corporate success. Delivering high quality services and achieving, high customer satisfaction has been closely linked to profitability. The customer relation management will be developed to enhance the formation of individualized relationship with customers, with the aim of improving customer satisfaction and maximizing profits. The project aims to help an enterprise to enable its marketing department to identify and target their best customers, marketing campaigns with clear goals and objective.

Therefore, customer relation management was mentioned to be a significant tool of any enterprises that would like to increase customer service system efficiency in that firm. There are many methods to improve the customer relationship such as customer information architecture, data quality, data mining, target marketing, e-crm . and so on. All methods are absolutely affected in higher customer satisfaction capacity and efficiency of information usage.

1.2 Research Objectives

- (1) Identify the way to build and maintain customer relationship and managing customer information quickly.
- (2) To create and improve customers loyalty.
- (3) Able to provide linkage to individual customer information from multiple data sources for specific marketing application.

1.3 Scope and Limitation

- (1) Focus on the customer relation management systems.
- (2) Apply the customer relation management system, as a tool and methodology that deliver integrated and accurate data for analysis.
- (3) Focus on analyzing, improving the customer satisfaction and providing the high level of service.
- (4) Apply an enterprise customer relationship management solution to recognize and understand patterns and trends based on the integration of complex customer transaction data.

Focus on data management solution for customer information service.



II. LITERATURE REVIEW

As a business grows in size and number of customers, building and maintaining customer relationships and managing customer information quickly become complicated task. The main issue facing marketers today is the attention of their message to their customers. It becomes the discussion of customer relationship management (CRM) systems in evolving open markets where customers are confronted with many options. The marketer sources information on the behavior of existing and prospective customers. attempts to understand which of many observed facts and behaviors explain actual or potential purchasing activity and develops strategies that will influence these behaviors in favor of the company's products.

In order to understand the role of IT in strategic advantage, we now examine two of Michale Porter's classical models and IT management to be discussed as reference concept in this report.

2.1 Competitive Forces Model (5s Forces)

One of the most well-known frameworks for analyzing competitive is competitive forces model (1985). This model has been used to develop strategies for companies to increase their competitive edge. It also demonstrates how IT can enhance the competitiveness of corporations. The model recognize five major forces that could endanger a company's position in a given industry. The five major forces can be generalized as follows:

- (1) The threat of entry of new competitors.
- (2) The bargaining power of suppliers.
- (3) The bargaining power of customer.
- (4) The threat of substitute products or services.

(5) The rivalry among existing firms in the industry.

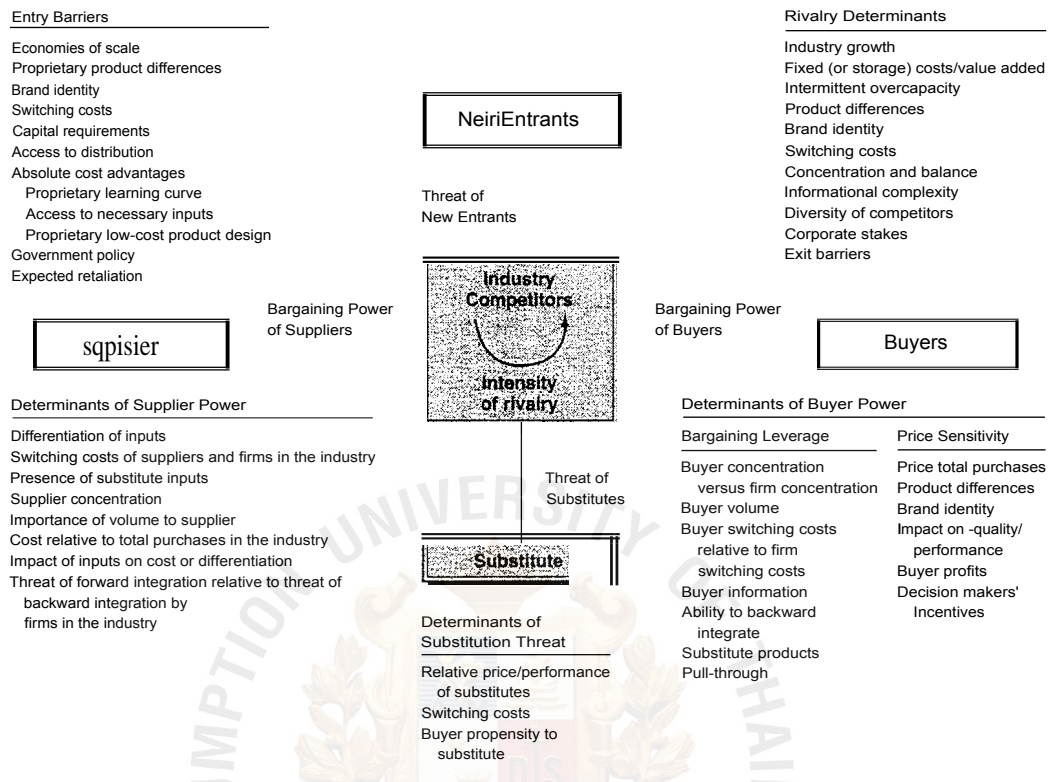


Figure 2.1. Five Forces Model.

Table 2.1. Impact of Competitive Forces and Role of IT.

Impact of Competitive Forces and Role of IT		
<i>Key Force Impacting the Industry</i>	<i>Business Implications</i>	<i>Potential IT Effects</i>
Threat of new entrants	Additional capacity Reduced prices New basis for competition	Provide entry barriers/reduce access by: exploiting existing economies of scale differentiate products/services control distribution channels segment markets
Buyer power high	Forces prices down Demand higher quality Require service flexibility Encourage competition	Differentiate products/services and improve price/performance Increase switching costs of buyers Facilitate buyer product selection
Supplier power high	Raises prices/costs Reduced quality of supply Reduced availability	Supplier sourcing systems Extended quality control into suppliers Forward planning with supplier
Substitute products threatened	Limits potential market and profit Price ceilings	Improve price/performance Redefine products and services to increase value Redefine market segments
Intense competition from rivals	Price competition Product development Distribution and service critical Customer loyalty required	Improve price/performance Differentiate products and services in distribution channel and to consumer Get closer to the end consumer—understand the requirements

SOURCE: Ward and Griffiths (1997), p. 86.

2.2 Value Chain Model

Another way to analyze and examine the role of IT, provided form Porter' s, is Porter's Value Chain Model.

According to the Value Chain Model (Porter 1985), the activities conducted in any manufacturing organization can be divided into two parts: primary activities and support activities.

The primary activities are:

- (1) Inbound logistics (inputs)
- (2) Operations (manufacturing and testing)

- (3) Outbound logistics (storage and distribution)
- (4) Marketing, and sales
- (5) Service

The primary activities are sequenced and work progresses according to the following manner while value is added in each activity. They are supported by the following support activities which are:

- (1) The firm infrastructure (accounting, finance, management)
- (2) Human resources management
- (3) Technology development (R&D)
- (4) Procurement

Each support activity can support any or all of the primary activities; they may also support each other.

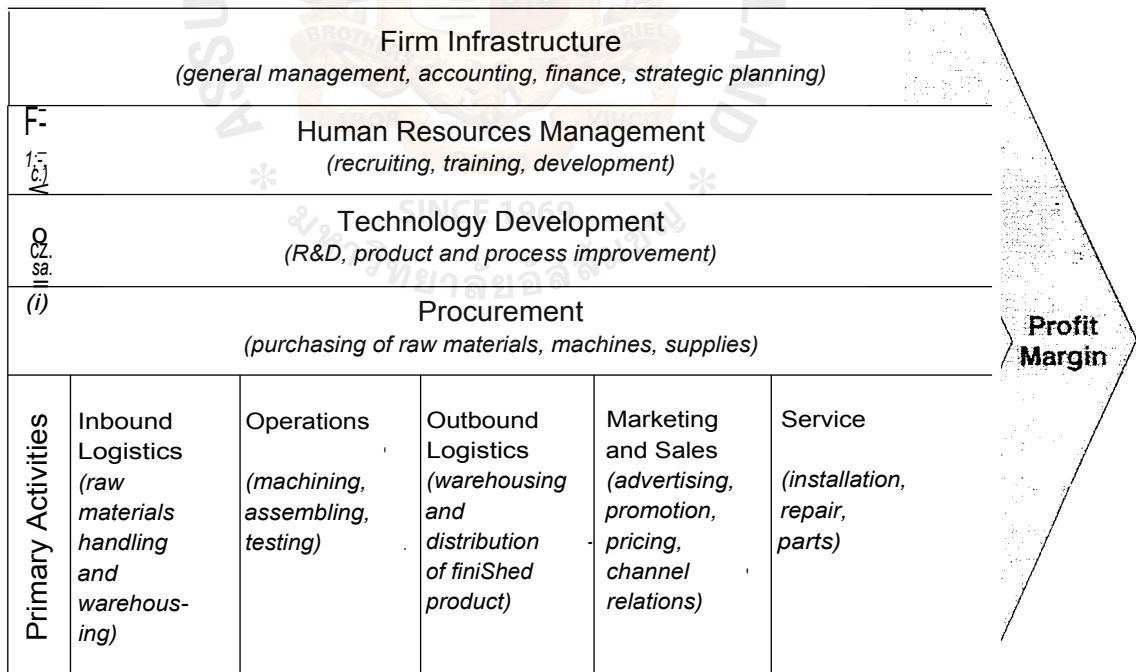


Figure 2.2. Value Chain Model.

