

IT Project Management Review

Central Florida Expressway Authority

June 2019

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I. Executive Summary

Background

During the period between April 9th and May 15th, 2019, Internal Audit (“IA”) performed an IT Project Management review for Central Florida Expressway Authority (“CFX”). CFX’s IT Management requested this project be included in the audit plan to understand where improvement opportunities exist within its project management practices. CFX’s growth in recent years has necessitated a more formalized project management structure. As CFX continues to grow, project management is essential in maintaining a consistent repeatable approach to manage projects throughout their lifecycle. Strong project management processes allow an organization to streamline the intake, prioritization, coordination of resources, and execution of projects to give the organization planning, risk, and objective measurement capabilities throughout the project lifecycle.

Overview

This report represents the improvement opportunities and recommendations based on the IT Project Management Review conducted by IA for CFX. IA reviewed the existing IT Project Management Plan as well as related policies, procedures, and supporting tools within the environment used to assist in the intake, planning, resource management, execution, and completion of projects.

Summary of Improvement Opportunities

As a result of this review, IA identified four (4) improvement opportunities. The observations describe issues with the overall project management practices at CFX. Specifically:

- A project management framework, including supporting protocols and documents, is not yet formalized.
- Formalized project intake processes could be improved to allow CFX to prioritize, resource, and initiate projects in a consistent manner.
- Portfolio management capabilities can be developed or implemented to manage initiatives, programs, and projects throughout their lifecycle.
- Resource management procedures can be enhanced to track internal and external resources and their current project workload.

Summary of Recommendations

To address the above issues, CFX should consider:

- Formalizing a project management framework to which all projects are subject such that projects are managed and governed in a consistent manner.

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- Formalizing the project intake process so that a succinct method of requesting projects from IT exists. This process can include specifics such as the requestor, business case, priority, scope and requirements, risks and assumptions, budgets, and stakeholders.
- Continuing plans to implement the portfolio management function within the Cherwell application to track programs and projects within the IT portfolio to ensure projects are coordinated and monitored effectively allowing for risks and setbacks to be identified in a timely manner.
- Developing a formal resource planning and tracking system or process to identify current resource availability and capacity.

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II. Scope and Approach

Scope

The scope of this project was the IT Project Management program at CFX. CFX currently manages project lifecycles utilizing Microsoft Project and Cherwell as project management tools to assist in the intake, planning, resource management, and completion of projects.

Approach

IA took the following approach during this review:

- Project intake and demand management
 - Assessed the way requests are received and accepted, both from the business (functionality or performance requests) and internally from IT (proactive technology implementation or continuous improvement)
- Project risk management program and procedures
 - Examined how CFX identifies, analyzes and controls potential threats that could impact projects
- Project/Development methodologies
 - Examined the design and development standards utilized at CFX
 - Reviewed the Quality Assurance team organizational structure
 - Reviewed testing procedures such as unit testing, peer review, integration, regression, and user acceptance
 - Assessed how CFX documents the results of the project
- Project Governance
 - Reviewed the CFX project charter, if applicable
 - Assessed how projects are planned, executed, and monitored
 - Assessed how changes in scope and prioritization affect the project
- Project Health metrics (how are we measuring the success of projects)
 - Assessed how metrics such as cost, schedule, quality, resources, and scope are captured and how variance of each of these items initiates action
 - Requirements management (standards and processes)
 - Examined how changes in requirements are documented, prioritized and approved by all affected stakeholders
- Resource management
 - Assessed how internal resources are assigned to projects
 - Assessed how CFX determines a project will be outsourced
 - Assessed how CFX selects vendors, and how vendors are monitored during the project to ensure the vendor delivers what is required
 - Reviewed the process to ensure that projects have been properly staffed

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III. Approach to Evaluation of Results

Observations made during this review have received one of the following rankings defined below. These rankings indicate the significance and likelihood of risk in the business environment. This assessment can be used as a tool by management to determine how quickly attention should be given to each finding specified.

-  **Critical** priority observations are risks to the business that are grave in nature. These vulnerabilities should be addressed and/or fixed immediately because they may pose an immediate danger to the security of the networks, systems, or data involved. Almost no mitigating controls exist.
-  **High** priority observations should be addressed in an expedited manner. While mitigating controls may exist, these issues present an increased level of risk associated and should be addressed as soon as possible.
-  **Moderate** priority observations should be noted and implemented at a later date, but may not pose a real threat to the network and connected systems at this time.
-  **Low** priority observations are system configurations, cultural issues, and technical process-related items observed throughout this review. These items are included to help improve technical processes and assist in defining its long-term strategy.

For each risk identified, IA has assigned an observation ID specific to this assessment. The observation ID is used to reference each risk in a confidential manner through verbal or written communications and in other reporting without revealing the details of the actual issue. The assigned number is noted in the far left column of the summary of observation table in section IV.

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IV. Summary of Improvement Opportunities

The following table summarizes the number of observations in each priority ranking associated with this review:

Observation and Significance Summary				
Critical	High	Moderate	Low	Total
0	3	1	0	4

The table below provides a categorical summary of the observations discovered as a result of the review performed:

Observation ID	Description	Significance			
		Critical	High	Moderate	Low
1	Project Management Framework		X		
2	Project Intake Process		X		
3	Portfolio Management		X		
4	Resource Planning			X	

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V. Detailed Improvement Opportunities

The four (4) items identified during this review are listed below. They are listed in the order in which CFX should consider addressing them.

