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presents

Dr. Bean v3.2
&
Dr. Bean On Call v1.0

eCRM for the Life of Your Business

A White Paper

April 1, 2000
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I. Background

E-business[1] is becoming e-normous. The pace of its growth is so unlike anything we've encountered in previous human economic experience that the numbers become virtually incomprehensible. Growth has been phenomenal, yet analysts maintain that we've only just begun. Forrester Research, for example, estimates that total Internet sales in 2000 will top $200 billion, and by 2003, they expect global Internet commerce to approach $3.2 trillion.[2] By next year, says Forrester, 71 percent of all companies will be involved in online business through e-marketplaces.[3]

Such numbers are numbing. And although they may convey that we are dealing with markets that are oceanic in proportion, gross measures are less helpful than observing the patterns that they comprise. For example:

Today, the majority of e-business transactions are business-to-consumer (B2C). Yet while the number of B2C transactions will continue to grow, that number is soon to be overcome by business-to-business (B2B) e-commerce, which, says Forrester, "will hit $2.7 trillion in 2004 . . . and reach 53 percent of all online business trade within five years."[4]

And then there's B2G—business to government. While security issues and public concerns for privacy may keep e-government from making the strides that e-commerce has enjoyed, that's about to change, says the Gartner Group. B2G in procurement, contracts, and grants; delivery of services and supplies; and online outsourcing constitutes a rapidly increasing area of commercial growth.[5]

A final surprise is the international growth of the Internet, which promises as much as anything else to change the way that business is conducted everywhere. Some of us have become accustomed to thinking of the Internet as primarily a North American phenomenon and e-commerce as serving primarily the North American market. But we will reach a notable milestone this year. For by the end of 2000, fewer than half of all Internet subscribers will be from Canada or the US. And by 2003, the North American share is projected to drop to roughly one third.[6] Presently, 57 percent of web users are English speakers; but, says *Computer Economics*, that same number will reflect non-English-speaking Internet users by 2002.[7] Companies that fail to appreciate and address the international scope of their markets will be shouldered aside by those who do.[8]

But all is not roses in the New Economy. Until recently, those businesses that even had websites used them mostly as online company brochures. As businesses came to realize that a website could become a major vector for "self-serve" marketing and sales for their customers, they began to flock to the Internet. Now, says the Gartner Group, "customer self-service websites are no longer 'nice to have'; today Internet-based customer service is imperative for any enterprise that wants to compete effectively in the new millennium."[9] In such industries as retail, banking, insurance, telecommunications, and utilities, says Gartner,

> . . . using the web in customer service has moved from a competitive differentiator to a requirement for doing business. While lagging behind web-based sales applications by two years, web-based customer service technologies are now maturing on 'Internet time.' Enterprises had 20-plus years to build effective customer service call centers; they now have 12 to 24 months to provide competitive websites.[10]

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[1] "E-business: An enterprise that conducts business on the Web from prospect identification through product delivery." Definition from The Gartner Group's e-Business Resource Center, March 14, 2000.

[2] Forrester Research, March 5, 1999.

[3] Business Wire, "Forrester Research Finds 71% of Companies Will Link to eMarketplaces by 2001," Forrester Research, March 1, 2000.

[4] Steven J. Kafka, "eMarketplaces Boost B2B Trade. Forrester Research Reports, February 15, 2000.

[5] William Malik, "E-government Security," *Inside Gartner Group*, March 15, 2000.

[6] Nevin Cohen (ed.) "eGlobal Report," *eMarketer*, March 27, 2000.

[7] *Computer Economics*, cited in Cohen, *Ibid.*

[8] *Ibid.*

[9] Donna Fluss *et al.*, "Internet-Based Customer Service: Miracle or Migraine?" The Gartner Group: Strategic Analysis Report, September 28, 1999.

[10] Fluss *et al.* The Gartner Group. *Ibid.*, page 4.

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Analysts at Jupiter Communications agree:

> Proactive customer service is a required investment to create brand loyalty and cultivate future re-
> peat purchase opportunities. The savvy online merchant will use every contact with the customer
> as a means to proactively promote products and services in accordance with that consumer's
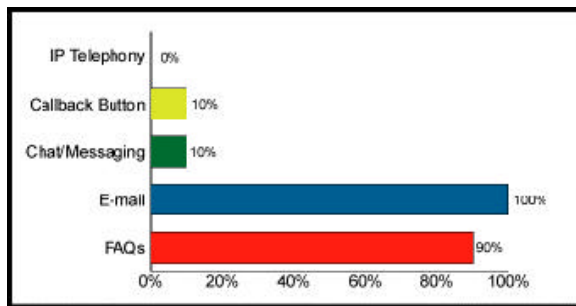> needs, habits, and online transactional behavior.[11]

So how are businesses handling their electronic customer relationship management (eCRM)?
The *Washington Post* summed up the status of online customer experience in one word: "dis-
mal!"[12] As companies have moved toward e-commerce, traditional customer servicing channels
are no longer capable of handling the huge and diverse client bases the Internet delivers. Those
client bases include not only conventional customers and prospects, many of whom may not be
English-speaking, but also the entire supply chain, including corporate infrastructure as well as
VARs and partners. Says the Gartner Group:

> The proliferation of Internet-capable clients and partners will require enterprises to provide web-
> based sales and service channels that are integrated with legacy systems and the telephony infra-
> structure. Self-service is the elusive goal of enterprises and customers. . . .Customers hoping for
> channel independence and convenience are frustrated by limited site capabilities, the lack of inte-
> gration between websites and call centers, substandard customer service, and bad site design. [13]
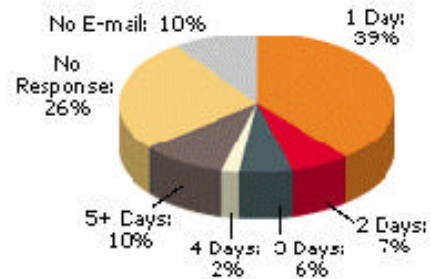
Such "limited site capabilities" works out in deplorable
treatment of customers. In their December, 1999, survey
of online customer service, Jupiter Communications
found that virtually all e-business sites claimed they pro-
vided e-mail options to customers for asking questions
and registering complaints. Yet of the companies sur-
veyed, ". . . 46 percent took five or more days to respond,
never responded, or didn't post an e-mail address on
their site." (See Figure 1.)[14]