A firm value chain is part of larger stream of activities, which Porter calls Value system. A value system includes both the suppliers that provide the inputs necessary to the firm and their value chains. Gaining and sustaining a competitive advantage, and supporting that advantage by means of IT, requires an understanding of this entire value system.

The value chain and value system concepts can be drawn for both products and services and for any organization, private or public. Although the initial purpose of the value chain model was to analyze the internal operation of a corporation to increase its efficiency, effectiveness, and competitiveness, the model was later used as a basis for explaining the support IT can provide.

2.3 Customer Relation Management (CRM)

is feasible to build and maintain customer relationships entirely through face-to-face interactions between the staff and the customers in order to provide immediate, seamless integration among customers, financial, supply, supply chain and employee management system. A CRN system automates the marketing value chain. CRM functions build on the level of data quality and granularity in a marketing database to discover and exploit regularities and to achieve marketing objectives.

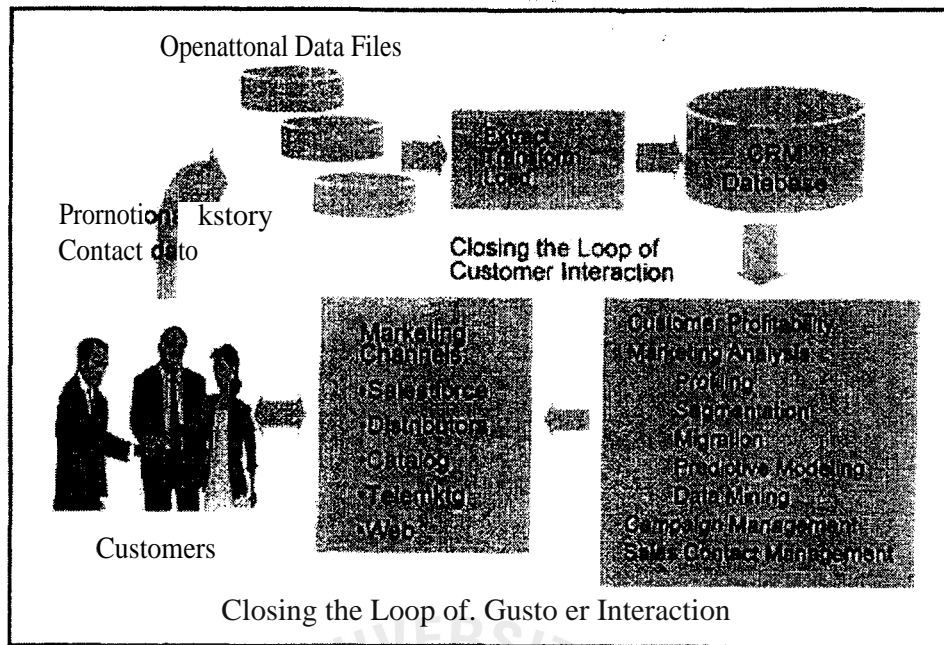


Figure 2.3. Closing the Loop of Customer Interaction.

The CRM system uses various tools and applications to analyze customer information and to drive marketing initiatives, based on observed regularities of customer behavior. Some of the tools used to accomplish this are customer profitability analysis, campaign management and sales contact management. These tools, applied to the CRM database, enable the marketer to develop theories about how customers might respond to initiatives and then to track their actual responses and use this experience in future marketing efforts.

These functions comprise a closed-loop CRM system where the results of marketing initiatives are noted in the CRM database at the customer contact level and related back to the campaign that initiated them. CRM consists of:

- (1) Helping an enterprise to enable its marketing department to identify and target their best customers, marketing campaigns with clear goals and objectives and generate qualify leads for the sales team

- (2) Assisting the organization to improve telesales, accounts, and sale management by optimizing inform shared by multiple employees and streamlining existing processes
- (3) Allowing the formation of individualized relationships with customers. with the aim of improving customer satisfaction and maximizing profits; identifying the most profitable customer, database marketing and providing them the high level of service.

In most cases, as one would expect, marketing concepts and approaches form the foundation for a corporation's CRM strategy. Database marketing drove the initial design and development of data marts, or marketing data warehouses, fully focused on customer-level data and marketing communications. Marketing data marts have enabled advanced analysis of customer data to provide not only valuable customer profiles and segmentation capabilities but also the ability to predict critical patterns of customer behavior.

Database marketing strategies have offered a valuable framework for construction of CRM strategy. It is easy to see hoe database marketing concepts are critical to successful CRM. Database marketing has brought the following benefits to many companies:

- (1) Forming its own foundation around a centralized repository of all customer information, to which business users have desktop access.
- (2) Making data usable through standardization across all corporate data sources.
- (3) Directing application-specific analytical processes for targeting homogeneous customer segments.

- (4) Incorporating business rules that link information to customer communications.
- (5) Driving the collaboration of cross-departmental steering committees for everything from data mart design to strategy development.
- (6) Producing strategies to launch marketing campaigns that successfully integrate technology, information and customer communications.

It means that for a corporate CRM strategy to be effective, all customer communications need to be carefully orchestrated and interfaced. The need for interfacing of systems is the collection of data needed to be "close the loop" or, in other words, to identify a connection between a customer communication and the behavior of a specific customer (or prospect).

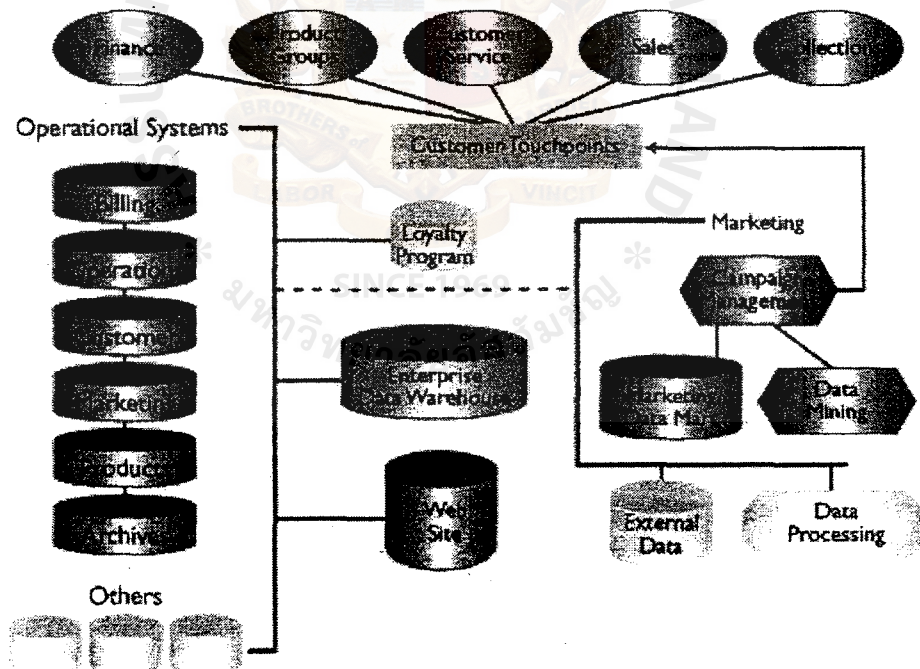


Figure 2.4. Marketing Campaign Strategy.

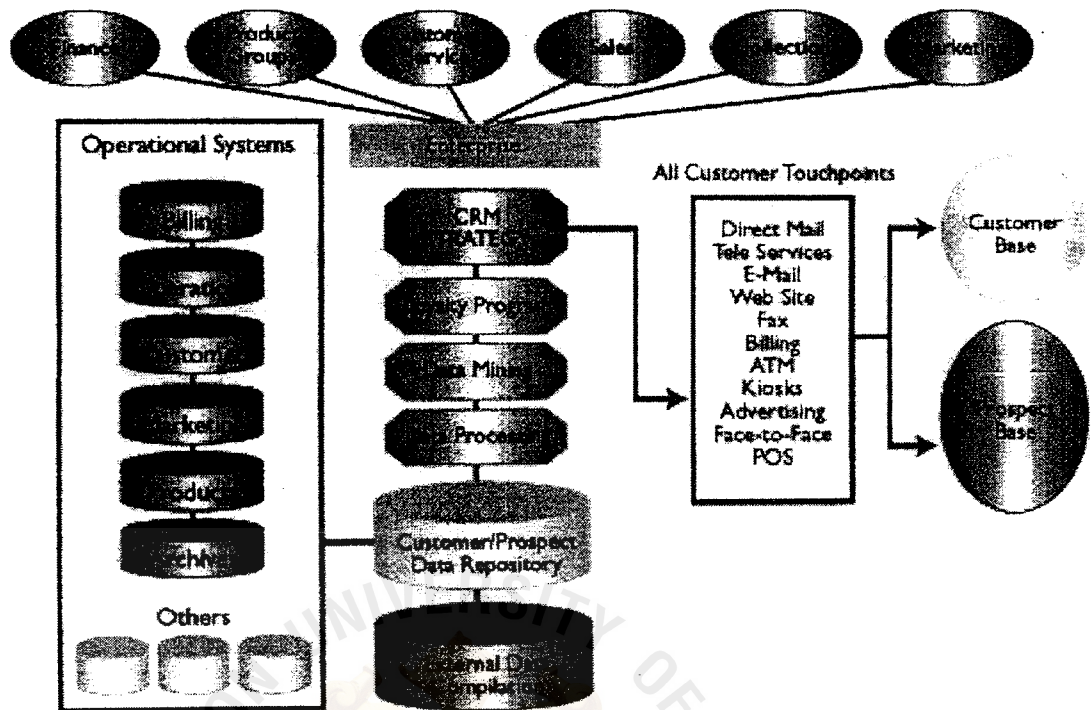


Figure 2.5. Customer Relationship Strategy.

