

ROI Case Study: Hummingbird RM Guidant Corporation

THE BOTTOM LINE

Using Hummingbird RM to replace time-intensive records management processes, Guidant Corporation reduced personnel costs and communication costs and increased employee productivity for both records administration staff and internal, line-of-business customers.

ROI: 318%

Payback: 4 months

THE COMPANY

Guidant Corporation designs and manufactures medical devices, specializing in cardiovascular equipment including pacemakers, defibrillators, and cardiac resynchronization devices. Based in Indianapolis, Indiana, and founded in 1994, Guidant employs about 10,000 people worldwide today. The company's reported revenues for the fiscal year 2001 were more than \$2.7 billion.

THE CHALLENGE

By 2001, Guidant Corporation's existing records management facilities depended on a time- and paper-intensive filing process. The FDA requires that companies retain information such as patent data, design specifications and manufacturing, and quality assurance information for a product's lifetime plus two years after the product is retired. Various EPA, labor, and tax regulations also require Guidant to maintain control of other records produced in the normal course of business. Because federal regulations dictate that Guidant must treat a wide range of documents as records, any inefficiencies in document filing and searching had a negative impact across the entire company.

Whenever records management personnel filed a document, they had to fill in a form and send it with the document to the main records center; records center personnel would enter the data from the form into an aging computer system before filing the record. In all, employees needed to complete five manual steps to file any document. In addition to these time burdens, the process presented numerous opportunities for error during data entry, and the performance of the existing software had begun to degrade as system volume and use increased.

Administering the system and searching within it had also become onerous tasks. Through a series of corporate acquisitions, Guidant had come to rely on 10 different databases for record tracking. This placed unwanted burdens on IT staff. Whenever personnel needed to search for a record, locating a document often required a series of searches in more than one database. Since each search had to be conducted by phone with the help of a records administrator, each failed search would prompt another call and a

handoff to another administrator. As a consequence, Guidant's line-of-business personnel needed extra time to make any decision that depended on reference to records. For example, engineers had to wait for old engineering documents before making new design decisions, and legal staff might spend hours awaiting patent histories. All of these delays cost time and money.

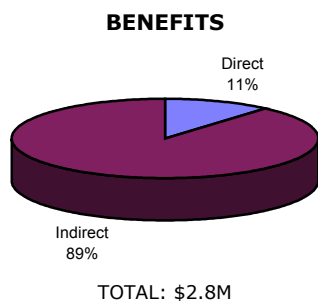
THE STRATEGY

In February 2001, Guidant's records management supervisory staff decided that it was time to invest in a new records management solution. The company had already had positive experiences using Hummingbird's imaging and document management software, which it purchased in 1998, so the group considered its solution, Hummingbird RM, first. After reviewing Hummingbird RM, the selection team decided to deploy it for the following reasons:

- Hummingbird RM could address the existing inefficiencies. Company personnel would be able to file documents simply by filling out an online version of the existing form, eliminating the need for data re-entry and other manual steps. Records management could be centralized, and internal customers would have a single point of access for their queries.
- Hummingbird RM could support both records management and retention scheduling within an integrated electronic document management system.
- Hummingbird RM could easily support Guidant's existing records retention schedules and policies, virtually automating their execution.
- Hummingbird RM was Web enabled, and its search and access functionality could be deployed to internal customers through an existing intranet.
- Purchasing Hummingbird RM would allow Guidant to leverage its prior investments in Hummingbird software as well as its experience deploying and using those solutions.

Between May and July of 2001, three of Guidant's internal IT staff and the records management supervisor installed the new solution in the centralized records facility in Minnesota. Five records center personnel, who provided domain expertise and feedback, occasionally assisted the team during development, installation, and testing.

During this first phase, the Hummingbird RM solution was available only to five records administrators through Hummingbird's client software. By October 2001, the development team had installed the RM solution in records facilities in Ireland, Puerto Rico, and Redmond, Washington. At that time, the team also enabled read-only records access for 240 line-of-business users via a corporate intranet.

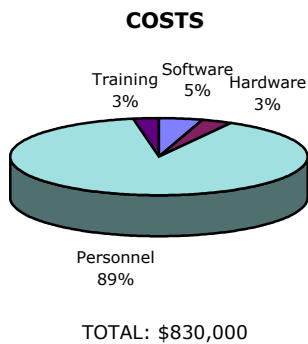


KEY BENEFIT AREAS

Using Hummingbird RM has enabled Guidant's employees to file, manage, and find records faster and with less effort than before.