Figure 1
B2C E-mail Response Times

Next to e-mail, Jupiter found that the most prevalent
customer service tool used was listings of frequently
asked questions (FAQs), with 90 percent of online retail-
ers responding that FAQs and e-mail constituted their total eCRM program. Yet FAQs are notori-
ously poor resources. Customers will pursue almost any other source of information before they
will scroll through long lists of answers. For customers who know how to use them and will take
the time, search engines built into FAQ lists help, but fewer than 20 percent of retail sites relying on FAQ and e-mail even offered a search feature. Only ten percent of online merchants are offering either chat or callback buttons as customer communication tools, while none surveyed had implemented any kind of voice over net (VON) telephony solution. Jupiter believes that user unfamiliarity—and associated slower adoption rates—with this technology, along with bandwidth shortage, will preclude any significant growth of viable VON applications in the

**Jupiter Communications December, 1999, Survey of
CRM Solutions Offered to Online Customers**

Figure 2

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[11] Nick Jones, Evan Neufeld, Karin Riedl, "Capitalizing on Consumer Need to Drive Retention." Jupiter
      Communications Analyst Report, December 19, 1999, page 4.

[12] *Washington Post*, "Cognitiative, Inc., Releases Findings on Personalization, Privacy, Marketing, and
      Customer Service On the Web." April 30, 1999.

[13] Fluss *et al.* The Gartner Group. *Ibid.*

[14] Jones *et al.*, Jupiter Communications, *Ibid.*

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foreseeable future.[15]   Figure 2 graphically illustrates the customer service offerings merchants surveyed presently provide their online customers.[16]

The costs of poor eCRM is stunning. As much as $3 billion dollars was left on the table during the 1999 holiday season alone. This was due to nine out of ten frustrated shoppers who abandoned their online shopping carts ostensibly due to their inability to acquire product information, obtain assistance in placing orders, or resolve their questions about delivery schedules. A study by People Support found that nearly one third of online shoppers cited one or more online stores that they would be reluctant to shop with again. Young shoppers were especially critical of their online shopping experiences, with nearly half of those within the 18-24 age group reporting that they were sufficiently miffed that they would not go back to one or more online retailers.[17]

The problem is threefold: First, many online retailers really have not given much consideration to customer service. Second, those retailers that are concerned about customer service until recently had few online tools to help them. And third, now that these tools are becoming available, either the tools are too limited in their capabilities, or e-retailers don't know how to use them effectively.

The expectations of online customers haven't significantly changed. They still want a typical, "real" shopping experience. They don't want to enter an online store, ask a question about the merchandise or service, and find that if they ever get an answer it will be in a week or more. If they wish to speak to a customer service representative (CSR), they want to do so immediately, as if they'd walked up and asked a question of a salesperson in a "real" store. Most e-businesses, however, have failed to recreate the nuances of a real shopping experience, resulting in the vast majority of online transactions being abandoned before they are complete. E-businesses must recognize the tremendous potential to build personal, relevant, and profitable *relationships* with their customers.

Such dismal economics of e-business are beginning to have a significant impact upon online merchants. Until recently, most had regarded customer service as an expensive necessity for conducting business online. Because they perceived it as a costly service, merchants all but hid online service from their customers. That's beginning to change, says Jupiter Communications, as merchants realize that only through effective and available eCRM solutions can they begin to establish invaluable long-term relationships with their customers. They now are coming to perceive eCRM as an investment, rather than an expense. "Online marketers," says Forrester Research, "must change their view of electronic customer relationship management from a reluctant investment to a competitive weapon."[18] "Online merchants now are committing significant budgetary funds to develop customer service over the next year," adds Jupiter Communications.[19]

It is critical to their survival that e-businesses wake up to the requirements of eCRM. It's not just the money e-merchants are leaving on the table in missed sales and lost customers. The health of the entire industry is at stake. "Internet companies have to prove that they can convert marketing dollars into sustainable, profitable customer relationships," says Jupiter analyst Rob Leathern. "Otherwise, the financing well will dry up in the same way the biotech IPO market did in 1998."[20]

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[15] *Ibid.*

[16] *Ibid.*

[17] Jeff Barge and Roy Gattinella, "1999 Holiday Shoppers Survey." PeopleSupport (www.peoplesupport.com), December 22, 1999.

[18] Forrester Research, *Ibid.*

[19] Jones *et al.*, Jupiter Communications, *Ibid.*, page 5.

[20] Rob Leathern, Jupiter Communications Online. March 31, 2000.

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II. Sideware

"What architectural and technological issues will enterprises need to understand to exploit the Internet for customer service?" This was the fundamental question raised in the September, 1999, study of the eCRM industry by Gartner Group analysts.[21] They concluded that

> integrating websites into the enterprise's front-end application suites continues as a major challenge, with no easy answers or technology solutions. Complicating this further is the lack of "out of box" integrated web suites for sales, marketing, and service. . . . To meet the self-serve needs of customers, customer service and support vendors need to deliver feature-rich applications with Java or ActiveX-based clients, while still supporting the Windows environment. [22]

We could not find a more concise nor appropriate statement of Sideware's mission than this declaration of the fundamental needs of today's online businesses. For it defines the goal established by Sideware's management two years ago when, in part at the suggestion of IBM leaders, Sideware embarked on its mission to create the eCRM industry's most user-friendly customer interface and robust back-end architecture. The result of Sideware's quest is a suite of new products and services designed to cover a full spectrum of requirements from licensed and internally maintained solutions to fully outsourced customer service. Two main product lines have been developed that provide the underlying architecture for all offerings: **Dr. Bean**, a feature-rich customer service interface that supports real-time online communication between customers and a company or agency, while linking to any number of transactional databases; and **Dr. Bean On Call**, a fully developed service for companies not wanting to incur the cost of an entire customer interface system, or for application service providers, customer service outsourcers, and complex multi-product-line call centers.

