

# MINNESOTA DEPARTMENT OF REVENUE

Transforming state tax and revenue operations with an end-to-end solution for tax returns, check processing, and deposits



## ESSENTIALS

### Industry

State and local government

### Business Challenges

- Inefficient processes for business tax returns
- Need to improve check processing and move to electronic deposits

### Results

- Automatic classification of more than 800 document types supports complex business tax return processing and replaces time-consuming, manual processes
- Department saves at least \$1 million by leveraging existing, standard scanning hardware and software platform
- Same-day deposits for majority of checks; overall time to deposit expected to be reduced by at least 40 percent

CUSTOMER PROFILE

## OVERVIEW

The Minnesota Department of Revenue manages the state's revenue system, administering 28 different taxes and collecting more than \$17 billion annually. This money funds education, local government aid, property tax relief, social service programs, highways, and other state programs and operations.

## BUSINESS CHALLENGE

The Minnesota Department of Revenue (DOR) has been on the forefront of automated document capture for tax return processing since 2002, when the department began using an earlier version of EMC® Captiva® intelligent enterprise capture solution to ingest and process individual (personal) tax returns and related correspondence.

By 2006, DOR was ready to migrate to the next generation of the technology, and selected EMC partner Information Capture Solutions (ICS) to provide a solution that would include high-speed scanners and a more advanced capture solution capable of automatically classifying thousands of documents and extracting tax data.

## INEFFICIENT PROCESSES FOR BUSINESS TAX RETURNS

Most recently, DOR sought to bring business tax returns into the capture workflow process. Unlike individual filings, which average seven pages, Minnesota's business tax returns can be highly complex—often consisting of more than 100 pages and including dozens of different forms and schedules.

Since a significant percentage of business tax returns are still filed in paper form, DOR personnel were spending too much time on manual processes such as sifting through the returns to classify documents and ensure that the proper forms had been included. They were also hand-keying data from the forms into the department's tax system, introducing additional error potential into the process.

## IMPROVING CHECK PROCESSING AND MOVING TO ELECTRONIC DEPOSITS

Another area with room for improvement was DOR's process for receiving, processing, and depositing tax payments, which come into the department as a separate mailing from the tax returns. The department needed to replace its legacy remittance system for check processing, which was based on technology that was reaching the end of its life and would soon be unsupported.

## Results (continued)

- System's ability to determine best method for transmitting each deposit supports department policy and yields additional savings
- Steps required for check presentment reduced from seven to four; courier service for paper checks eliminated by electronic deposit

With the previous check processing system, DOR personnel began by scanning all of the checks and vouchers. Every check was manually keyed; so were many vouchers. Once the transaction balanced, they were required to scan each check and voucher again to encode the check. At the end of each day, DOR used a courier service to hand-carry the paper checks to the bank for depositing, which meant the funds would not be posted until at least the next day.

"Like many state governments, we must operate as efficiently as possible, with fewer resources, in today's economic climate. Replacing our previous system with technology that only supports payment processing would have required a significant expenditure—and that money was simply not available to us," says Cynthia Rowley, Director of Tax Operations for the agency. "Instead, ICS proposed that we leverage our existing document capture system to streamline check processing and move to electronic deposits."

## SOLUTIONS

ICS brought the department online with two IBML high-speed, high-capacity scanners, and migrated all of DOR's previous Captiva processes to the EMC Captiva InputAccel® intelligent enterprise capture platform. InputAccel is a fully automated solution that intelligently classifies hundreds of incoming tax return documents, automatically extracts the business data, and transforms the content into digital information for delivery to DOR's backend content management systems and business processes.

**"We saved at least a million dollars by leveraging our existing scanning hardware and the Captiva software environment, instead of purchasing a new system for check processing. We've also eliminated the costs of maintaining specialized software, license fees, and support for the old system—as well as courier fees."**

Cynthia Rowley  
Director of Tax Operations at Minnesota Department of Revenue

To meet DOR's latest requirements for processing all tax returns, including business tax documents and electronic payments, ICS proposed that DOR extend its Captiva document capture environment to use the advanced document classification and data extraction capabilities of EMC Captiva Dispatcher.

Working together with the IBML scanners, Dispatcher uses intelligent recognition technologies to automatically identify and classify complex paper documents such as DOR's business tax returns and associated forms, capture the necessary data, and then deliver the information to the department's backend systems.

In order to add business tax returns to the overall Captiva capture process, ICS defined more than 800 document types in Dispatcher that identify the various business tax return documents, as well as required documentation for every kind of business tax scenario. Once the entire return is scanned and intelligently classified, Dispatcher takes over and applies business rules to determine if the return is complete and acceptable. If the return is missing certain documents or other information, Dispatcher automatically routes the document set to a work queue for further processing by DOR staff.

