

IT as a “Business Within a Business”: Vision, Financial Processes, and Systems

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IT as a “Business Within a Business”: Vision, Financial Processes, and Systems

Executive Summary

IT can and should be run as a business within a business. This approach solves problems such as demand management, business alignment, cost control, funding for innovation, and transparency.

However, running IT as a business requires both fundamental shifts in how IT is managed within the corporate operating model, as well as attention to certain very specific planning and forecasting processes.

To truly operate as a business, IT needs to put forward a catalog of its products and services, with rates that represent the full cost of each to shareholders. Beyond that, its budget should forecast not only what it plans to spend, but also what it plans to *deliver* with the full cost of each project and service. Done in advance of each fiscal year, these are the results of effective IT business *planning* processes.

Tracking systems – such as accounting, invoicing, and dashboards of key metrics – are also impacted by the business-within-a-business paradigm. For example, instead of thinking of chargebacks as a way to spread IT costs to the business, an entrepreneurial IT organization bills for the products and services delivered. And instead of thinking that budgets and allocations are provided to cover IT costs, an entrepreneurial CIO treats them as money put on deposit by customers to buy IT’s products and services.

Effective implementation of the business-within-a-business paradigm begins with the planning processes, both because they provide immediate solutions to pressing resource governance processes, and because they are prerequisite to setting up businesslike tracking systems.

N. Dean Meyer and Associates Inc. (NDMA) has been researching the most challenging aspects of running IT as a business for many years, and in particular the changes required in IT financial practices. They offer the FullCost® method and tool for business and budget planning. Embedded in FullCost is an advanced service cost model.

FullCost should be considered by any IT organization challenged with the need for cost reductions, business-driven governance, transparency, and value.

Introduction

Information technology is under transformative pressure like never before. Tight budgets and economic uncertainty, coupled with substantive technology shifts like Cloud and consumerization, combine to demand improved IT business management.

Alignment, responsiveness, transparency, seamless integration – all are key challenges in IT business management, with profound impacts on IT’s relationship to business leaders. Increasingly well informed internal buyers of IT demand control over this critical business resource, as well as objective performance measures such as cost, innovation, quality of service, and strategic value.

While mature IT organizations can manage the **supply** of technology, true IT business management also includes the ability to understand and manage **demand** in a way that is relevant to business leaders. This is where the business-within-a-business paradigm, and specifically IT financial processes, are most critical.

The stakes are high. A major consumer of capital and source of operational risk, IT also holds out the potential of breakthrough innovations. Managing the “business of technology” is critical to the business as a whole.

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IT Business and Financial Planning

The proverbial “barefoot cobbler’s child” is commonplace in the IT industry: While IT automates the rest of the enterprise, its own business is often poorly understood and managed. With such large expenditures and business criticality, one would expect IT to be managed using techniques comparable to the largest enterprises. Yet the basic management practices around IT remain immature.

The consequences of not having a meaningful system of governance of IT resources are significant:

- Lack of IT alignment with business needs and strategies.
- Executives unwilling to meet IT’s resource requests, because they find it difficult to relate IT costs to benefits.
- Inability to make sensible decisions about quality of service and investment priorities (e.g. new services and approaches such as virtualization, enterprise architecture, or external Cloud).
- Unintended cross-business-unit subsidization of IT expenses – and perception of such unfairness eroding the business’ trust for IT.
- The perception (and possible reality) that internal IT is too costly, or that too much is spent on “run the business” as compared to “grow the business” and “transform the business.”
- Acceleration of decentralization and of unmanaged outsourcing by business consumers going directly to Cloud and other providers without a fair comparison of costs with internal IT.

Getting Beyond the “Business of IT” Hype

IT can be run as a business within a business. However, doing so requires both fundamental shifts in how IT is managed within the corporate operating model, as well as attention to certain very specific planning and forecasting processes.

The IT Operating Model

There is a growing industry consensus that traditional corporate budgeting processes focus too much on cost categories and not enough on products and services. One well known IT financial management vendor markets its ability to “rotate the General Ledger 90 degrees.” That is, instead of showing how much is being spent on traditional categories such as staff, hardware, software, training, and travel, the accounting results are presented in terms of valuable deliverables: email, ERP system, networking, and so forth.

Traditional corporate
budgeting processes
focus too much on cost
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This is an essential principle of the IT service management movement as well – the principle that IT costs need to be presented in terms of the final deliverable – that moment of truth for the service client.

