



# MDIT

MICHIGAN DEPARTMENT OF INFORMATION TECHNOLOGY

## Data, Information and Knowledge Management

Managing Enterprise Performance Data and Information for Decision Making  
(MiPLAN – Michigan Planning and Reporting Tool)

**Nomination Category:** Data, Information and Knowledge Management

**Title of Nomination:**

Managing Enterprise Performance Data and Information for Decision Making  
(MiPLAN - Michigan Planning and Reporting Tool)

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## Executive Summary

Governments and businesses alike are utilizing technology in new ways to influence their business and decision processes. From card processing machines which typically housed accounting records and historical information to web application and data-mining, technology has been an essential element in providing knowledge workers and decision makers the information they need, when they need it.

Michigan is at the cutting edge in applying data, information and knowledge management tools and processes in gathering, analyzing and disseminating information. Whether it's in strategic and business planning, issue management, or program enhancement, Michigan ensures that managers have the critical information they need to make those hard decisions.

Prior to 2005, the State of Michigan's policy and decision makers had no means of gathering and analyzing project information in real-time to enable effective decision making. The tracking and monitoring of project information was cumbersome to manage and provided little advantage in influencing decision making.

In May of 2005, the Michigan Department of Information Technology implemented the Michigan Planning and Reporting Tool (MiPLAN) as an enterprise application for all 19 state departments. This tool, which has now been in place for over a year, provides program evaluation, public policy and strategy alignment, accountability and performance management, project and information management, issue management and tracking, and accomplishment reporting. This functionality is accessible to government knowledge workers and managers anywhere (computer, PDA, blackberry, or smart-phone) at anytime.

Specifically, MiPLAN is used to:

- Measure and manage all of the governor's public policy projects and her statewide business plan
- Provide portfolio management to all departments
- Enhance decision making through data-mining and customizable reporting for any level
- Provide cross-boundary reporting and information sharing
- Engage, educate and motivate state employees. Employees are now able to see the big picture and impact the projects they work on which influence services to Michigan's citizens and businesses.

MiPLAN is a completely customizable tool built to be transferable to any organization. In Michigan, all state agencies are currently utilizing this as a standard tool to report project outcomes, measures and to do portfolio management. Michigan's return on investment (ROI) for MiPLAN, after year one, is over \$516,000 dollars after project costs.

Overall, MiPLAN has "best in breed" functionality. As Governor Granholm stated, Michigan now has "a living document – and not only a hard copy document, but a dynamic, electronic database of tasks; of which departments are working together to complete them; of who is ultimately responsible for them; of what stage of completion they are at and our internal targets."

## **A. Description:**

### ***Public Policy Demand for Information and Portfolio Management***

When Michigan's governor took office in 2003, she shared a bold vision for developing a cost-effective government that delivers the results people demand – without wasting precious taxpayer dollars. She envisioned a government that ensures that Michigan is a place where businesses want to invest, people want to live, and families want to raise their children. In support of this vision, she developed a statewide business plan titled the Cabinet Action Plan (CAP). This plan consisted of public policy commitments, strategic initiatives, and outcomes that were to be achieved within its four-year planning horizon.

***Problem: The State of Michigan's policy and decision makers had no means of gathering and analyzing project information in real-time to enable effective decision making.***

Initially, the tracking and monitoring of the CAP from all 19 cabinet departments was accomplished utilizing standard office templates developed by their planning team. This was a cumbersome way to manage, measure, and track progress. Management was unable to make real-time decisions based on the essential information being reported. Specifically, there was no way to:

- Logically plan and manage their dashboard of priority initiatives
- For departments to interact and collaborate in reporting of cross-boundary initiatives
- Have a seamless process for measuring progress
- Make educated business decisions based on critical information

As a result, the Michigan Department of Information Technology (MDIT) proposed that a web-based application be developed to simplify the management of and increase the decision making ability within the Cabinet Action Plan.

### ***Barriers, Challenges and Opportunities***

When MDIT first proposed a potential solution to this problem, each of the 19 cabinet departments became captivated by the tool's potential in their own program management. At that time, each department currently tracked, monitored, and conducted analysis on initiatives within each of their departments. However, none of the departments were satisfied with their process and few of them had anything automated. As a result, each of the departments wanted to assist in the requirements gathering process for the new reporting tool.

MDIT used this interest as an elixir to develop a cross-boundary advisory group who would lay out the requirements of the web-tool and champion the roll-out of an enterprise wide information and portfolio management and reporting tool. This advisory group investigated how each department within the State of Michigan currently reported on projects, conducted best practice research, and learned from other states on how to report information that would enable better decision making.

