



Ceridian Canada: IBM and Siebel Deliver a Leading Edge CRM Solution

An IDC e-business Case Study

THE SUBJECT

Based in Winnipeg, Manitoba, Ceridian Canada provides payroll and human resource management services to 38,500 companies across Canada. A unit of US-based Ceridian Corporation, the company pays 2.4 million Canadians—or 17 percent of the work force.

THE GOAL

To develop and implement a coherent, integrated set of customer service processes across the entire company, replacing what had been a patchwork of processes. To create the underlying technical infrastructure necessary to implement these processes—specifically, a CRM solution and a Web-based self-service solution sharing a common database.

THE SOLUTION

Designed and developed by IBM Global Services, Ceridian Canada's solution contains two main elements. The core of the solution is a Siebel CRM application used by all 800 customer service employees across its nationwide branch network. Complementing this is a customer self-service solution (now in beta) employing WebSphere Application Server, which accesses the same nationwide customer database as the CRM platform.

WHY IBM

"We saw WebSphere as a highly flexible, standards-based infrastructure for building advanced Web applications. Its tight fit with Siebel—also a best of breed solution—made complete sense for us."



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Executive Summary

Innovation Spotlight

By providing companywide access to a unified customer database, Ceridian Canada's new "STAR" platform allows the company to move from branch-level customer care processes to a nationwide "virtual call center" model.

Based in Winnipeg, Manitoba, Ceridian Canada is that country's leading provider of payroll and human resource management services, processing one of every six paychecks. As competition among service providers intensified, the need to provide top-quality customer service became Ceridian Canada's primary strategic imperative. Recognizing this, the company boldly reengineered its core customer service processes around a team-based model, while at the same time created an information processing infrastructure—specifically CRM and Web self-service—to make it all possible.

Ceridian Canada selected Siebel's CRM solution to power its new customer service platform (known as STAR), and chose IBM WebSphere Application Server as the foundation of a new customer self-service solution. IBM Global Services was instrumental in nearly all phases of Ceridian Canada's initiative, from planning and design to implementation and training.

Ceridian Canada's Solution at a Glance

- ▶ **e-business State** Internal Integration
- ▶ **Core Functionality** Ceridian Canada's CRM solution allows its newly deployed account management teams (which replaced individual account reps) to access a single national database of customer information, which provides a full profile of each customer's account history. A built-in knowledge management capability allows for faster resolution and less frequent escalation. The Web self-service solution, now in beta, will allow customers to access (and in some cases update or modify) their account information via a browser.
- ▶ **Software** Siebel Call Center and Service; IBM WebSphere Application Server
- ▶ **Servers** IBM Netfinity 6000R, IBM Netfinity 4500R
- ▶ **Storage** IBM FASTT500 Fibre-Channel SAN Controller; IBM SAN-Data Gateway; IBM EXP500 Fibre-Channel Storage
- ▶ **Services** IBM Global Services
- ▶ **Key Benefits**
 - ▶ Ceridian Canada expects aggregate customer satisfaction levels to increase by 20 percent over the next three years as a result of its new set of CRM-enabled processes.
 - ▶ The implementation of CRM-enabled customer service processes has led to faster, smoother handling of inquiries and a lower rate of problem escalation.
 - ▶ Over the next 3 years, Ceridian Canada expects its CRM and self-service platforms to avoid 20 percent of the customer service costs the company would have incurred in the course of its revenue growth.
 - ▶ Improved customer service capabilities enabled by new and improved service delivery approaches strengthen the company's overall competitive position.

Situation Analysis

► Background

Based in Winnipeg, Manitoba, Ceridian Canada is Canada's leading provider of payroll and human resource management services. A unit of US-based Ceridian Corporation, Ceridian Canada serves 38,500 companies across Canada, ranging from small businesses to large corporations. With a total of 2.4 million employees paid, the company processes the payroll of fully 17 percent of the Canadian work force. Ceridian Canada was established as an independent business unit in 1998, when Ceridian Corporation consolidated the operations of two recently acquired companies. The company currently operates a nationwide network of branch offices across Canada, employing 1,300.

With payroll processing services more or less a commodity, product line has assumed less importance as a competitive differentiator. Instead, quality customer service has emerged as the industry's pivotal competitive requirement.

