



NIKU®

**Enterprise Portfolio Management:**  
The Backbone of IT Management and Governance

*A Niku White Paper  
By David Hurwitz*

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## EXECUTIVE SUMMARY

Information Technology organizations and the executives who lead them find themselves in the most challenging of times. IT, so long perceived as a natural engine of progress, emerged from the recent spending bubble caught between a rock and a hard place: its budget has been reduced, often dramatically, while expectations for its contribution remain undiminished.

Moving beyond this paradox requires a fresh approach to IT management and governance — one that facilitates partnership between IT leaders and fellow operating executives and that delivers tactical execution at a level of excellence rarely seen in the past. Specifically, today's world class IT operations must remain in alignment with the strategic priorities of the enterprise, must deliver promised results with control and predictability, and must transparently report costs, progress and problems in time to act on them.

This paper describes why IT is in this current state of challenge, what is really different about the management and governance of IT (it's not the technology), how each of four subsystems — portfolio management, enterprise project management, resource planning and financial management — serve a vital role in the solution, and what new management and governance structures are required.

After reading this paper, you are invited to speak with us at Niku Corporation. We look forward to conferring with you about how your organization can benefit from Enterprise Portfolio Management.

### Where Else Is Enterprise Portfolio Management Applied?

IT Management and Governance is not the only application of EPM. It can be applied to any area of the enterprise where specialized resources work on a portfolio of projects and initiatives. However, aside from IT, EPM is most commonly applied to the management of new product development in engineering and R&D, and to the management of professional services, known as PSA or Professional Services Automation. Future Niku white papers will address these solution areas.

## THE CHALLENGE AND OPPORTUNITY OF 21ST CENTURY IT LEADERSHIP

Information Technology organizations and the executives who lead them find themselves in the most challenging of times. IT, so long perceived as a natural engine of progress, emerged from the recent spending bubble caught between a rock and a hard place: its budget has been reduced, often dramatically, while expectations for its contribution remain undiminished.

Moving beyond this paradox requires a fresh approach to IT management and governance — one that facilitates partnership between IT leaders and fellow operating executives and that delivers tactical execution at a level of excellence rarely seen in the past.

Specifically, today's world class IT operations must remain in alignment with the strategic priorities of the enterprise, must deliver promised results with control and predictability, and must transparently report costs, progress and problems in time to act on them.

Achieving this is a challenge because IT management and governance has always been a uniquely difficult operation to evaluate. Even those who understand its technical minutiae often have trouble objectively judging the quality of results delivered by the CIO.

As it happens, IT *is* different from other operational departments. Not because of the technical underpinnings of servers, networks and applications, but because IT provides the infrastructure for every other department — almost all of which is critical, though only some provides differentiation for the enterprise. Whether

or not it is organized on a shared services model, IT must accommodate the competing demands of departmental heads, business unit chieftains, board-level strategic priorities, and budgetary constraints. These must be met while rationalizing the typical set of accumulated systems from 20 years of mergers and re-organizations. This web of competing priorities makes for both a strategic planning nightmare and a profusion of programs, initiatives and projects the likes of which is not seen anywhere else in the enterprise. To top off this 21st Century management challenge, the specialized resources necessary to mobilize modern IT are expensive or scattered, or both.

The CIO's current challenge is somewhat comparable to that faced by manufacturing 20 years ago.

***“In short, IT Governance is, first and foremost, the structured executive oversight of IT investment to ensure alignment with strategic priorities.”***

The parallel rise of electronics — assembled from thousands of small, expensive and rapidly obsolescing piece parts — and Japanese JIT production methods forced manufacturing executives to re-engineer processes and adopt new classes of operational management systems. IT will do the same. The re-engineering will come from the savvy use of outsourcing (more about this later), web services, and utility computing. Of equal importance, new management and governance systems are required.