As complements to both product lines, Sideware has developed functional extensions that provide substantial additional capabilities. These extensions adhere to the standards maintained for all Sideware architectures, including Java, EJB, and XML. They are supported by the universal queing capability resident in both product lines, which allows for similar managing of customer communications and support through multiple media types. Functional extensions include media bridges, which provide the capability to integrate communications from a variety of channels, including e-mail, fax, VON, and telephony; CRM components, including data-mining; and CRM connectors, designed to support rapid integration with leading CRM and e-business applications.

Universal Framework

Universal Framework is a Sideware invention that comprises the Java-based standards that permit popular products within the eCRM industry to easily and seamlessly integrate with one another. The Universal Framework provides the "hooks" necessary to connect eCRM components that normally are incompatible. Further, this impressive framework allows third-party developers to build or enhance new functions, customize graphic-user interfaces, access different data sources, manipulate data types, or switch to different communication servers.

Two professional service offerings have been developed by using the Universal Framework. These include Dr. Bean ASP, a service based upon Dr. Bean On Call, which allows smaller online businesses to purchase basic functionality of a Dr. Bean system without the necessity of owning or maintaining their own server; and CyberRep[SM], which provides fully outsourced customer service, including CSR staff. These are described in detail below.

Dr. Bean v3.2

Sideware's Dr. Bean 3.2 will redefine the way the world conducts e-business. Scalable and 100 percent Java, this eCRM technology provides the power to control the entire customer experience from beginning to end, ensuring total client satisfaction each step of the way. Most important, this technology provides the critical back-office tools that enable cross-selling, up-selling, and after-sales follow-up that promotes customer loyalty.

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[21] Fluss *et al.* The Gartner Group. *Ibid*, page 7.
[22] *Ibid.*

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Built entirely from Sun Microsystem's Java technology, and Java 2 compliant, Sideware products integrate seamlessly with new or existing e-commerce or e-government applications, creating a "backbone" for ones online business or agency. Because of Java's portability, scalability, and flexibility, Dr. Bean and its sister products are notably robust and flexible, will run on any known operating system, and expand easily with evolving e-business needs. They will permit future e-commerce technologies to simply "plug in" to the existing architecture, removing the very real threat that should a company or agency someday move on to a new operating system, they would forfeit their investment in their eCRM system.
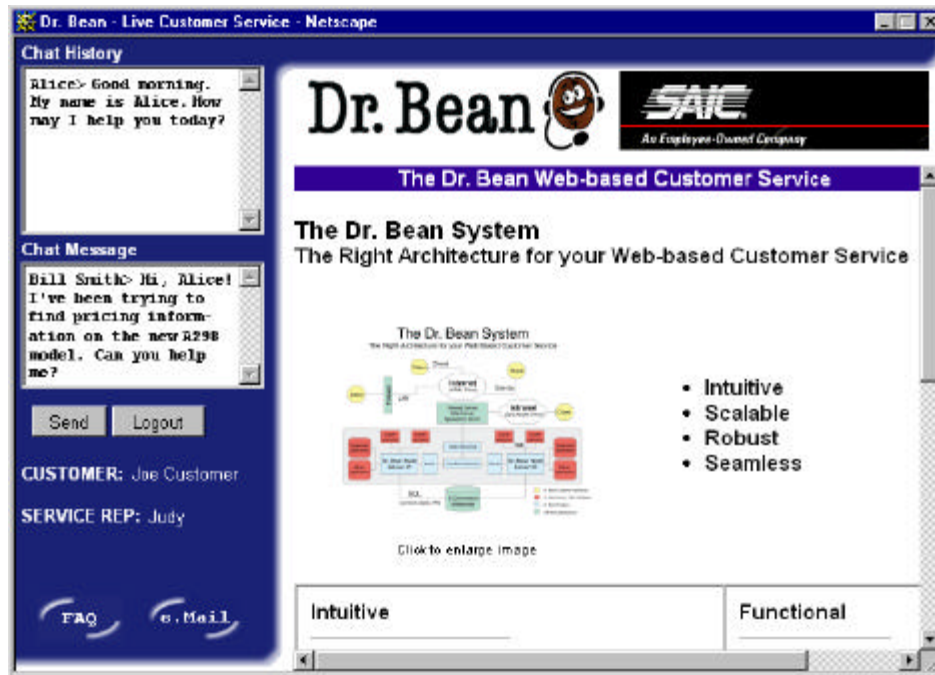

Dr. Bean 3.2 Customer Console

Dr. Bean is also a cross-market solution that appeals to companies in B2C, B2B, and B2G applications. This product can help provide personal customer and client service to online shoppers or other website visitors from guided website tours to auto-tracking and self-help resources that assist customers with their buying decisions or clients in their decision-making. Dr. Bean simplifies contact management, routing, record keeping, and other administrative functions that some companies or agencies struggle to manage.

Dr. Bean, Sideware's fully scalable e-CRM solution, is designed to facilitate online delivery of customer and technical service for middle market companies and discrete business units of larger companies. Using Dr. Bean, companies can leverage teams of up to 500 or more online CSRs to field inquiries from a common or shared customer base. Dr. Bean 3.2 includes the following array of features to meet these eCRM needs:

- Integration and routing of all e-CRM functions, including online chat, telephone callback requests, and e-mail;
- Online interaction interfaces;
- CSR collaboration and oversight;
- User-friendly connection to corporate databases; and
- Simplified customization of interfaces, data reporting, and customer management protocols.

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Dr. Bean is based upon a client/server model. A client graphical user interface (GUI) is incorporated into a company's online storefront or agency's webpage. By clicking the Dr. Bean icon, the customer or client opens an interactive link with a CSR. The customer and the CSR communicate through real time chat. Messages typed by either party show up immediately on the other's display screen.

