

The Missing Link:

Capacity Management and Business Requirements

by Jan D. Vromant

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In March 2003, I was training some Pemex¹ executives in IT Service Management in Mexico City. I found out that they were in the middle of their IT budget exercise. They told me that the Pemex budget is consolidated by April, because it has to be approved by the Mexican Senate. I asked the participants if they were aware of the Pemex strategic plans for 2004. "No, that comes later ...", was the answer. My obvious follow-up question was, "How can you possibly make a coherent IT budget if you are not aware of the strategic needs and requirements of the business?"

A major car manufacturer's marketing group figured that a great television advertisement during the Superbowl would really increase the visibility of a particular brand. Because of confidentiality concerns, the marketing people did not inform the IT people ahead of time. The day of the Superbowl, the TV ad was indeed great. However, the ensuing hits on the web site of that automobile brand started to come in at a rate of more than 50 times the normal volume. The web servers and the routers buckled under the heavy loads, and failed. The ensuing yelling and accusations of 'sabotage' and 'incompetence' were not the signs of a happy family.

Missing Link

Why do IT folks have such a hard time reflecting required capacity in their budgets? Why is it so difficult for them to bridge the gap between business requirements and ensuing IT capacity needs? The two examples above illustrate a blatant lack of communication and a missing link between Business Requirements and the Capacity Management process. There is a failure to understand the relationship and the cascading effect from business requirements to capacity requirements. ITIL® helps in restoring this missing link, as well as the link from capacity requirements to budgeting needs.

In most companies, the budget is a carefully crafted political compromise. When established, it determines the capacity that is being used by the IT operations. The capacity then determines the services and the corresponding service levels that IT provides. The provided services then often fall short of the expectations and the needs of the business users. This is the world upside down! Capacity requirements should determine the budget, and not vice versa.

¹ Petroleos Mexicanos - national oil company of Mexico

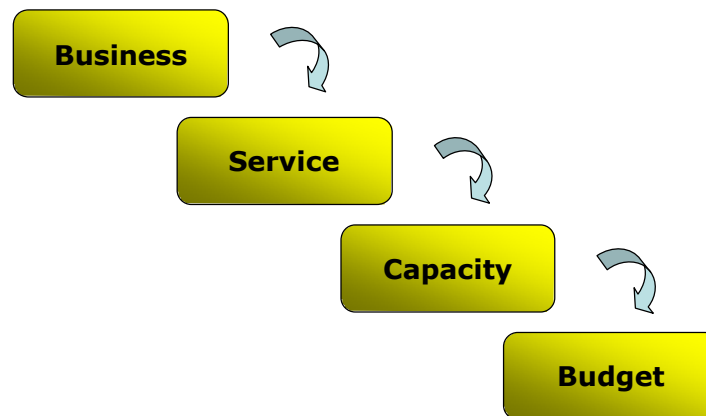
Cascade

A marketing group of a major US company decided to plan a significant advertising campaign for the second quarter of the fiscal year. The sales group hired 200 people to handle the additional load in the 'sales funnel'. This meant 200 laptops, 200 email accounts, an additional Exchange server, 200 Siebel licenses, another Siebel application server, and other services, for which the capacity [and the corresponding budget] was not planned. As the Sales and Marketing group failed to timely inform the IT group, the result was 'fire-fighting' in the IT operations.

The correct sequence of events should have been a 'cascading' effect:

1. get information about the expected increase in personnel [when will they be hired, how many, permanent or temporary, where];
2. identify the IT services needed to support the business requirements [CRM², email, RAS³, etc];
3. identify the capacity needed, based on the configuration needed to support a service [additional Exchange server, RAM and CPU capacity, backup needs, bandwidth, routers];
4. based on the increased capacity estimates, prove the cost and demand the budget.

Cascading Requirements



The above scenario is so obvious that it would be almost idiotic to point it out. Unfortunately, "common sense isn't!" IT people are wrapped up in trying to get the upper-hand of their reactive behavior and attempting to get into a proactive mode⁴. As a result, they are not following the above logical decision-making path when thinking about capacity.

