

# A Method for IT Portfolio Management

The promise of IT portfolio management is the quantification of IT efforts, enabling measurement and objective evaluation of IT investments and alignment with business strategy. Understand how IT portfolio management can be a driver of IT process improvement and governance alike.

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# Introduction

As many as 75% of IT organizations have little oversight over their project portfolios and employ non-repeatable, chaotic planning processes. This typically leads to the wrong projects receiving priority and funding, coupled with the increased costs and risks that come with poor planning. IT portfolio management offers one solution to this problem.

IT portfolio management is the application of a system of portfolio management methods and tools to the work managed by an IT team. This work includes projects and other planned initiatives, but also includes ongoing services like application or technical support. The promise of IT portfolio management is the quantification of IT efforts, enabling measurement and objective evaluation of IT investments in addition to alignment with business strategy.

The concept of IT portfolio management is analogous to financial portfolio management in that the seeking of value is constantly balanced with risks and costs. The IT portfolio is managed like a financial portfolio: riskier strategic investments (high-growth stocks) are balanced with more conservative investments (cash funds), and the mix is constantly monitored to assess which projects are on track, which need help, and which should be shut down.

Risk management plays a large part in both financial and IT portfolio management, yet there are significant differences:

- IT investments are not liquid, like stocks and bonds (although investment portfolios may also include illiquid assets), and are measured using both financial and non-financial yardsticks (e.g. a balanced scorecard approach). A purely financial view is not sufficient.
- Financial portfolio assets typically have consistent measurement information (enabling accurate and objective comparisons), and this is at the base of the concept's utility in application to IT. However, achieving such universality of measurement is going to take considerable effort in the IT industry.

This In-Depth Report will do the following:

- Make an argument for IT portfolio management by highlighting what actually happens in organizations without this discipline.
- Discuss various methods for managing the IT portfolio, in the context of implementing this discipline.
- Discuss some of the features of common portfolio management software tools, since it is difficult to effectively manage all but a small portfolio without automation.
- Provide standards for managing the IT portfolio still under development.
- Show how to confront some of the key challenges that the typical IT portfolio management implementation will face.

# The Whys of IT Portfolio Management

It is easy to spot an organization without an IT portfolio management discipline. Managers cannot access real-time status on projects, resources, and requests. Most, if not all status reporting requires manual intervention and may be considered cumbersome. Methodologies may be pushed but not tracked. There is no formal process for managing the steady flow of new demand relative to currently active projects and tasks. This leads to the following common scenarios:

- High-priced projects that may not meet the company's strategic objectives are approved when submitted by well-connected or vocal business sponsors – or by those most deft at preparing presentations.
- Important projects do not receive sufficient funding or management support.
- There is a serious backlog of key projects.
- Tracking the total cost of ownership of IT services and infrastructure (and in some organizations, even determining the total amount spent on IT) is an elusive goal.
- Key maintenance activities get too little – or too much – attention relative to projects, programs, and new business initiatives.
- Measuring the value of IT and its work streams and projects is difficult.
- IT management ends up sponsoring projects that should be generated and sold by line-of-business heads.
- The wrong IT resources are working on the wrong projects or work streams.
- There is difficulty finding enough people to adequately staff projects, or “resource delays” are often blamed for project failure.
- There is high turnover of key IT resources.
- Excessive overtime and other pressures have led to a burned out IT staff.
- IT management has difficulty seeing how much funding and resources a given project is consuming, relative to the overall portfolio.
- Projects move back and forth from active, to on hold, and back to active.
- The interactions and dependencies between various IT work streams and projects are not always well-understood and managed.
- The organization struggles to align business strategy with IT execution since business people do not understand what is technically possible, IT does not understand business drivers, and neither side really understands how the other impacts it.
- The company doesn't build good business cases for IT projects or it doesn't do them at all, leading to redundant projects.

- Key executives and managers wonder why certain projects go ahead while others do not.

A strong portfolio management program can:

- Maximize value of IT investments while minimizing risk.
- Allocate project management, support, and delivery resources to IT work according to the best match of skills, capabilities, and project priorities.
- Improve communication and alignment between IT and business leaders.
- Encourage business leaders to think "team," not "me," and to take responsibility for projects.
- Allow planners to schedule resources more efficiently.
- Reduce the number of redundant projects and make it easier to kill bad projects.

