

**Executive
Guide to
Customer
Relationship
Management
in South
Asia**

Research

Analysis

Communication

Action

INPUT[®]

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About This Executive Guide

This Executive Guide presents a summary of research findings into an area of current and vital interest to executive decision makers. It provides key pointers for decision makers who require:

- A snapshot of current trends
- A summary of the most recent research
- A guide to some of the leading information technology suppliers

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- Electronic Banking
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- Internet & Intranet
- IT Customer Services & Support
- IT Operational Services

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See inside back cover for more information on
INPUT's services.

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Executive Guide to Customer Relationship Management in South Asia



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Introduction

In today's competitive and challenging market environment, South Asian companies are looking for new ways to understand and reach their customers. The focal point of this trend is Customer Relationship Management (CRM), a disciplined, comprehensive and organization-wide approach to identifying, attracting and retaining customers.

This *Executive Guide to Customer Relationship Management in South Asia* provides decision makers in South Asia with an understanding as to how technology can help companies gain a competitive edge by better managing customer relationship and better understanding customer needs. It also provides recommendations and observations based on extensive discussions with senior executives across South Asia.

INPUT conducted a survey of 210 organizations (35 per country) in each of six South Asian countries: India, Indonesia, Malaysia, the Philippines, Singapore and Thailand. The survey involved interviews with two senior executives in each organization -- the senior sales/marketing executive and the senior IT executive -- for a total of 420 executives interviewed.

This *Executive Guide* summarizes the findings of this survey, and offers detailed profiles of selected providers of CRM solutions. These are the vendors that we recommend as the first point of contact for any South Asian organization seeking to leverage current technology and requiring best-of-breed CRM solutions. The focus of the Executive Guide is on providing a localized perspective to the information technology needs of South Asian organizations, highlighting trends and areas of opportunity.

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Executive Summary

For South Asian enterprises, competition is growing and markets are changing. Within a dynamic environment, companies are realizing the importance of the customer and are looking for new ways to understand and reach their customers.

Today's customers are becoming more demanding and are not easy to please or keep. The key to success, and to gaining a significant competitive edge, is in developing long-term, profitable relationships with customers. Companies need to move beyond simply listening to the customer or providing incremental enhancements to customer service. They need to have 'customer-centric' organizations and processes that ensure that all activities add value for the customer.

Creating such customer-centric organizations is the goal of CRM. The CRM process drives the complete transformation of the relationship between company and customer. It encompasses all the activities that go into identifying, attracting and retaining customers, and focuses on aligning the whole organization to build profitable, lasting relationships with customers.

Proper management of the customer relationship is a complex, multifaceted discipline that involves re-thinking and re-examining everything from technology and processes to the skills and abilities of employees. It involves transforming the entire organization.

Understanding customer profitability is an essential element of that process because it enables the company to differentiate the level of service provided to various customer segments according to their needs and value to the company. It is important to understand which customers, or prospective customers, offer the greatest profits and to focus resources around ensuring the satisfaction of high-value customers. Such differentiated treatment does not mean that some customers get "good" service while others get "bad" treatment. Instead, it means that different customers get the service that is most appropriate for their needs and the company's profitability.

A key goal of managing the customer relationship also needs to be customer retention. Generating additional revenue from existing customers is far cheaper than generating revenues from new customers. Repeat customers have a greater lifetime value for a company because they:

- purchase more frequently than other customers

- purchase more than other customers
- purchase more higher-margin product than other customers
- promote the company among potential customers because they are satisfied

Just as technology is helping companies to better plan and integrate processes through Enterprise Resource Planning (ERP) solutions, it is also helping companies to better manage their relationships and interaction with customers. In fact, ERP and CRM often go hand-in-hand, since the process of integrating enterprise-wide processes also needs to involve the integration of customer-centric processes.

Ideally, CRM solutions help the organization to provide consistent, unified customer interaction across:

- all communications channels: Web, phone, fax, email and video;
- all applications: front- and back-office; and
- all business functions: e.g., sales, marketing, and customer service.

This study found that South Asian businesses are using CRM solutions to:

- identify, gain and retain highly profitable customers
- better understand customer needs
- enhance customer satisfaction
- improve responsiveness to customers
- identify opportunities for new products or services
- improve business efficiency and effectiveness

What are CRM Solutions?

CRM is an integrated process centered on the customer that delivers improved profit, revenue and operational efficiency by better understanding the customer and the customer relationship.

Today, there are a variety of technology solutions designed to aid and facilitate CRM within the enterprise:

Sales-force automation and support: Technology is helping organizations make their sales-force more efficient and effective. Sales-force automation and support solutions allow the sales force to track customers and prospects. They also provide information on available stock, pricing, goals and plans.

Marketing automation: Organizations need to be going through a continuous process of gaining customer insight, and of understanding and anticipating customer needs. Marketing automation solutions help marketing staff analyze customer needs, spending patterns and demographics, as well as to measure the results of marketing activities. They also help in designing future marketing campaigns.

Call centers: Call centers provide an effective means of providing service and support to customers, and the technology available today allows for increasingly efficient and sophisticated call center solutions.

Internet and electronic commerce: The Web has become an important vehicle for communicating with customers and prospects. A growing array of solutions is helping to manage the interaction with customers across the Internet, whether it be Web-based sales, marketing or customer service.

Customer relationship portal: An important, emerging area for CRM solutions is to provide for the integration of customer interaction, consistently, through all customer communications channels.

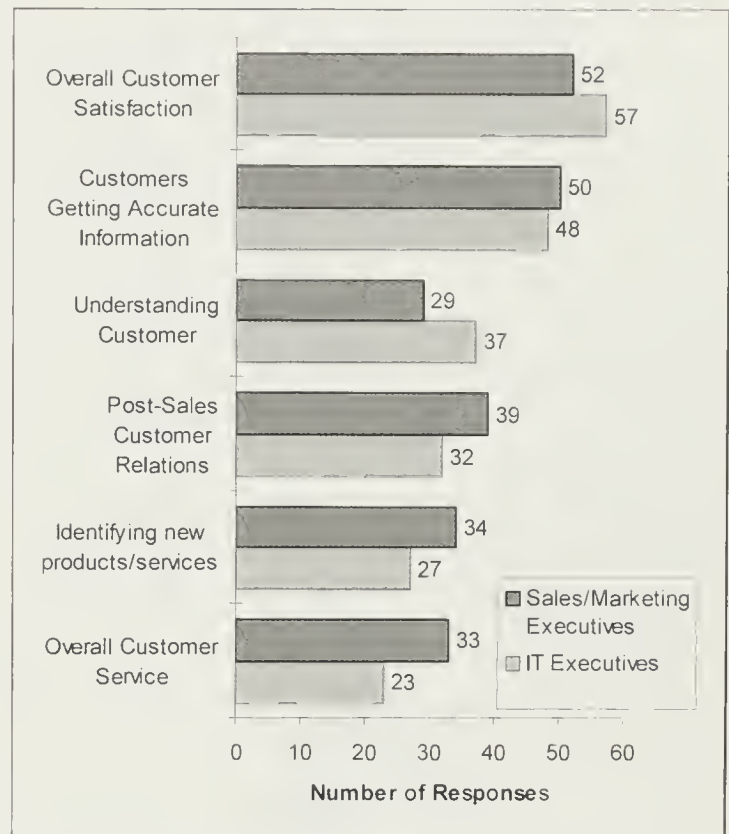
Solutions that manage the relationship with customers are, increasingly, being linked to solutions that manage the relationship with suppliers -- known as Supply Chain Management (SCM). By linking CRM solutions with SCM solutions customer requests and orders can be tied directly to production, inventory and delivery. The result is better service to the customer combined with a more efficient organization.

The Use of CRM Solutions in South Asia

Managing the customer relationship is a major issue and concern for senior executives across South Asia. And, it is an issue that is of growing importance. This study found that the two biggest concerns among senior executives in South Asia are ensuring a high level of overall customer satisfaction; and getting accurate information in a timely manner to customers (see Exhibit I). Other key concerns include better understanding customer needs and ensuring good post-sales customer relations.

Exhibit I

Biggest Concerns of South Asian Executives in Managing Customer Relationships



Note: Multiple Mentions

Sample: 210 Organizations Surveyed

Source: INPUT

In India, the senior sales/marketing executives interviewed were concerned about obtaining a knowledge of customers by segment as well as maintaining customer loyalty, while the issues for IT executives were overall customer satisfaction and getting information to customers.

In Indonesia, overall customer satisfaction was the key concern for both sales/marketing and IT executives, with sales/marketing executives also concerned that customers receive accurate information.

In Malaysia, overall customer satisfaction was also the key concern for both sales/marketing and IT executives. The speed and efficiency in responding to customers was also a key concern for sales/marketing executives while obtaining a knowledge of customers by segment was the other key issue for IT executives.

In the Philippines, both sales/marketing executives and IT executives were concerned with ensuring that customers receive accurate information. Other issues were creating awareness of new products/services and maintaining customer relations after the sale.

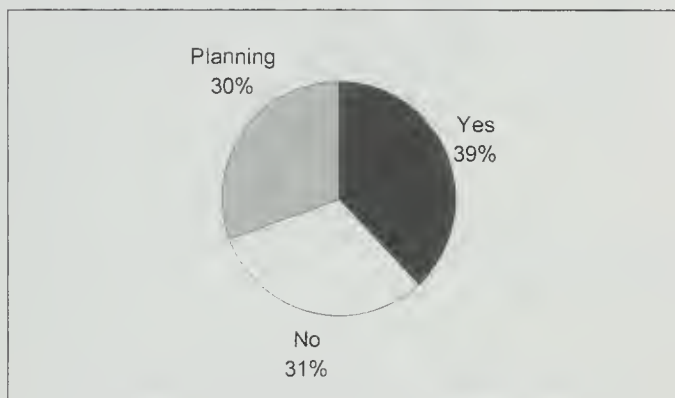
In Singapore, overall customer satisfaction, customer service and responsiveness to the customer were the key concerns for both sales/marketing and IT executives.

In Thailand, the speed and efficiency in responding to customers was a key concern for both sales/marketing and IT executives. IT executives were also concerned with obtaining knowledge of customers by segment and overall customer satisfaction, with sales/marketing executives more concerned about making sure the customer receives accurate information.

The key concerns challenging senior executives across South Asia are also problems that CRM solutions are designed to address. Thus, it is not surprising that a growing number of organizations across South Asia are implementing CRM solutions.

Exhibit II

Is Your Organization Using Technology, Systems or Applications to Manage Customer Relationships?



Sample: 210 Senior IT Executives Surveyed

Source: INPUT

According to the senior IT executives interviewed, 39% of the organizations surveyed are currently using CRM solutions (see Exhibit II), with another 30% having near-term plans to implement CRM solutions. Thus, the percentage of South Asian organizations using technology to help them manage at least some aspect of the customer relationship is expected to nearly double by year-end 2000.

The number of organizations using CRM solutions was highest in Malaysia and Singapore, and lowest in the Philippines and India.

Among the senior sales/marketing executives interviewed, the combined percentage of those using and planning to use CRM solutions (81%) was similar to that of the IT executives. However, a much larger proportion of the sales/marketing executives said they currently have CRM solutions installed (61% for

sales/marketing executives vs. 39% for IT executives). There are two reasons for this difference:

1. Senior IT executives tended to count only significant, enterprise- or department-wide CRM solutions, while some senior sales/marketing executives included simple, PC-based applications.
2. Marketing, sales and customer service departments sometimes implement relatively small applications of which the senior IT executive is not aware.

Interviews with both the senior sales/marketing executives and the senior IT executives confirmed that about three-quarters of large- and medium-sized organizations in South Asia will be using CRM solutions of one form or another by year-end 2000.

Key areas where organizations are planning to implement CRM solutions include:

- customer service & support
- marketing automation
- sales department
- call center

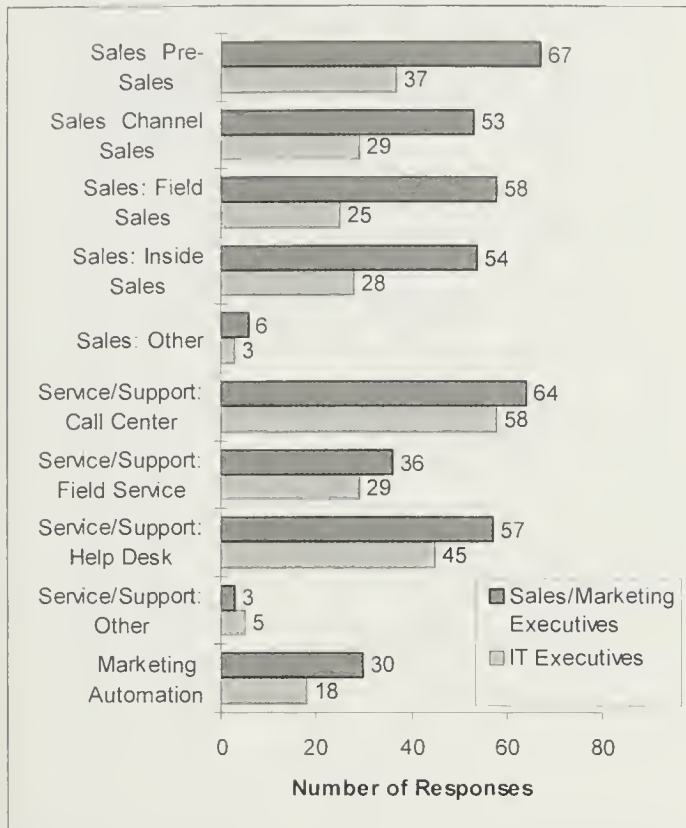
South Asian organizations have implemented CRM solutions across a broad range of areas. As shown in Exhibit III, on the following page, the sales/marketing executives indicated that CRM solutions have been implemented across the board, including sales, call centers and help desks. The IT executives, on the other hand, indicated that CRM solutions have been implemented primarily in the areas of call centers and help desks.

There were some differences in the current use of CRM solutions by country within South Asia. Specifically, the use of:

- sales applications was strongest in Indonesia, Malaysia and Singapore;
- call centers was strongest in Singapore and Malaysia, with India and Indonesia not far behind them;
- help desks was strongest in Singapore and Indonesia; and of
- marketing automation was strongest in Indonesia and Thailand.

Exhibit III

Types of CRM Solutions Currently in Use



Note: Multiple Mentions

Sample: 210 Organizations Surveyed

Source: INPUT

Expect to see strong growth in the number of South Asian organizations using or implementing solutions in the areas of Internet-based customer service/support, marketing automation, sales support, call centers and field service support.

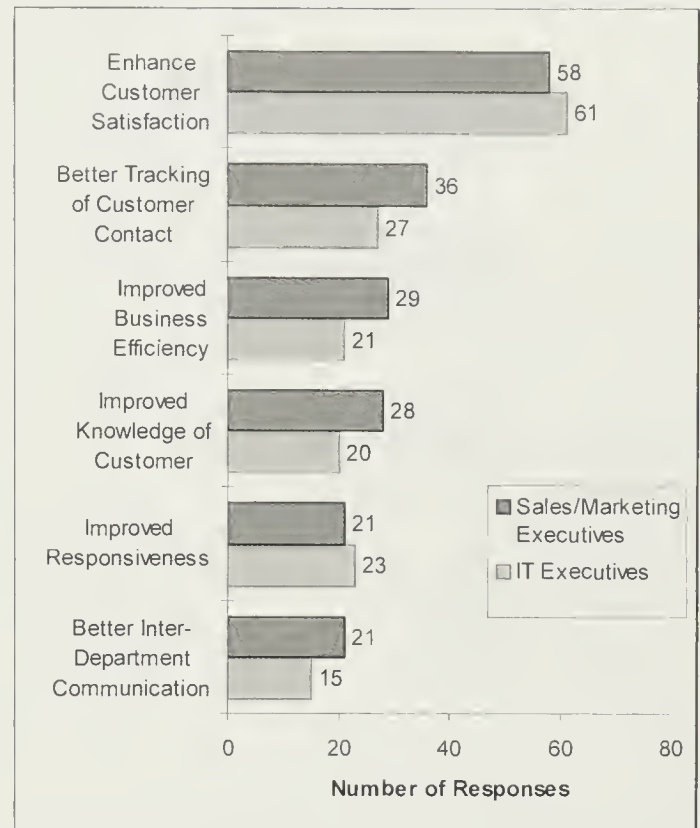
One comment made by the executives interviewed was that it was very important for their CRM applications to be integrated into the organization's 'back-end' systems. However, many also indicated that they were less than satisfied with the current level of integration.