## THE RISE OF PORTFOLIO MANAGEMENT

IT must adopt a structured, transparent, consistent and defensible investment planning methodology. If not, it will continue to be whipsawed by executive politics, flavors of the day, and reactionary blowback. Plus, it will never get credit for the considerable cost and effort entailed in simply keeping the lights on.

### The Origins of Portfolio Management

In looking for a proven investment planning methodology, one might look to the literal originator of the term. Anyone who has attended even a single retirement planning session has a passing familiarity with portfolio management, the core management structure of financial planning. Portfolio management is based on asset allocation models, where a portfolio is viewed as a pie that can be divided — and analyzed — by any of several attributes. These analytic attributes — goals, risk levels, costs and forecasted returns — also serve as planning buckets. For instance, if the set of goals within a financial portfolio are growth, income and capital preservation, then the first decision becomes how much of the overall portfolio to allocate to growth, how much to income, and how much to capital preservation. Only subsequently do decisions come into play as to which financial instruments in each category to sell, retain or buy. These tactical decisions are much easier to make when constrained by their relatively minor role in the overall asset allocation model. For example, deciding which large capitalization financial services stock to buy is a relatively easy decision to make when such investments as a group comprise only eight percent of the portfolio.

## Business Investment Planning

Now consider the asset allocation model as applied to business investment planning, specifically within IT.

Here the set of goals might be revenue growth, cost reduction, regulatory mandate and business continuation. Simply answering how much of the overall IT capital and operating budget should be allocated to each of these is an executive level question of considerable depth, requiring evaluation of strategic priorities, planning horizons, capital allocation criteria and so on. As with financial portfolio planning, the evaluation of specific assets and projects within each category occurs only after the determination of how much to invest in each category. And, portfolio analysis doesn't stop with goal alignment. The portfolio must also be analyzed by a variety of other criteria, including risk, strategic alignment, and expected return, among others.

Contrast the asset allocation model with how IT planning is often done: individual projects, systems and initiatives are approved or rejected in the abstract, with little analysis performed or considered as to their impact on the portfolio as a whole. It is bottom-up, in contrast to classical strategic management which is top-down. No wonder the results appear — and often are — chaotic.

While an asset allocation model can point the way to the future, it first requires a current portfolio inventory, no small matter in a large IT shop. An IT portfolio inventory should include application assets, physical assets, projects (ideally grouped into programs and/or initiatives), infrastructure assets (such as networks and bandwidth), and resources (internal, contracted and outsourced).

These classes of portfolio items are what give rise to various forms of portfolio management, such as Application, Asset and Project Portfolio Management, all of which are related.

Initial IT portfolio inventories often reveal copious and expensive redundancies, such as an insurance company with 11 billing systems, a manufacturer with four AP systems, and a financial services provider with seven customer portals. Portfolio management projects often stop at this point, however, as the new visibility of these redundancies triggers a system or asset rationalization program that can be expected to save millions of dollars all by itself.

But the march of progress never stops. New projects are always knocking at the door. Examples include a fast growing division with a major new business initiative that must be enabled; another division that is being spun off; yet another that is being acquired. IT will be called upon to respond, for none of these can succeed without IT. No one, least of all the CIO, wants IT to be the roadblock to strategic imperatives. And so implementing portfolio management gets pushed to the following year, or maybe the year after that.

To make sure savings are realized, to respond effectively to dynamic circumstances, and to keep IT aligned with the business, a system is required — a Portfolio Management system. Such a system provides for comprehensive IT portfolio inventorying, analysis (by goal, risk, status, budget, expected return, and so forth), and scenario planning. Importantly, the Portfolio Management system must seamlessly link to the systems that drive controlled delivery of the tactical programs that are derived from the investment planning process. Otherwise, the strategy may become undone by poor execution.

## Taking the Next Step: IT Governance

Given this portfolio management framework, IT is in a position to engage with executive stakeholders in an IT governance process. This often takes the form of an IT Governance Committee (sometimes called the IT Steering Committee), which functions like a board of directors in debating and ultimately approving budgetary parameters, such as how much portfolio investment to direct towards cost reduction programs, for example.

