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Document **H91**

## **ROI CASE STUDY DIGITECH SYSTEMS CARDELL CABINETS**

### **THE BOTTOM LINE**

**Cardell Cabinets replaced its paper-based accounting and invoicing processes with Digitech Systems PaperVision Enterprise and PaperFlow, streamlining processes and accelerating payments while increasing staff productivity.**

**ROI: 101%**

**Payback: 1 year**

### **THE COMPANY**

One of the most important rooms of a home is the kitchen. For more than 40 years, Cardell Cabinets has been helping homeowners make their kitchens more efficient and attractive with cabinets in a broad array of door styles and finishes ranging from the grand traditional to the trendy and contemporary. Based in San Antonio, Texas, Cardell is one of the largest manufacturers of kitchen and bathroom cabinets in the United States, employing more than 1000 employees.

### **THE CHALLENGE**

Although Cardell had an imaging system for storing electronic invoices, invoices still had to be manually scanned and entered into the system — which took a considerable amount of time and slowed the account management process. Even though five employees were devoted to scanning invoices, there was often a backlog of a few months before invoices were available in the system. If customer service representatives needed a copy of an invoice that was 45 days old, for example, they had to locate the paper invoice because it hadn't yet entered the system — which slowed the customer support process and slowed accounts receivables.

### **THE STRATEGY**

Cardell considered a number of different imaging and workflow solutions and selected Digitech Systems PaperVision Enterprise and PaperFlow for a number of reasons:

- The solution's barcode scanning and match and merge capabilities would accelerate the speed of entry into the system.
- Customer service, accounts receivables, and other staff would be able to rapidly search and access invoice information through the intuitive interface.
- The solution was very cost competitive compared to other applications with similar levels of functionality.

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- H51 Profiles in content management: Digitech Systems
- H43 Digitech Systems ROI case study – Bigelow Tea
- H26 Content management guidebook
- H11 Digitech Systems announces message manager
- G80 Digitech Systems ROI case study – Childrens' Hospital New Orleans

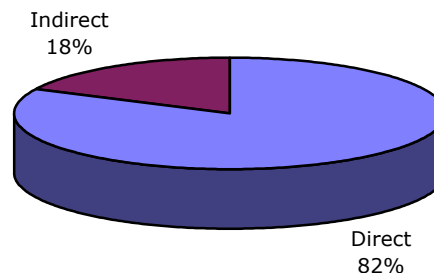
Beginning in May 2002, Cardell worked with Caso Document Management, a Digitech Systems reseller, to migrate the existing images to PaperVision Enterprise and customized the solution to enable Cardell to be able to print both invoice number and sales order numbers as barcodes directly onto the invoices. This enabled them to quickly index the documents and use match and merge to connect them to the PaperVision Enterprise database. Now, instead of scanning a full set of documents, scanning clerks can just match the barcode sheet with the supporting documents and complete a batch scan — all the relevant information is automatically entered in the database.

The deployment took approximately one week, including a week of training for active users of the system and a 30-minute training session for casual users of the system. Since, the company has deployed PaperVision Enterprise to other areas such as human resources to support more streamlined data entry.

**KEY BENEFIT AREAS**

Deploying Digitech Systems PaperFlow and PaperVision Enterprise has enabled Cardell to go beyond just archiving documents to being able to support sales, accounting, and customer service with automated access to account information. Key benefit of the project include:

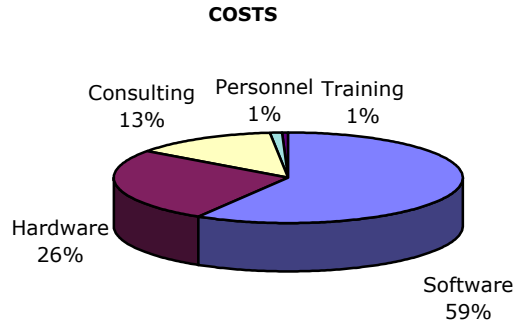
- Increased staff productivity. Because all users can rapidly access the information they need, they spend less time searching for documents and more time supporting customers.
- Reduced paper and storage costs. Accelerating the data entry process has enabled Cardell to reduce the need for paper and filing storage areas.
- Redeployed staff. By accelerating the data entry process, Cardell has been able to remove 3 staff members that were devoted completely to scanning documents, and reduce overtime payments.
- Accelerated accounts receivables. Because invoices are more rapidly entered into the system, they can now be collected upon more rapidly, enabling Cardell to improve accounts receivable staff productivity while reducing days sales outstanding.