A major focus of CRM efforts over the next couple of years will not only be the implementation of new CRM solutions, but also the integration of both new and existing solutions with other enterprise-wide systems and solutions.

Improved customer satisfaction and better information on customer contacts were the two key benefits that senior executives across South Asia are looking for from CRM solutions (see Exhibit IV). There was little variance between countries in these key benefits that senior executives are seeking from CRM solutions.

Exhibit IV

Key Benefits Sought from CRM Solutions



Note: Multiple Mentions

Sample: 210 Organizations Surveyed

Source: INPUT

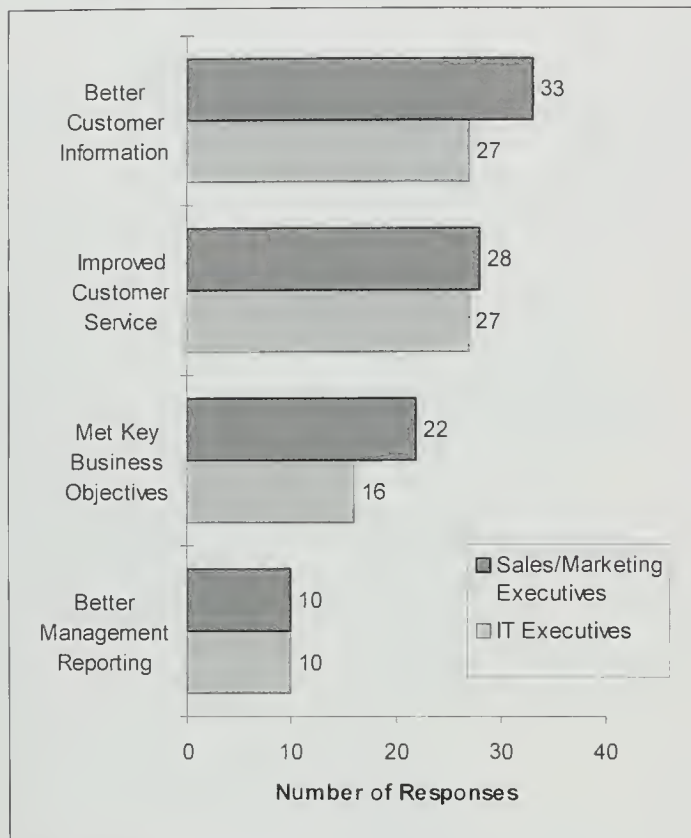
The executives surveyed were also looking for CRM solutions to give them a better understanding of the customer while improving overall business efficiency.

In comparing the benefits that South Asian organizations are seeking from CRM solutions with the benefits that those using such solutions (compare Exhibits IV with Exhibit V on the following page), CRM solutions are providing clear and tangible results. Across South Asia, organizations that have implemented CRM solutions are realizing the benefits that they sought from such solutions. Given that these organizations are seeing improved levels of customer satisfaction and gaining a better understanding of customer needs, it is not surprising that they are also meeting their key business objectives.

CRM solutions are providing South Asian businesses with a real and tangible competitive advantage. This should serve as a wake-up call for companies that have not yet implemented CRM solutions or that have not yet made CRM an integral part of their processes.

Exhibit V

Benefits Realized from CRM Solutions



Note: Multiple Mentions
 Sample: 80 Organizations using CRM Solutions Source: INPUT

In addition to the tangible, immediate benefits highlighted in Exhibit V, the executives interviewed noted that CRM solutions help organizations meet strategic goals as well (see Exhibit VI).

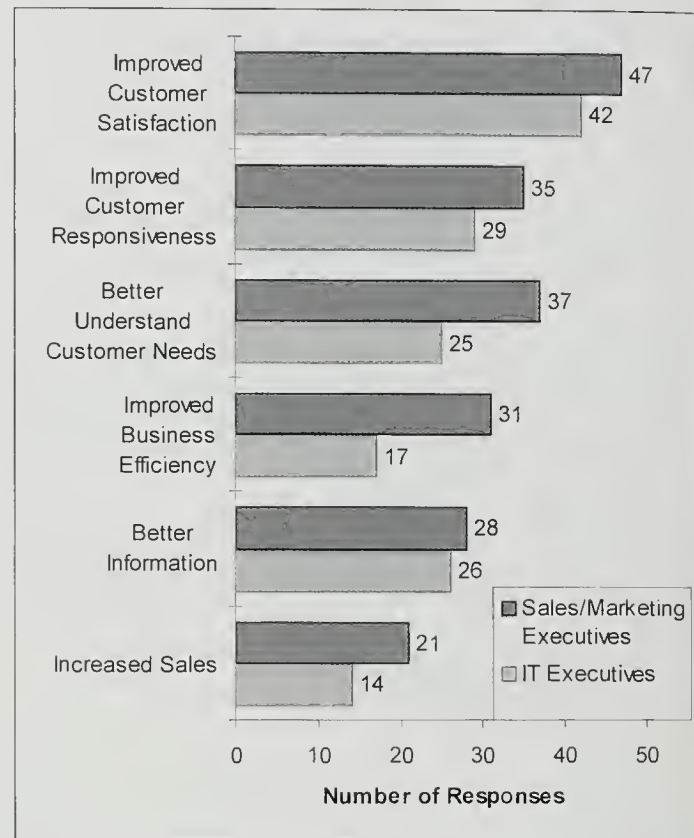
CRM solutions are helping South Asian organizations better understand customer needs and better respond to those needs once identified. The result is a more satisfied base of customers.

The sales/marketing executives interviewed were more positive about the ability of CRM solutions to serve the strategic goals of the organization as compared to the IT executives interviewed.

There was little variance on the strategic benefits of CRM solutions between the six South Asian countries included in the survey.

Exhibit VI

How CRM Solutions Serve Strategic Goals



Note: Multiple Mentions
 Sample: 210 Organizations Surveyed Source: INPUT

Recommendations

Companies of all sizes in South Asia are experiencing challenges in the form of changing markets, increased competition and a tougher business climate. In this environment of rapid change and dynamic markets, South Asian organizations are placing greater attention and focus on the customer, and looking to better manage the relationship with customers.

CRM solutions are helping businesses take advantage of technology to better manage the relationship with customers. Most of those in South Asia that have implemented CRM solutions have seen tangible benefits as a result. Those that have not are finding themselves at a competitive disadvantage.

In light of this study, INPUT offers the following recommendations:

1. **Ensure that a customer-centric focus is in place** in your organization. CRM solutions can only facilitate and automate CRM processes. If the organization does not have a customer-centric focus, then it has a problem that CRM solutions alone cannot fix. CRM is an integrated process

centered on the customer, and it is important to first ensure that CRM processes are in place.

2. **Gain a better understanding** of the CRM solutions available in South Asia today. Take the time to explore how technology can help you and your organization to better understand and meet the needs of your customers. Talk to vendors selling CRM solutions; attend relevant seminars, exhibitions and conferences. Look for ways to gain a competitive advantage by focusing on the needs of the customer. Whether you decide to implement CRM solutions or not, make sure you have the information to make an informed decision.
3. **Involve all relevant departments throughout the process.** The effective implementation of a CRM solution ensures that the project is integrated, and that the right customer information is delivered to the right people. While the executives surveyed highlighted the importance of enterprise-wide integration for CRM solutions, most of the CRM solutions implemented in South Asia today are not well integrated. A lack of communication between departments within large- and medium-sized organizations was often the cause.
4. **Link the project to overall objectives and needs.** The CRM solution needs to be tied to the objectives and goals of the business. Linking the company's goals and objectives to the implementation of the CRM solution will help ensure that it results in clear, practical and measurable results to the enterprise.
5. **Educate and train.** Ensure that adequate training and education are provided to the staff involved. In particular, make sure that the sales, marketing and support staff understand the technical aspects of the solution, and that the technical staff understand the business aspects of the solution.

Profiles

Profiles of Selected Customer Relationship Management Solution Providers in South Asia

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Aspect Communications

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ASPECT

Company Background

Aspect Communications provides electronic customer relationship management (eCRM) solutions that enable companies in a broad array of industries worldwide to ensure consistent interactions with their customers. Aspect's expertise in this area is based on its 14-year history and more than 7,300 customer contact center implementations.

Aspect Communications reported net revenues of US\$489.1 million for the year ending December 31, 1999. Aspect is headquartered in San Jose, California, and has operations in 24 countries, including Australia, China, Japan, Hong Kong, the Philippines and Singapore, employing more than 2,300 professionals worldwide.

Aspect's customers are companies that put a strong emphasis on their CRM strategies and desire a customer contact center that provides consistent information and consistent interactions with their customers. These companies operate within intensely competitive industries, including finance, health care, travel, retail, utilities, telecommunications and technology. Among Aspect's customers are Bank United, DaimlerChrysler, E*Trade, ICT Group, and PacificCare Health Systems.

Aspect's products include the award-winning Aspect® Customer Relationship Portal, along with Aspect Customer Self-Service, Aspect Customer Interaction,

Aspect Customer DataMart and Aspect's mission-critical telephony platforms. These integrate with products from leading front- and back-office vendors.

Companies are moving from traditional voice-only call centers to comprehensive mixed-media contact centers that play a central role in a company's CRM strategy. Likewise, Aspect is moving the call center market space into the fast growing CRM market, specifically the customer relationship portal segment. Aspect already has a leadership position in this market segment, which is expected to grow nearly 85% in the next three years.

Customer Relationship Management Solutions

Technology

Aspect's CRM solutions allow organizations to implement flexible, scalable customer contact centers that meet evolving business needs. Aspect's technology mission includes providing reliable, mission-critical applications that are highly integrated on converging voice and data networks.

Aspect Customer Relationship Portal is a mixed-media customer contact solution that manages customer interactions by telephone, Web, e-mail and fax. As the foundation of a company's CRM and e-commerce strategies, the Aspect Portal delivers a consistent customer experience through one virtual place and allows companies to efficiently connect customers to the enterprise resources via flexible business rules, intelligently defining how each customer should be served. The Aspect Portal combines the rich queuing and routing capabilities of Aspect's traditional automatic call distribution (ACD) software with computer-telephony integration (CTI), distributed multi-site networking and desktop integration, making the Aspect Customer Relationship Portal an out-of-the-box solution for ACD, CTI and Internet-enabled solutions. The Aspect Multimedia application of the Aspect Portal unifies customer interactions across Web, phone, fax and e-mail, and integrates customer information with front- and back-office applications. Additionally, Aspect Customer E-Mail covers the entire spectrum of e-mail response management and allows e-mail to be routed in the contact center in the same way that telephone calls are routed. All capabilities are programmed through Aspect Architect™ software, a visual programming tool with a point-and-click graphical user interface for designing the business rules and workflows that connect customers to the full range of contact points including voice, Web, e-mail and fax.

Aspect Customer Self-Service (CSS) empowers customers to drive transactions with companies using interactive response, speech recognition, fax and Internet capabilities. Routine customer requests are handled automatically, allowing sales and service representatives to concentrate on more complex, high-value transactions that require personal interaction. Companies can also extend the range of interactive options with advanced speech recognition and text-to-speech technologies. Aspect Customer Self-Service combines CTI with Aspect Customer Self-Service Architect, a robust graphical development tool, enabling businesses to design advanced interaction applications with a point-and-click graphical user interface.

Aspect Customer Interaction offers capabilities that empower agents to be more informed and productive. Aspect Customer Interaction connects the customer to the agent's desktop with a complete view of the company's information about the customer including real time interaction information and historical transaction data. Aspect Customer Interaction builds on Aspect's current WinSet™ for Windows and Web Agent products. WinSet delivers a Windows-based agent console with automated features that provide greater agent efficiency. The Aspect WinSet Software Developer's Kit allows companies to extend the console for additional functionality. Aspect Web Agent delivers Web call-through and Web interaction through screen synchronization and collaboration between the agent and customer.

Aspect Customer DataMart provides businesses with an end-to-end view of each customer transaction for mining data on preferences, patterns and trends. The Aspect Customer DataMart provides fast, convenient data synthesis and analysis, enabling companies to more quickly capitalize on business strengths, identify business trends, create new sales opportunities, uncover potential business problems, and make informed business decisions while decreasing the data management and reporting burdens created by contact center and customer interaction technologies. The DataMart builds on the reliable end-to-end reporting capabilities of Aspect's current offerings.

Aspect's mission-critical platforms are key to a successful CRM solution. The Aspect Office Platform provides a robust mission-critical platform for smaller enterprises or branch offices with 10 to 80 agents. The Aspect Enterprise Platform has a 14-year history of proven reliability and a feature-rich architecture for larger contact centers. Both platforms utilize Aspect Call Center Software and the Aspect Telephony Server, which has the ability to handle extremely heavy call volumes at both sustained and peak loads. Aspect also offers the Aspect CSS Telephony Server

(IVR) for providing automated services capable of handling thousands of self-service transactions.

Services and Support

Aspect offers a selection of top-quality support plans and services that are scaled to meet the needs of customers. Customers have access to Aspect's international support centers for resolution of their questions or issues, as well as on-site support for customer's special business needs through Aspect's Customer Operations Engineers and Business Applications Consultants.

Aspect services help customers with the implementation of their customer contact centers, leveraging existing investments and bringing in the latest technology. Through Aspect Consulting Services customers can obtain end-to-end consulting and systems integration for contact center implementation and integration. Aspect Consulting Services consultants deliver solutions through organized practices based on clearly defined trends in customer interaction.

Recent Business Developments

Aspect and iXL form strategic alliance to provide Internet-based eCRM portals

Aspect Communications has formed a strategic alliance with Atlanta-based iXL, Inc., a premier strategic Internet services firm and a wholly owned subsidiary of iXL Enterprises. The alliance will allow customers to rapidly transform their businesses by harnessing the full potential of the Internet with eCRM solutions based on the Aspect Customer Relationship Portal in conjunction with iXL's eBusiness strategy, creative, design and engineering expertise.

As part of Aspect's eBusiness Alliance Program, iXL will provide business strategy, integration and implementation for the Aspect Portal. The alliance includes training and deployment of iXL consulting teams and joint sales and marketing.

Aspect completes PakNetX acquisition

On Feb. 1, 2000, Aspect announced a definitive agreement to acquire privately held PakNetX. Aspect will integrate multimedia over IP technology from PakNetX into its flagship Aspect Customer Relationship Portal software. The technology integration is expected to make possible for the first time a new breed of eBusiness applications that seamlessly integrate video, voice, conferencing and Web interactions from a centrally managed software switch, eliminating the need for a hardware PBX.



Aspect and Siebel Systems form strategic alliance to deliver unique product capability

Aspect Communications and Siebel Systems, a leading supplier of eBusiness applications, formed a strategic alliance that will integrate Aspect's E-Workforce Management Portal application with Siebel's industry-leading eBusiness applications. This unique, integrated offering will be available in the second half of 2000.

In a first phase of the alliance, the two companies announced immediate availability of the out-of-the-box integration between the Aspect Customer Relationship Portal software platform and the Siebel Call Center and Siebel eService applications. Through this integration, the Aspect Portal applications for Web collaboration, e-mail and electronic service seamlessly integrate with the Siebel agent desktop and are blended with customer self-service information from Siebel eService. This integration is currently available for Lucent, Aspect and Nortel-based call centers.

Through this alliance, Aspect and Siebel Systems' customers will be able to quickly and cost-effectively deploy an eBusiness strategy that optimizes all customer relationships wherever the customer meets the business. Aspect and Siebel expect the

partnership will create even stronger links between companies and customers by helping to ensure adequate staffing of skilled agents to support integrated e-mail, Web, IVR, chat and voice interactions with the customer. This joint solution ultimately offers companies increased organizational effectiveness and greater profitability through optimized staffing, while delivering superior customer service.

With the combined solution, organizations can efficiently staff their multimedia contact centers to ensure that each customer interaction is handled efficiently and by the best personnel available. Benefits of the integrated solution include:

- Real-time information that allows managers to accurately predict staffing requirements for all media types, which reduce overall staffing demands while simultaneously ensuring customer responsiveness.
- A single, integrated user interface with full multimedia workforce management capabilities, which maximizes productivity and minimizes training requirements.

- Integrated sales, marketing and service functionality allowing agents to handle any type of customer request quickly and efficiently, leading to improved customer satisfaction.

Partner Programs

Part of Aspect's success can be attributed to its business partners. Aspect works with a broad variety of technology and solutions providers to ensure customers are able to implement a seamless customer relationship solution. Aspect leverages its platform-independent, open systems approach in recommending and implementing customer relationship solutions.

