



## IT Portfolio Management

### IT PORTFOLIO PHILOSOPHY

Like any collection of assets, such as financial instruments or real estate, IT systems can be viewed holistically and leadership can take a systematic approach to allocating funds and resources to these assets. OmniSolve offers tools and techniques to help IT leadership with this approach to informed decision-making.

Once adopted, IT Portfolio Management becomes integrated into the normal course of business management. In other words, IT Portfolio Management is not a project, but a business process.

In the Federal Government, systematic management of IT investments is a requirement. The Clinger-Cohen Act of 1996 requires "agencies to use a disciplined capital planning and investment control (CPIC) process to maximize the value of and assess and manage the risks of the information technology acquisitions....(and) ensure that performance measurements are prescribed for information technology used by, or to be acquired for, the executive agency and that the performance measurements measure how well the information technology supports programs of the executive agency".

Commercial organizations following best practices don't need a federal mandate to instruct them to use a systematic approach to measuring the value of IT investments. Experienced leaders know this is a key activity in running their business, especially given the enhanced role technology has come to play in virtually every industry.

### We follow a five Step process:

- 1. Determine the Outcomes Desired from Portfolio Management.**
- 2. Define the Scope of the Portfolio**
- 3. Determine the Criteria for Selecting Metrics**
- 4. Choose the Metrics**
- 5. Use the Metrics**

### Step One: Determine the Outcomes Desired from Portfolio Management.

Even for Federal Organizations required by Clinger-Cohen to use capital planning and investment control, the process of implementing IT portfolio Management, OmniSolve

recommends the process begin with an assessment of the key questions we are seeking to answer. Typical examples include:

- Do we get the best value from our IT expenditures? What competitive advantage do we get from IT (commercial organizations)? How well do our IT investments meet our mission (public sector)?
- Do we invest in the right areas? Do we invest effectively; i.e. not overpaying for systems relative to industry benchmarks
- Are we running our information systems efficiently? (O&M, Development, Support costs)
- What is our level of operational risk? What is our ability to mitigate operational risk?
- Is our IT prepared for the future, in terms of both systems architecture and staff capabilities?

### Step Two: Define the Scope of the Portfolio

OmniSolve helps assemble an inventory of IT systems in the portfolio based on the scope of systems the organization wishes to manage. In large government or commercial organizations, there might be a desire to manage the entire population of systems, but it may not be practical or key to the mission to look at every system. We work with our clients to determine the scope of systems in portfolio. Examples include:

- **Functional** – i.e. all customer-facing systems, all financial systems, all HR systems, etc
- **Geographic**
- **Size Threshold** – i.e. all systems with operating budgets above \$1million
- **Organizational** - such as business unit, Office or Agency.

For example, the scope of the portfolio being managed might be: customer-facing systems with an annual operating budget above \$1million; or HR

### OVERVIEW

- **OmniSolve looks at IT systems as a assets in a Portfolio and helps clients determine which systems should:**
  - *Be maintained in a steady state*
  - *Be put on a path towards retirement*
  - *Be modernized*
  - *Be replaced with commercial alternatives*
- **OmniSolve's portfolio management service helps IT organizations improve the return on their technology investments, reduce risk, and eliminate redundant expenditures. By taking a portfolio view rather than a project view, organizations coordinate efforts across different projects and operational systems; allocate resources based on business objectives, and balance risk vs. reward in their IT investments.**

systems with a budget over \$500,000; or all systems within a data center located in a given city.

### Step Three: Determine the Criteria for Selecting Metrics

Once the scope of the portfolio is determined, OmniSolve works with IT and business management to establish a set of metrics to be tracked for each system in the portfolio. These metrics should be applicable to systems in any stage of the software lifecycle:

1. *Projects being considered*
2. *Projects underway*
3. *Systems complete and in Operations and Maintenance Mode*
4. *Candidates for replacement, upgrade or retirement.*

In fact, effective IT portfolio management is particularly valuable for systems in categories 1 and 4, helping management answer the questions: which projects should we invest in? Which systems are reaching the end-of-life and should they be retired, modernized, or fully replaced?

