CASE STUDY

Surgical Implant Device Provider Cuts Costs, Increases Business Volume with InRule®

A healthcare company in the United States connects doctors, hospitals, and surgery centers with the manufacturers of implantable medical devices, such as orthopedic and spinal implants, and the insurance companies that provide payments for the devices.

PROJECT OVERVIEW

With operations in several states, the company receives referrals from more than 2,500 healthcare facilities or physicians. Following each referral, firm employees create a purchase order from a product catalog of more than 17,000 products from 175 different manufacturers. The company then manages the process of billing and receiving payment from the insurance companies that have contract arrangements with patients, healthcare providers, and device manufacturers

Exacting Standards for Service Delivery

The company serves all parties involved in the medical process: the doctors who initiate the request for a medical procedure, the manufacturers of the implantable devices, the insurance carriers that pay the bills, and the patients who undergo the implant procedure. The company must also comply with strict government regulations for confidentiality and provide auditable records of every transaction.

"All of our customers—the healthcare facilities, the device manufacturers, and the insurance carriers—are all concerned about the patient. The timeliness, accuracy, and quality of our business processes are critical to the satisfaction of not just our direct customers but also the patient having the medical procedure," explained a senior Marketing and Product Development executive with the company. "We need to have the exact information available in the case of product recalls or safety bulletins. Our responsiveness and accuracy can be a matter of life or death."

Manual Processes and Increased Operational Complexity

For years, orders came to the company as referrals from doctors or hospitals in the form of secured fax messages. Employees had to key in the information from the faxed messages to create purchase orders. However, the manual processes and resulting silos of information made it difficult to operate efficiently.

Further hindering efficient operations, the company has an extremely complex pricing model, with volume tiers, discounts, and rebates that was dependent on the different contracts between device

> *"In my experience, we simply could not have accomplished our goals in such a limited time frame with Oracle or SAP. To accomplish that, we needed to shift to the Microsoft technology platform."*
>
> Vice President of IT and Application Development

> *"We increased our volume of business by more than 150%. We did this with less than 50% increase in our overall operations staff. And, our unit cost of processing a referral has fallen by 30%."*
>
> President and Chief Operating Officer

manufacturers, healthcare providers, and insurance carriers. A patient may receive partial payment from one insurance company and the balance from a second company.

According to the company's VP of IT and Application Development, "Before, all of that information was in people's heads or in Microsoft Office Excel spreadsheets on their desktops. Imagine preparing a bill for an insurance company and having to look up and apply terms of a contract to every item on the bill."

Processing orders was time consuming, and opportunities for error crept up at almost every step.

Limited Access to Management Information

The paper-based information flow also made it difficult for company employees and executives to obtain up-to-date information about business operations.

"Information about the state of the business was difficult to retrieve, and we could only give our customers limited information about order status, usage rates, and cost comparisons," said the company's VP of IT and Application Development. "We knew we needed to automate those processes and add workflows if we wanted to grow the business."

SOLUTION

The company considered business management solutions from Oracle and SAP, but the cost of implementation was high, and the solutions would have required time-consuming and expensive customizations. The company decided to convert its proprietary business management systems to Microsoft Dynamics GP and implemented Microsoft Dynamics CRM to manage its customer and order history.

"Microsoft Dynamics CRM gave us the ability to manage all the different entities we interact with, such as patients, physicians, manufacturers, hospitals, and surgery centers, and it gave us a way to structure that information," said the VP of IT and Application Development.

Specialized Integration

The company initially used the Smart Connect tool from eOne, an independent software vendor and Microsoft partner, to connect Microsoft Dynamics CRM to the financial management capabilities of Microsoft Dynamics GP. However, the company needed more advanced information management for efficiently managing the flow of information from hospital and doctor referrals to the company's catalog of implantable devices and to the insurance contracts that might apply to a particular purchase.

To achieve this, the company sought specialized customization to create more powerful, more flexible links between its financial and operational systems. To create these customized integrations, the company began taking advantage of the xRM application development platform.

The company asked two Microsoft Gold Certified Partner companies, Idea Integration (formerly known as Enterlogix) and CRM Accelerators, to provide the customizations and integrations between the multiple

components of Microsoft Dynamics GP, Microsoft Dynamics CRM, and the company's database information stored in Microsoft SQL Server.
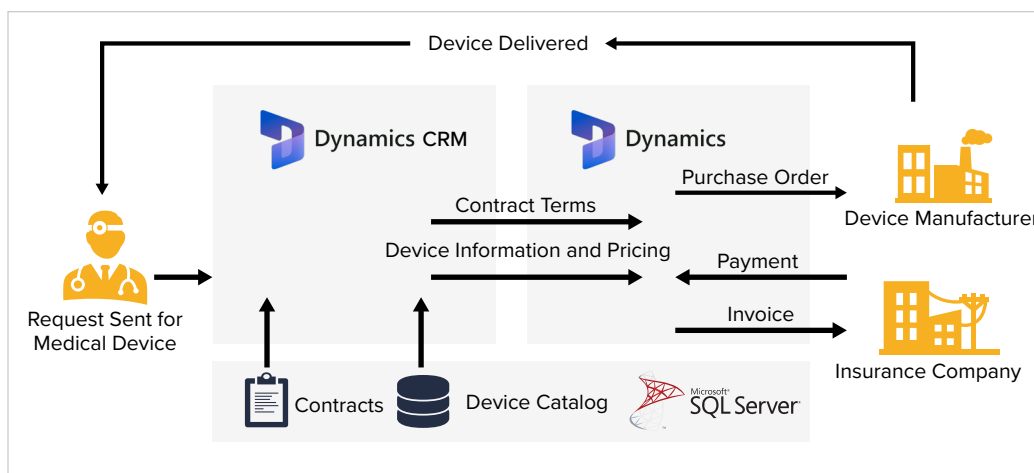
Says Tracy Knutson, Director of Delivery for Idea Integration, "The company wanted a complete case management life cycle for every referral it receives from a physician. So, we extended the capabilities of Microsoft Dynamics GP to make it work the way the company wanted it to."