Through Aspect program, Aspect extends the value of its product offerings by collaborating with these qualified partners. Aspect customers are provided access to the best complementary products and services worldwide, enhancing the overall value, flexibility and usefulness of Aspect's solutions. These partners, with application-specific solutions that have been certified to complement Aspect products, help Aspect customers increase the effectiveness, productivity, and performance of their enterprise-wide customer contact strategies.

Through value-added reseller agreements with industry leaders, Aspect becomes the prime contractor for implementing value-added solutions encompassing computer-telephony integration, electronic commerce, help desk, customer interaction software, and workflow technologies.

Aspect's Strategic Positioning

Aspect provides an integrated foundation for a successful CRM strategy through the Aspect Customer Relationship Portal - a virtual place that connects customers with the right enterprise resource, whether the contact is made by phone, fax, e-mail, or web. Aspect Portal applications for Computer Media Integration, Web Interaction, e-mail, eWorkforce Management, Self-Service (IVR and speech recognition), Call Center and Data mining enable businesses to ensure consistent interactions with their customers from one centrally managed eBusiness. Aspect's leading position in customer relationship management solutions is based on their 14-year history and more than 7,300 customer contact center implementations.

Award Winning CRM Solutions

- November, 1999: Editor's choice award from *Communications Solutions* (formerly *CTI*) magazine
- November, 1999: "Best of the Best" award, plus the "Best Leading-Edge Development" award at *Voice Europe '99* Exhibition
- December, 1999: "Best of Show" at CTI Expo
- January, 2000: "Product of the Year" from *Call Center Solutions* magazine

Case Studies

Introduction

Meeting customers' needs can be like shooting a moving target. Today's world moves so fast that often the consumer is ahead of the organization when it comes to technology. Consumers will adopt technology, such as mobile phones and e-mail, as it suits them and expect the companies they do business with to be able to cope with this. If not, they will walk.

Yet, in their bid to deal with these new channels, some companies are not looking at the whole picture. Instead, each channel is handled separately – creating isolated pools of information for different customer touch points. This means that customers are not being served consistently and in some cases are not even being recognized, if they use a different communication channel from their usual one.

This 'corporate amnesia' can be eliminated through the strategic implementation of Customer Relationship Management (CRM). However, the CRM philosophy does not start with technology, it starts with sound business processes. What is needed is a way to take a set of business rules and apply them to all the different contact media, divisions and systems within the company. This also allows businesses to protect their original technology investments, while enabling them to implement a competitor-beating CRM strategy. The Aspect Customer Relationship Portal has been designed to do just that.

In a typical contact center, front-office applications are where most customer-centered processes are initiated. Front-office vendors include Siebel, Vantive, Clarify and Point.

Underlying these very visible applications is the back-office software - from providers such as SAP, Oracle and Baan. These are enterprise-wide solutions geared towards greater efficiency. Added to these, Aspect have other systems that deal with customer contact, including Web, e-mail and the traditional call center. The Portal's primary use is as a 'nerve center' that enables all these applications and systems to work together. By managing all the contact points where the customer meets the business, regardless of

the channel used, the Portal ensures consistency and integrates these previously separate areas of technology.

The Aspect Portal combines its operation as a CRM nerve center with CTI capabilities and integrated decision support to provide a seamless CRM solution that is flexible.

A customer relationship portal at work: ICT Group

ICT Group, an independent provider of call center services for sales, marketing, and customer care, employs nearly 450 professionals in management, sales, systems, and operations, and approximately 4000 telephone sales and customer service representatives as well as research interviewers.

The company manages 34 customer contact centers in the U.S., Europe, Australia and Canada, from which it supports inbound and outbound calling for domestic and multinational corporations and institutions, primarily in the financial, insurance, telecommunications, healthcare, information media, energy, and hospitality industries.

ICT's business depends upon their ability to offer top-notch service for their client's customers. ICT realized that consolidating customer contact information and bringing live customer service via the Internet into their contact centers would be a key competitive differentiator for them.

While there are many companies that offer Web shopping or service to customers, the customer service ratings of dealing with companies over the Web have been poor. ICT wanted to rise above these statistics by integrating Web service and support into their traditional contact center to enable them to provide live, personalized service.

ICT selected a solution from Aspect designed to significantly improve both the sales productivity and customer satisfaction levels of all types of customer transactions and bring them together into the existing contact center infrastructure.

ICT began with the Aspect Customer Relationship Portal as their foundation, and then added Aspect Customer Interaction to bring the e-mail and Web transactions into the contact center. By integrating their Web transactions into the Aspect Portal, ICT could take advantage of the Aspect Portal's advanced routing capabilities across multiple media. Adding Web transactions to the contact center allows ICT to offer personalized service to high-value customers that need it, so that the experience with the company is positive. In addition, being able to see where the customer has been on the Web site gives agents better opportunities for up-selling.

"We can have the customer communicate with the contact center with their second phone line, voice over IP, e-mail, or however they would like. We can do collaborative sessions and white boarding, and push information such as the latest interest rates to the customer," said Jack Kerins, President of Management Services from ICT. "By providing all of the services and information through a central place—The Portal—we can lock in customers that might otherwise be lost."

Connect-IBS, Australia

Connect Interactive Business Services (IBS), an outsourcing company, provides their clients with multimedia centers to handle customer inquiries. The company specializes in "customer relationship management" for various vendors, such as Compaq, as well as other Australian companies.

Solutions provided: Aspect Portal with Call Center Software Rel 7.0, Aspect Customer Interaction

Type and scope of project: 300 agent call center capacity and 100 concurrent Web Interaction seats

Other/partner technologies: IVR(Edify), predictive dialer(Davox), call logger/recorder(Nice), relationship management software(Marketing Technology), Artificial Intelligence(Briteware), Lotus NotesCC (e-mail).

Key reasons for choosing Aspect

Open, flexible call transaction system that can integrate with the best available technologies from multiple vendors, such as predictive dialers, IVRs, and relationship management software.

Platform that can support new types of customer contact methods, such as e-mail and the Web.

Specialist in call centers with flexible and scalable solutions.

Measurable benefits

Ability to offer consistent and personal service across multiple access media—phone, fax, e-mail and Web.

Integrated IVR and CTI solution allows intelligent call routing—the best agent gets the necessary information as the call comes through.

Baan

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Baan

Company Background

Baan Company is a leading global provider of enterprise business solutions, with systems implemented at approximately 13,000 customer sites worldwide. Founded in The Netherlands in 1978, Baan has dual headquarters in Barneveld, The

Netherlands and Herndon, Virginia, United States of America.

Designed to meet the growing needs of a broad range of companies, Baan enterprise solutions enable companies to continuously reduce software complexity and cost, enhance ease of use, and bring value to a company's own customers and partners. Benefiting mid-market and large-scale multinational companies alike, Baan enterprise solutions enable organizations from all industries to master change, drive strategic business growth, improve business processes, reduce operating complexity, and increase corporate flexibility.

Baan, a public listed company on the NASDAQ (BAANF) and ASE (BAAN), achieved revenues in fiscal year 1998 of US\$736 million. The company presently employs more than 4,700 professionals worldwide.

Integrated Business Solutions

As integration has always been a key component in the Baan solution strategy, it is no surprise that Baan offers one of the broadest sets of integrated enterprise applications, which extend beyond the enterprise to reach a company's customers and suppliers.

This comprehensive portfolio of integrated solutions includes best-in-class, component-based applications that span an organization's entire value chain including E-Business and Web Commerce, Customer Relationship Management (CRM), Supply Chain Management (SCM), and Enterprise Resource Planning (ERP). Baan also offers a global network of support, consultancy and education services – including 11 application service provider (ASP) partnerships, more than 200 reseller relationships and 14,000 trained consultants. This broad reach provides your company the infrastructure to achieve your goals and gain competitive advantage.

In August 1997, Baan acquired Aurum Software, a leader in customer relationship management software.

Baan's CRMS

Baan's solution empowers your sales force to most effectively manage and capitalize on opportunities with your customers. The result of which is a measurable, positive impact on your bottom line.

As a component of the BaanFrontOffice application suite, **BaanSales** produces dramatic results: increased effectiveness and productivity; support for multiple selling channels; breakthrough technology that ensures easy adoption; and a measurable return on investment.

BaanSales improves the effectiveness and productivity of all sales activities, enabling increased face-to-face selling time with customers and more effective sales tracking and management. Through its process-driven sales and marketing model, BaanSales helps you significantly increase your return on investment by closing the gap between sales methodology and software automation.

The **BaanSales Funnel**, a Baan-originated and often-copied visual interface, allows your sales force to display strategic accomplishments and the total financial projection of the sales funnel at each phase, providing a realistic, forward-facing view of the business.

BaanConfiguration enables sales professionals to quickly assess customer needs and tailor complex product and service configurations to meet them. With BaanConfiguration, you close more business at the point of sale, resulting in higher revenue, shorter sales cycles, and greater customer satisfaction.

BaanIntegration makes it easy for BaanFrontOffice to share information with other areas of the enterprise. Based on Baan's extensive experience integrating front and back-office applications, BaanIntegration tools and packaged interfaces drastically reduce implementation costs. The net result is an enterprise-wide solution that provides a single source of business intelligence, empowering organizations to increase operational efficiency, and respond effectively to customer needs.

BaanKnowledgeManager is a fully integrated, add-on option to the BaanFrontOffice application suite. It manages, consolidates, and effectively delivers to your field sales reps context-appropriate product, company, and competitive information on demand. Using BaanKnowledgeManager, your field sales force can access marketing literature, articles, and other materials while either connected or disconnected to your corporate information network. It also distributes marketing and competitive information throughout the organization via the Web.

To remain current, effective sales professionals invest substantial time in scanning newspapers, researching relevant web sites, and reading trade journals. BaanKnowledgeManager provides a one-stop shop for up-to-the minute information on competitors, products, and accounts, enabling field sales representatives to use their time and sell more effectively.

BaanProposal is an integrated document and proposal generation system that dynamically combines customer-specific configuration, pricing, needs assessment, and customer history information into rich proposals, contracts, and other custom documents.

BaanDataAnalyzer provides comprehensive business intelligence analysis and OLAP reporting.

BaanMarketing provides marketing organizations with a robust set of solutions to design, manage and analyze marketing campaigns directed to the most appropriate audience across the most appropriate channels.

To put it simply, Baan Marketing enables marketing professionals to communicate with prospects and customers across all media channels in the most effective way possible. It is the first step in understanding the customer and the front end to the sales organization. BaanMarketing delivers a closed loop solution that begins with learning from past marketing efforts, continues with running lead generation campaigns and finishes with realized revenue streams. Through tight integration with both the sales and support systems, BaanMarketing will make automated cross-selling and up-selling opportunities a reality. Furthermore, tight integration with data mining tools will offer the marketing professional a better understanding of campaign

BaanPricer as an add-on component of the BaanFrontOffice application suite, takes the complexity out of creating, managing, and enforcing clear and consistent pricing and promotion strategies across your enterprise. Accounting for variable combinations of customer types, distribution channels, product categories, taxes, and currencies, BaanPricer ensures that your customers receive fair and accurate pricing information at each product purchase decision.

Improve Sales Processes

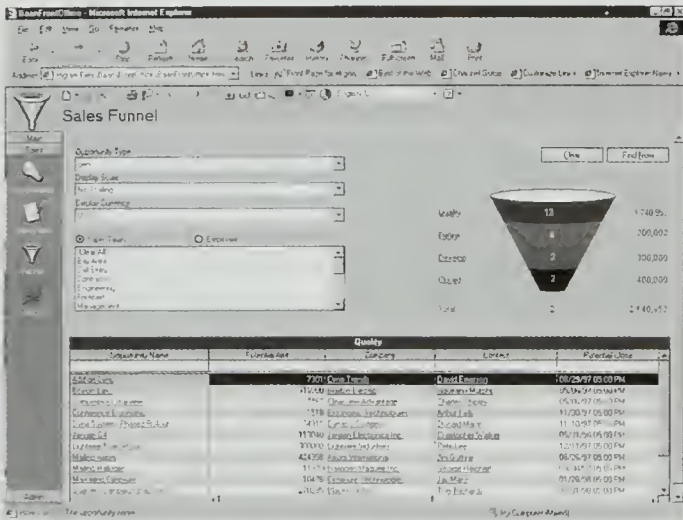
Most sales cycles are complex and, as a result, require a number of steps to complete. Therefore, it is essential to have a process defined. Sales Force Automation (SFA) solutions provide a way to reinforce these methodologies and processes.

Model: **BaanSales** provides the mechanism to model and reinforce the sales methodology that has been put into place

Track: Being able to keep tabs on opportunities in different stages of their sales process

Leverage: Increasingly team selling is seen as competition heats up. With that in mind, the entire team needs to be kept in the loop, not just the sales rep. By leveraging team selling, miscommunication is reduced.

BaanSales provides Visual representation of the sales process, modeling each process regardless of how many stages. The opportunity funnel within BaanSales provides a visualization of sales methodology. It allows you to map the technology to the way you run your sales cycles. It is also a good way for allowing sales managers to see how well (strategic coaching) they are doing at each stage. The rep may have a lot in the funnel, but the leads may be stuck all in one stage.



The funnel provides a graphical view of the opportunities being worked and what stage they are in within the sales cycle. This information can be used to analyze and predict sales activities and then make adjustments to strategies and tactics, as needed.

BaanSales can accommodate multiple sales processes simultaneously. Baan realizes that companies have different sales processes for different markets or regions, or different channels that are selling its products.

For Example: With deregulation in the utilities industry, Pennsylvania Power & Light was faced with having to make substantial changes in order to remain competitive. They implemented BaanSales with the goal of improving the way they generate new leads and then how they manage them throughout the sales process.

- Their sales management team reports higher quality, better-qualified leads for the sales reps, who are now more efficient in pursuing true sales opportunities.
- They estimated that they increased their earnings 10% within 9 months of having implemented the solution

Improve Productivity

Enterprises often fail to provide their revenue producers with the accompanying knowledge and authority to commit enterprise resources profitably with

customers. As these sales professionals seek the information they need to close business, they often weave from one enterprise department to another - whether physically or electronically - wasting valuable selling time.

Empower/Access: By packaging this information into "objects of knowledge" that can be placed in the salesperson's briefcase, they can easily recombine the objects with the customer to close the deal.

Minimize: By providing a repository of information that the sales force can access, you minimize the time that sales reps have to spend on administrative activities, which will allow them to spend more face to face selling time with their customers.

For Example:

Fujitsu Network Communications is one of the leading telecommunications suppliers and is a BaanFrontOffice customer. They wanted to provide their detached mobile sales force with up to date information about new customers, orders and service calls. They wanted to do this by integrating SAP R/3 and their service call system with BaanFrontOffice.

- They were able to do true team selling through a single customer database. So they could retrieve leads and make changes in account status that others could track.
- Sales reps can spend more face to face selling time with customers because they know about recent orders and service calls, without having to ask the customer. They are able to proactively address customer needs before they become problems.

Increase Efficiency

Sales force automation can increase your sales force efficiency.

Forecasting: By providing forecasting in a consistent manner at an enterprise level, as opposed to a jumble of faxes, phone calls and email.

Extend: Forecast visibility.

Innovative Technology

Component: BaanSales is a 100% active-X component-based solution. Each level of the architecture uses a COM interface so you can deploy and split up the application at the component level.

User Interface: The user interface is truly a world-class user interface. Baan studied thoroughly all the latest Microsoft tools, Outlook, Word, materials from msn.com – they looked at the user interfaces that Microsoft is using, what was behind them and what were the essential key elements of those user

interfaces. Baan believe they've taken the best of those approaches and merged them into their front office user interface.

Synchronization: Because a front office solution supports both mobile and connected users, database synchronization is still a very important technology to Baan.

- Real-time, bi-directional synchronization (vs. batch)
- Customer information...any time, anywhere
- User choice of attached or detached operation
- Proven scalability to tens of thousands of users
- Server-to-server synchronization

Component Based

When companies typically implement SFA, they want to do so in manageable chunks. Deploying in phases means that users can get comfortable with the system without being overwhelmed. Companies can then deploy additional parts of the application as it fits their sales reps' needs.

Additionally, as you add new functionality to your SFA system, you'll have a need to upgrade your users in the field. With a component based system, you no longer have to install one large, monolithic executable - instead, you can deploy the individual components that represent new or upgraded functions. These functions can be directly downloaded to the users' laptops, either via the web, or even through push technology.

The component based nature of BaanFrontOffice also means that you can distribute specific functionality to different groups of users - what you want your direct sales reps to see may be different than what you want your channel reps to see, and so on. Users have exactly what they need, and can thus be more productive than if they were operating with a solution that had more than they needed.