Every IT governance committee must address which parts of the portfolio to outsource. In some cases, the determination will be that all of IT should be outsourced, in other cases that none should be outsourced. More common is the determination that specific assets should be outsourced: levels of infrastructure, areas of development or support, or specific systems. Determining the right mix, and then crafting transition programs to the proposed portfolio, is a challenge perfectly suited for portfolio management.

Opportunity management — requests for significant new systems and projects — should also be processed through portfolio impact assessments, with the request sponsors self-assessing how the proposal will score in terms of goal, risk, status, and so forth. The framework provided by a Portfolio Management system significantly increases the likelihood of the IT organization achieving the defined goals that emerge from the governance process.

## WINNING STRATEGY DEPENDS ON SUCCESSFUL TACTICS

Leaders, and the strategies they launch, are often undone by poor tactical execution. It happens several times an hour in a basketball game. Just watch for the coach's pained expressions. It happens to philharmonic conductors, generals, and it most certainly happens to managers and executives. The best strategy in the world — complete with compelling mission, proper budgeting, appropriate resource assignments and visible executive sponsorship — will end up as a failure if the tactical programs required to execute it aren't well managed.

Nowhere is the role of tactical execution more critical than in IT, with its unusually large numbers of projects, cross functional delivery and sponsorship arrangements, and its role as a corporate change agent. This last function shouldn't be overlooked since most successful IT projects change work processes and routines throughout the enterprise. Sometimes it is a small

***“The challenge for large organizations is to optimize execution at more than just the individual project level.”***

change, like upgrading the e-mail system, and sometimes it is a big change, like implementing a new AP system. And some might consider a small change like the e-mail upgrade a big change, thus highlighting the challenge of the change agent.

Thus, project management across the panoply of IT programs remains a core competency. Gantt charts, critical path analysis, task tracking, time capture, and estimates to completions are all as central today as ever. This is because project managers can be successful as individuals while programs stumble, strategies crumble or

the organization as a whole fails.

Therefore, tactical management systems must scale from the management of individual projects up to the management of programs that are full of projects, and then ultimately up to the management of asset allocation criteria that are supported by multiple projects, programs and initiatives.

Sample Enterprise Project Map Linked to Portfolio Management

| Portfolio Criteria | Cost Reduction  |   | Regulatory Compliance  |  |
|--------------------|---|---|--|--|
|                    | Programs  | System Consolidation  | Sarbanes-Oxley   | Privacy  |
| Projects           | -Memphis into Erie<br>-Paris into London<br>-Hong Kong into Singapore | -Evaluate each AP System<br>-Develop a superset AP system<br>-Migrate users to the super AP | -Map Section 404 Exposure Points<br>-Implement New S404 Controls | -Develop customer privacy policy<br>-Conduct gap analysis against policy<br>-Close the gap |

Enterprise project management is not done at the desktop computer level. Detailed planning is often done at this level. But enterprise project management requires an enterprise system, one that is broadly and easily accessible, consistent, coordinated, secure, and designed for the needs of large organizations.

Additionally, an enterprise project management system must go beyond task management system must go beyond task planning and status tracking. It should richly support the collaboration requirements of project teams (threaded discussions, document management, and the like), as they are usually cross-functional (and therefore not used to working with one another), often geographically dispersed, and occasionally operating in more than one language, given the prevalence of off shore development.

Critically, just as the portfolio management system described in the previous section must seamlessly link to the enterprise project management system, so too is the corollary true: tactical transactions and activity must seamlessly bubble up to portfolio management. In

this way, not only will line managers know what's really going on, but so too will senior and executive level management.

