Executive Summary: Missouri's information technology infrastructure grew in an environment of competing needs and resources of different business units. Despite being a single entity we had multiple datacenters, competing platforms, and vastly varied architectures. The resulting disparity combined with decreasing budgets and increasing calls for accountability in government demanded a revolutionary change.

The Problem is Not Ours Alone: Many financial institutions have separate systems for personal banking and loan services with no way to share data between them, retail businesses have legacy inventory systems that do not talk to newer warehouse systems, and even your frequent flyer information may be stored in several databases for the same airline. The problem, exasperated when companies are acquired, is universal for large organizations.

The answer is not technical in nature but in the very structure of IT organization. In 2006, Missouri stepped to the forefront of the public sector by taking an original approach to consolidating thousands of IT employees from fourteen different agencies. Our unique amalgamation of staff and budget has produced radical results and started a cultural revolution.

Organizational Changes: Budget management is key to controlling costs, assuring standards, and building enterprise architecture. Without true budget consolidation, states and businesses have floundered under the constant struggle to negotiate funding with the business units and find dispirit resources are invested disproportional to true enterprise needs.

In Missouri, technology is supported by over a hundred different funding streams ranging from very flexible to the strictly regulated (such as federal grants). The more restrictive, the more difficult it is to consolidate from the business unit to the new IT Division.

Most entities incorporated the easier "charge back" system which promotes antagonistic relationships with customers like those shared between citizens and utility companies that can not communicate the nature of costs and tend to increase them without adequate explanation.

Missouri's bold approach is the first to challenge state and federal bureaucracy and is on the cutting edge of reforming a system that is the largest hurdle to government efficiency.

To assure customer satisfaction was not negatively impacted by consolidation, a unique system for measuring customer's key technology outcomes was designed for each department. Defined by the customer, with business need targets, these metrics rollup into a balanced measurement portfolio used to set direction, identify improvement opportunities, communicate with stakeholders, and show tangible results.

Government has embraced mantras such as "Do more with less" and "Run more like business", but the actions behind the words are often absent. This new approach to IT service delivery and accountability have literally changed the culture.

Results: In 2006 alone, amidst all the administrative changes, ITSD saved the state of Missouri over six million dollars and demonstrated improved service delivery in each customer area.

The innovative approach to consolidation not only bore immediate fruit, but it was accomplished completely within existing resources. Ten years ago the IT community was desperate for technology to catch up with needs, today; our challenges are organizational and managerial. In this area, Missouri has taken the lead.

There is a perfect storm brewing, a twister forming in the skies above the technology industry and all of us are starting to feel the impact in one way or another. License and Maintenance costs continue to rise at a steady pace at the same time IT budgets in government are shrinking by double digit percentages. There are fewer kids entering college pursing technology degrees and an alarming number of seasoned professionals leaving the workforce. At the same time demand for technology services and solutions continues to climb. More business functions are one hundred percent reliant on IT but the gap between the CIO and the CEO does not seem to be closing the way we have hoped.

This storm has many CIO's and other IT business leaders looking for a path to a better way of doing business. Ten years ago meetings were filled with discussions about how long it would be until technology caught up with the visions we set for our organizations. Today, technology is a much smaller part of the conversation as attention turns to governance and a centralized approach to service delivery. This new strategic thinking has us looking somewhere over the rainbow to where blue birds sing a song of IT Consolidation.

Missouri is no different than other states that find themselves swirling around in this tornado. All of these universal issues, combined with Missouri's sixteen executive branch departments each having their own set of standards, conflicting directions, and seven years of consistent budget cuts put the CIO right in the eye of the storm.

Then on June 16th of 2006 the IT shop came crashing down to earth. We walked out the door and found ourselves basking in Technicolor, surrounded by unfamiliar, but strangely comfortable, surroundings. We were consolidated in our own wonderful world of OZ.