And finally, the component-based architecture of BaanFrontOffice makes it easier to integrate with enterprise, back-office applications.

Benefits of SFA

- Reduce training costs
- Reduce workstations upgrades costs
- Reduce customization costs
- Save travel expenses
- Communicate efficiently with the field

BaanSales is the first SFA application that runs completely in an Internet Environment – as the web is something all the sales force uses. Baan did this for two reasons:

1. Browsers are easy to use. It is something that sales reps are already familiar with – e.g. the use of forward and back buttons, hyperlinks, etc.
2. Integrates well with desktop applications, you can view PowerPoint files in the browser

International Support

- Full Euro compliance
- Nine localized languages
- One common executable
- Dynamic multi-locale support and switching
- Localized screens, address fields, documentation, help files

As more and more companies are expanding internationally, you want to be sure that any Front Office application you choose can grow with your global needs as well.

Future Objectives

Baan Company will focus on Integrated Internet-Enabled Solutions, and will focus their operations on providing open integration E-Enabled enterprise solutions. The re-organization calls for Baan to focus their go-to-market strategy and product development efforts on the high-growth Business to Business (B2B) E-Commerce market. This vision addresses all aspects of fulfilling customer demand; from the time a lead is identified through lifetime service of the customer, including support for direct and indirect procurement, complex manufacturing and E-Customer Relationship Management.

Baan Strategic Partners

IBM: As a strategic partner with Baan, IBM has made a major commitment to strengthen joint solutions and drive innovative solutions to enable a greater return on investment for Baan implementations. To meet these goals, IBM has opened Implementation Factories in Atlanta, Georgia USA and Copenhagen, Denmark to rapidly tailor the full complement of Baan Enterprise Solutions to meet specific customer needs based on company size, industry and culture.

IBM is also working with Baan on the strengthening of joint solutions, which includes the strategic e-business joint initiatives to further extend the Baan applications suite to the Web, and enhancing their joint solutions with DB2 Universal Database.

Microsoft: On several key fronts, Microsoft and Baan have shared a common vision for innovation and bringing value to customers. At the heart of the E-Enterprise suite is the Microsoft commerce server and Internet technologies that have helped build the framework for this industry-leading line of e-business applications.

In addition, the expanding Baan and Microsoft relationship that began in research and development, extends into marketing, sales, delivery service and support. The Baan Enterprise Software Agreement (BESA) makes Baan and Microsoft's vision of a Digital Nervous System a reality by delivering a seamless flow of information across an extended enterprise, allowing organizations to make better, faster business decisions. BESA combines all the business software, maintenance, support and self-help cyber services needed for companies to run an extended enterprise exclusively on the Microsoft platform.

Others: Baan partners with leading organizations around the world that add value to the Baan customer base. Companies such as Data General, Hewlett Packard, Compaq, Sun Microsystems, as well as the top systems integrators, experienced applications service providers, resellers, and technology partners all share in the Baan vision to provide integrity, initiative, and innovation to users of Baan solutions.

Case Study

Bang & Olufsen

Growth had become Bang & Olufsen's biggest problem. The manufacturer of high-end consumer audio-visual equipment found that its trademark buying experience—the streamlined customer-first approach at the very core of its philosophy—had begun to unravel. As product lines and configuration possibilities multiplied, the company struggled to address the concerns of customers fast enough. Management needed a solution to enable salespeople to sort through hundreds of configuration requirements and pricing scenarios on the spot. They found the solution in a product configuration software package. "Without **BaanConfiguration**," admits Hens Harder, Senior Manager at Bang & Olufsen's international service department, "we would still be selling standalone TV's and audio products."

Executive Summary

Problem: As product lines and configuration possibilities multiplied at this high-end consumer audio-visual equipment manufacturer, it became virtually impossible for salespeople to manually configure custom systems and maintain a high-quality sales experience for customers.

Solution: **BaanConfiguration** software enables salespeople to present customers with a system designed to his or her exact specifications, while enhancing order and production accuracy, and improving delivery times.

Key Benefits: Because of its unique custom configuration options and ease of use, Bang & Olufsen is able to continue to differentiate itself in a highly competitive market.

Simplicity on the Sales Floor

Bang & Olufsen is currently integrating **BaanConfiguration** into its network of 2,500 retailers worldwide. Bang & Olufsen has found key advantages in this solution. The constraint-based engine prompts dealers to ask the right questions, so orders sent to the factory are complete to the last detail. Production accuracy has increased significantly. Harder believes that "the Baan solution has been a significant contributing factor in Bang & Olufsen's 10 percent profit growth in fiscal 1998-99."

Detailed orders are not the only advantage. Every salesperson now has tools to sell at the level of the most experienced. The solution has also halved the education time required to train new people. This has resulted in a decreased number of necessary dealers to serve customers and increased revenue and dealer loyalty.

The product configuration solution is also an important element of Bang & Olufsen's ongoing effort to streamline operations. The company is migrating from a multi-brand dealers distribution plan toward one emphasizing dedicated Bang & Olufsen outlets. Fifty-nine of these outlets opened in the first half of this fiscal year. As a component of Bang & Olufsen's Retail Management System, the configuration solution has empowered this strategy.

The Trademark Experience

In the future, Bang & Olufsen plans system enhancements to allow customers and dealers to check on the status of orders in real time. The product configuration solution has not only enabled Bang & Olufsen to simplify logistics and increase the accuracy of its back-end order processing, it has allowed the company's trademark buying experience to thrive!

Clarify

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A Nortel Networks Company

Company Background

Nortel Networks' Clarify eBusiness Applications unit is ushering in the second wave of eBusiness, delivering complete eBusiness solutions that leverage the high-performance Optical Internet, CRM and multimedia contact centers to enable seamless, personalized customer experiences.

The Clarify eBusiness Applications unit combines Clarify, Periphonics and Nortel's customer care and call center division.

With the unique combination of these technologies, Nortel Networks will enable virtual Internet marketplaces where companies can create dynamic, secure communities of interest in order to share valuable customer information among partners and suppliers. Nortel Networks will deliver new, expanded solutions optimized for pervasive computing environments, including applications within the enterprise, mobile wireless handheld devices, and B2B extended enterprise offerings.

This new business division, announced in March 2000, is headquartered in San Jose, California. With 2,600 employees and more than 2,000 customers, Nortel Networks' Clarify eBusiness Applications unit is one of the largest suppliers of eBusiness and CRM solutions.

The Clarify eBusiness Applications unit has established strategic alliances with system integrators and software providers to compliment their solutions, further delivering a second wave of eBusiness capabilities. System integrators, including Andersen Consulting, Cap Gemini, Ernst & Young and PricewaterhouseCoopers, offer valuable consulting services to help enterprises and service providers compete in the Internet economy. Software providers bring complementary technical capabilities for enabling virtual Internet marketplaces. Examples of these alliances include Blue Pumpkin, Broadbase, Delano Technologies and eShare.

Recent business developments

In August 1999, Clarify announced the acquisition of Newtonian Software, a leading provider of interactive selling systems that enable unassisted selling and configuration for complex products and services. Newtonian further extends Clarify's ability to capture and leverage each customer interaction spanning all channels, including the Web, self-sales, telesales, partner sales and mobile team selling.

In August 1999, Nortel Networks and Periphonics announced a definitive merger agreement whereby Nortel Networks would acquire Periphonics.

In October 1999, Clarify and Nortel Networks announced a definitive merger agreement whereby Nortel Networks would acquire Clarify.

In March 2000, Nortel Networks announced the creation of the Clarify eBusiness Applications unit. This division combines Clarify's CRM software solutions, Periphonics interactive voice response technology and Nortel Networks call center management solutions.

Customer Relationship Management Solutions

Clarify eBusiness Applications division is focused on providing best-of-breed front office solutions which allow organizations to re-focus their business on the customer.

The customer relationship management product suite is called **eFrontOffice** and is both Web-enabled and provides a single source for all customer information. It allows every customer interaction to be personal and consistent, based on knowledge and information available across the organization.

eFrontOffice offers mix-and-match flexibility through a series of individual modules, which are also available bundled into product suites.

The eFrontOffice product suite is designed to facilitate improved customer relationships in the following five solution areas:

1. **Sales and Marketing solution:** comprising ClearCallCenter, ClearSales, ClearSales Configuration, ClearSales Commissions and ClearEnterprise Traveller modules.
2. **Customer Service solution:** comprising ClearContracts, ClearSupport, and ClearQuality.
3. **Field Service solution:** comprising ClearContracts, ClearSupport, ClearLogistics, and ClearEnterprise Traveller.
4. **Call Center solution:** comprising ClearCallCenter module and ScriptManager.
5. **Help Desk solution:** comprising ClearContracts, ClearHelpDesk, and ClearQuality modules.

Consolidating all customer touchpoints is crucial for effective CRM. Clarify integrates all interactions with the customer, regardless of the channel used into a single routing and queuing system. Auto-response by e-mail, self-service over the Web, and live interaction with a salesperson or call center agent are all accommodated.

Clarify allows requests to be prioritized and handled, based upon how valuable a customer is, rather than treating each method of communication differently, or providing a response on a first-come first-served basis. A highly valued customer interacting by e-mail, for example, would receive precedence over a lower valued customer making contact over the telephone.

eFrontOffice's Computer Telephony Interfaces (CTIs) include soft phone controls, and middleware interfaces to products from technology leaders such as Nortel Networks, Periphonics, Dialogic, Aspect Telecommunications and Genesys Telecommunication Laboratories.

The eFrontOffice modules address the unique requirements of individual business units while providing a single view of the customer across these business units. The individual modules are described below.

ClearCallCenter combines interaction management and profiling with CTIs to leverage information from any source, and automate processes so the call center agent can focus on the customer relationship rather than only the transaction in progress. Clarify's Script Manager exploits the customer profile developed through ClearCallCenter to personalize each interaction. Scripts can be versioned, analyzed for effectiveness, and can act as triggers for follow-up actions.

ClearSupport combines configuration control, workflow, account management, problem resolution, and ownership and commitment tracking to enable the flow of information within an organization to be effectively managed, in pursuit of efficient and effective customer service.

ClearLogistics comprises of three elements; Field Operations, Order Operations and Spares Manager. When combined, these components provide the functionality for managing field service technicians and spare parts and inventory. ClearLogistics provides tight integration with ClearSupport, for example, to update a customer's configuration information.

ClearQuality module identifies, traces, catalogues and verifies repairs, via intelligent agents, to ensure continuous improvement of the quality of products and services offered by an organization.

A key element of Clarify's sales and marketing solution is the **ClearSales** module. This module automates the complete sales process from territory and operation management, through to quote generation and revenue forecasting.

ClearSales Commissions is an integrated add-on to ClearSales product family that enables sales management to implement and maintain a compensation system for direct sales reps, resellers and distributors, as well as providing "click through" rewards for Web based commerce. The end result is a comprehensive solution that regulates commissions and incentives and uses compensation as a key motivator to increase revenues.

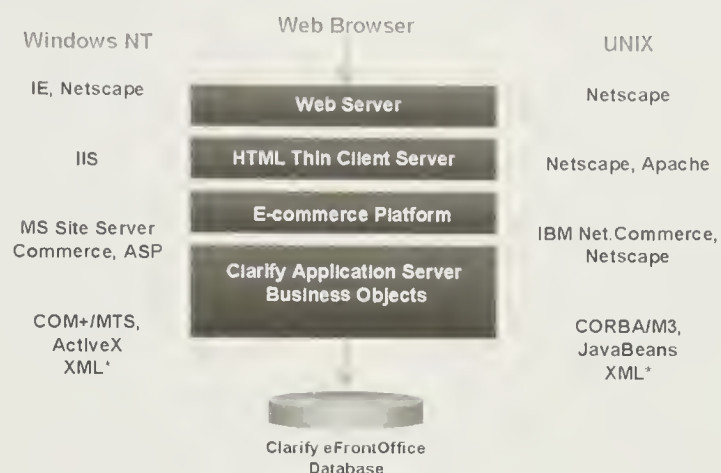
ClearSales Configuration is also an add-on to ClearSales providing management of complex product configurations in the sales cycle.

The Clarify **Marketing Encyclopaedia** incorporates push technology in order to supply the latest opportunities and tools to field representatives. Target Account Selling (TAS) sales methodology is a further component of ClearSales.

ClearHelpdesk module features closed loop problem resolution, integration with popular asset management systems, workflow, ownership and commitment tracking and change management. Combined these elements offer better collaboration, greater personalization and pro-active, rather than re-active, support service.

Management of service contracts is facilitated by the **ClearContracts** module of eFrontOffice. This module provides out-of-the-box functionality for personalized Service Level Agreements (SLAs), which ensures that entitlement and compliance information is readily available.

Clarify eFrontOffice Architecture



ClearEnterprise Traveler module provides mobile capability. This module enables advanced data synchronization and data distribution to sales and support staff working without a direct connection to the corporate database.

Clarify not only incorporates an e-mail Response Management facility, which classifies incoming mail and determines the best method of response, it also allows automatic responses to be personalized to ensure that the customer receives relevant and pertinent information to their request. Clarify's workflow engine directs complex inquiries to the most appropriate resources and provides 'bulletproof' accountability for query resolution. This is enforced through users not having the ability to delete any query from the workflow system, and the need for each query to be accepted by a designated specialist before the query can be passed on.

Personalization is clearly one of the most important features of CRM systems. eFrontOffice combines both self-service and self-sales within a single view through dynamic portals. Customers are able to update their profile, for example, to change the preferred method of contact. Customers can also manage the sales order process by viewing the status of an order, or review the entire relationship life cycle on a single screen. Facilities to initiate customer service and peruse individually tailored promotions are also provided.

Clarify contains Web collaboration software such as call-me and click stream monitoring. When a customer clicks a call-me button on the Web site, notification is immediately received of the expected wait time for a response from a live operator, such as a call center agent. Using click stream monitoring, the agent has full details of each Web screen that the customer visited prior to calling for assistance. By having the complete context of the interaction, the

agent can resolve problems more efficiently and effectively.

Using eFrontOffice, business rules can be set up to configure notification and escalation procedures, such as to alert a supervisor when a call has been outstanding beyond a predetermined limit. Multiple types of actions can be raised, such as running a ClearBasic program. Actions can also be scheduled to coincide with customer business hours or SLA response times.

Clarify client software is managed to an extent by caching of meta data on the client. If ClearCustomise and Business Rules point-and-click tools are used, then customization is automatically captured as meta data and downloaded to the client.

Only when implementing a major new release is manual intervention required. eFrontOffice integrates with automatic software distribution via Tivoli's Tivoli Management Environment for UNIX and Microsoft's System Management Server for PC clients. Features such as point-and-click for customization and configuration mean fewer resources and implementation can be achieved in a shorter time-scale.

Mobile/Personal Data Assistant (PDA) interfaces allow the bi-directional transfer of information, such as e-mail and calendar details, between eFrontOffice and Microsoft Outlook, 3Com PalmPilot and Microsoft Windows CE.

eFrontOffice automatically detects where enhancements contained within new software releases duplicate data items and functionality that have been customized by the client, therefore assisting developers with release management. eFrontOffice is also equipped with modeling tools to enable unique business processes to be designed, a competent configurator, and ClearCustomise - Clarify's development tool. ClearCustomise, which is based

upon Microsoft Visual Basic, allows developers to customize eFrontOffice for each business implementation. Over 80 percent of Clarify eBusiness Application customers choose to implement three or more applications, with the average implementation timeframe being between three and six months.

Clarify has partnered with CrossRoads Software and Active Software to enable easy and inexpensive integration with back-office systems. The Clarify/CrossRoads solution uses out-of-the-box collaboration modules, which work in real-time through connectors to native Clarify and SAP, Baan or PeopleSoft interfaces. Active Software provides a solution which links to Oracle's back-office suite. Information is passed from Clear API to the Active Adapter (Clarify Edition), to the Active Adapter (Oracle Edition), and finally to the appropriate Oracle application.

Case Study

Fujitsu, Australia

Fujitsu Australia is one of Australia's leading suppliers of solutions and services to key customers and target markets including Government, Retail, Utilities, Financial Services and Telecommunications. Fujitsu's portfolio of offerings includes customer relationship management (CRM), electronic business, enterprise applications, and information technology & telecommunications infrastructure systems & services.

Fujitsu's infrastructure systems and services offering includes data center services, systems and network management, IT infrastructure outsourcing, IT lifecycle management, multi-vendor system support services and help desk services. The help desk services use advanced call center functions to provide a single customer interface for all services.

