

# TeamQuest and ITIL Version 2

## Part 5 — Implementing Financial Management for IT

Widely adopted or considered, IT Infrastructure Library (ITIL) Version 2 is still relevant today. Yes, a refreshed version has been released, but many organizations are at a maturity level where there is advantage to starting with Version 2. Many of the core processes in the new Version 3 are contained within the Service Delivery component of Version 2. Financial Management for IT is an important process within ITIL Version 2 and its processes are, for the most part, identical in the new version 3. No matter which version you choose, this paper will provide an informative overview of this important ITIL process that is responsible for managing and allocating the costs associated with delivering IT services to the organization and its customers.



### **About the Author**

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## Introduction

Where Service Level Management (SLM) defines and manages the services, Financial Management (FM) determines the costs of those services and provides financial accounting support. Doing so ensures expenditures fall within approved plans and that funds are well-spent. Financial Management is often responsible for allocating the costs of delivering IT services across the department and divisions of the organization. The role of Financial Management varies depending upon the view of IT within the corporation.

Some companies view IT as an expense center, some as a profit center, and some as a cost recovery center. Different best practices are suggested for each role. However, in all cases, Financial Management supports the “business” of IT.

## Why Financial Management for IT?

Financial Management processes are tightly integrated with Service Level Management, Capacity Management, Configuration Management and the Corporate Finance Department. The values of this process include the following:

- FM provides a budgetary planning process for the IT organization that dovetails with the corporate budgeting cycle in order to plan and predict future expenditures required to maintain and improve services. Business unit plans, both short and long term, provide the information needed to work closely with Capacity Management and SLMs to develop the IT budget.
- IT accounting ensures expenditures fall within approved plan guidelines and that the money is well-spent.
- Cost-benefit analysis projects assist senior management in understanding the ongoing total cost of ownership of a proposed IT initiative. As a result, business leaders can make more informed decisions when considering and prioritizing future work.
- Chargeback promotes a better understanding of the costs of providing services to a particular business unit. It fosters an environment of controls to ensure IT services are more effectively and efficiently used. Chargeback places financial responsibility for service consumption with the individual business units. Effective costing disciplines can also influence changes in consumption patterns to conserve costly IT infrastructure assets. For example, a lower chargeback rate for batch jobs run overnight can influence business units to perform work during hours when idle computing capacity is available, releasing capacity during peak hours, thus delaying expensive capacity upgrades.

Chargeback places financial responsibility for service consumption with the business unit.

## The Financial Management Process

Financial Management (FM) is responsible for the oversight of all IT expenditures, ensuring funds are available for planned events. The team assists in the IT decision-making process by providing detailed financial information supporting proposed initiatives. FM processes, through the use of chargeback systems, influence the use of IT assets to maximize the return on IT investments. The component processes of Financial Management are described below.

### Budget

Budgeting normally takes into account costs of providing current services, known project requirements and planned business growth.

The budgeting process identifies all IT expenses for a specified period of time to ensure the appropriate funding is available to sustain operations. Budgeting normally takes into account costs of providing current services, known project requirements and planned business growth. Budgets are usually built annually with estimates covering the costs of the current and subsequent accounting periods. Some organizations build budgets for the subsequent three years to permit improved financial planning decisions. The budgeting process provides insight into how expenses change year-to-year. In addition, the process helps management better understand the impacts to new applications, cost-of-living increases and technology unit cost improvements.

At a minimum, budget categories should contain hardware, software, staffing, telecommunications and external services (e.g., disaster recovery) costs.

For most shops budgeting is a balancing act, maximizing services within the constraints of available capital for acquisition and sustained Service Level Agreements (SLA), as well as to address external market forces such as vendor service rates. At a minimum, budget categories should contain hardware, software, staffing, telecommunications and external services (e.g., disaster recovery) costs. Account for support costs outside the actual cost of the unit or application when planning future hardware and software purchases.

Identify costs when adding new hardware for the following:

- Installation
- Cabling
- Operating System Software
- Capacity-based software upgrades
- Facilities (e.g., floor space, power, cooling)
- Administration
- Maintenance
- Consumables (e.g., tapes, CDs, paper)
- Backup/recovery

In addition, identify costs when adding software applications to the budget:

- Installation
- Hardware capacity
- Software upgrades
- Database maintenance
- Administration
- Testing
- Quality Assurance
- Consumables (e.g., tapes, CDs, paper forms)
- Business data backup/recovery

