



Cost Reduction and Containment: New Perspectives on Familiar Challenges

Industry Context

Many CIOs are seeking to provide ever more sophisticated services on static or even reduced budgets. They are also engaged in an ongoing battle to reduce the cost of supporting the business ('keeping the lights on') in order to fund new projects that drive business growth. New technologies such as collaboration and virtualisation are creating opportunities for CIOs to achieve these objectives, while also supporting their aspirations to align IT more closely with the business.

Opportunities for cost reduction

According to the Economist Intelligence Unit, the main role of CIOs is moving from cost efficiency to revenue growth. Nonetheless the expectation of CEOs is that cost efficiency will still be the predominant role of 31 per cent of CIOs in 2009. When seeking cost efficiencies, the CIO has two areas to consider: IT costs and costs that occur throughout the business.

IT costs include all the services, hardware, software, licences and staff that are essential to keep the lights on, and they represent 60 to 90 per cent of most IT budgets. These costs are typically targeted when decisions are made about cost reduction. However, there are hidden dangers in the methods used to calculate IT costs. One example is outsourcing which often results in an initial cost reduction, followed by rising costs driven by the need for process improvement or innovation.

Another example is the fact that many companies do not calculate the business benefits that result from IT projects, which usually focus on innovation and are managed separately from other IT budgets. Failing to calculate the business benefits of an IT project could reduce its perceived importance and result in cost reduction decisions being taken that inhibit business growth. In addition, companies often take into account only the IT people required for a project, not the resources that will be needed from other parts of the business. In this scenario, reducing IT project costs will increase the pressure on IT budgets by failing to allocate – and then proportionally trim – the necessary budgets from business units.

Costs that occur throughout the business include those related to employees, the workspace, services and transport. The potential to reduce these costs is usually much greater than any savings that can be made from the IT budget alone. At some point, IT support will be needed to help reduce these business costs with technologies such as automation, virtualisation and collaboration that enable the organisation to do more with less, faster and more innovatively.

Reducing or avoiding cost

Although most organisations tend to focus on cost reduction, it is also important to maximise and measure opportunities to avoid cost.

Cost reduction is a finite process. When a company has reduced its bottom-line costs as far as possible, it has to pursue top-line growth which, in turn, increases bottom-line costs again. Importantly, the size of these cost increases will depend on how much the business model has changed. One of the pitfalls associated with calculating IT cost reductions is to assume that all other aspects of the business will stay the same. Since this is rarely the reality – for example, business growth will require IT to support more employees – any cost cutting exercise must look behind the figures and examine the true role and value of IT in the business.

Cost avoidance is particularly valuable in helping companies to prepare for periods of growth. In a growth situation, it is virtually impossible to reduce costs in absolute terms. Changing the business model – for example, by automating business processes and providing employees with real-time collaboration tools – can help companies to ensure that costs increase more slowly than they would have done previously. Cisco has avoided costs totalling \$2.5 billion per year since 2000 by implementing new processes and technologies.

Cisco's Perspective

Cisco uses a 'Core versus Context' model to support decisions on issues such as innovation and outsourcing. The model was first applied in IT and is now used throughout the company.

Cisco classifies IT activities as either 'core' or 'context', where 'context' refers to activities that are mature and can be outsourced, such as contact centre operations, and 'core' refers to services such as enterprise architecture whose strategic impact makes them critical to the business, or services such as emerging technologies which are at a point in their lifecycle that requires close management by skills within Cisco.

To increase the percentage of funding available for innovation at Cisco, the IT organisation continually moves resources from context to core (see Figure 1). For example, the company's investment target for emerging and advanced technologies within core is currently US\$10 billion. The IT 'sweet spot', or the point where the IT organisation can have the biggest impact on helping Cisco to achieve this target, is in selecting activities for strategic outsourcing (context) in order to fund the deployment of new technologies (core).