IT portfolio management, not unlike financial portfolio management, can achieve this by:

- Becoming conscious of all the individual listings in the portfolio.
- Developing a big-picture view and a deeper understanding of the components of the portfolio, analyzing how they interact and compare with each other, and considering how they add value to the portfolio as a whole.
- Allowing for sensible sorting, adding, and removing of items from the portfolio based on their costs, benefits, risks, and alignment with long-term strategies or goals.
- Facilitating the measurement of portfolio value in addition to individual component value.
- Enabling the portfolio owner to get the best-bang-for-the-buck from resources invested.

And why is IT portfolio management of interest to project managers themselves? Project managers want to have enough resources available to complete high quality project deliverables, on-time and within budget. Project managers typically also prefer to work on projects that are perceived to be valuable and, therefore, enjoy plenty of support throughout the organization. Project managers who find themselves continually frustrated by lack of resources or by other organizations stealing their resources should be especially interested in this discipline. These frustrations are symptoms of an unbalanced (or unacknowledged) project portfolio.

In short, the frequent complaint of not enough resources is simply another way of saying that there are too many projects. And if there are too many projects, then someone should be sorting them out, prioritizing them, and killing the projects that aren't high priority.

# Methods of Managing the IT Portfolio

## Getting Started with IT Portfolio Management

The first steps in getting started with portfolio management are the following:

- Look for signs that this discipline is needed and document (and where possible quantify) them. Many of these signs were described in the scenarios above.
- Learn a bit about IT portfolio management. This can involve talking to professionals and consultants, interviewing peers who have implemented this practice, and of course reading up on the topic.
- Compile an inventory of projects and work streams. These must describe in detail the resource and funding requirements of each of these, as well as current spending versus budget. Besides just considering the current slate of projects, recently implemented projects should be considered in terms of lessons learned or post-mortem analysis of problems.

These initial steps form the basis for making a business case for IT portfolio management.

The core of the business case is the expected value added to the organization from implementing a portfolio management discipline. It should be possible to do this by describing, and wherever possible quantifying, the benefits of addressing the problems described above. But a portfolio management discipline can also go hand-in-hand with better IT processes and governance as will be seen later – these benefits are harder to quantify initially, but will become apparent to management over the first years of implementation.

## The Implementation Process

Once the business case is clear, most organizations that implement IT portfolio management have followed a process similar to the following:

1. Identifying champions and forming governance.
2. Collecting data.
3. Documenting existing situation – platforms, applications, infrastructure, vendors, projects, programs, initiatives, baseline cost, allocated budgets, and allocated resources.
4. Prioritizing and selecting projects, work streams, and other portfolio components.
5. Considering risk.
6. Initiating projects.
7. Selecting tools.
8. Reviewing, monitoring, and rebalancing of projects.
9. Improving process and governance.

## Champions and Governance

In some organizations, champions initiate the subsequent implementation activities, whereas in others, the evangelists and managers of the IT portfolio management function are assigned at a later stage. Either way, the organization needs to decide who will participate as active managers of the portfolio management process. Typically, the management team is made up of department heads from sub-organizations that generate requests for projects, provide project resources (especially team members), provide project funding, use finished project deliverables, set strategic directions, and so on. This team may or may not be part of an existing IT governance body such as an IT steering committee or some other steering body focused on business-IT alignment.

After that team is established, the members must agree on a set of criteria for valuing and risk-rating projects in order to prioritize them. Decisions based on these criteria will likely be more acceptable to everyone in the organization if the criteria have been developed with the input or review of as many stakeholders as possible from within the various sub-organizations. Typically, broad, organization-wide discussions of the criteria are held before they are finalized.

## The Inventory

An early step of any IT portfolio management process involves the organization developing a complete and accurate list of all its projects and work streams with enough descriptive information about each to allow them to be analyzed and compared. Such descriptive information can include:

- Project or work stream name.
- Category (see below).
- Associated program or initiative (where relevant).
- Business objective.
- Current status.
- Owner/sponsor.
- Estimated duration.
- Estimated cost.
- Assigned budget.
- Assigned resources.
- Assessed risk.
- Estimated return on investment and benefits.

