MICHIGAN

OFFICE OF THE AUDITOR GENERAL

AUDIT REPORT

PERFORMANCE AUDIT
OF

INFORMATION TECHNOLOGY INVESTMENT MANAGEMENT PRACTICES

MICHIGAN DEPARTMENT OF INFORMATION TECHNOLOGY

August 2008

THOMAS H. MCTAVISH, C.P.A.
AUDITOR GENERAL

084-0595-07

The auditor general shall conduct post audits of financial transactions and accounts of the state and of all branches, departments, offices, boards, commissions, agencies, authorities and institutions of the state established by this constitution or by law, and performance post audits thereof.

– Article IV, Section 53 of the Michigan Constitution

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REPORT SUMMARY

Performance Audit

Information Technology Investment Management Practices

Michigan Department of Information Technology

Report Number:
084-0595-07

Released:
August 2008

For the six fiscal years 2001-02 through 2006-07, the State invested $2.93 billion in information technology (IT) services for application development, operations, maintenance of existing information systems, and infrastructure. IT investment management best practices are used by private companies and governmental agencies alike to increase their return on investment. The Michigan Department of Information Technology (MDIT) was established, in part, to improve the management of IT investments.

Audit Objective:
To assess the effectiveness of MDIT's efforts to establish the management structure, policies, and procedures needed to ensure that the State invests in IT projects that best support the State's strategic goals.

Audit Conclusion:
MDIT's efforts to establish the management structure, policies, and procedures needed to ensure that the State invests in IT projects that best support the State's strategic goals were moderately effective. We noted two reportable conditions (Findings 1 and 2).

Reportable Conditions:
MDIT should expand its IT investment management practices beyond the agency level to formalize a complete IT investment management program at the enterprise level (Finding 1).

MDIT did not consistently apply key project management practices that would support an IT investment management program at the enterprise level (Finding 2).

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Audit Objective:
To assess the effectiveness of MDIT's efforts to implement key monitoring practices to ensure that the State's investments in IT projects meet cost, schedule, and performance expectations.

Audit Conclusion:
MDIT's efforts to implement key monitoring practices to ensure that the State's investments in IT projects meet cost, schedule, and performance expectations were moderately effective. We noted one reportable condition (Finding 3).

Reportable Condition:
MDIT should expand its monitoring of its enterprise-wide portfolio strategic IT projects to include additional performance data (Finding 3).

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Agency Response:
Our audit report contains 3 findings and 3 corresponding recommendations. MDIT's preliminary response indicated that it agreed with all of the findings and partially agreed with the recommendations.

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A copy of the full report can be obtained by calling 517.334.8050 or by visiting our Web site at: http://audgen.michigan.gov

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THOMAS H. MCTAVISH, C.P.A.
AUDITOR GENERAL

August 5, 2008

Mr. Kenneth D. Theis, Director
Michigan Department of Information Technology
George W. Romney Building
Lansing, Michigan

Dear Mr. Theis:

This is our report on the performance audit of Information Technology Investment Management Practices, Michigan Department of Information Technology.

This report contains our report summary; description of agency; audit objectives, scope, and methodology and agency responses; comments, findings, recommendations, and agency preliminary responses; the five stages of maturity within information technology investment management, presented as supplemental information; and a glossary of acronyms and terms.

Our comments, findings, and recommendations are organized by audit objective. The agency preliminary responses were taken from the agency's responses subsequent to our audit fieldwork. The *Michigan Compiled Laws* and administrative procedures require that the audited agency develop a formal response within 60 days after release of the audit report.

We appreciate the courtesy and cooperation extended to us during this audit.

Sincerely,

Thomas H. McTavish, C.P.A.
Auditor General

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MICHIGAN DEPARTMENT OF INFORMATION TECHNOLOGY

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Description of Agency

For the six fiscal years 2001-02 through 2006-07, the State invested $2.93 billion in information technology* (IT) services for application development, operations, maintenance of existing information systems, and infrastructure. These investments directly affect the ability of State agencies to provide effective and efficient government services to the public. IT investment* management best practices are used by private companies and governmental agencies alike to increase their return on investment*.

