



MDIT

MICHIGAN DEPARTMENT OF INFORMATION TECHNOLOGY

Implementation of Consolidated IT Services Digital Government Management

Title of Nomination: Michigan Implementation of Consolidated IT Services

Category: Management

Project/System Manager: Teri Takai

Job Title: State of Michigan CIO, and Director of MDIT

Department: Michigan Department of Information Technology

Address: Romney Building, 111 South Capitol Avenue, Eight Floor

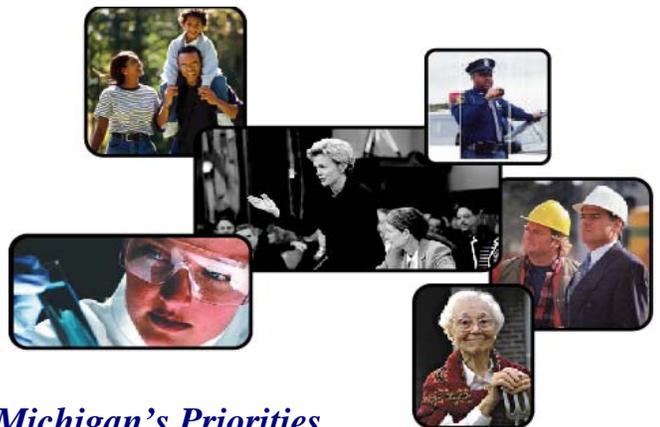
City: Lansing

State: Michigan

Zip: 48913

Phone: (517) 373-1006

Email: TakaiT@michigan.gov



MDIT: Service and Strategic Support for Michigan's Priorities

Implementation of Michigan Consolidated IT Services Executive Summary

In fiscal year 2001, the pressures of the economic downturn severely affected Michigan's manufacturing-based economy, decreasing the state's revenues even as it fueled demand for government services. Reductions in the state's workforce drove agencies toward increased automation, and citizen demand for Web-based and IT services escalated. Recognizing that the siloed and incremental legacy approaches could no longer address the growing and changing needs, the state looked for broad-based, innovative solutions. IT was moved out of its traditional order-taker role to that of a strategic policy, business and service partner, particularly for Michigan's departments, capable of transforming the way government meets the needs of its citizens and taxpayers.

The Michigan Department of Information Technology (MDIT) was created in October 2001 by Executive Order No. 2001-3 to achieve a unified, cost-effective approach for managing information technology among all Executive Branch agencies. Michigan centralized information technology resources and functions from 19 state agencies, encompassing all IT personnel (1,700 plus), equipment, and activities. This single department uses a strategic, statewide service approach to address the challenges of declining resources, increasing demand, security, and government transformation goals. The Department's initial charge included centralizing IT policy-making, unifying strategic information technology planning; improving information, project, and systems management; managing enterprise projects; consolidating infrastructure and application development; and addressing enterprise security needs.

Michigan used a phased approach, spanning four years, and having the full executive sponsorship of two administrations. A premium was placed on change and risk management, customer, cross-boundary and service relationships, and outreach processes. Existing organizations and functions were consolidated, several were materially strengthened or changed, and a number of new functions, processes and organizational units were created. New functions and processes included Agency Services, the Services Delivery Improvement Initiative, a consolidated infrastructure organization, Office of Technology Partnerships, Outreach Office, Center for Geographic Information, and the establishment of the internal and external liaison and advisory bodies MITEC and CyberMichigan.

The consolidation enabled major reductions in staff and expenditures, while maintaining or increasing service levels. Total Interdepartmental grant spending (IDG) was reduced from \$465.6 to \$350.5 million (24.7%). State employee staff was reduced from 2,064 to 1,762 (15 %), and contractors from 1,764 to 469 (64 %), for a total reduction of 34 percent.

The debate on the merits of centralization versus decentralization has reached a tipping point. The juxtaposition of an enduring, if not permanent, fiscal crisis with continuing demand for services, expectation of efficiencies and ROI, concerns about security and other cross-boundary issues, and an increasingly mature IT management, solution and service experience base has moved the issue from debate to the decision and design table. More than 12 states are actively assessing or taking centralization or consolidation actions. The Michigan experience, one of the longest established and advanced, offers lessons on both practices that can maximize benefits as well as minimize risks. The elements of Michigan's approach are reproducible as individual initiatives or as part of overall IT consolidation for governmental units seeking cost savings, operational efficiencies, and increased effectiveness.

However, one size does not fit all. The particular state circumstance, balance of issues and policy drivers and the makeup of government all have a crucial influence on the choices and decisions to be made. It is a complex, challenging undertaking, involving risks and tradeoffs, requiring a proactive, sustained management of change, customer and stakeholder relations, as well as risk itself.