While easily stated, these principles are not necessarily easy to implement in corporate cultures accustomed to high degrees of micro-management. It is very easy and tempting for leaders to “zero out” categories such as training and travel from an IT budget, which only compromises the quality and sustainability of the services being offered.

A true service-based costing approach puts the accountability for such decisions on the service providers, who can make fact-based decisions about whether such activities are necessary for the delivery of their service. With this empowerment comes accountability – for the quality and cost competitiveness of IT’s products and services.

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In the business-within-a-business paradigm, accountability for cost control is distributed between IT service providers and business consumers. First, IT needs the tools to understand and manage costs, and produce products and services at competitive prices. Then, business leaders can manage costs by managing demand for those products and services.

Running IT as a business also changes the way IT’s budget is viewed. Instead of thinking of budgets and allocations as a means of covering IT’s costs, an entrepreneurial IT organization views it as revenues for its products and services. In some companies, the funding for IT is provided through direct budgets or allocations – money put on deposit with IT, which funds an account against which IT service costs are deducted. In other companies, business units pay IT for services delivered – termed “fee for service.”

Running IT as a business
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However funding flows to IT, running IT as a business demands that business clients decide which products and services they will “buy,” and which are not funded. All IT products and services have a true, full cost to shareholders, and funds are limited. Business clients have a finite “checkbook” – whether held in the business (fee for service) or put on deposit with IT (direct budget and allocations). Tough decisions are required to manage demand within limited resources.

Ultimately the sense of accountability and entrepreneurship unleashed by true “business within a business” approaches drives superior business performance, as staff and management at all levels of IT become more service and customer focused, and more competitive. Meanwhile, business clients learn to make sensible investment decisions within their limited spending power.

IT Financial Management Tools

IT financial management tools fall in two categories: planning, and actuals accounting.

IT actuals accounting systems track costs and service delivery, issue invoices, maintain account balances, and report metrics. IT financial vendors Nicus, Digital Fuel, Apptio, ComSci, and Costonomics are all strong in this regard. However, while some offer budget modules, these may be more oriented to historic data, and weaker as true planning support tools.

IT business planning tools must support the following activities:

- Defining and refining the service catalog
- Demand forecasting
- Fulfillment planning
- Investment-based budgeting – a budget for proposed products and services, not just expenses
- Applying unit rates to the service catalog

Planning tools and processes ideally are implemented before actuals accounting. Note that most of the critical financial management issues described above are addressed by an effective planning process, not after-the-fact reporting. Demand management, alignment, transparency, business-driven budget decisions, and cost savings all result from an investment-based budget and a service catalog with rates published at the beginning of the year. Furthermore, those outputs of the planning process are pre-requisite to implementing service-based accounting.

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IT Business Planning Tools

IT business planning tools do far more than trend historic data and support “what if’s” on costs. They have functionality to support each step of the business planning process.

Defining and refining the service catalog. The IT organization must first determine the products and services it plans to offer, both to the business and internally to peers within IT. These services may include:

- Application services (software development/configuration and functional application support)
- Infrastructure services (hosting, networking, data center operations, storage)
- End user computing (collaborative tools, business intelligence)
- Support services (service desk, training, IT business office)
- Professional services (business requirements analysis, project management, architecture and policy planning)

For each catalog item, IT needs to define the type of unit (hour, server image, gigabyte, mailbox, account) that will be used to account for service consumption (but not the rate at this point in the planning process). Services that depend on other services (or, even more challenging, provide services to each other) must be modeled.

Demand forecasting. Once the services are determined, the likely demand for them needs to be estimated, using the determined units. For example:

- We expect the HR department to have 40 users of the HR system.
- The estimated transaction load for the online banking system is 32 million account lookups/month.
- Project initiation pipeline indicates a demand for 500 new virtual machines in the next 12 months.

Demand must be understood in terms of both external and internal customers.

Demand must be understood in terms of both external and internal customers. If IT sells email services to itself, this should be represented as well as email services provided to business clients.

Fulfillment planning. The resources required to deliver the forecasted demand are then planned. This includes staffing, contractors, vendor costs, and capital investments. All costs must be forward looking, not historic, since the budget and rates are for the coming year.

Cost modeling. All indirect costs – both vendor and internal sales to peers – are applied to just the right products and services within each IT line of business. As costs flow through the network of internal sales, all costs ultimately end up represented in the cost of sales to business clients.

