Department of Transportation

IT Business Alignment Audit

Audit Period: April 1, 2010 to May 21, 2010

Contents

Executive Summary

Background

The OBM Office of Internal Audit (OIA) performed an IT Business Alignment audit of the Department of Transportation (DOT) Information Technology (IT) department between April and May, 2010. The DOT IT department provides application development and operational support to the agency. Application development is done in support of all functional divisions within the department. Operational support includes general IT desktop services and systems operations of ongoing applications.

DOT established an IT Governance Board to prioritize IT project demands to needs of DOT as an agency. The Board consists of senior management representatives throughout DOT which select and prioritize IT projects for DOT. This activity will provide visibility into the overall work plan for IT projects. The Board's charter outlines initial and ongoing responsibilities for changing business needs or regulatory requirements. The Board was formed in the third quarter of fiscal year 2010 and has had two organizational meetings to date.

DOT IT provides several routine reports to the rest of the agency. These reports provide project status and operational performance data of the IT department's activities. The creation of the Governance Board has prompted the creation of several additional reports regarding application development activities.

This audit leveraged a well-established set of industry best practices to assess alignment between the business and IT teams within DOT. There have not yet been enough deliverables from the Board to provide a basis for an evidence-driven audit of the activity; however, the Charter appears consistent with best practices that align IT with business to provide appropriate controls and ensure IT adds value to the business.

OIA would like to thank DOT staff and management for their cooperation and time in support of this audit. This report is solely intended for the information and use of agency management and the State Audit Committee.

Scope and Objectives

The scope of the audit was confined to the business alignment activities of the IT Department within the Department of Transportation. The work was completed between April and May 2010. The scope of this audit included the following areas:

- Value Governance
  - Informed and engaged leadership
  - Portfolio investment strategy
- Portfolio Management
  - IT strategy alignment
  - Resource availability
  - Business cases
- Investment Management
  - Investment opportunity management
  - Cost benefit analyses
  - Monitor and measure

The following summarizes audit objectives and conclusions on management's internal control effectiveness.

Objective	Conclusion[1]
Value Governance - Evaluate design and adequacy of controls over the engagement of business leadership in IT activities and portfolio investment strategy.	**Well-Controlled with Improvements Needed – See Observation 1**
Portfolio Management - Evaluate design and adequacy of controls for alignment of IT and business strategies, management of resource availability, and development and measurement of activities to business cases.	**Well-Controlled**
Investment Management - Evaluate design and effectiveness of the controls cost benefit analyses process and monitoring and measurement of IT investments.	**Well-Controlled**

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[1] Refer to Appendix A for classification of audit objective conclusions.

Summary of Observations and Recommendations

The Summary of Observations and Recommendations includes only those risks which were deemed high or moderate. Low risk observations and recommendations were discussed with individual agency management and are not part of this report. However, the low risk observations and recommendations were considered as part of the audit objective conclusions above.

No.	Observation	Recommendation	Risk
1.	**IT Communication with Customers –** At DOT, formal reporting from IT to the business focuses on projects. IT produces biweekly project status updates and a monthly project dashboard report. In addition, IT delivers the Organizational Performance Index report which shows network and server availability. All other reporting and communication is informal. There is no additional agreed-upon set of metrics that IT uses to report on its value-added services to the agency.	IT management should enhance its reporting to Agency executive management to include routine IT operational reports. IT management should work with agency users to develop a set of meaningful metrics that provide indicators of how well service levels have been met and how IT provides value to the organization.	**Moderate**

Due to the limited nature of our audit, we have not fully assessed the cost-benefit relationship of implementing the observations and recommendations suggested above. However, these observations reflect our continuing desire to assist DOT in achieving improvements in internal controls, compliance, and operational efficiencies.

Detailed Observation and Recommendation

Observation 1 – IT Communications with Customers

Best practices suggest that relevant portfolio, program and IT (technological and functional) performance should be reported to the board and executive management in a timely and accurate manner. Management reports should be provided for senior management's review of the enterprise's progress toward identified goals. Status reports should include the extent to which planned objectives have been achieved, deliverables obtained, performance targets met and risks mitigated. Reporting should be integrated amongst IT and other business functions so interrelationships are clear.

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Risks to management of not having formal communications include:

- Unclear view of performance
- Surprises and unexpected problems and delays
- Deviations from plans not noticed

Recommendation

IT management should enhance its reporting to Agency executive management to include routine IT operational reports. IT management should work with agency users to develop a set of meaningful metrics that provide indicators of how well service levels have been met and how IT provides value to the organization.

Management Response

We are currently providing the following information to executive management:

- biweekly status reports all active projects
- dashboard of all projects that are active, on-hold, not yet started or completed in the last three months

An additional report available is a chart showing where time is spent in IT broken down by projects, maintenance, administration, break/fix, and mentoring. IT will develop a process for formal reporting as directed by executive management and the IT Governance Board.

Risk	Remediation Owner	Estimated Completion Date
Moderate	CIO, Information Technology	January 2011

Appendix A – Classification of Audit Objective Conclusions and Observations

Classification of Audit Objective Conclusions

Conclusion	Description of Factors
Major Improvements Needed	Weaknesses are present that could potentially compromise achievement of its overall purpose. The impact of weaknesses on management of risks is widespread due to the number or nature of the weaknesses.
Improvements Needed	Weaknesses are present that compromise achievement of one or more control objectives but do not prevent the process from achieving its overall purpose. While important weaknesses exist, their impact is not widespread.
Well-Controlled with Improvements Needed	The processes have design or operating effectiveness deficiencies but do not compromise achievement of important control objectives.
Well-Controlled	The processes are appropriately designed and/or are operating effectively to manage risks. Control issues may exist, but are minor.

Classification of Audit Observations

Rating	Description of Factors	Reporting Level
High	Observation has broad (state or agency wide) impact and possible or existing material exposure requiring immediate agency attention and remediation.	State Audit Committee, Senior Management, Department Management
Moderate	Observation has moderate impact to the agency. Exposure may be significant to unit within an agency, but not to the agency as a whole. Compensating controls may exist but are not operating as designed. Requires near-term agency attention.	State Audit Committee, Senior Management, Department Management
Low	Observation poses relatively minor exposure to an agency under review. Represents a process improvement opportunity.	Department Management, Senior Management (Optional), State Audit Committee (Not reported)

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Appendix B – Audit Follow-up Procedures

OIA will periodically follow-up on management's plans to remediate high and moderate risk audit observations. Follow-up activities may generally be broken down into three categories:

Detailed Detailed follow-up is usually more time-consuming and can include substantial audit customer involvement. Verifying and testing procedures implemented as well as substantiating records are examples. The more critical audit observations usually require detailed follow-up.

Limited Limited follow-up typically involves more audit customer interaction. This may include actually verifying procedures or transactions and, in most cases, cannot be accomplished through memos or telephone conversations with the audit customer but requires onsite observation or testing.

Informal This is the most basic form of follow-up and may be satisfied by review of the audit customer's procedures or an informal telephone conversation. Memo correspondence may also be used. This is usually applicable to the less critical observations.

Low risk audit observations will not result in an OIA audit follow-up, although these observations will be factored into the continuous risk assessment process for future OIA engagements.

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