

Service-based IT Cost Modeling and Identifying Cost Saving Opportunities

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Introduction

Responsible service provision requires an appropriate balance between quality and cost. But this balance cannot be achieved without a clear understanding of the service costs and the relationship between cost and service levels. With this knowledge comes the power to make decisions on where and how to spend to reach the desired balance.

This whitepaper describes a consistent approach outlining how to:

- create a cost model for a service and thereby
- understand what contributes to costs
- provide levers and/or options for the business to control costs within acceptable service levels.

The major activities in this approach are:



The availability of the right information, along with processes and procedures for capturing and maintaining the information, is critical to the success of this approach. However, we have found that many customers do not have all the information they need and their information processes usually need to be strengthened. Hence, you may want to conduct a pilot first with a small subset of services, identifying the information and process gaps, and creating and executing plans to address the gaps, before applying this approach to a broader set of services.

Step 1: Identify Target Services

A non-trivial amount of effort is required to perform a cost analysis of a service. We have found that it typically takes 30 to 60 hours of effort to create a Cost Model depending on whether the right information is available. Therefore, the approach should be applied to services where there is a strong likelihood of finding cost savings; and, where the business is willing to discuss cost / service level trade-offs. (If the business insists on the highest quality of service, it is unlikely they will agree to cost saving



measures that negatively impact service levels.) To identify the target services, interview your Subject Matter Experts (SMEs), Business Relationship Managers, Service Owners and Service Level Managers as they will have an intuitive feel as to which services are likely to produce savings.

Step 2: Define Service Levels

For each service, the scope and current service levels need to be formally documented. This becomes an input into identifying cost savings and also the baseline for discussing the business impact of specific cost savings opportunities. Information about the current service levels may come from the Service Catalog, once it is fully published; it may come from an existing Service Level Agreement (SLA); or, it may come from discussions with the Service Owners.

Step 3: Calculate Service Costs

In order to create a service cost model, you first need to understand the supporting services. The service cost model should use a bottom up approach of first determining the unit cost of the supporting services and the number of units to be applied to the target service being modeled. For example, the email service may be supported by the application hosting service and the storage service. You will need to determine the cost of the application hosting service and the storage service first before you can determine the cost of the email service.



The cost model for a specific service usually consists of the following main parts:

• **Cost of the Underlying Assets**. There are a couple of different approaches for determining the cost to purchase / replace the assets that comprise the services. Accounting may have depreciation tables that track the annual cost of the capital investment. However, if the projects are fully depreciated or the depreciation information is not available, you may want to



try a "bill of materials" approach. In the "bill of materials" approach, you determine the cost to replace the service components / assets, e.g. replacing the hardware, and then spread the total cost across your organization's standard depreciation duration, e.g. let's say the total cost to replace the hardware for a service was \$30,000; if costs are generally depreciated over 3 years, then the annual bill of materials cost is \$10,000.

- **Operating costs**. These are costs that re-occur each year, e.g. annual software maintenance costs, ISP network costs, electrical power for data centers, diesel for generators, etc. Some organizations mistakenly overlooked these costs resulting in an under-stated cost model.
- Labor. Labor costs should include both employees and contractors. If you do not have a timekeeping system to determine how labor is allocated, then you may need to survey your managers to get a rough ball park on what percentage of effort is going to support and operate services versus going to projects (where the labor may already be counted as part of depreciation).

Step 4: Identify Cost Savings Opportunities

Analyze the costs and service levels to identify cost savings opportunities. The cost savings may take many forms:

- **Recurring Hard Savings.** Run-rate savings (current spending or next budget cycle). Reduce variable costs on recurring basis, proportionate to volume, in the current or next budget cycle.
- **One Time Hard Savings**. One-time hard savings (current spending or next budget cycle). Reduce fixed costs by a set amount in the current or next budget cycle/quarter.
- **Reduced Future Costs Savings**. Reduced Future Costs Savings on what would have been spent during out years (e.g., renegotiating a three- to five-year maintenance contract reduces savings in out years), which should be captured and tracked, but don't have the same cash-flow impact as savings in the current or next budget cycle.
- **Soft Savings**. Improvements in efficiency that won't be realized as a direct increase in cash flow, but will contribute to increased productivity. This can happen, for example, as a result of reducing a staff member's daily workload by some proportion for a given task, but not enough to enable a reduction in head count. The time that's been freed up can be reassigned to another task in the department.
- **Expense Deferral**. Taking an action that will result in an expense being due and payable at a future date, rather than during the current time period. Many cost optimization efforts make the mistake of not differentiating between putting off a cost into the future and making structural changes that will reduce the long-term run rate.

Ideas for cost savings can be gleaned from reviews of SLA achievement reports, the Continual Service Improvement register, discussions with Business Relationship Managers and Service Owners.



Create recommendations, based on a deep understanding of the customer's needs and business circumstances. Try to quantify the business impact of the cost savings.

Step 5: Review with the Customer

The next step is to review the recommendations with the business. Keep the message simple (you do not need to show the entire cost model, just the bottom line or key cost drivers), easy to understand, and avoid technical jargon. Make sure you are communicating the business value the customer is getting for their money. Business value may consist of financial and non-financial aspects, e.g. regulatory compliance, brand positioning, customer satisfaction, etc. You should also highlight potential risks of lowering the service level, e.g. increasing security risk or continuity risks or potentially impacting other services. Where possible, suggest ways that IT (or the business) can minimize the effect of any negative business impact, e.g. through process improvement, etc.

During the meeting with the business stakeholders, there may be some discussion about adjusting the proposed service levels. This may result in homework to determine the impact on the estimated cost savings. An iterative approach may be required to present the alternative service level(s) and associated cost savings until the business decides on a direction.

Step 6: Create and Execute Plans to Optimize Cost

Based on the results in Step 4, a formal plan should be defined to transform the service from the current service level(s) to the new service level(s) that represents the optimized cost. These plans are typically non-trivial and may require upfront capital investment and time to execute. The high-level plan should be reviewed with the customer and IT management to ensure that the upfront investment still makes sense given the expected future cost savings.

The plan will follow the service management lifecycle by including the detailed design of the improvements and transition of the improvements leading to a new operational state. If appropriate, a Project Management methodology should be applied to manage the execution of the plan through the lifecycle stages, according to your organization's processes and policies.

Conclusion

This whitepaper described an approach for service-based IT Cost Modeling and identifying and acting upon the cost saving opportunities. This approach can be used prior to or in parallel with a cost transparency / show-back / charge-back IT Financial Management journey to prepare IT to track and understand service-based costs and help prepare the business for taking a more direct role in making IT cost decisions. It provides the business with levers to control their IT spend.



IT Cost Modeling is not simple - information may be missing and creative solutions may be required to estimate certain costs; policies need to be established on how to categorize and track costs, and repeatable procedures for creating and maintaining the cost model must be established. However, if IT Cost Modeling is done well, the benefits of true transparency and effective cost controls can far outweigh the challenges.

Third Sky can help you pilot this IT cost savings approach, provide the expertise and experience, and teach you how to become self-sufficient in this area.

About Third Sky

Third Sky is a full service IT Service Management consulting, education and technology provider with offices in San Francisco (HQ), Boston, Charlotte, Detroit, New York, San Diego, Seattle, Colorado Springs, and Washington, DC. Our approach to Business Driven IT leverages frameworks such as ITIL, CobiT, PMBOK and ISO/IEC20000 to align the business strategy with IT objectives to both reduce cost of delivery and improve customer satisfaction.

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