This inventory should include not only projects, programs, and other initiatives, but also other important work streams like:

- Application and technology monitoring processes.
- Asset management and inventory processes.
- Business applications.
- Business continuity processes.
- Change management processes.
- Security processes.
- Technology infrastructure and processes.
- Vendor management programs.

Such a list is typically compiled in an electronic database so that it can be analyzed and compared more easily (and, as will be seen, dedicated tools are available to manage such a list.) Afterwards, department heads or other leaders examine each project and work stream, categorize these, and prioritize them according to established criteria.

The overall list of projects is then considered and prioritized in order to develop a well-balanced list of supported projects. Some projects will be given high priority and extensive support, some will be given moderate priority, and still others will be placed on hold or dropped entirely from the list.

Finally, the project portfolio is reevaluated by the portfolio management team on a regular basis (monthly, quarterly, and so on) to determine which projects are meeting their goals, which may need more support, or which may need to be downsized or dropped entirely. Since the circumstances of each project and the business environment can change rapidly, IT portfolio management is most effective when the portfolio is frequently revisited and actively managed by the team.

#### **Examples of Project Categories by Value Driver**

- Strategic/market share enhancement.
- Regulatory or controls enhancement.
- Business/revenue enablement and growth.
- Productivity enhancement.
- Operational risk reduction/quality improvement.
- Cost containment.
- Capital reduction.

#### **Examples of Project Categories by Type**

- Mandatory change – running the business.
- Maintenance/bug fixes/enhancements – running the business.
- Business growth.
- Business transformation and change.

#### **Examples of Project Evaluation/Prioritization Criteria**

- Return on investment.
- Non-financial drivers (regulatory, audit, controls enhancement, risk reductions, etc.)
- Risk rating.
- Resource requirements – staff, funding.

Organizations need to determine how IT costs and business value will be measured, managed, and monitored. A strong business case will be required to secure funding for new IT projects identified as a large, growth investment. Approval of a major systems project requires the development of a complete business case analysis that identifies a project's cost, business impact, return on investment, and risk. Specific metrics that can be used to measure value include the following, each of which looks at benefits from a different perspective:

- Net present value (NPV).
- Return on investment (ROI).
- Internal rate of return (IRR).
- Cash flows (over the life of the project).
- Total benefits (over the life of project) – sum, broken down by type.
- Total costs (over the life of project) – sum, broken down by source.
- Total cost savings.
- Implementation duration.
- Project risk rating.
- Project breakeven period (in years).
- Other measures and metrics which are user-defined.

## Evaluate

The next steps involve establishing a portfolio process. The heads of business units, in conjunction with the senior IT leaders in each of those units, compile a list of projects during the annual planning cycle and support them with good business cases that show estimated costs, ROI, business benefit, and risk assessment.

- Where IT is a business enabler, traditional NPV and ROI measures are typically used.
- Where IT is seen as a cost of doing business, supporting business operations, then efficiencies and cost savings are typical drivers (and NPV and ROI can also be used).

The leadership team vets those projects and sifts out the ones with questionable business value based on agreed criteria. Next, a senior-level IT steering committee made up of business unit heads, IT leaders, and perhaps other senior executives can review the project proposals. A good governance structure is central to making this work.

## Considering Risk

Recognizing, assessing, sizing, and mitigating risks to successful project delivery and management of IT work streams are a significant part of the project and technology management professional's responsibilities. Implemented criteria may be an issue that comes up in an enterprise IT portfolio management implementation, but what is important is that the portfolio management process allows for the frequent capture of such risk assessments. The risks inherent in non-project work streams should be assessed by the respective line managers (with help from independent sources like audits, security and control reviews, and the like).

Project risks to consider include:

- Project delivery risk.
- Project budget compliance risk.
- Project time frames.
- Level of staffing and other resources.
- Availability of data.

- Architectural complexity.
- Funding stability.
- Changes to scope, requirements, priorities, or external environment.
- Extent of new technology or process deployment.

Risks associated with existing IT work streams include:

- Ability to deliver to business needs/degree of business alignment.
- Impact on business performance.
- Time to issue resolution.
- Level of compliance with policy, regulation, and law.
- Security and business continuity readiness.
- Technology performance and availability.
- Architectural complexity.
- Level of staffing and other resources.
- Vendor viability.

There are many dimensions to assessing risk, but for the portfolio management system, a small number of risk indicators should be presented representing a composite of these dimensions. This makes it easy to see the risk of individual portfolio components.

