

Office of Administration (OA)

Strategic Plan for Information Technology

Overview

OA's Strategic Plan for IT aligns the Information Technology Services Division's (ITSD) Core Goals and Strategic Initiatives for the State with OA's strategic business objectives. This plan documents the goals, strategies and tactics that have been developed through numerous meetings at all levels within OA.

The plan is designed to be executed through the end of 2016. However, this plan is a living document and will change as threats emerge and new opportunities are identified.

Core Goals

ITSD has 7 core goals that are the focus of its strategies, tactics and daily operations.

GOAL 1: Effectiveness

Deploy technologies and systems to allow state agencies to manage their programs, cases and relationships with constituents in the most effective manner.

GOAL 2: Productivity & Efficiency in Government Operations

Increase the productivity of state employees and create efficiencies that reduce the cost of government operations.

GOAL 3: Citizen Access to Services, Information & Data

Allow citizens to access government services, information, and data from anywhere and at any time, whenever appropriate.

GOAL 4: Risk Mitigation

Ensure that the risks of negative outcomes are within tolerable limits.

GOAL 5: Infrastructure

Develop and maintain the IT Infrastructure that enables, not hinders, the strategic plans and tactics of state government.

GOAL 6: Governance

Create, maintain and employ the processes to ensure that IT resources will be used to meet the State's goals in an effective and efficient manner.

GOAL 7: Workforce

Maintain a diverse workforce of IT professionals and vendor partners that are able to deliver critical IT services to citizens and state agencies in a timely fashion.

Strategic Initiatives

ITSD has four strategic initiatives, under which fall the vast majority of ITSD projects which support the state enterprise. These initiatives were chosen because of their ability to meet the Core Goals in today's world. In fact, all 4 initiatives are a direct response to the way the world has changed dramatically during the past 5 years and represent an opportunity to keep pace with the way citizens and state agencies are operating now and the way they will operate in the future. These initiatives include cybersecurity, modernization, mobility and data as an asset.

Cybersecurity

Protecting state assets, networks, systems and data is a challenge for all states, and the threat to our Cybersecurity from cyber criminals, hacktivists and Advanced Persistent Threats (APTs, nation-sponsored hackers) is ever increasing. In fact, 2014 has been called by some experts "The Year of Data Breaches" because of the number of high profile incidents.

Hackers are not only using automated attacks against State of Missouri systems in an attempt to identify vulnerabilities that they can exploit, their use of social engineering and spear phishing is getting more and more

sophisticated. This means that all state employees, not just IT experts, play an important part in defending against these very real threats.

ITSD received additional ongoing funding for Cybersecurity from the Governor and Legislature during the 2013 legislative session. These funds are being put to use by ITSD's team of Cybersecurity professionals as they enhance the State's Cybersecurity systems and train state employees in Cybersecurity best practices. ITSD continues to execute a 4-point strategic plan for Cybersecurity that:

- creates a culture of Cybersecurity best practices;
- deploys "best of breed" tools used by Cyber professionals when defending state networks and systems;
- ensures swift, effective response when Cybersecurity incidents occur; and
- establishes the IT governance that bakes Cybersecurity into routine processes.

ITSD's strategic plan for Cybersecurity improves the security posture of Missouri State Government not just IT-consolidated agencies, though they certainly enjoy more impact as Cybersecurity becomes central in state agency IT plans. However, risk will never be eliminated, it is mitigated. ITSD and state agencies must ensure the benefits of doing business online are not overshadowed by the risk that citizen privacy will be violated through a successful Cyber attack.

Modernization

Modernization is a critical enterprise strategic initiative and modernization projects are found in all state agency IT plans. These projects can be grouped into 4 categories:

- Data Center Modernization / Private Cloud / Hybrid Cloud
- Network Modernization / Unified Communications
- Legacy System Modernization
- Business Process Automation

The motivation to modernize is a result of trends that present both opportunities for change and threats to the status quo. A few opportunities presented by modernization include:

- Enhanced state agency program effectiveness through improved access to timely, accurate data
- Improved employee productivity via process automation
- Reduced long-term costs through virtualization
- Increased citizen access to online services and reduced processing times

Maintaining the status quo is often not an option as the world changes around us. Many of the State's legacy processes and technologies are not sustainable. First, manual processes, paper processes and dying technologies are becoming too expensive to support under today's economic reality – budgets won't support them into the future. Second, and perhaps most importantly, the workforce supporting legacy technology is aging and retiring in great numbers. Counting on a new wave of workers to support those technologies is a dubious strategy.

