Business model innovation – the new route to competitive advantage.

Part of the CIO implications series
Introduction

While pressure to control costs and maintain operational efficiency is still a priority for businesses of every size and across every industry, most are reporting a renewed emphasis on top-line growth. Globalisation and technology advances are giving rise to an unprecedented level of competition while creating extraordinary opportunities to differentiate. For many companies, growth – perhaps even survival – will depend on innovation. Today’s leading organisations know that execution is critical in order to gain competitive advantage. They know that profit and opportunity lie ahead for those who can step outside their traditional comfort zone and deliver innovations that can truly differentiate their business.

IBM’s Global CEO Study 2006 was conducted to examine the push to innovate within today’s businesses. It takes an in-depth look at CEOs’ current views, captures their insights and shows how they are enabling innovation in their own organisations. The study reveals that CEOs are expanding the innovation horizon. In fact, there is a categorical shift toward a more expansive and unconventional view of innovation, as well as a need for a greater mix of innovation types. While CEOs still believe that product, service and operational innovations are important, they feel that innovation must also be applied to a company’s very core – to the way it does business and drives revenue. CEOs deemed these business model innovations vital to creating new and differentiating value for their companies. Companies that can substantially change how they add value to their own or other industries can differentiate themselves and gain a competitive edge.
The study results have important messages for all business leaders but should be of significant interest to CIOs for two key reasons. First, business model innovation is often dependent upon information technology (IT). A flexible, agile infrastructure is key to a dynamic business model. It is the essential catalyst for innovation of this scale. Second, CIOs and the IT organisation are an integral part of the enterprise business model. Any changes to the enterprise business model encompass the IT organisation as well.

The purpose of this paper is to highlight valuable innovation insights from the Global CEO Study that have particular relevance to CIOs and the IT organisation. This paper helps CIOs understand what they can do to enable business model innovation. It identifies the IT concerns that CEOs believe are hindering their companies’ ability to innovate and explains how CIOs can overcome these concerns and increase the innovative capability of their organisations. CIOs have long been counted on to support and enable corporate innovation efforts, and the study indicates that CEOs will continue to rely on their IT leadership to drive innovation initiatives.\footnote{1}

**The IBM Global CEO Study 2006**

For the Global CEO Study, IBM surveyed 765 CEOs, business executives and public sector leaders on the subject of innovation. Study participants hailed from 20 different industries and 11 geographic regions, from mature markets and important developing markets, such as China, India, Eastern Europe and Latin America. They included large and small business leaders of both public and privately held companies. The sizeable and diverse survey population provided IBM with a wide array of perspectives and ideas, as well as substantial opportunities for analysis.
The study findings are based on in-depth interviews with the CEOs. In 80 percent of cases, the CEOs’ responses were delivered face-to-face. The remaining responses were obtained by telephone. The CEOs were frank and passionate, exposing their concerns, their motivations and their plans for the future. Their responses offer a compelling new view of innovation, with CEOs looking to gain sustainable market advantage through the creation of a new business model that diverges from or even overthrows industry norms.

Two-thirds of the CEOs interviewed for the study expect their organisation to be inundated with change over the next two years. With intensified competition, escalating customer expectations and globalisation all bearing down on their organisations, they believe that fundamental business changes will be required. They are viewing business model innovation as the answer. Many are seeing the way they do business as an important differentiator because such innovations do not invite imitation or commoditisation the way that product and service innovations do. Simply put, the competitive advantage they offer the business is more durable over the long run.

The study found that today CEOs are focusing nearly 30 percent of their innovative efforts on business model innovation. Some admitted giving it as prominent a place on their agendas as more traditional types of innovation. Even CEOs who did not see a reason to focus on business model innovation before now believe the time has come – and with good reason. IBM’s financial analysis, conducted as part of the Global CEO Study, revealed that companies that put more emphasis on business model innovation experienced significantly better operating margin growth (over a five-year period) than their peers.
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Highlights

Today business model innovation is perceived as a way to grow profit but also as a way to avert threats from competitors.

![Operating margin growth in excess of competitive peers.](Percent compound annual growth rate over 5 years)

-1 0 1 2 3 4 5 6

- Products/services/markets innovators
- Operations innovators
- Business model innovators

Aside from the top-line potential, business model innovation is seen as a way to preempt competitive threats from industry and non industry peers. Some 40 percent of CEOs fear that changes in a competitor’s business model could radically change the entire landscape of the industry. These CEOs want their companies to be the ones driving that change and creating the competitive threat; they don’t want to have to follow another company’s lead. They see business model innovation as a natural evolution, recognising that change is inevitable and required once a business model has run its course.