The Michigan Department of Information Technology (MDIT) was created in October 2001 by Executive Order No. 2001-3 to promote a unified and more effective approach for managing IT among all executive branch agencies and to improve the management of IT investments. To facilitate these goals, the executive order transferred to MDIT all the authority, powers, duties, functions, responsibilities, personnel, equipment, and budgetary resources involved in or related to the provision of IT services.

In 2005, to better manage the portfolio* of IT projects* from all State departments and to create an enterprise* view of strategic IT projects, MDIT began developing an enterprise-wide IT investment portfolio* and IT investment management practices.

Elements of MDIT's IT investment management practices include:

- Strategic Management Team (SMT): This group consists of MDIT executives and information officers representing all State departments and agencies. SMT identifies strategic IT projects, reevaluates strategic priorities, and allocates MDIT personnel on a semiannual basis. SMT meets weekly to review ongoing project schedules.

- Information Officers: MDIT's information officers are part of the SMT and are responsible for understanding their customer agencies' business needs as well as MDIT services and helping the agencies develop optimal IT solutions.

* *See glossary at end of report for definition.*

- Client Service Directors: The client service directors are accountable to the information officers. Client service directors are the customer agencies' primary point of contact for MDIT service delivery and work with agency program managers to understand, communicate, and address tactical requirements and priorities at an agency level.

- "Value" and "risk" measures: SMT evaluates and prioritizes strategic IT projects using internally developed "value" and "risk" measures. SMT uses the priority ranking to assign MDIT resources and uses the risk ranking to determine the frequency of project oversight.

- MiPlan: Information on all strategic IT projects is maintained in the MiPlan application software tool. This tool gives SMT access to high level information about a project's progress toward meeting established milestones and schedules.

- Project Management Methodology (PMM): The State's PMM provides standard methods and guidelines to ensure that IT projects are conducted in a disciplined, well-managed, and consistent manner. PMM promotes the delivery of quality products that meet the customer agencies' needs and results in projects that are completed on time and within budget.

- Statewide Unified Information Technology Environment: MDIT has established an internal service improvement project with the objective of creating an enterprise-wide model for the development of information systems. This will include the adoption of a systems development methodology and integration of PMM.

Audit Objectives, Scope, and Methodology and Agency Responses

Audit Objectives

Our performance audit* of Information Technology (IT) Investment Management Practices, Michigan Department of Information Technology (MDIT), had the following objectives:

1. To assess the effectiveness* of MDIT's efforts to establish the management structure, policies, and procedures needed to ensure that the State invests in IT projects that best support the State's strategic goals.

2. To assess the effectiveness of MDIT's efforts to implement key monitoring practices to ensure that the State's investments in IT projects meet cost, schedule, and performance expectations.

Audit Scope

Our audit scope was to examine the information processing and other records related to information technology investment management practices. Our audit was conducted in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States and, accordingly, included such tests of the records and such other auditing procedures as we considered necessary in the circumstances. Our audit procedures, performed from April through October 2007, generally covered the period October 2006 through September 2007.

Audit Methodology

The criteria used in the audit included best practices stated in the Government Accountability Office's* (GAO's) *Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity** (ITIM Framework), control objectives and guidelines outlined in the Control Objectives for Information and Related Technology* (COBIT) issued by the IT Governance Institute, and other IT investment

* *See glossary at end of report for definition.*

management best practices. To accomplish our audit objectives, our audit methodology included the following phases:

1. Preliminary Review and Evaluation Phase

   We conducted preliminary meetings with MDIT management and staff to obtain an understanding of MDIT's investment management practices. We reviewed best practices for IT investment management. This included the ITIM Framework and the IT Governance Institute's *Enterprise Value: Governance of IT Investments, The Val IT Framework*. We also reviewed COBIT control objectives, GAO audits, National Association of State Chief Information Officers research and guidance, and other IT investment management best practices.