Even today, the State maintains too many legacy systems and too much outdated infrastructure. Many of these systems are neither effective nor efficient, are difficult to access, and not sustainable in the long term. Investing in the modernization of those systems is a good opportunity for the State.

Mobility

The advent of the cloud, the proliferation of mobile devices and the maturation of mobile application ecosystems like Apple's App Store and Google's Play have forever changed our world. Mobile devices are now a part of life and citizens use them to do business - and not just commercial business, but state business. In fact, more visitors to mo.gov now use mobile devices than traditional desktops when accessing our State web portal. That's a significant milestone – a tipping point of sorts. The world has changed and state government must respond...and respond quickly.

A 3-pronged enterprise-wide strategic initiative is designed to ensure that Missouri state government responds to the changing world by:

- Optimizing websites and online services for use on mobile devices via responsive design techniques
- Delivering mobile applications for citizens when the state service will be used frequently
- Empowering the State’s mobile workforce by giving them high value mobile devices and applications that make them more effective and efficient

Data as an Asset

The final enterprise-wide strategic initiative is designed to enhance Missouri’s ability to treat its data as a valuable asset. The State is creating and capturing more data faster than ever before, yet the quality of that data and our ability to use it for the benefit of citizens can be improved. Data projects can be characterized as:

- Data Classification and Cataloguing – it is important to understand, protect, govern and share State data appropriately
- Master Data Management (MDM) – MDM projects can knock down silos and artificial barriers so that state agencies have a single view of their constituents and constituents have a single view of state government
- Data Analytics – whether examining the past or predicting the future, employing data analytics makes state agencies more effective by improving outcomes and reducing fraud
- Open Data – publishing open data increases transparency and has the potential to increase economic opportunity

Office of Administration (OA)

OA is the service and administrative control agency created by the General Assembly to combine and coordinate the central management functions of state government. OA provides central services and support to all other state agencies through its various divisions listed below.

This IT strategic plan for OA details some of the more important projects and ongoing system support efforts that allow OA's business units to execute the functions that support their individual missions. The specific CORE GOALS and STRATEGIC INITIATIVES related to each project are denoted within the project description.

** Denotes project completion*

Accounting

The Division of Accounting is responsible for the operation of the statewide accounting and payroll systems, social security administration, bond management, and is the custodian of all public accounting records of the state.

System Maintenance & Support

Enterprise Resource Planning (ERP) - Statewide Advantage for Missouri (SAM II)

Statewide Advantage for Missouri (SAM II) is an accounting system that processes state transactions for purchases, payments and fixed assets reporting. It is also used for project/federal grant reporting state payroll and processing other HR related tasks.

SAM II is now approaching its 17th year in production. It is a COBOL/Mainframe commercial-off-the-shelf system that has been customized for the State of Missouri and requires ITSD staff to ensure that the system is updated to comply with state and federal accounting rules and is functioning as intended. A SAM II data warehouses exist and is updated daily so that other systems are able to query the large amounts of data in SAM II.

Missouri Accountability Portal (MAP)

MAP uses the SAMII data warehouse to present financial information to the public, allowing citizens to track how the state is spending taxpayers' money.

MoDOCS

MoDOCS replaces paper document processes like expense reports with electronic documents and workflows thereby eliminating paper and manual handling. Paper documents are continuously converted to MoDOCS and rolled out to wider audiences across state government.

Application Development

SAM II is a legacy system that lacks functionality desired by state agencies. This has spawned numerous ancillary systems and project requests that attempt to provide desired functionality. This gap analysis would document what functionality is missing from SAM II, take into consideration the deployment of a new eProcurement system and chart a course for the future of the state's ERP.