Dr. Bean 3.2 Architecture
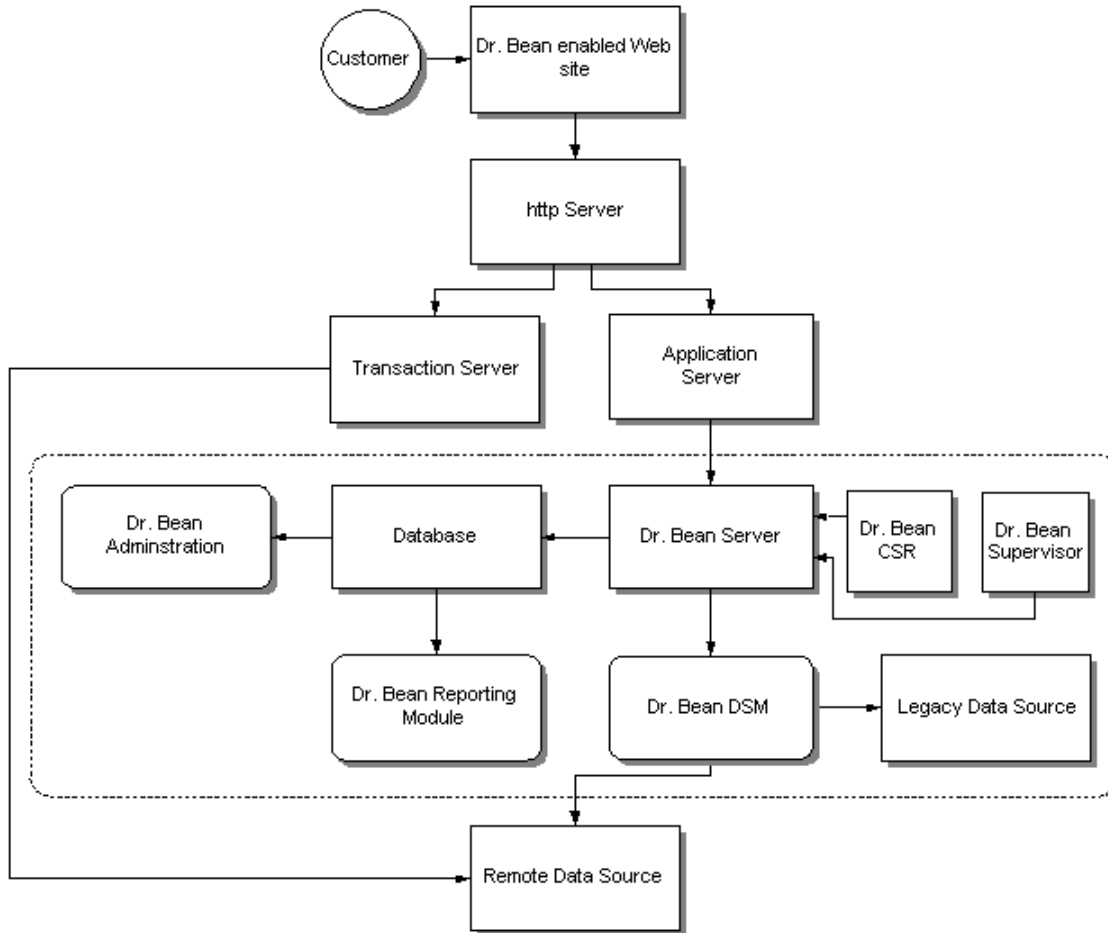
Dr. Bean 3.2 contains many other features that improve the efficiency and level of service provided by customer service representatives. These include the following:

Intelligent Routing: Dr. Bean can direct a customer to the most appropriate CSR support group through a variety of methods -

- Customer selects help topic from a dynamically-generated help menu;
- Intelligent routing, based upon keywords embedded in the Web page that the customer is visiting; and
- Web page associated with a specific Support Group.

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The Dr. Bean administrator can choose to activate none, or any combination of one or more of the above routing rules. The purpose of intelligent routing is to direct customers to the CSR support group that can best service their needs. The CSR can view customer-centric information from multiple databases while engaging in a chat session. This allows the CSR to become familiar with the customer's needs, in turn providing efficient and personable service.

Collaborative Services: CSRs can collaborate amongst themselves and with their supervisors, while interacting with customers. If the customer asks a question that the CSR cannot answer, the CSR can seek assistance from a colleague or supervisor.

Database Connectivity: Dr. Bean can integrate with multiple data sources. The ability to communicate with existing company databases enables the CSR to view customer specific information; for example, the sales history of the customer—an invaluable feature for cross-selling and up-selling. Dr. Bean can also archive chat sessions to a company's database, providing a permanent record of the interaction with a customer or client. With its flexible java technology, Dr. Bean is fully compatible with all major database programs, including IBM's db2 and Oracle 8i and iBill.

Web Page Push: A CSR can push Web pages to a customer, taking him on a virtual showroom tour.

Whiteboarding: CSRs can also draw on a customer's webpage (for example, to circle an important item) in much the same way television sports broadcasters mark-up football play.

Enterprise Level Reporting: Dr. Bean can generate a full range of statistical data covering such items as average length of CSR chat or the number of calls handled by a particular CSR. In addition, Dr. Bean 3.2 provides tools for creating custom report templates so an organization can generate reports to meet its individual requirements.

E-mail Resolution: E-mail resolution provides customers with another means of communicating with CSRs. Customers have the option of leaving an e-mail message during or after live service hours.

Spell Checker: CSRs and supervisors are able to check for spelling errors before sending a chat message to a customer. This eliminates misunderstanding and embarrassment caused by misspelled words. It also helps protect the company's image.

What does all this mean? Simply put, Dr. Bean allows a business to control and manage each customer or client's experience while deriving up-to-the-second performance data on marketing and sales. And by using Java technology and integrating Dr. Bean with existing systems, a company can move into the "New Economy" without sacrificing existing records of customers or clients. That's good news.