2. Detailed Analysis and Testing Phase

   We performed an assessment of MDIT's investment management process. Specifically:

   a. Management Structure, Policies, and Procedures

      We assessed the overall management structure, policies, and procedures related to MDIT's investment management practices. We judgmentally selected 11 IT projects from a population of 57 strategic IT projects to which MDIT allocated resources as of May 2007. Specifically, we judgmentally selected 4 large agency-specific projects, 3 enterprise-wide projects, and 4 MDIT internal improvement projects. This gave us a cross section of IT projects for the purpose of understanding the business cases* supporting MDIT's assessment of a project's expected benefits and value.

   b. Key Monitoring Practices

      We assessed MDIT's practices to monitor cost, schedule, and performance expectations for investments in strategic IT projects.

3. Evaluation and Reporting Phase

   We evaluated and reported on the results of the detailed analysis and testing phase.

* *See glossary at end of report for definition.*

When selecting activities or programs for audit, we use an approach based on assessment of risk and opportunity for improvement. Accordingly, we focus our audit efforts on activities or programs having the greatest probability for needing improvement as identified through a preliminary review. Our limited audit resources are used, by design, to identify where and how improvements can be made. Consequently, we prepare our performance audit reports on an exception basis.

Agency Responses

Our audit report contains 3 findings and 3 corresponding recommendations. MDIT's preliminary response indicated that it agreed with all of the findings and partially agreed with the recommendations.

The agency preliminary response that follows each recommendation in our report was taken from the agency's written comments and oral discussion subsequent to our audit fieldwork. Section 18.1462 of the *Michigan Compiled Laws* and the State of Michigan Financial Management Guide (Part VII, Chapter 4, Section 100) require MDIT to develop a formal response to our audit findings and recommendations within 60 days after release of the audit report.

COMMENTS, FINDINGS, RECOMMENDATIONS, AND AGENCY PRELIMINARY RESPONSES

EFFECTIVENESS OF EFFORTS TO ESTABLISH THE MANAGEMENT STRUCTURE, POLICIES, AND PROCEDURES

COMMENT

Background: In its August 2005 research brief entitled *IT Management Frameworks: A Foundation for Success*, the National Association of State Chief Information Officers (NASCIO) reported that state chief information officers are increasingly required to justify services, account for costs, and identify and deliver value to the enterprise. Information technology (IT) investment management is necessary for satisfying the expectations of constituents and the examinations of funding and oversight bodies. An effective and efficient IT investment management process emphasizes the importance of thorough planning, competent risk management, strict accountability for meeting program goals and objectives and asset performance expectations, and cost-effective life-cycle management. The intent is to improve the management of IT so that it enables a more efficient delivery of services to the public, employees, and other governments.

To address the need for IT investment management at the federal level, the Government Accountability Office (GAO) developed *Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity* (ITIM Framework), issued in March 2004. NASCIO recognizes the ITIM Framework as a framework that can be applied at the state level to improve the efficiency of IT planning.

The ITIM Framework offers organizations a road map for improving their IT investment management processes in a systematic and organized manner. These process improvements involve selecting, controlling, and evaluating IT projects and are intended to:

- Improve the likelihood that investments will be completed on time, within budget, and with the expected functionality.

- Promote a better understanding and management of related risks.

- Ensure that investments are selected based on their merits by a well-informed decision-making body.

- Implement ideas and innovations to improve process management.

- Increase the business value and mission performance of investments.

Audit Objective: To assess the effectiveness of the Michigan Department of Information Technology's (MDIT's) efforts to establish the management structure, policies, and procedures needed to ensure that the State invests in IT projects that best support the State's strategic goals.

Audit Conclusion: MDIT's efforts to establish the management structure, policies, and procedures needed to ensure that the State invests in IT projects that best support the State's strategic goals were moderately effective. Our audit did not assess whether the State invests in IT projects that best support the State's strategic goals. Our assessment disclosed two reportable conditions* related to an IT investment management program and project management practices (Findings 1 and 2).

