

Reaching efficient frontiers in IT investment management

What financial services CIOs can learn from portfolio theory



An IBM Institute for Business Value executive brief

IBM Business Consulting Services, through the IBM Institute for Business Value, develops fact-based strategic insights for senior business executives around critical industry-specific and cross-industry issues. This executive brief is based on an in-depth study by the Institute's research team. It is part of an ongoing commitment by IBM Business Consulting Services to provide analysis and viewpoints that help companies realize business value. You may contact the authors or send an e-mail to iibv@us.ibm.com for more information.

Contents

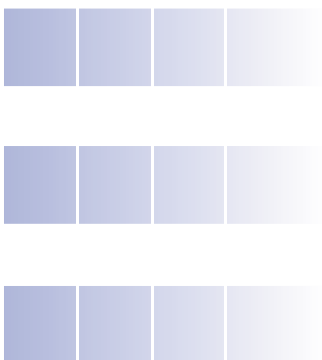
- 1 Introduction
- 2 What stands in the way of higher returns on IT projects?
- 6 Understanding IT portfolio management
- 7 Leading practices: What market leaders are doing
- 12 Pulling it all together: Portfolio management for financial services firms
- 13 Knowing the score: Assess your current practices
- 15 Progressing toward your own leading practices
- 17 About the authors
- 17 About IBM Business Consulting Services
- 17 References

Introduction

Heavily dependent on information technology, financial services firms globally spend over €235 billion on IT,¹ representing – for large banks – 15 to 22 percent of their overall non-interest expense.² Unfortunately, their investments too often fail to generate anticipated returns – and worse, many firms do not even know which are paying dividends and which are losing money. In fact, benefits realization data was available for only 31 percent of those interviewed in a recent study. Compounding the problem, few firms actually reserve funds as a contingency for projects that exceed their budgets, though there is a compelling need to do so. The repercussions can be considerable, as evidenced by one study participant whose projects, on average, ran more than 60 percent over budget. With so much at stake, financial services CIOs need a more effective way to manage IT investments – and the clues may come from the firms' asset managers down the hall.

For decades since Markowitz, Miller and Sharpe first began publishing their complementary Nobel Prize winning theories in the 1950s, financial services firms have applied portfolio management concepts to reduce risk and improve returns on invested assets. More recently, progressive firms have turned to those same basic concepts to significantly enhance the performance of their IT portfolios, particularly important with the spotlight Basel II has put on returns and efficiency. *IT portfolio management* takes a holistic view of IT projects across the enterprise, evaluating proposals against the firm's strategic objectives. More conservative investments compensate for riskier ones, thereby lowering the overall reserve requirement – for study participants, reserves could be reduced by up to 55 percent of total project budgets.

Merely understanding the potential benefits of IT portfolio management isn't enough – making the leap from theory to successful execution is the key. Based on its evaluation of 165 large IT projects at leading financial services companies and IBM internal and consulting experience, the IBM Institute for Business Value has outlined several leading practices that can help firms substantially improve their IT investment performance over the short and long term.



What stands in the way of higher returns on IT projects?

IBM conducted several in-depth interviews with CIOs across the financial services sector about how they manage IT projects, both individually and collectively. Data was collected about project performance, project characteristics, risk mitigation, success and failure criteria and process maturity. Based on IBM consulting experience, financial services firms are generally behind other industries in realizing the full value of IT investments. With margins so high and IT budgets so large in the past decade, financial institutions have not felt the pressure to reach for better returns – pressure they now feel more keenly in a resource constrained environment. The IBM study found that *governance*, the evaluation of *risks* and the management of *capital* constrained by these investments are the most pressing challenges to improving IT project performance. Though risk management is viewed as important, few firms use standardized processes to evaluate generic risks and implement risk mitigating measures.

Governance is a perennial challenge for nearly all financial services firms. Not surprisingly, those with more mature governance processes and controls achieved better performance. The unwelcome surprise is the prevalence of weak project management – often attributable to poor coordination, lack of business alignment, unclear scope and inflexible sponsorship. Instead of devoting sufficient time to coordination, alignment and sponsorship, IT departments typically emphasize tasks such as enforcing process standards, verifying that the solution fits the architecture and managing project staffing.

Study results showed that one-third of projects run over time, one-fifth run over budget and one-fifth fall short of planned functionality, for a variety of reasons (see Figure 1). As the pie charts show, study participants acknowledged their own responsibility for project underperformance, attributing it to *overly optimistic business cases* or *unforeseen internal factors* at least half of the time. Even worse, most financial institutions lack both the data and the business-oriented metrics needed to measure returns on IT investments, so accepting the status quo offers little chance for performance improvement.

