

Chapter 1 : Portfolio management - Azure Boards and TFS | Microsoft Docs

IT portfolio management is the application of systematic management to the investments, projects and activities of enterprise Information Technology (IT) departments. Examples of IT portfolios would be planned initiatives, projects, and ongoing IT services (such as application support).

On a cyclical basis, an IT organization is allocated funding to address these opportunities in addition to ongoing maintenance, operations and support. Adopting this viewpoint requires portfolio managers to focus on the mix of applications and deliver the best value to their business partners at a cost-effective price. Managing an IT portfolio increases the need to understand the overall portfolio health in terms of individual project status, financial impact, risks, rewards and the state of the IT architecture for all the projects in the portfolio. In recent years, software vendors and IT consulting organizations have launched new engagement efforts to assist organizations with the IT portfolio management processes. Marketing presentations filled with colorful bubble charts and project scorecards can often motivate IT organizations to purchase the tool and choose to apply the processes supported by the tool. Implementing a tool without defining the process always carries inherent risk. Organizations are complex with their own custom business rules and organizational acronyms and jargon. Prior to selecting a tool, the organization should examine their current and future state portfolio management processes. The next few articles will highlight the goals and benefits of portfolio management and to outline a flexible portfolio management process framework. The framework allows organizations to develop their own processes and apply supportive tools and techniques as applicable. The organizational goals included: Create single source of all existing IT assets, initiatives and potential investment opportunities Provide visibility of IT projects and relative value to senior management instead of an independent review Identify the best mix of projects faster to enable business processes Facilitate executive decision making Manage organizational budgets and prioritize projects relative to the overall IT budget Portfolio management processes exist to provide organizations with better insight to the ongoing spend and future investment in IT products and services. From the CIO to the project manager, all stakeholders need to understand the projects within the portfolio and how they align with IT strategy. Executives have a broad, high-level view to the programs and projects supporting business processes. Department managers need to know the current project and application health in their department level portfolios. Project managers also need a single method to report status of the projects in the portfolio instead of generating different status reports for the same project. Well-implemented portfolio management processes allow stakeholders at all levels of the organization to view the portfolio data and make strategic and tactical decisions. Executives have centralized information that improves their understanding of the assets within their portfolio Managers closely monitor costs Redundant projects are identified and project scope is modified to combine with other related initiatives. Implementing a portfolio management process also allows IT organizations to make data-driven decisions by comparing each projects relative cost and business value as a whole rather than considering each project independently. Similar to stock portfolio analysis, IT portfolio management requires measuring risk and reward with the yearly IT budget. Adopting a portfolio management process allows IT managers to cancel or defer projects if a project investment is struggling or providing low return to the business organization. Portfolio management processes allow management to view all the assets in their portfolio and make the best decisions based on all of the information instead of basing their decision on a portion of information. Understanding these goals and benefits of a portfolio management process will help managers understand their needs before jumping into a system implementation. Once portfolio managers understand the different processes within portfolio management, a specific tool can be selected to meet the IT portfolio management needs.

Chapter 2 : IT Portfolio Management Goals and Benefits

IT Portfolio Management Introduction Just as investors have portfolios of financial investments to address their multiple investment objectives, firms have portfolios of information technology (IT) investments.