Implementing an effective IT investment management program is a complex process. The ITIM Framework established a maturity model (see supplemental information) for management to assess the stage of its efforts compared to best practices. The maturity stages* range from stage 1 (creating the investment awareness) to stage 5 (leveraging IT for strategic outcomes). MDIT has created an investment awareness; however, there are essential agency level investment management practices that must be implemented at the enterprise level in order to reach stage 2 maturity (building the investment foundation). The audit findings identify the first steps that will help MDIT build the investment foundation, move to a higher maturity stage, and establish more consistent, cost-effective, and repeatable investment management practices throughout the enterprise.

FINDING

1. IT Investment Management Program

   MDIT should expand its IT investment management practices beyond the agency level to formalize a complete IT investment management program at the enterprise

* *See glossary at end of report for definition.*

level. Without a formal and complete IT investment management program, the State may find it difficult to ensure that its annual IT investments align with the State's strategic plan and provide a reasonable qualitative or quantitative return on investment with an acceptable level of risk.

MDIT's efforts to create an IT investment management program, as listed in the description of agency, include allocating MDIT personnel to strategic IT projects. MDIT's efforts to expand its IT investment practices beyond the agency level should focus on:

a. Creating a management structure at the enterprise level to oversee the State's IT investment management program.

   According to the ITIM Framework, a management structure should be created to establish overall responsibility for the investment management processes. Responsibility for defining and implementing the processes to select, control, and evaluate IT investments should be formally assigned. This management structure should include senior executives from MDIT, State departments and agencies, the Office of the State Budget, and the Legislature.

b. Adopting an IT investment management framework at the enterprise level as the basis for the State's IT investment management program.

   An IT investment management framework identifies the processes and key practices that are critical to successful IT investment management and can be used as a road map for improving existing investment management processes at the enterprise level.

   The ITIM Framework provides a method for evaluating how well an organization is selecting and managing its IT investments and provides a systematic method for an organization to minimize risk while maximizing its return on investment. The ITIM Framework organizes the critical processes needed to establish an IT investment management program into a framework of increasingly mature stages. The ITIM Framework is composed of five progressive stages of maturity that an organization can achieve in its IT investment management capabilities. In order to progress to a higher stage of maturity, MDIT must first create an organizational culture that supports the

methods, practices, and procedures at the lower maturity stages so they become the way of doing business (see supplemental information).

c. Preparing the required planning documents that identify the goals, objectives, and benefits that MDIT expects to achieve by implementing an enterprise-wide IT investment management program.

MDIT's project management methodology provides the guidance for preparing planning documents that, when followed, will increase the likelihood that key stakeholders will understand and support an enterprise IT investment management program in the State.

d. Documenting the policies, procedures, and practices necessary to effectively manage an IT investment management program.

MDIT should document policies, procedures, and practices to:

(1) Identify IT projects or systems that support the State's ongoing and future business needs.

(2) Select new IT proposals and reselect ongoing IT projects.

(3) Define management oversight of IT projects and systems.

(4) Identify and collect information about IT projects, systems, and assets to support the investment management process.

According to the GAO, without the structure that IT investment management policies and procedures may bring, the success of individual projects is unpredictable and may often be the result of extraordinary efforts by individuals or the project team. Also, IT investment management processes that are important for success may be practiced by some project teams but are not widely shared and established as normal practice.

RECOMMENDATION

We recommend that MDIT expand its IT investment management practices beyond the agency level to formalize a complete IT investment management program at the enterprise level.

AGENCY PRELIMINARY RESPONSE

MDIT agreed with the finding and partially agreed with the recommendation. MDIT informed us that its investment management program is facilitated through investment boards for each principal department in State government, which is consistent with the model the federal government uses and the GAO's ITIM Framework. The Michigan IT Strategic Plan and the Governor's Cabinet Action Plan are used as the basis for IT project selection by agencies and in the budget development process.