Direct Costs	Capital	Monthly	Month incurred	Direct Costs
Staffing		\$416,667	January	\$5,000,000
Benefits		\$133,333	January	\$1,600,000
Consulting		\$41,667	May	\$333,333
Other Employee Related		\$6,667	January	\$80,000
Hardware Lease		\$4,400	January	\$52,800
Software Lease		\$390,000	January	\$4,680,000
Hardware Purchase Expense		\$5,000	January	\$60,000
Software Purchase Expense		\$500	January	\$6,000
Hardware Maintenance		\$120,000	January	\$1,440,000
Software Maintenance		\$185,000	January	\$2,220,000
Outside Services		\$120,000	January	\$1,440,000
Offsite Tape Storage		\$5,000	January	\$60,000
Disaster Recovery		\$75,000	January	\$900,000
Facility (space)		\$37,500	January	\$450,000
Facility (power & cooling)		\$15,000	January	\$180,000
Office Supplies		\$300	January	\$3,600
Telecom		\$800,000	January	\$9,600,000
<b>Total Direct Cash Expenses</b>				<b>\$28,105,773</b>
Hardware Depreciation	\$1,500,000	\$41,667	June	\$250,000
Software Depreciation	\$2,650,000	\$110,417	April	\$993,750
Other Non-Cash, transfer		\$55,000	January	\$660,000
<b>Total Non-Cash Direct Cost</b>				<b>\$1,903,750</b>
<b>Total Direct Operating Expense</b>				<b>\$0</b>
<b>Cost of Money</b>				<b>\$145,250</b>
<b>Total Costs</b>				<b>\$30,154,733</b>

The value of the budgeting process is the business justification and prioritizing of IT services required to support business operations. Through the use of the process, senior executives understand the components of cost and thus make more informed decisions on where to direct IT investments that best satisfy the needs of the organization as a whole.

Exhibit 1, left, shows an example of a high-level budget. Note – the figures are purely fictitious and any resemblance to reality is coincidental.

Exhibit 1

## Accounting

The goal of IT accounting is to provide accurate and timely financial information regarding IT expenditures — current and proposed. IT accounting differs substantially enough from normal business accounting that ITIL recommends organizations separate them to ensure optimum financial decision outcomes.

IT and business management can then make sound decisions over priorities in supplying IT services to the business and gain an improved comprehension of IT cost components.

Components of IT accounting work include:

- Tracking current expenditures against a budget or financial plan
- Coordinating IT accounting data with corporate accounting departments
- Analyzing proposed investments to identify true costs to implement and operate
- Providing senior management with sufficient data to understand the short and long term aspects of IT initiatives and weigh financial risks associated with them
- Supporting the charging for IT services

Caution must be exercised in developing these capabilities so the cost of performing the work does not exceed the benefit.

This work is performed from an IT perspective, revealing true costs of IT services and is not meant to address more complex corporate accounting issues such as tax accounting. Caution must be exercised in developing these capabilities so the cost of performing the work does not exceed the benefit. Therefore the level of detail and reporting will vary depending upon the size and complexity of the organization. There are several different IT accounting methodologies that can be employed by an organization:

- **Accounting** — simple gathering and reporting of IT expense information, usually aligning it to IT services to promote cost awareness within the organization. This methodology creates an awareness of IT expenses and how they are affected by changes in business volumes and priorities. However it does not promote effective use of resources. If individual business units are not held accountable for consumed resources, it is difficult for the IT organization to provide cost effective services.
- **Cost Recovery** — a methodology in which costs are apportioned by service and recovered from organizational units in a fair and equitable manner. This methodology is considered best practice as it forces discipline in the organization's use of IT services. Similar discipline is employed within the organization to control cost-effective use of travel and office supplies.
- **Profit center** — a methodology employed mostly by IT service providers whereby a profit is generated by selling IT services. Charging and service delivery must be competitive with the marketplace to maintain the customer base. Profits are used to improve services and grow the business. This methodology can be effective in controlling vendors as financial incentives can substantially reduce profits if service quality declines. Some companies embrace this methodology internally as a measure against external services and — similar to service providers — use the profits from the services to provide the funding needed to sustain and grow IT services.

There are two major components to the accounting process — cost accounting and investment analysis.

### **Cost accounting**

Some organizations employ a simple approach and account for IT costs as a whole without any definition of how the resources are consumed.

Best practices dictate that IT organizations should adopt some level of IT accounting detail. There are a variety of ways to perform this function, depending upon size and complexity of the organization. Some organizations employ a simple approach and account for IT costs as a whole without any definition of how the resources are consumed. A better practice is to identify costs based upon what each customer consumes. Doing so provides some customer accountability for what is consumed. Some organizations go into more detail and account for costs based upon business applications. Examples of this method would be costs for running General Ledger or Call Center Applications.

Another more effective method is to account for costs based upon business processes. Examples of this method would be IT costs per online sale or customer inquiry. The more detailed and business oriented methods provide the greater value, albeit at a greater cost. Caution must be exercised however to ensure the costs of the accounting do not far exceed the benefit to the organization.

Since business volumes are rarely static, it is also necessary to estimate what they will be at the end of the accounting period.

The cornerstone of cost accounting is the cost model. This document reveals all the IT costs associated with the desired level of detail. The model generally covers a fixed period of time, usually concurrent with the organization's fiscal year. The gathered cost detail should be much more than just today's costs. Since business volumes are rarely static, it is also necessary to estimate what they will be at the end of the accounting period. We do this since the actual costs to the customer over the accounting period will be a blend of today's costs and costs for every day in the future up to the end of the accounting period.

There are two types of costs that are gathered.