Our landing did not come without casualty. Every IT employee, asset, and budget dollar was now in a common IT agency leaving years of individual department IT autonomy crushed in one fell swoop. Every customer was shocked at the speed and totality in which everything they had known was turned upside down. There was confusion, a little fear, a few tears, and a lot of cleaning up to do.

Governor Matt Blunt campaigned on the idea that the time for IT consolidation had come. He promised efficiencies and accountability in an area that had been behind the curtain for decades. After his inauguration he named life-long public servant Dan Ross to lead the consolidation effort. The Governor then informed his new cabinet that the consolidation was upon them and that the change would be fully supported. Dan started down our yellow brick road with only the final goal in mind: complete consolidation, completed in house, completed with no new budget, and completed within a single fiscal year.

The Brains of Consolidation

Leading up to the official consolidation date, the CIO met with his senior IT leaders from various executive branch departments as well as certain CIO's from the judicial and legislative branches to join him in a series of facilitated discussions aimed at building the first enterprise wide IT strategic planning effort in Missouri history.

A clear vision, mission, and outcomes were formed for the impending division in the months that followed.

The mission is to provide technology services and solutions to the executive branch departments so that they can better serve the citizens of Missouri. This simple sentence defines our scope, our customer, and our purpose for being. The consolidation does not focus or mandate new requirements outside the executive branch, though they are always invited to participate, and we limit our scope to the broad areas of service and solutions in the technical arena.
Ultimately, we touch the citizens of Missouri, but only through our primary customers.

Efficient, Reliable, and Accessible systems and resources are our three highest priority outcomes. Efficient not only addresses costs, but development, internal processes, and day-to-day operations. Reliable defines the safety and security that our customers depend on to protect Missourians from malicious activity. Accessible is the availability of network and other infrastructure as well as accessible data, resources, and talent.

These outcomes work together to form the vision for the Information Technology Services Division (ITSD) "A new ERA for IT in Missouri". The new ERA not only reminds us of our key outcomes, but also reminds us that a new way of operating, a new culture, and a new means of service delivery is our ultimate goal.

With the foundation of the strategic plan in place, ITSD identified how consolidation could impact each of the key areas, chartered teams to re-engineer processes based on best practices, and started to look at a system to measure the successfulness of our efforts.

The Heart of Consolidation

As ITSD began its journey down the yellow brick road, not everyone was excited about the adventure. Departments who had decades of investment in their IT shops were fearful of the change and resented losing the control of staff and resources so suddenly. If a strong strategic plan was the brains of the operation, the heart had to be a customer relationship model that inspired trust and built long lasting partnerships.

