



**Medical Device Manufacturer  
Consolidates 18 Independent  
Systems into One Cohesive ERP with  
Microsoft Dynamics AX**

**Technical Case Study**



## Business Challenge

### Customer Profile

At the time of the initial implementation, Accuray was a \$200 million revenue company, with 600 employees spread from Hong Kong, Tokyo and Paris to its Sunnyvale, California headquarters. Today the company has grown to \$500m in revenues with 1,100 employees, and has paved the way to future profitable growth, both organically and through acquisition.

### Customer Profile

Accuray was managing a highly complex medical device manufacturing process with manual data entry and 18 disparate software systems. To accommodate the company's growth objectives, consolidation to a single, flexible and robust ERP system was crucial

### Software & Services

- Microsoft Dynamics AX
- Microsoft Dynamics CRM
- Microsoft BizTalk 2008 R2
- Customization and Implementation Services - Armanino

### Benefits

- Consolidated 18 legacy systems
- Eliminated manual entry and introduced Electronic Signatures for FDA Validation

### Modules

- Microsoft Dynamics AX for High Tech: Medical Device - Armanino
- Revenue Recognition - Armanino
- Field Service - Hitachi
- TQCM - ERP Solutions
- Vertex Tax Accounting

Accuray Incorporated develops, manufactures and sells personalized, innovative treatment solutions that set the standard of care with the aim of helping patients live longer, better lives. The Company's leading-edge technologies – the CyberKnife and TomoTherapy Systems – are designed to deliver radiosurgery, stereotactic body radiation therapy, intensity modulated radiation therapy, image guided radiation therapy, and adaptive radiation therapy.

Accuray had been using many paper-based processes and the prospect of using (CFR21 Part 11) electronic signatures to comply with their FDA validation requirements were next to impossible because of the multitude of disparate systems that were in use, not to mention the general lack of industry support provided by many of those systems. As such, Accuray had to maintain extensive paper-based records which led to huge inefficiencies from delayed access to, storage, retrieval, and analysis of information.

Accuray worked with Armanino to catalogue 62 of their major business processes and the incumbent systems that were being used to support those processes. To support its operations, Accuray's legacy systems environment included 18 individual systems and 34 Excel spreadsheet-supported business processes. Additionally, a large volume of paper records were being generated to capture physical signatures and approval processes, leading to large volumes of paper documentation to ensure detailed recordkeeping. For instance, for each of the installation projects of these systems for its customers, Accuray quoted, configured, designed, sold, managed export compliance, invoiced, purchased components and built subassemblies for, constructed and installed at their customer site, sold service contracts for, maintained spare parts, performed field service maintenance, repairs and calibrations, and maintained the device history records. Because these processes overlapped many disparate systems, several inefficiencies were found that added process latency and overhead.

## Business Improvements

Accuray selected Microsoft Dynamics AX 2009 and Microsoft Gold Certified ERP Partner Armanino for implementation. The medical device manufacturer has been live with 80 concurrent users since January 1, 2011. Accuray systematically identified the low-hanging fruit in terms of the systems that could be replaced with and consolidated into their Dynamics AX environment, using ISV solutions and customizations where necessary to accomplish broad coverage of its business processes in a single integrated ERP solution using Dynamics AX.

Accuray has achieved incredible success through consolidating its business applications to provide a comprehensive business management platform with Microsoft Dynamics AX. Having field service fully integrated with its Dynamics AX environment enables Accuray to ensure efficient

scheduling of its team of more than 50 field service professionals to constantly test and ensure optimal calibration and maintenance of the several hundreds of systems that have been installed at their clients around the world. Spare parts management is further improved through real-time integration to FedEx 3PL logistics depots around the world using Microsoft BizTalk 2008 R2. As products are serviced, an FDA requirement specifies that the history of all changes made to a medical device over its lifecycle are tracked and recorded along with the related information and certifications of the people making those changes, referred to as a Device History Record (DHR). Having the full DHR lifecycle integrated into Dynamics AX enabled Accuray to consolidate another bespoke application that had been in place previously, and significantly reduced the total cost of ownership to maintain their applications environment.