- Capital costs are dollars spent now and affect the organization's cash flow, yet have a different impact on the financial plan. These costs are generally related to the acquisition of hardware, major application software such as CRM, and facilities. Capital expenditures are depreciated, a financial method of spreading the cost of an asset over its useful life. Most organizations already employ a depreciation methodology used by IT accounting. Depreciation methods used in the USA are mostly determined by FASB and IRS guidelines. The budget or financial plan accounts for the amount of depreciation incurred during the term of the budget/plan. Therefore capital and expenses must be kept separate and not confused when building the financial plans.
- Operational costs are the day-to-day expenditures needed to sustain IT operations. Operational costs will include:
  - Hardware and software maintenance
  - Telecommunications — data and voice
  - Personnel
  - Consumables — tapes, CDs, paper, forms, office supplies
  - Facilities — floor space rent or allocation, power, cooling, uninterruptible power, physical security
  - External services — such as disaster recovery, consultants, vendors
  - Transfer — costs such as corporate overhead, HR costs, finance, security

...capitalized expenses must be kept separate and not confused when building the financial plans.

The spreadsheet is the primary tool of IT accounting. Financial data is gathered from across the organization to identify IT costs and associated business metrics. Costs must be determined to be fixed or variable. For example, the base costs for an 800 phone service will be fixed as the contract would need to be renegotiated to change the rate. The vendor would charge any additional minutes of service on a per-minute or tiered charge; therefore that portion of the cost would be variable since it depends on business usage.

Once costs are gathered, it is necessary to break them down by unit of use if a more detailed accounting approach is chosen. When breaking the costs down by customer, application or business process, it is first necessary to understand how services and infrastructure components are consumed. "Cost centers" are set up to hold the individual cost components. Cost centers have "direct" and "indirect" or "overhead" costs associated with them. A cost center could be assigned to a customer, an application or a business process.

Once costs are gathered, it is necessary to break them down by unit if a more detailed accounting approach is chosen.

Direct costs are those expenses directly attributable to a particular cost center. Examples of direct costs are dedicated servers, departmental desktops, staffing dedicated to supporting a particular application, or a business process. Indirect costs are generally those shared by all and allocated to the various costs centers in an equitable manner. Examples of indirect costs are facilities, senior IT management and support staff, telephone switchboards or PBX.

Where services prove not to be cost effective, IT and the business can work together to develop more cost effective alternatives.

The allocation methodology is important to the process. It is critical that it be easy to understand and consistent across the cost centers. It should also be employed in the chargeback process. In doing so, the customer will understand the charging, and if it is fair and reasonable, accept it. If a variety of allocation methods are employed and/or they are not easily understood, suspicions arise and IT is not looked upon favorably. Probably the most popular allocation method is by percent consumption.

Those costs directly attributable to a cost center are usually easy to identify. The remaining costs, usually called “overhead,” are applied across the cost centers in an equitable fashion. In this case, they are allocated on a percentage of the whole basis. For example, if a cost

center consumes 30 percent of the total direct costs across all cost centers, then it will also attract 30 percent of the unallocated overhead costs.

The FM staff collects the information, segregates it by cost center, prepares the spreadsheet, and distributes the results. Business units will understand the actual IT costs to support each cost center, be it a group of users, application(s) or business processes. Where services prove to not be cost effective, IT and the business can work together to develop more cost effective alternatives. The data can be saved in a historical database and trends analyzed with results used for building future IT investment plans. Exhibit 2, left, shows a simple example of cost accounting for a fictitious business application. Note — the figures are purely fictitious and any resemblance to reality is coincidental.

<b>Sales Support Dedicated costs</b>	<b>Capital</b>	<b>Monthly</b>	<b># months</b>	<b>Share</b>	<b>Annual</b>
<b>Hardware</b>					
UNIX	\$1,500,000	\$41,667	9	75%	\$281,250
Linux	\$125,000	\$3,472	12	100%	\$41,667
Windows	\$60,000	\$2,500	12	35%	\$10,500
<b>Software</b>					
OS Maint		\$35,000	9	75%	\$236,250
Application Lease		\$229,167	11	100%	\$2,520,833
3rd party maint		\$21,580	12	35%	\$90,636
<b>Consumables</b>					
Paper, forms		\$2,800	12	100%	\$33,600
Tapes		\$500	12	100%	\$6,000
CDrom		\$50	12	100%	\$600
Cleaning		\$25	12	75%	\$225
<b>Dedicated Staff</b>					
Database Support		\$7,417	12	100%	\$89,000
OS Support		\$12,833	12	65%	\$100,100
Scheduling		\$5,300	12	25%	\$15,900
Change Control		\$4,800	12	35%	\$20,160
Help Desk		\$6,250	12	44%	\$33,000
Benefits		\$7,530	12	100%	\$90,356
<b>Telecommunications</b>		\$350,000	12	48%	\$2,016,000
<b>Services</b>					
Disaster Recovery		\$15,000	12	45%	\$81,000
Offsite Storage		\$5,500	12	100%	\$66,000
<b>Unallocated Costs</b>		\$55,000	12	65%	\$429,000
<b>Total Costs</b>					\$6,162,077
<b>Business Units</b>					\$15,245,877
<b>Cost Per Sale</b>					0.4041799

Exhibit 2



### Investment analysis

Every department in an organization needs capital to sustain and grow the business. Usually capital resources are limited so senior management must choose those initiatives providing the best return for the business. One of the ITIL best practices is IT Investment Analysis, which provides the needed financial information for management to make informed decisions on provisioning new or enhanced IT services. Without this discipline, limited resources could be directed to projects and services that actually constrain the business rather than supporting its growth. Popular methods of investment analysis are:

- ROI — Return On Investment — widely used to determine the length of time before the cost of an acquired asset is offset with savings or new revenue/profits.
- TCO — Total Cost of Ownership is a process promoted by Gartner, Inc. to better understand the true costs of implementing initiatives. The process came to global attention when Gartner used the process to reveal the true 5-year cost of ownership for a \$2,000 PC was \$35,000 after support costs such as overhead, maintenance, upgrades, support, and disposal were considered.
- ROCE — Return On Capital Employed is probably the most popular method world-wide. It is thought to be a good indicator of the effectiveness of the organization.