GOALS: EFFECTIVENESS, RISK MANAGEMENT, EFFICIENCY,
STRATEGIC INITIATIVES: DATA, MODERNIZATION
EXPECTED COMPLETION: TBD

Budget and Planning

The Division of Budget and Planning is the central point to assist state agencies, the Commissioner of Administration, and the Governor in preparing and overseeing an efficient and effective overall plan for the State's financial resources.

System Maintenance & Support

Budgeting System (BRASS)

BRASS is the system used to develop state agency budgets during the state's budgeting process every fiscal year.

Application Development

BRASS Analysis

An analysis of BRASS is being performed to determine if the benefits of system modernization are worth the cost.

GOALS: EFFECTIVENESS, RISK MANAGEMENT, EFFICIENCY

STRATEGIC INITIATIVES: MODERNIZATION, DATA

COMPLETED: August 2015

Commissioner's Office (CO)

The chief administrative officer is the Commissioner of Administration who is appointed by the Governor with the advice and consent of the Senate.

Application Development

***Alternatives to Abortion (A2A) System Enhancements [PROJECT COMPLETE]**

The Alternatives to Abortion Program was established in 2007 through Section 188.325 RSMo. The program is designed to assist women in carrying an unborn child to term instead of having an abortion, and to assist them in caring for their child or placing the child for adoption. Services are available during pregnancy and for one year following birth. The A2A System allows users of a public website to locate resources and providers associated with the program. This project enhanced the system to make it more user friendly and increased security of the underlying data.

GOALS: RISK MANAGEMENT

STRATEGIC INITIATIVES: CYBERSECURITY

COMPLETED: March 2014

Facilities Management, Design and Construction (FMDC)

FMDC is responsible for the maintenance and operation of state-owned buildings and grounds throughout the state. The division is responsible for the preparation of the leasing budget for the entire state and for oversight of the leasing program. Staff of the division provides design services, space analysis, project management, energy management and mechanical services. The division is responsible for the preparation of the state's capital improvement program and budget, inventory and condition assessment of all state-owned land and facilities, contracting for and managing capital improvement projects for state agencies.

Application Development

Lease Management System Rewrite

The system allows FMDC to manage and track leased facilities. It is in legacy technology. A new application will be developed in C# and utilize a SQL Server database. FMDC will receive a more user friendly system with increased automation to eliminate some manual processes.

GOALS: RISK MANAGEMENT, EFFICIENCY
STRATEGIC INITIATIVES: MODERNIZATION
EXPECTED COMPLETION: November 2015

General Services (GS)

GS provides management services to the state departments including printing, vehicle maintenance, risk management and fleet management. The division also provides staff support for the Missouri State Employees Charitable Campaign, and the Missouri Public Entities Risk Management Fund.

System Maintenance & Support

Charitable Campaign System

The Missouri State Employees Charitable Campaign (MSECC) system is used by State staff to manage charity and donation data for the annual campaign.

Vehicle Fleet Information System (FLEET)

FLEET tracks state vehicle fleet information. The Fleet application is used by various state agencies for data entry of vehicle assignment and contact information, maintenance and repair, miles driven, purchase and disposition information. Fleet also has both online and batch reporting processes. Agency users can create maintenance/repair work orders that are submitted to the OA Garage. The work orders can identify the work to be done and a preferred scheduled date.

It is also used by the OA garage, staff for their Maintenance and Repair operations for state fleet vehicles. They can enter work orders and work from customer entered work orders. The work orders, track the types of labor performed as well as the parts that are needed for a repair. Parts and labor invoices from vendors are also entered into the Fleet system. SAM II transactions are created to invoice customers and to pay vendors.

In addition to SAM II transactions, Fleet interfaces with SAM II for agency and organization names, vendor information, and updates the HR status for individuals that are identified as drivers in the system. Fleet also interfaces with Department of Revenue data to maintain driver's license information such as the operator status, commercial status, school bus status, license class, restrictions and endorsements. Fleet also retrieves data from the General Services Legal Expense database when a driver is involved in an accident involving a state vehicle. There is an interface to the CARS carpool MS SQL database to retrieve some information about carpool vehicles.

Vehicle Fleet Reservation System (CARS)

CARS allows state employees to reserve a car for state use.

