Mississippi Department of Information Technology Services

Information Technology Planning Methodology for State Agencies

July 2019
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Introduction

Information Technology (IT) has become increasingly important to the efficient and effective operation of state government. Investing scarce public resources in carefully selected IT projects offers significant benefits, including increased productivity of government workers and improved service delivery to the citizens and businesses of Mississippi. Through careful IT planning and the coordination of purchases, agencies can take advantage of sophisticated technological solutions to information processing and communication needs in a cost-effective way. IT planning is a vital prerequisite to the budget process and the procurement of IT equipment, software, and services.

Why Plan?

An IT Plan is the single most important ingredient to the effective use of technology in an agency. The planning process provides a method for determining how well technology is currently meeting the business needs of an agency and helps identify technology gaps that could improve agency performance and service.

The Mississippi State Legislation requires the Mississippi Department of Information Technology Services (ITS) to obtain, review, and approve IT plans from state agencies, boards, and commissions. These plans include current and proposed IT projects as well as the associated project costs.

Once collected and reviewed, IT plan information is compiled into reports that are evaluated for possible statewide infrastructure impact and needs, procurement requests that would allow agencies to take advantage of volume purchase agreements, IT training and education opportunities, and potential consulting service requests. The information is also used to prepare the State of Mississippi Strategic Master Plan for Information Technology (Master Plan). Mississippi State law requires ITS to present this report to the Governor and Legislature annually and to advise them concerning allocation of fiscal resources to best achieve statewide information resource management goals.

By following the planning process described here, agencies help to determine the direction the state takes in adopting information technologies. This in turn enables the agencies to be better equipped to develop their individual action plans within the Master Plan parameters. As technology choices become increasingly complex, it is more important than ever that state agencies and ITS plan together to strengthen the state’s technology base and offer more services to government, citizens, and businesses.

How to Use This Guide

This planning methodology guide explains the basic steps that agencies should follow to perform IT planning. Throughout the guide, the ♦ symbol specifies key information or refers to a particular worksheet or form that will assist in the planning process.

The worksheets located in Appendix A are provided as a planning tool when following this methodology, but are not required to be submitted to ITS.
The TechPlan System

The TechPlan system is a web based application, available to all Agency Planners. The URL for the system is https://techplan.its.ms.gov/Pages/Login.aspx. Agency Planners should contact ITS for system access and training.

Plans are due by September 1 of each calendar year. If needed, the ITS Planning staff is available to provide technology planning assistance and training at no cost.

The screen shots located in Appendix B of this document are provided as an example of what is displayed in the on-line TechPlan planning system. It would be beneficial to become familiar with the overall look and feel of the system before accessing it online.

The Planning Methodology

For the purpose of agency planning, the proposed methodology can be summarized in the five steps described below. The timing of the processes is designed to coincide with the State’s budgeting and funding cycle. However, the plan does not have to match budgeted dollars. Understanding realistic projections, there can be a difference between what your agency plans to do over the next three years and the amount of funding it received.

Step One - Establish an IT Planning Team

Worksheet 1 entitled, “IT Long-Range Plan for Fiscal Years _____ - ____” is provided in Appendix A of this guide.

The purpose of Step One is to establish an IT planning team within each agency. The team should be a collection of people that will emphasize the alignment of IT resources with agency business strategies. IT planning should be a joint activity between agency executives and IT management. If the IT organization performs IT planning without this partnership, the value of the planning process is less useful for the agency. Other suggested areas of involvement include the following:

- Senior Management - Involving a senior manager will help insure the IT Plan serves the mission and objectives of the agency and will also provide “top-down” management support for the IT Plan.

- Telecommunications and office automation - Management of data, telecommunications, and office automation technologies are relatively distinct, yet many technologies overlap. Since the planning process is intended to produce IT plans, it is important that all individuals who share responsibilities for the diverse technologies used within an agency, be coordinated and brought into the planning process.

- Remote offices and districts - Numerous agencies have remote offices throughout the state that are organizationally responsible to the main office. These remote offices may be involved in the management and use of information processing. Consequently, it is important to incorporate the remote offices’ needs when preparing the IT Plan.

Suggestions for coordinating an effective IT planning team include:

- Designate an IT Planner - It is recommended that a senior level individual be identified as the lead person responsible for the overall planning process as the IT Planner.
• Establish a Planning Team - Members of the planning team should include the senior manager identified in Suggestion 1 as the IT Planner and the planning representatives. The planning representatives are normally middle-level managers or supervisors from each functional area of the agency. The responsibility of detailed planning should be delegated to the planning representatives. Having a cross-section of participants adds multiple perspectives, increases commitment to decisions, spreads work assignments, and improves the final product.