MDIT informed us that to implement the State's ITIM Framework at a single enterprise level would require significant revisions to the State's and agencies' strategic planning and budget prioritization practices, including the associated legislative processes. However, MDIT informed us that it will conduct further analysis of opportunities for expanding the IT investment management practices to facilitate a single enterprise approach. In addition, MDIT informed us that it will consult with the Executive Office and the Office of the State Budget on possible alternative methods to implementing revised practices within the current budgetary process.

FINDING

2. Project Management Practices

MDIT did not consistently apply key project management practices that would support an IT investment management program at the enterprise level. Consequently, the agency level focus could result in the State making investment decisions based on incomplete information.

Our review of MDIT's project management practices identified several areas where improvements are needed to consistently implement a foundation for effective IT investment management. We noted:

a. MDIT's project management practices did not ensure that business cases were consistently prepared and updated for all IT projects. Without a business case, the merits of a particular project cannot be effectively assessed and evaluated against competing projects.

   We reviewed the business case (or other relevant documentation) for 11 of 57 strategic IT projects as of May 2007. Our objective was to assess the completeness of documentation used in MDIT's assessment of each project's expected benefits and value. MDIT did not provide documentation to support the expected benefits for 5 of the 11 IT projects and had only limited documentation for the remaining 6 projects.

   Both the Control Objectives for Information and Related Technology (CobiT) and the ITIM Framework recognize that a complete and updated business case is one of the most valuable tools available to management in guiding the creation of business value. A business case should be prepared and periodically updated, reviewed, and verified throughout the economic life of an investment to support management decisions. Business cases facilitate the comparison of potential projects and help ensure that projects with the highest return are selected.

b. MDIT should use the State's accounting system to efficiently track project costs.

   The State's accounting system provides several coding structures that would allow MDIT to track the costs of specific IT projects, operational systems, and infrastructure.

   MDIT informed us that it identifies IT costs sufficiently to bill agencies for the services that MDIT provides. MDIT also informed us that it can obtain some of the costs of IT investments using information from both within the State's accounting system and from external systems or by other means. However, MDIT must expend further effort and resources to develop this cost

information when requested. Reliable and timely cost data would be available if MDIT classified transactions to identify the specific investments when initially recorded in the State's accounting system.

According to the GAO, reliable and timely cost data is a cornerstone of IT investment management decision making. This data can be used for budgeting and cost control, performance measurement, program evaluations, and decisions that involve economic choices. IT investment management decisions made with incorrect or incomplete cost data will provide a distorted view of the costs and benefits of a project.

c. MDIT did not document criteria for selecting and funding IT investments from an enterprise-wide perspective. Instead, MDIT used an individual agency perspective to select and fund IT investments.

MDIT informed us that each State agency recommends which IT projects to fund within its respective budget. The criteria used to select IT projects can be specific to each agency and reflects the agency-level budget practices. MDIT works with agency executives and the Office of the State Budget to determine project funding based on criteria that include the Governor's Cabinet Action Plan and the Michigan IT Strategic Plan. However, MDIT and the Office of the State Budget could improve investment practices by establishing standard enterprise-wide criteria as a basis for selection and funding decisions.

According to the ITIM Framework, the selection criteria should include the business value of the project, management's expected return on its investment, the level of risk that management is willing to assume, and the extent to which the project aligns with the strategic direction established by the Governor. Standard criteria will enable the State to evaluate competing IT projects objectively and with a Statewide perspective.

RECOMMENDATION

We recommend that MDIT consistently apply key project management practices that would support an IT investment management program at the enterprise level.

AGENCY PRELIMINARY RESPONSE

MDIT agreed with the finding and partially agreed with the recommendation. MDIT informed us that, although key project management practices have not been consistently applied on an enterprise level, it believes it has effective project management practices, including processes for collaborating with the Office of the State Budget on final budget priorities related to IT projects. MDIT also informed us that these project management practices have resulted in reduced IT costs, successful completion of projects, and recognition as a national leader in IT performance and governance. For example, MDIT informed us that its processes for selection, funding, and control of IT projects have reduced the State's IT spending by 24%, or more than $100 million, annually since MDIT was formed in 2002.