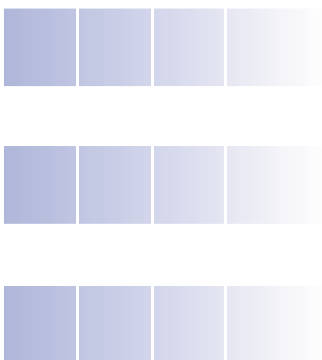
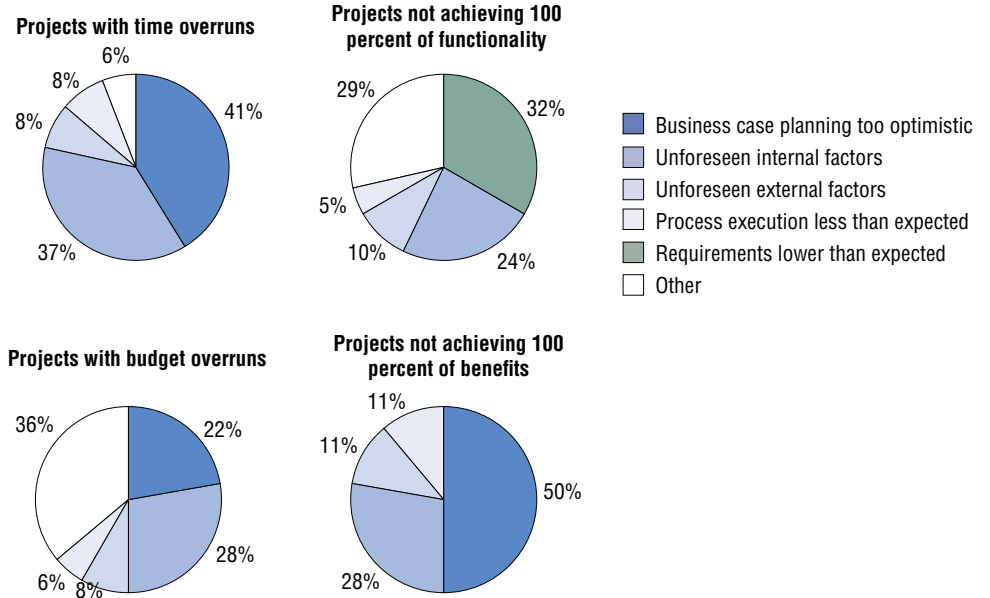


Figure 1. Overly optimistic business case planning, unforeseen risks and poor process execution are the chief reasons participants cited for not achieving targets.



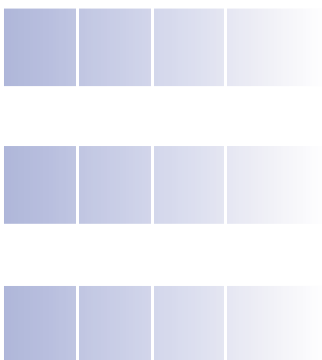
Source: IBM Institute for Business Value analysis.

Though financial institutions are doing well at planning the initial business expense of IT projects, they are still falling short in several ways:

- A lack of structured risk evaluation on a portfolio level
- Insufficient transparency in managing projects that go over budget
- Scarcity of systematic methods to track project performance.

Before they can accurately evaluate risk at the portfolio level, firms must understand both the generic and class-specific risks associated with every IT project. In addition, even though IT programs typically reduce operational risk for the financial institution, none of the study participants has attempted to quantify this potential benefit. More investigation into the effect of IT investments on operational risk will help firms better understand the risk/capital relationship.

Every IT project includes aspects of *generic risk*, such as *project management methodology*, *geographic coordination* and *management support*. To improve planning and reduce contingencies for budget overruns, firms need to manage generic risk on an ongoing basis by:

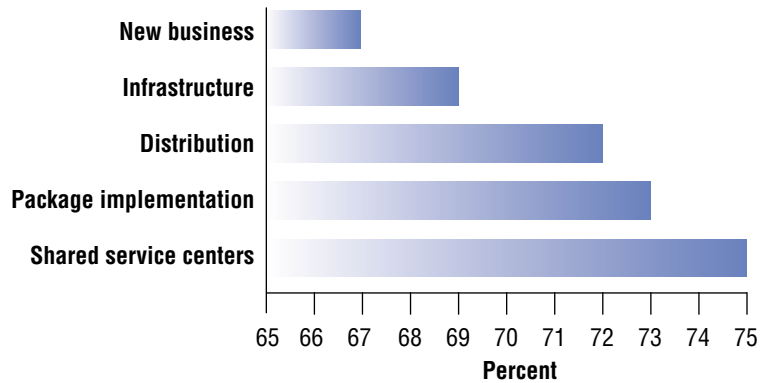


- Conducting systematic risk reassessments, evaluating business cases for risk mitigating measures and reporting status regularly
- Enforcing risk program adherence via management attention and through establishing solid, mature processes
- Requiring sign-off on a risk assessment matrix at the end of each project phase
- Putting IT projects on hold when resources no longer match strategic business objectives or when the expected return no longer justifies the risks
- Communicating openly about risk to reform a "blaming" culture
- Expressing all risks in financial terms to maintain focus on those with the largest impact (as well as to prevent too much attention to relatively inconsequential risks).

Along with factoring in generic risks, portfolio management of IT investments also requires the understanding of the *class-specific risks* that vary by project class: package implementation, infrastructure implementation, shared service center implementation, product or service distribution and new business development.