However, DOE has numerous projects, and program managers and senior managers should be concerned with the management of risks at the overall enterprise level, or project portfolio management. While the portfolio is composed of projects rather than stocks and bonds, the analogy with stock portfolios is intentional. For the investor, high-yield, high-risk stocks and bonds can be balanced by low-yield, low-risk stocks and bonds to achieve the desired level of portfolio risk. The knowledgeable owner, whether of stocks and bonds or of active projects, balances the portfolio to achieve an acceptable overall risk level. Portfolio risk management does not imply that an owner should not perform risky projects but rather that the knowledgeable owner is aware of an optimum overall level for risk and adjusts project risks accordingly. Project owners do not have the flexibility of investors to trade stocks and bonds on the market and therefore cannot manage project portfolios in the same way that investment portfolios are managed, by buying and selling them. Some of the projects that an organization undertakes may not be freely chosen but rather determined by external forces. Page 71 Share Cite Suggested Citation: The National Academies Press. The fact that some projects may not be completely controllable only reinforces the point that the owner should understand the risks. The primary difference between investment portfolios and project portfolios is that an investor has historical information about the volatility of the stocks for example, the beta factors computed for stock prices and, importantly, the correlation between them, with which to make informed decisions. However, there is no available database of volatility factors and correlation coefficients for first-time or one-of-a-kind projects. Therefore other means must be used to assess project risks. A knowledgeable owner who performs a large number of projects can make valid statistical judgments if a database of past projects is maintained and a consistent methodology for assessing risks is implemented across all projects. A fundamental maxim of modern management is: Managing projects through risk assessment and risk management means looking forward, to anticipate future risks, instead of looking backward at past mistakes. The knowledgeable owner applies this process to all active projects in the portfolio, to minimize surprises. An inadequate contingency at the program level may lead to project scope reductions, schedule delays, and even terminations. Over-estimation of contingencies leads to opportunity costs. The knowledgeable owner uses the best available method to set appropriate contingencies consistently across the project portfolio that are neither too large nor too small for the risks involved. The knowledgeable owner also undertakes the risk assessments necessary to avoid baseline breaches by predicting the actual cost and time at completion of all ongoing projects. Projects that are the most vulnerable to risks need the most management attention. Consistency is necessary for programwide, cross-project comparisons, so the knowledgeable owner needs consistent procedures for assessing risks across all projects, and these procedures need to be insulated from project biases. To get started with program-level risk management, an owner needs to have a current risk assessment of all ongoing projects in the portfolio and to establish, on a consistent basis, the vulnerabilities of projects with respect to schedule, cost, and performance risks. This assessment then becomes the baseline for program risk management, and should be updated as: Projects are completed and removed from the active project portfolio. Projects make progress and the estimated costs to complete, times to complete, and risks are reevaluated periodically see the discussion on learning from project progress in Chapter 4. New projects are authorized, or proposed for authorization, to be added to the active project portfolio. For proposed new projects, portfolio risk assessment should be used to determine whether the authorization of a particular project would raise the overall portfolio risk to a level unacceptable to enterprise management. If it would, then program managers may wish to terminate the proposed project, modify it, postpone it until, for example, some active high-risk projects have been completed, or accept the risk of undertaking it. Program management concerns not only doing projects right, but also doing the right projects, and a project that appears to raise the portfolio risk to an unacceptable level may require restructuring before it can proceed. A very important factor in portfolio risk assessment, as mentioned earlier, is the determination of

correlations between projects. In investment portfolio management, for example, the investor needs to understand the correlations between stocks, as the whole point of portfolio management is to ensure that the assets in the portfolio are independent of each other so they do not all lose value at once. Similarly, the program manager needs to know if projects are correlated such that, if one project