Like many outsourced services, the Canadian market for payroll processing services has in recent years undergone significant consolidation. In a market that once supported nearly a half-dozen significant competitors, Ceridian Canada and ADP Canada (a unit of US-based ADP Corporation) have emerged as the dominant players. As the market has evolved, underlying product line has assumed less importance as a competitive differentiator, reflecting the commodity or "utility" status that characterizes payroll service offerings today. At the same time, quality customer service—already a key strategic competency—has emerged as the industry's pivotal competitive requirement. Payroll providers have addressed the customer service issue on two levels. In addition to focusing on standard customer service metrics—such as problem resolution timeframes—providers are seeking to improve customer satisfaction by providing alternative service delivery channels, such as Web-based self-service.

► The Need: Enabling Technology for Team-based Service

Having coalesced from two companies, Ceridian Canada faced the challenges of unifying a fragmented, often divergent set of business processes. Foremost among these was customer service. While cultural factors represented a significant barrier to the implementation of common customer service practices, structural factors—such as a high degree of geographic dispersion—made synchronization even harder. According to Mark Alpern, Vice President of Customer Care & Quality, the prevailing "branch-centric" approach to customer interaction made the construction of a consistent set of processes very difficult. "Under our previous framework, customer information for the Winnipeg branch was held in Winnipeg, the Halifax branch was held in Halifax, and so on," says Alpern. "There was a lack of consistency in process from branch to branch to the extent that each branch was unique." Ceridian Canada's disparate IT infrastructure—another vestige of its formation—further exacerbated the problem.

In addition to fragmented information resources, the company's generic customer service approach, based on account management, was also emerging as a point of vulnerability. Under this approach, each account manager would be responsible for servicing as many as 150 customers. However, as the company

grew it became clear that the individualized approach to customer service would have to be modified to ensure continued success into the future. Feedback from customer surveys validated what Ceridian management had come to know: customers were becoming increasingly frustrated at not being able to reach their service rep by phone on the first try. By 1999, the need to reengineer Ceridian Canada's fundamental approach to customer service was clear.

The company responded swiftly, redesigning its customer service processes around a team-based structure, which allowed a customer's inquiry to be addressed by various members of an account team. For customers, the benefits of this team-based approach were manifold—greatly improved access, faster problem resolution and generally higher satisfaction. But for Ceridian, the move to a team-based customer service model also required a more flexible, integrated infrastructure for sharing data within the company. As Alpern explains, the company's "change in philosophy" on customer service required an equally bold initiative on the technology side. "We saw the need to fundamentally change the way we store, access and use customer information," says Alpern. "This in turn required a shift in our infrastructure strategy towards a more centralized, standardized approach."

Action Plan and Decision Process

► First Steps and Decision Process

"Although we had developed some very exacting specifications as an outgrowth of our process redesign efforts, the breadth and depth of Siebel's functionality accommodated them easily. Siebel's market leadership gives us the added confidence that we'll be on the right technology path."

— Bob Aldridge,
Project Director, Customer
Care, Ceridian Canada

Ceridian Canada's redefined approach to customer service and customer data management rested on two key technological pillars. First was the company's decision to implement a CRM solution companywide that would provide the main point of entry for account teams servicing customers. The second element—underpinning this—would be the creation of a single national customer database to replace branch-specific customer information databases. According to Bob Aldridge, Project Director for the CRM initiative, the two major tasks at hand were to thoroughly redefine customer service processes, and to select a CRM platform that would support the company's new vision for customer interaction. "While the redefinition of our internal processes was a task that we were clearly best prepared to perform, we viewed the CRM vendor selection process as an area where we could leverage outside expertise," says Aldridge. "We selected IBM Global Services to help us assess the various alternatives."

After evaluating several platforms over a nine-month period and winnowing the list to three vendors, Ceridian Canada selected Siebel Systems in December 1999. According to Aldridge, his company's selection of Siebel's Call Center and Service solution hinged on the product's functionality as well as Siebel's status as the leading innovator in CRM technology. "Although we had developed some very exacting specifications as an outgrowth of our process redesign efforts, the breadth and depth of Siebel's functionality accommodated them easily," says Aldridge. "Siebel's market leadership gives us the added confidence that we'll be on the right technology path."