Best practice dictates looking at an IT investment over a 5-year period to understand the true cost of ownership.

The work is similar to that performed in budgeting and accounting, however it is directed at a singular IT initiative. Best practice dictates looking at an IT investment over a 5-year period to understand the true cost of ownership. Spreadsheets similar to those used in budgeting are used to identify the cost of ownership. Once the analysis is completed, management can understand the total cost, compare it to business benefits gained, and make an informed decision on whether to proceed with the work. The work requires much coordination with Service Level Management, Capacity Management, and Configuration Management to ensure all components of cost are captured and accurately stated. This process is extremely important to the business in assessing the viability of IT initiatives, determining risk, and establishing priorities.

Exhibit 3 below shows an example of Total Cost of Ownership analysis for a fictitious business application. Note – the figures are purely fictitious and any resemblance to reality is coincidental.



**5-year TCO  
Business Application A**

Hardware	Capital	Annual	Year1	Year2	Year3	Year4	Year5	Totals
UNIX Server	\$450,000	\$150,000	\$150,000	\$150,000	\$150,000	\$0	\$0	\$450,000
Windows Server	\$40,000	\$20,000	\$20,000	\$20,000	\$0	\$0	\$0	\$40,000
UNIX Upgrades	\$125,000	\$41,667	\$0	\$0	\$41,667	\$41,667	\$41,667	\$125,000
Windows Upgrades	\$20,000	\$10,000	\$0	\$0	\$10,000	\$10,000	\$0	\$20,000
PCs	\$17,000	\$8,500	\$8,500	\$8,500	\$0	\$0	\$0	\$17,000
PC Replacements	\$17,000	\$8,500	\$0	\$0	\$8,500	\$8,500	\$0	\$17,000
UNIX Maintenance	\$0	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$225,000
Windows Server Maint	\$0	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$120,000
PC Maintenance	\$0	\$3,600	\$3,600	\$3,600	\$3,600	\$3,600	\$3,600	\$18,000
<b>Software</b>								
UNIX OS Maint	\$0	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	\$110,000
Database software upgrade #1	\$350,000	\$116,667	\$116,667	\$116,667	\$116,667	\$0	\$0	\$350,000
Database software upgrade #2	\$275,000	\$91,667	\$0	\$0	\$91,667	\$91,667	\$91,667	\$257,000
Database softw main #1	\$0	\$85,000	\$85,000	\$85,000	\$85,000	\$85,000	\$85,000	\$425,000
Database softw main #2	\$0	\$57,000	\$0	\$0	\$57,000	\$57,000	\$57,000	\$171,000
Application Acquisition	\$2,500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,500,000
Application Maintenance	\$0	\$500,000	\$0	\$0	\$500,000	\$500,000	\$500,000	\$2,500,000
Office Suite	\$1,800	\$1,800	\$1,800	\$0	\$0	\$0	\$0	\$1,800
Office Suite upgrades	\$2,100	\$2,100	\$0	\$0	\$0	\$0	\$0	\$2,100
<b>Staffing</b>								
DBA incremental		\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$225,000
Scheduling incremental		\$23,000	\$23,000	\$23,000	\$23,000	\$23,000	\$23,000	\$115,000
Tech Support incremental		\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$325,000
Help Desk incremental		\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$175,000
Telecom incremental		\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$85,000
<b>Telecommunications</b>								
		\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$600,000
<b>Environmentals</b>								
Consumables — paper, tapes, etc		\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$12,500
Disaster Recovery		\$5,500	\$5,500	\$5,500	\$5,500	\$5,500	\$5,500	\$27,500
Offsite storage		\$1,750	\$1,750	\$1,750	\$1,750	\$1,750	\$1,750	\$8,750
DR Annual test		\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$20,000
Floorspace charges		\$2,600	\$2,600	\$2,600	\$2,600	\$2,600	\$2,600	\$13,000
Power and Cooling		\$1,700	\$1,700	\$1,700	\$1,700	\$1,700	\$1,700	\$8,500
<b>Allocations</b>								
IT Overhead		\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	\$110,000
Corporate Overhead		\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$55,000
<b>Totals</b>								<b>\$8,647,150</b>

Exhibit 3

## Chargeback

Unlike accounting, chargeback occurs after the fact and is a methodology to equitably apportion IT costs across the user base. Where accounting relies on expense data, chargeback relies on infrastructure usage data, usually obtained from the Capacity Management team or extracted directly from the Capacity Management Database (CDB). Chargeback is considered an ITIL best practice because it forces the individual business units to control their consumption of IT services.