Workers' Compensation System (RESTORE)

RESTORE is the system used to track workers' compensation claims by state employees.

Application Development

Legal Expense System Rewrite

The system allows GS to manage and track legal claims against state government. GS currently receives claim information in paper form and manually enters the information into the system. A new application will be developed in C# and utilize a SQL Server database. GS will receive more functionality to run reports, search claims, update claim details, and track claim status. The system will also allow state agency representatives to enter claim

details and additional documentation online. The application will also be used by the Attorney General's office to approve payment on claims.

GOALS: RISK MANAGEMENT, EFFICIENCY
STRATEGIC INITIATIVES: MODERNIZATION
EXPECTED COMPLETION: October 2015

***RESTORE [PROJECT COMPLETE]**

The Risk Enterprise System to RESTORE Employees (RESTORE), which manages workers compensation claims for employees of several state agencies and universities, was implemented on July 1, 2014. Created using the .Net platform, RESTORE replaced the Risk Management System that had been in use since 1993 and was based on block mode, green-screen technology that is now outdated. RESTORE provides new and improved functionality in the areas of payments, claim subrogation and claim event documentation, streamlines federally required Medicare reporting, eliminates paper-based processing for claim forms and settlement negotiations, and enhances the ability to track trends and manage costs efficiently and effectively.

GOALS: RISK MANAGEMENT, EFFICIENCY, EFFECTIVENESS
STRATEGIC INITIATIVES: MODERNIZATION, DATA
COMPLETED: July 2014

RESTORE Enhancements

RESTORE enhancements will process the majority of claim-related medical bills electronically and eliminate the mailing of large volumes of paper documents between providers, the State and HealthLink. Medical bills will be sent electronically from providers or clearing houses and upload into RESTORE. The data will need to meet all HIPAA requirements. Upon receipt of the billing data in the HIPAA compliant 837 format, a 997 acknowledgement record should be returned to the sender. Bills will then be associated with the appropriate workers' compensation case within RESTORE and be sent electronically to HealthLink for re-pricing. After the bills are re-priced the updated data will need to be loaded and made available for review and payment in the RESTORE application. When the bills are being paid a HIPAA compliant 835 remittance advice record also has to be sent.

GOALS: EFFICIENCY, EFFECTIVENESS
STRATEGIC INITIATIVES: MODERNIZATION, DATA
EXPECTED COMPLETION: TBD

Fleet Re-platform

FLEET is written in a legacy technology that will become unsupported in the near future.

However, OA is satisfied with the functionality of the Fleet System. ITSD is planning to procure services through an already-drafted RFP to re-platform this application.

GOALS: RISK MANAGEMENT
STRATEGIC INITIATIVES: MODERNIZATION
EXPECTED COMPLETION: TBD

ITSD is the information technology unit for nearly all state government agencies that are under the umbrella of Missouri's 14 consolidated departments. ITSD also provides network services to all other Missouri state government agencies.

ITSD has individual enterprise strategic plans for Cybersecurity, the State Data Center (SDC) and Networks and Telecommunications that are beyond the scope of this document. Below are a few initiatives of note:

Initiatives

Cloud Governance Committee

ITSD's Cloud Governance Committee reviews potential opportunities in the cloud and weighs the benefits of those opportunities against cost and risk. Its function is to ensure the cloud is leveraged in a way that is suitable to state government so citizen privacy is protected but state resources are maximized.

GOALS: CYBERSECURITY

STRATEGIC INITIATIVES: MODERNIZATION

EXPECTED COMPLETION: Ongoing

Internships

The ITSD Internship program, part of OA's Internship program, allows ITSD to give potential IT employees an opportunity to get to know ITSD, its culture, state technology and state government while still in school. The program results in great hires every year.

GOALS: WORKFORCE

STRATEGIC INITIATIVES: SUPPORTS ALL

EXPECTED COMPLETION: Ongoing

Mobile Development Architecture and Standardization

ITSD will establish and document an enterprise mobility strategy for application development that is based upon experience with mobile application development projects during the last 2 years. Architecture will be defined for custom mobile applications developed to support both the Android and iOS platforms. This architecture will be used for both in house and contracted development projects supported internally. A standard solution for simple inspection forms will be recommended. A deliverable of this strategy will be a decision tree that will assist teams on what type of product to use. Recommended solutions will depend on how the questions are answered. They will determine if it is the simple inspection process, custom mobile application or standard responsive web application.