## **Portfolio Review**

Evaluation and prioritization must quickly be followed by active management of the project portfolio. This means periodic financial and work progress perspective updates from project leaders. Update information goes into a database that shows the project inventory and its status across the portfolio. A common practice is to assign a traffic light color system to rate each project (green for on target and within budget; yellow indicating the presence of issues, risks, or dependencies that could cause the project to veer off target or budget; and red to indicate that a project is off target and budget). Typically, the update includes an explanation of the key driver causing a yellow or red condition. The governance body responsible for the portfolio should then make decisions to continue or stop initiatives, assess funding levels, and resolve resource issues.

## **IT Process and Governance Improvement**

The newly-implemented portfolio management process will shine a spotlight on areas for process and governance improvement. This is because project and work stream decisions and status – and expected project benefits – now are much more transparent than ever before, and because the governance processes force open communication about decisions, status, and risks. IT process and control improvements are an important secondary benefit of the portfolio approach.

## The Incremental Approach

Examples of successful approaches come from incremental implementation. This allows cultural issues to be solved on a domain level and for the success to be sold upwards throughout the organization. Best practice examples can be converted into quantifiable results of which management can see the value. For example, organizations can begin implementing IT portfolio management at the departmental or business unit level.

This group may already have the management bias for visibility, process and measurement, or perhaps they are simply looking for ways to improve or gain more visibility into their department, and a portfolio approach looks promising. Next, portfolio management can be rolled out across departmental boundaries. Senior management can now see who is doing what and how this resource allocation is affecting the portfolio value.

## How to Quantify Value

The earliest portfolio management techniques optimized a portfolio's commercial value within its resource constraints using a closed-form mathematical model. These techniques focused on maximizing value, but paid little attention to balance or aligning the portfolio with a company's strategy. The models relied on financial projections of each project's commercial value. Relying principally on a single criterion that had a high degree of uncertainty can reduce its credibility.

Next, portfolio assessment tools were developed, including scoring and sorting models and checklists (including the now-popular scorecards.) These methods maximize the value of the portfolio through either financial or non-financial measures. Such methods evaluate the expected financial cost and benefit of a project using a probability decision tree to account for the uncertainty about a project's technical and commercial potential success. This method and other financially-based models are often criticized for over reliance on financial data and an inability to optimize the mix of projects.

Alternate methods have grown that use non-financial scoring models. Projects are rated based on a set of criteria in five categories:

1. Probability of technical success.
2. Probability of commercial success.
3. Reward.
4. Business strategy fit.
5. Strategic leverage.

The scores for each category can be summarized into a single rating. While this method can balance multiple metrics, it is time consuming to execute and, because the criteria are qualitatively assessed, it can falsely measure the relative attractiveness of projects. The checklist – a variation on the scoring model – uses multiple criteria in multiple categories; however, instead of assigning a score, the criteria is answered with a yes/no based on minimum acceptance criteria. A single no answer kills the project. Using this tool, poor projects can be weeded out quickly. However, checklists do not rank projects within a portfolio and are not able to evaluate the balance within a portfolio.

Quantitative tools that are well-established in managing financial portfolios are being adapted to IT portfolios. An example of this is the use of Monte Carlo analysis. This mathematical simulation technique can be used to simulate various portfolio “outcomes” under different scenarios of risks and environmental states (reductions in funding, loss of key personnel, delays in acquiring key resources, and so on).

This can help to determine the optimal mix and scheduling of projects and work streams, especially when combined with scenario planning techniques. Decision trees are another quantitative method that can be used in managing the IT portfolio.

Finally, mapping portfolio tools use graphical and charting techniques to visualize a portfolio's balance. Typically, two-axis diagrams are used to display the trade-off between two criteria – for example, risk versus reward, probability of success versus value, or ease of implementation versus attractiveness. Mapping tools can incorporate multiple portfolio criteria into a single diagram, but are not capable of prioritizing projects.

## **Success Criteria**

Just as the components of the IT portfolio must be subject to value measurement, the portfolio management system itself must be tied to various success factors. These will depend upon each organization's nature, specific requirements for portfolio management, and its level of process maturity. For some organizations, just having a single list of active projects and other work streams is a significant benefit, while others will want to be able to aggregate projects into programs and initiatives and understand interdependencies between projects (even tying this portfolio into enterprise human resource management and cost management systems and processes).