► Leveraging CRM for Web-based Self-Service

“We saw WebSphere as a highly flexible, standards-based infrastructure for building advanced Web applications. Its tight fit with Siebel—also a best of breed solution—made complete sense for us.”

— Bob Aldridge

In addition to focusing its e-business initiatives on employees (e.g., using CRM to facilitate team-based customer service), the company has also developed customer-facing Web-based solutions such as Powerpay, a fully Web-based payroll solution targeted to small businesses. While Powerpay represents a new element of Ceridian’s core service portfolio, the company has also leveraged Web technology to expand its customer service delivery channels. The most important initiative in this area has centered around Web-based self-service, under which Ceridian Canada customers access various service features via a Web browser. In late 2000, the company examined the opportunity to leverage its CRM investments—the most crucial element of which was its national customer database. As conceived by Ceridian Canada, this solution would provide Web-based access to customer data drawn from the core CRM customer database. Moreover, like the CRM initiative from which it was derived, the Web self-service initiative was designed to improve the quality of customer service through increased convenience. Equally important, the platform was also seen as a scalable, low-cost channel for handling less complex customer inquiries.

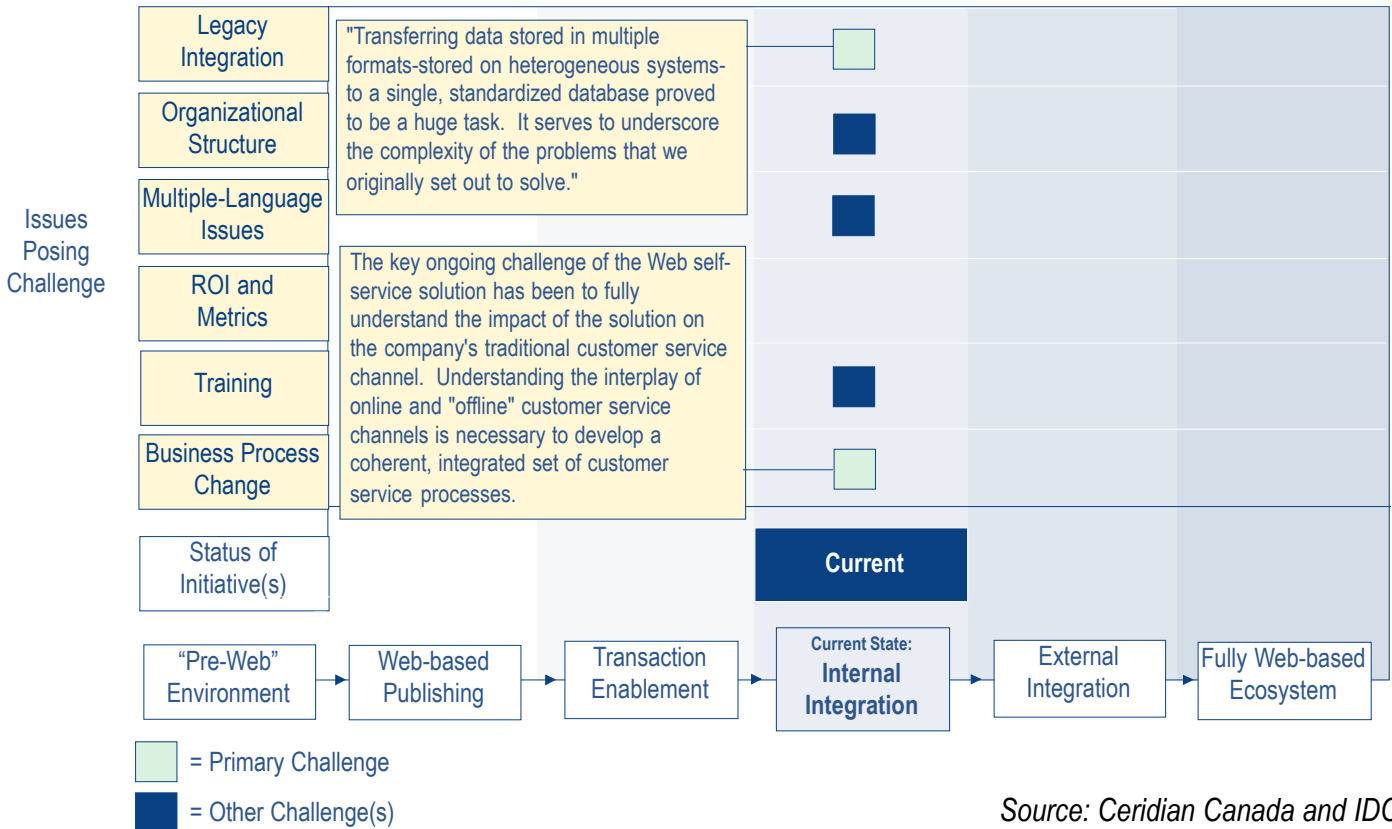
Ceridian Canada chose IBM WebSphere Application Server as the core technology powering the solution, and chose IBM Global Services to build the solution itself. As Aldridge points out, WebSphere Application Server was selected on the basis of its flexibility and ease of integration with the Siebel platform. “We saw WebSphere as a highly flexible, standards-based infrastructure for building advanced Web applications,” says Aldridge. “Its tight fit with Siebel—also a best of breed solution—made complete sense for us.”