So, how do we choose metrics? OmniSolve works with client management to identify the set of metrics to be tracked for the systems and projects in the portfolio, with our experience brought to bear to help clients determine what gets measured. Criteria for choosing metrics include:

- Can the metric be captured without excessive cost or effort?
- Does the metric have relevance to the business mission? There is often a tendency to gather metrics because they are easy to obtain even if they are not relevant. For example, the number of packages transmitted daily is an easy metric for a system with a messaging component, but it doesn't generally provide insight into the value of the system.
- Can subjective measures be captured and converted into a numerical value? For example, customer satisfaction can be captured in a survey, and a relative number (i.e. scale of 1 to 10) assigned to this subjective measure.

### Step Four: Choose the Metrics

Applying the criteria from Step Three, and bearing in mind the outcomes sought (Step One) and scope of the portfolio (Step Two) the next step is to select the metrics. Below is a set of common metrics that are used to measure IT investments and assets. Note that while ultimately, the full set of investments and assets are considered holistically and each system is placed relative to the rest of the systems in the portfolio, the metrics are gathered individually for each system.

Common Metrics:

- Number of staff trained in the system's core technologies/number of staff needed for ongoing support
- Customer or user satisfaction with the system
- (for new projects) Projected cost of acquisition or development and post deployment maintenance
- (for existing systems) operating and maintenance costs
- Relative years remaining on equipment and vendor support; i.e. threat of obsolescence
- Consistency with business mission (generally measured on a relative scale that captures subjective assessment of management)

- Vulnerability to security threats such as intrusion (again a subjective scale)
- Relative use of open standards
- Percent downtime
- Percent of shared assets with other systems
- (for systems with revenue generating functions) Return on Investment
- (for systems targeted to reduce costs) Return on Investment
- Scalability (subjective scale in some cases, in others can be a hard number based on ability to support so many additional users)

Software complexity – how difficult is it to maintain and enhance the system? One way to assess this is level of componentization, and another is use of open vs. proprietary standards.

### Step Five: Use the Metrics

Assuming we have selected the right set of metrics for our in-scope IT portfolio and we have gathered these, there are two scenarios under which the metrics are applied. Note that these two scenarios are not mutually exclusive – both can be used.

Scenario One: Investment planning and budgeting. Whether approaching an annual budget or a multiple year strategic plan, applying the metrics to each system allows leadership to allocate resources.

Scenario Two: On-Going Management. In this scenario, the organization's business process includes evaluating each system in the portfolio based on the metrics, and adjusts staff resource allocations and financial investments via trends observed. In this approach, OmniSolve recommends building a management dashboard, preferably on-line but a static hard copy can serve effectively. The dashboard is updated at standard intervals – monthly or quarterly are typical, and management has a tool it can use at any time.

Regardless of which scenario is being followed, management will likely face a combination of "hard" data, such as operating costs or customer/user satisfaction survey results and "soft" scores, such a relative complexity or alignment with business mission. Recall that in Step One, we decided what outcome we want from the IT Portfolio Management effort (Do we invest in the right areas? Are we running our information systems efficiently? Is our IT prepared for the future? etc) Management is likely to use the mix of hard and soft metrics to support planning sessions about these questions, which OmniSolve can facilitate, but ultimately these are supporting numbers but don't provide an answer. This does not diminish the value of metrics-based IT Portfolio Management, rather it points to its ultimate value as a decision support tool.

### COMPLEMENTARY SERVICE OFFERINGS

Other service offered by OmniSolve that complement this offering includes:

- *Program Management*
- *Project Management*
- *Business Process Improvement*
- *Performance Management*

For further Information about the material presented in this document or to arrange a consultation, please contact:

### OVERVIEW

- *For those using IT Portfolio Management who seek a more systematic, quantitative approach to measuring systems, a technique utilizing weights and scores can be used. For each metric chosen (Step Four), a relative weight is assigned – how important is this metric compared to the others? The total is 1.0 (100%). For the same metrics, a relative score is assigned – how well, compared to the other systems, does this system rate for each dimension? The product (weight x score) for each system provides the relative value of that system. This is illustrated below with just three metrics for simplicity.*

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