Since costs are itemized by cost center, the work reveals those service components that are not cost effective so better alternatives can be identified and deployed. This methodology also permits costs of unique solutions for an individual business unit to be charged back directly to the unit. IT leaders must keep in mind, however, that since the customer is paying for the services, the customer is by default given more control over the allocation of IT expenditures.

To be successful, a chargeback methodology needs to:

- Be accepted by all units in the organization. All must agree to and abide by the charging mechanisms and rates.
- Be simple, with low overhead and easily understood.
- Provide fair and accurate recovery for services delivered.
- Use a charging mechanism that fits the organization's culture.
- Have the usage details available to be able to segregate usage by cost center.
- Maximize return on IT investments by influencing customer and user behavior.

Data that cannot be directly attributed to a particular cost center should be equitably allocated across the cost center using the same algorithms as cost accounting.

Detailed infrastructure consumption data is critical to the chargeback process. In most cases the data is already being captured by Capacity Management tools. The tools must have the capability to discern a discrete user or consumer in order to segregate the data for billing purposes. The tools should have data mining capabilities so the data can be easily extracted for use in producing bills. Data that cannot be directly attributed to a particular cost center should be equitably allocated across the cost centers using the same algorithms as cost accounting.

In setting rates, one must be careful to consider the actual capacity of each component rather than the theoretical capacity. Applications consume resources in different ways, so maximum capacity of components may differ. For example one application may be written to use all processors on a machine, therefore capable of consuming 100 percent of the capacity, but another application may only be able to employ the use of a single processor on a machine, therefore using a portion of the total capacity. In another case, an application may read tremendous amounts of data, so it is constrained by the data transfer rates of the storage units. In these cases, the data transfer constraint can prevent the application from physically using all of the machine's computing capacity.

Another consideration in setting rates is to influence user behavior. If a majority of the IT work occurs during normal business hours, there may be substantial excess capacity overnight. By offering a lower rate for overnight work, the chargeback process can influence users to offload work from prime shift, effectively extending the life of the infrastructure component.

If users are not disciplined in the use of IT resources, vendor charges could exceed plans and the organization could spend substantially more until the business units can get use under control.

The bills should be clear, easily understandable and displayed on a single page if possible. The cost components should be listed at a high level rather than individual occurrence so the customer can easily understand the charges. The detailed data used in producing the bills should be kept in an easily accessible location so it can be available for justification and dispute resolution.

Chargeback is an important discipline for the organization as a whole. If a cost-per-use discipline is not already in place, organizations choosing to externally source a particular service will be at a distinct disadvantage when negotiating a contract and managing the vendor.

<b>Services for Period 8/1/2005 – 8/31/2005</b>				
<b>Service</b>	<b>Unit Increment</b>	<b>Unit Cost</b>	<b>Units Used</b>	<b>Total</b>
Mainframe daytime batch	CPU seconds	\$0.475	111653	\$53,035.18
Mainframe night batch	CPU seconds	\$0.221	47980	\$10,603.58
Mainframe online	CPU seconds	\$0.380	286754	\$108,966.52
UNIX batch	CPU seconds	\$0.570	34875	\$19,878.75
UNIX online	CPU seconds	\$0.170	13277	\$2,257.09
Windows PC support	Per PC	\$50.000	45	\$2,250.00
Help Desk support	Per Call	\$3.640	47	\$171.08
Technical support	Per Hour	\$47.000	87	\$4,089.00
Special Runs	Per Run	\$150.000	2	\$300.00
Printing	Per 1000 Pages	\$47.500	3700	\$175,750.00
Data Storage — online	Per Gigabyte	\$1.470	476	\$699.72
Data Storage — archive	Per Gigabyte	\$0.230	1297	\$298.31
Telecommunications	Direct Charge	\$23,000.000	1	\$23,000.00
Dedicated Windows server	Direct Charge	\$3,700.000	1	\$3,700.00
Overhead allocation	Percentage	12%		\$48,599.91
<b>Total</b>				<b>\$453,599.13</b>

Exhibit 4

If users are not disciplined in the use of IT resources, vendor charges could exceed expectations, resulting in substantially higher costs until the business units can get resource usage under control.

Exhibit 4 shows an example of chargeback billing for a fictitious business application. Note — the figures are purely fictitious and any resemblance to reality is coincidental.

## Which Other ITIL Processes Interface with Financial Management?

Not only does CM provide the detailed consumptions data FM needs to compute costs and bill customers, it has the capacity knowledge of the affected capacity limits of the individual infrastructure components.

Financial Management processes are tightly integrated with Service Level Management, Capacity Management, and Configuration Management. The interface to Capacity Management (CM) is probably the most important. Not only does CM provide the detailed consumptions data FM needs to compute costs and bill customers, it has the capacity knowledge of the affected capacity limits of the individual infrastructure components. That data is needed to ensure components are not over or under subscribed in the cost accounting and chargeback processes.

## Staffing Considerations

The Finance Manager must have sound financial skills. This person needs to be a people person capable of communicating well and building relationships with business as well as technical staff. The manager must understand business products and services and how IT services affect them. Over time this person will probably interface with every leader in the organization. The manager will need strong negotiation skills to be able to manage the chargeback work. He/She will need to understand the business of IT and the associated costs. The person must be well grounded in statistical and analytical discipline. The manager must have excellent vendor management skills.