Idea Integration built subledgers for each case, with records for each insurance company, and created a custom transfer-of-responsibility window so that the correct balance for each insurance company was calculated and passed on correctly. Now if anything changes, the correct information has to be processed for all the payers.

Advanced Business Logic and Automation

Working with the two partners, the company used a business rules management system from InRule Technology to guard against invalid or missing data by validating data in referral requests against a predefined set of business rules. The company's VP of IT and Application Development noted that InRule supports even complex rules that require queries against multiple data sources.

"Before, the only specification we could add to a window or a field was whether it was required or not," said the VP of IT and Application Development. "Now, we can use the business rules engine to drive specific contract behaviors for every case we process. We can enforce specific rules, and if a problem comes up, the system provides specific information to people about what's needed to solve the problem."

Idea Integration built links between Microsoft Dynamics CRM, Microsoft Dynamics GP, and the company's databases by using the eConnect module and other data integration tools from Scribe Software. Orders generated in Microsoft Dynamics CRM now flow automatically to Microsoft Dynamics GP to generate the required purchase orders, invoicing, and claim forms that go to the insurance company.

In addition, the company has connected these business management solutions to SQL Server and uses SQL Server Reporting Services, SQL Server Analysis Services, and Microsoft Office SharePoint Server. This connectivity helps to create both internal business intelligence reports and customer-facing portals that provide order status and usage information.

RESULTS

The company now has a much more efficient operational process. Information from physician referrals flows automatically into Microsoft Dynamics CRM, where it is combined with information about medical devices and insurance company contracts and linked automatically into Microsoft Dynamics GP.

INRULE

"Built-in business logic results in more reliable and faster processing and lower costs per referral; executives have better business insight; and the company provides valuable information to customers"

Vice President of IT and Application Development

Reduce Costs and Increase Business Volume

The company's business management solutions have made employees more productive and saved the company money. Employees no longer need to re-enter data or look up contract terms in paper files as a case evolves from a physician referral, to a purchase order for a medical device, and to an insurance claim for reimbursement for that device. In addition, the application of sophisticated business logic to the company's operations results in fewer errors, faster processing, and lower operating costs.

Since implementing the Microsoft Dynamics solutions, the company has seen a significant rise in the number of orders processed. The order-processing technology has enabled them to manage the growth of the business with only nominal increases in staffing while significantly reducing costs.

"We increased our volume of business by more than 150 percent," said the company's president and chief operating officer. "We did this with less than a 50 percent increase in our overall operations staff. And, our unit cost of processing a referral has fallen by 30 percent."

Accelerate Development of Workflows and Integrations

The company and its partners took advantage of the xRM application development platform included with Microsoft Dynamics CRM to simplify the work of creating the integration links and automated workflows the company needed.

"The Microsoft technology platform makes it easy to build and maintain these integration links," explained Idea Integration's Knutson. "We can add windows and fields where we need to without writing extensive amounts of custom code. If we had to build these integrations from scratch, it might have taken months instead of weeks."

The company recently needed to install a separate set of business pro- cesses to meet the confidentiality requirements of a new customer, a medical device manufacturer.

"We were able to build a completely firewalled application for that customer in 15 days," said the company's VP of IT and Application Development. "We could not have done that without the speed and flexibility that the xRM application development platform gives us. Any other platform would have taken at least 60 days to meet that customer's needs. That was a huge win for us."

The speed and flexibility of the development process was a significant cost savings for the company. Added the VP of IT and Application De- velopment, "In my experience, we simply could not have accomplished our goals in such a limited time frame with Oracle or SAP. To accomplish that, we needed to shift to the Microsoft technology platform. It enabled us to do things we could never have done in any other way. Keeping our technology footprint tight and concise is how we're going to continue to be successful in responding to the needs of the business.

Empower Executives and Improve Customer Service

The management system that the company, Idea Integration, and CRM Accelerators built now gives the company's executives much better information about company operations, which helps them manage the business better.

"We have dashboards and other tools that give us monthly, daily, and even hourly status reports on more than 100 different metrics that are important to running our business profitably," said the company's president and COO.

With the Microsoft Dynamics solutions, the company can provide a valuable service to the company's customers. Doctors can now track the status of purchase orders online, and both device manufacturers and insurance carriers can monitor overall trends in costs and demand.

"The integrated system that the company now has in place helps the company track every aspect of its business," says Mitch Milam, Chief Technologist at CRM Accelerators. "The system tracks which healthcare providers have made referrals, which medical devices came from which manufacturers, and which insurance carriers were involved. This environment gives the company tremendous institutional intelligence."

Sharing this information with customers adds value to the company's services and strengthens its position as a leader in the implantable-device benefits market.

This organization is one of hundreds of successful InRule User Community Members. Learn more about how InRule saves its customers an average of $1,485,150 and why 95% would recommend us to a colleague. Visit https://www.inrule.com/resource/value-of-inrule.