² Customer Relationship Management applications

³ Remote Access Service

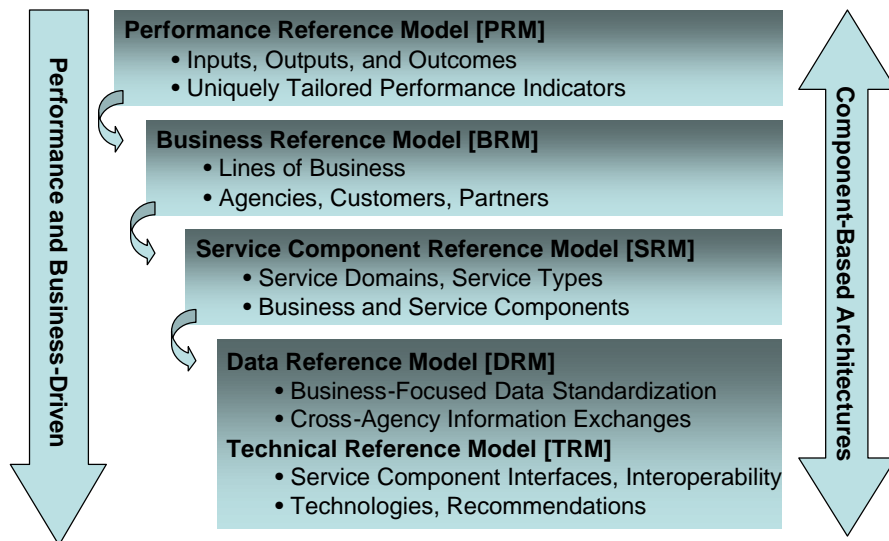
⁴ Another explanation is that some IT people want to be fire-fighting heroes and are paranoid keepers of their knowledge. Some feel psychologically rewarded when the organization is reactive instead of proactive.

The way to break through this vicious cycle is to

1. get a timely understanding of the business requirements by having IT management involved with or at least thoroughly informed of the business decisions;
2. break the business requirements down into the needed IT services by establishing a Service Catalog, have Service Level Management in place to correctly identify service levels, and have the IT architecture designed from a point of view of services;
3. make sure a good Configuration Management is in place with the proper linkages of the Configuration Items, so that the increase in service levels [e.g., availability and performance] are matched by a corresponding increase in capacity;
4. have the Financial Management process tie in to Configuration Management to show the immediate budget adjustments.

A good parallel to the concept of this cascading approach is the way the US Federal Government is mandating the use of a Performance Reference Model, cascading down to a Business Reference Model, followed by a Services Reference Model, and finally a Technical and Data Reference Model⁵.

Federal Enterprise Architecture [FEA]



ITIL

ITIL provides a collection of best practices, focusing on the mandate for the IT group to deliver a quality service to the business customers by targeting the IT processes. The recommendations of ITIL, which are common sense, and presented in an organized way, center around the balancing of the *expectations* of the business customer with the *abilities* of the IT group. The ability of the IT operations to deliver

⁵ See the Federal Enterprise Architecture web site at <http://www.feapmo.gov> for further details

a particular IT service at a required level is related to the capacity of the IT infrastructure; this capacity is determined by performance thresholds, and the capacity needs should serve as the basis for the IT budget. ITIL provides the guidelines around the building blocks of the cascading effect.

Commitment, Planning, and Belief

The correct cascading effect (business needs > IT services > capacity > budget) is difficult to implement, because there is an absolute need for executive commitment to reverse the existing cycle, where the budget determines the capacity.

Another hurdle is the need for planning from both the IT and the business sides. This is notoriously difficult and the communication around the planning is often deficient.

A final obstacle is the mental shoulder shrugs that IT Service Management consultants are getting from IT directors when evangelizing a focus on processes. Manufacturing departments have proven the absolute link between process control and quality. However, in many cases, IT operations haven't gotten the message yet. Typically, some serious disasters have to happen before best practices, as advocated by ITIL, are implemented.

The cascading effect from business requirements to service requirements to capacity requirements to budget has to be respected and conceptually integrated into the IT processes, so that the resulting IT operations can provide the services at the desired service levels in a proactive mode. The IT director should not feel unreasonable budget pressure. The business side should not feel frustrated with the inability of IT to keep pace with the business' requirements. Business and IT should be a happy family, right?

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