



California Department of Food & Agriculture  
Office of Information Technology Services

# **IT Governance Project & Portfolio Management**

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Category: IT Project and Portfolio Management



## Executive Summary

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The size of California's Agricultural Economy is staggering; a \$32 billion industry that generates an additional \$100 billion in related economic activities. In California, the department charged with the protecting the prosperity of this industry and the millions on Californians who depend on it is the California Department of Food and Agriculture (CDFA). And, like anything having to do with the California Agriculture, when there are problems, the problems are big.

In 2006, an independent assessment of IT governance at CDFA validated the Department's feeling that there was a need to formalize IT governance and Project management across CDFA's seven divisions. CDFA executives and business leaders from the divisions came together to form the IT Governance Council and worked collaboratively to develop a repeatable and sustainable IT Governance Process. The process provides a consistent and predictable method for moving project concepts through the initiation and approval processes. This design streamlines business operations, keep lines of communication open, and ensure that the business units and IT are engaged and working as a team.

The IT Governance Process also identified active IT projects that were managed using a variety of tools and methodologies. The use of disparate tools and project management methodologies made it difficult to determine the number, status, and costs of IT projects and their alignment with the department's strategic goals. In order to address the project management needs in an enterprise fashion and provide visibility into IT initiatives, CDFA implemented its Project & Portfolio Management System (PPM) using Computer Associates' "Clarity" application.

The department leveraged its IT Governance Process and industry best practices such as PMI Project Management Body of Knowledge (PMBOK) and IT Infrastructure Library (ITIL) Frameworks as the foundation for the PPM configurations. This approach allowed CDFA to uniformly adopt these standards through external project management and IT service delivery training coupled with internal system training for project managers and executives. The PPM is now the standard tool for project management and is the "one-stop-shop" that provides CDFA executives with a high-level view of how dollars and resources are being allocated to IT projects and how these projects align with the department's strategic goals.

These solutions, as expected, have stabilized the development of IT initiatives at CDFA, stabilized the execution of those initiatives, hedge the risk of large project failure, and, consequently, stabilized California's agriculture industry.

## Description

### Business Problem

Agriculture in California is big. Not big in the way that skyscrapers are big or in the way that Bob Dylan was big, but big in the way that countries are big. The scope of it all is staggering; California's agriculture is a nearly \$32 billion industry that generates an additional \$100 billion in related economic activities. If California stripped away all other industry within its borders except agriculture, it would still rank among the top 50 in Gross Domestic Product per country. While the abstract description of the size of this industry is impressive, it is not academic; there are 88,000 farms and ranches, with millions of employees that need a properly and efficiently functioning agriculture sector for their livelihoods. The charge of making sure that California remains the most productive agricultural state, as it has been for the last 50 years, falls upon the California Department of Food and Agriculture (CDFA). And, as with everything related to California's agriculture, when there are problems, the problems are big.

CDFA has seven operating divisions. While each of these divisions is responsible for a specific aspect of California agriculture, the ultimate goal of each division is to maintain the reputation, safety and prosperity of California's agriculture and its millions of dependants. Every dollar that can be saved by finding an efficiency is a dollar that can be spent on inspection, promoting the California brand, or preventing pests and diseases. Every dollar spent on those services means a dollar, or more, in the total worth of this critical economic sector – which means money in the pockets of agriculture workers, farmers, and ranchers. The realization of scale and organizational efficiencies is, therefore, not an extraneous goal, but a mission-critical aspect of CDFA policy.

Information Technology (IT) at CDFA was not structured in a way to take advantage of these efficiencies. IT evolved overtime as disparate, with each division having its own staff and each division pursuing its own projects. Projects were being approved, not as part of a department-wide strategy, but based on the current need and funding available to each division. This ad hoc approach, as verified by an independent assessment, resulted in a litany of problems: Projects – big projects – were more likely to fail, expertise and innovation that existed in one division's IT staff did not communicate to others, and money that could have been saved and expended on services was falling in the gaps between divisions' IT departments. The problem was one of structure and administration, the solution would need to use the best practices of governance to remedy these problems and keep California's agriculture growing.

### Solution

CDFA needed a repeatable and sustainable process for the management and approval of its IT projects. This process needed to balance division needs with department goals, as well as make sure that IT policy was integrated into business policy. The governance protocol best designed to meet the needs of all stakeholders (division IT staff, division business leaders, department IT leaders, and department business leaders), would be the protocol best able to serve the ultimate CDFA purpose – the improvement of services to California's agriculture sector. The structure of the new governance process

has two parts, an IT Governance Council and a specific Project & Portfolio Management protocol. These two parts bring system and transparency to IT projects, allowing business leaders to make decisions on resource allocation.