A. Description of Project

Phased Implementation: Centralization of Michigan's IT occurred in two distinct phases. In *Phase One*, (July 2002 to January 2003), the state used a merger and acquisitions approach to focus on the core objectives of the consolidation: (1) centralized, strengthened IT policy-making, including standards (2) integrated IT strategic planning, (3) improved management of IT projects, (4) establishment of an agency services and two-way customer interface capability, (5) centralized IT procurement and contract management, and (6) development of a consolidated infrastructure (Michigan 1). Executive management also defined core financial, organizational, and implementation management processes for the new organization. *Phase Two* began in January 2003, by engaging state agencies and external stakeholders in IT strategy and governance. MDIT now had statewide information, technology and IT perspective.

Traditional, Strengthened and New Solutions: The **traditional IT and management functions** that were transferred included: application development and maintenance; desktop computer support; mainframe computer operations; server and local area network support; information technology planning; IT budget oversight; procurement and contract management; project management; telecommunication services; and IT security. Some of the functions had to be strengthened, and new policies, organizational structures and processes had to be created, particularly to address change management, agency relations and cross-boundary collaboration and outreach. *Strengthened functions* included strategic planning, standards and architecture, employee services and development, contracts and procurement, and project and process management. *New functions, processes or organizations* included: Agency Services, Services Delivery Improvement Initiative, consolidated help desk, consolidated information organization (including Michigan 1), Office of Technology Partnerships, Outreach Office, Office of Enterprise Security, Center for Geographic Information, and the establishment of the internal and external liaison and advisory relations with MITEC and CyberMichigan.

Process, Leadership and Outcomes: The comparatively rapid, but systematically phased implementation involved significant changes in authority and organization, which were complemented by solid process changes, a positive culture and strong leadership. Tough policy and operational decisions were made to consolidate and reduce costs. While there were some unavoidable initial disruptions, there were multiple, significant benefits, and in several areas Michigan has received national recognition for its enterprise and statewide approach, model processes, outstanding efficiencies and other accomplishments.

Risks and Risk Mitigation: A large scale organizational consolidation is a complex, challenging undertaking, involving risks and tradeoffs, requiring proactive, sustained change and customer stakeholder relation management. Some of the issues and risks to be mitigated include: Inherent complexity of large-scale organizational change; sustained demands of a operating a matrix organization; effects of culture and inertia; bridging inter-agency, cross-boundary barriers; initial staff, career disruptions, communications breakdowns, and adverse effects on morale; initial decreased flexibility in responding to department-specific needs, and potential performance reductions; perceived loss of control and agility at the departmental level, and possible tensions with departments; and a higher risk of budget reductions and potential political backlash due to the much higher visibility of total expenditures and the larger projects.

The practices, outcomes and benefits discussed in sections B, C and D are not planned or projected events. They represent actual, documented progress made over four years. The elements of Michigan's approach are reproducible either as individual initiatives or as part of an overall IT consolidation. States seeking greater policy and strategic coherence, improved cross-boundary relations, cost savings, operational efficiencies, and increased effectiveness can benefit by turning to this experience base. In any one instance, the management processes described can parallel best practices also used by other states.

Best Practices and Lessons Learned: Successful organizational redesign and consolidation needs to be supported by a clear understanding of desired goals, the authority required to meet them, responsive and effective processes, a positive culture and strong leadership. However, the most basic requirement is maintaining an equitable, workable balance among agency and staff needs and those of the enterprise, recognition of the complexity and risks involved, and being cognizant of the unique characteristics of the state.

1. Leadership and Gubernatorial Support: The centralized IT approach has had full executive sponsorship during two administrations. Other states, including Michigan, Virginia and Illinois at *Governing* magazines “*Managing Technology 2005*”, cited this as a fundamental requirement.

2. Adequate Scope of Authority: EO 2001 - 3, detailed in the “*2004 – 05 NASCIO Compendium of Digital Government in the States*”, provides MDIT with an exceptionally broad mission and authority. A 2003 Gartner State Technology Management Assessment ranked Michigan in the top quadrant for its strategic and operational role potential, high on both breadth of influence and depth of support.

3. Change Management Processes and Organization

An Integrated Planning Process: The IT strategic plan is fully integrated with MDIT’s operational plan, agency business plans as well as the state Cabinet Plan. By directly staffing the Cabinet planning effort, MDIT gained an in-depth understanding of the Governor’s priorities and agencies’ business plans, and used that understanding to build Michigan’s IT strategic plan. All technology initiatives have been prioritized with individual departments and the Governor’s office, ensuring relevance and positive impact.

Enterprise Funding Model and Budgeting: A consolidated, enterprise level IT budget , funded through interdepartmental grants (IDG) has been implemented. Part of the agency charges are based on rated services, and the funding model for IT is being refined. The FY 2004 Budget was the first consolidated IT budget in Michigan's history. The IT budget process is a part of the states outcome budgeting process.