**BENEFITS**

**TOTAL: \$683,058**

## KEY COST AREAS

Key cost areas for the deployment included software, consulting, personnel, hardware, and training. Software costs made up more than half of the total budget, which is not surprising given that training, personnel, and consulting costs were quite low. Hardware costs included the cost of servers to support the projects as well as new scanners and a jukebox that was initially used to support the project but has since been retired.



**TOTAL: \$227,180**

## LESSONS LEARNED

As imaging and content management technology becomes less costly and less risky to deploy and support, more and more organizations are finding that reinvestigating their content management strategy can deliver significant returns. Although Cardell had an existing imaging system, upgrading to one that addressed the broader business process enabled it to dramatically improve staff productivity and save money — with limited customization costs.

## CALCULATING THE ROI

Nucleus calculated the costs of software, hardware, consulting, personnel, training, and other investments over a 3-year period to quantify Cardell's total investment in Digitech Systems.

Direct benefits quantified included reduced paper and storage costs, redeployed staff and reduced staff overtime costs as a result of a more streamlined data entry process, and interest savings as a result of accelerating the collection of accounts receivables. Indirect benefits, including the increased productivity of customer service, human resources, and accounting staff, were calculated based on the time saved searching for documents, using the fully loaded average cost of an employee and a correction factor to account for inefficient transfer of time between time saved and time worked.

*Nucleus Research is a global provider of investigative technology research and advisory services. Building on its unique ROI case study approach, for nearly a decade Nucleus Research has delivered insight and analysis on the true value of technology and strategies for maximizing current investments and exploiting new technology opportunities. For more information or a list of services, visit [NucleusResearch.com](http://NucleusResearch.com), call +1-781-416-2900, or e-mail [info@NucleusResearch.com](mailto:info@NucleusResearch.com).*

# DETAILED FINANCIAL ANALYSIS

## CARDELL CABINETS

### SUMMARY

Project:	<b>Digitech Systems</b>
Annual return on investment (ROI)	<b>101%</b>
Payback period (years)	<b>0.96</b>
Net present value (NPV)	<b>127,683</b>
Average yearly cost of ownership	<b>75,727</b>

<b>ANNUAL BENEFITS</b>	<b>Pre-start</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Direct	0	187,205	187,308	187,390
Indirect	0	40,385	40,385	40,385
<b>Total Benefits Per Period</b>	0	227,590	227,693	227,775

<b>DEPRECIATED ASSETS</b>	<b>Pre-start</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Software	60,682	0	0	0
Hardware	35,000	5,000	20,000	0
<b>Total Per Period</b>	95,682	5,000	20,000	0

<b>DEPRECIATION SCHEDULE</b>	<b>Pre-start</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Software	0	12,136	12,136	12,136
Hardware	0	7,000	8,000	12,000
<b>Total Per Period</b>	0	19,136	20,136	24,136

<b>EXPENSED COSTS</b>	<b>Pre-start</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Software	0	24,142	24,142	24,142
Hardware	0	0	0	0
Consulting	0	10,000	10,000	10,000
Personnel	2,019	168	168	168
Training	1,548	0	0	0
Other	0	0	0	0
<b>Total Per Period</b>	3,567	34,310	34,310	34,310

<b>FINANCIAL ANALYSIS</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Net cash flow before taxes	188,280	173,383	193,465
Net cash flow after taxes	101,208	86,759	108,801
<b>Annual ROI - direct and indirect benefits</b>			<b>101%</b>
Annual ROI - direct benefits only			81%
<b>Net present value (NPV)</b>			<b>127,683</b>
<b>Payback (years)</b>			<b>0.96</b>
Average annual cost of ownership			75,727
3-year IRR			85%

### FINANCIAL ASSUMPTIONS

All government taxes	50%
Discount rate	15%