The rusty old Service Level Agreements (SLAs) that are typical in Missouri have failed to inspire anything but negativity. Used to beat one another about more than to manage, they tended to focus on process and procedure more than outcomes and customer satisfaction. A series of Boolean statements that mid-level managers have memorized in order to joust with their adversaries, these historic beasts had to go.
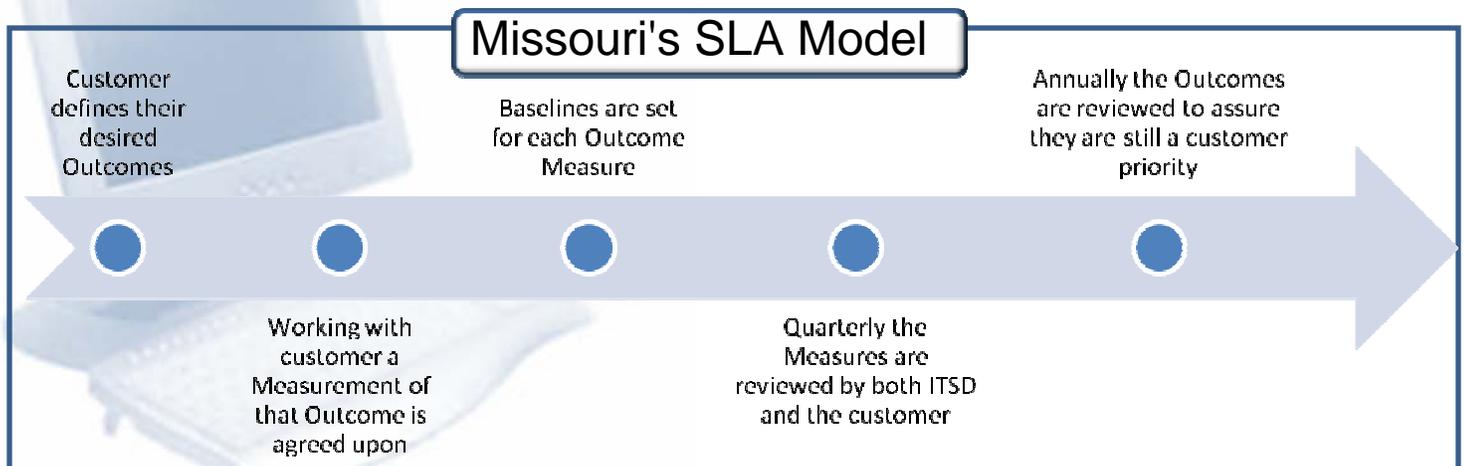
Not only were these documents failing to meet our intended results, it was impossible to create one for an entire IT organization. It would easily be ten volumes, each the size of a city phone book, chuck full of so much jargon and legalese one would never use it productively.

To assure the heart we put in place was not already diseased and in need of oil, we built new SLA's from scratch; individually customizing each one to the department's unique needs. We made them almost entirely measurement based, and purposefully kept the details vague.

Within the SLA the customer must do three things. One, they must define what a successful IT shop is to them. Two, they must provide a prioritized list of new projects. Three, they have to name a liaison to the CIO's office who agrees to meet with the Deputy of Operations quarterly to review the measures and projects, discuss service and satisfaction levels, and share ITSD strategies and goals that may impact their department.

The new project list is used by the IT Director assigned to that department as a product or service order and not as an enterprise prioritization. However, we reserve the right to use the list to identify commonality amongst departments where economies of scale may be found and as a fertile place to find places to spend any undedicated funds.

The heart has close ties with the brain as many measures from a particular area's SLA role into enterprise measures in the strategic plan. They can not work independently, and when both are healthy, it is a good indicator the body is healthy as well.

Missouri's SLA Model

Customer defines their desired Outcomes

Baselines are set for each Outcome Measure

Annually the Outcomes are reviewed to assure they are still a customer priority

Working with customer a Measurement of that Outcome is agreed upon

Quarterly the Measures are reviewed by both ITSD and the customer

The Courage to Consolidate

Most CIO's of large cities, counties, and states will tell you they either are consolidated, or are working toward a consolidated model, but few have taken the step Missouri has. It is scary to take on the 129 different funding streams for IT in an organization this size. Only one of those streams comes with very few strings attached and you find yourself chasing your tail to track down a grant from a decade ago, or scared of the potential audits lurking in your inherited shadow.

It's more than a little frightening to put all of the State's data and infrastructure into a single data center, call it secure, and hope the levees of the mighty Missouri hold until the Disaster Recovery Plan is tested a bit more thoroughly.

If those beasts were not ferocious enough, add on identifying most IT spending and putting into a state budget for every legislator to dream of cutting, controlling every network router and server coupled with the issues that come with outages, and every project with a multi-million dollar price tag that is one bad project manager away from a journalist calling you for a quote.

Where does a single CIO find the courage to take on these, and the mountain of other things that go bump in the night? Through an structure built to balance the health of the organization.

ITSD was built only after we had set our outcomes and goals. It was built specifically to meet those and with the full intention of modifying the model when the goals change. It is based on the best practices of public and private sectors, deals with reporting structures as well as placing policy setting, architecture, and planning in the most logical places.