► Challenges

At the outset of the project, the Ceridian Canada/IBM Global Services team faced significant challenges, most—but not all—of which were related to people and process issues. For the CRM solution, the most significant business-level challenge was the management of expectations for both staff and management employees. For the WebSphere-based self-service solution, the key ongoing challenge has been to fully understand the impact of the solution on the company’s traditional customer service channel. Ceridian Canada rightly believes that a clear understanding of the interplay of online and “offline” customer service channels is necessary to develop a coherent, integrated set of customer service processes.

One of the key technical challenges of the CRM project was the inherent complexity of the configuration effort, with the issue of legacy integration emerging as the single most important issue. As Aldridge explains, the fact that Ceridian Canada’s branches had independently developed their own methods of gathering and storing data led to a proliferation of data formats. “Transferring data stored in multiple formats—stored on heterogeneous systems—to a single, standardized database proved to be a huge task,” says Aldridge. “It serves to underscore the complexity of the problems that we originally set out to solve.”

Challenges Encountered in Ceridian Canada's e-business Evolution



Solution Profile and Implementation Strategy

► The Project

Staff from IBM Global Services' Customer Relationship Management practice began implementing the Siebel CRM solution in January 2000. One of the critical early phases of the project was the redesign of Ceridian Canada's core customer service processes. Led by Ceridian staff, this process provided the business-process framework around which the Siebel solution would be designed by the IBM team. The IBM team completed the next phase—the design and configuration of the solution—at the beginning of 2Q2000. The actual solution development and integration effort began soon after. IBM Global Services deployed the Siebel solution on a site-by-site basis, completing the implementation of the first site in August 2000. Upon completion of the deployment, all 800 of Ceridian Canada's customer service employees will have access to the STAR system.

IBM Global Services completed a pilot version of Ceridian Canada's Web self-service application in March 2001, after a two-month development effort. The

Development Timetable for Ceridian Canada's e-business Solutions

	4Q1999-1Q2000	2Q2000	3Q2000	4Q2000	March 2001
Ceridian Canada selects Siebel as its CRM vendor; IBM Global Services begins development of "STAR," the new customer service platform.	■				
IBM Global Services completes the design and configuration of the STAR platform.		■			
IBM Global Services completes the implementation of the STAR platform at Ceridian's first site.			■		
Ceridian Canada selects IBM WebSphere Application Server to power its customer self-service application.				■	
IBM Global Services completes a pilot version of the customer self-service application.					■