Accuray also replaced a custom contract management solution through developing a best of breed contracts module within Dynamics AX. With more than 30% of revenues coming from ongoing multi-year specialized maintenance contracts on the devices the manufacturer sells and services, having an integrated contracts module provides for significant time savings and drastic improvements in contract adherence in a global environment where contract terms can vary significantly across many sales regions.

Accuray uses the advanced projects modules within Dynamics AX which provide significant additional value to its industry implementation by not only providing integrated project accounting, production and project management capabilities, but they provide a foundation to support all of Accuray's industry-specific requirements around DHR, contract management, field service, advanced quality management, and product lifecycle management.

"Microsoft Dynamics AX has given our company great sales and service support, both internally and for our customers," said Arul Daniel, Director of Enterprise Applications for Accuray.

A big win for Accuray was its ability to implement CFR21 Part 11 compliant electronic signatures in Dynamics AX in an FDA validated environment. With the help of the FDA Validation Toolkit, Accuray was able to save time with its validation efforts, redeploying resources to more strategic functions within the company. Remarkably, Accuray passed an FDA audit just three months after going live on Microsoft Dynamics AX

Accuray also found significant benefits from using the native product builder module in Dynamics AX to ensure the design integrity and export compliance of its configured systems.

The medical device manufacturer is using the Dynamics AX HRM modules, which allowed them to consolidate yet another set of Excel files and Access databases.

All told, Accuray was able to consolidate more than 18 independent systems that were being used globally into a single integrated Dynamics AX platform to support an extensive set of industry requirements.

Further, a true test of the excellence of its implementation was challenged in June 2011, when Accuray (Nasdaq: ARAY) acquired Tomo Therapy (Nasdaq: TOMO), which had been a longstanding SAP customer. Although Accuray had only purchased Dynamics AX 18 months earlier and had only been live on Dynamics AX for 6 months at the time, the company clearly demonstrated that it had deployed far more functionality in that period of time than TOMO had accomplished in 4 years on SAP after several millions of dollars of investment. More importantly, the total cost of ownership going forward for AX was less than half of the annual cost to maintain SAP. As a result of the detailed analysis, Accuray's executive team decided to replace the Tomo Therapy SAP system with Dynamics AX. The replacement of SAP has proven to significantly reduce the TCO, while providing far richer support for industry requirements.

Accuray has consolidated far more systems than their peers. Accuray leverages the entire Microsoft stack, including HRM, Manufacturing, Hitachi Field Service, Engineering, Quality, Precision Point for BI, and CRM to enable decision-making and streamline business processes. Accuray operates its global application support with one-half of IT team size required at companies of similar size and complexity.

## For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers in the United States and Canada who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to: [www.microsoft.com](http://www.microsoft.com)

For more information about Cloudmark products and services, call (415) 946-3800 or visit the Web site at: [www.cloudmark.com](http://www.cloudmark.com).

For more information about Armanino products and services, call (925) 790-2600 or visit the Web site at [amllp.com/microsoft-dynamics](http://amllp.com/microsoft-dynamics).

## Microsoft Dynamics

Microsoft Dynamics is a line of integrated, adaptable business management solutions that enables you and your people to make business decisions with greater confidence. Microsoft Dynamics works like familiar Microsoft software such as Microsoft Office, which means less of a learning curve for your people, so they can get up and running quickly and focus on what's most important. And because it is from Microsoft, it easily works with the systems that your company already has implemented. By automating and streamlining financial, customer relationship, and supply chain processes, Microsoft Dynamics brings together people, processes, and technologies, increasing the productivity and effectiveness of your business, and helping you drive business success.

For more information about Microsoft Dynamics, go to: [www.microsoft.com/dynamics](http://www.microsoft.com/dynamics).

© Microsoft Corporation. All rights reserved.

This document is for informational purposes only. MICROSOFT MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN THIS SUMMARY. Microsoft, BizTalk, Excel, Microsoft Dynamics, Windows, Xbox, and Xbox 360 are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