A financial analyst must have strong financial, analytical and statistical skills. The person(s) must have good communication skills and be able to prepare reports easily understood by the business community. The analyst must also have good understanding of IT concepts and terminology.

A process champion is the person auditing the process on an annual basis and responsible for making the appropriate process changes as dictated by changes in the workflow. This is usually not a full time position and could be filled outside the FM team.

## Steps to Implement Financial Management

All successful projects start with a project plan. Implementing IT Financial Management is no different. A project manager with a record of success in implementing large, complex projects should be assigned. Additional staff as required by the company's project management process should be assigned at the same time. Support staff will be needed to document the progress. Since this implementation is the pilot, the support staff should be sufficient to quickly handle any anomalies during the execution of the project plan and should be the ones to make adjustments to the general implementation procedures to smooth the way for future process implementations.

### Step 1 — Gather the Data

The project team should survey the entire IT organization and discover where and to what extent FM work is being performed today.

The first step is to identify a finance manager. In most shops this should be a "full time" position and probably already performed in some form by corporate finance. Separating this function permits one to focus on the peculiarities of finance as it pertains to IT. Substantial IT knowledge is desired to ensure proper oversight of IT expenditures.

Perform a current state assessment. This is frequently done with the assistance of a consultant or facilitator, however OGC does provide a self-assessment checklist that can be used to narrow the focus of the assessment work. The project team should survey the entire IT organization and discover where and to what extent FM work is being performed today.

A tools and software inventory should also be performed. In most organizations, spreadsheet and accounting programs are already in place and being used, however chargeback applications relating IT consumption by users to expenditures may not be in place. As a result, data from the Capacity Management organization may be available to FM to support the FM processes, otherwise commercial usage chargeback packages may be required.

The gap analysis will show the areas that need process improvements or new work to be performed and where efforts are duplicated.

Once the assessment and inventories have been completed, the next step is to perform a gap analysis. The gap analysis will show the areas that need process improvements or new work to be performed and where efforts are duplicated. Staffing needs and/or skills and training requirements will be identified. The project team will identify tool needs and duplication. The result of the gap analysis is essential to build the project plan, define the work that needs to be accomplished, identify tools that need to be acquired, and understand the staffing requirements and costs.

Now that the gap analysis has revealed the changes required to migrate to the new organization, the project plan can be developed and a cost analysis completed. Staffing, tools and equipment needs will be translated into costs and included in the cost analysis.

## Step 2 — Build the Plan

Once the gap analysis has been completed, sufficient information will be available to tailor an implementation plan to attain the vision. The plan will be responsible for establishing the three major components of Financial Management — people, processes and tools. The plan will also determine the costs necessary to sustain the organization, build a preliminary budget and compare it to the current expenditures for similar function — possibly spread across the organization. The components of the implementation plan are as follows.

Determine where the finance manager is located in the IT organization. The ideal placement is as a direct report to the CIO or IT Director.

...the project plan needs to develop a process and identify a team to handle any process gaps during or immediately following implementation.

Sufficient time must be allowed to document the financial processes. The documents should have a description of all the data inputs, information outputs and work processes. A flow chart of the workflow should also be included. Much thought needs to occur to ensure all interfaces and work are identified. In addition, the project plan needs to develop a process and identify a team to handle any process gaps during or immediately following implementation. The plan must include tasks to identify and train the people performing the work. The plan will vary depending upon management's decision to staff from within or look externally for the appropriate talent. Job descriptions need to be drafted and sufficient time allocated to work with the Human Resources organization to review and adopt them.

Sufficient time must be built into the plan to train the FM team on the new processes and any other ITIL team that interfaces with FM. Many organizations have chosen to train all IT staff on FM processes since it impacts everyone in the IT organization. Some organizations choose to train their business managers on FM processes to promote a better understanding of IT costs and their impacts on changes in business processes and volumes.

Any work regarding acquisition, consolidation and/or implementation of Financial Management tools will be included in the plan. If tools are to be acquired, the project manager needs to allow sufficient time in the plan for corporate acquisition policies and procedures to be followed.

The project manager needs to develop a plan item to communicate the organization and its processes. Many organizations use their internal corporate communications team to accomplish this task. Due to demands on their talents, the project manager should schedule the work with corporate communications well in advance so project goals can be achieved.

The project should include members of the financial team so a comprehensive implementation and ongoing operations budget can be developed. In addition, these project team members will assist in identifying current expenditures across the organization that performs Financial Management for IT functions. All the financial information is then fed into the Total Cost of Ownership (TCO) document and submitted to management with the proposed project plan.

Project reports should be determined and agreed upon. Many organizations employ the use of a dashboard report, using traffic light colors (green, yellow, and red) to signify project status. Once the project plan and the budget have been completed, the project manager and the project sponsor present the plan for approval.

### **Step 3 — Execute the Plan**

#### **Assign the Staff**

The FM staff should be assigned at the beginning of the implementation project. By participating from the onset, the staff will be very familiar with all facets of the processes and business and technology data.