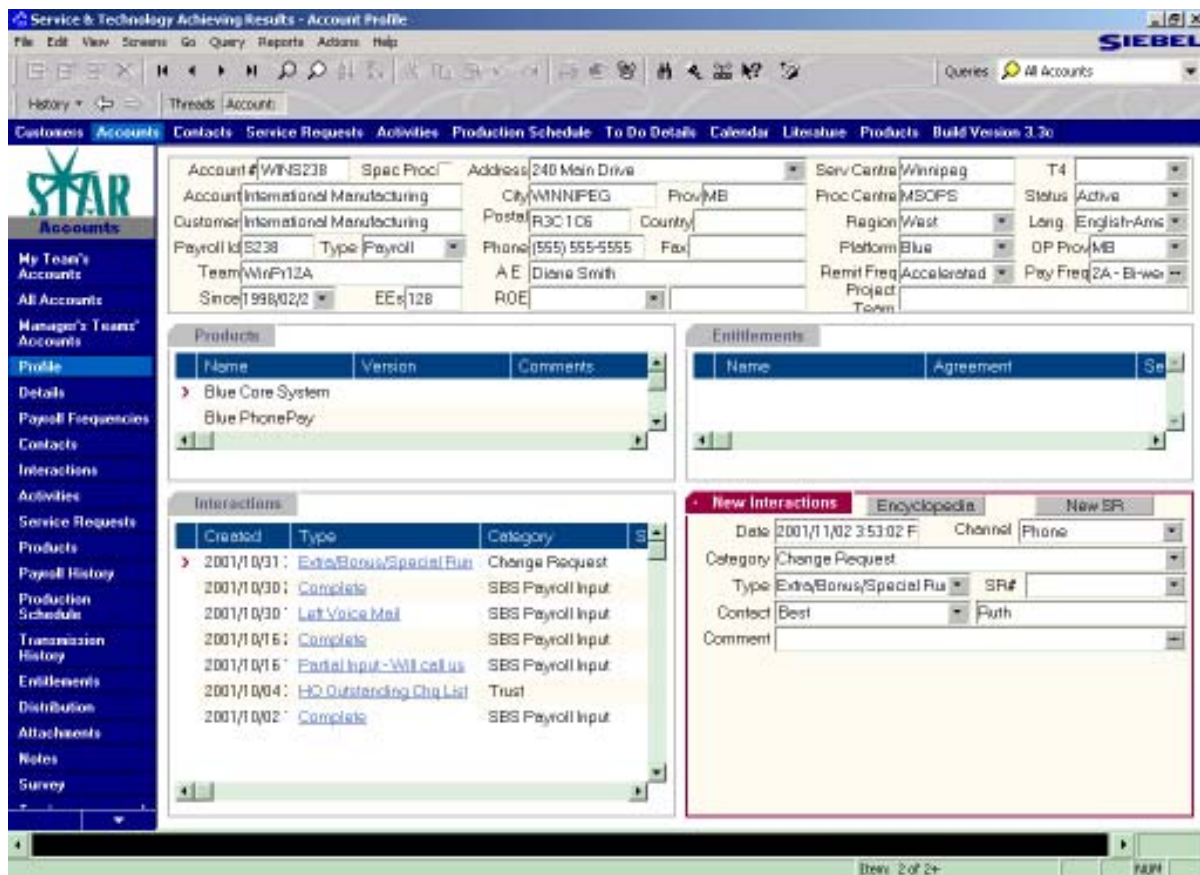
Source: Ceridian Canada and IDC

first phase of development focused on database integration, while the second focused on the user interface component of the solution. Since then, a beta version of the solution has been used by a limited number of customers. As Aldridge points out, the goals were two-fold. "First, we wanted to create a functional application that could be tested by customers to ensure that it was what they wanted," relates Aldridge. "We also wanted to gain an understanding of the impact of the solution on existing internal processes and staffing requirements." Ultimately, Ceridian Canada plans to roll out the solution to all its customers—albeit using a gradual, phased approach that will allow them to more accurately gauge their infrastructure requirements.

► The Solution in Action

Ceridian Canada's CRM solution—known internally as STAR (Service and Technology Achieving Results)—is used primarily by employees (customer care representatives and managers within the customer service organization). Other Ceridian users include Billing and Finance staff, who access STAR data through workflow from the Customer Care organization. The core of the STAR system is a centralized database that stores payroll account information, as well as a complete record of interaction between Ceridian Canada and the customer (telephone calls, faxes and e-mail). Another important capability of the STAR system is its ability to create and track service requests when a live representative cannot address a customer's problem immediately. This workflow-like capability then allows the representative to identify the appropriate staff to address the inquiry.