• Establish a Steering Committee - The steering committee should consist of key senior and middle level management, and will review and set recommended priorities on IT within the agency.

**Step Two – Review Strategic Information**

Once the IT Planning Team has been established, it is important to review both the agency and ITS strategic documentation and plans for information systems within the context of the agency’s mission, program objectives, goals, and strategic direction. During the planning process, it is important to remember to link the agency’s business plan or Five-Year Strategic Plan and the IT Plan (The Five-Year Strategic Plan that is submitted to LBO and DFA and usually serves as the agency’s business plan).

*Figure 1* illustrates how the Five Year Strategic Plan should be linked to the agency’s IT Plan.

![Diagram linking the Technology Plan to the Five-Year Strategic Plan](image)

- **Review the Agency Business Plan** - In order to utilize IT more effectively, it is essential to have a business plan in place that identifies the agency’s strategic direction and related goals. Once the IT Plan is in place, the agency’s IT staff can more accurately determine what technology resources will be required to help the agency realize its goals and move toward the strategic direction it has established.

- **Review the Agency Mission Statement and Division Objectives** - It is important to plan for information systems within the context of the agency’s mission and division objectives and to define IT projects that will enable the agency to fulfill its mission more effectively.
Worksheet 2 entitled, “Mission and Division Objectives,” is provided in Appendix A of this guide to document the Agency Mission Statement and Division Objectives.

- Review the Agency’s Strategy Statement and Goals of the Agency and its Divisions - Strategy statements define in general terms the agency’s direction with respect to major functions or responsibilities. The goals of the agency and divisions are more specific statements directly related to a strategy statement. The goals are steps the agency will take toward achieving the strategic direction.
- Identify or define resources required to support goals - Include all resources required to support the agency’s and division’s goal. Resources may fall into the broad categories of: personnel, capital outlay, contractual services, and/or commodities. The tendency is to underestimate the resources required. Reviewing the budget on a line-item basis should prompt the inclusion of resources that may otherwise be overlooked. It is the responsibility of the IT Planner to identify the IT resources needed to meet the strategies and goals of the agency.
- Review the State of Mississippi Technology Infrastructure and Architecture Plan (Infrastructure and Architecture Plan) and the State of Mississippi Strategic Master Plan for Information Technology (Master Plan) - The Infrastructure and Architecture Plan and the Master Plan are available on the ITS web site at http://www.its.ms.gov or may be obtained by contacting an IT Planning Coordinator. Reviewing these plans will give you up-to-date information about the enterprise infrastructure that is available for all state entities to use, as well as ITS’ plans to upgrade the infrastructure and the strategic technologies and strategies that ITS is researching for future enhancement of statewide offerings.
- Review Agency’s Previous Year’s IT Plan - It is important that you review your last year’s IT Plan because some projects may carry forward into the next year and/or may need to be revised.
- Review Existing Hardware/Software Application Systems - Reviewing a complete inventory of hardware, software, and applications will often trigger the identification of projects that are needed to enhance or procure additional resources.

Step Three – Identify Opportunities for Improvement

Worksheet 3 entitled, “Areas of Opportunity,” is provided in Appendix A of this guide.

An opportunity for the purposes of this endeavor is defined as a potential project that can increase revenue, reduce or avoid costs, and/or improve services. The opportunity areas may involve upgrading an existing system, acquiring hardware or software, or initiating a new project. Any potential project should be initially examined by asking three questions. If the answer to any one of these three questions is “yes,” it may be time to look at the potential project in more detail.

- Will the potential project increase revenue either now or in the future?
- Will the potential project allow present or expected costs to be avoided?
- Will the potential project provide improved service?

In identifying such opportunities, the agency is not committing itself to a definite course of action. The opportunities identified represent the “first cut” of a non-prioritized list of potential projects.
Step Four – Establish Priorities for Projects

Worksheet 4 entitled, “Project Priorities,” is provided in Appendix A of this guide.

Understanding the priorities of the agency’s projects is important in order to justify the project, develop an implementation schedule for the project, and to develop contingency plans in case of change. These priorities represent management’s preferences and the direction management would take with a project if there were no constraints or none of the contingencies occurred.

Management considerations used in determining project priorities include:
- How important is this project to the mission of the agency?
- What priority is this project given by executive management?
- What is the value of this project to the agency based on the cost-benefit ratio?

The Project Priorities form is used to develop an initial list of projects for consideration. Obviously, a number of factors may cause projects to be added to or taken away from this list as the plan continues to be refined.

Suggestions for prioritizing projects:
- List the projects without regard to sequence
- Identify the priority rating for each project
- Rate each project numerically

By redrafting this list on the Project Priorities Form in order of priority, the basic outline is developed to begin Step Five, the actual development of the Agency IT Plan.

