

# TRANSFO



David Brattain,  
senior vice president,  
Elavon

Elavon, headquartered in Atlanta, delivers reliable, secure payment solutions to 1 million merchant locations around the world. To provide optimum levels of customer service, the company's IT systems must be resilient, available and scalable. David Brattain, senior vice president of systems, EITM and production support, discusses how Elavon has achieved its goals by transforming its IT organization.

**C**ONTINUITY OF CUSTOMER SERVICE IS important in any industry, but for a financial services company such as Elavon, continuity is fundamental for business growth. Our customers will not tolerate having to wait for a financial transaction to be processed: They want fast, faultless service.

Such high expectations place considerable pressure on our IT systems. To ensure a seamless customer experience, our IT infrastructure has to be reliable, scalable and always available. To deliver on all these fronts, we needed to develop a robust and integrated approach to IT management that could also facilitate business change, regulatory compliance and cost control.

As the third largest merchant acquirer in North America, Elavon serves restaurants, retailers, hotels, mail-order businesses and government agencies in 30 countries. Every day, we process millions of transactions on behalf of our merchant customers—from check and credit card payments to prepaid gift cards. Elavon also provides payment terminals, PIN pads, printers and proprietary software to be used at individual merchant locations. Any interruption in customer service impacts not only our business, but also that of our 1 million merchant locations around the world.

Like most organizations involved in transaction processing, IT is at the heart of our day-to-day operations and is critical to our ongoing success. Elavon's IT services and systems are tightly coupled with our business goals and the expectations of our customers.

Although service-level expectations vary from merchant to merchant, they all share one requirement: no unplanned downtime. If we suffer an interruption in service and can't process a transaction, it will have a direct negative effect on a merchant and its customers.

### **RESILIENCE, AVAILABILITY AND COMPLIANCE**

Given the role of our IT systems in such a critical revenue-generating and customer-facing process, resilience and availability are essential. We must be able to respond immediately to prevent an IT issue from becoming a critical problem. To provide this proactive response, our Systems & Technology (S&T) organization needs 24/7 visibility into the company's infrastructure, as well as solid processes for change, release, problem and asset management.



# DORMING



## ELAVON DEVELOPED A ROBUST, INTEGRATED APPROACH TO IT MANAGEMENT THAT FACILITATES BUSINESS CHANGE, REGULATORY COMPLIANCE AND COST CONTROL. By David Brattain

Poor performance in any of these core areas can quickly affect IT availability and overall business continuity. Change and release management are particularly important, since we develop our own applications for use both internally and externally. We have to manage millions of lines of code both in our environment and in external payment solutions. This requires an enormous level of source code management in terms of updates, changes and fixes—sometimes as many as 500 per month.

Ensuring that software is changed and released correctly is essential for safeguarding customer service and meeting regulatory compliance. As a financial services organization, Elavon must adhere to a range of industry and international rules. Compliance with the Payment Card Industry (PCI) Data Security Standards is particularly important because failure to demonstrate the correct procedures can prevent a company from processing transactions. Any compliance contravention could be very damaging for us and our parent company, U.S. Bank, the sixth largest commercial bank in the United States.

To ensure compliance with PCI and other regulations, we need to be able to:

- Demonstrate a separation of duties in the change management process
- Eliminate cron jobs (which execute commands at specific dates and times) from our operating environment
- Provide an audit trail of any systems changes
- Demonstrate our approach to problem management
- Protect confidential customer cardholder information
- Ensure the security of every one of our transactions.

### SCALABILITY FOR FUTURE GROWTH

Although we needed to address current operational challenges, we also wanted to develop an IT platform that would support future growth. When growth comes through acquisition, it presents our S&T organization with a considerable challenge. We need to be able to keep up with the pace of change within the

business, while consolidating the acquired computing assets into our existing IT infrastructure. At the same time, it is important that we maximize our investment in existing technologies.

The more transactions we can push through a system, the more cost-effective we can make our IT operation. The need to maximize performance and minimize costs has led us toward virtualization. Since S&T was also looking at a shared-services model, any new IT management approach had to fit with these two models—and with leading-edge technology yet to come.

Although virtualization and shared services come with obvious business benefits, these advantages can be fully realized only if enterprises are prepared for the added IT management complexity. This means establishing standardized and automated processes that can be applied to an evolving IT environment.

It was becoming very difficult to manage our infrastructure effectively and proactively. We were finding it difficult to track all the assets that we had in the field, and we recognized that this situation would only deteriorate as the company grew. To deal with these pressures and challenges, we needed to embark on an IT transformation.

Adopting the Information Technology Infrastructure Library (ITIL) framework was central to this transformation, as was our decision to partner with CA. ITIL has become the key to how we manage our customer expectations—both internally and externally—and CA's Enterprise IT Management (EITM) approach matched our new model.

