



Business Technology Software Solution
Facilities Management
Project Management Office (PMO)

Riverside County Information Technology
(RCIT)

09-9-20

Introduction

Riverside County Economic Development Agency under a modification reestablished the Facilities Management Department.

Project Overview and Background

The effort is to:

- Better understand the technology business requirements for Facilities Management and test cases.
- Evaluate existing functionality in CRM Dynamics to either 1) move functionality to solution(s) already available within the county, and/or 2) evaluate new third-party options
- Increase integration between solutions to improve efficiency and effectiveness of the business workflows (e.g., PeopleSoft, ServiceNow, etc.)
- Improve customer transparency into FM processes

Objectives

Project Management Office PMO needs an automated centralization and management of information, through all aspects and stages of a construction project, such as estimating, design, planning, contracting, and management of the construction process, but also invoices, purchase orders, and communication between project stakeholders. Additionally, the business technology solution must be able to manage real time project details such as changes, agreements and expenses that can correlate to approvals and procurement documentation for budget and scheduling performance at the project and portfolio level. Functionality needs to extend to mobile devices for operation from any location.

The direct customer base consists of divisions internal to the Facilities Management Department and other County personnel; while indirectly, viewing access or user rights by all other external project team members should be at the discretion of Facilities Management. These external project team members include construction professionals involved at different project stages such as County, City or State regulatory agencies, as well as Contractors, Architects, Engineers and other construction-related consultants. As external project team members may differ from one project to another, the business technology solution should be able to offer unlimited users. Because email is most often used by Facilities Management to exchange project-related decisions, data, documents, and drawings, these communications must be integral to the business technology solution.

A partial automated process has been designed in CRM with many of the project management sequence of administrative, and business processes, e.g. invoice approvals, streamlined. While CRM did not have opportunity to provide full functionality, any gap of the solution would hinder PMO processing. PMO is looking for an uninterrupted transition.

Scope of Work

- PMO requests an automated, centralized solution applying the Project Management Body of Knowledge (PMBOK) collection of processes, best practices, terminologies, and guidelines; accepted standards within the construction project management industry.
- The solution should be comprehensive and easy to use.
- The solution will capture construction project phases to create and/or estimate budgets; automate and manage project email communications between stakeholders; organize and manage the exchange and storage of data, documents, and drawings; manage Requests for Information (RFIs), Submittals, Change Order requests, and Construction Directives; and calculate project performance against established budget and schedule.
- The solution will offer dashboards that can be readily customized to view multiple projects or expand to view a program portfolio with the ability to drill down to the project level, project manager, project type, County department, or funding source.
- The solution will provide real time visibility into project health from project inception to construction close-out by comparing project progress and tasks against established project timelines and budget in order to identify and avoid risks before they impact the project.
- The solution will automate and manage project changes and drawing version control. Every time a contract adjustment is made, a commitment is entered, or a change order is approved, the solution will update and document all project schedules and be visible from the project dashboard.
- The solution will have standardized templates readily customizable for the automated distribution and receipt of project tasks, communications, data, documents, and drawings throughout all phases of the construction project and that are identified and linked to the project and file location.
- The solution will have functionality on any mobile device.
- The solution will capture job quotes and/or job walks; building types; task scheduling capabilities of the project managers within FM.
- The solution will capture customer information (ref. Form 5) including budget sources and approvals.
 - Automation of the Form 5 is desired.
- The solution must be capable of housing historical project data, drawings and records.
 - To include supporting documentation such as Board Approval (Form 11) and Capital Improvement Project (CIP) records; with additional approvals as required.

Proposed Process (Summary)

- The workflow must encompass real time project management, contract procurement and administration, Construction management; document, data, submittals, RFIs and drawing management/storage; project drawdowns and schedule management, communication management, change management, agency approvals and clearances. Milestones, Revisions; Staff and Management reviews, reporting; and alerts and notifications. Accounting staff must be able to receive and retrieve pertinent invoice information throughout the process in order to process accounting transactions and reimbursements through the Oracle PeopleSoft Financial application.

Business Requirements

1.0 General

1.1 Security Roles

1.2 By user and permissions

2.0 Project Initiation

2.1 Customer ability to submit FM Facility Project Requests (Currently submitted using the RIVCO FM Form 5)

2.2 Receipt and distribution/assignment of the FM Facility Project Request to specific divisions within Facilities Management: Project Management, Maintenance or Real Estate

2.2.1 Auto or Manual assignment

2.3 Distribution/assignment of the FM Facility Project Request to specific individuals within Project Management

2.3.1 Auto or Manual assignment

2.4 Incorporate an ability for automated request for a PeopleSoft project number (PS#)

2.4.1 Manual assignment of PS# by Accounting and Finance (A & F)

3.0 Project Set-Up

3.1 Automate establishment of a project dashboard populated by the FM Facility Project Request data

3.2 Incorporate customizable project file folders from a standardized menu

3.3 Incorporate the ability to establish users and permissions

3.4 Incorporate the ability to automate (send/receive) customer revisions and signature of the FM Facility Project Request