2.4 CRM Interaction Management

CRM Interaction Management aggregate customer information from multiple systems and sale channels into a comprehensive customer history. It integrates tightly with CRM support, so keeps customer information readily available to call center agents servicing_ customer needs. From one easy-to-navigate screen, agents can access multiple databases, configure and enter orders, check status, resolve bill inquiries, log service issues and retrieve product information.

2.4.1 Integrated Experience

- (1) CRM Interaction Management provides and integrated customer experience across sales, marketing, and service functions.
- (2) CRM Interaction Management provides integrated workflow across peoplesoft CRM application and other peoplesoft products.

(3) Seamless integration of all enterprise application is provided through CRM Interaction Management

2.4.2 Channel Management

CRM Interaction Management provides contact Management across all channels- web, voice, fax, e-mail, or wireless.

Access to Functionality:

CRM Interaction Management provides access to back-office functionality such as order capture.

2.4.3 CRM Marketing

CRM Marketing provides complete functionality for developing, executing, and tracking marketing programs. Marketing campaigns employ five components-target audience, offer, content, channel, and call to action which can be tested or reused. "Triggers" automatically generate communications pieces., based on response. Peoplesoft CRM marketing incorporates analytics for measuring results and developing new strategies.

2.4.4 CRM Sales

CRM sales provides closed-loop management of all sales activities: selecting prospects. producing or capturing leads from marketing, and managing opportunities. Sales managers benefit from automated forecasting and the ability to adjust plans at the sales representative level—or by aggregate territory—without updating the underlying opportunities.

2.4.5 CRM for Communications

CRM for communication is designed specifically for the communications industry. It simplifies the sales and marketing process from procurement to receipt settlement. It automates the ordering and configuring of complex service offerings. It

also supports targeted marketing, online shopping and ordering, bill presentment and payment, and customer self-service.

2.4.6 CRM Field Service

CRM Field Service improves the efficiency of internal and third-party field service organizations. It tracks service-level agreements, entitlements, warranty coverage, and "return material authorizations." It stores product configurations. CRM Field Service also features robust integration with several people soft applications for faster turnarounds and areater use of resources.

Organization must nature their client relationships to ensure customer satisfaction and subsequent loyalty. Companies are able to target the right customer with the most appropriate solution, ensuring the most profitable promotions and highest propensity to buy. Efficient management, analysis and use of customer information yield the competitive advantage necessary among companies fighting for the same customers. The competitive advantage is not reached just buy understanding the optimal customer segmentation. Instead, the competitive edge is gained by linking to the customer via the optimal delivery channel (the world wide web, direct mail, outbound call center, etc.), organizing customer information and mining customer information for innovative product and service ideas that competitors haven't thought of yet.

The key to successfully making this switch in marketing focus is altering the way in which organization analyzes their customer data. Most of the data organizations need in order to yield integrated, accurate customer information comes directly from the customers themselves: their demographics, their purchasing patterns, their likes and their dislikes, their means and methods of purchasing, their buying history. The good news is that most of the information is in bits and pieces and lives in disparate data

sources across an organization. This may cause organization to think that from a marketing or customer relationship management prospective.

Organizations need different tools to achieve these "smarter" marketing goals. They must build an infrastructure to support technology-enabled marketing that is information- and customer-driven, rather than product-driven like the old style of marketing. Organizations must invest in enterprise customer relationship management solution based on an effective customer information architecture (CIA), decision support systems (DSSs) and delivery channel applications such as e-commerce applications.

CRM strategy must include effective use of data warehousing technology and sophisticated delivery channel support systems-many of them Web-enabled. Three key elements to a successful enterprise customer relationship management solution.

2.5 Customer Information Architecture (CIA)

CRM solution is ineffective without accurate and integrated customer information. The best method for integrating data cross-functionally is with data warehousing technology, and the best solution for accuracy is taking data through the data quality process.

Customer Information Architecture (CIA)-the tools and methodologies that deliver integrated and accurate data for analysis which is the piece of the enterprise customer relationship management puzzle that turns disjointed data into cohesive information.

With customer information resident in disparate database across disparate platforms, traditional data management processes are inadequate to support a best-in-class customer information architecture (CIA). Because customer information repositories are developed iteratively and the operational environment is constantly

changing, the interface between the operational and data warehouse environments can become unmanageable if one relies solely on hand-coding efforts. Best-in-class customer information architectures (CIAs) are supported by a scalable data management packages (i.e. extraction, transformation and loading software) which automate the design, construction and maintenance of operational data stores, data warehouses and marts

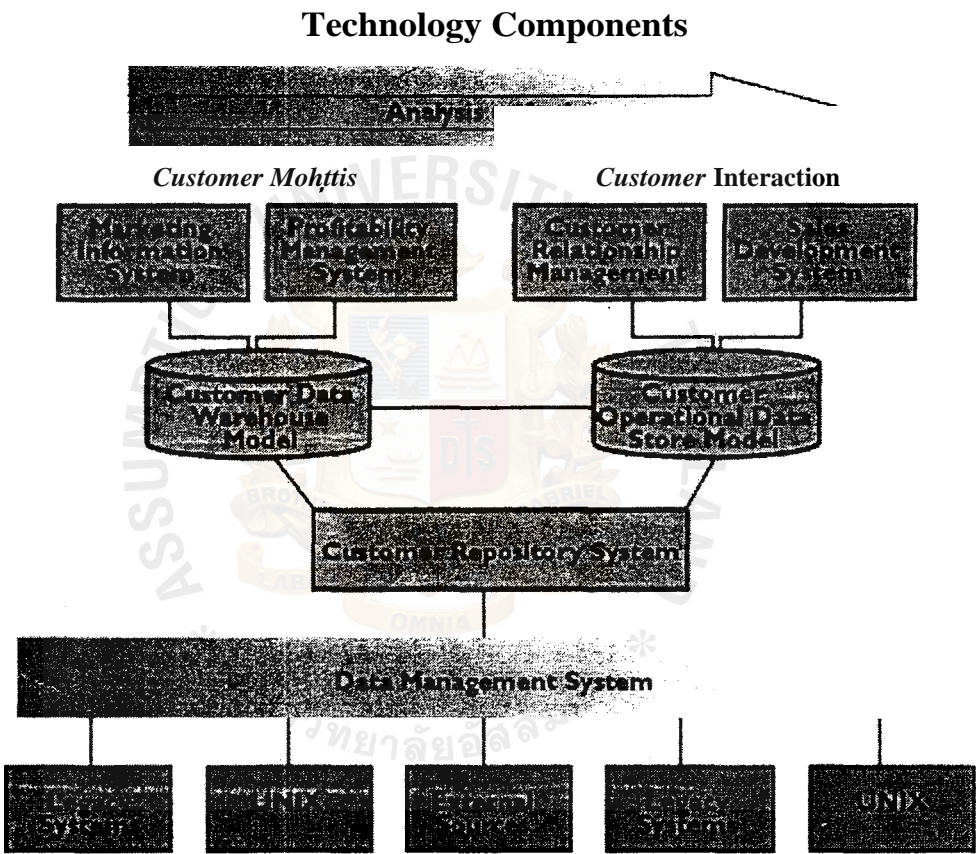


Figure 2.6. Customer Information Architecture.

Often many attempts are made to aggregate customer information. Most attempts only make data available on a departmental basis and provide incomplete or inconsistent information. The best in class data management solution for a CIA provides a flexible, automated approach to data warehouse or mart initiatives, allowing customer to build on

their initial investment by growing in any direction. They are based on a unique architecture that lets organizations collect and process information only once and then organize it for delivery to any point of use within their organizations. Multiple capabilities required to support this environment include:

- (1) Capability to support projects requires integration of data from multiple, heterogeneous source database to provide consistent information across departmental organizations. Normally this includes sourcing multiple legacy files and targeting one or more relational database environment.
- (2) Capability to build and maintain data warehouses or operational data stores serving a wide variety of users across the enterprise. The capability must be provided to integrate data from several subject areas from cross-enterprise data sources, as well as managed deployment of warehouses on multiple heterogeneous database scaling from NT SQL to MPP configurations.
- (3) Capability to support rapid, economical construction of scalable data marts for a workgroup or specific subject area.
- (4) Capability to build a mart consisting of a single subject area of data within a single target database, commonly sourcing UNIX operational systems and creating a data mart on a UNIX or NT platform to support specific customer-facing solutions or populating a customer service or sale management system.
- (5) Capability to convert data for migrating data across one or more application domains. It integrates data from multiple legacy sources into a single target database or distributes to multiple sources.
- (6) Capability to identify change that occurs in operational systems so that ongoing data warehouse/data mart/operational data store maintenance is

more efficient, by capturing and applying changed data to the warehouse or mart environment.

The core components of a best-in-class CIA include software which provides integrated capabilities for design, construction and maintenance of scalable data warehouses and marts; an intuitive, graphical user interface; and workflow model for complete support of the implementation and maintenance cycles.

