

STATE OF MICHIGAN
Department of Information Technology

**Enterprise IT Portfolio Governance and
Management Model**

NASCIO 2007 RECOGNITION AWARDS CATEGORY:

IT PROJECT AND PORTFOLIO MANAGEMENT

Enterprise IT Portfolio Governance and Management Model Executive Summary

The development of the Strategic Management Team (SMT) and its **Enterprise IT Portfolio Governance and Management Model** has been a groundbreaking step towards better stewardship of IT resources for the State Of Michigan. It is a defining move in maturity on a path that started with Michigan's consolidation efforts in 2002, a planning framework of initiatives based on State Agency line-of-business profiles in 2004, and has now shifted to a project and portfolio management approach in 2006.

Michigan's IT consolidation in 2002 created a de-facto project portfolio with the combination of existing Agency projects that were underway at the time. In 2003 the Michigan Department of Information Technology (MDIT) began using its new enterprise perspective to engage the State Of Michigan's Agencies to drive IT Strategy in Michigan. The result was a deliberate portfolio of projects aligned to overarching strategic goals yet still oriented towards each individual Agency's - sometimes disparate - needs. Also at that time, MDIT in trying to satisfy its customers was willing to attempt more projects than it had the capacity for. Without a standard process to evaluate proposals, projects were started basically with just the approval of an Agency specific IT leader. Additionally without clear visibility across the organization there were many duplicated efforts by Agency specific initiatives.

To remedy these issues the Agency Services Information Officers began meeting in November of 2005 intent of improving the situation and those efforts evolved into the Strategic Management Team and the **Enterprise IT Portfolio Governance and Management Model**.

As part of the governance process it was quickly apparent that representation was necessary from the functional IT leaders that had oversight for Infrastructure Services, the helpdesk, and the Field Services areas. So in late January 2006 these executives joined the process forming the initial Strategic Management Team (SMT). At this point the SMT got underway with its initial inventory of projects and commissioned the in-house development of a dashboard tool dubbed "MiPlan" to provide a mechanism for visibility into the planned work and the progress of all projects that would be part of the enterprise portfolio.

To perform an evaluation that scrutinized all ongoing and planned projects the Michigan Portfolio Assessment Framework was developed. This signature framework scored all projects on the basis of "Value" to the organization and the "Risk" to achieve the projects outcomes. Combining the prioritization and risk profiles from the framework with resource capacity planning created the first true enterprise IT portfolio for the second half of Michigan's 2006 fiscal year. This first portfolio process whittled 120 initiatives down to 49 and brought divisions that had previously worked semi-independent of each other were now working in lock-step. Also many of the duplicated efforts in areas such as Data Warehousing and Identity Management were consolidated and streamlined which added to their progress and momentum. Subsequent portfolios have achieved a 70% rate for on-time, on-scope, and on-budget project outcomes across the entire portfolio.

This interactive and flexible process has allowed Michigan to take full advantage of every IT dollar spent in the Executive branch of State government. The **Enterprise IT Portfolio Governance and Management Model** has increased IT productivity, organizational agility, and better assures desired outcome and ROI realization. The broad portfolio view better balances internal and customer directed investments, diversifies the risks while at the same time broadening the impact of successful emerging technologies, and has enabled the identification of innovative cross boundary opportunities. The model's processes continued to be refined, its stakeholders broadened, and the results continue to improve for each subsequent cycle. The **Enterprise IT Portfolio Governance and Management Model** has been extremely successful and is strong and flexible enough to take the Michigan Department of Information Technology on to the next stages of driving delivery and policy on statewide priority issues such as e-health, education, and economic development.

A. Project Background

The responsibilities of the Michigan Department of Information Technology (MDIT) as a centralized IT organization include balancing the IT demands from the major 19 State Agencies as well its internal priorities to better manage IT as a whole. While in the past each area's projects would have been managed in a focused silo, it was clear that the maturing organization and IT environment in Michigan required a better method of making and monitoring IT investment decisions. What was needed was a sustainable enterprise model with a method of alignment, resourcing, and monitoring of a portfolio of IT projects.