### IT Governance Council

The first part of the plan was a process that shepherded new IT initiatives from conception to implementation. The IT Governance Council is a collection of CDFA executives and business leaders that came together to form the process of how IT projects would be submitted, studied, and approved. This governance protocol was designed to streamline business operations, keep lines of communication open, and ensure that the IT and business units are engaged and working as a team.

The first step of the governance process is the submission of the IT Project Concept Paper (IT-PCP). The IT Governance Council reviews the IT-PCP to validate the information presented in the IC-PCP, and to ensure that project are prioritized based on business needs and how they align with departmental goals.

Next, a six-step approval process for the IT-PCP gives all stakeholders a chance to vet the IT-PCP and receive clarification regarding the information and how the project might affect their operations.



After this six-step process, business and IT work together to develop a more detailed Feasibility Study Report (FSR). This report contains more detailed information regarding project objectives, scope, schedule, and costs. This federated model of governance, with autonomous IT departments succeeding some of their authority for the greater good of the Department, and ultimately California Agriculture, is an exemplary case of best practices in governance and big-picture thinking by IT personnel.

### Project & Portfolio Management (PPM)

A complete Governance process needs to go beyond conception and initiation; it also needs to give business management tools to track the ongoing status, schedule, and costs of projects. While planning is important, the ability to analyze and adjust to new factors is critical. Previously, there was no standard metrics and methods for PPM making it difficult for projects to be managed at an enterprise level. In order to provide transparency into IT initiatives, CDFA implemented a PPM using the Computer Associates' "Clarity" application.

The PPM implementation allowed CDFA project managers to apply and validate the IT Governance Process and to configure the system using project management industry best practices, processes, and methods. The PMI Project Management Body of Knowledge (PMBOK) and ITIL (IT Infrastructure Library) Service Management Frameworks provided the foundation for the configurations which allowed the department to

uniformly adopt these standards through a combination of external project management and IT service delivery training coupled with internal system training for project managers and executives.

Throughout the PPM implementation process the system was vetted by the IT Governance Council to ensure that the project management and reporting needs of the business leaders were met the moment the system went into production, October 2007.

### Significance

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*"CDFA's Information Technology (IT) supports and sustains in its mission to promote and protect California agriculture and food products. CDFA took a major step forward by implementing an IT governance and project and portfolio management. IT governance pools people, processes, and technology to increase operational efficiency, accountability, and transparency. Project and portfolio management allows all stakeholders - IT Services, program managers, and related areas such as finance - to take part in IT project investment decisions and be involved in their performance and risk management. I encourage active participation in decision making for the future of CDFA." California Secretary of Agriculture, A.G. Kawamura*

#### Increased Operational Efficiency

The IT Governance Process and PPM have realized new efficiencies by promoting collaboration between the seven divisions. A specific expertise in one division is no longer sequestered from the other six and, when a good project comes around, there is no need to re-invent the wheel six times in order to make it an enterprise-wide standard. This eliminates duplicate effort, which means less money is being spent on the administration of IT and more is being spend on promoting California's agriculture.

*"In the past, divisions worked on their own to start IT projects. Now I have what I call Davood's Kitchen Cabinet Meetings once a month where I meet with all the program directors and look at all the initiatives in front of IT. That way, we can see what applications and projects can be shared across the whole agency." Davood Ghods, California Department of Food and Agriculture, Agency Information Officer*

#### Improved Project Alignment and Financial Management

The Project & Portfolio Management is now the central repository for all project data and is the "one-stop-shop" that provides CDFA executives with a high-level view of how dollars and resources are being allocated to IT initiatives within the department's six strategic goals. The **Total Goal Portfolio** shows the total cost of projects within each goal area as a percentage of the total cost of CDFA's IT investments (Figure 1).

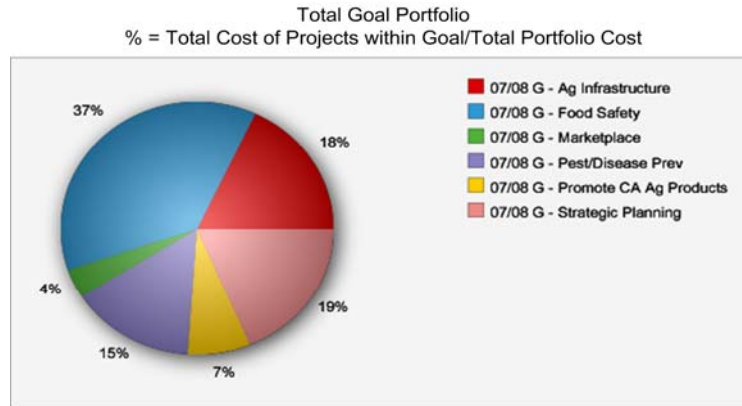


Figure 1

With California facing a near \$16 billion revenue shortfall, divisions and the department need financial flexibility. The ability to analyze the impact of cuts on the department's IT investments is extremely valuable and serves as a cost containment strategy. Real-time information regarding how monies are being spent across the entire portfolio of projects combined with the ability to forecast upcoming expenditures allows CDFA executives to make those "tough decisions" when cuts need to be made. For example, CDFA's **Total Project Portfolio** shows the cost of each project as a percentage of the total cost of all projects in the portfolio (Figure 2).