Confidence breeds courage, and confidence in the organization comes from the power granted to the positions and the personal traits of the people in them. Of the ten people who hold the highest positions in the consolidation, two were from outside of IT (a budget specialist and process improvement consultant), one was a vendor who took a 40% cut in pay when she caught the vision, and four others have over twenty years experience each with the state in their field and are recognized as experts in their professions.

Like a medal hung around the organizations neck, the leadership team provides the knowledge base and experience to boldly go where many in the public and private sector have decided not to tread.
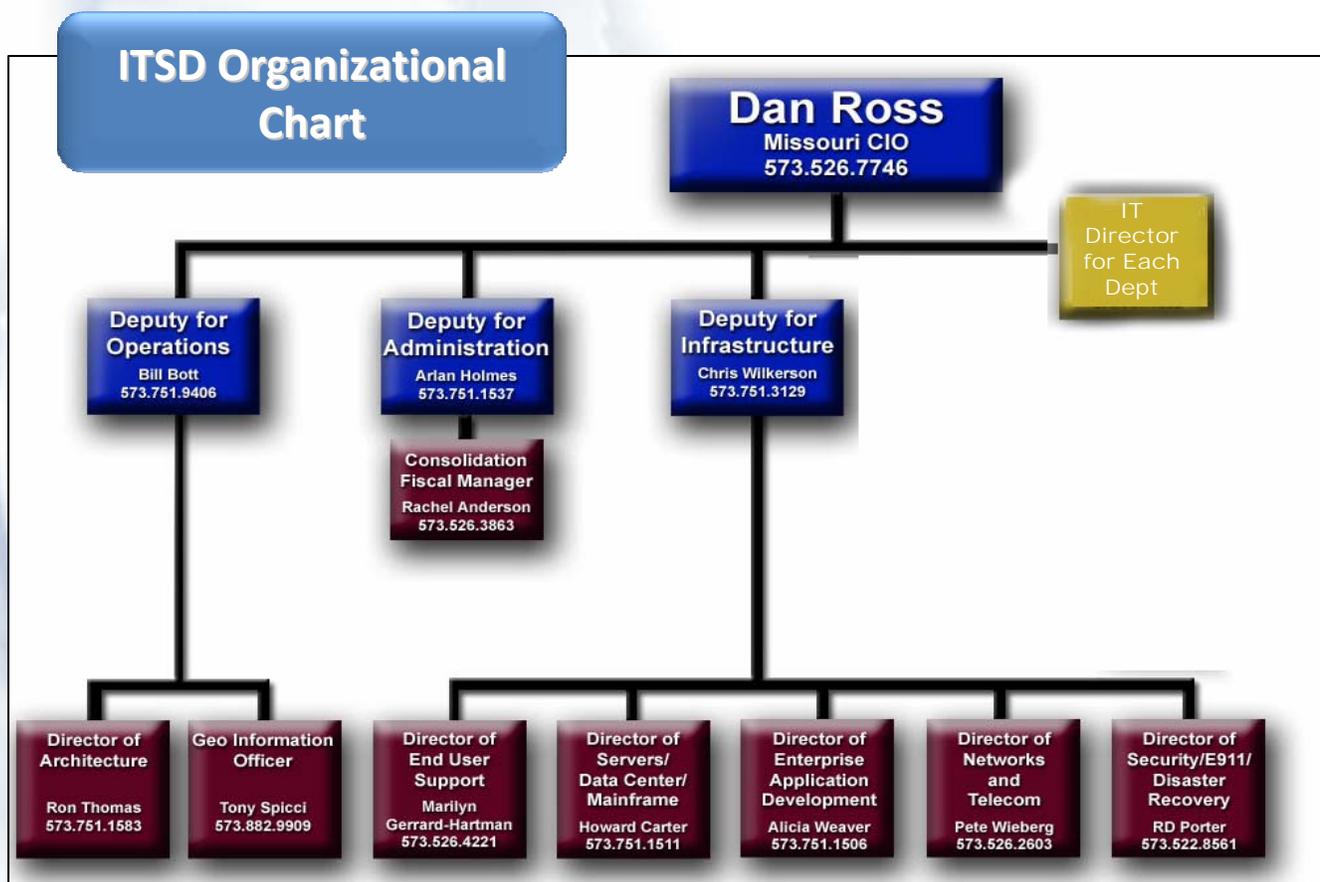
Conclusion