What developed was a governing body called the Strategic Management Team(SMT) which uses the Michigan Portfolio Assessment Framework for aligning and prioritizing government information technology projects to deliver better balance between different types of investments, flexibility and agility to keep up with new or changing political priorities, and to gain consensus among a broad group of IT stakeholders.

The Strategic Management Team consists of IT leaders representing all 19 of the major State Agencies within Michigan as well as IT functional leaders for infrastructure services, desktops, helpdesk, field services, various administrative shared service areas, and cross boundary initiatives. This group uses the signature Michigan Portfolio Assessment Framework to create process and traceability, and to provide *transparency* into the IT investment decision making that builds the enterprise portfolio. This framework evaluates possible projects or investments using "Value" and "Risk" measures. A key tenet it that it is not focused on trying to define an absolute correct investment, but is designed to reflect an agreed consensus of the priorities of the SMT.

The Michigan Portfolio Assessment Framework takes in to account 3 broad categories of Value to prioritize projects. They are Alignment, Feasibility, and Benefits. The categories are weighted between themselves based on the collective priorities of the SMT.

A sampling of factors in the Alignment category include:

- Strategic and Executive Branch policy alignment
- Opportunities for collaborative and cross boundary partnerships
- Technology leadership or innovation.

Feasibility is measured by:

- Business Sponsorship,
- Alignment to Enterprise Architecture and technical standards
- Skills availability or knowledge base

The Benefits category quantifies:

- Structural cost savings
- ROI
- Revenue enhancements
- Efficiencies to State employee's productivity
- Direct efficiencies or savings to citizens and constituents
- Increases in the "asset" value of the MDIT organization to the future operations of State Government through:
 - a. Internal process efficiencies
 - b. Increased service quality
 - c. Security improvements
 - d. Reductions in risk

A unique underpinning of the Michigan Portfolio Assessment Framework is that since public sector projects are often attached to policy positions or legal mandates that cannot be undone; the Risk profiles are a guide to which risk mitigation techniques must be applied, as opposed to which projects should be avoided. So the framework qualitatively measures the risk profile of each project to ensure the proper oversight levels from the portfolio monitoring that the SMT performs, as well as the project specific management and monitoring that Michigan's Project Governance and Control Office model will provide. The risk profiles take into account:

- Extent of organizational change
- Degree of coordination or span of stakeholders
- Project size and customization
- Financial penalties or legal mandates
- Failure or nil consequences (non-financial)
- Security and privacy risks to any information or data involved.
- Highly compressed or extended schedule

These Value and Risk scores provide enterprise priority to projects and are used by the Strategic Management Team to build their IT portfolio. Once all potential initiatives have been evaluated, a resource-cost estimation is completed for each initiative. In parallel a resource capacity evaluation is done by resource type within every major division of MDIT. The estimates of resource capacities are then applied beginning with the highest priority investments and continue through the list until the limit of available resources is reached. Then an iterative exercise ensures resources are balanced across divisions, confirms the available resource allocation models, identifies opportunities to supplement skills, determines key resource bottlenecks, and makes the final scope commitments. Then the portfolio is approved and all the projects move ahead.

A monitoring phase ensues with time set aside at weekly SMT meetings to track and address issues which are limiting progress toward project outcomes and milestones, and therefore the health of the overall portfolio. Care is taken to seek out leading indicators to problems as well as reviewing the lagging indicators in order to keep delivery on track towards the project's outcomes and schedules. Oversight throughout the monitoring phase is directed proportionally to the Value and Risk scores, with the highest visibility applied first to projects of high-value and high-risk, then high-value and low-risk, and finally the lower-value low-risk projects.

Each project is given an overall status of green(healthy), yellow(warning) or red(needs help) to reflect the lowest of the status ratings in the individual areas of scope, budget, and schedule. The status is updated and tracked by a dashboard tool developed in-house called "MiPlan." Access to the tool is given to the customer stakeholders as well as IT decision makers to facilitate clear communications on the projects in the portfolio. The aggregation of the overall project ratings shows the global health of the portfolio.