For government users, Dr. Bean permits an agency to manage completely a client's experience, routing visitors to precisely the right service representative to answer questions or otherwise acquire needed information, forms and applications, regulations, and reports and other publications. Dr. Bean can collect and record client-CSR interactions invaluable both to supervisors and as a record of provided public information.

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Dr. Bean On Call v1.0

Dr. Bean On Call is a next-generation service based upon Sideware's Universal Framework standards described above. This service is designed to meet the needs of two types of companies:

- Those that want to provide online customer service directly from their Web site without incurring hardware or administration costs. Sideware hosts Dr. Bean On Call on a Sideware server and provides CSR seats to the client. The client places a Dr. Bean icon on their Web site and links the icon to Sideware's Dr. Bean server. To connect with a live CSR while surfing the client's Web site, the customer simply clicks on the Dr. Bean icon. Dr. Bean On Call is fully equipped with Java technology that permits it to traverse firewalls.

- Those that want to serve as an ASP providing online customer-service capabilities to multiple companies with independent customer bases.

Dr. Bean On Call offers three alternative customer interfaces:

- **HTML Interface**: Two-way chat, one-way Web-page push, one-way whiteboarding, file downloading, email push, video streaming, and firewall traversing.

- **Applet Interface**: Offers all of the same features as the HTML interface plus two-way whiteboarding.

- **Application Interface**: Best suited for B2B service, two-way chatn, two-way Web-page push, two-way whiteboarding, VoIP, and traverses firewalls through an open port.

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III. Technical Summary

Dr. Bean employs five key technical components that buyers should seriously consider before making a purchasing decision. These components permit a company or agency to grow from a small to a large enterprise with minimal upgrading. Java can communicate with all types of databases and platforms. It thereby maximizes company resources by accommodating existing equipment and software, avoiding the need for special and costly system upgrades.

Core technology considerations buyers should look at before purchase.

Before purchasing an eCRM system, a company or agency should consider the degree to which the following six features are important to their enterprise:

1. Multiple Platform Capabilities.

Dr. Bean is able to run on multiple platforms because it is written in Java, a cooperative language, eliminating the need to rewrite software to comply with the different types of platform languages. Among others, Dr. Bean has proven experience collaborating with the following operating systems:

- *390*
- *Solaris*
- AIX

- Linux
- NT
- Unix

2. Scalability

Dr. Bean is able to connect to a wide variety of databases, which means that Dr. Bean can serve a large number of users without breaking down or requiring any major changes in procedure.

3. Flexible Database Connectivity

Dr. Bean is able to connect to most types of existing databases a company or agency is using, including:

- Oracle's Enterprise (8I & iBill)
- IBM's db2
- Syba

- Microsoft Sequel Series
- Informix

4. Integration to Middleware

Middleware resides between the client applications and the servers, allowing transaction over an e-commerce environment. Dr. Bean integrates with most transaction servers, including IBM NetCommerce and Oracle Payment Server.

5. Configurable HTML Interface

Dr. Bean provides a configurable HTML interface that allows a company or agency to customize its client interfaces to reflect corporate colors and logos.

6. System Security

Because Dr. Bean employs only server-sided Java, it does not require the download of Java applets to function. This is critical to defense, police, and many financial applications where system security denies the acceptance of applets by client machines. As computer viruses and worms become increasingly sophisticated, more and more businesses and government agencies will deny the download of applets as they have denied the acceptance of executable files and subroutines. Dr. Bean is prepared, for it already meets the highest standards of system security.

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Dr. Bean Server

The Dr. Bean server acts as the communications hub of the system's architecture. The server coordinates all of the activities from the other console applications. Written entirely in Java, the Dr. Bean server uses RMI (remote method invocation)—Java's standard communication mechanism—to communicate with Dr. Bean's various consoles. The Dr. Bean server uses database tables to obtain and store usernames, passwords, utilities for storing customer contact histories, user account information, webpage push information, and session and profile management.

Because it is written completely in Java, the Dr. Bean server is able to run on a variety of hardware types and operating systems. For example, it can run on such Sun Microsytems products as SPARC and Solaris 2.X, IBM Systems 390, AIX, AS400, Microsoft Windows NT, on IN-TEL- or ALPHA-based platforms, various Linux distributions, and HP's UX. The Dr. Bean server database is configurable via an administrative interface that embraces a wide variety of JDBC and JDBC:ODBC drivers supporting a broad range of database products, including IBM db2, Oracle Enterprise, Microsoft SQL Series, Informix, and Sybase.

CSR Console

The CSR console comprises a multi-view design that provides control and communications between CSRs and customers and with other CSRs and supervisors. A CSR console GUI (graphic user interface) presents a chat frame where a CSR can chat in real-time with customers over the Internet. CSRs are able to push web pages to the customer or surf the Internet on their own without disconnecting from the customer. This console also enables the CSR to choose from a list of data views (created with the Data Source Manager by the administrator) where he can view information about the customer while simultaneously chatting with him. CSRs can also collaborate amongst themselves or with their supervisor without breaking their connection with their customer.

By pushing web pages and facilitating customer requests and inquiries, CSRs are able to sell more products and services, thereby increasing revenue. Dr. Bean also provides the tools necessary for the CSR to acquire valuable customer preference information that can foster improved relationships between customers and the company. This customer information can also be used in conducting highly targeted marketing and sales campaigns, such as specialized discount and purchase programs, rewards programs, and promotions for service plans and contracts.

Administration Console

The Administration module is the main control center for Dr. Bean. It is a 100% Java application where you can set up and configure the integrated components of Dr. Bean.

The Intelligent Routing engine routes customers to the most appropriate Customer Support Group based on parameters that you have defined in the Intelligent Routing section of the Dr. Bean Administrator. And, it lets you choose between using one, or any combination of the following three service levels:

- Customer selects help topic from a dynamically-generated help menu

- Intelligent routing, based upon keywords embedded in the Web page that the user is visiting

- Customer is routed to the Support Group that is associated with the Web-page from which they clicked the Dr. Bean icon.