The environment must provide an open platform to integrate and manage both business and technical meta data about warehouse versions across the enterprise.

2.6 Delivery Channels

The clear market leaders will be the organizations taking advantage of the Internet age by implementing e-commerce solutions on top of robust analytical solutions that are supported by data warehousing technology.

E-commerce is changing the face of enterprise customer relationship management and marketing, enabling customers to purchase items and be catered to virtually 24 hours a day. When you sign on or call up, customer preferences, profile, value, issues, and history should be known. This provides customer service representatives with the information needed to make suggestion on additional services that can be figured for the individual customer. It is the tools behind the knowledgeable sales associate and the fancy Web site that help organizations cater to their customer's needs and wants.

Organization operates world-class best practices while minimizing risk, maximizing effective and efficient customer and reducing overall costs. To have a successful CRM, organization must align their service channels to their customers. Not all customers can be afforded the same level of service. Organizations must determine hoe to segment their customer base and delivery channels. Once segmented, they need to align customer segments with the most appropriate delivery channels.

One method that helps companies identify appropriate distribution channels is to consider using customer touchpoints as a guidepost for establishing channel functionality. If the analysis identifies significant customer contact for multiple products across single distribution points (i.e. outbound sales), the process design and technology support will be designed differently than if only a single product were to be identified for a specific channel. Conversely, if a particular product were to be distributed through several channels, designs would focus heavily on consistency of message and tight integration of live information. In either event, these operational touchpoint decision should be tightly aligned to corporate vision and strategy.

The CRM design needs to be holistic or enterprise wide with a whole company-to-end process view. Only then can you design and execute effectively for the benefit of customers and the organization.

Organization should enable their customers to have multiple access methods, such as phone, interactive voice response, internet, ATM/kiosk, branch and mail; and the type of access should be linked to customer-segmented needs. Tool-free access numbers should be provide to all customers. Companies must exemplify a single-image perspective by providing one number to call for all inquiries: and they should have a common architecture to support multiple channels, which maximize system components and reusability and leverage existing systems. The sales and service philosophy needs to be one of "anytime, anywhere," resulting in high customer satisfaction.

2.7 Data Management

A CIA data management function defines the roles and responsibilities of the organization and defines the overall level of acceptance for the organization. First, the data management function should establish the guidelines for data quality for the organization. Data quality embraces four levels of data analysis, and each level is

designed to analyze the quality of the data environment from a different prospective using appropriate criteria to identify the various types of data quality problems that may be present. The methodology of data quality analysis provides a structured framework in which to plan, organize and perform a systematic assessment of the data quality condition of the data environment. The four levels of analysis (as shown in Figure 7). are completeness and validity. structural integrity, business rules and conversion rules.

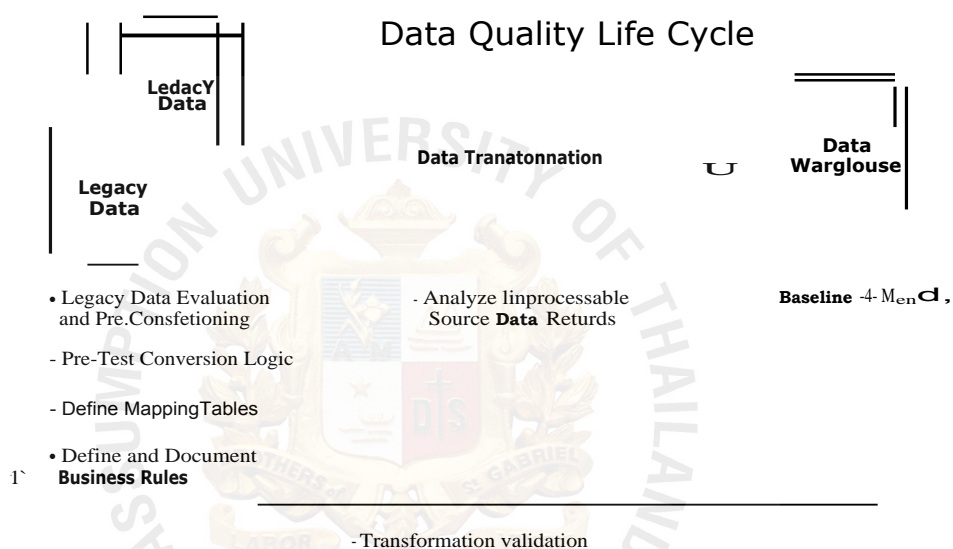


Figure 2.7. Data Quality Analysis Methodology.

Data Quality is an extremely important issue since quality determines the data's usefulness as well as quality of the decisions based on these data. Data are frequently found to be inaccurate, incomplete, or ambiguous, particularly in organizational database.

One of the major issue of DQ is Data integrity which is a change made in the file in one place may not be made in the file in another place or department.

The methodology is based on performing sequential analysis that progresses from simple tests of data quality to more rigorous, complex and subtle tests of data quality.

By following this methodology, the data quality analysis results in a comprehensive and complete assessment of the data quality the exposes and quantifies both the strengths and weakness of the data environment.

Each level of analysis is designed to address relevant types of data quality problems and requires that appropriate quality criteria be available or established. The actual data quality condition is measured against those criteria. Analyzing each level in sequence is important because it is useful in understanding the problems at one level and how they can have a compounding effect the results at a higher level of analysis.

Data management has been geared to supporting transaction processing by organization the data in a hierarchical format. This format supports efficient high volume processing; however, it is inefficient for queries and other ad hoc applications. Therefore, relational database were added to facilitate end-user computing and decision support. With the introduction of client/server environments databases became distributed throughout organizations, creating problems in finding data quickly and easily.

It is now well recognized that data are a burden, but their use, in terms of information and knowledge, is power. The purpose of appropriate data management is to ease the burden and to enhance the power. The data warehouse is only one building block of effective data management. Recently, intranets have been playing a greater role in the support of information sharing across the enterprise, and databases accessible through the Internet can be used by almost any organization.

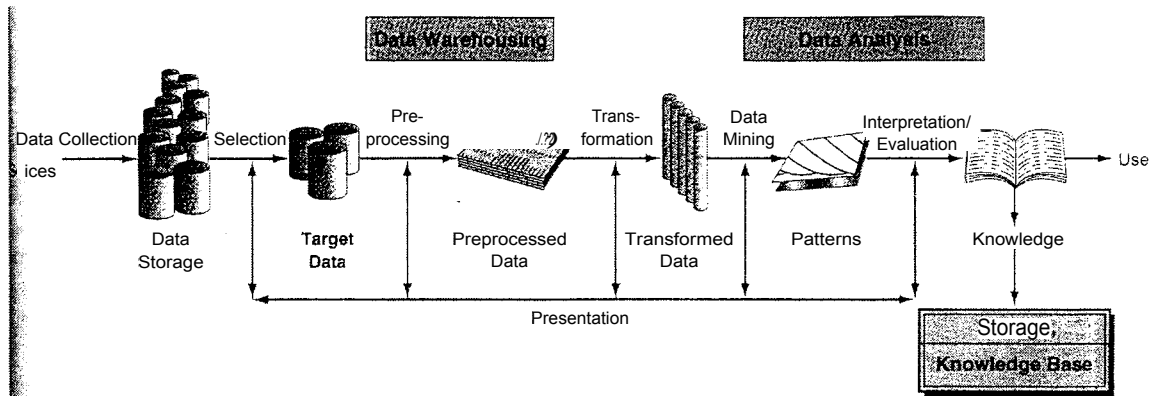


Figure 2.8. Converting Data to Knowledge.

2.7.1 Data Sources and Collection

The data life cycle begins with the acquisition of data from data sources. Data can include documents, pictures, maps, sound, and animation and they can be stored and organized in different ways before and after use. Data also include concepts, thoughts, and can be raw or summarized. Many IS applications use summary or extracted data. Data can also be classified as internal, personal, and external.

2.7.2 Internal Data

An organization's internal data are stored in one or more places. These data are about people, product, services, and processes. For example, data about employees and their pay are usually stored in the maintenance department database. Sales data can be stored in several places-aggregate sales data in the corporate database and details at each regional database. Internal data are usually accessible via an organization's computer network.

2.7.3 Personal Data

IS users or other corporate employees may document their own expertise by creating personal data. These include, for example, subjective estimates of sale, opinions about what competitors are likely to do, and certain rules and formulas

developed by the users. These data can reside on the user's OC or be placed on some public databases or knowledge bases (some personal data are not documented but are kept in people's memories).

2.7.4 External Data

There are many sources for external data, ranging from commercial database to sensors and satellite. Data are available on CD-ROMs, on Internet servers, as films, and as music or voices. Pictures, diagrams, atlases, and television are also sources of data. Hundred of thousands of organizations worldwide place publicly accessible data on their web servers, flooding us with data. Most external data are irrelevant to a specific application. Yet much external data must be monitored and captured to ensure that important data are not over-looked. Large amounts of external data are available on the Internet.

2.7.5 Internet Database

Some external data flow to an organization on a regular basis through electronic data interchange (EDI) or through other traditional company-to-company channels. but much data are accessible via the Internet.