GOALS: INFRASTRUCTURE, CITIZEN ACCESS, EFFICIENCY

STRATEGIC INITIATIVES: MOBILITY

EXPECTED COMPLETION: Ongoing

ITSDU

ITSDU is a leadership and mentoring program designed to grow ITSD's leaders of tomorrow. The program will begin with a focus on developing leaders that will be able to serve in the role of Client Service Manager (CSM). CSMs interface directly with agencies on strategy, tactics and daily operations providing customers with a go-to link to ITSD and all of its functions.

GOALS: WORKFORCE

STRATEGIC INITIATIVES: SUPPORTS ALL

EXPECTED COMPLETION: Ongoing

Office of Equal Opportunity (OEO)

The Office of the Commissioner is responsible for OEO, which assists state agencies in employment and contracting of historically underutilized individuals, and monitoring progress in promoting and ensuring equal opportunity within state government through employment, provision of services, and operation of facilities.

Case Management for M/WBE Certification

The current process for certifying M/WBE's is paper and manual intensive. A new case management system for M/WBE certification will introduce automation to create more effectiveness and efficiency. Online customer self-service will reduce the burden on OEO staff, increase transparency for customers and reduce processing times.

GOALS: EFFECTIVENESS, CITIZEN ACCESS, EFFICIENCY

STRATEGIC INITIATIVES: MODERNIZATION, DATA

EXPECTED COMPLETION: July 2015

Personnel/HR

The Division of Personnel administers the Missouri Merit System and the Uniform Classification and Pay System (about 45,000 employees). Additional responsibilities in all agencies include management training, labor relations, productivity and quality improvement, employee leave benefits, and consultative services.

System Maintenance & Support

Employee Performance Appraisals - Productivity, Excellence and Results for Missouri (PERforM)

PERFORM provides functionality to assess and rate employees performance. PERforM is a .NET system used by 6,776 state employees to create performance objectives, create annual performance appraisals and create special appraisals. In the past year 33,249 annual appraisals were created.

Merit System - Electronic Application System (EASe)

EASe is a web-based application system for the State Merit System that collects pertinent employment information about an applicant and depending on the job class applied for, determines the applicant's rating of education and experience based on their responses to a series of questions. EASe allows users to apply for inclusion on Merit System job class registers - it does not allow users to apply for specific open positions.

Merit System - Management and Applicant Information Resource System (MAIRS)

MAIRS is a statewide client server application used to process Merit System applications in conjunction with EASe, schedule and score tests, fill registers, create certificates, and track dismissals. The system generates emails, letters and online reports.

Timekeeping (ETA)

Use of the Enterprise Timekeeping Application (ETA) has expanded from 800 active users in May 2013 to over 4000+ active users as of March 2015. Additional state agencies including Department of Insurance and Professional Registration, State Treasurer's Office, Department of Natural Resources and the Department of Corrections are interested in using ETA.

***MAIRS Rewrite Analysis [PROJECT COMPLETE]**

This project conducts Business Process Reengineering (BPR) analysis and provides business requirements documents and a project plan on MAIRS in order to replace the existing MAIRS system with a modern application that utilizes newer technology and delivers improved business functionality.

GOALS: RISK MANAGEMENT, EFFICIENCY
STRATEGIC INITIATIVES: MODERNIZATION
COMPLETED: MAY 2015

***MO Careers [PROJECT COMPLETE]**

All agencies will have the ability to post job vacancies into a centralized, statewide database. An interface will be available to pull data, which they can utilize on their own sites; this will provide them an opportunity to save time and money for maintaining their own. For those who don't have this functionality, it affords them the opportunity to use it. Citizen access is increased because jobs can be automatically posted to other databases like MO Careers, jobs.mo.gov, data.mo.gov for display on websites like oa.mo.gov, jobs.mo.gov, etc.

