Can IT Financing and Management Models Survive IT Change?

SOA, virtualisation, Cloud, PaaS, IaaS – Service Models under pressure

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In a nutshell:

The models used for businesses to create IT budgets have not changed significantly in a generation. The advent of new models for the production of applications and their operational deployment, especially virtualisation and SOA, are causing stress when budgets are fixed in a way that reflects static IT infrastructures, i.e. the application / server / storage silos that have heretofore been the mainstay of IT service delivery. Is it time for the way business pays for IT to change?

Key points:

- The use of new IT models, especially SOA and 'virtualisation' are changing the way IT services are built and delivered.

- There exists great potential in the new models to offer flexible services that can be manipulated rapidly to meet changing business demands.

- Flexible IT utilisation requires IT budgets to have similar flexibility. Only with such changes can new systems deliver on the significant opportunities to reduce operational IT costs and increase resilience.

Whether or not you believe that IT is about to experience a revolution, it is clear that a number of the fundamentals of how the IT infrastructure is built are changing. Many technological and operational developments are altering the way applications are developed and deployed. Everything from innovations in how applications are designed and coded, through to the methods used to deploy running applications are transforming at a pace rarely experienced in the world of computing.

On the application creation side it is now the case that the adoption of SOA principles allows functional components to be developed rather than an entire application. This architecture thereby potentially allows individual functions to be utilised by multiple systems rather than simply by the application for which they are coded, as has been the case in traditional application 'silos'.

Another major factor influencing the deployment of IT systems is "virtualisation". When deployed on virtual servers, individual applications, along with all the associated middleware and Databases, are no longer fixed to run on specific server hardware. This approach potentially allows great flexibility to be incorporated into the running of systems as well as providing the opportunity for multiple applications to be run on a single server.

With so much potential in the technologies available to build and run IT applications, a major question then shifts to the support side of the stack, especially the way IT is financed and operated. In essence both SOA and virtualisation make it possible for systems to be built and run much more flexibly than in the past. They also force the concept of server, storage and application resource sharing as something to be considered on both operational and financial grounds.

 But whilst operationally and even economically such developments make sense, there is evidence that they may not fit so comfortably with traditional IT budgeting models. The idea of sharing or pooling resources can also stir up internal political hackles. In the light of such high profile developments, can traditional budget models survive the revolution?

Until now much IT spending has been predicated on building / acquiring individual applications along with the supporting server hardware, storage and middleware software. These costs have then been coupled with some estimation of the operational overheads to produce an IT budget. Frequently such a budget may have been met by the end user of the application / service being delivered.

This approach to budgeting for IT systems can make it difficult for shared systems or virtual server pools to be utilised for IT service delivery. This is especially the case in scenarios where existing platforms are to be reused to run not just the original service but possibly to host other applications. Internal political conflicts are by no means unknown where pooling results in applications being run for the benefit of another department that did not help meet the budget provided for the acquisition of the original resources.

Then there is the question of how to pay for a virtualised data centre where any server can be used to host any service and where storage pools exist housing all data. Is this a complete nirvana or a budget nightmare when users demand total transparency on costs and who is paying for what?

If an organisation can untangle the internal politics that comes as part and parcel of IT budget allocation, or the "cost blame game" as it is sometimes termed, then it will be in a much better position to ensure that IT resources are managed in a fashion to more accurately reflect business needs. Clearly there will be a requirement for more sophisticated monitoring tools as well as a demand to put in place clear reporting systems to ensure performance indicators are reflected.

Even more important will be the need to ensure that business needs drive resource allocation rather than leaving everything down to just the IT administrators. For the IT staff to start making such value judgements without the active participation of business managers will result in culpability wars without end. Such virtualised data centres and transparent IT resource pooling may well prove to be the catalyst for charge back models to take a much more prominent place in the IT budgeting processes.

Such changes to IT budgeting are needed for IT to operate as efficiently as possible. Should "Cloud" services become part of the equation then an even more dramatic change to IT budgeting will be required, especially should there be interest in utilising "pay per use" models for long term IT service delivery. Without significant changes to business – IT budget relationships it will be very difficult to optimise IT service delivery or to use external suppliers except in niche scenarios.

Enterprise IT budgets have existed in their current forms for a long time with few significant changes. It is very likely that the changes taking place in IT service building and delivery will create substantial pressure for IT budget change. Such changes will not be straightforward, even with considerable dialogue exchanges between business and IT managers. Indeed, they could well be fraught with difficulty but they are needed to ensure that business gets the IT services it needs and that IT be seen as the important supplier it is. Without such budgetary changes IT evolution will be slowed and, ultimately, business advantage will be reduced.

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