However, MDIT acknowledged that there are several opportunities to expand or consistently apply MDIT project management practices and to ensure more formal documentation of criteria for selecting and funding IT investments from an enterprise-wide perspective. MDIT informed us that it will conduct further analysis to determine the feasibility of implementing expanded project management practices, including practices to more formally document criteria for selecting and funding IT investments from an enterprise-wide perspective. In addition, MDIT informed us that it will consult with the Executive Office and the Office of the State Budget on possible alternative methods to implementing revised practices within the current budgetary prioritization process.

EFFECTIVENESS OF EFFORTS TO IMPLEMENT KEY MONITORING PRACTICES

COMMENT

Background: The GAO identified the monitoring of cost, budget, and scope as a critical step to move from stage one maturity (characterized by ad hoc, unstructured, and unpredictable investment processes) to stage two maturity, where an investment foundation is created.

Audit Objective: To assess the effectiveness of MDIT's efforts to implement key monitoring practices to ensure that the State's investments in IT projects meet cost, schedule, and performance expectations.

Audit Conclusion: MDIT's efforts to implement key monitoring practices to ensure that the State's investments in IT projects meet cost, schedule, and performance expectations were moderately effective. Our assessment disclosed one reportable condition related to enterprise investment oversight (Finding 3).

FINDING

3. Enterprise Investment Oversight

MDIT should expand its monitoring of its enterprise-wide portfolio of strategic IT projects to include additional performance data. The additional performance data would provide management with more information about the portfolio's overall condition.

MDIT's strategic management team (SMT) has established practices to monitor the schedule of strategic IT projects using its portfolio management application (MiPlan). These practices provide SMT with timely information needed to take corrective action on projects that are likely to miss critical completion dates. Additional performance data, such as cost, benefit, risk, and expected and actual system functionality, will provide a broader measure of the overall condition of the enterprise-wide portfolio of strategic IT projects.

MDIT informed us that project managers track and report cost and progress toward achieving expected benefits for individual projects. However, MDIT should assess the feasibility of recording the additional performance data in MiPlan.

The control phase of the ITIM Framework states that decision makers should have all relevant data about current IT projects available to review at the enterprise level.

RECOMMENDATION

We recommend that MDIT expand its monitoring of its enterprise-wide portfolio of strategic IT projects to include additional performance data.

AGENCY PRELIMINARY RESPONSE

MDIT agreed with the finding and partially agreed with the recommendation. MDIT informed us that, with respect to monitoring, there is legislative oversight for both funding and project progress for the State's largest and strategic projects. MDIT also informed us that this complements the oversight already in place by MDIT executives, the Office of the State Budget, and the customer agency.

However, MDIT acknowledged that SMT does not monitor all aspects of strategic IT projects but instead relies on other monitoring activities (e.g., monitoring by project managers, agencies, and MDIT executives and legislative oversight).

MDIT informed us that it will conduct further analysis to determine the cost-benefit of implementing expanded monitoring activities at the enterprise level and will consult with the Executive Office and the Office of the State Budget on the most effective methods of implementing the revised practices.

SUPPLEMENTAL INFORMATION

INFORMATION TECHNOLOGY INVESTMENT MANAGEMENT PRACTICES

Michigan Department of Information Technology

The Five Stages of Maturity Within Information Technology (IT) Investment Management

Stage 5	**Leveraging IT for Strategic Outcomes:** The organization has mastered the selection, control, and evaluation processes and now seeks to shape its strategic outcomes by benchmarking its IT investment processes relative to other "best in-class" organizations.

- Optimizing the investment process
- Using IT to drive strategic business change

Stage 4	**Improving the Investment Process:** The organization is focused on evaluation techniques to improve its IT investment processes and portfolio(s), while maintaining mature selection and control techniques.