- (1) The Internet: Many thousands of database all over the world are accessible through the internet. A user can access home pages of vendors, clients, and competitors. He or she can view and download information while conducting research. The internet is becoming the major source of external data for many decision situations.
- (2) Commercial online publishing: An online publisher sells access to specialized databases, newspapers, magazines, bibliographies, and report. Such a service can provide external data to users in a timely manner and at a

reasonable cost. Several thousand services are currently available, most of which are accessible via the Internet.

2.7.6 Methods for Collecting Raw Data

The diversity of data and the multiplicity of sources make the task of data collection fairly complex, creating quality and integrity problems. Sometimes it is necessary to collect raw data in the field. Raw data can be collected manually or by instruments and sensors. Data can also be scanned or transferred electronically.

The collection of data from multiple external sources may be an even more complicated task. One way to improve it, according to Roland (1994), is to use a data flow manager (DFM), which takes information from external sources and puts it where it is needed, when it is needed, in usable form. A DFM consists of;

- (1) A decision support system
- (2) A central data request processor
- (3) A data integrity component
- (4) Links to external data suppliers
- (5) The processes used by the external data supplies

Data processing in organizations can be viewed either as transactional or analytical. Transaction processing is the routine daily processing of the transactions of the organization such as ordering or billing. The data in such cases are organized mainly in a hierarchical structure and are processed by the IS department. The database and the processing systems involved are known as operational systems and the results are mainly summaries and reports. In today's fast paces and highly competitive marketplace, access to data is critical. The most successful companies are those that can respond quickly and flexibly to market changes and opportunities, and the key to this response is the effective and efficient use of data and information. It is not sufficient,

therefore to conduct transaction processing. A supplementary activity, called analytical processing, is done mainly by end users. Placing strategic information in the hands of decision maker aids productivity and empowers users to make better decisions leading to greater competitive advantage. End users need direct access to corporate data. A Load data delivery system therefore should be able to support:

- (1) Easy data access by the end users themselves
- (2) Quicker decision making
- (3) More accurate and effective decision making
- (4) Flexible decision making

Analytical processing, which includes DSS, EIS, and other end-user activities, is based on data stored in the operational system and possibly on external data.

As a database marketer, how will you find those high-potential customers in a database that contains hundreds of data items for each of millions of customers?

It has an answer that data mining software can help find the "high-profit" gems buried in mountains of information. You must somehow fit your data mining results into the execution of marketing campaigns that enhance the profitability of customer relationships.

2.8 Data Warehouse

is a repository for relevant business data. While traditional database primarily stores current operational data, data warehouse consolidates data from multiple operational and external sources in order to attain an accurate, consolidated view of customers and the business. Characteristics of data warehousing are:

- (1) Organization Data are organized by detailed subject (e.g., by customer, vendor, product, price level, and region, containing only information relevant for decision support.

- (2) **Consistency** Data in different operational databases may be encoded differently. For example, gender data may be encoded 0 and 1 in one place and "M" and "F" in another. In the ware house they will be coded in a consistent manner.
- (3) **Time Variant** The data are kept for 5 to 10 years so they can be used for trends, forecasting and comparisons over time.
- (4) **Nonvolatile** Once entered into the warehouse, data are not updated.
- (5) **Relational** Typically the data warehouse uses a relational stucture.
- (6) **Client/server** The data warehouse uses the client/server architecture mainly to provide the end user and easy access to its data.

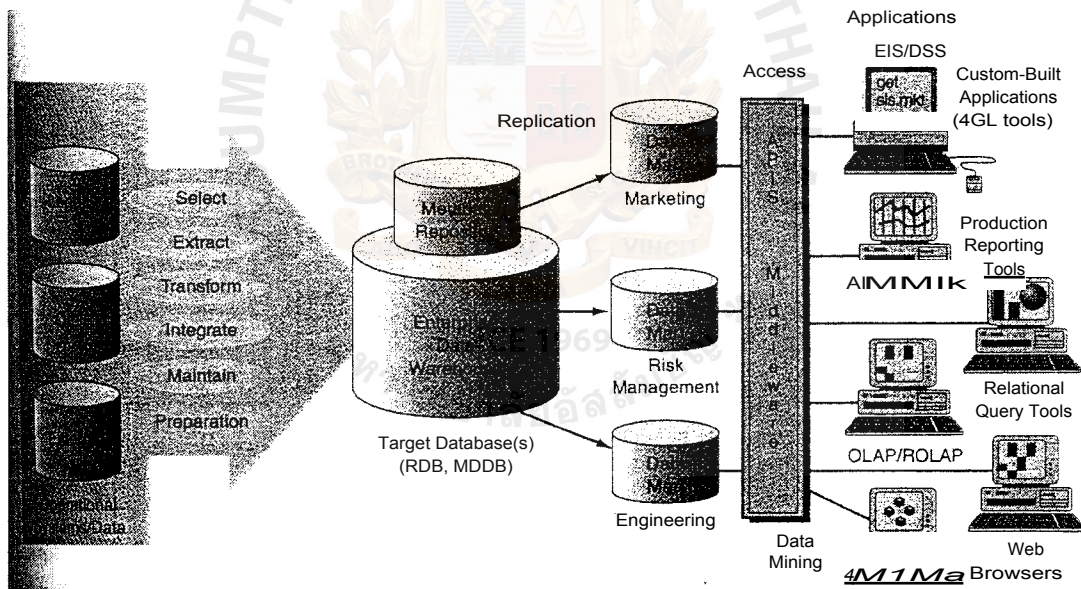


Figure 2.9. Data Warehouse Framework and Views.

2.8.1 Data Mart

is a replicated subset of the data warehouse and it is dedicated to functional or regional area.

2.8.2 Database Marketing

uses information in computerized databases to target offerings to customers and prospects.

2.8.3 Data Mining

uses technologies such as neural networks, decision trees or standard statistical techniques to search large volumes of data. In doing so, Data mining builds models for patterns that accurately predict customer behavior.

Data mining uses well-established statistical and machine learning techniques to build models that predict customer behavior. The technology enhances the procedure by automating the mining process, integrating it with commercial data warehouses, and presenting it in a relevant way for business users.

Data mining helps marketing professionals improve their understanding of customer behavior. In turn, this better understanding allows them to target marketing campaigns more accurately and to align campaigns more closely with the needs, wants and attitudes of customers and prospect. If the necessary information exists in a database, the data mining process can model virtually any customer activity. The key is to find patterns relevant to current business problems.

Typical questions that data mining answers include:

- (1) Which customers are most likely to drop their cell-phone service?
- (2) What is the probability that a customer will purchase at least \$100 worth of merchandise from a particular mail-order catalog?
- (3) Which prospects are most likely to respond to a particular offer?

2.8.4 Scoring

uses a model to predict future behavior. The score assigned to each individual in a database indicates that person's likelihood of exhibiting a particular customer behavior.

2. 8 .5 Campaign Management

uses information in a data warehouse or marketing database to plan, manage and assess marketing campaigns designed to impact customer behavior.

Campaign Management automates and integrates the planning, execution, assessment and refinement of possibly tens to hundreds of highly segmented campaigns running monthly, weekly, daily or intermittently.

The closer data mining and campaign management work together, the better the business results. Campaign management software uses the scores generated by the data mining model to sharpen the focus of targeted customers or prospects, thereby increasing response rates and campaign effectiveness.

A customer segment is a group of prospects or customers who are selected from database based on characteristics they possess or exhibit.

Scoring on the fly or dynamic scoring is the ability to score an already-defined customer segment within a campaign-management tool. Rather than scoring an entire database, dynamic scoring works with only the required customer subsets, and only when needed.

Data Mining builds models by using inputs from a database to predict customer behavior. The prediction provided by a model is usually called a score. A score (typically a numerical value) is assigned to each record in the database and indicates the likelihood that the customer whose record has been scored will exhibit a particular behavior.

Attrition, sometimes known as churn, occurs when a customer terminates his or her relationship with a service provider. Marketing efforts usually focus on minimizing churn because the cost of bringing a customer back is usually much greater than the cost of retaining the customer in the first place.

2.9 e-CRM

New Image Technologies's electronic Customer Relationship Management (eCRM) practice helps its clients develop and implement superior customer service strategies through the combination of processes with web, wireless and voice technologies.

With business specialist in major vertical industries, New Image Technologies develops eCRM strategies that can reduce operational costs through internet-enabled capabilities and efficiently manage customer assets through improved customer collaboration programs and highly targeted marketing efforts. We assist clients in the evaluation and selection of innovative CRM solutions that meet business requirements and best-of-breed technologies to create the seamless integration of multiple communication channels.

New Image Technologies's technology innovators have extensive experience building and deploying technologies that embrace industry standards (e.g. XML, Java, Microsoft) including wireless systems that deliver the right information to the right person at the right time.

The intersection of CRM and e-commerce, known as e-CRM promises to facilitate the emergence of new business models for many industries from financial services to automobile purchasing. In e-CRM, consumers have several interests and buying preferences in real time; the marketing value chain becomes an interactive process. This challenges companies to integrate their physical-channel strategy with the Internet or to develop alternative e-commerce strategies.

Maintaining control of customer relationship is possible only through consistent implementation such as customer care and communications, reward for customer value

and loyalty, special consideration for high-value customers and customized product and services.

Companies with effective CRM know who their customers are and they know how to service them. Without integrated data, none of this is possible. Customer relationships remain the foundation of any organization's ability to achieve significant gains in productivity, profitability and competitiveness. Meeting ongoing customer needs is only possible when organizations can provide the right information to the right people at the right time. CRM allows them to do just that.