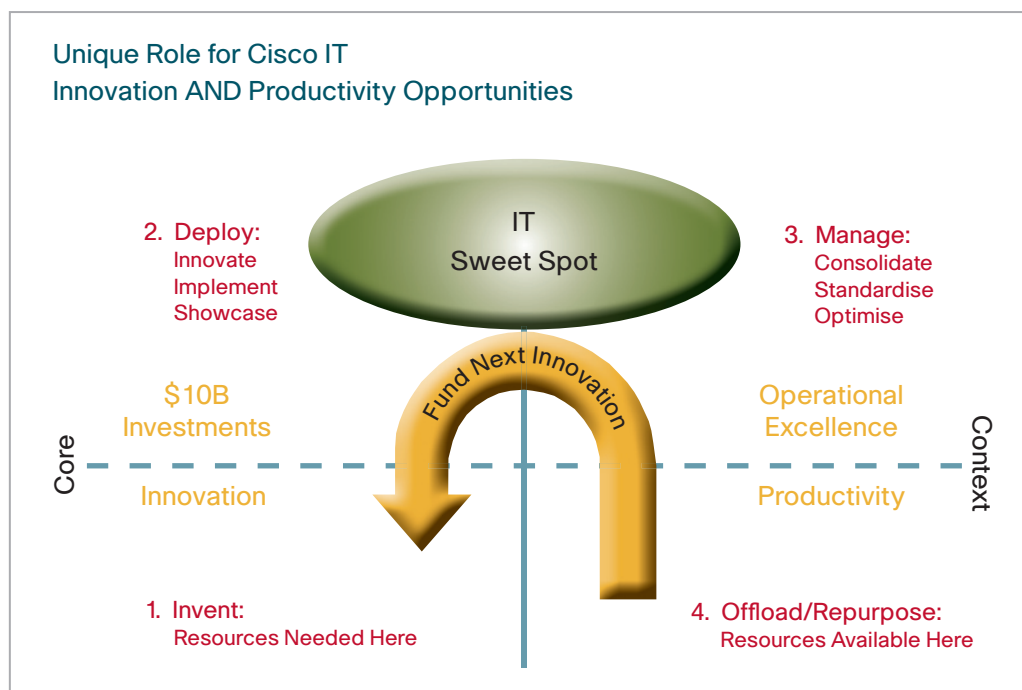


Figure 1: Increasing funding for innovation

Technology Solution

Virtualisation is an important technology because it enables IT organisations to utilise resources more efficiently, either by segmenting one device so that it appears to users as multiple virtual devices or by making multiple devices appear to users as one virtual device. The virtualisation of IT assets – servers, storage devices, appliances, network, security, business applications and so on – is not new. However, the emergence of a high-speed, robust, global networking platform has removed the geographical boundaries from the technology, making it more useful to large businesses.

Virtualisation helps to cut or avoid costs by:

- Re-using or optimising the use of IT resources
- Providing a consistent user experience across the organisation, thereby reducing the support and training needed for IT and non-IT staff
- Reducing the risk of deploying new services
- Reducing the time to deploy new services
- Reducing power consumption.

It is also possible to virtualise the skills of employees such as contact centre agents or those with special expertise such as financial experts. This reduces or avoids costs by:

- Decreasing staffing and real-estate requirements
- Improving customer support, resulting in higher customer satisfaction, potentially higher revenue and reduced churn
- Making companies more responsive to business need because skills or support are available 24*7.

Like virtualisation, **collaboration** offers companies many opportunities for cutting or avoiding costs. By giving employees a wide range of real-time communications capabilities, companies can expect to improve productivity as well as employee and customer satisfaction. Effective collaboration can further reduce costs and enhance business sustainability by reducing corporate travel.

Process automation is another important source of cost reductions throughout the business, and an approach that Cisco has used very effectively. Examples include:

- The Cisco E-Sales portal, which eliminated many manual processes and integrated all sales-relevant information and applications, creating a single end-to-end sales process. The portal has increased the accuracy of forecasting data, improved productivity and enabled sales people to spend more time selling to their customers.
- Cisco's Web-based applications for expenses and travel reservations have automated these two time-consuming tasks, saving time and improving productivity.
- The deployment of CRM and IP contact centre applications has helped to enhance the customer experience, cut Cisco's support costs, and reduce customer churn.

Virtualisation, process automation and collaboration combine to help companies effect a transformation in their business. As a result of deploying such technologies, companies will be better placed to manage costs while becoming more productive, efficient and innovative (see Figure 2).