## **A COMPREHENSIVE CAPTURE PROCESS FLOW FOR ELECTRONIC CHECK PRESENTMENT**

"When we originally purchased the IBML scanning hardware and Captiva software, it was with the intent that we could someday adapt it to handle electronic check presentment," says Rowley.

To replace DOR's aging check processing system, ICS integrated a customized solution into Captiva that supports electronic check presentment to banks as defined by the U.S. Check Clearing Act for the 21st Century Act (also known as Check 21). Check 21 enables any bank to accept and honor an electronic image of a check that is considered the legal equivalent of the original document.

ICS partnered with Tangent Systems, a leading provider of electronic check clearing software, to integrate Tangent's Deposit21 solution into DOR's Captiva intelligent capture solution. As a module within Captiva, Deposit21 handles the actual check transmission to the bank according to Check 21 guidelines.

With the new solution, each check and its accompanying voucher is scanned into Captiva. Captiva then classifies each document and sends check images off to the Deposit21 module where the check amount is captured and validated. Recent upgrades to the IBML scanners provide Deposit21 with the magnetic ink character recognition (MICR) line data on each check for optimum accuracy.

Captiva verifies that the check amount matches the amount due from the payment voucher; if different, the system automatically routes the return to DOR accounting staff for further processing. Once Captiva has determined that the payment transaction is balanced, it releases the check to Deposit21 for electronic deposit. Deposit21 automatically determines the optimum method for transmitting the check to the bank.

The Minnesota DOR has specified a hierarchy of electronic deposit options for Deposit21 to use. For personal checks under \$25,000, the system transmits the deposit via the Automatic Clearing House (ACH) network, which has the lowest cost per transaction and guarantees next-day availability of the funds. Any checks over \$25,000 or those that don't otherwise qualify for ACH are deposited via the Check 21 image cash letter method which costs a little more. Finally, the system identifies those few sub-standard checks, such as illegibly dark money orders, that must be sent to the bank in paper form.

Deposit21 formats, encrypts and transmits the electronic deposit files per each bank's standards. When each file transmission is complete, the bank sends an acknowledgement file to Deposit21 confirming that the bank accepted the deposit and credited DOR's account with the appropriate dollar amount. The system automatically creates a short-term archive of all check images to facilitate any research or adjustments for bank debits and credits such as NSF's.

## **GREATER EFFICIENCIES EQUAL FASTER DEPOSITS**

With EMC, the Minnesota DOR could expand its existing EMC Captiva solution to support a high-volume tax return and check processing workflow. During peak periods, the department can process and deposit up to 75,000 checks a day—and the system ingests more than 50 million pages every year.

With the new electronic check presentment solution, DOR has reduced its previous seven-step process to only four steps for "clean" transactions (which require no additional processing by agency staff). Checks no longer have to be hand-keyed prior to scanning since Captiva and Deposit21 handle the extraction and validation of the amounts. Since Deposit21 automates the electronic deposit, checks only need to be scanned once. And finally, the fully automated system has completely eliminated the requirement, and the cost, of a courier to hand-carry the paper checks to the bank.

DOR had set a target of a 40 percent reduction in deposit time for each transaction as a result of the new Captiva-Deposit21 solution, which went into full production for the 2011 tax return season.

"We easily surpassed that goal, since we're virtually assured of same-day deposit for most types of checks," says Rowley. "Previously, when the checks were couriered in hard copy form, we had to have them ready to go much earlier in the day in order to ensure timely access to the funds. It paid off—DOR was able to deposit 75,700 items in a single day. The past one day record using the old system was 48,400."

### **AWARD-WINNING SAVINGS**

"We saved at least a million dollars by leveraging our existing hardware and Captiva software instead of purchasing a new system for check processing. We've also eliminated the costs of maintaining specialized software, license fees, and support for a stand-alone remittance system—as well as courier fees," says Rowley. The system has also successfully handled payment processing for other state agencies, she adds. These savings, and the system's leverage across other state offices, got the attention of Minnesota Gov. Mark Dayton. In 2011, DOR's check presentment system was one of two state agency projects to receive the Governor's Better Government for Minnesota Award.

### **SUMMARY**

The EMC Captiva intelligent enterprise capture solution has been truly transformational for the Minnesota DOR, letting the agency expand its electronic processing of business and personal tax returns, and electronic and check payments. By integrating Captiva with Tangent's Deposit21 electronic check deposit solution, DOR avoided a million-dollar expenditure to replace its old payment processing equipment.

This overall tax return processing solution means the agency will continue reaping the efficiencies and cost savings of electronic payment and tax return management well into the future. "We believe we have established a blueprint for electronic tax return processing that can be leveraged across tax types and agencies, including revenue agencies in other states," says Rowley.

## **CONTACT US**

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