Strong Procurement Management: MDIT sets IT procurement policies, which are put in practice jointly with the Department of Management and Budget. MDIT is using faster contract vehicles, is consolidating and leveraging demand and has 100 percent competitive bidding.

Clear Standardization Authority: Enterprise standards are established for the desktop environment, Web tools, database software and tools, servers in some functional areas, and network devices and monitoring tools. Michigan had consolidated mainframe and telecommunications operations earlier, has a statewide technology help desk, and is in the process of consolidating servers and e-mail systems.

Centralized Project and Process Management: A Project Review Board has been established, along with a formal Project Management Resource Center for tracking technology initiatives through dashboard reporting.

4. Customer, Agency and Cross-boundary Service Relations: The following organizational changes and processes were implemented to maximize the benefits and minimize the risks inherent in the change and consolidation process. Emphasis was also placed on internal and external cross-boundary relations.

Improved Communications, Culture and Human Investments: MDIT developed a skills inventory, staff development programs, an employee communications function which includes the “TechTalk” Web site;

holds regular Town Hall meetings with the CIO and leadership, and has an extensive employee recognition and reward program. One of the IT strategic plan goals is making Michigan a great workplace for IT professionals.

To facilitate cross-boundary relations, MDIT established the *Michigan Information Technology Executive Council (MITEC)*, an advisory council of deputy-level directors from the nineteen state agencies, the legislature and the judiciary, and formed a relationship with *CyberMichigan*, a public/private sector statewide IT forum.

Agency Services (AS): A new organization, serving as the liaison between MDIT and the individual Executive Branch agencies was created in order maintain business relationships and ensure delivery of agreed upon services. AS also works with cross-agency leadership to identify essential outcomes for government programs, and helped shape spending priorities for FY06.

Service Delivery Improvement Initiative (SDII): A two-phase initiative successfully addressing the initially negative perceptions of the client agencies, uncertainty and confusion, and improving service delivery in all areas. Led by a cross-functional team of DIT employees, SDI is responsible for change management and service plans. The first four of the twelve targeted areas were: Client relationship management model (CRM); Client Service Center (CSC); procurement; and end user services (EUS). Phase two focused on several internal processes such as DIT Governance, or decision-making authority.

Because of the priority and enterprise, cross boundary nature of security issues, an *Office of Enterprise Security*, headed by a *Chief Information Security Officer* for the Executive branch has been established. The “Secure Michigan” initiative, and more recently its Web portal have received national recognition.

Consolidated Infrastructure (Michigan / I): Multi project enterprise initiative including desktop standardization; directory service, messaging and server consolidation; and enterprise system management.

Office of Technology Partnerships, a new organizational structure, fostering cross-boundary technology collaboration and partnerships with business, K-12, universities, and local units of government.

B. Significance to the Improvements of the Operation of Government

In addition to an improvement in policy and program alignment, increased enterprise level efficiencies and effectiveness, and supporting a statewide and cross-boundary approach, the program and process changes also permitted a greater emphasis on data, information and knowledge management, and provided an improved platform for the transformation of e - government and government itself.

Improved Public Policy, Strategy and Planning Alignment: MDIT’s direct staff support of statewide business planning at the cabinet-level provided a coherent, repeatable planning process and ensured that IT strategy stayed aligned with the Governor’s priorities and with individual agency business plans.

Improved Transparency, Accountability, Management and Business Case: Consolidating resources has resulted in greater transparency and accountability of operations, a more comprehensive and integrated planning and budget process, and significantly improved the output and outcome reporting and analytic information base. This in turn has improved the state’s ability to manage IT programs. Also, after an initial education and outreach phase, a fuller and more systematic and sustained business case is being made to decisionmakers on consolidated IT operations, programs and services

Resource Allocation: Centralization has permitted a more efficient resource allocation process, with potential for making more resources available for other IT priorities, as overall IT costs are reduced.

Improved Internal and External Cross-boundary Relationships and Processes: Agencies directly participate in the IT planning and budget development process through MITEC. The Office of Technology Partnerships provides a focal point for state/local collaborations and public/private partnerships, supporting MDIT's statewide perspective.

Use, Sharing and Management of Information: Consolidation has enabled a greater emphasis on data, information and knowledge management, including information sharing among different agencies and levels of government. For example, the data warehouse has become more effective and efficient, and several new enterprise level initiatives have been developed.

Security and Disaster Recovery: The enterprise level "Secure Michigan" approach provides a consistent, integrated approach across all departments and makes individual agencies less vulnerable.

Clarifying Sourcing Issues, Policies and Options: Consolidating functions, processes and resources has permitted a more comprehensive and thorough assessment of the balance between in-house and sourced services as well as available options.