Fujitsu located its Asia/Pacific regional customer service center at its Enterprise Management Center in Canberra with multi-lingual capability to service customers in Australia, New Zealand, Hong Kong, Singapore, Malaysia, Indonesia, Philippines and Thailand. Fujitsu's support services include traditional preventative, predictive and remedial systems maintenance, plus remote support, systems configuration assistance, ISP user support, desktop applications assistance and software and network support services. Fujitsu Australia recently received the 1999 global award from Teleperformance for "No. 1 ISP/internet help desk in Australia".

To continue to provide world class help desk services and meet its customers' expected levels of service, Fujitsu has invested over \$5 million to implement Clarify's eFrontOffice front office software.

The modules Fujitsu has chosen include:

- ClearSupport, to allow the call center to manage information flow within Fujitsu for the efficient resolution of issues
- ClearContracts, to automate key contract information and processes both before and after the sale
- ClearLogistics, for field technician dispatch, managing spare parts inventory and enabling high-volume repair center operations
- ClearExpress WebSupport, to allow Fujitsu's customers to log cases over the web, check the status of their case, and to perform their own troubleshooting on the secure site.

General Manager, Fujitsu Services, Peter McFarlane, said the implementation has enabled Fujitsu to replace more than half a dozen discrete call management systems with a single, integrated solution that delivers greater functionality, control and reporting capabilities.

Selecting a Long Term Reputable Partner

"We went looking for a platform that would serve us well into the future, providing integrated management of cases, contracts and logistics as well as addressing our Y2K exposure with some of our existing systems. It was also important that it be a specialist product with a proven reputation in the marketplace, and that it be capable of operating over a WAN because we want to eventually roll it out to our New Zealand operation," he said.

"After several months of intensive evaluation, including reference site visits and meetings with senior Clarify officials, we chose eFrontOffice as the solution that best met our requirements. Not only did it offer the functionality we wanted, but it also met our demanding standards for reliability and performance.

"The Clarify solution was actually recommended to us by Fujitsu operations in other parts of the world, including Japan and the US, but the selection was based on our own analysis. It is perhaps significant that subsequent to our decision, Fujitsu moved to standardize on Clarify for all its customer support operations throughout Asia," said Mr. McFarlane.

The Solution

Fujitsu's Enterprise Management Center in Canberra handles calls 24 hours a day. The calls are logged in eFrontOffice, which uses a workflow model to manage service fulfillment according to agreed service levels for that customer.

The implementation is being rolled out in stages, with the ClearSupport, ClearContracts and ClearExpress installed and 233 customers implemented so far. Clarify business partner, Cambridge Technology Partners, are working in conjunction with Fujitsu's own project team to implement the system. After a

successful internal pilot in April, the first group of 83 customers came online in July, followed by an additional 150 customers in September.

Customer Benefits

"We anticipate that all customers will be registered in the system by the end of October, with plans to add additional reporting functionality and integrate the ClearLogistics module to manage our spare parts inventory after that," said Mr. McFarlane, who believes customers will benefit significantly from the new solution.

"The Clarify solution gives us a central repository with comprehensive records of what products our customers have, where they are located and their relevant service level entitlements. Not only does this help our personnel to deliver service to the required standard expected by the customer, but also because we're better informed, we can be respond more quickly to service calls and always ensure we have the necessary equipment to address the problem."

"Customers can also log into the system via the Internet to place calls, track the progress of existing service calls or add new information to open calls. We think this will prove very popular with customers, since they'll be able to access a full listing of calls relating to their organization at their convenience, without having to go through an operator."

"We're also planning to enhance our service level reporting capabilities by complementing our standard range of SLA reports with a full database which they

can dissect and customize to suit their individual reporting requirements," said Mr. McFarlane.

Substantial Savings

From Fujitsu's point of view, the Clarify solution offers numerous benefits in efficiency, cost savings and information management.

"We expect to reap substantial savings in operational costs by centralizing our call center management and staffing in Canberra. The new systems will also enable us to improve our performance in meeting SLAs through a series of automated reminders and escalation procedures as SLA deadlines draw closer."

"Clarify's powerful integration of various communications mechanisms means we can notify service personnel in a range of ways such as email, pager or telephone, and the system provides a full audit to assist with case management and reporting," he said.

While focused on bedding down the current customer service implementation in the short to medium term, Fujitsu sees its investment in Clarify as a long-term commitment.

"Clarify is a major player in the front office market and we expect this partnership to continue well into the future," said Mr. McFarlane. "We will continue to purchase modules and expand our Clarify implementation over time as we identify further opportunities to support and enhance our business processes, and improve the service we can offer to customers."

Sample Customers

Customer	Industry	Solutions Provided	Project Details
Microsoft, Global	Software	Customer Care/support software, Web-support	<ul style="list-style-type: none"> 10,000 concurrent users, global roll-out. Clarify is used to support enterprise customers. Microsoft have seen an increase in the number of customers who are 'very satisfied' up from 50% to over 70%.
Digex, USA	Internet Services (Application & Web hosting)	Full front office suite eFrontOffice	<ul style="list-style-type: none"> 600 users. Digex manage mission-critical web sites for over 1,500 customers and plans to be running more than 20,000 servers for customers by the year 2002. eFrontOffice is used by the marketing, sales, implementation and technical operation teams within Digex.
Aussie Home Loans	Banking and Finance	Sales and Marketing, customer support	
BT (British Telecom), Global	Telecoms	Customer support, sales	

Compaq

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Successful CRM-BI Implementations

For Compaq, Customer Relationship Management (CRM) and Business Intelligence (BI) are complementary technology strategies. CRM solutions individualize the customer experience based on detailed information about each interaction the company has with its customers and suppliers. To individualize each interaction with the customer, the solution considers the customer's likes and dislikes and what they are likely to buy. Central to CRM strategies is organizing the business around customers rather than products. BI, a component of successful CRM strategies, is the gathering and organizing of customer data for access, exploration, and analysis.

An end-to-end process, CRM spans product development, nurturing customer relationships, acquiring knowledge about individual customers, rewarding loyalty, planning actions, and measuring results. Gathering, analyzing, and acting on vast volumes of information is an enormous undertaking. And, in fact, with an average of 50 components, CRM implementations are among the most complex IT projects. Without proper planning & implementation, the complexity can increase costs and prolong

implementation. Therefore, companies considering CRM should evaluate vendors for proven success in:

Minimizing risk—The complexity of CRM solutions relates to multiple potential points of failure. CRM solutions are assembled from various vendors' application software, platform, operating system, and database. Configuring multiple software components in *n*-tiered architectures can be difficult. The vendor's field experience, configuration and sizing tools, and close relationships with CRM applications providers minimize risk.

Ensuring availability—With e-business assuming a larger role in corporate strategies, the appearance of being "always open for business" is essential to success. If a customer-facing CRM solution goes down, customer satisfaction declines and revenues can erode.

Delivering fast "time to solution"—Fast time-to-solution is particularly important for CRM because the goal is to gain competitive edge. CRM solutions offer a potentially sustainable competitive advantage for early adopters. The first companies in their industry to deploy CRM solutions gain a competitive edge by offering individualized customer service, increasing customer retention and wooing new customers from competitors. To achieve fast-time-to-solution—and gain a sustainable competitive edge—companies need a solutions vendor who is experienced with implementations for similar companies using similar components.

Compaq Value for CRM Solutions

Compaq's CRM solutions build on Compaq's proven system integration expertise and knowledge of ERP and supply chain solutions. Compaq minimizes risk, speeds time-to-success, and ensures 24 x 7 availability of CRM solutions with a proven collection of methods, expertise, and services. These include strategic partnerships and alliances, innovative platform technology, and value-added services.

Strategic partnerships and alliances

For the spectrum of CRM projects—ERP, supply chain, sales force automation, call center integration, or business intelligence—Compaq offers the partnerships and the expertise to integrate the various technology components. Compaq has established strategic partnerships and alliances with leading CRM solutions vendors and cooperates with them for solutions implementation, legacy integration, and training. Partners include Microsoft, Oracle, SAS Institute, and Siebel Systems.

Strong partnerships create unique value for Compaq customers, in two ways. First, all solutions are extensively tested on Compaq platforms. This minimizes risk, speeds time-to-solution, and enables Compaq to configure both the platform and CRM solutions for optimum performance in the customer environment. Second, implementation proceeds more smoothly because Compaq and their partners are involved in continuing efforts to discover and resolve issues beforehand. When new issues do arise, the platform and software providers work cooperatively, for faster resolution.

Microsoft

Compaq offers compelling benefits for customers whose CRM solutions include a Microsoft SQL Server database or Windows application. Chief benefits are Compaq's skilled Windows staff, industry-leading price/performance, and Compaq's partnerships with Windows applications vendors.

Expertise—During their 17-year partnership with Microsoft, Compaq has become the prime integrator worldwide for Windows 2000-based enterprise computing. More than 2,300 Compaq MCSEs and MCSDs are certified in Windows 2000®. Therefore, technical expertise is readily available, reducing risk and accelerating project completion.

Price/performance—Continuing innovation between Compaq and Microsoft has resulted in record-setting performance. For example, Compaq ProLiant systems with Microsoft SQL Server repeatedly set new performance and price/performance records in industry-standard benchmarks. Compaq ProLiant servers and Microsoft Windows 2000 Advanced Server shattered the latest TPC-C benchmark record.

Partnerships—Compaq also offers customers the benefit of their strong partnerships with vendors, such as Siebel Systems and SAP, whose CRM applications run on the SQL Server database. With Compaq's joint expertise in Windows 2000 and the application, customers receive a complete solution. Compaq extensively tests platform configurations as well as various combinations of application and database servers. The result: much of the work, including configuration and testing, are completed before the project even begins, speeding implementation.

Oracle Corporation

During 20 years of collaboration, Compaq and Oracle have cooperated in many industry firsts, including the first Oracle TCP benchmark and first 64-bit version of Oracle8i. Oracle Apps running on Compaq platforms supports more users than on any other platform. Moreover it is estimated that 42 percent of all Oracle

solutions deployed on Microsoft Windows NT platforms run on Compaq ProLiant servers.

The advantages of deploying Oracle solutions on Compaq platforms are:

Less risk and complexity—The Compaq Alpha Warehouse family are pre-tested, pre-installed, Tru64 UNIX configurations with Oracle8i. This integrated offering, available only from Compaq, reduces time to initial warehouse load. Compaq publishes sizing tools on ActiveAnswers that suggest configurations for optimal performance and predict system usage for different scenarios.

Price/performance—Oracle databases on Compaq ProLiant servers with Windows NT or on Compaq AlphaServer systems with Tru64 UNIX deliver the best price/performance, according to industry-standard TPC benchmarks. Customers can confirm the outstanding performance of Oracle on Compaq platforms with their own workload at one of Compaq's Benchmark Centers. These centers are staffed with trained Oracle DBAs.

SAS Institute

SAS Institute and Compaq have been partners since 1986. With more than 8,000 customers, Compaq has three times more SAS installations than the nearest Windows NT competitor. Customers who deploy SAS solutions on Compaq platforms achieve the following advantages:

Performance—In industry tests, SAS solutions perform the best on Compaq AlphaServer platforms: Compaq has never lost a benchmark. The reason is that SAS solutions take full advantage of the very large memory capabilities of the AlphaServer.

Low risk and fast time-to-solution—SAS users who choose Compaq for implementation reduce risk and speed time-to-solution because Compaq CustomSystems offers pre-tested, pre-configured ProLiant and AlphaServer configurations for SAS Enterprise Miner™. CustomSystems also offers Rapid Results, a joint initiative with SAS to perform proof of concept at the customer site. The Compaq ActiveAnswers site includes comprehensive resources for SAS Enterprise Miner.

Shared partners—SAS Institute's strategic partners, Siebel and Exchange Application, are strategic partners with Compaq, as well. Established relationships minimize risk and speed time-to-solution.

UNIX/Windows NT integration—UNIX integration is important because SAS is usually deployed in a client/server UNIX environment. Also, large data warehouses tend to run on UNIX platforms while small data marts tend to run on Windows NT platforms.

Siebel Systems

With more than 250 installations to date, Compaq is the dominant platform provider for both the application and database servers in Siebel solutions. Siebel's first platform partner, Compaq remains Siebel's development platform of choice for Windows NT Server solutions. Therefore, customers who deploy their Siebel solutions on Compaq platforms are ensured of optimum performance and testing. Siebel customers can obtain sizing and configuration services on the Compaq ActiveAnswers web site and in Compaq's Solutions Centers, free-of-charge.

Following are Compaq's strategic advantages for customers with Siebel solutions:

Strong partnership with Siebel—Compaq has been a preferred partner since 1997 and a strategic consulting partner since 1999. Compaq tests Siebel solutions in their Competency Centers, employs certified Siebel consultants, and dedicates personnel to Siebel support. Customers benefit from Compaq's own experience because Compaq uses Siebel's call center solution in their own call center and Siebel's SFA solution for their sales force. Similarly, Siebel develops their software and runs their in-house system on Compaq platforms, with the help of Compaq Professional Services.

End-to-end SFA solutions—Compaq offers a range of enterprise servers, storage, and client devices to provide end-to-end solutions for the entire sales organization. Acquiring all platforms from a single vendor simplifies integration, minimizing risk and speeding time-to-solution. Compaq Professional Services also offers integrated call center solutions that take the guesswork and risk out of component selection. The solutions include best-of-breed components, some of which have been pre-integrated to speed deployment and ensure reliable operation.

Proven track record with SFA—Compaq understands the platform and service issues essential to the success of SFA and call center projects. These include server sizing and optimization, effective backup and restore practices, proven deployments of high availability solutions, tested best practices in synchronization, and territory assignments.

Siebel customers also benefit from Compaq's understanding of call center platform and service issues, including server sizing and optimization, effective backup and restore practices, proven deployments of high availability solutions, tested best practices in synchronization and territory assignments.

Compaq's Innovative Platform Technology

Compaq's range of server and storage products grant customers the flexibility to adapt their solutions as business needs evolve. Customers have the freedom to scale their systems for more users or transactions, choose Windows NT Server or UNIX, and even support mixed Windows NT and UNIX environments. For incremental changes, customers can add or modify modules in the complete CRM solution.

Often the customer's primary interface with the company, CRM solutions require the highest levels of availability. Compaq delivers the spectrum of available solutions, from ProLiant clusters based on the Intel processor and Windows 2000 operating system, to AlphaServer clusters and NonStop Himalaya solutions. Delivering the industry's best availability, NonStop Himalaya solutions are behind many of the world's mission-critical applications.

Compaq Availability Services take you beyond basic product warranty, providing increased levels of hardware & software support. Choose the level of service you need, depending on your business demands.

When you need maximum availability for business-critical operations, Compaq first conducts a risk assessment of your entire IT environment. Compaq then combines highly responsive support with an ongoing, proactive partnership that helps you improve availability, even as your environment changes. A dedicated support team monitors your systems and provides the highest levels of support—up to 24x7 with a 30-minute maximum response time.

Compaq Value-Added Services

Compaq minimizes risk by providing a myriad of tested configuration and sizing guidelines for customers. The guidelines are published on Compaq's ActiveAnswers Web site and developed in Compaq Solutions Centers worldwide.

ActiveAnswers (www.compaq.com/activeanswers)

Compaq ActiveAnswers, minimizes risk and speeds time-to-solution by delivering comprehensive methodologies, tools, and information for planning, deploying, and operating your CRM and BI solutions. Compaq developed their solutions with leading CRM solutions providers—Microsoft, Oracle, SAS, and Siebel—so ActiveAnswers reflects the expertise gained from joint engineering.

Compaq Solutions Centers

Compaq Solutions Centers, located in major global population centers, are laboratories that determine optimal configurations for different CRM environments, and also consider issues related to IT integration and business integration. In their Solutions Centers, Compaq leverages their partner and customer engagements to build knowledge and expertise that other customers can apply. Activities include proof of concept, pre-testing, & benchmarking.

Compaq and SAS Institute also sponsor and maintain a joint Competency Center in Cary, North Carolina, at the SAS Institute World Headquarters. The Competency Center is staffed by Compaq systems engineering experts and has a wide range of Compaq platforms for porting, testing, and benchmarking.

Full Lifecycle Services for CRM Solutions

Compaq supports the entire services lifecycle: planning, design, implementation, and management. Customers benefit from a single point of accountability throughout the life of the project, ensuring continuity and faster time-to-solution. One service of particular interest to CRM customers is Compaq's unique Business Exploration Service. Compaq has discovered that dividing the CRM plan into 90-day projects, or "building blocks"—such as Sales Force Automation systems, web-enabled call centers, and analytical data marts—is an extremely effective strategy. Attempts to implement the entire blueprint at once often fail—not only because of the complexity, but because organizations cannot accommodate too much change at the same time. The deliverable for the Business Exploration Service is a plan for designing & implementing CRM in increments.