## PEOPLE ARE THE MOST IMPORTANT IT ASSETS

IT organizations are populated with specialists, such as process analysts, DBAs, trainers, network managers, software engineers, and more. Many of these specialized resources are in-house contractors or out-sourced staff. Achievement of high utilization rates depends on enterprise-wide visibility of resource usage and availability, ease of requisitioning and assignment and, especially, sophisticated planning capabilities. Many schedules are undone when key resources don't free up when project plans assumed they would. This often happens when shared resources are simultaneously assumed to be available by more than one project manager. The reverse — under-utilization of resources — is also possible and especially galling in today's lean operating environments.

The digital assets in the portfolio — hardware, software and systems — are specified, designed, deployed and maintained by people (the human assets). Thus, the truism that people are the most important assets is especially valid in knowledge and process-based organizations like IT. Beyond the ability to deliver, staffing costs remain one of the largest IT spending areas. Thus, proactive and adept resource planning remains one of the core competencies of world class IT management.

## FINANCIAL ACCOUNTABILITY DRIVES GOOD GOVERNANCE

Departmental and business unit heads know that IT systems underlie nearly all business initiatives. Yet, they tend to undervalue or overuse IT unless it hits expense budgets. Hence the surging popularity of charge-backs and IT cost allocations. These internal billing mechanisms force budgetary owners in the business to account for the costs and, therefore, the value of their IT systems. One byproduct of this IT financial consciousness is that internal customers become naturally engaged with the overall IT governance process: how IT priorities are set, and how those priorities affect their initiatives, become topics of great importance to them.

Detailed and correctly allocated financial management of IT initiatives is a management challenge that has historically been difficult to address. Aside from the emergence of charge-backs, American companies have found that reporting for compliance with the SOP 98-1 standard has also emerged as a driver for the need to accurately track labor and costs on IT projects. This U.S. accounting standard alone — which allows for the capitalization of costs expended in the latter stages of a project — can lead to major reductions in reported expense levels.

Thus, accurate time, status and expense tracking are now as important to finance as they have always been to the project and program manager. However, capturing the transactions to support this level of reporting, backing up the transactional flow with proper project accounting, then posting the resulting entries to the general ledger, requires a financial management system that is tightly integrated with the core project and initiative management system.

By enabling charge-backs and SOP 98-1 reporting for capitalization, IT financial management systems drive widespread support for proper IT Governance.

## **ENTERPRISE PORTFOLIO MANAGEMENT: THE BACKBONE SYSTEM OF IT**

Various systems of record comprise the information backbone of an enterprise. Examples include accounting, procurement, inventory control and customer support. These are often augmented by advanced planning systems. Just as these are the backbone systems of the business units, so is Enterprise Portfolio Management the backbone for IT management and governance.

The Enterprise Portfolio Management system's seamless melding of portfolio management with project management makes for a compelling marriage of the strategic to the tactical: a structured investment allocation decision framework that drives, and is informed by, a system for precise tactical execution. Add to this mix the vital supporting functions of resource planning and project-based financial management, and the result is the comprehensive system needed for IT control and visibility.

IT Governance is a hot topic today for good reason: IT continues to be very expensive, more than occasionally frustrating, and at least as important as ever. Thus, control and visibility are required, which in today's parlance means proper governance. Satisfying these requirements in large IT shops — even those that have outsourced large chunks of their portfolios — requires a proper backbone system. The rise of Enterprise Portfolio Management systems is therefore perfectly timed for IT today. With such a system, CIOs can more effectively step up to the same level of management capabilities as their peers on the executive committee.

Just as manufacturing emerged stronger and more nimble after meeting the challenge of electronics and JIT, so will IT emerge as more controlled, predictable, transparent, and valuable to the success of the enterprise.

**Niku Corporation** (Nasdaq: NIKU) is the leading vendor of Enterprise Portfolio Management systems. More than 400,000 users at industry leaders such as 3M, BT, Best Buy, Emerson, Philips and Unilever depend on Niku to manage mission critical projects, programs and initiatives. Niku's flagship product, Niku 6, offers superior functionality, scalability and architecture, making it the leading solution for the management of IT operations, new product development efforts and services operations. Niku Corporation is a publicly held, profitable company with global operations.

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