Investment-based budgeting. The key to fact-based budget decision-making, and to demand management, is submitting and negotiating a budget for the products and services IT plans to deliver – what IT proposes to “sell,” not just what it proposed to spend. This builds an understanding of the value IT delivers at various levels of funding. It allows executives to set budgets based on the needs of the business and strategic investment opportunities. And it clarifies what the final budget does and does not pay for.

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Applying unit rates to the service catalog. While the budget forecasts the total costs of projects and services, the same cost model produces a consistent set of unit costs (rates) to assign to each item in the service catalog.

Note that a full-fledged planning system entails a lot more than just a cost model. Traditional Activity-Based Costing (ABC) modeling tools do little more than assign the costs in an existing budget to an existing catalog of products and services. But they are not designed to support all of the steps in a business planning process.

An ITFM Architecture

A fully functional IT financial management solution consists of the following modules in EMA’s reference architecture (Figure 1):

- Planning
 - Service Cost Modeling
 - Budgeting and Forecasting
- Actuals
 - Consumption Tracking
 - Control, Reporting and Chargeback/Showback (“Bill of IT”)
 - Benchmarking

These tools in turn need to be integrated with

- General ledger and other corporate financial systems.
- Vendor management, contract and supply chain systems (including purchasing).
- Project, application, and/or service portfolio management, including demand management depending on how it is defined, and the user-facing service catalog of requestable offerings.
- IT service management and other work and activity tracking systems (e.g. application lifecycle management, other workflow systems).
- Asset management and CMDB (increasing integrated into the core of ITSM suites).
- Time tracking systems.
- Technical element management (infrastructure performance and capacity monitoring, for detailed consumption metrics).

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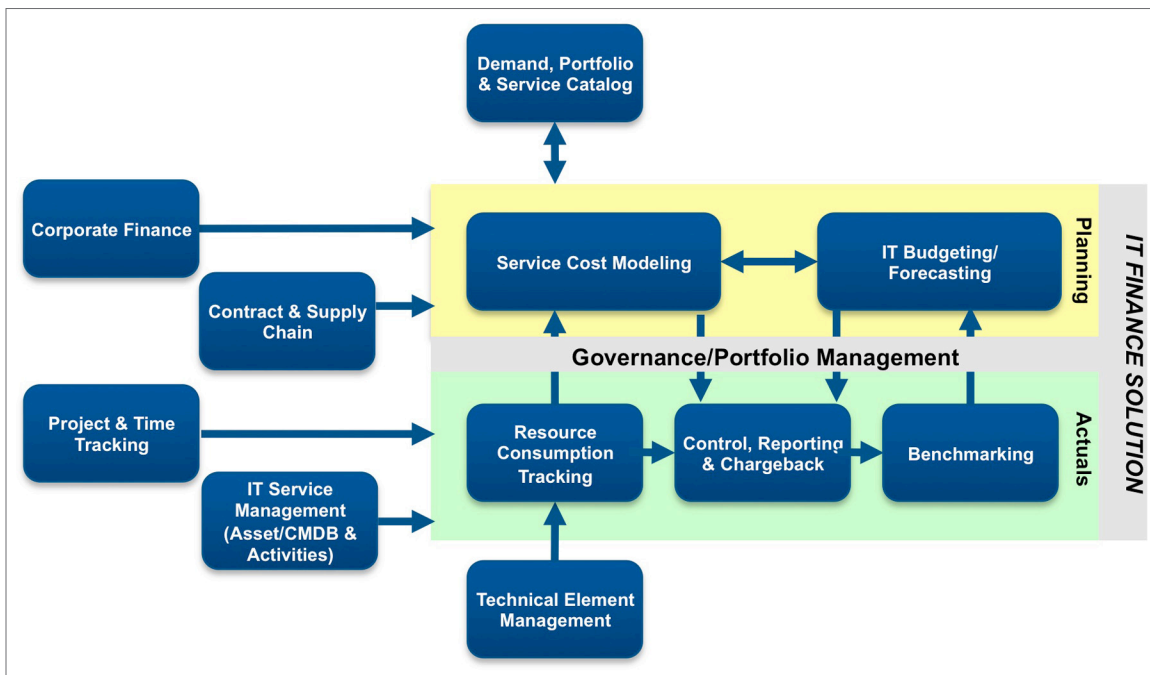


Figure 1. IT Financial Management reference architecture

Many tools exist to manage after-the-fact actuals data; they map resource consumption to services, enable chargeback, and show current status. However, few tools excel with the challenges of IT business planning.