Each project class has an inherently different level of risk. But today, few financial services firms classify and quantify class-specific risks. For example, the risks associated with *package implementation* typically include insufficient training of end users, incompatibility with legacy applications, overcustomization and difficulty with supplier management. Risks specific to *infrastructure implementation* include the need for fit with the overall architecture, hard-to-prove benefit realization and hard-to-plan technical support needs. A *shared service center* project encounters risks such as whether overall costs will actually be reduced or whether organizational change will be managed effectively. Projects for *distribution of products or services* entail risks regarding level of user cooperation and the need for culture change. For *new business development* projects, class-specific risks include the management of uncertainty, new processes and technologies and operational costs not included in the business case. The study illustrates that this variance in risk translates to different success rates for each class (see Figure 2).

Figure 2. Comparison of project success rates by project class.



Note: Classes were defined based on participant interviews, but are not always distinct. For example, a shared services center project might also be a package implementation.
Source: IBM Institute for Business Value analysis.

Since they haven't established systematic approaches to collect information and measure IT project performance, few firms set aside contingency funds to offset potential failures and project overruns. Instead, they use phased budgeting or other procedures to allocate budget in case of overruns. And, those financial institutions that are allocating budget for contingencies do so primarily at the project level. Rather than leveraging a portfolio-wide perspective, they base the contingency amount on the historical performance of similar, individual IT projects.

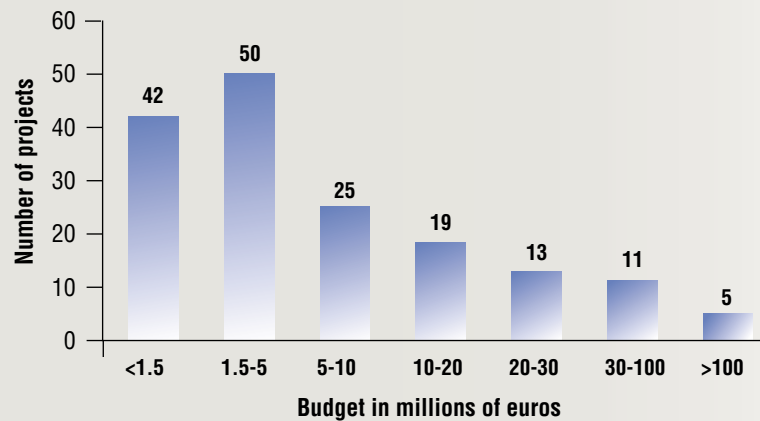
A snapshot of IT projects in the IBM study

Nine participants shared data on 165 projects with different characteristics:

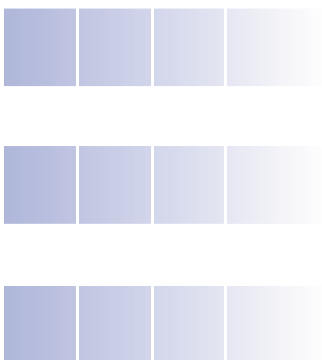
- Over 65 percent of projects focused on infrastructure development or transaction processing
- Over 70 percent were intended to improve the distribution of financial services to customers and aimed at cost reduction and standardization
- About one-third were mandated by external authorities
- About half were funded by business units and about half by the corporate office.

Project duration ranged from two months to six years, eleven months and project budgets ranged from €41,000 to €144 million, with a mean project budget of €13.2 million (see Figure 3). The budget for all 165 assessed projects totaled €2.2 billion, underlining the significant financial impact of IT portfolio management on business performance.

Figure 3. Distribution of projects by budget size.



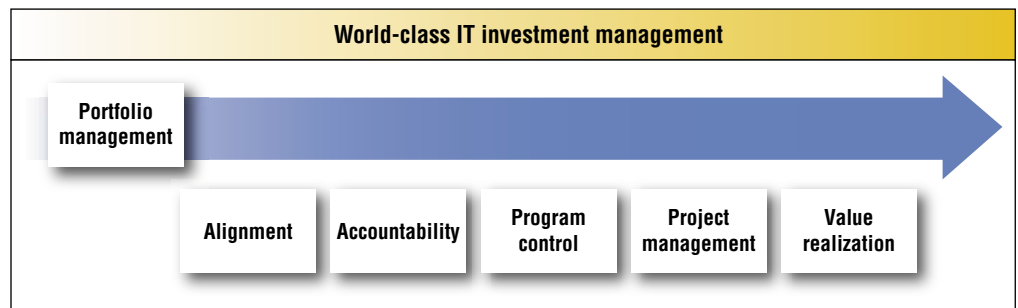
Note: Although a great deal of emphasis was placed on achieving a high level of data reliability, the conclusiveness of the findings and recommendations is limited by the quality of the data delivered by participants.
 Source: IBM Institute for Business Value analysis.