Page 73 Share Cite Suggested Citation: Correlations may be due to elementary factors such as material cost: If the price of steel goes up, then the costs of all projects that use steel will go up. Or the dependency between projects may be more subtle; for example, if multiple plants or processes are built to the same design, any design flaw would be likely to occur in all of them, potentially affecting the performance of the entire enterprise. The knowledgeable owner may not be able to avoid such dependencies but must certainly know what they are. Owners also need to understand dependencies among projects and their combined effect on the success of the enterprise. For example, if one project is to build a chemical processing plant and another is to build a waste treatment facility to support the former, then the risks for these projects should be managed as one. Knowledgeable owners set project contingencies to meet risk management criteria at all levels of the enterprise. Portfolio contingency is difficult to control if the project contingencies are not explicitly stated but rather are buried in the project estimates. Consequently, periodic project reviews known as scrubbing the estimates become necessary as a means to uncover and consolidate the buried contingencies. It is possible to set contingencies to meet defined risks on a consistent basis across all levels of an enterprise, from work packages at the lowest level up through the work breakdown structure to the total project level and then to the program or enterprise level. When this is done on a consistent basis, the budgets at all levels can be set in accordance with acceptable risks of overrunning at these levels, which need not be the same for all levels and all projects. For example, program management might accept a relatively high risk of overrunning at the detailed work package level, less risk of overrunning the project budget, and still less risk of overrunning the program budget at the enterprise level. However, the budget risks cannot be controlled unless the contingencies are explicitly set to match the risks. Knowledgeable owners should have a consistent and explicit policy on the use of contingencies, what level of risk they should reflect, and, of particular importance, who controls them. Why do relatively few projects seem to underrun budgets, and why do so few return the unused contingency? There are at least two possible explanations for this: Page 74 Share Cite Suggested Citation: Under what circumstances might project budgets be generally biased on the low side less than the expected values? Some possible explanations include the following: Projects are intentionally underestimated and pushed through the process by their advocates, who recognize that the likelihood of getting funded decreases with increasing project cost estimates. Project proponents also recognize that if a project is underfunded, the funding may not be enough to complete the project, but will be enough to get it started. They expect to go back to the sponsor to authorize a budget increase once the project is under way, and expect that the sponsor will not terminate it with so much money sunk into it. Project proponents are motivated to lowball the cost estimates and discouraged from providing unbiased estimation. Even a small lowball bias at the work package level leads to a virtual certainty that budgets will be overrun at the project level. Project estimates are in fact originally accurate at the project level but are arbitrarily reduced at a higher political level, in the belief that they are too large or contain too much fat. Or, trying to do more projects than the funds available can support, higher-level managers simply divide their fixed resources among their projects regardless of project estimates. This behavior is also self-reinforcing. Project Budget Entitlement Another possible explanation for the apparent fact that more projects seem to overrun than underrun is an asymmetry in how funds are handled. It is typically assumed that cost overruns in some projects are statistically offset by underruns in others, and that reserve margins can therefore be proportionally lower when spread over many projects. To take a different view, suppose that every project that overruns its budget and appeals for additional funding receives it, while projects that underrun budgets hold onto all or part of the contingency and use it to enhance the project instead of passing it back to the program. This result may be rationalized by a sense of entitlement. Project personnel may feel that their work is highly justified. They can also easily justify spending it on increasing the project scope and quality, improving performance and reliability, getting more and better instruments, upgrading the office space, and the like. Any or all of these options may be much more attractive to the project

personnel than giving the money back to the program, especially if they feel they are entitled to it by the value of their work or their suffering through past budget cuts. In fact, many people believe that all contingency funds belong to the project and ought to be spent by the project, whether or not the events on which they were contingent ever occurred. No underruns may in fact be observed. This happens because more management attention and efforts are typically directed to projects or work packages that are underperforming and overrunning than to those that are outperforming estimates. In typical project monthly reports, projects are classified as red underperforming and overrunning, yellow trending toward underperforming and overrunning, or green outperforming estimates, based on cost and schedule performance, and attention immediately turns to those classified as red, not to those classified as green. Because badly performing projects get more upper management attention than problem-free projects, it is not unusual that the good performers get worse in the absence of careful supervision. In addition, a common solution to the problems on one project is to transfer the project manager from another project that is within budget and on schedule, leaving that project under less competent management. Underruns may thus disappear naturally, and no one can say if they ever existed, much less where they went. These effects would be very hard to observe in the cost records. In the second case, no one ever observes an underrun, even the personnel on the projects. In the first case, underruns might become known if project personnel admit that they could have come in under budget but spent the full budget anyway because it was there. But this admission is unlikely to occur. Thus an outside observer can never observe the probability distribution of costs as they might have been; one can only observe the actual costs after they have been reported and therefore after any potential underruns have been spent. The costs of one project may influence the budgets for following projects. If contingencies are expended, the whole cost structure will inexorably creep upward. Thus, as overruns are reported accurately but underruns are spent, costs will get higher and higher, even for programs with cost databases from prior experience. These considerations lead to the conclusion that, not only should contingencies be set objectively based on probability considerations, but also control of these contingent funds should be retained at the enterprise level. Management reserves should be controlled high up the management chain, in order to take advantage of the benefits of larger numbers of projects, and they should be controlled by people who are not proponents of any particular projects to ensure that the reserves are allocated based on actual needs and priorities, not personal bias. The nature of management reserves and contingencies—how large they are and why—should be made open, rational, and explicit rather than hidden or implicit, at all organizational levels. Rules for the rational setting of management reserves should be published in organizational policies and procedures, along with statistical justifications. Responsible managers should actively manage the reserves. Efforts should be made to reduce costs by controlling the release of contingency funds to projects or activities, by rewarding managers who come in under budget, by sharing any remaining contingency funds between the project and the program, and by giving management attention to prospective risks, whether projects are under budget or over budget. Some sense of common purpose is required to reinforce cooperation and minimize competition so that project estimates are not manipulated up or down, and surpluses are returned to the higher management level. The likelihood of defensive irrational decisions can be reduced by meeting budget cuts or shortfalls by delaying or canceling the lowest-priority projects and fully funding the rest rather than underfunding, and thus delaying, them all. Page 70 Share Cite Suggested Citation:

Chapter 3 : What is IT Portfolio Management? - Definition from Techopedia

The IT portfolio management step-by-step methodology presented in detail in Chapter 5 is a proven process for applying IT portfolio management and has eight stages.

Here we show parents which provide a few of the features and epics to which the backlog items belong. Items that are owned by other teams appear with hollow-filled bars. For example, Mobile feedback and Text alerts belong to the Account Management team. Items that are owned by other teams appear with an information icon,. Choose Previous navigation for guidance. Backlog displays with work item icons is supported for TFS Here we show parents which provides a few of the features and epics to which the backlog items belong. Assign work from a common backlog While the hierarchical team and backlog structure works well to support autonomous teams to take ownership of their backlog, it also supports assigning work to teams from a common backlog. During a sprint or product planning meeting, product owners and development leads can review the backlog and assign select items to various teams, by assigning them to the feature team Area Path. Previous navigation In this view of the Account Management backlog, all items still assigned to Account Management have yet to be assigned. During the planning meeting, you can open each item, make notes, and assign the item to the team to work on it. Tip You can multi-select work items and perform a bulk edit of the area path. See Bulk modify work items. Here, all backlog items have been assigned to feature teams. While all features and epics remain owned by Account Management. In this view of the Account Management backlog, all items still assigned to Account Management have yet to be assigned. Add portfolio backlogs If you need more than three backlog levels, you can add more. To learn how, see Customize your backlogs or boards for a process. If you need more than three backlog levels, you can add more. To learn how, see Add portfolio backlogs. Track dependencies across teams The simplest way to track dependencies across teams is to link work items using the Related link type. You can then create queries that find work items containing these relationships.

Chapter 4 : IT Portfolio Management – Software AG Government Solutions

IT portfolio management is the process of supervising and maintaining the entire pool of IT resources across an enterprise in terms of their investment and financial viability.

Some organizations, however, are realizing opportunities to use it as an active management tool that involves the business with IT and to level-set the perception of business value from IT. When budgeting is tied to project valuation and selection, it can actively guide the measurement of IT value to maximize performance for the organization. Driving Portfolio Decisions At Ten Six, we believe that driving portfolio decisions through the IT budgeting process is the first step in creating an active management framework. Alignment of strategic business goals to IT is only one part of the success equation. To complete the picture, business-driven value metrics must be linked to the investment selection process and drive the IT budgeting process. Communication Communicating portfolio decisions increases agility throughout the organization. The results of investment selection and resulting budgets must be shared with the business to allow them to monitor and track progress, as well as validate that expected benefits remain true as initiatives are executed. Using collaborative top-down budgeting processes allows business managers and IT managers to reach consensus on IT investment priorities. Both need to continue their collaboration through the delivery of IT projects with a focus on the key value metrics that are defined for the investment. As strategy shifts during execution, adjustments to the basic assumptions can be factored into the portfolio and the portfolio adjusted based on this new information. Measure And Realign Once the budget is set, both the business manager and the IT manager need to continually measure, evaluate and realign future investment in the selected projects. By agreeing on and recording key value metrics through the execution of the project, the business manager and IT manager can ensure that the expected benefits are realized as strategy shifts during execution. Original assumptions must be re-evaluated and the portfolio adjusted based on this new information. Allocate budgets based on investment schedule instead of fiscal periods. The fact is, few investments start and finish in sync with budgeting cycles. Often original cost justifications are lost when funding requirements slip beyond the original budgets in which they were proposed. Early visibility of time-phased budget spend will help to ensure that no one is surprised as the projects progress and business managers can adjust value expectations from the project delivery. IT Portfolio Management Benefits Ten Six has seen that companies who have implemented this process typically see the following benefits of: Consistency between the bi-annual IT progress plan, the annually allocated IT budgets and the ongoing actions. Having a comprehensive and shared view of all ongoing or planned projects and initiatives and associated key indicators. This simple step of data collection and consolidation has enabled many senior executives to determine the work in process. It also indicates the lack of updated, relevant performance measurements, notably for the evaluation of anticipated contribution. The ability to regularly measure the alignment of ongoing and planned projects with corporate strategy; thereby eliminating high-risk, non-aligned projects with low ROI before they affect corporate profitability. The encouragement of arbitration based on criteria such as balance, risk, contribution to specific business areas or the profitability of invested capital. Optimized use of funds and human resources, focused on shared priorities. Guaranteed centralized access to essential information for the decision-making committees and others involved; thereby simplifying and speeding up decision cycles. Focusing on investments that generate maximum value, from selection to execution, while addressing compliance requirements and capacity planning are some of the key benefits of Portfolio Management. Call Ten Six today to learn more about our Portfolio Management services!

