



2D Barcoding The High-Speed Solution

Virginia Department of Taxation, Lee Mikelson
American Management Systems, Beth Payne-Jackson
Imaging Business Machines, Laurie Mitchell



2D Barcoding The High-Speed Solution

A Small Piece of a Big Pie

The Partnership Project

- Replaces the legacy computer systems with an Integrated Revenue Management System
 - Evaluates every business process
 - Identifies opportunities for process improvement and technical innovation
 - Focuses on customers



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2D Barcoding

The High-Speed Solution

A Small Piece of a Big Pie

Management Improvements

- Better responses for customers with complex questions
- Forms that are easier to complete and to process
- Internet filing options
- On-line access to business accounts
- Easier identification of audit candidates



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2D Barcoding

The High-Speed Solution

Why a High-Speed Scanner?

- Cascading Technologies
- Higher data collection efficiencies
- Image Archive



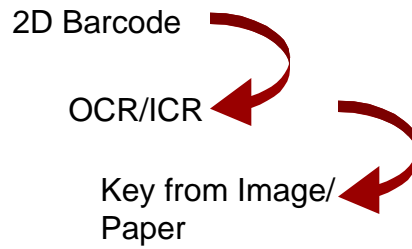
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Cascading Technologies



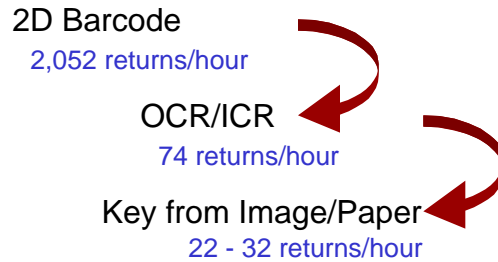
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Cascading Technologies mean higher efficiencies



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2D Barcoding

The High-Speed Solution

Advantages of Image Archive

- Reduced paper storage
- Faster access to records
- Improved customer service



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2D Barcoding

The High-Speed Solution

Why the ImageTrac?

- Multiple cameras
 - 400 dpi
 - Barcodes stay small
 - 200 dpi
 - Digitally drops out color
 - Captures a complete image for archive and viewing, letting us eliminate templates over images.



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The Process

- Collect 400 dpi and 200 dpi images
- If 2D fails, cascade to OCR/ICR workflow
- Commit 200 dpi images to storage
- “KILL” successful 2D returns



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GOAL



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The Results

77% Kill Rate

Barcode misreads attributed to:

- Incomplete specifications
- Damaged barcodes (labels over barcodes)
- Bad data types in fields (untested codes)
- Differences in print quality (laser vs. ink-jet printers)



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The Results

Timely refund returns with 2D barcodes were processed with zero data entry

Timely paid returns with 2D barcodes were processed with only the payment number corrected (read with an OCR engine)



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The High-Speed Solution

Lessons Learned

Partnerships are critical to success!

- AMS, IBML, Software Developers
 - Launched many new technologies
 - AMS' gradual approach to deployment minimized the bruises
 - Able to deploy 2D late in system development
 - Chose partners who understood our business and were attentive to our needs.



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Lessons Learned

Software Developer Certification

- Provide specifications early and update frequently
- Begin testing earlier and communicate better
- Provide clear, concise specifications



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Lessons Learned

TEST, TEST, TEST!!



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