A Study on IT Portfolio Management

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Abstract - IT Portfolio management is proved to be a best approach, enabling maximum allocation of assets/resources toward objectives, factoring in risk and dependencies. Common mainstream portfolio management practice fails to deliver on this value proposition. The root cause is failure to adopt a practical, human-centered, approach that delivers obvious value to key stakeholders. Corporates require to institute or evolve IT portfolio management can force a best practice approach to design an effective and company-specific development plan. Doing so allows for the best of both worlds — use of best practices, and the acknowledgment of Corporates needs and culture.

Keywords – IT Portfolio Management, IT governance, Processes, Knowledge-Based View, IT assets

I. INTRODUCTION
A corporate has one logical IT portfolio, composed of all the IT investments that support the organization's mission, strategies, goals and objectives. These IT investments are conceived, are delivered, live a useful life and are eventually disposed of, where innovations are conceived of in the IT Discovery Phase. These innovations may occur as seemingly unbalanced applications of latest technologies most of which fade away, but some don't, often providing enormous value.

More traditional IT investments mature into productivity as projects in the IT Project Phase. When these projects are finished, they become productive assets, where they live a useful life in the IT Asset Phase. Eventually, these IT assets must be retired, usually causing them to cycle back into the IT Project Phase, because a project is usually required to replace or dispose of them. At the end of the day, however, there is one logical portfolio composed of the entire IT budget — all IT resources — being allocated to a set of objectives. They are all interdependent. The phases tend to have factors, most of whom report directly to the IT Heads. While conceptually, the Heads steward the entire portfolio, in practice, it is rare to see active portfolio management of the entire portfolio.

II. ANALYSIS

Big picture: IT need to have one single portfolio

An Company need to have one logical IT portfolio, composed of all the IT investments that support the company mission, strategies, goals and objectives. These IT investments are perceived, are delivered, live a useful life and are eventually disposed of. These innovations may occur as apparently unbalanced applications of emerging technologies, many of which fade away, but some don't, often providing enormous value.

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To manage easily, it is common to divide the IT portfolio into subportfolios to support differing needs of business units (such as different business units that support different markets or different layouts, necessitating independence, individuality or degrees of freedom). It is also common to break down components of the IT portfolio based on the phases of the life cycle. This is similar to separation of concerns — designing separate areas to work on such that any work in that area would minimally impact other related areas. Thus, it is normal and acceptable for an organization to focus solely on the project portfolio for a while, then focus on the assets (such as the application portfolio). This allows portfolio management work to get done in the face of limited resources, an overabundance of information and low thresholds for change pain.

There are also liquidity issues that can be tackled by having portfolio partitions. For example, projects are relatively easy to stop, whereas assets (such as an ancient Business Application system) are not. In 2010, 6% of projects were
canceled prior to delivery, but we have received no confirmed reports of the shutting down of an archaic ERP system without a corresponding project to replace it.

In addition, the underlying processes that generate data to do portfolio management are quite different. The Discovery Phase is less constrained and lends itself to creative processes (such as ideation). The Project Phase has greater control, but accounts for normal project risk and change. The Asset Phase is operational, shock-full with standard processes and often in a continuous improvement cycle.

There are also accounting practices and principles that motivate separation. Projects in the Project Phase tend to be capitalized to spread the costs over a period of years. Assets in the Asset Phase tend to be amortized or depreciated, deducting asset value over the useful life of the asset. Often, items in the Discovery Phase don't show up on the accounting radar screen until they've either generated returns or failed.

At the end of the day, however, there is one logical portfolio. All the IT investments and all the IT resources are allocated to a set of often competing objectives. As an individual allocates scarce resources (that is, their income) toward their objectives (such as purchasing a house, going on a vacation or retiring) using a variety of investments (for example, penny stocks, large-cap stocks and fixed-income securities), an organization must allocate its scarce IT resources toward a set of business objectives using various investment classes (such as projects, assets and innovations) through the Discovery Phase.

Big Problem: Portfolio Process Without Perspective Disconnects IT From the Business Service

The big problem occurs when Companies fail to recognize that it's one logical portfolio and the interdependencies are lost. During the 2008-2009 correction, the problem surfaced as reactive project portfolios, where capital grow-the-business spending was indiscriminately cut, while concretized grow-the-business costs remained seemingly unscathed, and opportunities to transform were seemingly forgotten. 2 In true IT portfolio management, projects become assets, and assets become projects. Failure to recognize this dynamic contributes to a disconnect between business vision and IT delivery, as well as a bloated asset portfolio that consumes the majority of the IT budget to maintain the status quo. Business leaders declare their Companies are on paths to growth or transformation, yet 66% of the IT budget, on average, is allocated toward maintaining the status quo. As according to the different paid research reports available, For the period of 2006 through 2010, IT spending as a percent of revenue fluctuated between 5% and 4.4%; however, the percentage of that spending allocated to run, grow and transform remained practically unchanged.

2008 through 2009 marked the biggest economic crisis and contraction ever for most people alive today; however, the percentage of the IT budget allocated to run, grow and transform did not change noticeably during this period. Even allowing for a time lag between changes to the business and a corresponding response from IT, data suggests that business changed, but IT did not, beyond an obligatory reaction to cut some project costs.