### ***The Solution – Michigan Reporting and Planning Tool (MiPLAN)***

After four months of requirements gathering and three months in development, MDIT released the Michigan Planning and Reporting Tool (MiPLAN) to state government in May of 2005. This tool, which has now been in place for over a year, provides project and portfolio management, issue management and tracking, and accomplishment reporting.

Throughout MiPLAN's first year, the Governor's office utilized the tool to monitor and make decisions on its top priority initiatives. The MiPLAN tool not only supported the public policy goals of the executive branch but enhanced their decision making through analytical reporting. For example, the

Governor uses this tool on a monthly basis in her executive cabinet meeting to ensure the promises she made are kept; and when milestones or outcomes are not met managers have the information they need to shift resources to ensure completion. Governor Granholm stated that MiPLAN, “is an enormous management and tracking database of over 170 commitments (projects) that we’ve made to citizens – everything from implementing early childhood learning programs to improving our roads around the state to giving folks access to cheaper prescriptions.”

Today, the MiPLAN tool has been implemented in each of Michigan’s 19 cabinet departments. It provides the State of Michigan a single enterprise wide solution to manage and track projects. The tool was designed to be user friendly for anyone from front line employees to department Deputy Directors. MiPLAN’s functionality provides for data and information sharing, cross-boundary reporting on projects, and customizable dashboard reporting of individual projects down to any level of one’s organization.

MiPLAN is a key tool in assisting state employees in becoming more productive and providing more timely and accurate reporting of project status. In addition, departments are now able to better understand what initiatives other departments are involved with and can determine where multiple departments are involved, eliminating duplication of effort and thus providing better service to the citizens of Michigan in a more cost effective manner.

Specifically, MiPLAN is used to:

- Measure and manage all of the governor’s public policy projects and the CAP
- Provide portfolio management for all departments
- Enhance decision making through data-mining and customizable reporting for any level
- Provide cross-boundary reporting and information sharing
- Engage, educate and motivate state employees. Employees are now able to see the big picture and impact the projects they work on which influence services to Michigan’s citizens and businesses.
- Provide the Governor the ability to determine what performance outcomes have been achieved

Overall, MiPLAN has “best in breed” functionality. As Governor Granholm stated, Michigan now has “a living document – and not only a hard copy document, but a dynamic, electronic database of tasks; of which departments are working together to complete them; of who is ultimately responsible for them; of what stage of completion they are at and our internal targets.”

## **B. Significance to the Improvement of Government Operation**

### ***Strategic Direction: Public Policy and Strategy Alignment***

MiPLAN is not only used to manage and influence decision making of all public policy commitments and gubernatorial priorities, it also enables each user the ability to align their initiatives and outcomes to the governor’s priorities, Michigan’s budget, and individual department goals, strategic and business plans.

### ***Program Evaluation: Portfolio Management and Business Case Development***

The MiPLAN tool enables each department a unified approach to building and evaluating business cases for every state government project in terms of objectives, outcomes and performance. Additionally, MiPLAN provides departments the ability to logically conduct portfolio management with customizable dashboard reports, data mining, and resource (budget, skills and staffing) assessment.

### ***Accountability***

MiPLAN enables departments the ability to link project and outcome deliverables to specific staff. For some of Michigan's employees, these deliverables are directly linked into their performance objectives for the year, a personalized scorecard of their performance.

### ***Government Transparency and Information Sharing***

MiPLAN enables departments and other trusted partners to report on cross-boundary projects. This means that for a multi-agency project, there is one project plan, one set of deliverables and a common communication platform for issues and deliverables to be reported on and directly linked to individual responsibility. MiPLAN gives departments the ability to share with one another to provide increased efficiency and effectiveness in program and portfolio management.

### ***Decision Making: Project and Information Management***

Customizable reporting through analytics and data-mining provides management real-time reports to improve and/or enhance decision making. MiPLAN is directly tied into the Business Objects reporting tool to provide ultimate flexibility in both information management and predictive analysis to provide management and knowledge workers the information they need, when they need it. MiPLAN empowers decision making and project reporting down to the lowest level to ensure accurate and real time information. Anyone can customize and access reports to best meet their needs.

Additionally, MiPLAN can proactively assist management in performance and decision making through automatically generating and sending reports to users at pre-determined thresholds; yet providing another way make government more productive and efficient. Governor Granholm stated that MiPLAN provides information, "that I can access from my desktop and use as a manager, in our monthly cabinet meetings for instance, to track the progress of our agencies." MiPLAN enables managers the ability to see a direct link between planned goals and actual results!