Platform for the Transformation of Government: The combination of: process, innovation and outreach emphasis; enterprise reach and link to business plans; outreach and cross-boundary approach; improved information management; and a critical mass of project managers and planning staff offers MDIT a platform for not only transforming digital government, but government itself. Major statewide issues currently being addressed include health, security, broadband, and economic development.

C. Customer, Service Recipient, Taxpayer, Agency Benefits

General Benefits: Standardization has provided economies of scale for equipment and software licensing; centralization has enabled better integration of constituent-facing services; consolidation has helped eliminate redundancy and costs through enterprise leveraged solutions with projects such as online credit card payment, e-grants, and intranet; Agency Services has enabled clear communication between IT and the agencies, building relationships with the client agencies that maximize business value and provide business/IT alignment.

More Enterprise Solutions: A premium is placed on developing 'enterprise solutions' that are deployed across multiple agencies (e.g. CEPAS, MiTAPS, e-Store). Also, centralized hosting center servers have increased from 876 to 1,123, and 16,000 state e-mail users have been moved to a consolidated server.

Improved and Increased "anyone, anytime from anywhere" State Services: MDIT has delivered 43 new on line services in 2004 and 6 more in the winter of 2005. Citizens have increased the use of online services 54 Percent since 2002. MDIT has achieved a 10 % cost reduction in Michigan.gov (State portal) service costs while page views increased 82.7 % and 37 new functions/sites were added.

Makes Infrastructure Consolidation Feasible: Michigan/1 is an enterprise consolidation and standardization effort spanning 55,000 desktop computers, 3,000 servers and 26 data centers. It is creating an Enterprise Management System for infrastructure, including: Desktop Standardization, Directory Services Consolidation, Asset Management, Messaging Consolidation, Server Consolidation, and Enterprise System Management.

Improved Staff Professional Development: The assimilation of technical expertise in one department had the benefit of giving staff opportunities to develop skills in new platforms and technologies that parallel private sector opportunities. Also, MDIT has identified job competencies for all job roles in MDIT, 60 unique roles, and has a professional development strategy as well as a curriculum in place. Approximately 250 DIT employees have gone through Project Management Certification.

Expanded Outreach / Partnerships: With the help of MDIT 's coordinated outreach efforts, local governments have increased the use of the state's Master Computer Purchasing Contract by 79 percent

Improved Security: With over an 800 percent increase in virus intrusions in 2004, MDIT was able to remove 99.94% of all viruses instantaneously. Implementation of SPAM filtering and SurfControl prevents users from accessing Web sites that are deemed risks to the State's network and systems.

D. Return on Investment (ROI), Short - Term / Long - Term Payback

Centralization and consolidation, in conjunction with program and service efficiencies, has enabled major reductions in staff and expenditures, while maintaining or increasing service levels (See sections B and C). In addition, centralization of authority has enabled management actions addressing resource shortfalls and budget reductions (e.g. contracts, negotiated rate reductions, enterprise license deals, contractor replacements and eliminations, purchasing freezes). An enterprise management approach to contracts and negotiations has also resulted in leveraging reductions that have provided ongoing savings. In addition, the early-out savings represent a counterpart to efficiencies and savings gained from consolidation.

1. Ensuring the use of ROI (Michigan's ROI Program): MDIT has developed measurements of expected outputs and outcomes for major initiatives, as a part of the project review, planning and budgeting process. Projects and agencies will be held accountable through charters as well as SLA's. MDIT will be using ROI as part of the outcome budgeting and project management process.

2. Increased Service Demand: Maintenance requirements have remained stable, while service demand has increased. For example, MDIT maintains over 800 critical business applications, 55,000 desktop computers, over 3,000 servers, and serves 1,305 telecommunications locations.

3. Savings and Cost Avoidance: Total Interdepartmental grant spending (IDG) was reduced from \$465.6 million in FY 2003 to \$350.5 million in FY 2005, for a reduction of \$115.1 million (24.7%). Major components include: \$65 million in contract savings (rate reductions, cost avoidance / savings over the life of contracts); Savings of \$10 million annually through replacement of long term contractors with state employees; and \$2.3 million savings annually through reduction in voice and data phone rates. State employee staff was reduced from 2,064 to 1,762 (15 %), and contractors from 1,764 to 469 (64 %), for a total reduction of 34 percent. \$24 million in total was saved due to early retirement.

4. MDIT ROI: Currently MDIT is providing the same or increased level of services with 66.5 % of the staff and 75.3 % of the budgetary resources available before the consolidation [1,764 state staff plus 469 contracted staff divided by 2,064 state staff plus 1,292 contracted staff], and [\$350.5 million / \$465.6 million in nominal dollars].

5. MDIT Long Term Savings: Estimated yearly savings total a minimum of \$36.3 million [\$10 million annually from contractor replacement, \$24million from early retirement, \$2.3 million from voice and data rates).