Step Five – Prepare the Agency IT Plan

The TechPlan system is a web based application available to agencies for easy input, maintenance, and submission of IT Plans. The ITS Planning Staff is available for training and consulting at no charge.

- Review the Agency’s "Contact Information" to verify the correct staff members have access to the TechPlan and that ITS has the correct email address and phone number for each contact.
  Select “Agency and Contact Information Verified” to complete this step.

- Prepare a Project for each in-progress, new, or planned project. The Project should include basic information of the scope as well as the resources and costs required for the implementation and/or maintenance of the project. Understanding the costs associated with the project will help the agency decide whether the costs are justified and if the project was thoroughly planned. Listed also on the form is a series of questions that should be reviewed and answered for each project.

- Prepare an additional Project for IT Ongoing Operating Costs that captures the ongoing expenditures for all recurring IT costs that are not related to a specific project. This will typically be used to reflect fixed costs to which the agency has already committed, such as, lease-purchase obligations, maintenance contracts, and licensing fees.
  Select the Projects to be reviewed by ITS when the IT Plan is submitted.
Complete the “Additional Reporting” section of the IT Plan. The information required in this section includes:

- The IT Contractual and Capital Outlay totals from the Agency’s LBO Budget Request forms
- Agency IT Security status and Security Contact information
- Agency Disaster Recovery/Business Continuity status

Select “Additional Information Complete” to complete this section.

Electronically submit the IT Plan to ITS.

All Steps in the TechPlan must be Complete before submitting the IT Plan to ITS for review.

Select “Submit Plan” to finalize the submission of your agency’s IT Plan.

Additional planning information can be found on the ITS Planning page at:
http://www.its.ms.gov/Services/Pages/Agency-IT-Planning.aspx.

Information Technology Services Contact Information

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Fax: (601) 713-6380
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Appendix A

Worksheet 1 – IT Long-Range Plan for Fiscal Years

<table>
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<tr>
<th>Agency Name</th>
<th>IT Planner</th>
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<th>Planning Team Members</th>
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<th>Steering Committee Members</th>
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APPENDIX A
Worksheet 2 - Mission and Division Objectives

Please provide the agency mission statement below.

Please summarize each division’s basic objective below.
Worksheet 3 – Areas of Opportunity

Please list and describe the agency opportunities.

________________________________________________________________________

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Worksheet 4 - Project Priorities

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<th>Project Name</th>
<th>Priority Rating</th>
<th>Cost-Benefit Ratio</th>
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Appendix B

TechPlan Screen Shots 1 – Home and Contact Information
TechPlan Screen Shots 2 – Projects and Project Title
TechPlan Screen Shots 4 – Funding and Line Items
TechPlan Screen Shots 5 – Adding New Line Item and Attachments

Example

Project Attachments - Word, Excel, or pdf files may be attached to this project by selecting the + New Attachment option. Available attachments may be opened by selecting the Download box beside the file name and choosing the Download button under the list. Attachments may be deleted by selecting the x beside the filename.
TechPlan Screen Shots 6 – Summary

Example

General Project Information

Project Name:  Example
Agency Project Tag:  
Fund Number:  
Start Date:  
Completion Date:  
Contact:  
No assigned contact...

Project Status:  Draft
ITS Project ID:  196453
Project Created:  6/4/2019 4:24:00 PM
Last Modified By:  Kevin Gray
Phone:  
Email:  

Last Items Edited: Project Funding — 6/4/2019 4:36:16 PM

Project Description

Briefly describe the business need driving this project and provide details on the proposed solution:

Briefly identify any potential savings and/or anticipated benefits related to this project:

Progress to Date:

If this is an existing project, please identify all vendors and/or contractors:

Do you anticipate initiating a procurement on the project in the current fiscal year?  Yes  No
Is this a Bureau of Buildings Project?  Yes  No
Does this project conform to the State of Mississippi Security Policy?  Yes  No
Will this application interface with any other entity?  Yes  No
Will this project require security needs such as a Security Incident and Event Management (SIEM) or log management solution?  Yes  No
Will this project require new or upgraded data circuits at your location?  Yes  No
Is this project currently (or will it be) housed in the State Data Center?  Yes  No
TechPlan Screen Shots 7 – Summary (Continued)

<table>
<thead>
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<th>Agency Comments</th>
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### Project Funding

- Federal: [%](% of whole # is only)
- General: [%](% of whole # is only)
- Special: [%](% of whole # is only)
- Grant: [%](% of whole # is only)
- Bond: [%](% of whole # is only)

**Total:**

### Project Budget

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### Project Attachments

- [← Save & Previous](#)
- [Projects](#)
- [Approval Exception Request](#)