A mantra around the office is that "consolidation is only doing what any prudent person would do if they were starting again from scratch." You would never build fourteen different email systems, or have thirty different contracts for the same product from the same vendor. You would share servers where you could, and you would build a data center capable of housing both current and future needs.

Public servants with more than eight years under their belt have probably seen at least one consolidation / decentralization cycle in procurement, HR, or even IT. With technology becoming more and more a utility than a core business function, the time for a transformation seems both inevitable and evolutionary to our field. But to this that we are ever more than three heel clicks away from the place we knew would be foolish.

Changes in our leadership, failure to deliver on service goals, or a hot trend that hits the streets tomorrow all circle a consolidation like the wicked witch. Sometimes you feel like any wrong move may bring the walls crashing in on everything that has been built this year. But more than the budget savings, the accolades, and attention that comes with an effort like this, the real story is in the things that we have put in place that will never be replaced.

A brain that thinks strategically, a heart for customer satisfaction, and the courage that comes from being successful at what you have set out to do.

ITSD Organizational Chart

Dan Ross
Missouri CIO
573.526.7746

IT Director for Each Dept

Deputy for Operations
Bill Bott
573.751.9406

Deputy for Administration
Arlan Holmes
573.751.1537

Deputy for Infrastructure
Chris Wilkerson
573.751.3129

Consolidation Fiscal Manager
Rachel Anderson
573.526.3863

Director of Architecture
Ron Thomas
573.751.1583

Geo Information Officer
Tony Spicci
573.882.9909

Director of End User Support
Marilyn Gerrard-Hartman
573.526.4221

Director of Servers/ Data Center/ Mainframe
Howard Carter
573.751.1511

Director of Enterprise Application Development
Alicia Weaver
573.751.1506

Director of Networks and Telecom
Pete Wieberg
573.526.2603

Director of Security/E911/ Disaster Recovery
RD Porter
573.522.8561

OPERATIONS: The Deputy for Operations oversees the Customer Relations, Project Management, Strategic Planning, Enterprise Team Initiatives, IT Architecture, Geo Information, and Training for entire the organization.

INFRASTRUCTURE: The Deputy for Infrastructure coordinates and manages the five core functional areas of technology; Networks and Telecom, Mainframe/Server Environment, End User Support, Enterprise Application Development, Security/Disaster Recovery.
A specific director for each of these key areas maintains a constant mission of setting enterprise standards, policies, and strategic direction for the state.

ADMINISTRATION: The complete budget identified in the consolidation is just over a quarter of a billion dollars generated from no less than a hundred and twenty nine different funding streams including nearly thirty five percent federally mandated. The mammoth task of managing and protecting the budget demands a full time Deputy of Administration with a small staff of accountants. In addition to the budget, administration also oversees limited human resource functions and serves as a liaison to the state's Office of Administration.

IT DIRECTORS: As an IT Director serving a specific department customer each is tasked with having a command understanding of the business functions and structure of that department. They manage the day to day operations, assuring the guidance from the deputies is incorporated, and oversee the specific development and projects that impact their direct customer.

The new organizational structure embraces a more modern philosophy that ties areas together like woven cloth. For example, the Deputy of Infrastructure may set a standard in data storage devices, but to do that they must work closely with the Architecture staff located in Operations. This cross functional area dependency is on purpose and promotes team work while preventing traditional silo mentalities from forming.

State of Missouri