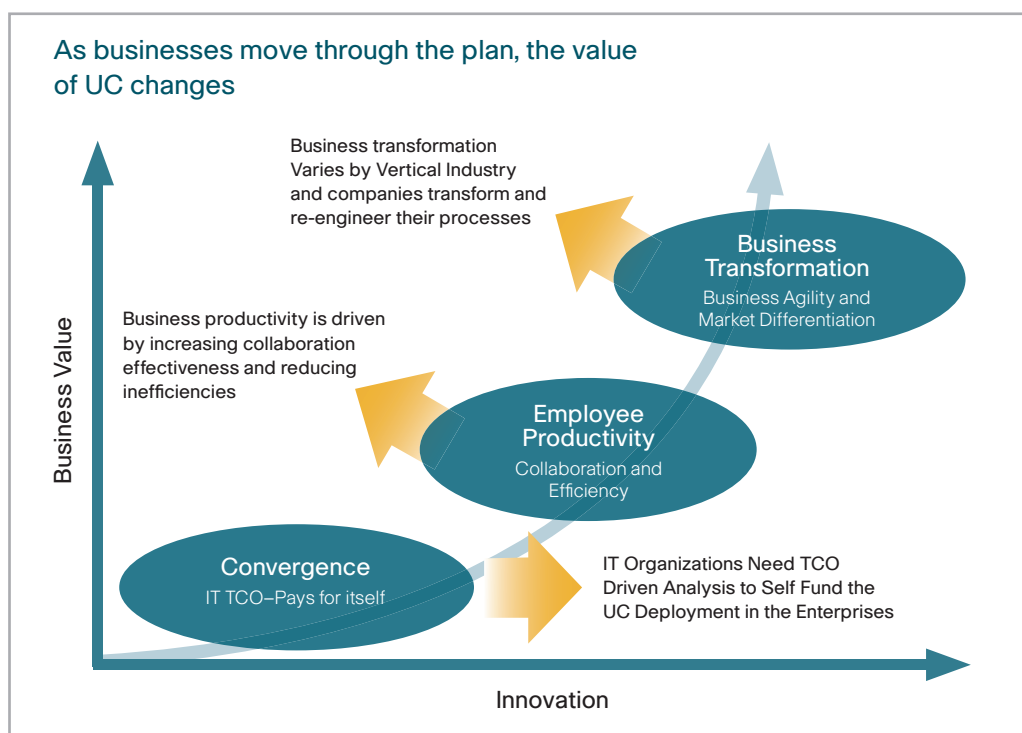


Figure 2: A cost-effective business transformation

Cisco's entire business also benefits from the **architectural approach** used by its IT organisation. An enterprise architecture provides an effective way of linking IT infrastructure to business objectives and processes. It enables faster and lower-cost systems integration, provides a framework for virtualisation, and offers a consistent user experience throughout the organisation.

The Cisco Experience

Virtualisation

Through storage virtualisation alone, Cisco has reduced the total cost of ownership per megabyte of storage from \$0.12 in 2002 to \$0.035 in 2005. The company has also achieved maintenance cost reductions of over \$4.3 million per year for over three years. Other benefits include higher availability, and improved provisioning speeds and storage management. When combined with parallel gains from similar exercises in other areas of the data centre, these benefits not only yield massive cost savings, but also contribute to the creation of a common virtualised infrastructure that enables information to be placed into any of the company's workflows or business processes.

In early 2007, Cisco IT had deployed more than 1500 virtualised servers, which produced cost avoidance and savings valued at a cumulative total of nearly US\$10 million (calculated as of mid-2007). Approximately 70 per cent of the virtualised servers were new deployments that avoided the purchase of new physical servers and associated hardware and cabling. The remaining 30 per cent of deployments were existing physical servers that were reconfigured as virtualised servers to support more applications.

Cisco IT estimates that a virtualised server costs approximately US\$2000 to deploy, compared to US\$7000 for a standard physical server with two CPUs. Having fewer physical servers also lowers costs for operation, management, maintenance and support.

Collaboration

Using IP telephony as an example, it is possible to demonstrate the benefits of collaboration technologies in terms of cost reduction, productivity gains and business process transformation. Cisco has analysed return on investment data from 37 customers in the insurance sector, which showed:

- Cost reductions ranging from 20 to 40 per cent on internal telephone calls, line rental and maintenance
- Potential improvement in employee productivity from two to 10 per cent, or one to four hours per week
- Potential business transformation, per applicable business process, of 10 to 40 per cent; examples included improvements to customer service processes, cross-selling and product development efficiency.

Another example from the Cisco Services organisation shows the benefits of using the full Cisco Unified Communications portfolio. Faced with escalating department-wide travel costs and environmental concerns, Cisco Services, Europe, has changed how it collaborates. Face-to-face meetings are now the exception, not the rule, and the introduction of TelePresence in summer 2007 saw a reduction of 14 per cent in travel-related expenditure in the following quarter. An overall annual reduction of 20 per cent is forecast for 2008. To find out more, please read "Building a culture of collaboration services in Cisco services" at:

http://www.cisco.com/en/US/products/ps9599/prod_case_studies_list.html

Reducing costs to invest in business growth

This paper has explored ways in which to reduce and contain costs, such as:

- Seeking opportunities across the business – not just in IT
- Using an enterprise architecture to link IT infrastructure to business objectives and processes
- Virtualising the organisation's physical IT assets
- Deploying collaboration technologies to improve productivity, reduce operational costs and drive innovation.

Adopting this approach can help CIOs to reduce costs across the enterprise, maintain operational excellence on static or reduced budgets, and increase the funding available for innovative projects that enable business growth.



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