- Improving the portfolio's performance
- Managing the succession of information systems

Stage 3	**Developing a Complete Investment Portfolio:** The organization has developed a well-defined IT investment portfolio using an investment process that has sound selection criteria and maintains mature, evolving, and integrated selection, control, and evaluation processes.

- Defining the portfolio criteria
- Creating the portfolio
- Evaluating the portfolio
- Conducting post implementation reviews

Stage 2	**Building the Investment Foundation:** Basic selection capabilities are being driven by the development of project selection criteria, including benefit and risk criteria, and an awareness of organizational priorities when identifying projects for funding. Executive oversight is applied on a project-by-project basis.

- Instituting the investment board
- Meeting business needs
- Selecting an investment
- Providing investment oversight
- Capturing investment information

Stage 1	**Creating the Investment Awareness:** Ad hoc, unstructured, and unpredictable investment processes characterize this stage. There is generally little relationship between the success or failure of one project and the success or failure of another project.

Source: Government Accountability Office's *Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity*

GLOSSARY

business case	A tool that supports planning and decision making. It answers the question, "What are the financial benefits, opportunities, or weaknesses of approving this project?" A good business case shows expected financial consequences of the project over time and includes the methods and rationale that were used for quantifying benefits and costs. Business case development is a process organizations use for project selection, funding, and prioritization. It analyzes how the project will be used to implement an agency's business strategy. It tells the story of why the project is critical to a particular agency's mission.
Control Objectives for Information and Related Technology (COBIT)	A framework, control objectives, and audit guidelines developed by the IT Governance Institute as a generally applicable and accepted standard for good practices for controls over IT.
effectiveness	Program success in achieving mission and goals.
enterprise	An organization. In this audit report, "enterprise" encompasses MDIT and all other State agencies that run information systems on the State's network.
Government Accountability Office (GAO)	The Government Accountability Office (GAO) is the audit, evaluation, and investigative arm of the United States Congress. The GAO examines the use of public funds, evaluates federal programs and activities, and provides analyses, options, recommendations, and other assistance to help Congress make effective oversight, policy, and funding decisions.

information technology (IT)	Any equipment or interconnected system that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. It commonly includes hardware, software, procedures, services, and related resources.
Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity (ITIM Framework)	A framework developed by the GAO that identifies and organizes into five stages of maturity 13 processes that are critical for successful IT investment. Such a maturity framework can be used either to analyze an organization's investment management process or to determine the maturity of its investment process. The framework provides three key capabilities: (1) a rigorous, standardized tool for internal and external evaluations of an agency's IT investment management process; (2) a consistent and comprehensible mechanism for reporting the results of these assessments to agency executives and other interested parties; and (3) a road map that agencies can use for improving their IT investment management processes.
IT investment	The expenditure of resources on selected IT or IT-related initiatives with the expectation that the benefits from the expenditure will exceed the value of the resources expended.
IT investment portfolio	The combination of all IT assets, resources, and investments owned or planned by an organization in order to achieve its strategic goals, objectives, and mission.
IT project	An organizational initiative that employs or produces IT or IT-related assets. Each project has or will incur costs, expects or will realize benefits, has a schedule of project activities and deadlines, and has or will incur risks.

maturity stage	A well-defined evolutionary plateau toward achieving mature processes.
MDIT	Michigan Department of Information Technology.
NASCIO	National Association of State Chief Information Officers.
performance audit	An economy and efficiency audit or a program audit that is designed to provide an independent assessment of the performance of a governmental entity, program, activity, or function to improve program operations, to facilitate decision making by parties responsible for overseeing or initiating corrective action, and to improve accountability.
PMM	project management methodology.
portfolio	A grouping of programs, projects, services, or assets selected, managed, and monitored to optimize business return.
reportable condition	A matter that, in the auditor's judgment, represents either an opportunity for improvement or a significant deficiency in management's ability to operate a program in an effective and efficient manner.
return on investment	A financial management approach that is used to explain how well a project delivers benefits in relation to its cost.
SMT	strategic management team.

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STATE OF MICHIGAN

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