#### **Document and Publish the Processes**

If this implementation is a pilot, defining and writing the processes will be more work than a “normal” ITIL implementation. Interim interfaces to existing IT units have to be identified as well as those needed for end-state so work can be accomplished with a minimum of interruption while the rest of the organization rolls out. It is necessary to document the workflow: inputs, outputs, work accomplished, steps to accomplish, who does the work, who receives the work, outside assistance needed to execute the processes. It may be advantageous to employ the services of a professional writer to do the bulk of the work with management and technical staff creating just an outline to minimize disruption to day-to-day activities. Doing so ensures the processes are documented consistently in the same format and the same language (tone and wording).

#### **Acquire and Implement the Tools**

Historical infrastructure performance data and reporting tools are as important as the FM staff. The accurate reporting of service performance is critical to the team’s success. Without the right detailed data it is difficult for the staff to efficiently or effectively execute processes and procedures. Ideally a single tool will provide all the functions mentioned below. However economics may dictate that a number of existing products must be used and integrated. The Finance Manager must review the portfolio carefully, however, to ensure that data from all tools is based upon the same collection interval and that data can be easily moved between tools. Manual input of data from one tool into another can be a productivity drain and subject to errors, therefore it is desired to have automated methods of transferring data between the tools. Temporary means may be utilized until the Capacity Management team is implemented and more sophisticated tools become available.

#### **Build the Accounting and Budgeting Framework**

The budget and cost model are put in place. Generally a budget in some form is already available, it may just need more detail depending upon the new structure. Interfaces to corporate finance and financial units within the business units will be needed to obtain invoices, staffing expenses, travel, supply, vendor services and depreciation schedules. A financial calendar

Without the right detailed data it is difficult for the staff to efficiently or effectively execute processes and procedures.



needs to be put in place to determine when regular analyses and review points will take place. The calendar needs to be coordinated with the business planning calendar as both work efforts will depend on each other.

### **Identify, Define and Implement Chargeback Systems**

Usage data is gathered and analyzed to confirm original estimates and allocations. Any changes to add detail to the usage data gathering applications need to be put in place. Rates need to be determined and put in place. Reporting needs will be finalized and reports will be built and put in place. This work will require close coordination with the Capacity Management team as they are responsible for managing the Capacity Management Database (CDB). If charging is based upon business volumes, business data interfaces need to be put in place and tested, then integrated into the chargeback system.

### **Define Metrics to Measure Success**

As with all ITIL processes, there needs to be a way to measure the success and ongoing performance of the different IT units. Metrics need to be meaningful and measurable. They should be tied to business value rather than technical measures. Metrics should be fewer in numbers yet succinct and to the point, still providing management with good representation of the effectiveness of the unit. Remember that each ITIL process will have at least one metric, which will be rolled up into an overall IT report. It is necessary to keep the metrics at a manageable level as executives and managers do not have the time or the desire to read through many pages of metrics reports. In FM, most metrics will be related to financial performance.

It is necessary to keep the metrics at a manageable level as executives and managers do not have the time or the desire to read through many pages of metrics reports.

### **Build the Training Materials and Execute the Training Plan**

As stated previously, sufficient time must be built into the plan to train not only the FM team but any other team that interfaces with Financial Management. To accomplish this, it will be necessary to develop training materials based upon the processes previously drafted. Generally the use of a presentation tool such as Microsoft PowerPoint or Adobe Acrobat is desirable since it permits self study or group presentations. From previous experience, self study seems to work well in a busy IT environment, however managers must ensure that each member of their staff has sufficient time to read and comprehend the information. Some organizations have opted to develop online training facilities, permitting staff to go through the material in a computer-based interactive environment.

To ensure retention, testing should be performed. Passing the test should be made mandatory. Some organizations offer financial incentives, others tie success to future compensation and include them in staff MJOs.

Once again, it cannot be stressed enough that organizations will experience fewer missteps when they spend more time testing. In most cases, the workflows will be substantially different than the work performed today; therefore it is necessary for each staff member to understand the work for which he or she is accountable and the value of the work to the organization.

### **Implement Reporting and Exception Processes and Procedures**

Financial performance cannot be assessed without some type of reporting. Two types of reporting need to be put into place.



The FM team and those staff assisting with corrective actions will need more detailed reporting to identify problematic service areas and to track results of actions taken.

High-level reporting is used to keep senior management informed of service quality. These reports are generally in the form of a “dashboard,” using the colors red, yellow and green to depict service quality. It is important that each service have two measures - current status and trend. In this way management will understand the current status and where it is trending. For example, a service with a yellow current service indicator and a green trend indicator may need less attention than a service with a green current service indicator and a yellow or red trend indicator.

The FM team and those staff assisting with corrective actions will need more detailed reporting to identify problematic service areas and to track results of actions taken.

## Step 4 – Initiate the Ongoing Work of FM

Once the initial budgets and accounting spreadsheets are put in place, work to automate and produce financial reports should be started. Intelligence should be built into the reports to alert the FM team when financial targets are threatened and when substantial changes in user behavior occur. This proactive trending permits corrective actions to be taken before financial targets are missed.