Integration was also fundamental because we wanted to unify our approach to core IT processes. The ability to integrate IT management across multiple solutions is one of the most critical elements of our EITM deployment, which has enabled us to adopt an integrated approach across the following core capabilities: incident and problem management, application performance management, workload automation, dynamic and virtual systems management, data center automation, change and configuration management, service-level management, and IT asset and financial management.

We need as much integration as possible in order to achieve a solid ROI. CA Service Desk is the focal point for a large portion of this integration and has become the linchpin for our S&T organization. Instead of relying on one of our 300 staff members to report a fault, many issues are now logged automatically to our help desk.

As a dynamic and virtual systems management solution, CA NSM monitors our core infrastructure around the clock. Many of the servers are operating as multiple virtual machines, but they can be monitored as if they were physical devices. We can manage the performance of the physical servers and monitor the resource utilization of each of the virtual machines, so we can make changes in a fairly effortless way, ensuring that the virtual environment is aligned to our business needs.

By adopting a virtualized approach, we've been able to consolidate hundreds of physical servers into a handful of devices. But consolidation is just the first phase of virtualization. We intend to proactively use our virtual machines to respond to peaks in demand by enabling automated provisioning. As our virtualization strategy matures, we hope to use CA Data Center Automation Manager to automate the provisioning of new virtual machines based on predetermined criteria.

Tracking an IT problem back to one of these virtual devices—or any other IT component—has been simplified. NSM enables event correlation, a key requirement in establishing the root cause of an IT problem. Prior to deploying this solution, we had to send legions of people into the field to determine if an issue was network-, server-, desktop- or application-related. Now, we can quickly establish the cause of a problem and often fix it before it affects a user.

Faults with IT devices are not the only problems being logged automatically. The integration of Service Desk with CA AutoSys means that if a scheduled job fails to run, a ticket will be raised with our help desk. We use AutoSys to automate hundreds of IT jobs every day, and we know immediately if a job fails: The system sends a general automated alert and notifies the appropriate team.

CA Software Change Manager plays a role in the release of new source code for our production systems and for the solutions we provide to our clients. We must be able to effectively process changes to these applications to keep up with customer demand, regulatory requirements and new technologies.

Beyond ensuring that source code changes are implemented correctly, we need to provide an audit trail for all changes to our production systems, whether it involves hardware or software. This audit trail is critical for demonstrating a separation of duties, which is a requirement of the PCI standards. With our new solutions, we can demonstrate that separate individuals are carrying out key tasks in the change management process.

All of this has allowed us to meet another industry standard: the elimination of cron jobs—a specific requirement of Visa and PCI compliance. By using AutoSys, we have been able to replace those jobs with automated scripts.

Our compliance efforts have been further enhanced by our new ITIL-based approach to incident management. Every year, we have to provide our auditors with a document that outlines our tactical support model and proves we are following our own processes. By implementing ITIL and EITM solutions, we've been able to provide this information in significantly less time.

Our S&T organization has also been able to reduce the time involved in managing the company's 5,000-plus IT assets. Using the CA Asset Intelligence and CA Client Management Solution, we can now track assets throughout their life cycle.

Our improved resolution times are now being tracked as part of our service-level management initiative, which is supported by the built-in measurement and reporting capabilities of the new solutions. This allows S&T to demonstrate its ability to continuously improve business service levels and communicate achievements in terms easily understood by the business. This closer alignment of IT to the business will be extended by our plans to adopt a shared services model, which will be facilitated by CA Clarity PPM. This will enable the S&T organization to make better use of its IT resources around the globe.

Our aim for global visibility applies to every part of our IT operation. We already have 24/7 visibility between our operations in the United States and Western Europe, and we will be adopting this model across the globe.

### MEASURING ROI

Since embarking on our IT transformation in 2006, we've been able to make considerable efficiency gains. The automation and integration enabled by the EITM solutions allows us to operate more effectively and provide a quick response to IT problems.

This has a direct impact on the productivity of our staff, as they now benefit from:

- Increased uptime: Applications and systems are more available, and users no longer have to spend time reporting faults to the help desk.
- Self-service support: By providing employees with access to Service Desk via a Web interface, users can resolve minor IT issues without having to go through the full incident management life cycle.

In addition, virtualization will help us free up rack and floor space in our data centers; reduce energy consumption, especially in terms of cooling requirements; and take advantage of unused processing power. Our virtualization strategy is also key to supporting future growth. As the capacity demands of our merchants grow, we have to be able to respond quickly with additional processing resources. With a virtual infrastructure, we can deploy a "new" server much more quickly.

Acquisitions are another key component of our growth strategy. Since we can use the Asset Management tools to get immediate visibility of the new devices we have inherited, the integration of new companies into our infrastructure has been simplified. These solutions also help us capture the configuration and software portfolio of each device, which ensures that the right licensing agreements are in place post-acquisition.

The new solutions also have helped us improve cost control, simplify regulatory compliance and audits, safeguard the speed and security of 1 billion customer payments, and ensure consistent service levels.

Our ability to maintain the availability of our systems and to process transactions seamlessly gives us a competitive advantage and will help us grow our business and customer base. ◀



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