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Supervisor Console

The supervisor console comprises a multi-view design that provides monitoring, analysis, control, and communication with CSRs. Through a session monitoring interface, supervisors can manage multiple CSRs who are connected to multiple servers. This module enables a supervisor to monitor CSR and customer sessions, as well as chat with CSRs.

A supervisor is also able to analyze effectively the activities of each of the CSRs by viewing the number of customers handled, following the chat interchange, and monitoring the duration of sessions and the webpages pushed. These statistics are also presented in an easy-to-read graphical format.
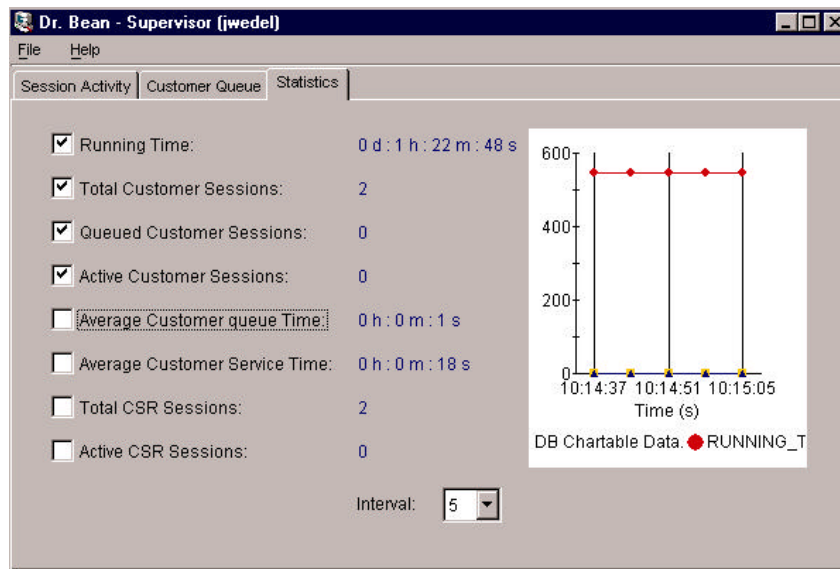
Customer Interface

The Dr. Bean Customer Interface is a combination of HTML files, JavaScript, and Java Servlets that work together to provide the interactive graphical interface where the customer and the CSR interact.

Behind the scenes, Java Servlets handle the fundamental interactive functions, including session management, as well as more sophisticated functions such as intelligent routing and automated self-service capabilities.

The Dr. Bean Customer Interface can be modified to reflect a client's corporate image or to resemble the Web site that is hosting Dr. Bean.

System Monitoring Module

In the supervisor module, a supervisor is able to view all of Dr. Bean's reporting statistics, including session running time, queued customer sessions, total customer sessions, active customer sessions, average customer queue time, average customer service time, total CSR sessions, and active CSR sessions. These appear in an easy-to-interpret, graphic format.

System Monitoring Console

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User Rights/Privileges

Administrator User Rights and Privileges are defined in the Administrator Module. Only those with Administrator User Rights are authorized to modify the configuration of Dr. Bean.

CSR-to-Supervisor Chat.

Customer service representatives are able to concurrently chat with a supervisor while chatting with a customer. CSRs can flag for supervisor assistance and the supervisor can initiate contact at any time.

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IV. Key Benefits

Return on Investment

Before adopting any new technology, it's important to determine the potential return on in-vestment (ROI). The simple ROI calculation below shows how implementing Dr. Bean into an existing e-business strategy can increase traffic to an e-commerce website, increase orders and order size, and improve revenues.

	Hits /Day	Orders/ Day	Average order size	Daily Revenue	Browser/ Buy Ratio
Normal e-business site	500	10	$50.00	$500.00	2.0%
e-business with Dr. Bean e-CRMT Solution	576.5	14.3	$57.25	$818.68	2.5%
Percentage Increase (see notes)	15.30%	43.00%*	14.50%**^	63.7%	24.0%

*1. Increased orders: 43 percent higher closing rate.

**2. Increased order size: Of those Internet users who have not purchased online, 13.7 percent said they would buy online if the could interact in real-time with a sales person on an e-commerce site.

^3. Studies have indicated an average 43 percent increase in orders online following implementation of a customer care solution.

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Frequency of Orders, Average Order Size, Daily Revenue, and Hits per Day Comparing a Dr. Bean-Enabled Website to a Conventional E-business Site

Legend: Conventional e-business Site: ▬ e-business with Dr. Bean solution: ▬

Increase in Orders: e-business with Dr. Bean e-CRM solution vs. conventional e-business	**Increase in Average Order size: Dr. Bean e-CRM solution vs. conventional e-business**	**Increase in Daily Revenue: Dr. Bean e-CRM solution vs. conventional e-business**	**Increase in Hits per Day: Dr. Bean e-CRM solution vs. normal e-business**