1	Project Management Framework
	<p>Opportunity: CFX has not formalized a project management framework to aid in a structured and repeatable approach to projects. This had led to inconsistent performance and results across projects within the organization. A project management framework contains policies, procedures, and document templates to facilitate the project management lifecycle at CFX. Documents such as project charters, budget and scheduling templates, and status update dashboards would provide CFX with the ability to accurately and efficiently execute projects and identify potential risks, as well as having consistent governance over all projects.</p> <p>Without formal project management frameworks, projects may not be governed consistently and may lead to challenges throughout the project lifecycle including project intake, prioritization planning, resource management, and completion.</p>
	<p>Significance: High</p>
	<p>Recommendation: CFX should utilize industry best practices, such as ITIL, to develop a project management framework surrounding their project management lifecycle. The framework should include policies and procedures surrounding demand planning to provide IT with the ability for visibility, prioritization, tractability, and governance of projects. The procedures should include step by step guidance around project intake, prioritization, scoping, budgeting, monitoring, handling changes related to ongoing projects, and completion.</p>
	<p>Management Response:</p> <p>Owner: Jim Greer, Chief Technology and Operations Officer</p> <p>Due Date: July 31, 2020</p> <p>Action Plan: Management will develop a plan for implementing a formalized project management framework that includes policies, procedures and templates to facilitate project management life cycles at CFX. ITIL will be considered as this framework is developed.</p>

2	Project Intake Process
	<p>Opportunity: CFX has not formalized the project intake process to capture key factors of a project including the requestor, business case, priority, scope and requirements, risks, budgets, and stakeholders. In the past, this has come in the form of a document to be filled out with preliminary information such that stakeholders can assist prioritizing and budgeting practices. The document is no longer utilized, which has led to challenges around meeting project requirements and budgets in an efficient manner.</p> <p>Without a formalized project intake processes, an organization may experience challenges in identifying and tracking key factors that may affect the efficiency of projects, visibility of incoming demand, and in turn impede resource and capacity planning.</p>
	<p>Significance: High</p>
	<p>Recommendation: CFX should consider developing a project intake process to explicitly identify and document key factors such as a description of the project and business case, budget, priority, scope and requirements, services impacted, organizational sponsors, and stakeholders. Documenting these factors assists in managing the projects ensuring projects are appropriately prioritized and desired milestones and results are achieved.</p>
	<p>Management Response:</p> <p>Owner: Jim Greer, Chief Technology and Operations Officer</p> <p>Due Date: December 31, 2019</p> <p>Action Plan: Management will develop a project intake template (and supporting process) that can be used by project requestors at CFX that includes business case, priority, scope, risks, budget, and stakeholders.</p>

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3	Portfolio Management
	<p>Opportunity: CFX has not implemented a formal portfolio management function within the environment. This has led to challenges surrounding management of resources, prioritizing projects, and risk management of projects. Within the Cherwell tool, a portfolio management function exists to manage ongoing projects around planning, execution, and management, however it has not been implemented.</p> <p>The portfolio management function involves the use of people, processes, and methodologies to plan, execute, monitor, and complete projects within the organization. Without a portfolio management function, an organization's may not be able to continue driving towards goals within the strategic plan.</p>
	<p>Significance: High</p>
	<p>Recommendation: CFX should continue plans to implement the portfolio management function within Cherwell. The portfolio management function should identify initiatives within the strategic plan and coordinate people, processes, and methodologies to plan, execute, monitor, and complete projects.</p>
	<p>Management Response:</p> <p>Owner: Jim Greer, Chief Technology and Operations Officer</p> <p>Due Date: March 31, 2020</p> <p>Action Plan: Management will continue plans to enhance and leverage the Cherwell deployment to support the portfolio management function at CFX.</p>

4	Resource Planning
	<p>Opportunity: Through review of the current project management process, IA found that CFX has not yet formalized the resource management processes in place to track internal and external resources as they work on projects. This has led to CFX on- and off-boarding internal and external resources throughout the project lifecycle due to project requirements, scheduling conflicts, and project prioritization.</p> <p>Without formalized planning and coordination of resources, CFX may encounter challenges meeting budgets and timelines associated with projects. Resource planning ensures proper resources and skills are allocated to projects vital to the overall success of the project.</p>
	<p>Significance: Moderate</p>
	<p>Recommendation: CFX should identify requirements and budgets associated with projects and identify current resources and availability required to complete the project. Formalizing resource management will assist CFX in identifying current availability of internal resources and justifying the requirement for external resources.</p>
	<p>Management Response:</p> <p>Owner: Jim Greer, Chief Technology and Operations Officer</p> <p>Due Date: July 31, 2020, contingent on the implementation of an Enterprise Resource Planning (“ERP”) system.</p> <p>Action Plan: Management will formalize resourcing practices with regard to projects at CFX based on requirements and budgets defined in the project intake process (see Observation 2). CFX will integrate these practices within the ERP system planned for 2020.</p>