Understanding IT portfolio management

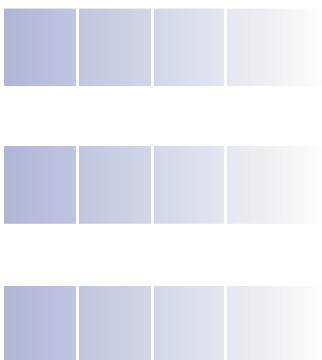
To address the dual challenges of governance and risk management, leading firms are beginning to manage their IT investments as a portfolio rather than as a set of distinct, unrelated projects. Combining IT projects into a portfolio helps senior leadership and IT managers make better decisions for the firm as a whole; it also reduces total contingency requirements by aggregating over- and underperforming projects. Portfolio management is becoming more sophisticated as progressive financial institutions make it an integral and overarching part of their IT investment management practices (see Figure 4).

Figure 4. Six key aspects of successful IT investment management.



Source: IBM Institute for Business Value analysis.

- *Portfolio management* – The "umbrella" leading practice, forming the framework of operations for the other essential leading practice categories. It establishes a clear portfolio of initiatives to achieve strategic goals and manage dependencies.
- *Alignment* – Align business and IT for effective end-to-end management of key initiatives.
- *Accountability* – Define clear roles and responsibilities and provide performance-based remuneration.
- *Program control* – Track, communicate and manage program success regularly using standard metrics that are tied to strategic initiatives.
- *Project management* – Leverage professional project management capabilities, including integrated, continuous risk management.
- *Value realization* – Use project classification to determine prioritization and evaluation criteria; define an investment governance process to clarify benefits and risks for business managers; and provide feedback to the business planning process.



Leading practices: What market leaders are doing

We highlight below some of the leading IT investment practices that are currently underway at companies participating in the study. For each leading practice, a description of its objectives and characteristics is followed by a case study example of how a particular market leader is putting that practice into action.

Alignment

Alignment entails close cooperation between business and IT through the widespread establishment of coordination mechanisms. Key to successful alignment is joint portfolio management of transformational projects – considering the business value, risks and changes in organization, processes and IT. Budget, priorities and planning cycles are combined and aligned to enable joint ownership and decision-making. Service level management (at the strategic, tactical and operational levels) and issue resolution are established and synchronized. Meetings, review boards, account managers and closely cooperating project leads support ongoing coordination between business and IT groups.

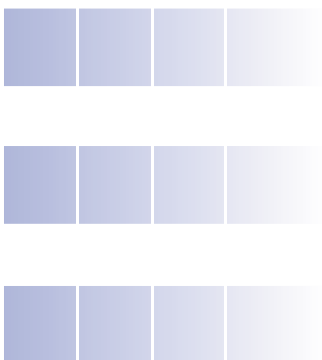
What the leaders are doing

Alignment: Bridging the business/IT divide with cross-functional committees

Dissatisfaction with its previous process (focus on micro issues, insufficient attention to benefit delivery and fragmented views of the portfolio) led one financial institution to commence a more sophisticated portfolio management process.

Its new structure centers on a cross-functional Corporate Portfolio Management Committee (CPMC) which is responsible for governance of the total portfolio. Representing all corporate functions, the CPMC includes experts from the business area, distribution, finance, infrastructure and IT development. The CPMC owns the budget and sets strategic direction and vision, presenting quarterly plans for executive approval. At the product/service family level, cross-functional Integrated Portfolio Management Teams (IPMT) handle financial and management decisions and are responsible for presenting clear choices to the CPMC. Each IPMT serves as an escalation point for functional or extended team issues within projects and is accountable to the CPMC for business results.

Rather than the traditionally rare interactions between business and IT, this new process features structured interaction between business and IT, with planned, regular communication at both the portfolio and program levels. Groups that previously may have felt like adversaries plan and prioritize together – reducing the chances of being caught off-guard by decisions of their colleagues in other parts of the corporation. In addition, alignment helps resolve issues faster and more effectively, and typically results in a single view of the comprehensive project portfolio.



Accountability

Accountability is established through contracts with the business that assign clear portfolio management responsibility through the use of well-defined roles. An accountability pyramid is defined to link each project to the strategic initiatives. What's more, individual and team targets, performance measurement and compensation are aligned at each level of the pyramid (see Figure 5).

Clear and uniform roles and responsibilities are defined and in effect for project management and portfolio management practices. Wherever possible, accountability is combined for business and IT.

Figure 5. The accountability pyramid.



Source: IBM Institute for Business Value analysis.

What the leaders are doing

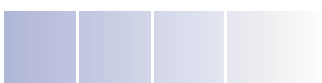
Accountability: Embedding decision-making bodies and process within the lines of business

A large financial services firm found that project startup was being handled inconsistently across the company, with little coordination or communication at a portfolio level. The accountability for results – including roles and responsibilities – was unclear.

To promote accountability for strategic projects and all other programs/projects with budgets greater than €1 million, this financial institution has established a combined business and IT coordination committee within each functional area or business division. This committee manages changes to business cases and project plans as required by modified business strategy, business needs or troubled projects. A division's committee consists of its divisional chairman of Control and Organization, plus representatives of Project Management, Corporate ICT, Market Management, Human Resources and the Portfolio Support Office (PSO). The PSO supports the committee by providing project reports and preparing advice about any potential impact on the portfolio of projects, based on information collected from the other representatives.