Orders per Day	Average Order Size (in dollars)	Daily Revenue Increase (in dollars)	Hits per Day
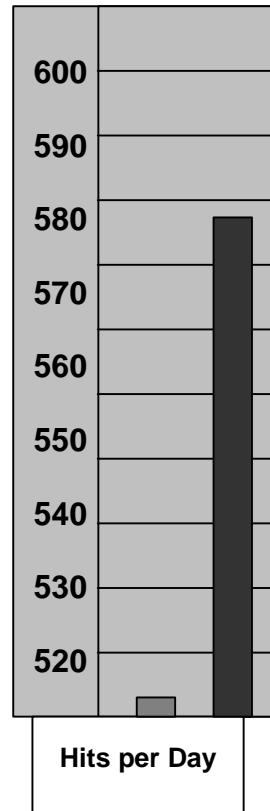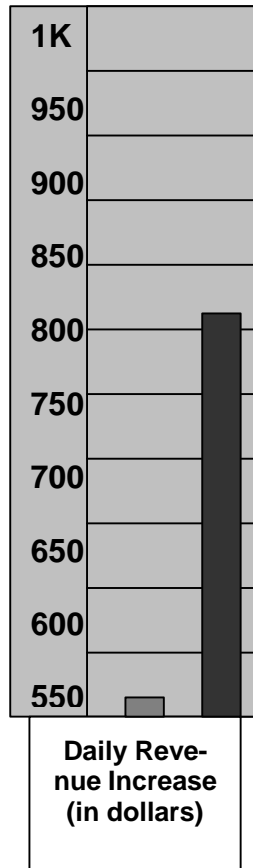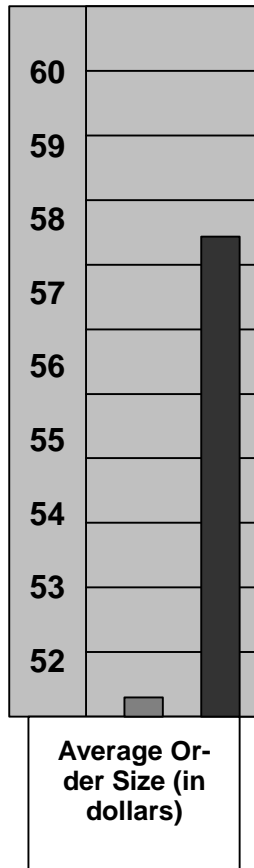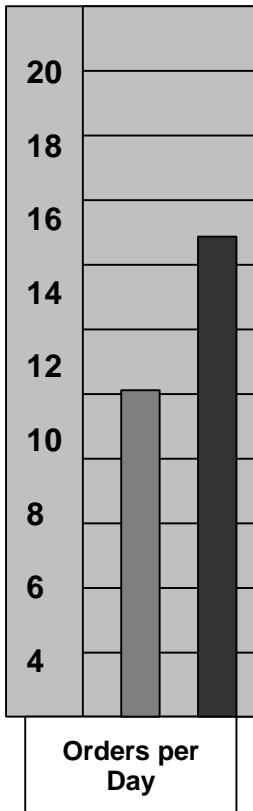
Improved Customer Satisfaction

The Internet economy is about responding to and anticipating customer needs. The following is only a small listing of the benefits to e-commerce websites to be derived from Dr. Bean:

- Improved customer retentions due to analysis of administrative reports that lead to more focused marketing initiatives and strategies.
- Customers can be directed to virtual hands-on trail use of a variety of products.
- Highly customizable applications provide consistent corporate look and feel.
- Customers can advertise their products and services, or other products and services on Dr. Bean's HTML interface.
- Fully integrated suite allows reporting and statistics generation for entire system for more accurate customer profiling.
- Intelligent auto-routing makes CSRs available for high-priority clients, critical incident resolution, and product expertise.
- Self-help for questions and accounts, products, and services increases overall satisfaction by providing customers with a way to manage their own time rather than yielding to conventional business hours.
- Highly targeted e-marketing campaigns and reward programs increase customer traffic and foster customer loyalty.
- Customers can be monitored and provide immediate feedback about what elements of a marketing strategy are working and which are not.
- Service and support can be delivered in a more effective and timely manner, leaving customers relieved instead of frustrated.

New Revenue Models

- Pay-for-service implementations of the technology are possible with flexible authentication mechanism.
- Businesses can offer high-priority access to the system for premium customers.
- Customer data allows targeted cross-selling opportunities.

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V. Sideware's Strategic Partnerships

Sideware's partnerships add value to the company's products and services. The following relationships support Sideware's Java development strategy, our sales and marketing team, and our systems integration group.

IBM

Sideware is an IBM business partner reseller, entitled to resell IBM PC hardware products. In addition, Sideware is eligible to access IBM's established global value added reseller (VAR) channels.

In June of 1998, Sideware joined IBM's BESTeam Software Partner program to provide unique e-business solutions to customers by integrating its own value-added products with IBM. By the end of September of that year, after members of its development team had successfully achieved the required levels of IBM certification, Sideware announced its new status as an IBM BESTeam Advanced Software Partner.

On October 19, 1999, Sideware announced an agreement with IBM to bundle Dr. Bean with IBM S/390 Multiprise 3000 servers as part of IBM's Enterprise Growth Offering (EGO). The EGO program was designed to help medium-sized enterprises grow existing applications, such as e-business solutions, and add new hardware capacity while reducing their cost of doing business. IBM's S/390 Business Partners throughout North America will offer the new bundled solutions.

In November, 1999, Sideware became a member of the IBM Netfinity ServerProven Program. This program gives commercial software and hardware developers the opportunity to test their business solutions on Netfinity servers in real-world environments, reducing integration risks and enabling smoother installations and reliable implementations.

The following IBM products are used as part of Sideware Systems' integration solutions:

- *NetCommerce START and PRO* are electronic commerce software products that offer customers opportunities to sell their products online. IBM NetCommerce can operate on a configuration that combines operating systems with cross-platform compatibility to operate under IBM AIX, Windows NT, and Sun Solaris.

- *DB2 Universal Database* is a scalable, manageable, accessible, and extensible database. DB2 can operate with RISC System/6000 hardware, IBM mainframes, Sun Microsystems hardware and operating systems such as OS/2, Windows (95 & NT), AIX, HP-UX, LINIX, SCO OpenServer, and Sun Solaris.

- *IBM Netfinity Server* is a reliable foundation for e-business and enterprise-wide computing. These Intel processor-based servers can manage the demands of complex applications that include the Netfinity 3000, 3500, 5500, and 7000.

- *WebSphere Application Server* can create and manage a truly functional Web site that supports mission-critical applications. It includes a runtime environment for Java servlets with connectors to common database formats industry-standard object request brokers, and enterprise middleware.

- *eNetwork Firewall* protects company assets from unauthorized access from both internal and external sources. The IBM eNetwork Firewall security and directory program provides a scalable, manageable, and comprehensive end-to-end security solution.