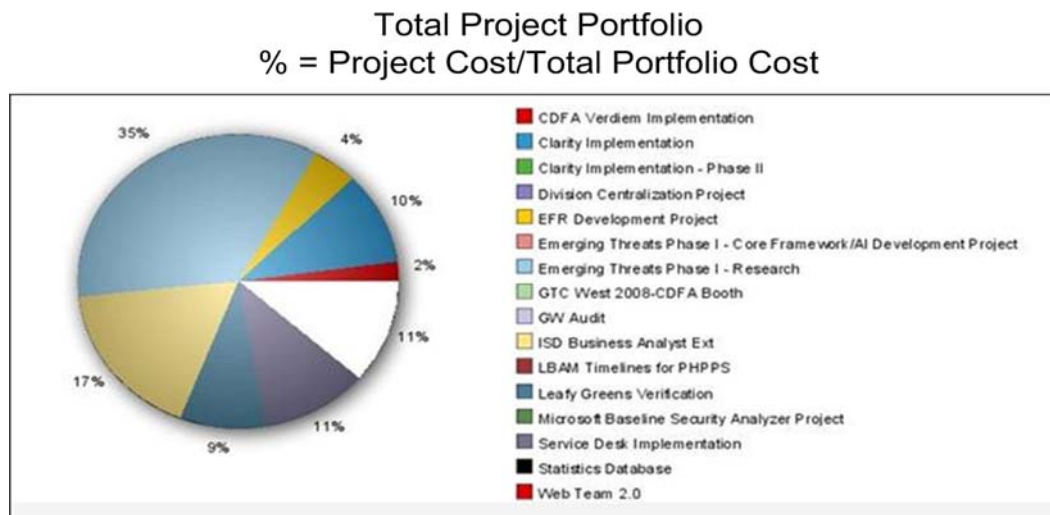


Figure 2

The Total Project Portfolio also gives management the ability to see current and future expense over a fiscal time period. Providing this graphical representation gives decision-makers at CDFA the ability to create different scenarios to show the effect of taking on new IT initiatives, shifting funds and resources, and responding to changes in policy.

*"CDFA, like many departments, has struggled to maintain information in a way that fully takes advantage of rapidly evolving technology. With shared IT governance the division directors have been able to pool their resources and support a more specialized and*



*deeper IT staff. A key to this success is trust that is based on the new governance structure and strong IT leadership.” Annette Whiteford, Director, Division of Animal Health & Food Safety Services.*

### **Public Value of the Project**

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*"If an IT project gets out of control or fails, it could have profound affects on the performance of an organization. Implementing IT governance and project and portfolio management allows CDFA's Office of Information and Technology Services to communicate clearly and consistently with all interested parties so that they understand the goals of IT goods and/or services." California Chief Information Officer, Teri Takai.*

The most profound return on CDFA's less than \$500,000 investment is that there is now a transparent, communication-laden process that will protect against the high costs, and embarrassment of failed IT projects.

To use an anecdote, the CDFA is currently managing several IT projects related to emerging threats to agriculture, which means threats to people's livelihood. The Emerging Threats Data Management System Enhancements Project is a seven-year project with a planned cost of approximately \$6.5 million and requires reporting to the California Legislature. The Leafy Greens Audit Verification Project is a six-month project with a planned cost of approximately \$200,000. The department's IT Governance Process and PPM has given stability and transparency to these IT business decisions whose success are of the highest import. Now, if a legislator wants to know the amount of money going to managing data regarding the sightings of a crop-destroying pest in his district, that information and the process behind the business decision to fund that program are now available. If the Governor wanted to know how much money is being spent on verifying the safety of Californian Spinach exports after an E-coli outbreak, CDFA can now give him that number.

The truth is, these programs are not about lettuce and moths, they are about protecting a \$32 billion industry, protecting the over a \$100 billion in related business, and protecting the over a million people who rely on the health of California's agricultural economy. The idea of managing projects of this scope and importance in an "ad hoc" fashion is unconscionable, and now, thanks to the IT Governance Council and PPM it is an idea of the past.

### **Transferability to other Organizations**

As the interest and need for IT governance and project and portfolio management grows in state government, many California state agencies have approached CDFA for its best practices in these areas. Agencies that have purchased Clarity, or are considering this application, will be able to use CDFA's PPM as a model to capitalize on the department's best practices and to potentially reduce implementation time and costs. The same way that good IT projects are no longer sequestered in one of CDFA's divisions-- when they should be department-wide, the CDFA's governance and PPM model can easily be transferred to any one of California's departments or agencies.