While a project cannot start or continue without positive advice from the PSO, the coordination committee is accountable for decisions made. The decision-making process regarding project prioritization, origination, modification and cancellation is clearly defined and executed consistently across the organization, based on committee responsibilities.

Though satisfied with this system, the firm wants to increase cross-functional decision-making. Currently, it is considering whether to grant more autonomous decision-making power to the coordination committee and include representatives of different business functions as part of each functional area's committee.



**What the
leaders
are doing**

Program control

Program control centers on the consistent use of standard process measures to manage and determine effectiveness of the overall program. For better management of projects on a regular basis, reporting is defined and differentiated for various management levels – revealing deviations early, allowing quick action and monitoring. Effective program control also helps define necessary organizational changes and start relevant communication to implement those changes.

Program control: Enabling structured evaluation of proposed initiatives with project cards

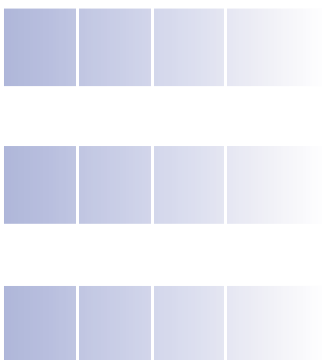
One financial institution recognized inconsistency and insufficient control over how new IT projects were assessed, approved and funded. Project initiation was not standardized or subjected to meaningful benefits analysis. Instead of evaluating proposed IT projects against business acceptance criteria (such as strategic issues addressed, business impact, associated risk, financial consequences and architectural fit), projects came to life through various, mostly informal methods and without clear performance objectives.

Now, for all projects larger than €160,000, all approving committees use the same project assessment tool to evaluate suggested new initiatives. For promising ideas, a brief feasibility study (using predetermined criteria) is conducted. After passing those criteria, a project card – outlining the benefits, constraints and architectural solutions – is sent to the IT Management Team for review. Following approval, the relevant line of business approves the budget to develop the project. Finally, the IT Management Team and the Domain Steering Committee (which includes both business and IT members) approves the project. To maintain a view of the entire project portfolio, a Global Project Management Office administers and manages the overall process.

The use of project cards allows both business and IT approvers to evaluate portfolio-wide impact before a new project can be approved to enter the pipeline. Fiscal control of the business acceptance step is enforced by the "closed barrel principle": new IT projects are accepted only when other project plans are canceled. Currently, 65 percent of all project work complies with the project cards process. Of the remaining 35 percent, 15 percent are small projects and 20 percent involve daily maintenance, for which more simplified processes are used.

Project management

Project management capabilities are key contributors to successful projects. Leading firms stress compliance to standard project management methodology, encouraging certification and establishing professional development programs. Post-project evaluations and other means are used to share knowledge and lessons learned among project teams. IT projects are viewed holistically, as part of a larger business project. One project manager may be responsible for the whole or two project managers may be jointly accountable – one for the business and one for IT.



**What the
leaders
are doing**

Project management: Defining project management as a profession

A global firm realized that greater control was needed over IT projects. Strong project management could improve consistency of risk management and establish more effective ways to track a project's technical, financial and schedule performance.

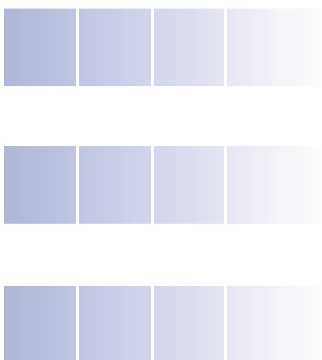
This multinational company now uses a single, common project management approach that embodies methodologies, education, tools and techniques common to all internal organizations, while accommodating individual business considerations. Project progress is measured in terms of technical, financial and schedule performance with project management professionals who are held accountable for specific project results. The continuously-updated approach defines the plans, procedures and records that direct all project management activity and provide information about the current state and history of each IT project.

A Project Management Center of Excellence (PM/COE) is staffed with a small team of experienced project management professionals representing all business areas worldwide and is responsible for organizational competence in project management. Project management is an established profession with defined professional standards, levels of maturity and its own career path. Project managers must be certified by a Certification Board, with mandatory, periodic recertification. Internal skill development and networking enable cross-functional sharing of lessons learned, as well as leading-edge methodologies and tools.

This project management practice promotes systemic change by providing support and checks and balances, removing roadblocks and increasing the use of project management disciplines enterprisewide. The PM/COE drives a consistency of approach, a network of knowledgeable practitioners and supportive business processes and systems – including a Knowledge Network database for sharing best practices and techniques and experiences. The Knowledge Network also provides ready access to experienced practitioners elsewhere in the enterprise. In addition, management tools allow a department or division to assess its own project management maturity and capability so that these skills can be targeted for improvement.