So what's the big deal? Opportunity costs. The status quo was largely maintained in IT, while the business that IT is supposed to represent contracted for most. The resources being allocated to growth could have been redeployed to reduce costs in the Grow Phase or could have been allocated to transform. The resources could have been conserved as well. Analyzing the aggregate data, with every plausible explanation, suggests that IT lacked the agility to change with the business. The big problem is the lost opportunity to serve the business the way it needs to be served.

**BIG SOLUTION: FOCUS ON THE BIG PICTURE AND THE PEOPLE, AND KEEP IT SIMPLE**

The big solution isn't actually big at all. Those who've attained exemplar results from IT portfolio management have relied on a handful of best practices to do so. Cisco Systems, and a handful of leading IT portfolio management practitioners had the ability to adjust to business needs. They all encompassed a consistent set of simple best practices. These best practices were:

- Maintain a big-picture perspective
- Keep it simple: process and analytics
- Focus on people

**MAINTAINING THE BIG PICTURE**

Those who succeed with IT portfolio management tend to maintain a big-picture perspective, ensuring their portfolio management effort supports the objectives of the business — even as they change. Leaders also acknowledge the connections between the various phases of the IT portfolio life and the relationship between these phases. While they may not mature their Project, Asset, and Discovery portfolios consistently in a linear fashion, they do acknowledge the full life cycle and ensure they have some visibility across the phases — even if basic. For example, one leader focusing on project portfolio management collected a list of assets to ensure that requested or active projects were not duplicating assets. This extra effort proved fruitful because they were, in fact, creating and proposing to create millions of dollars in duplicate assets.
**KEEP IT SIMPLE**

A host of "advanced" techniques are advocated by myriad prognosticators; however, in practice, leaders tend to use simple processes and simple analytics. The processes are consistent with their organizations' culture, maturity and need. IT portfolio management is largely a planning discipline, more in the realm of management accounting than financial accounting.

**FOCUS ON PEOPLE**

IT portfolio management leaders focus on key stakeholders, ensuring that both the value proposition and the value delivered from portfolio management resonate with the values of key stakeholders and ensuring their continued involvement and support. They take time to do stakeholder analysis, identify stakeholders who will declare portfolio management a success or failure, and take action to ensure that success is declared. These stakeholders generally include, but are not limited to:

- Senior management
- Business unit leaders
- Participants in IT steering committees

The communication with key stakeholders is bidirectional. These key stakeholders are usually the best source for information regarding environmental changes that might necessitate a significant rebalancing of the IT portfolio; however, this information must be elicited. IT portfolio management leaders also develop and maintain support for portfolio management through active communication, relationship management and expectation management. Communication is a thoughtful and ongoing component of a successful portfolio management function.

**MAINTAIN THE BIG-PICTURE VIEWPOINT**

Develop an understanding of the phases of the IT portfolio management life cycle, and foster this understanding throughout the organization. Even if focusing solely on just the project portfolio, acknowledge the connection to other portfolios (such as applications). Conversely, if the focus is on application portfolio management, acknowledge the existence of the project portfolio and the discovery portfolio. Forge relationships with key stakeholders responsible for all phases of the IT portfolio life cycle, including enterprise architecture, emerging technologies or any other group responsible for experimentation that is the hallmark of the discovery phase. Also, develop alliances with those responsible for the asset portfolio, including the owners of maintenance, as well as operations to ensure the big-picture perspective is pervasive.

Also, ensure that subportfolios are appropriate and can be reconciled. In highly federated organizations, it is common to have subportfolios to enable autonomy and rapid change. The best way to ensure the design of these portfolios is optimized is to reconcile them back to a single logical IT portfolio.

**KEEP IT SIMPLE**

Albert Einstein famously said, "Everything should be made as simple as possible, but not simpler." Use best practices to identify strengths, capabilities and constraints, as well as to identify targets for processes and analytics. In general, strive to master the processes and analytics at the current level of maturity or one level up.

**FOCUS ON PEOPLE**

Use stakeholder analysis to identify the key stakeholders - those who can make or break IT portfolio management. Ensure that the value promised and delivered from IT portfolio management is consistent with their values and is attainable. Foster support for portfolio management by delivering value in exchange for support. Develop processes and analytics that meet the needs of the business leaders. Many decision style models suggest that high-level conceptual information reverberates more with senior leaders than fine-grained detail. Playing to this dynamic also lightens the workload for portfolio management professionals; they only have to collect and structure a minimal amount of data to support decisions.

**III. CONCLUSION**

- Information suggests common portfolio management practices are failing to deliver the required results and more ever could not even be considered portfolio management.
- The main cause appears to be losing sight of the objectives of portfolio management, coupled with much focus on process and tools and too little on people and results delivery.
Design/Develop understanding of IT portfolio management as a process and discipline.

Develop an understanding of the Corporate-specific objectives of IT portfolio management, noting corporate capabilities, constraints and maturity.

Institute practical portfolio management that focuses on objective realization and value delivery — paying careful attention to key stakeholders, ensuring they attain and deliver value, and also that it should understand and support the IT portfolio management concept.

REFERENCES