Sun Microsystems

Sideware has had a lengthy relationship with Sun Microsystems and is presently part of the Sun Developer Connection program at the strategic developer level. Additionally, Sideware is a member of the Oracle Partner Program (OPP). Sun has a record of continual innovation and leadership, extended recently with the adoption of its Java technology, a breakthrough computing architecture that has captured the imagination of software developers worldwide and has become a de facto industry standard architecture for the Internet and corporate intranets. Sideware's Dr.

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Bean e-CRM technology uses Sun's Java technology and Sun middleware products, such as Enterprise Workgroup Servers and Solstice Firewall.

Oracle

Oracle Corp. is the world's second largest software company and the world's leading supplier of information management software. With annual revenues exceeding $8.8 billion and over 41,000 employees, Oracle offers its database, tools, and application products in more than 145 countries.

Dr. Bean is available for full integration on Oracle's new line of e-commerce middleware, including Oracle 8i database, iBill, and Pay Release.

The following Oracle products are used as part of Sideware's Systems integration solutions:

- *Oracle iBill & Pay Release 3i* are e-commerce products that offer a payment system for transactions from a website storefront. iBill allows transactions to be completed from an e-commerce-enabled website. Payment Release is a complete electronic payment processing solution that makes it easy to "payment enable" new or existing Internet or client/server applications.
- *Oracle 8.i Database* offers features needed to develop web-enabled applications for Internet and enterprise applications.
- *Oracle Applications Server* provides an open-standards-based architecture ideal for deploying applications for the web. Its scalable, distributed architecture and superior database integration provide a foundation for supporting transaction-based applications across Netscape and Microsoft HTTP server. This server is also a strategic platform for network application deployment.
- *Sun Enterprise Workgroup Servers* Sun's Enterprise Workgroup family of servers are pre-tuned and pre-configured for today's dynamic workgroup and line-of-business environments.

SAIC

Sideware is partnered in North America with Science Applications International Corporation, or SAIC, one of the largest systems integrators in the US. To complement SAIC's systems integration capabilities and e-commerce strategy, SAIC will offer Sideware's Dr. Bean to bring a customer service component to its overall Internet solution. Because Dr. Bean is designed to be compatible with virtually any system, SAIC can now integrate customer service in just about all client networks. A diversified high-technology research and engineering company, SAIC offers a broad range of expertise in technology development and analysis, computer system development and integration, technical support services, and computer hardware and software products. SAIC caters to a broad range of markets, including oil and gas, utilities, environment, financial services, health care, law enforcement, maritime, national security, space, telecommunications, and transportation.

Headquartered in San Diego, CA, SAIC is a Fortune 500 company and the nation's largest employee-owned research and engineering firm. The company provides information technology and systems integration products and services to government and commercial customers. SAIC scientists and engineers work to solve complex technical problems in telecommunications, national security, health care, transportation, energy and the environment.

Advanced Call Center Solutions

E-commerce operates 24 hours a day, seven days a week. So it follows that a company should have Dr. Bean-enabled customer service representatives for its customers 24-7 as well. With that in mind, Sideware has partnered with Advanced Contact Solutions Inc. (ACS) of Torrance, California. This alliance provides the Dr. Bean Internet customer service system with a 24-hour, 7 days a week, outsourcing option. Advanced Contact Solutions has modern outsourcing facilities in the Philippines staffed by university-educated, multilingual representa-

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tives. ACS provides support for its clients' products and services, including inbound and out-bound e-marketing, help desk, service support, customer care, collections, and order processing.

Sideware has combined its latest version of Dr. Bean with IBM e-business or Oracle middle-ware to provide a unique and powerful e-commerce solution for all levels of business. In alliance with ACS, Sideware can provide extremely competitive 24 X 7 coverage for small companies as well as overflow coverage for medium and large companies.

International Partnering Opportunities

In addition to its North American partners, Sideware Systems is actively seeking partnering relationships with companies in Europe, South America, and Asia.

To understand fully the power and flexibility of Sideware's Java-based eCRM solution, it's helpful to compare Dr. Bean to products from other companies.

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VI. A Look at the Competition: Core Technology Differences

The ability to communicate with any type of platform and database, being able to move with the growth of a business, and allowing full customization are all benefits of a product that is 100 percent Java. Graphically displayed below are Sideware's present Top Ten competitors. These are compared by core technology differences.

CORE TECHNOLOGY DIFFERENCES	SIDEWARE SYSTEMS (Dr. Bean)	ESHARE TECHNOLOGIES (Net Agent)	QUINTUS (Webcenter)	INTERACTIVE INTELLIGENCE (Interac...)	SILKNET (Eservice)	LIVEPERSON (Live Person)	LOTUS (Sametime)	CISCO (Interaction Suite)	EGAIN (Custo-memow)	SKY ALLAND (iSky)	FACETIME (Instant Customer)
Multiple platform capabilities. (S390, Solaris, AIX, UX, Linux, NT)	✓	NT	UNIX, NT	UNIX, NT	NT	NT	NT, UNIX, S390	NT, SO-LARIS, LINUX	NT, SO-LARIS	NT	NT
Scalability (Ability to serve a large number of user without changing procedure)	✓	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗
Flexible Database Connectivity (Oracle, Db2, Informix, Sybase)	✓	SYBASE, ORACLE	ORACLE	✗	ORACLE	SYBASE, ORACLE	✓	ORACLE, SSQL, SYBASE	ORACLE, SQL	ORACLE	SQL
Integration to middleware (Integrates to transaction servers; IBM net. commerce, Oracle payment ...)	✓	✗	✓	✓	✓	✓	✓	✓	✓	✗	✗
Configurable HTML interface (Customizable interface; color, font, etc.)	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗

* The list of competitors set out above is not exhaustive. We are aware of approximately 30 other companies providing products or services that are competitive to some degree with Dr. Bean. The information provided on the competitive products listed above is accurate to the best of our knowledge. Our descriptions of those products and their features and pricing may be inaccurate, or may become inaccurate, as our competitors modify their products or marketing strategies.

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