Financial review meetings should be scheduled on a regular basis to cover results. These meetings are normally held monthly or quarterly. The data presented should be concise and only address changes or trends in usage and determine corrective actions. This meeting should not be one of reading the financials line by line, citing the results.

The continuous improvement process will be engaged on an annual basis to review the processes and make adjustments where necessary. This work is performed by the FM process champion.

## Step 5 – Perform Post-implementation Review

Six to 12 months after completion, a post implementation audit should be performed to determine if the new processes are being adhered to and if the new organization is delivering the expected business benefit.

At the end of the implementation project, the project manager should quickly put together a “lessons learned” document that identifies any changes that should be made to the process to facilitate future process migrations. Any implementation process changes should be made at this time.

Six to 12 months after completion, a post-implementation audit should be performed to determine if the new processes are being adhered to and if the new organization is delivering the expected business benefit. Some of the questions that should be asked are:

- Did we accomplish what we set out to do?
- Are the metrics measuring the team’s performance valid?
- Is the team communicating successfully with the organization in accordance with the FM processes?
- Are the interfaces working smoothly?
- Did we meet expectations on benefit delivered to the business?
- Does the organization as a whole have a better understanding of the makeup and costs of IT services?
- Are we capturing the right data and at the right level of detail?
- Are the processes accepted and observed by staff, both internal and external to FM?
- Are IT services more effectively used due to changes in business unit usage behaviors?

## Success Factors

Management needs to be very supportive of training, implementation and execution efforts.

The business work must continue in spite of the changes so when gaps occur it is essential that the gaps can be addressed before service problems occur.

- Management needs to be very supportive of training, implementation and execution efforts. Managers at all levels need to be ITIL cheerleaders.
- All IT and business units must be willing to work within the new processes.
- Business units must want to support Financial Management disciplines.
- The right people must be in the right positions to do the work.
- Effective tools are in place to collect the needed details of infrastructure usage and the tools have the capability to store historical data.
- Patience is needed to allow the team sufficient time to become proficient in the new processes and for old behaviors to die.
- Processes and pre-defined teams to execute them need to be in place and ready for dealing with gaps once implementation is completed. These teams will be used until all ITIL implementations have been completed. The business work must continue in spite of the changes so when gaps occur it is essential that the gaps can be addressed before service problems occur.
- Compensation policies should be adjusted to reinforce ITIL practices and drive the appropriate behaviors. Common goals should be in place for all ITIL processes, especially financial and quality.

## Potential Inhibitors

Unrealistic expectations by management can erode confidence in the processes.

- Unrealistic expectations by management can erode confidence in the processes. One must remember that a large number of companies have successfully implemented ITIL framework and best practices, many considering the new organization a competitive advantage. To succeed, they ensured management expectations were set realistically.
- Some management may view this unit as purely overhead and superfluous, making it difficult to sustain the team and its value to the organization.
- Lack of patience resulting in partial or cancelled implementation. It takes staff — and those who interface with the organization — time to become familiar with new workflows. It is essential to allow sufficient time for gaps and issues to be addressed and processes to mature.
- Lack of consistency in allocating unallocated costs across the cost centers.
- Permitting smaller business units to employ less-costly solutions that may look attractive from an individual business unit perspective but are more costly to the organization as a whole.

- Not enforcing adherence to processes — falling back to old behaviors. Two processes are more confusing and probably more detrimental than a single bad process. It is difficult as a surprising amount of work is accomplished through the influence of friends, but managers must resist the temptation and let the processes work. It may not seem like it at the time but when all implementations are completed and the staff is familiar with the new processes, work will flow through the system much faster. For example, one company saw the time needed to install a software change reduced from 45 days to 2 days due to ITIL process improvements.

## The Bottom Line

Implementing the Financial Management framework and best practices takes work and determination but the benefits make it worth the efforts. Once processes mature, your customers will be delighted as expectations have been set, they understand what service they will receive and the roles and responsibilities of the parties involved. Management will applaud the effective use of IT resources achieved by efficiencies produced through the right-sizing and business justification of the levels of service provided.

## TeamQuest Addresses ITIL Financial Management for IT

TeamQuest software directly supports ITIL Financial Management processes.

TeamQuest IT Service Analyzer enables IT organizations to generate chargeback reports directly from the tracking data and avoid adding a second separate system for billing. The business can easily match its bills to the original data, avoiding questions and concerns about incongruence and potential errors associated with having a separate billing system.

TeamQuest IT Service Analyzer and TeamQuest IT Service Reporter give you the ability to automate reports against historical data and track actual usage to your technology plan. With this data, you also use TeamQuest Model to easily prepare reports that visually show any deviation and how it impacts your plan today and the rest of the year.

TeamQuest tools support Financial Management by:

- Enabling IT organizations to generate chargeback reports directly from the tracking data and avoid adding a second, separate system for billing
- Allowing business units to easily match bills to the original data, avoiding questions and concerns about incongruence and potential errors associated with having a separate billing system
- Automating reports against historical data
- Tracking actual usage to your technology plan
- Providing the ability to prepare reports that visually show any deviation and how it impacts both your plan today and predicts the impact for the rest of the year

As with all major projects, proper planning is key. TeamQuest recommends following the ITIL Financial Management for IT implementation steps mentioned earlier in this paper.

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