The greatest improvements have occurred in departments that traditionally produce millions of pages of paper records, such as finance, payroll, quality assurance, manufacturing, and device tracking. Key benefits of the solution include the following:

- Reduced personnel costs. Replacing distributed facilities and manual processes with a more centralized, automated system enabled Guidant to reassign a records administrator. In addition, Guidant has not had to add any new records management staff despite a doubling in work volume — an increase that would have necessitated at least one new hire under the old system.
- Reduced postage and communications costs. Records administrators in remote offices no longer have to mail or fax duplicates to satisfy internal customers' requests.
- Increased records staff productivity. Central records staff who used to spend five hours each week preparing documents and forms for the records center now spend just one, on average.
- Increased business user productivity. Personnel in engineering, finance, and legal departments who used to spend hours on the phone tracking down records save about two hours per week thanks to web access to records management. The time personnel spent waiting for documents has also shrunk from a day or two to a couple of hours at most, enabling quicker cycle times and faster decisions across the company.
- Increased IT staff productivity. The responsibilities that fall on system administrators have decreased significantly as a result of the Hummingbird RM deployment.



KEY COST AREAS

Personnel costs will make up the greatest share of Guidant's 3-year costs for the project, amounting to 89 percent of the total. Other cost areas include software server and seat licenses, hardware upgrades, and training of IT staff and end users.

LESSONS LEARNED

Guidant discovered that involving users through all stages of the process — requirements definition, peer review, and customization — was key to project success. In this way the system reflected most users' needs from the moment it was deployed, greatly reducing the time and effort spent making changes and addressing bugs after initial deployment.

Guidant also reports that deploying through a Web-based intranet reduced training costs because it took advantage of employees' existing familiarity and proficiency in using Web browsers.

CALCULATING THE ROI

Nucleus quantified the costs of software, hardware, consulting, personnel, and other investments over a 3-year period to quantify Guidant Corporation's total investment in Hummingbird RM. Existing investments that Guidant had already made in Hummingbird imaging and DM software were not included in this

ROI analysis because this study focuses solely on the costs and benefits associated with Guidant's deployment of Hummingbird RM. Similarly, this analysis does not include the cost of a previously planned data conversion project, though it did serve as a foundation for the success of the records management solution.

Direct benefits calculated included reductions in personnel costs and communications costs. Indirect benefits, which include the increased productivity of records administrators, internal users, and IT staff, were calculated based on the average fully loaded costs of employees in each of these groups. Time savings associated with faster filing processes (for records administrators) and faster record searches (for internal customers) were multiplied by a productivity correction factor to account for the inefficient transfer of time from time saved to additional time worked. By choosing a solution that was based on technology already familiar to internal developers, Guidant also avoided consulting costs that likely would have been a part of deploying any alternative solution. However, because this rests on speculation, Nucleus has chosen not to include the apparent benefit in this study.

SUMMARY

Project:	Hummingbird RM
Annual Return On Investment (ROI)	318%
Payback Period (Years)	0.31
Net Present Value (NPV)	701,922
Average Yearly Cost of Ownership	276,757

ANNUAL BENEFITS	Pre-start	Year 1	Year 2	Year 3
Direct	0	105,200	105,200	105,200
Indirect	0	814,450	814,450	814,450
Total Benefits Per Period	0	919,650	919,650	919,650

DEPRECIATED ASSETS	Pre-start	Year 1	Year 2	Year 3
Software	14,385	0	0	0
Hardware	20,000	0	0	0
Total Per Period	34,385	0	0	0

DEPRECIATION SCHEDULE	Pre-start	Year 1	Year 2	Year 3
Software	0	2,877	2,877	2,877
Hardware	0	4,000	4,000	4,000
Total Per Period	0	6,877	6,877	6,877

EXPENSED COSTS	Pre-start	Year 1	Year 2	Year 3
Software	0	8,000	8,000	8,000
Hardware	0	3,000	3,000	3,000
Consulting	0	0	0	0
Personnel	133,333	202,500	202,500	202,500
Training	22,053	0	0	0
Other	0	0	0	0
Total Per Period	155,386	213,500	213,500	213,500

FINANCIAL ANALYSIS	Results	Year 1	Year 2	Year 3
Net cash flow before taxes		706,150	706,150	706,150
Net cash flow after taxes		356,514	356,514	356,514
Annual ROI - direct and indirect benefits				318%
Annual ROI - direct benefits only				-45%
Net Present Value (NPV)				701,922
Payback (Years)	0.31			
Average Annual Cost of Ownership		403,271	308,386	276,757
3-Year Cumulative ROI	726%			
3-Year IRR	314%			

FINANCIAL ASSUMPTIONS

All Government Taxes	50%
Discount Rate	15%

All calculations are based on Nucleus Research's independent analysis of the expected costs and benefits associated with the application profiled in the accompanying case. Financial modeling tool, format, and methodology copyright Nucleus Research Inc., all rights reserved.