CRM will benefit the customer by providing convenient means of commerce and establishing customer loyalty and satisfaction. Customer and business are getting to know each other, meeting each other's need, resulting in a win-win situation.

Whatever offer is made will have to be based on new techniques of analysis that weigh the cumulative history of past customer encounters with the revealed preferences that the Internet facilitates in real time. This is the next generation of e-CRM enabled marketing, one that offers great potential to offset the attenuation now being experienced in many marketing channels.

Finally, Information-driven technologies and business applications relating, to customer management are becoming smoothly integrated; and opportunities to nurture long-lasting, profitable customer relationships will grow. Customer relationship management is no longer just the responsibility of the marketing department; rather, it is a corporate-wide practice that needs to constantly improve the company's ability to treat customers and prospects in way that promote loyalty and continued business.

III. COMPANY PROFILE

3.1 Introduction

Nowadays, there are more competitive in every business. Therefore many enterprises must try to create competitive advantage in order to get more market share than any competitors. Every enterprise develops their business strategy to achieve their objectives.

And many enterprises are turning to the business strategy of CRM(customer relation management), which clearly places the customer at the heart of an enterprise strategy. These enterprises should not only enable themselves to provide greater value to customers faster and more accurately than any competitors. And OneEmpower (Thailand) Ltd. tries to develop customer services department in order to support coordinated customer interactions throughout all customer channels.

3.2 Company Background

OneEmpower is Asia's leading Customer Value Management solution and services provider. Founded in 1999 and headquartered in Singapore, we have over 150 full-time staff and 700 direct sales agents serving in our regional offices in Hong Kong, Korea, Thailand, Taiwan and China. Our integrated CVM process has helped our clients surpass their competition by giving them powerful new insights into ways needed to determine their customers' value and architect new marketplace strategies. We are currently the only service provider that has the technology, skills, knowledge and network, coupled with state-of-the-art business- intelligence technology to offer our clients a comprehensive and integrated, yet modular approach to CRM. Our application services includes payment services, loyalty services, marketing services (involving profiling, data mining and targeted marketing) and exchange services(creating a

marketplace for consumers and businesses), with the objective of increasing revenues and profitability for our clients.

3.3 Marketing Strategy

Business strategies are highly dependent on customers. It is the craft of getting and holding the attention of customers to remain competitive and profitable. The winning business strategy is crafted from knowing comprehensively and extensively customers' value, their needs and how to fulfil them. As the leading Customer Relation Management (CRM) solution and services provider in Asia, it is our business to help companies compete and win. OneEmpower offers end-to-end integrated CRM services needed to craft that winning strategy —from tapping customer database for marketing plans and targeting the right products to the right people to supplying secure payment products. OneEmpower delivers these innovative solutions and services seamlessly across the worlds of brick, click and mobile commerce. OneEmpower maximizes the value of the right customer:

- (1) Target and acquire the right customers, and data mine their profile to know their needs.
- (2) Sell them right product and services using targeting marketing.
- (3) Consolidate customer information from multiple sources in real time.
- (4) Deliver integrated and accurate data for analysis.

Our definitive experience in Customer Relation Management brings together both business and technology skills to offer our clients analytic and innovative capabilities to help them develop an approach that is appropriate for their market. The technology behind OneEmpower's propriety software applications underscores our standpoint on future standards of excellence and our creative and operational discipline. Our products are modular and highly scaleable. The open system design and web-based architecture

make them flexible and powerful customer relation management tools that can be fully integrated seamlessly across multiple channels in the world.

- (5) Supports cross-border and multi-currency payment and is inter —operable between physical, web and mobile environment.
- (6) Coupon- marketing tool that facilitates tracking,integrates payment and loyalty schemes, and is inter-operable between physical,web and mobile environment.
- (7) Wallet- eCRM tool that facilitates e-services,e-shopping and targeted marketing as well as integrates payment and loyalty schemes.
- (8) Pay- enables secure e-payment in multiple forms- credit,debit or prepaid. with virtual card and proxy number for enhanced security and privacy.
- (9) Targeting- a user-profile-driven targeted marketing tool incorporating the following applications:
 - (a) Profiling — captures customer's transaction profile and pattern.
 - (b) Decisioning - manages decision rules for marketing campaigns.
 - (c) AD-delivers relevant advertisement and messages.
 - (d) Campaign-supports planning, execution, tracking and analysis of marketing campaigns.
 - (e) Gatherer-a bills and statement aggregator.
 - (f) Bill-supports bill and statement presentment.
 - (g) Catalogue-supports **redemption and fulfilmetntracking and** merchandise inventory and order management.
 - (h) Channel Managers-handle traffic between application servers and various channels.

(10) Customer Relation Management solution including:

- (a) Customer segmentation.
- (b) Marketing and product performance monitoring.
- (c) Sales force automation and call centers.
- (d) Customer service technical support and field service operations.

3.4 Major Services of Company

- (1) Outsourcing: With OneEmpower's fully outsourced solution, clients can plug into the new digital economy without investing heavily in infrastructure technology, systems development, operations and customer support, and marketing services. Our outsourcing services allow companies to concentrate on their core competencies and business activities.
- (2) Software Licensing: Fee-based usage of our proprietary software application for clients who prefer to run their own marketing, operations and support services.
- (3) Business Consulting: Working with business leader on critical strategic issues, developing business objectives, business models and marketing plans. We are particularly strong in emerging technologies, such as smart card and e-commerce.

3.5 Our Clients

Our current clients include some of the largest financial institutions and consumer services companies in the region, such as:

- (1) Prudential Assurance.
- (2) Hang Seng Bank.
- (3) HongKong and Shanghai Banking Corporation.

- (4) LG Capital.
- (5) GE Capital.
- (6) Bank of China Credit Card International.
- (7) HongKong Chinese Bank.
- (8) Overseas Union Bank.
- (9) Siam Commercial Bank.
- (10) NETS.
- (11) Singapore Tourism Board.
- (12) A Major telco in Asia.

3.6 Structure

- (1) Business and technology expertise

At OneEmpower, the collective business and technical experience of our management and executive team exceeds 200 persons. Clients benefit from dealing with professionals who understand not just technology, but companies' bottom line issues as well.

- (2) Commitment to local market

We have an expert team residing in each local market to deliver total client satisfaction.

- (3) Innovative and comprehensive CRM solutions

Our CRM solutions harness the power of the latest emerging technologies. Combined with our in-depth business know-how to drive our clients' businesses forward through innovative application and services.

- (4) Technology strength

Our world-leading proprietary technology is a plug-and-play system based on an open, flexible, modular, scalable and secure architecture. Our

client can pick and choose which module to implement first and then extend and scale up over time in accordance with business needs. It integrates easily with client's existing hardware and software, thus protecting client's investment.

(5) Economical

Our outsourcing solution and services minimize clients' capital investment. There are almost no fixed overheads, and no necessity for clients to maintain a large sales, marketing, operations and support team.

(6) Quick time-to-market

Our off-the-shelf solutions and services plus easy integration ensure quick time-to-market implementation, which in turn, quicken return on investment.

(7) Cross-border, cross-industry network

Our regional network of offices and partners effectively allows our clients reach a wider pool of customers and partners.

(8) Continual R&D

We are committed to on-going research and development to ensure that our clients' businesses are kept in the forefront of technology, market needs and industry growth.

3.7 Statement of Problems

OneEmpower faced with the problems in finding people to handle and implement CRM system. The company is forced to place junior professionals in roles that they are not adequately qualified for. This has resulted in a number of problems for the company in terms of Leadership, People Management, Project Management, Client Interaction and good domain knowledge. OneEmpower is doing everything possible to

hold on to their best employees. The focus is, currently, on providing the staffs with growth opportunities by putting them on the fast track. In most organizations, each function that uses customer information collects and maintains its own customer records. As each group independently enters data and updates its records, its customer files become increasingly fragmented and disparate from the records of other functions.

Maintaining these multiple databases is not only inefficient, but also likely to have a negative impact on the OneEmpower customer relations and decision making. Because they are using separate data, two departments may treat a customer very differently, undermining the customer's confidence and possibly damaging the relationship. In addition, functions such as sales, marketing, and customer service may make decisions that affect the company's future based on very different views of individual customers and the nature of the customer base as a whole.

OneEmpower has been capturing and storing significant volumes of customer information for a number of years. This information is typically stored in a database that is specific to a particular business process case. Typically, these cases can be differentiated by process type (i.e., customer service, billing, fulfillment), by channel type (i.e., telephone, mail, Internet) and by product type.

3.8 Cause of Problems

OneEmpower faced the problems in complicated system because the CRM system is new system, and it is more difficult to find the right people to handle and implement system.

IV. RESEARCH METHODOLOGY

The author had already mentioned some details and background about OneEmpower in Thailand. Most of the information helps the author to see the problems of CRM system and the benefit of CRM system after the improvement. The main point of this project is the primary data that the author will use in the research to find out the obstacles and problems of CRM systems. The result of this research will help us to overcome those obstacles, and we can analyze the result in order to find out the strategy to develop the CRM system. In the next topic, we will clarify the research methodology used in doing this research.

4.1 Source of Data

This research study uses the descriptive and survey research from 2 sources of data:

Primary Data is collected from Interview, the sampling size is selected from the system manager and staffs who work in customer service relation department. From this survey, there are 9 persons who are surveyed.