### ***Issue Management***

MiPLAN provides users and management the ability to automatically escalate projects and issues to others through customizable pre-sets within the database. This means decision makers and project managers are now aware instantaneously when an issue arises within a project, when an action item or decision needs to be made or when a project goes yellow or red. This information is automatically fed to their computer, PDA, blackberry, or smart-phone so that real-time decisions and actions can be made instantaneously, in real-time.

### ***Public relations and citizen outreach***

Whether it is a department success or project accomplishment, communication staff and public information officers have the ability to remain abreast of current department and state achievements. State employees and executives can quickly search the tool to see what the state is doing for particular constituents or interest areas prior to meeting with them, enabling them to have a "big picture" as well as public relations view of state activities in varied contexts.

## **C. Customer and Taxpayer Benefits**

MDIT, government decision makers and Michigan citizens have received enormous benefits from Michigan's Planning and Reporting Tool (MiPLAN). In addition to the ROI and dollars saved in the next section, Michigan has reaped benefits such as:

- All state agencies are utilizing a standard tool to report project outcomes, measures and to do portfolio management
- No additional funds were used to develop MiPLAN, the State of Michigan utilized standardized tools, software and licenses to ensure cost effective development
- The governor and all management, which are utilizing the system, are benefiting from analytical data-mining capabilities to influence decision making and enhance the delivery of state programs
- Increased accessibility for government knowledge workers and managers to access critical information from anywhere (web, wireless, mobile) at anytime
- The quality of state government services have been enhanced with the ability to track, measure and make more informed decisions
- Reduced errors in reporting has improved accuracy of program delivery and accountability
- Enormous process improvements. Michigan now has one place to go to access key project information, issues management, and progress reports
- Savings include streamlined reporting and analytics which enables analysts the ability to spend more time doing project work instead of reporting on project information

Overall, MiPLAN enables enhanced collaboration and program management for all of Michigan's projects. Michigan now has the capability for shared government program management. All projects can be directly linked to both state-wide and department goals, Michigan's budget and the commitments which the governor has promised. With MiPLAN providing additional benefits to state government, citizens are able to reap easier access to enhanced services in a timely fashion. Government officials are able to use performance information to convey to citizens that they are receiving "value for their money".

## **D. Return on Investment (ROI), Short-term and Long-term Payback**

Prior to MiPLAN, Michigan departments were conducting project and portfolio management in a manual, time consuming, and ineffective way.

For just the Governor's Cabinet Action Plan reporting, it is estimated that this manual process typically took over 3.5 hours per project, monthly to track (2.5 hours for reporting and 1 hour for analysis).

Specifically, this involved:

1. The governor's office contacting departments to update them on their projects
2. For a project manager to develop a customizable report for the governor's office
3. Project managers and governor staff to review documentation together to ensure understanding and accuracy of information being provided
4. Once project status was returned to the executive office and agreed upon, projects were compiled, analysis was done, and reports were generated

**Reporting and Analytical Efficiency Accomplished**

Through MiPLAN, project managers are able to update information real-time into the database. It is estimated that around 1 hour is spent per project each month.

Because of this, executives, decision makers, and knowledge workers are now able to log into the MiPLAN tool and generate customizable on-demand reports. Dashboard reporting is a personalized compilation of project information and is done automatically by the system eliminating the need to manually compile reports.

**Project Cost**

To develop MiPLAN, it cost the state approximately \$84,000 dollars in staff and project costs.

**Return on Investment**

Currently, there are approximately 200 projects in the MIPLAN web tool. It is expected that by the end of 2006 there will be around 750 projects in MIPLAN.

<b>Realized Savings (After one year of implementation)</b>			
<b># of Projects</b>	<b>Hours spent prior to MiPLAN</b>	<b>Hours spent with MiPLAN</b>	<b>Total Savings</b>
200	700 hours Monthly	200 hours Monthly	500 hours saved Monthly
			= \$50,000* Monthly
			<b>= \$600,000* Annually</b>
			<b>Minus Project Cost=</b> <b>\$516,000* Total Savings</b>  <b>ROI Percentage</b> <b>\$600,000 / \$84,000 =</b> <b>714%</b>

<b>Anticipated – Annual On-Going Savings</b>			
<b># of Projects</b>	<b>Hours spent prior to MiPLAN</b>	<b>Hours spent with MiPLAN</b>	<b>Total Savings</b>
750	2,625 hours Monthly	750 hours Monthly	1,875 hours saved Monthly
			= \$187,500* Monthly
			<b>= \$2,250,000* Annually</b>
			<b>ROI Percentage</b> <b>\$2,250,000 / \$84,000 =</b> <b>2,679%</b>

\* Based on \$100 per hour for staff time (salary + benefits)