GOALS: CITIZEN ACCESS, EFFECTIVENESS
STRATEGIC INITIATIVES: MODERNIZATION, DATA
COMPLETED: DECEMBER 2014

PERforM Enhancements

This project would transition PERFORM to a full "paperless" application by allowing documents such as objectives and appraisals to be created and reviewed online, routed for workflow approval and capture signatures electronically. OA would also like to incorporate additional functionality such as:

- Email functionality, providing automatic notification of completion dates and appraisal status to employee/rater/reviewer.
- Redesign the site to offer a more user friendly/easier to navigate environment.
- Dashboard views of status and outstanding tasks
- Enhance functionality for administrators, proxy roles and delegate raters to simplify the editing of objectives and appraisals, the approval of appraisals, search functionality and viewing performance plans.

Savings would be realized as less paper and FTE hours needed to conduct annual appraisals.

GOALS: EFFICIENCY
STRATEGIC INITIATIVES: MODERNIZATION
COMPLETED: TBD

Purchasing (DPMM)

The Division of Purchasing and Materials Management is responsible for the procurement of equipment, supplies, general and professional services for most agencies of state government; and administers the state and federal surplus property programs and the state recycling programs.

eProcurement

In order to achieve greater procurement efficiency and savings for taxpayers and stake holders, the state is deploying a modern SaaS eProcurement system. Improving automation and technology will help eliminate complexities in the purchasing system and provide greater capabilities not only to DPMM but also to other state agencies, local government entities, and the vendor community. The new system will be optimized for use on mobile devices and eventually feature mobile apps giving users a chance to use the system "on the go."

Perfect Commerce's SaaS solution was chosen to become the State's eProcurement system and will be called Missouri BUYS. The project kicked off in April 2014.

Implementing a new eProcurement system will:

- Allow for processing efficiency of requisitions, solicitations, contracts, purchase orders, invoices, and receipt of goods
- Reduce of manual effort required to procure and pay for goods/services (i.e. Less data entry/duplicative entry)
- Improve reporting and business intelligence
- Improve ease of identifying existing contracts
- Improve customer interaction with the users of the system (state agency users, political subdivision users, and vendors)
- Increase fiscal accountability and transparency. The state would like to improve access to information for agencies, the public and vendors across the state to improve our purchasing power, analyze spending practices and improve contract compliance

GOALS: EFFECTIVENESS, CITIZEN ACCESS, EFFICIENCY

STRATEGIC INITIATIVES: MODERNIZATION, DATA, MOBILITY

EXPECTED COMPLETION: MARCH 2016

Surplus Property System

The Missouri State Agency for Surplus Property (MOSASP) currently tracks all state, federal and vehicle property at one location. They currently utilize a manual process for tagging and tracking surplus items. MOSASP and ITSD have partnered with Web Data to provide a web-based solution that will be hosted in the State Data Center. The Web Data Application will provide a full audit trail of asset recovery and surplus property disposals. This will create efficiency in MOSASP by automating their processes and workflows. The project kicked off in April 2015.

Implementing a new Surplus Property Tracking application will:

- Automate asset data retrieval
- Improve asset ownership validation
- Improve disposal authorization tracking
- Improve disposal tracking
- Reduce manual effort by tracking items with bar-coded labels and a hand held scanner
- Increase reporting functionality
- Increase transparency and communication between the programs and donees or potential donees.

GOALS: EFFECTIVENESS AND EFFICIENCY

STRATEGIC INITIATIVES: MODERNIZATION

EXPECTED COMPLETION: JULY 2015

Administrative Hearing Commission (AHC)

The Administrative Hearing Commission conducts prehearing conferences and full evidentiary hearings throughout Missouri, making findings of fact and conclusions of law relating to licensing, tax, and medical provider disputes.

AHC Case Management System

AHC and ITSD are investigating alternatives to replace the current case management solution for which the contract expires January 2016.

GOALS: EFFECTIVENESS, CITIZEN ACCESS, EFFICIENCY

STRATEGIC INITIATIVES: MODERNIZATION, DATA, MOBILITY
EXPECTED COMPLETION: SEPTEMBER 2015