Chapter 5 : IT Portfolio Management: Unlocking the Business Value of Technology by Bryan Maizlish

These IT portfolio management best practices will help you hit the ground running & keep your department's work aligned with your company's long-term goals.

Share through Email advertisement Business executives love to hate information technology, yet IT expenditures continue to increase. At the same time, accounts of wasted investments make headlines, providing fuel for IT skeptics: IT projects have failed altogether. Analogies that build on financial-portfolio theory or on concepts about product and research-and-development pipeline portfolios which are more akin to IT portfolio management than to financial portfolios are not new. An investment portfolio comprises all direct and indirect IT projects and assets, including infrastructure, outsourcing contracts and software licenses. The research “” consisting of a survey of Fortune chief information officers and in-depth interviews with selected respondents “” measured ITPM adoption, identified implementation hurdles, assessed benefits, defined best practices and formulated strategies for success. The team also wanted to find out if there were any broadly applicable stages of ITPM effectiveness. By correlating ITPM application data with responses about implementation hurdles, a general ITPM-adoption trajectory was identified and best practices were recorded to help guide organizations along that path. The data needed to test the five hypotheses was gathered through a mass survey and targeted interviews. The team received completed surveys from respondents. The average respondent had 17 years of IT management experience and had been in his or her current position for about four years. Skills, attitudes and behaviors must change. When he was chief operating officer, Gary Loveman “” now president and CEO “” began collecting extensive data on small-scale gamblers in order to measure the success of promotions targeted to them. Soon the rest of the casino industry found itself playing catch-up. The subsequent survey validated the model, finding that 4. Where there is no process, the ad hoc label is applied. At the defined and managed stages, companies are on the right track, but only enterprises at the synchronized stage show a link between ITPM and improved performance. The stages are composed of major factors, so that the synchronized stage includes all of the factors of the managed and defined stages, and the managed stage includes the factors of the defined stage. Managers may use the lists of characteristics to identify where their company is on the continuum. Ad Hoc Companies at this stage make decisions about investments in an uncoordinated way. For example, an IT audit of a major Fortune investment bank found four customer-relationship-management CRM projects under way in three divisions using software from different vendors. The bank was losing out on significant cost savings that would have accrued from consolidating the projects into a single CRM program. An unfounded perception exists that large corporations having complex IT needs are poor candidates for the portfolio approach. After being codified, project data are logged in a central database. Having developed methods for evaluating and prioritizing investment proposals, the corporate IT department also has instituted central budget oversight and, most likely, maintains a central project-management office. Pertinent IT personnel have a basic understanding of the financial metrics used to make investment decisions “” the portfolio having been defined in terms of an initial set of agreed-upon facts. Features missing at this level are consistency in organizationwide compliance, links into budgeting cycles and feedback loops to assess actual returns. Companies functioning at the defined stage often struggle to link the IT portfolio to business strategy because of a lack of common beliefs and standards. Business users all own some piece of the pie but only care about their own slice. Neither group sees the big picture. Well, we found that our project managers look at risk and reward very differently. Everyone said they bought into the portfolio concept but still looked at the world their own way. Establishing a common view of things across 63 offices in 38 countries is a big challenge. Managed Companies functioning at the managed stage distinguish themselves from those at the defined stage by a standardized ITPM process that enables objective project selection and has a clear link with business strategy. Their portfolios are managed in the sense that they are part of existing management-control processes. Financial metrics, such as ROI and net present value NPV , are consistently calculated and used in reviews with business leaders to align IT spending with strategy. However, at the managed stage, such exercises are usually annual rather than ongoing. The director of program