Compaq CRM solutions

Compaq offers a proven CRM solutions framework, including both back-office and front-office solutions.

Solutions framework

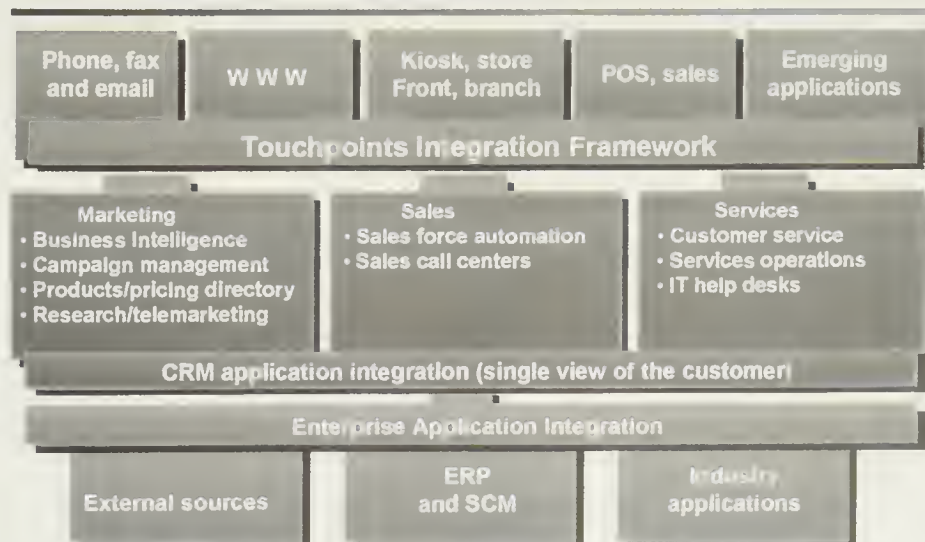
Compaq's CRM solutions framework integrates customer "touchpoints"; marketing, sales, and service applications; and other enterprise applications that are sources of customer information (see exhibit below).

Customer touchpoints (front end)—Compaq can design CRM solutions to collect information about every interaction, whether via phone, fax, Web store, point-of-sale terminal, or salesperson. By storing information about the customer's purchase—product, date, method of purchase—the company improves its understanding of the customer's needs and can, for example, anticipate an upcoming order and offer a reminder.

CRM application—Customer information, collected from each interaction, should be provided to the marketing, sales, and service organizations—on demand and during every customer interaction. The common types of CRM applications, each of which is available from Compaq through a partnership, are shown in the Solutions Framework diagram. The best set of applications for a particular company depends on its business goals.

Enterprise applications—In addition to customer information collected at touchpoints, Compaq CRM solutions can integrate other customer information from a variety of sources. These include commercial databases; ERP and value chain enterprise applications; and industry-specific applications, such as the billing systems and outbound call centers used by telecommunications companies.

CRM solution framework



Solutions components

Compaq CRM solutions include:

- Back-office components, which consolidate and allow analysis of customer data.
- Front-office components, such as call center and sales force automation (SFA) applications, which collect and provide customer information at the point of contact.

Back-office CRM solutions

Following are the elements that are available for Compaq's back-office CRM solutions:

Data marts: Data marts, accessed by sales, marketing, and service organizations, run on Compaq platforms with Microsoft SQL Server and Oracle BI for Tru64 UNIX.

Analysis and reporting: SAS Enterprise Miner

Data mining is a key component of most CRM implementations. It enables companies to improve sales, marketing, and service through churn analysis, customer retention models, one-to-one marketing, campaign effectiveness, direct marketing programs, call center results analysis, and demand forecasting.

The data mining component of Compaq's CRM solutions framework is on SAS Enterprise Miner Tru64 UNIX/NT. A packaged, low-risk solution, SAS Enterprise Miner helps companies select, explore, and model large amounts of data to uncover previously unknown patterns for business advantage. It employs data mining techniques such as decision trees, neural nets, and regression analysis.

Deploying SAS Enterprise Miner on Compaq platforms improves performance, as it is able to take full advantage of the capabilities of Tru64 UNIX.

Compaq Zero Latency Enterprise framework

Compaq's Zero Latency Enterprise (ZLE) framework gives the business the ability to access up-to-the-minute data about customer transactions—from ERP, e-commerce, and operational systems—and to act on it automatically for operational advantage. At the heart of the ZLE framework is an operational data store (ODS), a central, operations-focused database fed in near real time by all other databases and applications in the enterprise. ODS takes advantage of the extreme the reliability, availability, and scalability offered by the NonStop Himalaya platform, and is often implemented in a mixed environment with Compaq AlphaServer and ProLiant platforms.

Front-office CRM solutions

For the front-office component of CRM, Compaq offers the industry-leading Siebel Call Center and Siebel Sales Force Automation (SFA) solutions. In fact,

Compaq ProLiant NT servers are the most popular platform for Siebel applications, used twice as often as the next most popular platform. Compaq offers first-hand experience, using Siebel's call center solution in their own call center and Siebel's SFA solution for their own sales force.

Siebel Call Center

Siebel Call Center integrates customer sales and services information to provide a complete customer view for universal call center agents. The database server can be implemented either on a Compaq ProLiant or AlphaServer Tru64 UNIX platform. The Compaq/Siebel solution delivers high availability for customer centers requiring 24x7 support.

Siebel Sales Enterprise

Siebel Sales Enterprise provides a comprehensive set of tools for mobile and inside sales professionals to manage all aspects of the sales cycle. It increases selling effectiveness by providing essential customer and product information when and where the sales professional needs it. Compaq deploys the Siebel Sales Enterprise application on a Compaq ProLiant NT server, and installs the database on either the Compaq ProLiant NT server or AlphaServer Tru64 UNIX platform.

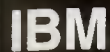
Compaq's ActiveAnswers web site provides sizing and configuration specifically for Siebel solutions, gathered from Compaq's experience with more than 250 Siebel implementations.

Conclusions

Essential to the success of CRM programs is the solution provider's ability to quickly and effectively integrate multiple applications and platforms. The most qualified solutions provider minimizes risk, accelerates time-to-solution, and ensures that the company appears "always open for business."

Compaq offers both the required expertise in CRM deployments and the methods for distributing that knowledge to customers. The expertise comes from Compaq's experience in deploying CRM solutions worldwide, as well as from their partnerships with leading CRM applications providers: Microsoft, Oracle, SAS, and Siebel. Customers can conveniently access key sizing and configuration information through Compaq's ActiveAnswers Web site and Compaq's Solutions Centers.

From conception to implementation, from platform sizing to software configuration, Compaq offers the experience, the partnerships, the staff, and the value-added services to ensure the rapid success of your CRM initiative.



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Company Background

IBM is the world's largest information technology company, with 80 years of leadership in helping businesses innovate. IBM Software offers the widest range of applications, middleware and operating systems for all types of computing platforms, allowing customers to take full advantage of the new era of e-business. The fastest way to get more information about IBM software is through the IBM Software home page at <http://www.software.ibm.com>.



e-business

IBM defines e-business as what happens when companies connect their Critical Business Systems directly to their critical constituencies - customers, employees, vendors and suppliers via intranets, extranets and over the Web. This powerful combination brings together the resources of traditional information systems with the vast reach of the Web, creating a dynamic and interactive flow of information. An early and active proponent of Java technology, IBM Software is continuously developing new e-business products that include Web application servers, secure e-commerce applications, and Web-enabled middleware.

CRM Products & Offerings

Corepoint Voice Response

Corepoint Voice Response is a versatile, powerful voice processing system that allows you to build, execute and manage a wide range of integrated applications. Let customers check business hours & locations, or access a detailed list of services, rates & prices – anytime day or night. Or take it to the next level, and let them schedule appointments, place orders, verify schedules, confirm account balances, and leave voice messages without waiting, transferring calls, or repeating account numbers. Corepoint Voice Response processing offers a wide range of functionality on several industry standard hardware platforms. You can use Corepoint Voice Response to present information stored in company databases – even if its stored in multiple computing environments – as well as for voice messaging, speech recognition, outbound dialing, audiotext information retrieval, and as fax, pager or automated attendant. Any organization that provides information over the telephone can use Corepoint Voice Response to perform any number of valuable functions, such as; order processing, claims inquiry, employee benefits, account balances, funds transfer, brokerage services, education & student services, patients scheduling, helpdesk & dispatch, and warranty expiration notification.

Highlights

Fully scalable, modular design – accommodates applications as business needs grow and scale from one system to a large, networked infrastructure supporting thousands of telephone lines.

Single platform support or multiple voice applications – delivers concurrent execution of voice response, voice messaging, fax and other voice processing applications.

Supports Java applications – developed using Corepoint Voice Response Java Beans for voice processing.

Application investment protection – applications developed with voice processing Java Beans are automatically enabled for all voice response execution environments.

Voice recognition – select, speaker independent, entry level through large vocabulary continuous speech recognition.

Text-to-speech – creates computer generated synthesized speech from text files, eliminating the need for pre-recorded speech.

Comprehensive management capabilities – provides control of multiple systems from a single node manager

Industry-leading integrated messaging – provides voicemail plus integrated messaging in one open tailorable voice response application.

Corepoint Telephony

Corepoint Telephony provides a comprehensive Computer Telephony Integration (CTI) solution including:

Inbound call processing - Uses customer information from business applications, agent information (e.g. skills and availability), and load balancing information (e.g. call center volumes) to route an incoming call to an agent best able to serve the caller.

Reporting - Generates information that allows managers to measure the effectiveness of their call centers.

Desktop tools - Includes a softphone integrated with the PBX/ACD system, and integration tools such as Java Beans and Dynamic Data Exchange (DDE).

Access channels - Provides computer telephony features such as screen pop, linking calls with data, and intelligent call routing across different customer access channels, including PBX/ACD systems, voice response units (VRU), and Web self-service systems.

Outbound call processing - Automates the placement of outbound calls by preview, power or predictive dialing from customer lists.

Corepoint Telephony allows you to streamline your call center operations and:

- Gain a competitive edge by linking telephones with new and existing computer applications.
- Improve customer satisfaction with the intelligent answering function.
- Reduce personnel costs by distributing peak workloads.
- Improve efficiency with the ability to transfer a business application environment with the call to another agent.

Highlights

- Features open, scalable, platform independent computer-telephony software and applications.
- Provides a Web-to-call center connection, allowing Web page visitor to request Customer Service Representative (CSR) assistance.
- Capitalizes on the flexibility of Java technology to leverage your current systems investment and position you for virtually any future changes.
- Supports a wide variety of delivery channels, including Web & interactive voice response.
- Easily integrates with email & kiosks delivery channels.
- Supports multi-site distributed call centers – “virtual call centers”.
- Allows agents to receive calls & customer data and easily transfer calls, along with data, to another call center.
- Offers many custom applications without complicated voice & data programming.
- Receives a customer’s profile along with the telephone call.
- Redistributes calls from busy call centers to improve response and efficiency during peak calling times.
- Route incoming calls directly to an agent with the skills to serve the customer.
- Creates an integrated call center management database, including call statistics & business information.

IBM Global Services – Customer Relationship Services

Thinking of the customer is not new. For consistently successful companies it's standard operating procedure. What brings you to the next level is how you think of customers. Viewing them as your most important asset - as relationships you invest in, nurture and grow. Every customer contact is an opportunity to increase the value of your customer asset, building loyalty, retention, increased sales and profitability. The full-range vision of IBM Customer Relationship Management (CRM) Services can help you harvest those opportunities as bottom-line results.

Strategic vision from beginning to end

At the outset of any customer-relationship building initiative, there must first be a comprehensive, enterprise-level plan. One that takes into account current and long-range business objectives, marketplace realities, and the best available technologies to enable the initiative. The plan is developed, refined, approved - and then executed.

Engagement Approach

Typically, planing and designing, and then execution are thought of as two discrete steps. But IBM takes a different approach. They believe the best results are achieved when the plan designers and integrators work alongside each other. Therefore, IBM builds a team with technology experts and business consultants at the very beginning of the engagement. By using this process, everyone is apprised of the best available and emerging solution.

IBM CRM Services executes an action-oriented, implementation-focused approach to customer relationship management. Their end objective is a working, productive and measurable customer relationship solution for the entire enterprise – not merely a plan.

IBM is uniquely positioned to deliver on that objective. They've assembled an organization with the most experienced, innovative and proven leaders in their fields. A collection of the diverse talents required to effectively examine, plan, test, implement and if requested, operate the business, human resources, and technical aspects of a successful CRM engagement.

Teaming

IBM CRM Services is a team of dedicated customer relationship management experts, committed to meeting the consulting and services needs of customer relationship operations across all industries. The team consists of more than 30 business consulting professionals and over 150 technology

professionals and integrators who work together to solve customer relationship management business problems.

Business consulting professionals provide management and operations consulting for reengineering customer relationship business processes, with an eye toward technology solutions. Technology consulting professionals translate customer relationship business requirements into the right technology solutions to meet the needs of IBM customers for acquiring, developing and retaining customers through multiple channels of access including call centers, branches, the Internet, ATMs and kiosks.

CRM Service Offering

IBM CRM Services offers specialized programs and services, including:

CRM Strategy and Vision

This offering provides an understanding the impact CRM can have on business results. IBM can assist you in developing a comprehensive strategy, as well as business processes, that create customer value.

- CRM Briefing
- Customer Value Management Assessment
- CRM Strategy
- CRM Roadmap Development.

Customer Contact Management

This offering assists you with integrating a solution that will enable consistent, effective and personalized experiences for your customer across multiple integrated access channels.

- Call Center Start Up and Consolidation
- Contact Center - Telephony Enablement
- Enterprise Connectivity
- CRM Package Selection and Implementation.

Customer (Business) Intelligence Management

This offering assists you with capturing and analyzing customer data. IBM can help analyze, profile, and score customer data for the purpose of targeted sales and services.

Customer Campaign and Market Management

This offering assists you to develop comprehensive go-to-market strategies by aligning marketing, sales, and service with customer values, wants, and needs. IBM can help create and manage the execution of campaigns that could result in loyalty retention, revenue growth and profitability.

Creating value where it counts - in the eyes of the customer. It takes a lot more than a new call center with all the latest tools and technologies to build customer relationships. IBM CRM Services employs the "peak value" system to identify, manage and maximize the perceived value your customers derive from choosing you.

Peak value is a structured, proven approach to defining customer value and what you need to deliver it, including:

- Real outcomes
- Perceived value
- "Moments of truth" interactions when you create satisfaction or dissatisfaction
- Essential process capabilities you need to create satisfaction and value at moments of truth
- The business, people and technology infrastructure required to efficiently and consistently enable the essential process capabilities.

What you can expect from an IBM Services Engagement

IBM uses a phased approach to migrating your customer relationship capabilities toward optimal performance and value, resulting in short-term improvements while defining and developing your ideal solution. Each activity in each phase employs proven strategies, methodologies and deliverables.

This structured approach delivers a thorough work plan for creating the optimal CRM solution for your business. Overlap among the phases improves efficiency and timeliness, while checkpoints throughout the activities continuously verify direction and substantiate results within the context of your business and financial objectives.

IBM CRM Services can handle every element of your CRM planning and implementation. You also have the option of enlisting IBM to complete only selected phases of your project. But when a long-term, enterprise-level solution is the objective, IBM people take you through a four-phase work plan.

The four phases of plan development, defined by level of focus, are:

- Plan Development - Business Level
- Plan Development - Organizational Level
- Plan Development - Technology Level
- Design, implementation, configuration and testing

Summary

IBM can develop a CRM Solution for you using IBM Global Services skills in conjunction with their suite of CRM offerings.

- IBM are a full service provider (hardware, software, services and support)
- IBM are global
- IBM are very experienced
- IBM have implemented CRM before and can repeat those successes
- IBM are focused on your business
- IBM have one of the broadest arrays of CRM offerings in the marketplace
- IBM have 15 years of CRM experience
- IBM have a standard methodology that they use when engaged with you
- IBM have intellectual capital they draw upon when building your solution.

Case Studies

Telecom New Zealand

"All our agents are busy, please hold." Hearing that phrase is frustrating at any time; compounding the frustration is waiting in a queue for an agent with no idea how long the wait will be - 30 seconds, 20 minutes, what?