Most organizations will want the portfolio management process to act as a control point where the value of individual portfolio elements (and the portfolio itself) can be quantified and where risks to the portfolio can be tracked. Measurable and achievable criteria should be set, and for organizations with less process maturity, these can be defined in various phases (where these phases can be set out in a roadmap for implementing portfolio management).

## Software Tools

An important point, especially when selling management on the idea of IT project portfolio management, is that while it is possible to do this without a specific automation tool, managing the portfolio will quickly get out of hand. True, one can educate all stakeholders and team members on the bigger picture of portfolio management and define the process for how projects get initiated, approved, planned, staffed, executed, and monitored. But without the support of an automated tool:

- Key resources will spend hours and even days pulling together status reports.
- Managing the assessment and approval process will become so onerous that it will not be followed.
- Creating a view of resource allocation will not accurately reflect what people are actually doing.
- Any calculations used to assess or track projects become suspect if done manually.
- A manual approach, while possible for a very small portfolio, is not scaleable as the portfolio increases in size.

Therefore, it is best practice to utilize an automated system to enforce assessment and approvals, capture the project inventory, maintain standards, establish visibility of status, produce reports, provide metrics, and enforce process work flows.

It is important to distinguish between project management tools and portfolio management tools. The former focuses on the management of individual projects, and supports capabilities like Gantt charting/PERT/CPM, resource allocation, milestone tracking, project cost management, and reporting of status versus plan (for deliverables, milestones, costs, resource allocation, and scope changes). The latter focuses on individual projects at a high level only, instead managing key components like initial assessments, approvals, status, risks, issues, and cross-dependencies.

The IT portfolio management system enables a view of the totality of projects and work streams in various stages (status, costs to budget, risks and issues indicators, realization of benefits, and so on) so that informed decisions can be made about project choice, resource allocation, project execution and delivery, while tweaking the portfolio as needed. In this context, such a system is used to categorize projects and work streams, assess their values and risks, score investments, and assess value and risk at a portfolio level (under varying scenarios).

To do so, the portfolio management solution must be able to manage and report at portfolio, program, and (summary) project level. In this capacity, flexible drill down and reporting of the portfolio and its components (by workflow, initiator/investor, by status, by risk, by budget allocation, and in totality as a dashboard or summary) is considered critical functionality of an automated solution.

When considering reporting needs, remember that senior management, business managers, and IT managers will have different needs for information. Managers who must decide on the portfolio composition will need to see value measures for portfolio components supported by impact statements, cost-benefit analyses, and risk

assessments. Program and project managers and relevant stakeholders will want to see project status, risks, actual spending versus budget, and so on. Auditors and regulators will be interested in seeing the support for key project, program, and portfolio decisions as well as audit trails of key changes to portfolio composition.

The portfolio management system can help act as the gatekeeper to project approvals, and to ensure that project methodologies are being followed across the board. Many tools also help to manage budget requests by program and project, so an overall view of such requests can be formed. Others help to forecast, schedule, and manage human, financial, and technical resources across the portfolio, even providing "scenario analysis" functionality allowing management to see the effects on the entire portfolio of changing the project and work stream mix, adjusting resource or budget allocations, changing the sequencing and delivery dates of projects, and so on.

The following vendors provide IT portfolio management software and services:

- Artemis International: [www.aisc.com](http://www.aisc.com)
- Barometrix: [www.barometrix.com](http://www.barometrix.com)
- Mercury: [www.mercury.com](http://www.mercury.com)
- Pacific Edge: [www.pacificedge.com](http://www.pacificedge.com)
- PeopleSoft: [www.peoplesoft.com](http://www.peoplesoft.com)
- Planview (includes Business Engine): [www.planview.com](http://www.planview.com)
- Primavera: [www.primavera.com](http://www.primavera.com)
- ProSight: [www.prosight.com](http://www.prosight.com)
- UMT: [www.umt.com](http://www.umt.com)

## Standards for IT Portfolio Management

It is difficult to talk about tools without talking about standards. Tools are often built around and can enforce standards, and the same should be true for IT portfolio management tools.