management of a Blue Cross Blue Shield-affiliated company functioning at the managed stage reports that the portfolio process helps with project selection: So we use alternatives to measure the impact of IT investments, such as the time it takes our associates to access information when taking member service calls. We also look at data from satisfaction surveys among our constituents. Those analyses translate into benefits-realization reviews at the end of each project. Synchronized The most savvy IT management teams distinguish themselves by their ability to align investment portfolios with business strategy. They routinely weed out underperforming initiatives. They also weigh option value – the value of investing in a project that will enable future opportunities. Synchronized companies also are disciplined about getting frequent feedback from business-unit heads and corporate-strategy vice presidents to ensure that IT efforts stay aligned with strategy after investments are decided on. They adjust course as necessary. A Fortune consumer packaged-goods company offers a relevant example. Then a cross-functional executive team evaluates each one using a Balanced Scorecard approach that captures the various dimensions of business value, risk and ability to succeed. Plotting projects on a matrix of value to the business vs. The consumer-goods company reported convening a senior management council – business-unit vice presidents plus the CFO and the CIO – to review projects. Six criteria related to the strategic objectives were weighed: There was better alignment and wider support from senior business management. Most important, the process was perceived to be fair and objective. The CFO and business-unit heads, upon reviewing the portfolio of potential projects, increased overall IT spending to fund additional high-value projects. The more successful companies therefore link strategy to IT portfolio investments using a process similar to one first laid out in the late s: Define the companywide strategic intent and business objectives; understand the strategic context of the company; develop business and IT objectives matched to corporate strategic objectives; develop an appropriate portfolio of business and IT investments to support the strategic business objective; and keep updating. We ask, What is the business need? What does the business owner want the technology to do or the investment of information technology to provide? If it provides that, what are the business outcomes that will change? For example, what will change in terms of customer satisfaction? What will change in terms of increased revenues? What will change in terms of decreased costs? Then on the basis of the total cost of ownership of putting the investment in place, they ask, What is the increased support and infrastructure that might be required? The higher the cost of the project, the more rigorous the analysis. We track our scores by Gold, Platinum and Diamond Rewards customer-tier levels, segmented by predicted customer lifetime value, and we actually look at the customer satisfaction scores that occur as we implement a service-improvement initiative. This enables us to objectively measure the value of customer-satisfaction IT initiatives and ties back into the IT portfolio-management process. Qualitative data analysis of the interview transcripts revealed what the interviewees considered to be the top 10 benefits of ITPM. The benefit valued most was improved business-strategy alignment. Next came centralized control and, in descending order, cost reduction, communication with business executives, improved ROI, improved customer service, professional respect, competitive advantage, IT integration during mergers and acquisitions, and finally, improved decision making. We have developed strong application-development and project-management skills. We are training other parts of the organization in project-management techniques. It provided the facts and insights needed to convince our executive team to move forward with consolidating all our disparate systems into one ERP. Our research also revealed how a lack of ITPM could hurt companies after mergers and acquisitions. Top management was fired and various acquired companies were divested. Some had no technological infrastructure at all. That resulted in the company being unable to manage its resources and measure performance. When Smith came aboard, his main challenge was to create an IT platform that would integrate the independent entities into a united network. Waste Management now closes its books in a timely manner, drives out costs, focuses on improved customer service and, most important, captures adequate information to run the business. The first two barriers are essentially about poor execution, the third relates to the deep-rooted divide between business and IT. Metrics and measurement process. Three examples from the insurance industry indicate the opportunity cost. Detailed analysis revealed its spending was excessive when compared with industry peers as well as many tactical savings opportunities. For example, the company was using internal resources to train contractors who were