At the end of each cycle a performance measurement exercise is completed that gathers both quantitative and qualitative feedback on the effectiveness of the **SMT Enterprise IT Portfolio Governance and Management Model** and of the organization relative to achieving the desired outcomes encompassed in the portfolio. This data then feeds into the following cycle so that assumptions, decisions, and process steps can be appropriately modified with the focus being on the continuous improvement of the model's processes and its benefits.

The **SMT Enterprise IT Portfolio Governance and Management Model** began in January 2006 and is in its third 6-month cycle of use. Each cycle it has increased the percentage of organizational goals and outcomes achieved through successful projects. It has advanced digital government maturity for the State of Michigan and has paved the way towards government transformation in effectiveness and service delivery.

B. Significance to the Improvements of the Operation of Government

Balanced short vs. long term and internal vs. customer-directed investments – The Michigan Portfolio Assessment Framework allows for a more direct comparison and balance between the enhancement and investment in new systems versus investments to improve core operational or infrastructure services. The framework acknowledges and accepts the value of strategic efforts that usually don't align to traditional ROI models such as long term planning, Enterprise Architecture, and a SOA framework.

Strengthened stakeholder participation – After just the first cycle of use, the impact of the **Enterprise IT Portfolio Governance and Management Model** on the organization's project delivery capabilities as well as employee's motivation towards the projects that most align to the Executive Branch's policy goals were so profound that additional stakeholders who were initially on the periphery of the process were adamant at being more involved in the next cycle. Strong stakeholder buy-in is also shown through attendance to the weekly meetings which is almost 100%. The areas represented now include 19 customer departments, and functional leaders from Technical and Data Center Services, Office Automation, Helpdesk, Security, GIS systems, Contracts and Procurement, Finance and HR, and local government/cross boundary representation. This robust and sustained participation continues to increase the effectiveness of the model's processes and portfolio.

Diversifying Risks and Opportunities – The **Enterprise IT Portfolio Governance and Management Model** enables the SMT to balance the risks and benefits of highly transformational but also less mature solutions. The risks of these solutions can be offset by incorporation into a mix of more stable and proven projects, yet if successful the benefits can be shared among a larger group of stakeholders and can address more diverse needs. This has allowed Michigan to target many emerging solutions such as IP telephony, wireless and mobile service delivery channels, and shared administrative services.

Increased Organizational Agility – The **SMT Enterprise IT Portfolio Governance and Management Model** keeps project spending and delivery aligned to the Cabinet Action Plan and Executive branch policies as well as other emerging opportunities. This process has also been very effective in handling changes in priorities as shown by proactive and swift actions on the part of the SMT when addressing investment decisions or problems with the health of the portfolio. Examples include development and standardization of collaboration technologies in response to budgetary travel restrictions, and Michigan's nationally recognized HIT efforts as a response to rising health care costs.

Innovative Cross-boundary Initiatives – Having a full portfolio perspective and broad stakeholder participation has resulted in earlier identification of projects with cross-boundary benefits. Examples of these projects include:

- Multiple initiatives for the sharing of data networks between State and Local governments
- Michigan ISAC which joins all levels of government in the State as well as public universities for collaboration and coordination around cybersecurity threats.
(<http://www.michigan.gov/cybersecurity/0,1607,7-217-43559---,00.html>)
- Michigan Geographic Framework Network which is a partnership program to maintain a statewide consolidated GIS repository that is used by both public and private entities.
(<http://www.michigan.gov/cgi/0,1607,7-158-12618-31485--,00.html>)

Improved Communication – The inclusion and collaboration that the **SMT Enterprise IT Portfolio Governance and Management Model** has created within the State Of Michigan IT leadership has produced a more consistent message on organizational goals and priorities. Additionally having a disciplined and transparent process has increased the buy-in to the portfolio by all employees.