Fewer still are capable of modeling the complex flow of costs within a typical IT department. Groups within IT provide each other with services in a complex mesh of relationships. Full service costing seeks to manage and measure all such interactions, so that all costs are assigned to just the right products and services and an accurate picture of the internal corporate “economy” emerges. This is essential to budgeting and setting investment priorities.

Most cost models resort to simplistic activity-based costing, which assigns indirect costs directly to external products and services. But what if the email service depends on the hosting service, **and** IT staff also use email? Such circularity pervades any attempt to develop accurate service cost models, but is challenging to support from a technical perspective.

If all the costs of email are assigned to clients’ email accounts, then email appears more expensive and the cost of other services (such as applications development) appears cheaper (below true cost).

The resulting inaccuracies in cost models can cause poor decisions, such as inappropriate outsourcing and avoidance of sensible IT investments. In a research paper, industry guru Dean Meyer detailed examples demonstrating how failure to accommodate circular service consumption of IT within IT can lead to material errors in IT service costing, errors that might tip the balance in favor of outsourcing.

What if the email service depends on the hosting service, and IT staff also use email?

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To model costs accurately, a “second generation” cost model applies all internal costs to the lines of business within IT that consume them. Of course, ultimately costs filter through the network of internal customer-supplier relationships until all costs are assigned to external sales – in just the right proportions.

In a state-of-the-art second-generation cost model, there are two options:

- “Break circularity” by making an informed, quantitative decision about where costs should be absorbed internally vs. charged to external sales. This option provides fast calculation of the model during the planning process
- Run cost models repeatedly (iterative calculation) until they stabilize. This option eliminates all distortion in the final results.

Ultimately, the ability to manage an IT investment portfolio based on accurate costs is essential to the IT organization. Pricing services in a service catalog without an understanding of their complex costing interplay is flying blind. It results in unsustainable practices, inability to meet customer demand, poor decisions, and ultimately business dissatisfaction with the IT organization.

Example of an IT costing distortion

“First generation cost models overprice some products, while assigning too little cost to others. For example, some infrastructure services (like electronic mail, network services, and shared storage) are consumed internally by IT staff, many of whom in turn support the infrastructure.

If this is ignored and all costs are assigned to services sold to clients, then the cost of infrastructure services will appear too high while applications engineering will appear low.”

~ N. Dean Meyer

The FullCost Approach

N. Dean Meyer and Associates Inc. (NDMA) has been researching the most challenging aspects of running IT as a business, and in particular business planning and service costing, for many years. In fact, Dean Meyer, founder of NDMA, is one of the earliest proponents of running IT as a business (dating back to the early 1980s), and coined the term “investment-based budgeting.”

NDMA offers the FullCost method and software for IT business and financial planning. FullCost is an industry leader in service cost modeling and business/budget planning, supporting every aspect of an IT business planning process.

Integrated Planning and Costing

Budgeting is often seen as a distinct activity from service costing, but there is great benefit in bringing the two together. As Meyer notes, “It’s not a good idea to offer one cost in the budget, and then charge a rate during the year that adds up to a different cost.”

FullCost provides an integrated planning and costing system. Rates are extracted from the same cost model that produces an investment-based budget.

Circular Costing

The FullCost cost engine is a true “second generation” cost model with full support for the problem of circularity in complex service cost models.

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FullCost can switch between “break circularity” mode during cost model development, which allows the rapid development of cost models with some distortion (although it’s very smart about breaking circularity in ways that minimize distortion). For the final run, FullCost supports “iterative” calculation. In this way, it seeks the best of both worlds – fast for planning; accurate for finalizing the published budget and unit rates.

FullCost can also map circular costs to help look for errors, such as spreading an indirect cost everywhere instead of onto just the right products/services within an IT line of business.

IT Leadership Team Involvement

FullCost is designed to be used not just by IT financial staff, but by the entire IT leadership team. Meyer points out that IT leaders have to plan their own little businesses within the business, and make decisions for which they’ll be held accountable. In FullCost, each leader owns a “budget unit” with its own catalog, sales forecast and cost structure. Their individual business plans are linked.