also invoicing training time as billable hours. Survey respondents cited a general lack of respect for IT plus communication problems between the CIO and business executives. Interviews revealed that some business leaders, in an effort not to expose their ignorance of IT, wasted resources by deciding on initiatives without IT consultation, then demanded that IT groups manage the projects well or take the blame. Meanwhile, some CIOs thought keeping business leaders technologically uninformed translated to job security and thus took little initiative to bridge the divide. Although most IT staff know what NPV is and how to calculate it, they have trouble making a strong business case in partnership with business-unit executives. To improve the financial skills of IT people, successful ITPM adopters make such skills a formal part of training curricula. A cross-functional approach that involves IT, finance and lines of business is essential. They were used to giving us rough ideas, and we would use our imagination to define what we thought they wanted. The challenge was to break through this behavioral traffic jam. Two things made a difference. First, senior leadership realized there was a need for a champion – someone to step up and get right down to the nitty-gritty. Second, we realized that both the IT and business people would gradually come around. They saw corporate IT as taking away their flexibility, their independence, their freedom. It was a big concern for them, and it took us four years to change their mind-set. IT projects were stuck into all kinds of different budgets. However, analysis of practices in the best-managed companies surveyed suggests four approaches that work: Staged Implementation Consistent messages heard throughout the research were that ITPM should be phased in iteratively and that performance feedback is critical.

Portfolio management ensures that an organization can leverage its project selection and execution success. It refers to the centralized management of one or more project portfolios to achieve strategic objectives.

Portfolio Monitoring These portfolio management processes represent primary portfolio management processes that are typically found in a portfolio management process. Although these processes represent the core portfolio management processes, a successful portfolio management solution includes four layers of processes: The primary processes layer includes the key processes required to analyze, plan and prioritize a portfolio of applications, projects and programs. The support layer provides the key management processes to ensure successful execution across technology, project management, risk management and financial management. These processes are further supported by an organization layer that utilizes common metrics, techniques and terminology across the organization. Finally, the architecture layer describes the software tools required to adequately support portfolio management. The figure below illustrates the four layers. Subsequent articles will provide a detailed overview of each process layer.

Primary Process Layer

Portfolio Planning: Identifies opportunities and develops the initial business case for candidate projects

Portfolio Prioritization: Prioritizes the candidate list of programs and projects to provide business value

Portfolio Execution: Selected programs and projects are executed and the application portfolio is updated to reflect the ongoing efforts. Includes current-state assessment of existing IT applications, projects and programs within the portfolio. In mature IT organizations, IT standards are adopted and patterns form to provide a common blueprint for application infrastructure. The Risk Management process is conducted at different points in the portfolio management process. Initial and current risk assessments are performed as projects move from portfolio planning to portfolio execution. Supports all four primary processes as the total cost of ownership for each opportunity is evaluated, prioritized and executed across the portfolio. Describes the common language, definitions, metrics, measurements and approaches to integrating the primary and support processes. Across the enterprise, portfolio managers need to follow a common methodology using common terms and measuring progress with consistent metrics.

Architecture Context Layer

The architecture layer describes the software tools used to support portfolio management. It is difficult to effectively identify, analyze and summarize the results of the portfolio management processes without a supporting information infrastructure. For small portfolios, Excel spreadsheets and desktop databases are sufficient for planning. As organizations grow, business intelligence and data warehousing tools can be effectively used to answer multiple facets of the portfolio management questions. Packaged portfolio management tools also help organization manage the assets in the IT portfolio. The next few articles will take a closer look at the different layers in the portfolio management model and describe its application.

Chapter 7 : IT Portfolio Management

IT portfolio management groups projects and initiatives into actively managed program portfolios to achieve specific business objectives, while retaining flexibility to meet changing business needs. Add new initiatives, terminate old projects, expand or reduce the scope of current projects and reallocate resources as needed.