Telecom New Zealand provides a full range of network voice and data services as well as telephone equipment to business and residential customers throughout the country. It understands that customers deserve better service than they are getting, and through their partnership with Corepoint, it plans to deliver.

Telecom New Zealand, which has a well-earned reputation for customer care, has dramatically improved its service by deploying advanced technology to re-engineer its business processes and supporting systems. The company implemented Corepoint Telephony, computer telephony integration (CTI) software from Corepoint Technologies. The solution provides 1,000 customer service agents in five sales, service, credit and telemarketing call centers a range of powerful inbound and outbound dialing features. These features have had a major impact on customer service and efficiency. For example, the system, which handles 800,000 calls per month, can now quickly calculate the average time a customer will have to hold and then uses a voice

message to announce the wait time. "This puts the decision to wait in the customer's hands, and that's appreciated," says Mike Bradley, the CTI leader at Telecom New Zealand. "International studies have shown that if you advise the wait time up front, customers believe they have been waiting less time than if you don't." Shaving seconds off each call. This feature is just one of many that have been rolled out to the company's agents.

One of the most valuable features is called "screen popping," which saves customers and agents a significant amount of time. When a customer calls, intelligent call processing software uses the incoming calling number to instantly access the customer's information on a PC monitor. As information on the customer no longer needs to be keyed in, many seconds are saved on each call. Customers get the information they want more quickly and CSRs can handle more calls. In fact, the company has experienced higher-than-expected customer hit rates with screen popping, according to Bradley. The hit rate ranges from up to 90 percent in the evening to 50-60 percent for residential customers during the morning work period. Screen popping is also used if the call has to be transferred. This also saves time and eliminates the need for customers to have to repeat their name and account details. Corepoint Telephony working in concert with Corepoint Voice Response has saved on average more than 17 seconds per call on inbound calls and 15 seconds per call on transferred calls, Bradley says.

The agents also will be able to pre-record their greeting to the customer. Corepoint Telephony will then automatically conference in the greeting at the beginning of each call. One unusual challenge faced was the need to enable the call centers to handle peak calls resulting from television advertisements. A company runs a commercial for a new service, for example, and provides an 800 number for viewers. Within seconds, the phones light up as 500 to 600 viewers place calls. Two minutes later, the calls stop. Rather than manually taking customer details and calling back, Corepoint Voice Response automates this process by utilizing the calling line details to capture the customer's phone number. This frees the agents to answer the first few hundred calls, while the switch picks up the rest, telling callers that it has captured their number and that an agent will call back shortly. "This is a terrific benefit," Bradley says, "because it enables us to balance our resources, provide better service to our customers and to capture calls we simply couldn't capture before, which of course increases our business."

Reaching out to customers

Corepoint also enables Telecom's agents to contact customers more quickly with a range of outbound dialing features. These range from manual dial via PC terminals, through manual and automatic dialing from a campaign list, to an eventual fully predictive dialing system. The implementation of the out-bound dialing features has resulted in some very significant productivity improvements. For example, the out-bound Credit Management Center improved productivity 350 percent by automating the call process. Another method used to achieve these results is an automated telemessaging system that calls customers in arrears to remind them via a prerecorded message than plays once the phone is answered that their account is overdue. According to Bradley, by reducing debtor days this achieved a return of 4,000 percent.

The predictive system will provide Telecom with even more productivity benefits. The system predicts when an agent will become free, dials a home automatically and passes to the agent only those calls that are live. Since the "screen pop" feature automatically displays customer information on the CSR's terminal, the agent can address business immediately. Corepoint Telephony captures and stores all phone transactions, updating records and providing management with a variety of valuable reports to constantly improve call center operations.

Providing personal service

The voice response features of this solution (intelligent queue announcements, agent greetings, call recording, interactive voice response and capture callback details) are provided by Corepoint Voice Response, which dynamically allocates ports to maximize the use of equipment. "We have a policy of benchmarking ourselves against the leading telecommunications companies," says Bradley. "Since we re-engineered our operations, our call centers are among the very best in the world, if not *the* best." "We've reduced our networking costs and increased productivity substantially. Even more important, we're now providing extremely rapid personal service to our customers, and they appreciate it. In an increasingly competitive global environment, customer loyalty is critical."

ORIGIN

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ORIGIN

Company Background

ORIGIN is a global IT services and consulting firm with over 18,000 employees around the world. ORIGIN provides a full spectrum of business and IT solutions for global corporations and other complex extended enterprises through operations in 32 countries. A leader in enterprise outsourcing, ORIGIN is represented by over 1,200 professionals in major Asia Pacific countries such as Australia, China, Hong Kong SAR, India, Japan, Malaysia, Taiwan, Thailand and Singapore (RHQ).

ORIGIN's unrivaled track record includes expertise in a number of industries including process manufacturing, oil & gas, chemicals and pharmaceuticals, high-tech electronics, consumer packaged goods, and banking & finance. ORIGIN's

key customers include ICI, Lucent Technologies, Philip Morris, Philips, Procter & Gamble, Shell and Unilever.

ORIGIN was formed in 1996 through a merger between BSO/ORIGIN and Philips Communications & Processing Services. Annual revenues of around US\$ 2 billion were achieved in fiscal year 1999, with approximately US\$ 42 million generated from the South Asia region. The company maintains headquarters in the Netherlands, U.S. and Singapore and is a member of the Royal Philips Electronics group of companies.

ORIGIN Heritage

ORIGIN is the result of a merger between BSO/ORIGIN and Philips Communications & Processing. BSO/ORIGIN was incorporated in the Netherlands in 1972 and was the largest Dutch IT consulting company in the Netherlands. Their focus was application development and automation technology for manufacturing, trading and government corporations. BSO/ORIGIN had strong entrepreneurial roots and its success was based on their founder's (Eckart Wintzen) famous cell concept. Each cell (i.e. business unit location) would grow its business and staff strength until a maximum size of no more than 100 employees. Once it reaches this size, it would be split into two cells, which would thereafter continue to grow separately and independently. This proved to be a winning formula with customers and employees due to its high customer focus and employee empowerment, and BSO/ORIGIN became the premier IT consulting house in the Netherlands.

Philips Communications & Processing was a subsidiary of Philips, the large Dutch electronics giant, which offered Data Center and infrastructure management services. Their services were widely used by all the Philips companies around the world and several large European manufacturing companies. Their strengths were their systematic and disciplined processes, using leading technologies and tools, which were critical in running mission-critical enterprise infrastructure systems globally.

With the merger of these two companies, ORIGIN is now able to deliver full lifecycle solutions and services to their customers, ranging from consulting, implementation, development, installation, managed operations, maintenance, helpdesk and support. Bundled with ORIGIN's strong global presence and unique focus on employee and customer relationships, ORIGIN has continued to see growth in all their target markets.

The continued emphasis on globalization and increasing complexity in technology has also helped fuel the demand for ORIGIN services as rapid implementations and reliable continuous support

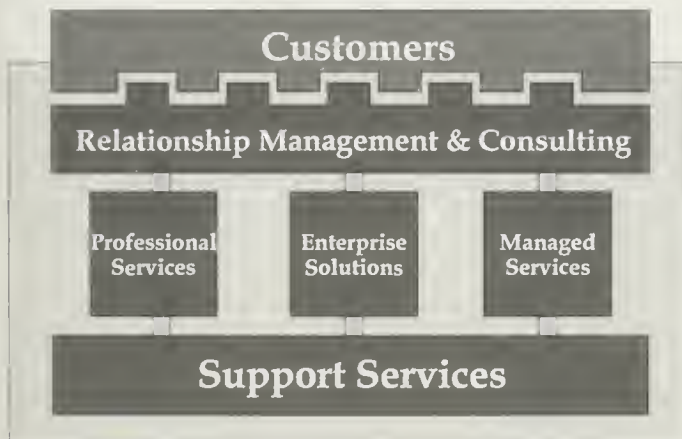
continues to be a focus for multinationals aiming for business efficiencies on a regional or global scale.

Main Business Activities

ORIGIN operates with a customer-driven matrix structure comprising of:

- Account Management & Consulting, which focuses on customer relationship management and technology consulting
- Three Service Groups which are described in more detail in the next section, namely:
 - Enterprise Solutions
 - Professional Services
 - Managed Services
- Support Management (Human Resources, Finance, Marketing, etc.)

The organization can be illustrated as follows:



Enterprise Solutions

ORIGIN's Enterprise Solutions deliver an integrated industry-based, enterprise-wide solution. They integrate core ERP solutions (SAP, QAD, Baan, etc..) with other best-of-breed specialized function solutions. ORIGIN consultants help re-design or re-align the business processes, implement solutions, train the users, roll-out to multiple sites or multiple countries worldwide, manage the entire project and the change processes. In line with the e-business trends, ORIGIN's latest packaged solutions for the enterprise are web-enabled and cover both business-to-business and business-to-consumer functionality.

Professional Services

ORIGIN's Professional Services portfolio is wide ranging and includes Consulting, Application development services and E-Commerce services. The Professional Services group specializes in providing customized solutions to meet the unique

needs and precise requirements of clients. With ORIGIN's ability to understand and integrate the various components of their customer business and IT ecosystem, the customer is well positioned to take advantage of the next wave of innovation to gain the competitive edge.

Since 1999, ORIGIN has placed added emphasis on emerging technology areas such as E-Business, ERP Second Wave arenas (i.e. CRM, SCM, etc.), Outsourcing and Knowledge Management. Last year, ORIGIN acquired a team of about 50 E-Commerce professionals in the US who are now leading the E-Commerce initiatives globally.

Managed Services

ORIGIN's Managed Services comprises IT infrastructure management, Managed operations, Applications support, Enterprise systems management and Customer support services. Managed Services provides ORIGIN's customers the flexibility of reorganizing their structures across geographies, time zones and functional areas, thus allowing more agile business set-up and operations.

ORIGIN's solution is based on the EMS (Enterprise Management Systems) which is designed for 24-hour-7 day-a-week coverage of business critical systems. This means operational stability and reliability for your business, both enterprise-wide and internet-wide. This also includes the ORIGIN Support Center, which provides 'Follow-the-Sun' telephone support globally.

Enabling the Extended Enterprise

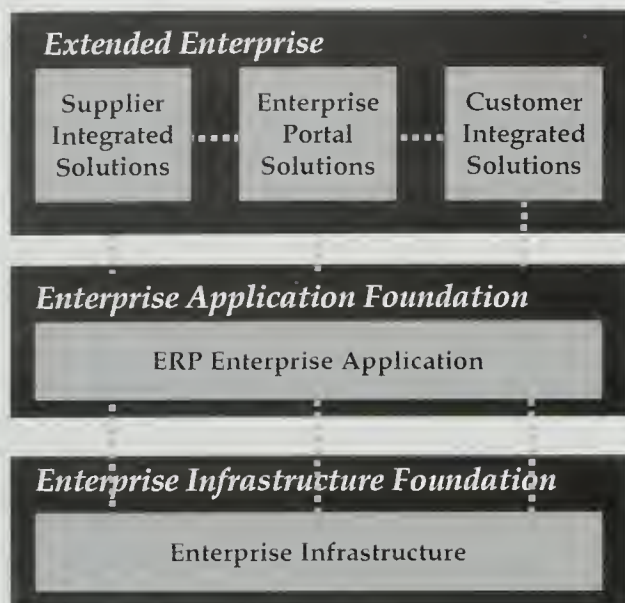
ORIGIN's strapline is "*Sharing the power of knowledge*", which acts as a reminder to themselves, their customers and partners that ORIGIN makes an ongoing contribution as a global information technology services provider.

ORIGIN succeeds by increasing the value of their customers' extended enterprise through the creative use and ongoing management of information technology. ORIGIN views the extended enterprise in two distinct ways. One is helping a company extend the boundaries of its technology so that it touches its customers, suppliers and vendors, using approaches such as Customer Relationship Management (CRM) and Supply Chain Management (SCM), while the second incorporates a complete e-commerce perspective of business processes.

The e-commerce perspective, also referred to as e-business, recommends that the enterprise has to approach electronic commerce from three views, namely the customer, the employee and the supplier. All three components are critical to the enterprise

business model and should move at the same pace for operational effectiveness and efficiencies.

The ORIGIN e-business perspective is depicted in the diagram below, whereby CRM is offered in the Customer Integrated Solutions category.



CRM Solutions

A key differentiator in this arena is ORIGIN's deep knowledge of ERP (Enterprise Resource Planning) systems, typically the backbone system of any medium/large-sized company, which enables it to assist clients to integrate the required CRM solution to the client's specific requirements. Another advantage which ORIGIN has is their systems integration and infrastructure management capabilities. This provides clients with the option to quickly move to an immediately operational environment at the shortest possible timeframe – thus gaining the lead on the competition. However, ORIGIN recognizes that their longstanding success in the ERP implementation arena does not directly transfer to the extended enterprise. Specific, in-depth knowledge of an

industry group and its specific challenges are required to demonstrate competency. As a result, ORIGIN is establishing two industry competency groups where they have substantial expertise and market knowledge. These are High-Tech Electronics and the Process Industry – in particular the Chemical / Pharmaceutical subset.

It is considered that business-to-business (B-to-B) is what ORIGIN does best, and is doing so now for their largest customers. ORIGIN recognizes that much of B-to-B activity will be based on ERP backbone activity, that is, working outwards from SAP, Baan, QAD, JDE and Peoplesoft applications in which ORIGIN has a great deal of experience, expertise and primary customer relationships. Therefore ORIGIN use these existing practice areas to maintain and develop the expertise to extend their offerings - including the development of new third-party relationships, such as I2, with their recent acquisition of Smart Technologies. This combines one of ORIGIN's supply-chain partners with one of the more aggressive Customer Relationship Management companies.

ORIGIN has experience in delivering both custom-developed CRM solutions and solutions based on standard packages, such as Onyx, Aurum by Baan, Siebel, Vantive, etc. Package implementation is one of ORIGIN's traditional strengths. Connecting these new front-end sales and customer support applications to an enterprise's ERP backbone and Customer Support Centers has become a major part of ORIGIN's business of late.

ORIGIN's CRM Solution is depicted in the graphic below.

Another benefit ORIGIN brings to their clients' CRM implementations and operations is that they also provide 'follow the sun' helpdesk services - providing clients with 24-hour support, no matter where they are located in the world. ORIGIN's 24x7 data centers are also a key resource to clients, and are ISO-9001 certified.

Origin's CRM Solution



ORIGIN's Strategic Positioning

ORIGIN is highly regarded for its expertise in the following industry sectors:

- Hi-Tech Electronics
- Consumer Packaged Goods
- Process, Chemicals & Pharmaceuticals
- Banking & Finance

A major advantage of ORIGIN is their knowledge of these industries due to their employees' background in these areas coupled with strong technical capabilities. Many of its employees are from the High-Tech/Electronics and Process/Chemicals industries

due to ORIGIN's long-standing strength in outsourcing and successful retention of these transferred employees by providing a new IT profession for them.

Coupled with their strong operational processes and implementation methodologies, ORIGIN is able to 'repeat' successful projects rapidly and operate world-class managed operations.

An often heard feedback from their customers is that ORIGIN employees are fun to work with. Although not promoted as key differentiator to the market, there was an article published in a leading IT magazine entitled "ORIGIN – Employer of Choice". The article mentioned that ORIGIN is a company which lives their company values i.e. 'walks the talk'.