FullCost uses an Excel front-end (although it’s an application, not just a set of spreadsheets), making it easy for leaders to enter their catalogs, demand forecasts, and costs. The tools make it easy for them to assign indirect costs (external and internal) to products/services, and to model labor costs (staffing being an output based on demand, not an input).

IT financial and planning staff have a “master file” which controls the configuration of the leaders’ Budget Unit workbooks, and which aggregates all the leaders’ data for reporting. FullCost produces reports for each stage of the planning process: development, executive scrutiny, budget negotiations, and ultimately uploading the results into a GL and catalog publishing environment.

Also, and very importantly, FullCost includes detailed documentation – not only of the software, but of each step in the planning process. It includes definitions and frameworks to help leaders think like entrepreneurs and coordinate their plans with one another, and templates that describe how to represent many common situations in a cost model – things like on-call work, clients who pay for certain IT staff salaries, “unfunded mandates,” and the start-up of new services.

EMA Perspective

IT transparency and the idea of managing IT as a business are easy concepts to voice, but much harder to implement. The devil is often found in the details, not the least of which is complex service costing and business/budget planning.

Service costing and investment-based budgeting therefore are key disciplines for the IT organization pressured to do more with less or risk being outsourced. Through clear, defensible transparency into its offerings and their cost structure *before* budgets are locked in, IT can gain its clients’ advocacy for its budgets and their understanding of the value it produces.

“My organization had been under-spending on information technology for years. With [FullCost], at a time where other budgets were shrinking, my budget actually went up because clients favored the new process and were able to defend their worthwhile investments.”

~ Lew Davison, CIO, Missouri Highway and Transportation Department

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Current IT financial management and service catalog approaches are often dangerously simplistic. Primitive allocation strategies can have disastrous results for the IT organization that winds up charging customers uncompetitive rates – or overpromising services for prices that can’t be met in the real world.

Similarly, there are numerous “service catalog” tools that may present an attractive front end for ordering IT services, and robust workflow for tracking their fulfillment. However, how are these services’ rates determined? A sophisticated cost modeling capability is required, especially for those IT organizations charged with complete or significant cost recovery from business clients.

NDMA’s FullCost product and method (packaged together) demonstrates a highly advanced understanding of the complexities of IT finance. With comprehensive support for an integrated costing and budgeting process, FullCost enables an IT provider to develop a complete portfolio of IT services and understand the necessary choices in managing it over a period of time.

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Some of the hardest problems in IT value and return on investment are found in questions like:

- How can I provide rates that are comparable to external IT providers?
- How do I justify an Enterprise Architecture group?
- How do I fund a new internal Cloud capability, knowing that I cannot fully recover its cost from users in its first year?

NDMA provides sophisticated insight into such thorny issues, including concepts such as “corporate good” services and internal “venture” funding, isolating unrelated costs which unfairly distort service pricing.

Note that FullCost is not a chargeback system. EMA sees it, therefore, as a good partner for the various systems that focus on IT consumption; and it might also be suitable for integration with Professional Services Automation products that also have excellent built-in consumption and activity capture (but no budgeting or modeling capabilities).

IT finance is perhaps the most complex and challenging expression of the general problem of corporate finance. Some interesting stories are cropping up in the industry regarding IT financial management techniques being applied to complex service costing problems **outside** of IT, such as those in health care.

It’s clear that NDMA and FullCost represent state-of-the-art insights into IT financial management, and should be considered by any IT organization challenged with the need for cost reductions, business-driven governance, transparency, and value.

About N. Dean Meyer and Associates Inc.

N. Dean Meyer and Associates Inc. is unlike most software vendors. First and foremost, Dean Meyer is a visionary in running IT as a business, a coach to CIOs on organizational issues, and a facilitator of organizational transformation processes. The FullCost tool comes not from cost accounting, but rather from that entrepreneurial business-within-a-business perspective, and is firmly rooted in the practicalities of engaging IT leadership teams in organizational transformation processes. In addition to the software, NDMA provides coaching and consulting on every step in the planning process, including how to develop pragmatic service catalogs, business planning, cost modeling, and more. More information can be found at www.FullCost.com.

About Enterprise Management Associates, Inc.

Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that provides deep insight across the full spectrum of IT and data management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help its clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise line of business users, IT professionals and IT vendors at www.enterprisemanagement.com or blogs.enterprisemanagement.com. You can also follow EMA on [Twitter](#) or [Facebook](#).

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