One such standard is Val IT, a suite of documents that provide a framework for the governance of IT investments, produced by the IT Governance Institute. Val IT is a formal statement of principles and processes that can be used for IT portfolio management. In fact, it is an overall IT governance framework, composed of the principles of value governance, portfolio management, and investment management. Val IT is tightly integrated with another IT governance framework known as COBIT, from the Information Systems Audit and Control Association. Val IT extends and complements COBIT, which provides a comprehensive control framework for IT governance extending from line of business issues, to IT-specific issues, to process and governance. Specifically, Val IT focuses on the investment decision (are we doing the right things?) and the realization of benefits (are we getting the benefits?), while COBIT focuses on the execution (are we doing them the right way, in a controlled manner, and are we getting them done well?)

Value Measuring Methodology (VMM), which has the motto "it's not just about ROI any more," provides more specific guidance than Val IT about the different types of value (tangible and intangible) that can be considered, and how to compare the "apples" (tangibles) with "oranges" (intangibles) from individual projects to help maintain balance.

VMM uses concepts of economic value of projects and metrics to help manage the portfolio. Each of the major processes/activities have a RACI diagram, indicating the responsibilities of the senior executives, business managers, and information managers, along with the major and minor COBIT control objectives associated with the activity. It is these linkages and assignments of accountabilities that make VMM a practical ready-reference that can be actioned, rather than it just being another list of "motherhood and apple pie" statements.

The portfolio management principles of VMM include the following:

- PM1: Maintain a human resource inventory.
- PM2: Identify resource requirements.
- PM3: Perform a gap analysis.
- PM4: Develop a resourcing plan.
- PM5: Monitor resource requirements and utilization.
- PM6: Establish an investment threshold.
- PM7: Evaluate the initial program concept business case.
- PM8: Evaluate and assign a relative score to the program business case.
- PM9: Create an overall portfolio view.
- PM10: Make and communicate the investment decision.
- PM11: Stage-gate (and fund) selected programs.
- PM12: Optimize portfolio performance.
- PM13: Re-prioritize the portfolio.
- PM14: Monitor and report on portfolio performance.

VMM defines an Investment Management domain, which is tightly coupled to the portfolio management domain and includes the following principles:

- IM1: Develop a high-level definition of investment opportunity.
- IM2: Develop an initial program concept business case.
- IM3: Develop a clear understanding of candidate programs.
- IM4: Perform alternatives analysis.
- IM5: Develop a program plan.
- IM6: Develop a benefits realization plan.
- IM7: Identify full lifecycle costs and benefits.
- IM8: Develop a detailed program business case.
- IM9: Assign clear accountability and ownership.
- IM10: Initiate, plan and launch the program.
- IM11: Manage the program.
- IM12: Manage/track benefits.
- IM13: Update the business case.
- IM14: Monitor and report on program performance.
- IM15: Retire the program.

# Meeting the Challenges

An IT portfolio management capability brings with it a significant degree of change for IT and the business alike. Change brings about challenges such as the following:

## Budget Tracking

One challenge of including application maintenance and support in IT portfolios is that IT budgets tend not to track these efforts at a sufficient level of granularity for effective financial tracking. Here, the IT portfolio management discipline acts as a change driver, forcing a more robust cost tracking process for these activities (and helping both IT and general management to see these more in a true profit and loss context.)

## Customers

Projects are often driven and defined by customers who set the milestones, schedules, and so on. This leads to difficulty in defining what a project is internally as each case may be different. In some industries, such as defense and aeronautics, there tends to be a monopolistic customer which will dictate the kind of projects and timings, which can be decades long. It is clear that in the use of IT portfolio management, a planning tool can be affected by customer prioritization. The other end of the spectrum is a three to four month project timescale (e.g. mobile sector or financial markets). Here, companies using a portfolio management process perceive the product lifecycle to be too short to use this process.

## Cultural

There is a big brother perspective that can be associated with IT portfolio management. This discipline makes it difficult to hide mistakes and poor decisions, and increases transparency around key decisions. Manipulating the project process (something senior managers may already be used to) becomes much more difficult. There is an issue of trust: if certain project are left out of the IT portfolio – in other words, if they are set to be “above” the portfolio management process – then key business managers will eventually discover this and lose confidence in the process, asking “what other things are IT resources working on, and where is that extra money being spent?”