Value realization

The purpose of *value realization* is to measure and communicate how well the projected benefits of key initiatives are achieved. To accurately measure benefit attainment, CFO involvement and commitment helps define the approach, delivery cost model and agreed-upon key performance indicators (KPIs). Well-designed systems and processes enable the collection of reliable, timely data. Through regular (monthly) tracking of project progress, financial services firms can uncover any deviations from expected performance early on.



And, measuring doesn't end as soon as the project does. A key aspect of value realization is post-implementation evaluation to assess the actual benefit realization at future points in time. Initial project planning needs to include benefit assessment after the project has been delivered. As important as the capability to measure IT project performance is the capability to communicate those results. Customized dashboard tools are increasingly being used to communicate the realized value of an IT investment in business terms.

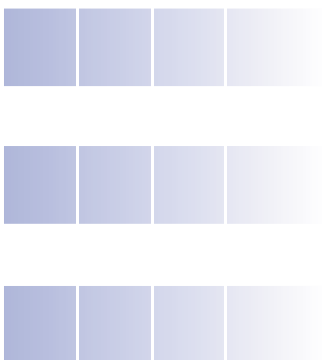
**What the
leaders
are doing**

Value realization: Classifying and differentiating business cases

A large European financial institution saw that too many projects were getting through the pipeline without sufficient risk mitigation measures and without vetting the compatibility among platforms and architectures. Worse yet, after such projects had begun, it was difficult to stop them even when they were no longer viable.

Now, the Program Control department runs a structured process to differentiate and prioritize business cases by assessing compliance with business and IT strategies, IT architectures and infrastructure before a business case is developed. During the project initiation phase, the Program/Project Manager completes a risk and architecture questionnaire for approval. Along with this program-specific view, risk and architecture interdependencies among all IT programs are considered throughout the process – analysis which can involve specialized departments (such as infrastructure team members) and Program Managers from other IT projects. Projects are classified into three types: Change the Business, Mandatory and Run the Business. Using evaluation criteria based on project type, risk management specialists judge the project risk and an IT investment governance team recommends mitigation measures. Scoring leads to a prioritization class (either Gold, Silver, Bronze or Blue [mandatory]) that determines whether to create a business case.

The classification and prioritization of projects is the first step in understanding the projected benefits of an IT effort, as well as identifying which established measurement criteria will apply. By categorizing a project as Change the Business, for example, eight specific criteria are used, such as cost payback in less than 12 months and ROI-to-cost ratio greater than two-to-one; by contrast, Mandatory projects are exempt from evaluation criteria since those efforts will proceed in any case. This company achieved 100 percent process compliance and improved overall IT project results because of the capability to reject proposed projects or stop active projects that did not meet the project type criteria for realizing expected benefits.



Pulling it all together: Portfolio management for financial services firms

By focusing on these leading practices, financial services CIOs are taking cues from asset managers' timeless advice: the benefits of a portfolio approach are not limited to monetary assets. CIOs increasingly recognize the need for systematic, structured processes that provide an enterprisewide view of projects in order to reduce risk and improve returns on investments. A fundamental characteristic of portfolio management is making a distinction between *the portfolio for the whole business* and *a portfolio for specific product or service families, or for specific business lines*. With this two-tiered approach, tier one entails managing across the entire portfolio. Strategic themes guide how individual IT projects are grouped to form various tier two portfolios of projects and results for both tiers are tracked against the firm's business drivers.

Along with assigning structured responsibilities, a well-defined portfolio management process measures the business success of the entire portfolio of initiatives. Measurement results from tier two managers guide the tier one managers in making decisions about the entire IT portfolio. In addition, strong portfolio management enforces alignment with strategic objectives and defines a plan for managing organizational change.

What the leaders are doing

Portfolio management: Grouping initiatives around strategic business themes

Noting that some of its IT projects had no identifiable connection to strategic initiatives, one large financial services firm acted to address how future new initiatives would be evaluated. There was little coordination or communication at a portfolio level, inconsistent project startup and unclear accountability throughout the organization.

To enforce project ties to corporate strategy, each proposed IT initiative is tested against the firm's business strategy and value proposition. Portfolios (and programs within portfolios) are then assembled around strategic themes such as Cost Reduction or Revenue Growth, resulting in a "big picture" of the initiative – including alignment to strategic priorities. Within the business division, the Portfolio Coordination Committee (PCC) is the final arbiter on business cases and project plans; it controls budgets for strategic themes and monitors delivery against theme objectives. An 11-member Portfolio Support Office (PSO) monitors and manages execution of projects and prepares advice on decisions the PCC will make. Changes to the process, policies and rules are identified and process changes are mapped against the near-term, mid-term, and long-term goals of the initiative.

Assessment and prioritization of new initiatives is a continuous, measured process that considers the entire portfolio's integrated and centralized roadmap, as well as the policies, capabilities, dependencies, risks and benefits related to each initiative. Prioritization is based on delivering the most value across the value chain compared to the whole portfolio of investments. Using this portfolio management approach, compliance with or deviation from standard architectures is evaluated and approved at an early stage and monitored throughout the process.

