



A Search for New Horizons



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ROTECH ENTERPRISE SERVICE BUS (ESB)

2005 COMPUTERWORLD HONORS CASE STUDY

MEDICINE

AT A 4,500 EMPLOYEE HEALTH PROVIDER, KEY INFORMATION CAN NOW BE ROUTED ACROSS THE ENTERPRISE IN NEAR-REAL-TIME. AS A RESULT, ORDERS ARE PROCESSED MORE EFFICIENTLY AND CUSTOMER CARE REPRESENTATIVES NO LONGER LACK CRITICAL, CURRENT INFORMATION WHEN WORKING WITH PATIENTS; THOSE SAME CUSTOMER CARE REPRESENTATIVES CAN NOW ALSO PROACTIVELY CALL PATIENTS TO COORDINATE DELIVERIES, SERVICE, AND ADDITIONAL TREATMENT. [20055427]

SUMMARY

For the more than 4,500 employees of the Rotech family of companies, delivering quality service and patient care is more than a job—it's a calling. Since its inception in 1981, Rotech has become a national leader in helping patients manage their health and medical treatment at home so that they can live more comfortable and productive lives. Specializing in the care of patients with respiratory disorders, the company works with physicians to serve patients through a network of nearly 470 coast-to-coast locations, offering a comprehensive set of services that includes home medical equipment rentals and mail-order medication delivery. Enabling medical treatment in the home is no small task, and Rotech is committed to providing care that patients can depend on. Once a patient's physician initiates an order for medication, equipment, or both—either over the phone or via Electronic Data Interchange (EDI)—Rotech becomes the patient's information and services hub, coordinating between doctor, pharmacy, and medical equipment suppliers. This single-source approach to home medical care offers significant convenience for patients. For Rotech, however, the logistics involved in the patient care process are anything but straightforward. To better service their customers, Rotech wanted to transform its IT infrastructure from one that relied on batch processing, to a service-oriented architecture (SOA). When an order is entered into the Rotech order-entry system, key information can be routed to other systems across the enterprise in near-real-time. As a result, orders are processed more efficiently—eliminating manual data reentry—and Rotech customer care representatives no longer lack critical, current information when working with patients; those same customer care representatives can now also proactively call patients to coordinate deliveries, service, and additional treatment.

APPLICATION

Rotech replaced traditional batch transmission processes with a real-time service-oriented architecture (SOA) based on SOA infrastructure product from Sonic Software: Sonic ESB and Sonic Orchestration Server. The project goals were to automate order management, enable near real-time views of patient information within the customer call center, and support complex data flows across Rotech's two businesses: medical equipment rental and mail-order pharmacy.

The result is an IT infrastructure that's more manageable and flexible. The complex order management process has been streamlined and automated, and key customer information is available across the business, enabling more effective patient care.

BENEFITS

Using Sonic ESB, Rotech can help improve customer care by having up-to-date patient information available to its call center. Rotech's infrastructure also supports efficient transaction routing and a high level of transaction integrity, helping the company provide reliable information and service to patients while complying with the Sarbanes-Oxley Act.

IMPORTANCE

Information technology is absolutely essential to the success of Rotech Healthcare. The systems allow Rotech to meet service-level agreement (SLA) terms with insurance providers, and deliver a high level of customer care to its patient customers.

ORIGINALITY

The Rotech ESB project is at the leading-edge of IT architecture. While many organizations are just defining a strategy to take advantage of SOA, Rotech has aggressively pursued and delivered on a sweeping re-architecture of its core IT systems.

SUCCESS

Rotech is able to streamline and automate its complex business processes, and provide timely, up-to-date customer information to its call center and billing. Rotech is also able to comply with Sarbanes-Oxley requirements by providing logging and auditing of its business processes. Additionally, Rotech can meet the service-level agreements (SLAs) that it has with insurance carriers and medical service providers.

DIFFICULTY

Rotech operates two very different business models, but wanted a common IT infrastructure that could automate and support the various business processes. The traditional durable medical equipment (DME) rental business is almost like a cable company where Rotech gets a patient, gets them set up and bills every 30 days until the equipment is picked up—it's an annuity stream. The pharmacy business is a sale that has to happen every month. If a patient doesn't call in or Rotech doesn't contact them to find out what additional medication they need, then Rotech doesn't get the sale. Delivering a common IT platform that can support these different business models and the related processes, and yet provide a common customer view for the call center and billing is very challenging.

Another challenge was the human factor, i.e. getting the business to embrace the changes that IT enables, and re-factoring the business process to take advantage of automation and efficiency. While this is often overlooked in IT projects, it is the single biggest key to ensuring success, because ultimately Rotech is transforming its business in a significant way.