While ostensibly a CRM platform, the STAR system also allows customer



service representatives to access a wide range of information in other areas of the company. For instance, employees using the STAR system can access databases containing a customer's account history, completed customer survey questionnaires and payment information. Aldridge believes that the integration of knowledge management features with the STAR system's core CRM functionality will substantially improve the effectiveness of Ceridian Canada's account teams. "Our strategy is to give as much knowledge to our front-line employees as possible," says Aldridge. "By empowering our reps with more information, we're able to dramatically reduce our problem resolution times by minimizing the need to escalate the inquiry to other parts of the company."

One of the STAR system's defining strengths is its integration with Ceridian Canada's core legacy systems. For example, if an employee using the STAR system makes a change to a customer's account information, that change is automatically fed into the company's payroll processing system (which handle all of Ceridian's mission-critical processes). Similarly, data from Ceridian's Billing & Tax Remittance system is downloaded to STAR on a monthly basis, enabling Customer Care representatives to view the data as needed. By integrating the STAR platform with its internal systems, Ceridian Canada has been able to create a more valuable CRM platform, while at the same time

leveraging its existing legacy investments.

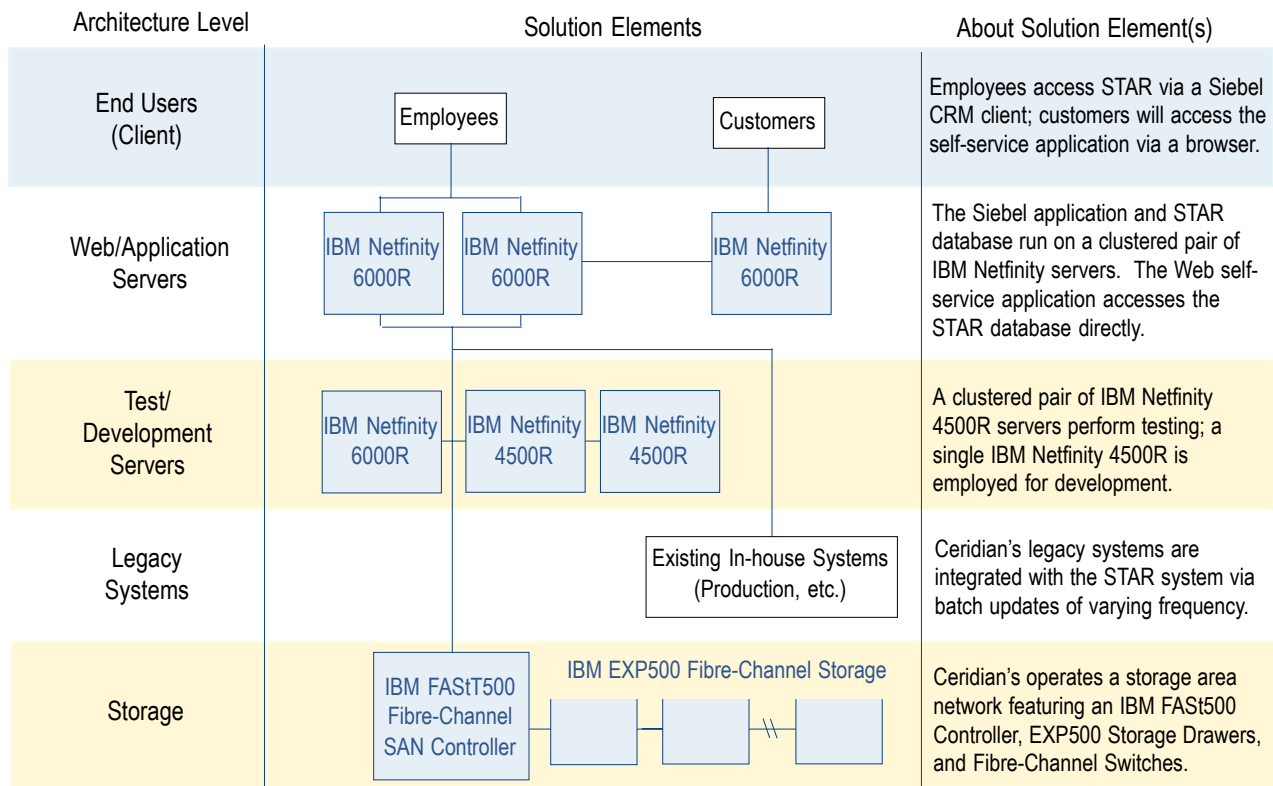
Ceridian Canada's Web self-service application is accessed via a standard Web browser; security is based on SSL. When the solution is fully rolled out, any of Ceridian Canada's nearly 40,000 customers will be able to use it. Within these companies, the number of end users will range from one (for smaller companies) to an entire department (for larger companies). In addition to allowing customers to view general information about their account, the solution also allows them to track the status of service requests online. In addition to read-only capabilities, the Web self-service solution allows the customer to make changes to select areas within the STAR database, which are then propagated to Ceridian's core payroll processing system.