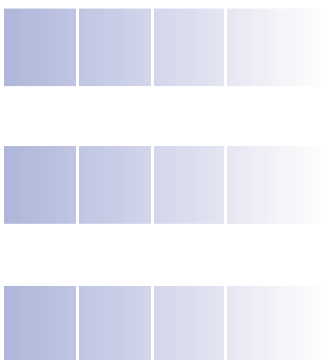


Knowing the score: Assess your current practices

To see how your financial institution's IT investment management capabilities stack up against both the industry average and the top scorer in the study, consider the following self-assessment (see Figure 6). For each area, grade your firm's performance from *low* to *high*. Comparing your scores to those of other leaders will help you pinpoint where you can improve IT portfolio management practices.

Figure 6. Self-assessment of IT investment management capabilities.

Assessment area	Low	Medium	High	Maturity scores			Your score
				□ Average	■ Best		
				Low	Med	High	
Portfolio management	Responsibilities	Approval and funding on a project basis – often by BU	Portfolios defined by BUs – may be a cross-BU Investment Board	Cross-BU Portfolio Management Committee for approval and alignment of project portfolios with corporate strategy			
	Portfolio measures	Few or unstructured measures	Project success measures but not portfolio success measures	Quantitative and qualitative business related measures of portfolio capital and resource utilization			
	Initiative definition	Projects individually defined	Projects individually linked to business strategy	Portfolios of projects defined by business strategies with change and implementation dependencies defined			
	IT portfolio alignment	No direct link to application portfolio	Application portfolio links defined but alignment not realized	Application portfolio largely aligned with business portfolio. IT architecture aligned with Business architecture			
Alignment	Strategy	Little or no alignment	Projects approved and prioritized with only indirect link to strategy	Project portfolio closely aligned with business strategic initiatives			
	Alignment measures	Few or unstructured measures	Project success measures – not by portfolio	Quantitative and qualitative business related measures showing alignment with strategy			
	Business case and funding	Little or no alignment	IT and Business budgeted separately but with some coordination	Portfolio of business cases closely aligned with business strategic initiatives			
	Transformational roadmap	Little or no alignment	Separate but coordinated change plans	Business and IT transformations and organization change linked			
	Coordination and communication	Little or no communication	Some communication – not always effective	IT plans and results coordinated and communicated in business terms			



	Assessment area	Low	Medium	High	Maturity scores			Your score
					Average	Best		
					Low	Med	High	
Accountability	Individual/group roles and responsibilities	Organization charts but no defined accountability	Responsibilities mostly defined but (joint) accountability not always clear	Clearly defined roles and responsibilities for joint accountability for portfolios				
	Sponsorship and commitment	Projects managed and driven by IT	Some business commitment – not always at executive level	Clear business management sponsorship and commitment to success of portfolio				
	Targets and goals	Little relationship between targets and strategic initiatives	Group targets linked to business drivers but not always aligned with individual or project goals	Individual, group and portfolio goals and targets aligned with business strategies				
Program control	Business impact ^A	Change plans made by IT – not integrated with business change plans	Business impact considered – not always communicated	Impact on the organization and for the business defined and communicated				
	Monitor and action	Monitoring and action on project basis	Development progress monitored and acted upon but business success of programs not always monitored	Progress of programs closely monitored and early action taken on deviations				
	Program control measures and data availability	Few or no program measures or measures on project basis only	Some measures to track progress but not always business success	Appropriate measures defined and data available to track program success				
Project management	Project initiation	Unstructured, ad hoc	Some structure, not fully deployed	Structured project initiation (Project Initiation Document). Clear contract with business				
	Execution	Unstructured, project manager discretion	Some structure, not fully deployed	Structured process for execution, review and change management				
	Closure	Unstructured, ad hoc	Some structure, not fully deployed	Formal acceptance, discharge, post-implementation review including benefit assessment				
	Methodology and monitoring	Unstructured, project manager discretion	Some structure, not fully deployed	Formal methodology adhered to with structured measures and communication				
	Profession	Unstructured, ad hoc	Some structure, not fully deployed	Project management treated as profession with knowledge exchange, review and learning				
Value realization	Business case	Unstructured, ad hoc	Some structure, not fully deployed	Structured business case review and approval, clear benefits definition				
	Value measures and data availability	Few or unstructured measures	Some structure, not fully deployed	Data available for appropriate business oriented measures and review				
	Communication	Little or no communication to business of value of project to the business	Some structure, not fully deployed	Clear, regular communication to business management of value anticipated and realized in business terms				
	Evaluation	Unstructured, ad hoc	Some structure, not fully deployed	Post-implementation evaluation and benefits realization assessment				

Note: A) Business impact = How program affects all aspects of the business; commercial, organization, personnel, administration, finance and IT.

Source: IBM Institute for Business Value analysis.