3.5 Incorporate the ability to automate the PMO Project Manager's Checklist and Testing & Inspections Checklist

3.6 Incorporate customizable project templates from a standardized menu to show PS#, Project Name, Project Address

4.0 Pre-Design

4.1 Confirm scope, identify required consultants, department staff, regulatory requirements, and set pre-design costs

4.1.1 Manual assignment

4.2 Incorporate an automated, standardized template for site visit documentation

4.3 Automate project communications (send/receive/approve) with department staff, customer, consultants, and regulatory agencies

4.4 Incorporate a standardized template for solicitation of proposals

4.4.1 Source: See existing contracts

4.5 Incorporate the ability for an automated Capital Improvement Project (CIP) Budget/Estimate Worksheet

4.6 Incorporate the ability to establish budget controls to manage multiple commitments, project expenses, and multiple funding sources in real time; have the graphic capability to show expenses against the established budget, to be visible in the project dashboard

4.7 Incorporate the ability to establish schedule controls in real time; have the graphic ability to show project tasks against the established schedule, to be visible in the project dashboard

4.8 Incorporate the ability to establish and manage contracts, project approvals and changes, and project communications

- 4.9 Incorporate the ability to receive project invoices/pay requests at the same time of the submittal to A & F for the purpose of recording commitment drawdowns

5.0 Project Design

- 5.1 Automate features to manage multiple consultants and deliverables: feasibility studies, reports, surveys, environmental and other regulatory documentation throughout the preliminary design, schematic design, and design development phases
- 5.2 Incorporation of a robust version control capability for consultant documents and drawings
- 5.3 Automate the distribution of documents, data, or drawings to project team members based on access and permissions

6.0 Bidding & Pre-Construction

- 6.1 Incorporate ability to automate and customize templates for: scope document, informal/formal bid forms, formal public works bid forms (Board of Supervisors), bid summary, bid evaluation, Notice of Intent to Award, Bid Selection and Notice to Proceed
- 6.2 File folder storage for quotes, proposals, final/permit drawings & specifications
- 6.3 Automatically generate distribution set for plan rooms, pre-qualified contractors, other stakeholders
- 6.4 Incorporate ability to automate and distribute bid addendum
- 6.5 Incorporate an automated, standardized template for pre-construction meeting documentation
- 6.6 Receive and coordinate construction schedules with all affected stakeholders

7.0 Construction Administration

- 7.1 Existing and future construction milestones, benchmarks and tasks to manage and update project budget and schedules in the project dashboard
- 7.2 Incorporate ability to receive, mark up and respond to Request for Information (RFIs), Change Order Requests (CORs) from the field using mobile devices
- 7.3 Incorporate ability to track and coordinate approval of submittals
- 7.4 Capability to maintain ancillary contracts and field reports from the design professionals, inspectors, testing labs, compliance reports, etc.
 - 7.4.1 Document retention and retrieval functionality
 - 7.4.2 Customer access and archiving features
- 7.5 File management for construction reports, daily reports, submittals, RFIs, Change Orders, Construction Change Reports and Directives and related backup
- 7.6 Receive and approve Application for Payment Requests on standardized G702 template
- 7.7 Job Card and Inspection card
 - 7.7.1 Detailed description of work performed (work order) signed off and validated completion (for construction projects)
- 7.8 Incorporate ability to develop standardized punch list template and manage corrections
- 7.9 Mobile app functionality
 - 7.9.1 Ability to receive and respond to sketches, drawings, or pictures that correlate to the contract documents

8.0 Project Close-Out

- 8.1 Incorporate ability to customize template for Project Close-out Form
- 8.2 Receive, validate amount, and approve final retention invoice
- 8.3 Incorporate ability to customize template for Notice of Completion Form
 - 8.2.1 Board of Supervisors approval
- 8.4 PM confirms all activities complete and signs off on project close-out
 - 8.4.1 Electronic Signature options

9.0 Reporting

9.1 Standard Reports

- 9.1.1 Monthly report by Project Manager, by Department, by Supervisorial District
- 9.1.2 Annual Report of completed and active capital, non-capital, environmental, or plan check/inspections projects
- 9.1.3 Annual Capital Improvement Program (CIP) Report of completed capital projects over \$10 million; capital projects over \$1 million, and capital projects underway
- 9.1.4 Annual Productivity & Efficiency Report (see Section 9.1.2)
- 9.1.5 Planned Project Expenditure Report for Riverside County Recommended Budget

9.2 Ability to develop custom reports