Sample Customers

Customer	Type of Institution	Customer Comments	Project Details
Philips – Business Electronics (PBE)	PBE comprises of 10 operating companies with key focus on analytical instrumentation and software, digital video systems, communications and security systems..	"The ORIGIN Team has turned in a credible performance despite having to work under tremendous pressure. Implementation was completed within budget and on time, probably the fastest ever." – Mr. S.M. Singh, General Manager, PBE	<ul style="list-style-type: none"> • Business Challenge A compelling case for a single integrated solution • ORIGIN Approach Implemented the Customer Service functionality for call centers which facilitated the integration of Customer Support with logistics and financial management • Results Improved customer service and operational efficiency, leading to improved bottom-line results.
Philips – Optical Storage	Leading Supplier of Measurement Systems for material analysis	"Their technical expertise, teamwork and responsiveness to unforeseen challenges and changes are remarkable. ORIGIN's Track record of quality service makes them an IT implementor of choice for Philips". – Annette Doing, Project Manager, POS	<ul style="list-style-type: none"> • Business challenge Linking the value chain to facilitate continuous and rapid interaction with Suppliers and Customers • ORIGIN Approach Messaging system facilitating B-to-B and B-to-C operations. • Results ORIGIN was able to provide end-to end delivery of business critical information
Rabobank	World class financial institution with 100 years of experience.	"They had a good track record with us, providing everything from systems integration and consulting to interim management and professional services." – Mr. Benedetto Paymans, Program Manager, Rabobank, Netherlands	<ul style="list-style-type: none"> • Business challenge Uniformity across 500 sites. • ORIGIN Approach Phased approach, rapid implementation of standard business model and delivering exceptional quality • Results Reduced operational costs

Unisys

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UNISYS

Company Background

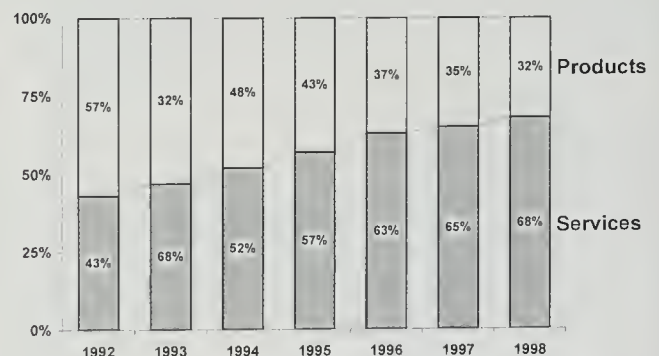
The 112-year history of Unisys is one of creative, technically excellent, tenacious people - people helping businesses and governments apply information technology to achieve new levels of competitiveness and success.

Today, Unisys is more than 33,000 employees helping customers in 100 countries apply information technology to solve their business problems. Unisys solutions are based on a broad portfolio of global information services including electronic business, systems integration including custom and "repeatable" application solutions, outsourcing, Microsoft Windows NT services, network services, and multi-vendor maintenance and support, coupled with enterprise-class servers and associated middleware, software and storage. Repeatable solutions are focused on key vertical markets including financial services, transportation, telecommunications, government, publishing, and other commercial markets.

In 1998, Unisys Corporation posted world-wide revenues of US\$7.2 billion, of which the service organizations contributed 68%. This reflected a 9% increase over the previous year 1997 total revenues. The Asia Pacific group contributed 14% and was highlighted as one of the areas of strongest revenue growth. Unisys' financial goals are to grow revenue at 10% per annum in 1999 and 2000.

The services business continues an upward growth path in Unisys, as reflected in the graph.

Growing Services Business



The keys to Unisys' success in the Services Industry are:

- Focus on "repeatable solutions" for core markets: Financial Services, Government, Communications, Transportation and Commercial.

Main Activities

<i>Their focused markets</i>	<i>What they do best</i>	<i>Why they do it</i>	<i>Some specific solutions & services</i>
SERVICES			
Systems Integration & Solutions	Integrate "best of breed" information solutions and technology into systems that support their customers' most critical business operations.	The need to integrate new and existing hardware, packaged and custom software, and networks into complex systems continues to grow. Unisys add value to their core integration expertise by bringing specialized know-how in areas like document imaging and customer care to systems they're designing and delivering.	<ul style="list-style-type: none"> ➤ Consulting ➤ Services to bring Windows NT to the enterprise ➤ Year 2000 ➤ Document imaging ➤ Electronic business ➤ Call center ➤ Customer loyalty
	<i>Repeatable Solutions</i> Deliver a portfolio of proven solutions – comprising services, software, and multi-vendor hardware – targeted at select vertical markets.	Repeatable solutions are the emerging mantra of the industry because they are cost-effective to deliver and have a proven track record. Unisys has the reputation for industry and technology expertise necessary to thrive in their focused markets.	<ul style="list-style-type: none"> ➤ Banking and insurance ➤ Public sector ➤ Airlines and airports ➤ Communications ➤ Publishing ➤ Supply-chain management
	<i>Custom Solutions</i> Deliver information services tailored to large, complex environments for clients in their select vertical markets.	A number of client engagements – often because of their sheer size and complexity – will require that Unisys apply their core industry and technology expertise to fit highly customized environments.	<ul style="list-style-type: none"> ➤ Custom data center consolidation ➤ Integrated justice information systems ➤ Social services systems ➤ Custom solutions
Outsourcing	Design each outsourcing engagement to a service level appropriate for its client – which can run the gamut from managing client operations out of Unisys' service centers to working along-side clients at their sites.	Outsourcing core and non-core operations to a trusted vendor lets businesses focus on their critical issues. Unisys has the physical and intellectual resources to step up to the task.	<ul style="list-style-type: none"> ➤ Program and systems management ➤ Application support ➤ Business-process outsourcing ➤ Internet services
Network Services	Provide support services such as consulting, integration, and onsite and remote management for distributed networks and desktops – for virtually any technology from almost any vendor	The growth of distributed networks and desktop systems is creating a host of challenges for businesses. Unisys built an unmatched infrastructure that tightly integrates all their services so they can effectively support every aspect of their clients' managed services requirements.	<ul style="list-style-type: none"> ➤ Network and desktop consulting ➤ Local- and wide-area network integration ➤ Remote network management ➤ Desktop configuration and integration ➤ Desktop asset management ➤ Help-desk support
Multivendor Maintenance	Maintain network and desktop products from many vendors on a global basis.	The proliferation of multi-vendor environments is creating growing client demand for a single point of contact for maintenance services. They've built on their competencies with Unisys proprietary products to become technology fluent on virtually any equipment.	<ul style="list-style-type: none"> ➤ Support for multi-vendor servers, PCs, printers, monitors and other peripherals, plus routers and hubs ➤ Support for multi-vendor software ➤ Unisys proprietary system support ➤ More than 10,000 desktop and networking supplies
TECHNOLOGY			
Enterprise-Class Servers	Develop high-end servers that are scalable, highly available, easily manageable, and secure enough to run in demanding environments – environments that are high volume, mission critical, and composed of different operating systems.	The growing dependency of businesses on IT is creating rising demand for highly available systems that are both efficient and economic. Unisys is delivering such systems by basing their servers increasingly on Intel's technology and Windows NT. To this foundation, they add their knowledge and experience building enterprise-class systems that can interoperate within different environments.	<ul style="list-style-type: none"> ➤ Clearpath servers, which integrate proprietary and "open" platforms ➤ Powerful Windows NT servers with enterprise-class attributes ➤ Value-add system middleware to power high-end servers
Specialized Technologies	Design innovative hardware and software that are specialized for specific applications	Unisys are focused on select areas where their systems and/or components have a solid reputation and market share as well as a good potential for growth.	<ul style="list-style-type: none"> ➤ Payment systems for centralized and de-centralized environments ➤ Tools and middleware for electronic business applications ➤ Object management software ➤ Storage products ➤ Natural language and voice-processing systems

- Vendor-neutral approach through integration of best-of-market systems and components from leading vendors.
- Full range of support services for networks and desktops from technology selection and consulting to implementation and maintenance.
- Best-of-class global seamless infrastructure provides consistency in service delivery across the globe.

As Unisys shifts their business more and more towards services, attracting and retaining talented employees is an imperative. They are aggressively recruiting - seeking to fill more than 6,000 positions world-wide for skilled personnel who can deliver billable services. In the Asia Division, Unisys has approximately 1,450 employees, with more than 550 based in South Asia.

Unisys e-@ction CRMS

Unisys e-@ction CRMS is a set of industry-specific solutions from Unisys and their partners (e.g. Siebel Systems, Ardent Software) designed to help you meet business needs in customer relationship management, business intelligence and e-business.

This set of solutions enhance your capabilities in managing your customer relationship, profitability and risks, in monitoring and analyzing your business performance, and in enhancing your performance through focused marketing and sales campaigning.

The multi-channel support of Unisys e-@ction CRM solutions ensures that you can manage the customer relationship effectively via a variety of different means, including the Internet, call center, mobile phone and mobile office.

The Unisys solution provides the two key components required for a complete customer relationship management system:

1. Customer knowledge – A customer knowledge warehouse is provided to give you intelligence about your individual customers, e.g. customer behavior, customer profitability and risk.
2. Customer interaction – Applications are provided for interacting with customers for sales, marketing and servicing through multiple delivery channels, such as call centers and Internet.

Unisys Decision Framework CRMS

The financial industry of today is fiercely competitive. Individual organization's success depends on its ability to build and maintain long-term, profitable relationships with the right customers. This means that the organizations have to select the customers

they want, and then focus on acquiring, growing and retaining them.

The Customer Relationship Management Solution (CRMS) from Unisys unlocks the potential of the organization's greatest assets - customer and market information. CRMS empowers the organization to deliver the right products to the right customers through the right channels, and at the right price and margins needed to profitably secure the markets. CRMS is able to pull together, standardize and maintain complete customer profiles, including demographic, behavioral and product/service purchase history information.

Based on a unique data warehousing architecture, the system provides the front-line people with easy access to valuable information generated by the CRMS analytical applications. As a result, functional areas throughout the organization can move more quickly from analysis to action, and take specific steps to improve customer service, sales performance, customer retention and profitability.

CRMS is based on a customer data warehouse - a relational database that contains all relevant information about your institution's customers and prospective customers. CRMS applications access and use the warehouse to perform marketing and sales support. They can also support other key systems, such as call-center applications.

The CRMS Data Warehouse Tools

This is an integrated tool-set that extracts, transforms and cleanses data from internal and external sources. It then holds your customer data that manages its quality when building your customer data warehouse. It also provides a complete data model.

The Campaign Advisor

A marketing automation application that co-ordinates branch and corporate marketing activities to help you perform market segmentation, plan and measure campaign effectiveness, analyze product usage behavior and sales force effectiveness, and deliver intelligence to each point of customer contact.

The Profit Advisor

A profitability management application that generates profitability data for both targeted products and customer market sectors, allowing one to perform "what-if" analysis and track profitability over time.

The Relationship Advisor

An integrated customer relationship management application built on top of a customer data warehouse. Relationship Advisor presents a complete picture of a customer's relationship with the bank to a point of service.

The Sales Advisor

A sales automation and sales management application that enables every point of customer contact to become a selling point. Sales Advisor manages the delivery, scheduling and tracking of campaigns (defined by Campaign Advisor) through the responsible officer(s) and business unit(s).

The Risk Advisor

The risk advisor provides centralized capabilities in credit risk management. It gives a consolidated view of a customer's credit exposure with the financial institution. It helps the financial institution manage credit risk by a data warehouse approach and provides accurate and consistent credit risk information to all business units in the institution.

Enterprise Performance Monitor (EPM)

The EPM is an Executive Information System that gives senior executives summary and high-level performance information.

Unisys Decision Framework VentoMap for Telecommunications

Deregulation, competition and consolidation are transforming the telecommunications marketplace. To be successful, service providers must effectively identify and better serve their most profitable customers or risk losing them to competition.

VentoMap for telecommunications is the most advanced business intelligence solution available today for service providers. It provides an accurate, timely and actionable view of the trends affecting the business. This results in better and more timely decisions that yield significant increases in revenue, market share, brand affinity, customer retention, and overall profitability.

VentoMap transforms operational data into business intelligence by delivering information in the form of Key Performance Indicators (KPIs) that closely match the way decision makers think about their businesses and the thought processes they go through during problem-solving. Sample KPIs include:

- Churn
- Call Usage
- Call Destination
- Network Availability
- Activation (Deactivation, Reactivation)
- Coverage
- Subscriber Analysis

- Responsiveness to Orders
- Analysis of Faults
- Revenue and Fraud

VentoMap for Telecommunications delivers a rich set of analysis features that help decision makers identify and rapidly respond to performance problems and market opportunities.

Multi-dimensional analysis: At any aggregate or detail level, analyze KPIs using multiple business dimensions (e.g. by product, customer segment, time period, etc).

Trend analysis: Identify trends and potential outcomes using both historic and goal-based projection methods and modeling techniques.

Geographical Analysis: Analyze business performance geographically by viewing and navigating maps showing your service territories, and cell sites.

Comparative Analysis: For truly meaningful results, VentoMap allows performance measurements to be compared to previous results or benchmarks.

Exception Analysis: VentoMap exception analysis functions and reporting techniques help users quickly identify out-of-norm conditions that require immediate attention.

Ranking analysis: View a "best to worst" ranking of products, customers, etc., by selecting KPIs, business dimensions, and measurement units.

Cause-and-effect analysis: Quickly determine whether one measure of business performance (e.g. revenue) is being driven by another (e.g. network uptime).

What-if analysis: Immediately test alternate performance scenarios by dynamically modifying exception analysis thresholds and comparison methods.

Analysis of individual transactions: Drill down to the level of an individual call detail record, network switch, or other data element during multi-dimensional analysis.

Unisys FBA Navigator for Retail Delivery

FBA Navigator is a dynamic suite of retail delivery applications that has been specifically developed to span the different channels customers use to communicate with banks - today and in the future. FBA Navigator functionality is contained within flexible core components, which share common information. Counselor, the Sales and Services application in the

FBA Navigator suite, enables an institution's customer service representatives to target and manage the sales process, carry out "best practice" sales activities, and conduct effective relationship management. All the members of the customer service team are supported, from marketing staff to salespeople as a branch CSR, Call Center agent, or a mobile banking agent, as they provide continuous, outstanding service.

Personal bankers: Salespeople can be specifically assigned to certain customers to give them personalized service and build the relationship.

Product knowledge and management: Immediate access to extensive information on your total product line is provided and can be easily updated.

Market segmentation: Comprehensive client and prospect lists, based on segmentation criteria, are generated so specific customer groups can be targeted.

Marketing management: A range of tools, including action plans, presentation tools, and product data, enable your marketing team to define new marketing strategies and implement marketing campaigns.

Generation, assignment and tracking of sales opportunities: Marketing specialists and sales managers can target desired prospects and create sales opportunities for sales representatives. Target names may be generated by home office marketing specialists and sales managers who can assign those prospect names to sales teams and/or individual team members. The progress of these sales opportunities can then be easily tracked by team leaders, and leads may be reassigned as needed.

Customer contact management: During contact sessions client information can be easily retrieved and updated. Any further customer contact through any channel presents a full record of the customer history to the next service representative.

Sales presentations: Integration with leading presentation tools means sales representatives can deliver high-quality presentations with maximum impact.

Sales management: Sales objectives can be defined and assigned to the relevant members of the team, and action plans created, guiding employees through proven selling processes.

Sales analysis: Consolidated sales reports are generated, helping you evaluate the success of your marketing strategies and demonstrate employee productivity.

FBA Navigator includes all the components needed to manage branches, as well as call centers, mobile

agent banking, and other delivery channels—making it the ideal platform for an integrated retail banking strategy.

FBA Navigator's integrated solution helps provide consistent, informed customer service across entire retail banking operations. This integration also helps deliver the flexibility customers require, while cost-effectively leveraging channels.

Case Study

Hana Bank

Consistently rated as the "best managed bank" and "most profitable bank" in Korea, Hana Bank has implemented a CRMS solution from Unisys for Customer Relationship Management. Excellence in total customer relationship management was identified by the bank to be the key to remain the leader in the industry. The Bank has very specific aims in implementing the marketing and sales systems of CRMS. Their goal is to increase the number of accounts per customer by 50%, and to increase the average balance per customer significantly. CRMS helps Hana Bank in the areas of customer information, marketing, sales development, cross-selling, profitability and risk analysis and contact management. Supported by CRMS' extensive data warehousing capabilities, the Bank initially gained an understanding of its customers' background and behaviour such as their income, demographics, and financial commitments.

Managing profitability is another key benefit of CRMS. It helps the bank to analyse the profitability of an entire customer relationship, instead of profitability of single accounts. The sales system in CRMS helps the Bank in equipping its staff to sell products as the solution cultivates a sales culture among the staff. The Bank is now able to generate and track sales leads, as well as to manage the entire selling process using CRMS, up to the point the customer makes a decision. Branch managers can also monitor performance of their staff.

INPUT Services For IT Buyers

INPUT conducts a variety of research based projects for decision makers. Projects are selected in consultation with sponsors, and focus on topics of high and immediate value to sponsors. The value proposition of IT buyer projects is that they are based on original research as opposed to opinion.

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- Electronic Commerce
- Electronic Banking
- Electronic Government
- Enterprise Application Solution
- Internet & Intranets
- IT Customer Services & Support
- IT Operational Services

INPUT's decision maker projects:

- Enable vendor selection based on organised data from research with active buyers and users
- Support buying decisions on systems, software, services and processes
- Provide data analysis and advice for strategic and tactical planning
- Support communications on industry developments and strategies with users, vendors and management

In addition, INPUT offers the following services:

- Extensive analysis and assessments of the world's leading IT vendors
- Comprehensive programmes of market forecasting for a leading IT market worldwide
- Custom research projects
- Client presentations

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