Progressing toward your own leading practices

While each of these practices already has some adherents today, it isn't necessarily easy to put these principles into action. They aren't "one-size-fits-all," so successful execution will require customization in addition to planning for *incremental* – not *instant* – progress. IT portfolio management is emerging as an important technique for market leaders, but reaching the overarching goal of managing IT investments better depends on taking some specific "baby steps" first.

Portfolio management: Learn to walk before you can run

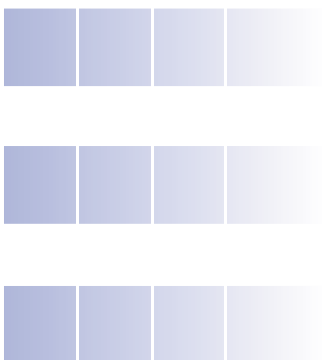
Among the most important prerequisites for migrating to a portfolio approach is establishing strong project management – managing a portfolio of badly performing investments won't deliver improved results. As underscored by the IBM study, better project management involves:

- *Holding people accountable.* Define roles and assign responsibility for benefits realization to individuals throughout the organization, and establish ways to communicate status and manage missed targets.
- *Enforcing good project management methodologies.* Seek a higher maturity level throughout the organization. Use tools such as the Capability Maturity Model (CMM) to identify project management strengths and weaknesses.
- *Measuring results.* Employ the right tools to track projects using workable KPIs, perform detailed assessments during progress and define measures for delivery excellence and post-evaluation. Aim for high-quality data by using techniques such as: incentives for project managers to deliver good quality data (and penalties for poor data), or an independent QA quality assurance function. Avoid adding layers of bureaucracy – aim to use the smallest number of measures that can provide needed information to project managers and other business managers.

Prioritizing investments: Measure and evaluate risk and return, for projects and across the portfolio

Every institution has a means of evaluating and prioritizing business cases, and this (in itself) is usually well done. However, few firms develop structured risk assessments and determine risk mitigation measures (and the costs of such measures) *prior to the execution of IT projects*. Even fewer use the risk assessment to evaluate business cases and determine priorities. In the IBM study, only two firms are piloting processes to adjust the required return on the basis of the risk assessment, which allows them to use scarce capital and resources more efficiently with more transparent management.

Measures need to be defined for risk and return, with established mechanisms to evaluate them *before, during, and in particular, after* project execution. Other



improvements to performing project assessment and prioritization include mapping projects more closely to the firm's strategic business model and using a single process to evaluate IT projects along with all other investment projects.

For the foreseeable future, information technology will remain a critical factor as financial services firms seek to gain or maintain a competitive edge. To improve the value realized from these efforts, IT investment managers can take cues from the corporate finance departments of their institutions – where such techniques are well established – to develop their IT portfolio management processes. As they adapt and implement leading practices, managers should focus on planning and executing well, with a strong project management foundation that includes the ongoing measurement of risks and returns at both the project and portfolio levels.

To learn more about how to interpret and act upon the results of your self-assessment and how leading portfolio management practices can improve your IT investment performance, please contact us at iibv@us.ibm.com. You can also browse through other resources for business executives by visiting our Web site:

ibm.com/bcs



About the authors

Daniel W. Latimore, CFA is a Partner in IBM Business Consulting Services and Executive Director, Institute for Business Value. Dan can be reached at dwlat@us.ibm.com.

Cormac Petit dit de la Roche, CA(SA) is a Managing Consultant in the IBM Institute for Business Value, Financial Services Sector. Cormac can be reached at cormac-petit@nl.ibm.com.

Koos Quak is a Principal, IBM Business Consulting Services, Financial Services Sector. Koos can be reached at koos.quak@nl.ibm.com.

Peter Wiggers is a Senior Consultant, IBM Business Consulting Services. Peter can be reached at peter_wiggers@nl.ibm.com.

Contributors

Special thanks for their significant contributions to:

John Spangenberg, Managing Director, IT Performance and Investment Management at ING in Amsterdam and to the members of his department.

Abderrahim Labbi, IBM Research, Zurich Laboratory and to all the others who helped execute this project or reviewed the findings.

In particular, our thanks go to those – who must remain anonymous – at the nine participating companies who devoted so much time and effort to gathering and submitting data and taking part in the lengthy interview sessions.

About IBM Business Consulting Services

With consultants and professional staff in more than 160 countries globally, IBM Business Consulting Services is the world's largest consulting services organization. IBM Business Consulting Services provides clients with business process and industry expertise, a deep understanding of technology solutions that address specific industry issues and the ability to design, build and run those solutions in a way that delivers bottom-line business value.

References

¹ Garcia, Virginia Heyburn. "Global Financial Services IT Spending in 2003: It Was the Best of Times, It Was the Worst of Times." *TowerGroup Research Notes*, The Tower Group, Inc. February 2003.

² Ibid.





© Copyright IBM Corporation 2004

IBM Global Services
Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
11-04
All Rights Reserved

IBM and the IBM logo are registered trademarks of International Business Machines Corporation in the United States, other countries, or both.

Other company, product and service names may be trademarks or service marks of others.

References in this publication to IBM products and services do not imply that IBM intends to make them available in all countries in which IBM operates.