► Solution Architecture

Ceridian Canada's CRM and Web self-service solutions run on IBM Netfinity servers centrally located at the company's enterprise data center in Winnipeg. These servers include:

- Two IBM Netfinity 6000R servers (clustered) running the Siebel application and the production database
- Two Netfinity 4500R servers (clustered) for testing

Basic Architecture of the Ceridian Canada Solution



Source: Ceridian Canada and IDC

- One Netfinity 6000R server for development
- One Netfinity 4500R server for directory management

The solution architecture also features a storage area network, whose main elements include an IBM FAStT500 Fibre-Channel SAN Controller, an IBM SAN-Data Gateway, and an IBM EXP500 Fibre-Channel Storage (50 Drives, with 18.2GB per drive). Users in Ceridian Canada’s branches access the STAR system through each branch’s local area network, which is connected to the corporate backbone via a wide area network.

“We see personalization technology as one of the critical design elements of the future because it keeps customers coming back to Web sites. WebSphere’s robust support for personalization will allow us to create an even stronger solution for our customers.”

— Mark Alpern, Vice President of Customer Care & Quality, Ceridian Canada

Ceridian Canada’s national customer database—the core of the STAR solution—resides on the production database server (see exhibit on previous page). Data stored therein ranges from simple name, address, and contact information to production schedules (i.e., when customers run their payroll) to billing and remittance information (i.e., tax payments to government agencies). The STAR database is integrated with Ceridian Canada’s various legacy systems—principally client/server systems—throughout the company’s branches. The data flow between the STAR system and Ceridian Canada’s legacy systems is bi-directional. For example, if an employee changes a customer’s delivery address, that change would be propagated from the STAR system to Ceridian Canada’s production system (controlling the addressing and mailing of checks). By the same token, data from the company’s backend systems (e.g., billing) is uploaded to the STAR database on a batch basis.

While presently in beta form, Ceridian Canada’s Web self-service platform will also be deployed on an IBM Netfinity 6000R server within the general architecture of the STAR system. As presently deployed, the solution (developed by IBM Global Services) runs IBM WebSphere Application Server and accesses the STAR database. Ceridian’s Alpern believes that when the Web self-service solution is fully deployed, it will leverage WebSphere’s ability to deliver targeted content based on user identity. “We see personalization technology as one of the critical design elements of the future because it keeps customers coming back to Web sites,” says Alpern. “WebSphere’s robust support for personalization will allow us to create an even stronger solution for our customers.”

Business Results

Ceridian Canada expects the benefits of its recent e-business initiatives to show up in the metrics it values most—customer satisfaction and retention. In the intensely competitive payroll services market—where quality customer service is the key differentiator—customer satisfaction is perhaps the single most important benchmark of the company’s well-being. In recognition of this, Ceridian Canada has conducted customer satisfaction surveys for the past several years. Since the limited introduction of STAR in 3Q00, satisfaction levels have already improved for customers served by Customer Care staff using the system. But Alpern believes the best is yet to come. “We expect our aggregate customer satisfaction levels to increase by 20 percent over the next three years as a direct result of giving our customers what they want,” states

Overview of Ceridian Canada’s Business Results Achieved

Business Process Area/Issue	Nature of Benefit	Description or Metric
Customer Service	Increased Customer Satisfaction	Ceridian Canada expects aggregate customer satisfaction levels to increase by 20 percent over the next three years as a result of its new set of CRM-enabled processes.
Customer Service	Cost Reduction Improved Productivity	The implementation of CRM-enabled customer service processes has led to faster, smoother handling of inquiries and a lower rate of problem escalation.
Customer Service	Cost Avoidance	Over the next 3 years, Ceridian Canada expects its CRM and self-service platforms to avoid 20 percent of the customer service costs the company would have incurred in the course of its revenue growth.
Strategic Marketing	Improved Competitive Position Increased Customer Retention Increased Market Share	Improved customer service capabilities enabled by new and improved service delivery approaches strengthen the company’s overall competitive position.