Because of 9 persons are interviewed, system manager is a person who is responsible for controlling the CRM system. And staffs in customer service department are responsible in operating and contacting with direct customers.

Secondary Data is collected from internet, journals, documents, text, OneEmpower's information, etc.

4.2 Methodology

The primary and secondary data is collected from Interviewing which collected data is during June-August,2001.The procedure for collecting data is as below:

- (1) Interviewing the system manager and the staffs who are responsible for CRM system.
- (2) Analysis the result from interviewing, and understanding in the problems and step in solving problem.
- (3) Collecting the informations from Secondary Data, and analyzes for guideline.

4.3 Data Analysis

After we get information from Interviewing, and we analyze those data. We can collect the data and conclude the results. We should understand and develop important parts in CRM system.

- (1) Customer Information Architecture.
- (2) Customer Data Integration.
- (3) Data Management and Distribution Enabling Technology.
- (4) Integrated Data Mining and Campaign Management Process.

V. CASE STUDY OF CRM

5.1 Case Study

OneEmpower has some cases about the problems of CRM system:

The Client

The client, a major HongKong Bank, provides credit card, banking, and financial services to 10 million.

The Challenge

The client desired an information distribution and delivery infrastructure that would put it at a competitive advantage in the increasingly competitive and information-intensive financial services industry. They identified an enterprise-level data warehouse environment with supporting data marts and data mines as key to help them achieve their business objectives. The client identified the following issues:

- (1) The client needs to have the information more clearly with confidence that there will be no major hidden surprises as we go through the development process.
- (2) Increasing accuracy through the elimination of manually induced errors.
- (3) Handles large-scale database environments of hundreds of million of customer records.

The Solution

The client decided to implement a CRM solution that would help it cultivate and nurture interactive, personalized customer relationships and achieve five business objectives:

- (1) Identify its most valuable customers.
- (2) Increase its wallet share with its customers.

- (3) Develop the best mix of products and services.
- (4) Understand and analyze customer behavior.
- (5) Tailor marketing campaigns to address customer needs.

The client selected OneEmpower consulting to build and deliver its CRM system. Powered by Exchange Application, Inc.'s Valex software, the system includes a comprehensive customer-centric datawarehouse with a supporting analytic datamart and a highly functional campaign management system. Following the large-scale CRM system implementation, OneEmpower launched phase two and added commercial data sources and specialized data marts for risk management and profitability analysis, providing up-to-the-minute customer data.

The Benefits

The client's CRM system is helping it learn how to invest intelligently in customer relationships. The new system provides a central information repository, where everyone in the organization can view the consistent customer data and analyses from any branch or from the corporate marketing organization. Such access provides the means to coordinate front-line marketing efforts with centralized marketing to ensure that customers are treated consistently. The system also helps instill a profit-focused discipline with front-line employees, enabling the bank to maximize the profit derived from direct customer contact. The system can send information from the customer contact points back to corporate headquarters for assessment, so that central marketing campaigns can be supplemented with informed local interaction to attain maximum financial results. Tracking customer activities allows the bank to find ways to cross-sell and up-sell products and services. By providing relevant, timely information to customers, the bank can increase its share of each customer's business.

VI. IMPROVEMENT SUGGESTION METHODOLOGY

OneEmpower has faced the problem in finding the skill people to implement CRM system. OneEmpower wants to set the training course for the staffs in order to increase the skill in CRM systems. And there are important parts that staffs must understand and OneEmpower tries to develop.

6.1 Develop Customer Information Architecture

- (1) To verify the organization structure, and document the organization's major goals and objectives. And then the author asks the executives to identify the major business functions that are performed on an ongoing basis in support of the identified goals, and to list the major categories of information that OneEmpower needs in order to perform each of the function.
- (2) To meet with the key people in each department. In this study, the key people identify all of the business processes performed within the department and the organization units that perform them. And the key people also identify the specific information that they need in order to perform each process and the nature of the interaction the process has with that information.
- (3) To conduct a series of group workshop sessions with representatives from each of the departmental workshops to develop an integrated view of the processes and entities. During these sessions, we resolve duplications and develop common definitions for the entities and processes. We also identify the relationships the entities have with each other on the basis of the organization's business rules.

- (4) We analyze the interaction between the processes and the entities. This analysis groups entities are used most frequently together into clusters that may become databases. It also groups business processes using similar data into clusters that may become computer aid application systems.

6.2 Develop Customer Data Integration

Definition and Requirements

Customer Data Integration (CDI) is a data management process where all prospect and customer data can be distributed to points of interaction in a timely and accurate manner. With this definition, the unique requirements of CDI must be well understood when considering the overall CRM objective:

(1) Distributed

The distribution of customer data from its source to all points of interaction must be standardized and managed through a single corporate point of reference

(2) Points of interaction

All points of customer and business user interaction that determine the nature of the relationship must have access to relevant customer data

(3) Timely

All customer data needed for decision-making must be delivered in a time frame appropriate to the needs of each point of interaction

(4) Accurate

Customer data delivered must consistently and accurately represent a given consumer entity, including individuals, households or businesses.

The Solution

A foundation for integrating customer data where all information can be managed and distributed in real time throughout the corporation. The CDI solution is based on three principle components:

- (1) Enabling technology components that control data management and distribution. This technology is designed specifically to operate within the framework of existing data warehousing and database marketing systems, providing the means to access and distribute relevant data from each system throughout the organization.
- (2) The introduction of a reference database to provide customer links through a referential matching process. The reference database serves as an impartial reference providing links between all captured instances of a customer.
- (3) The corporate-wide adoption of both the technology and the reference database.

6.3 Data Management and Distribution Enabling Technology

Data management and distribution enabling technologies are designed to provide an architecture backbone to allow information to flow freely throughout the company to enhance CRM. The essential attributes of these enabling technologies include:

- (1) Instant link and update: As customer interactions are captured at various touch points, each transaction is instantly matched against the reference database and associated with the CDI standard link. The transaction can now be instantly distributed to any other CRM channel requiring that information and be linked to any other instances of the same customer. For example, a company has an on-going outbound direct marketing strategy targeting promotions to both customers and prospects. On the e-marketing side of the

business, customers are ordering products from the company for the first time on the web or by phone. In real time, the e-marketing systems can generate new customer transactions and instantly update the direct marketing systems with changes in customer status to quickly change the customer mix or offer.

- (2) Push update: Customer name and address data naturally changes over time and needs to be updated rapidly to ensure that every customer can be properly contacted. Additionally, customer enhancement data such as demographic and behavior profile information also changes on a regular basis. As these changes occur, the data can be sent to the corporation in a pre-arranged push update process so that the corporation continually has the most current information on the most valuable customer characteristics. The scope and timing of the push update process is determined by business rules set by the corporation.
- (3) Data manager: Data manager is a technology component that resides outside of each corporate CRM system. Its role is to provide a single interface for all data access and distribution requests and to serve as a central manager of all information flowing between corporate systems. For example, if a marketer wishes to access information that resides in multiple locations within the enterprise, it is the data manager's responsibility to manage the inquiry of the data, know where the data resides and manage the retrieval and delivery of that information to the appropriate CRM system.
- (4) Event detection and triggers: Working in conjunction with the data manager, event detection applications detect significant customer events and trigger appropriate actions related to the events. These applications are installed

anywhere within a company's or data vendor's CRM systems, monitoring the flow of captured data to detect significant customer events. An event is any change in customer status that the company considers significant. For example, a lease is terminated, product usage declines or a service is upgraded. The event detector continually searches new information captured by the enterprise, triggering a transaction that can instantly notify other systems of the event.

6.4 Develop the Integrated Data Mining and Campaign Management Process

(1) Creating the Model

An analyst or user with a background in modeling creates a predictive model using the Data Mining application. This modeling is usually completely separated from campaign creation. The complexity of the model creation typically depends on many factors, including database size, the number of variables known about each customer, the kind of Data Mining algorithms used and the modeler's experience. Interaction with the Campaign Management software begins when a model of sufficient quality has been found. At this point, the Data Mining user exports his or her model to a Campaign Management application, which can be as simple as dragging and dropping the data from one application to the other. This process of exporting a model tells the Campaign Management software that the model exists and is available for later use.

(2) Dynamically scoring the data

Dynamic scoring allows user to score an already-defined customer segment within Campaign Management tool rather than in the Data Mining tool. Dynamic scoring both avoids mundane, repetitive manual chores and

eliminates the need to score an entire database. Instead, dynamic scoring marks only relevant customer subsets and only when needed. Scoring only the relevant customer subset and eliminating the manual process shrinks cycle times. Scoring data only when needed assures "fresh," up-to-date results.

Once a model is in the Campaign Management system, a user (usually someone other than the person who created the model) can start to build marketing campaigns using the predictive models. Models are invoked by the Campaign Management System.



VII. RESULT OF IMPROVED CRM

After One Empower has now the problems that make it difficult to handle CRM system, because of less skill staffs and complicated system. OneEmpower has developed our staffs to handle CRM system and can get the results that improving CRM system. And OneEmpower can increase the profit through new customer acquisition with reducing marketing cost, and reaches a specific revenue goal with both the existing and new customers.