But project managers themselves have not been blameless here. Many among us have raised risks or issues only at the last moment (as their effects are about to materialize), or during a weekly or monthly status report. A good portfolio management process makes it much more difficult to control and filter information in this manner by making the reporting of slippage, scope change, risks, issues, and dependencies much more transparent. Moreover, to provide effective portfolio-level information and reporting to senior stakeholders and decision-makers (and there will be a multitude of report requests once the process and system are up and running), a granular level of project detail must be present. Project managers may not be used to providing this detail unless mandated. The group responsible for oversight of the portfolio management process must be prepared to set and enforce minimum data provision standards.

Finally, there will also be a significant training and learning curve, even for organizations that have achieved process maturity. Portfolio management means an entirely new way of looking at, recording, tracking, and reporting projects and the cultural changes this will bring should not be underestimated. And it is human nature that, given the chance, some people will blame the portfolio management tool for information that they view as incorrect or negative. Use a recurring training and communications effort to introduce the process and supporting tools and teach both IT and key business contacts about what they need to know. Likewise, the governing body of the portfolio process must make sure that complaints of tool inaccuracies are investigated, resolved, and communicated.

## **Staffing**

IT portfolio management requires skill sets beyond traditional technology and even project management skills. The process must be guided by an individual or group that understands enough about both the business and technology to help manage the portfolio. If the organization already has an IT alignment team, staff from here may be good candidates to do this.

## **Finance**

If the financial measurements attached to an IT project are to be accepted throughout the company, then an authoritative representative from the finance department needs to support the method, as well as the ROI calculation. There is no better approach for getting the finance group to support the ROI of a proposed IT project than to work closely with the financial organization in determining a project's ROI potential. Where a committee has been put into place to govern the IT project portfolio, the finance department must be represented.

## **Flexibility**

With an IT portfolio management process – as with any centrally enforced discipline – there is less flexibility for individual project managers in how they track and report their project status. But it is counterproductive to be enslaved to any methodology when it comes to actually managing projects – and at times, selecting them. There are too many interdependencies between projects and the intangible benefits attached to each IT project are very difficult to quantify. Any process or formulaic approach to evaluating projects will miss some good projects and allow some bad ones. The same holds true for managing projects – individual project managers need to be given enough support to be able to manage their projects, each with its own unique mix of business objectives, technology challenges, sponsors, staff, risks, and so on.

## Start with Process

As with any business process re-engineering initiative (and this of course is what introducing an IT portfolio management process entails), there will be a temptation to start with a software solution. Although software (particularly if based upon portfolio management standards) can help to roll out and enforce a new process, you should make sure that this is the process that best adds value to your organization. There is no harm (and in fact there is benefit) in looking into vendor tool capabilities while pondering the right portfolio management process. But it is better to start by looking at that process in the context of your IT and business process maturity and governance before selecting a tool.

## Conclusion

At its most basic level, IT portfolio management serves as an excellent communications vehicle about business and IT priorities, and how to keep these aligned. Once this practice has taken hold, it can be a driver of IT process improvement and governance alike. We have seen that implementing an IT portfolio management system forces us to ask the following key questions:

- What are we spending our available resources on now? (This gives some indication of priority, and a fairly good indication of resource allocation.)
- Who are we and what are we trying to accomplish? (This indicates the level of business-IT alignment.)
- What are the investments that will provide the greatest leverage? (This is where the “rubber hits the road” in using agreed measurements and metrics of project value and balancing this with good business and technology judgment and leadership.)
- How many investments can we successfully take on at a given time? (This indicates the level of discipline of resource planning and budgeting.)
- How will these investments interact? (This indicates the level of maturity of the portfolio risk management process.)

We have seen that the IT portfolio management process can be understood in the following ten points:

1. Understanding why it is needed and building a business case.
2. Identifying champions and forming governance.
3. Collecting data.
4. Documenting the current state of projects and work streams.
5. Measuring value and prioritizing portfolio components.
6. Considering risk.
7. Initiating projects.
8. Selecting software tools.
9. Reviewing, monitoring, and rebalancing of projects.
10. Improving process and governance.

As with any process improvement initiative, challenges will arise during each of these stages which the organization must prepare to meet. And as with other types of initiatives, organizations do not always get it right the first time, but through iteration, learning, and improved communications, improvement is gradual yet lasting.