Coordination of highly interdependent areas – The enterprise prioritization of projects creates the collaboration between strategic leaders needed to deliver highly integrated IT projects across our large organization. This enterprise planning has narrowed MDIT's focus to the projects with highest public value, and has increased productivity by better aligning the highly interdependent shared service areas of security, infrastructure, and telecommunications with the delivery of the portfolio's projects. Recent initiatives such as data center consolidations, common desktop and file/print environments, and a new Software Engineering Model for application development are examples of complex projects that have benefited from the common priorities across the Michigan Department of Information Technology.

C. Public Value of the Project

Operational Efficiency

Especially in the State of Michigan, budget constraints have created the need to improve every resource allocation. The citizens expect government to be as efficient as possible before coming to them for more revenues. The Michigan Portfolio Assessment Framework has elevated the alignment of IT project investment decisions and the portfolio and project monitoring with its intense oversight of weekly scrutiny coupled with end-of-cycle performance measurement has dramatically increased the efficiency of IT resources.

Measuring the ability of the organization to turn strategy into tactics, and then deliver on the stated project outcomes shows the value of the **SMT Enterprise IT Portfolio Governance and Management Model**. During the initial cycle the model had delivery results of projects and their targeted outcomes with:

- 49% success rate for outcomes delivered on time, budget, and scope
- 12% of outcomes were suspended due to changes in direction and priorities
- 39% of outcomes had significant progress made but not within the planned timelines and scope.

The second cycle has produced even better results with:

- 70% success rate for outcomes completed on-time, on-scope and within budget
- 17% suspended due to changes in direction and priorities
- 13% made significant progress, but not within the planned timelines and scope.

More desired outcomes achieved - The willingness of MDIT staff to take on too many projects is something that has been uncovered and controlled through implementation of the **SMT Enterprise IT Portfolio Governance and Management Model**. Michigan is achieving more of its desired outcomes due to the prioritization and capacity planning that happens during the process.

The other part of achieving more outcomes derives from the prevention of projects getting off track. This is accomplished with the information provided by the risk profiles which allows the SMT to apply Michigan's *Project Governance and Control Office* model to the riskiest projects. This benefits IT stakeholders with additional IT productivity and gives State Agencies both improvements in their delivery of services as a result of the IT investments, as well as reduced IT costs from project overruns.

Willingness to cancel or suspend projects - In the past it was common within MDIT that once a project was started the project teams would always advocate seeing it through to completion regardless of whether it was going to achieve the desired outcomes. Now more projects are being suspended or cancelled when priorities change allowing those resources to be redirected to efforts that are more valuable. This adds creditability to the process and to the shows the stewardship by the IT leaders, as well as ensures the outcome and ROI realization for the State Agencies and other stakeholders.

Transferability to other Organizations

Through the involvement and interactions with many of our customer stakeholders while executing these processes, parts of the **SMT Enterprise IT Portfolio Governance and Management Model** are being duplicated in other State of Michigan Agencies for application to non-IT related projects and initiatives. The improved management and governance of the policy or service delivery projects in those Agencies has resulted in better accessibility, availability and quality of services to both Businesses and Citizens in the State Of Michigan.

Return on Investment

The return on investment for this model comes in the forms of the investments that it has enabled that otherwise would not have been made as well as the savings by reducing the delays in achieving project outcomes as shown previously. For an example the total resources spent on managing and executing the **SMT Enterprise IT Portfolio Governance and Management Model** is just over \$195,000 on an annual basis. The cost savings of just 2 of the projects enabled by the process (an Electronic Grant Management system and the enterprise Business to Government portal) is in excess of 1.6 million dollars which represents an ROI of 7.2. However this takes into account only 2 of the 49 projects in one of the previous portfolios so the actual return on investment for the **SMT Enterprise IT Portfolio Governance and Management Model** is several magnitudes higher.

Of the 62 projects in the current portfolio just two, a Document Management shared service offering and a Centralized Contact Center Support Team, both of which could not have happened without the **SMT Enterprise IT portfolio**, have annual savings of \$18.6 million and \$1 million respectively.