Overview[edit] Debates exist on the best way to measure value of IT investment. As pointed out by Jeffery and Leliveld, [1] companies have spent billions of dollars on IT investments and yet the headlines of mis-spent money are not uncommon. Nicholas Carr has caused significant controversy in IT industry and academia by positioning IT as an expense similar to utilities such as electricity. IT portfolio management started with a project-centric bias, but is evolving to include steady-state portfolio entries such as infrastructure and application maintenance. IT budgets tend not to track these efforts at a sufficient level of granularity for effective financial tracking. However, achieving such universality of measurement is going to take considerable effort in the IT industry see, for example, Val IT. 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 for example, a balanced scorecard approach ; a purely financial view is not sufficient. This is analogous to a vertically integrated company which may own an oil field, a refinery, and retail gas stations. IT portfolio management is distinct from IT financial management in that it has an explicitly directive, strategic goal in determining what to continue investing in versus what to divest from. At its most mature, IT portfolio management is accomplished through the creation of three portfolios: Application Portfolio - Management of this portfolio focuses on comparing spending on established systems based upon their relative value to the organization. Infrastructure management is sometimes divided into categories of systems management, network management, and storage management. In the rush to reduce costs, increase IT quality and increase competitiveness by way of selective IT sourcing and services, many organizations do not consider the management side of the equation. The predictable result of this neglect is overpayment, cost overruns, unmet expectations and outright failure. Project Portfolio - This type of portfolio management specially addresses the issues with spending on the development of innovative capabilities in terms of potential ROI, reducing investment overlaps in situations where reorganization or acquisition occurs, or complying with legal or regulatory mandates. The management issues with project-oriented portfolio management can be judged by criteria such as ROI, strategic alignment, data cleanliness, maintenance savings, suitability of resulting solution and the relative value of new investments to replace these projects. Information Technology portfolio management as a systematic discipline is more applicable to larger IT organizations; in smaller organizations its concerns might be generalized into IT planning and governance as a whole. Benefits of using IT portfolio management[edit] Jeffery and Leliveld have listed several benefits of applying IT portfolio management approach for IT investments. They argue that agility of portfolio management is its biggest advantage over investment approaches and methods. Other benefits include central oversight of budget, risk management, strategic alignment of IT investments, demand and investment management along with standardization of investment procedure, rules and plans. Implementing IT portfolio management[edit] Jeffery and Leliveld have pointed out a number of hurdles and success factors that CIOs might face while attempting to implement IT portfolio management approach. To overcome these hurdles, simple methods such as proposed by Pisello can be used. Developing and evolving IT portfolio governance and organization Assessing IT portfolio management process execution There is no single best way to implement IT portfolio approach and therefore variety of approaches can applied. Obviously the methods are not set in stone and will need altering depending upon the individual circumstances of different organizations. IT portfolio management vs. While balanced scorecards also emphasize the use of vision and strategy in any investment decision, oversight and control of operation budgets is not the goal. IT portfolio management allows organizations to adjust the investments based upon the feedback mechanism built into the IT portfolio management. History[edit] The first mention of the portfolio concept as related to IT was from Richard Nolan in McFarlan [5] proposed a different portfolio management approach to IT assets and investments.

Various vendors have offerings explicitly branded as "IT Portfolio Management" solutions. In peer-reviewed research, Christopher Verhoef has found that IT portfolios statistically behave more akin to biological populations than financial portfolios. Freeware and open source tools[edit] MappIT is a free tool used to map and analyze IT SEC Portfolio assets systems, business processes, infrastructure, people, skills, roles, organization, spending It was launched in its first version in February It has a single easily definable tangible output. A particular project may or may not be part of a programme. Program managers control dependencies and allocate resources across projects. A programme is likely to have a life that spans several years.

Chapter 8 : IT Portfolio Management Â« Center for Information Systems Research - MIT Sloan School of M

"I found IT Portfolio Management very easy to read, and it highlights many of the seminal aspects and best practices from financial portfolio management. It is an important book for executive, business, and IT managers."

Chapter 9 : IT Portfolio Management Framework

Portfolio management is the art and science of making decisions about investment mix and policy, matching investments to objectives, asset allocation for individuals and institutions, and.