7.1 Customer Information Architecture

- (1) We have better management communication. The architecture contains business terms and all of the terms have common definitions arrived at through consensus from all parts of the organization. Different parts of the business will start to communicate more effectively with other parts of the business as a result of this process, any new systems are developed. Furthermore, when systems do get built, the systems staff will have a solid enterprise-wide foundation on which to base their efforts.
- (2) We have the basis for sequencing our systems development projects in ways that make sense. We know which pieces create and maintain data needed for other pieces. We have a basis for building the data creation/ maintenance pieces first. And when business priorities dictate a different sequence, we can determine the full implications of such an approach in advance.
- (3) We have the information we need for more clearly defining the scope of our systems projects. We know in advance which business processes and which data components will be included in each project and we can have

confidence that there will be no major hidden surprises as we go through the development process.

- (4) We have a basis for identifying all of the stakeholders in any development effort. We will know in advance who ought to be involved in requirements definition and testing. We can plan for their participation and develop a higher quality more robust system as a result.

Finally, we have the opportunity to identify common systems that can be used by a variety of people throughout the organization. Frequently there are business processes that are performed in several organization units, with each being done in a slightly different way. If a common system is developed to support this activity, the organization benefits in two ways: there is improved consistency across the organization and there is reduced cost since only one system is built and maintained rather than several.

An information architecture is an essential tool for effective systems planning. The potential benefits are significant. All it takes is a little time on the part of your key business people and the assistance of an experienced information management facilitator. The time to start is now.

7.2 Customer Data Integration

- (1) Customers gain a unified profile of their situation among their suppliers, enjoy better customer service, and reduce the time and complexity of interacting with companies. Significantly, it will allow customers to more easily achieve the levels of privacy they require when handling sensitive and proprietary profile information.
- (2) Business benefit from reduced service costs, better customer service, less time spent deploying multi-vendor solution, and universally implemented

global privacy safeguards. Business even gain a competitive advantage through new alliances across the supply and demand chain.

- (3) OneEmpower also gets benefit by increasing market size through single customer profile.

And One Empower can use the CDI standards to enable information integration. These standards provide the business and communication rules that allow customer information to be distributed across all CRM systems.

- (1) Adoption of links

With the CDI link present on all data sources within the enterprise, all systems adopt a single standard for sharing views of customer information. Data sharing can occur between systems, requiring no algorithmic matching to produce a single consolidated view of customer data. With the adoption of the link, the company has virtual access to a complete and current profile of every customer.

- (2) Standard data distribution

The adoption of the "backbone" of CDI data distribution technology across the enterprise provides connectivity within and between all CRM systems and a single reference point for all data integration requests. The CDI data distribution technology is minimally invasive, requiring little modification to existing legacy systems. Upon adoption, participating CRM systems can speak to each other facilitating the distribution of critical customer information to any decisioning application, touch point or data store in timeframes appropriate to the business need.

(3) Privacy standards

Rules that govern consumer privacy within the enterprise are built into the CDI technology framework to enable consistent application of security and privacy measures across all CRM and customer interaction systems.

7.3 Data Mining and Campaign Management

- (1) Improved campaign results through the use of model scores that further refine customer and prospect segments, records can be scored when campaigns are ready to run, allowing the use of the most recent data. Fresh data and the selection of high scores within defined market segments improve direct marketing results.
- (2) Accelerated marketing cycle times that reduce costs and increase the likelihood of reaching customers and prospects before competitors. Scoring takes place only for records defined by the customer segment, eliminating the need to score and entire database. This is important to keep pace with continuously running marketing campaigns with tight cycle times.
- (3) Increased accuracy through the elimination of manually induced errors.
- (4) Less time spent on tasks of extracting and importing files, leaving more time for creative

7.4 Customer Relation Management

- (1) Enable a single, accurate view of the customer across all enterprise.
- (2) Handles large-scale database environments of hundreds of million of customer records.
- (3) Accommodates real-time transactional needs.
- (4) Enables integration of operational and information systems to synchronize business functions around the customer.

- (5) Provides linkage to individual customer information from multiple data sources for specific marketing applications.
- (6) Simplifies and expedites update and maintenance processes for data warehousing.
- (7) Helps understanding customer's expectations by allowing us to see a detailed view of the customer in an accurate.
- (8) Enables us to engage in truly integrated, multi-channel marketing.
- (9) Improves decision-making processes
- (10) Improves the accuracy and impact of marketing programs
- (11) Increases customer acquisition and retention rates
- (12) Increases customer loyalty, satisfaction and lifetime value
- (13) Integrates customer information from existing, isolated silos without having to move it
- (14) Allows us to leverage investment in existing sales and service front-office and back-office applications

VIII. CONCLUSIONS AND RECOMMENDATIONS

From this project, it can be concluded and recommended as follows:

8.1 Conclusions

This project is concerned about Customer Relation Management. We study the major problems of OneEmpower which are: the lack of the right people to ensure that the right strategies, tactics and processes are put in place to implement all of the new technologies. We believe that the company's customer relation management system had been under the normal environment and conditions. After analyzing these problems, we found that the direct operators who have no skill in their job and ineffective management originated most problems. From the beginning, lack of communication between everyone in the customer relationship chain can lead to an incomplete picture of the customers. With the number of the available direct operators and facility, we were confident of the sufficiency to achieve the average daily outputs.

With this reason, we had the idea to improve and develop our staff in order to successfully implement CRM. Therefore, OneEmpower looks at the following areas:

- (1) Long-Term Training Programs: CRM practitioners are made. Enterprises should design long-term training programs that will turn people with the raw skills required into the types of employees they need in the long run. This should include rotation them through all the points of customer contact. marketing and information system, as well as arranging for some formal training in analytical disciplines.
- (2) Investment in Automation and Efficiency: If enough people are not available, enterprises should use technology to minimize the number of skill CRM people they need. In particular, enterprises should invest in real-time

analytics, personalization technology and integrated suites. In addition, they should consider the application that minimizes the need for support within the enterprise. Enterprises can never outsource everything in CRM, but they can reduce the amount of talent they need to a more manageable amount.

- (3) **Creation of a Culture of CRM throughout the enterprise:** Increasingly, enterprises must stop thinking of marketing as a department, and make marketing everyone's responsibility. There still has to be a marketing group that ensures content consistency and executes the overall marketing strategy, but in practice, everyone contributes to the image of the enterprises and the level of customer satisfaction. If the enterprise understands and believes this, it will begin to find that its CRM initiative are much more successful because everyone has a stake in their success.

With the continuous improvement of the CRM system, we mean the understanding and improvement of effective staffs. Therefore, across the CRM teams the company ensures that staffs have a mix of the following skills:

- (1) **Analytical:** CRM initiative captures huge amount of data, including both real-time and batch information needed to be analyzed. Enterprises have on hand a good group of analytical individuals. It involves finding individuals that are comfortable with the concept of data-based marketing. If there are not existing database marketers available, an enterprise may want to look to financial analysts and other personal-both inside and outside the enterprise that may have these skills.
- (2) **Business Knowledge:** Simply having a group of statisticians makes it too easy for the enterprise to violate good business practices, because the results may look logical, but have no business value. That is why the

enterprise needs some good business practitioners. These people act as a real-world filter to determine what makes sense and what does not. However, enterprises need to be careful-this group may be too set in its ways to allow the enterprise to try some valid new initiatives.

(³) Direct Marketing: These people are experienced at working with small groups of customers and basing their offers on data. They can often quickly translate such data into multichannel and real-time campaigns, even if the enterprise does not want to do much with direct mail.

8.2 Recommendations

Although all these mentioned problems, happening in Customer Relation Management system at OneEmpower, were corrected in the satisfactory level, the author still believes that these problems can arise any time again, especially the bottleneck problem or unbalancing skills and capacity among staff, that can not be solved completely because of innovation technologies.

In this study, the author focused on developing the staff in order to increase the skills and capacities to handle Customer Relation Management Systems. However, it would be better to support staffs to quickly resolve customer issues. Not only to provide better customer service but also to smooth the process capacity in the higher satisfactory level. Normally, the large number of campaigns that run on a daily or weekly basis can be difficult to handle, but after improving the effectiveness and efficiency of the staffs, it has been formed that the key benefits are;

(1) Reduce Support Costs by automating the entire help desk process, from routing a call, to escalating a support request a problem. With Customer Service, Enterprise can maximize their customer support staff performance.

- (2) Improve Productivity levels by empowering customer support representatives and customers with flexible problem resolution and instructional knowledge tools. Customer Service focuses on sharing mission critical information.
- (3) Manage the entire CRM requirement. Customer Service is one part of CRM solution. We offer more technologies and capabilities than anyone in the market. And Distinctive Feature:
- (a) Provide better customer service.
 - (b) Make call centers more efficient
 - (c) Cross sell products more effectively.
 - (d) Help sales staff close deals faster.
 - (e) Simplify marketing and sales processes.
 - (f) Discover new customers.
 - (g) Increase customer revenues.



APPENDIX A
INTERVIEW QUESTIONS

INTERVIEW

- (1) What do you think about using CRM in our company? (Note your reason)

Answer:

- (2) What are the problems of CRM in our company? (Note your reason)

Answer:

- (3) What are the strategies to improve CRM system in our company? (Note your reason)

Answer:

- (4) What are the cause and benefit of using CRM in our company? (Note your reason)

Answer:

- (5) What is the difference between before/after using CRM in our company? (Note your reason)

Answer:

- (6) Can CRM make the customer loyalty and satisfaction? (Note your reason)

Answer:

- (7) Can you give other recommendation? (Note your reason)

Answer:

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