Source: Ceridian Canada and IDC

Alpern. “Faster, better service along with more choice, flexibility and convenience.”

The company also stands to garner major operational benefits from the implementation of STAR—the most important of which is an increase in the efficiency of its customer service operation. STAR’s central benefit was in providing the infrastructure around which Ceridian Canada could implement sweeping changes to its core business processes, the most prominent of which was the move to a team-based approach. With the implementation of these new processes, Ceridian Canada has witnessed a substantial, measurable improvement along a number of different performance parameters. As Aldridge points out, faster, smoother handling of inquiries has been one of the most immediate gains. “When we researched our old process, we found that for every customer call coming in we were making two or more calls internally,” says Aldridge. “Since deploying STAR, we’ve already seen significant decreases in the number of internal calls resulting from customer inquiries. Over the next few years, we expect to cut our internal calling volume by no less than half.”

Ceridian Canada expects the addition of its Web self-service solution to lead to

even further improvements in efficiency and customer satisfaction. However, as Aldridge points out, the dual benefits of cost reduction and cost avoidance may well emerge as the platform's key source of payback. The key, says Aldridge, is the solution's ability to suppress customer service costs—even as the company grows at a healthy clip. “The Web self-service solution provides us with a low-cost channel for handling simple inquiries that nonetheless take up precious internal resources,” notes Aldridge. “The beauty of the Web self-service solution is that it will allow us to grow our customer base—while keeping the cost of supporting that base essentially stable. Over the next three years, we expect to avoid 20 percent of the customer service costs that we would have otherwise incurred.”

Case Epilogue

“The depth and breadth of IBM's intellectual capital was evident from the vision stage to the completion stage. The IBM team made us feel that we were their most important customer—and that they would always go the extra mile to prove it.”

— Mark Alpern

Ceridian Canada's near-term goal is to deploy the new CRM platform across all of its branches and bring its 800-strong customer service staff online. But that's just the beginning. While the company has initially focused on creating account servicing teams within particular branches, its long term vision is to broaden this definition to multiple branches—and ultimately the entire company. The goal, says Alpern, is to create a “virtual call center” with coast-to-coast customer service capability. “We made a conscious choice not to build a traditional, centralized call center in order to stay close to our customers,” says Alpern. “Instead, we wanted to build a more flexible, intelligent solution that combines software and hardware with advanced routing capability. The STAR system is an important element of this vision.” Ceridian also plans to go full speed ahead on the Web self-service front by rolling out a production version of its WebSphere-based solution within the next 12 months. Fully aware of the potential number of Web self-service users, Alpern and his team have made the capacity and performance of the solution's infrastructure a top priority. “We are committed to providing high levels of performance to our Web self-service customers,” explains Alpern. “Our choice of WebSphere Application Server as the core of our solution ensures that we'll get the best performance and reliability available on the market today.”

While the addition of Web self-service to Ceridian Canada's customer service delivery model is expected to bring numerous benefits, it also poses challenges to the firm. The key technical challenge will be to develop a platform capable of delivering uncompromised performance for a potentially huge base of users. One of the key business-level challenges of providing a Web-based self-service will be the need to deliver adequate functionality to satisfy larger, more sophisticated customers, while at the same time making it simple enough for smaller, less sophisticated customers to use. Looking back on the project, Alpern appreciates the IBM Global Services team for the depth of expertise and commitment it brought to bear on the Ceridian Canada engagement. “The depth and breadth of IBM's intellectual capital was evident from the vision stage to the completion stage,” says Alpern. “The IBM team made us feel that we were their most important customer—and that they would always go the extra mile to prove it.

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