Leaders in business model innovation are realising that a company cannot drive these industry-altering changes alone. They are implementing major strategic alliances, combining their own expertise with the specialised capabilities of partners. Internally, they are making major structural changes, collapsing organisational boundaries and leveraging shared service
centres across the enterprise. They are pursuing new business opportunities, new competencies and new alliances, creating value not just for their own companies but also for their industry as a whole. For these companies, innovation occurs proactively rather than in response to specific events, and it has resulted in business designs that are truly differentiating.

Business model innovators reported other benefits as well, including cost reduction and strategic flexibility – which were cited by more than half of the CEOs studied. These CEOs report being better equipped to respond efficiently to market changes and operational demands. In addition, cooperative partnerships are enabling them to lower their operating costs, while providing new opportunities for revenue generation.

![Benefits chart]

**Highlights**

*Business model innovation offers major financial and business benefits, including operating cost reduction and flexibility to respond to changing market demands.*
As the organisation’s leading technology executive, the CIO’s role in driving business model innovation is pivotal.

Implications for CIOs
These important perspectives on innovation are changing the way companies view their business operation and map their future strategy. They are causing business leaders to rethink long-held business models and envision change from the ground up. IT is recognised as an integral element of this process and is being called upon to determine how exactly these changes can be implemented.

With executive responsibility for the IT organisation, the CIO is a critical player in a company’s business model innovation efforts, involuntarily or voluntarily becoming part of the company’s strategy and vision. Toward that end, there are key steps the CIO can take to enable and drive business model innovation within the organisation. CIOs who are looking to expand and facilitate their companies’ business model innovation efforts should take action in three focus areas:

- **Deepen business understanding through componentisation.** IT automation cannot take place without business understanding. This basic axiom also applies to business model innovation efforts. In order for IT to enable a dynamic business model, that business model must first be understood. Componentisation is a technique that can be employed to increase business understanding. Systematically breaking down the business into its component processes and focusing on the business value of those individual processes helps IT to understand the needs and objectives of the business at a granular, more in-depth level. Business leaders learn where improvements need to be made to reduce costs, boost productivity and drive growth.

- **Innovate the IT business model first.** For far too long, the IT organisation has been held apart from the rest of the business, creating the well-documented ‘business/IT gap’ and driving company leaders to push for better alignment between their business and IT organisations. That said, there has never been a better time for CIOs to lead by example.
Savings realised from reduced infrastructure cost and complexity can be used to fund innovation that creates superior value for the business.

They need to reaffirm that they are business executives first and technology executives second. IT needs to be viewed as a strategic partner to the rest of the business, and that requires rethinking IT’s current business model and managing IT like a business. Then the same componentisation techniques applied to the business can be applied to the IT organisation to understand how it can be innovately changed to better serve the business.

- Implement a flexible, responsive infrastructure. After years of ad hoc technology upgrades and piecemeal application additions, many corporate infrastructures have grown incomprehensible and nearly impossible to change without a high degree of risk. These overly complex environments are difficult and expensive to manage, consuming an increasing share of the IT budget just to maintain basic operations. Understandably, companies in this position are in search of a simpler, more standardised infrastructure, and CIOs are in the best position to help.

By simplifying the infrastructure through technology consolidation and the implementation of open architectures, CIOs can make the infrastructure easier and less costly to manage, but they can also enable innovation. An efficient infrastructure is more adaptable to change, and so, better able to accommodate changes required by innovation. Moreover, the savings realised from lower operations and maintenance costs can be used to fund innovation that truly matters to the business, such as the development of IT-enabled business services.
In the Global CEO Study, CEOs identified ‘inflexible physical and IT infrastructure’ and ‘insufficient access to information’ as two of the top ten obstacles to innovation. Results like these have serious implications for CIOs, mainly because they portray the IT organisation as a hindrance rather than an enabler of innovation. But they also point to a tremendous leadership opportunity for CIOs, who can provide strong vision and direction while helping to spearhead enterprise wide innovation efforts. There is little doubt that CIOs will be called upon to help drive innovation, but the greatest gains will be made by those who pro actively construct the right mindset and infrastructure to enable it.

The CIO’s role in driving business model innovation

Until recently, the CIO’s primary job was to manage the technology infrastructure for the enterprise, lowering costs and improving productivity along the way. New technologies were acquired as needed to support business activities. But as enterprise IT technology has matured, so have the CIO’s responsibilities. Today CIOs are focused on transforming business outcomes. CEOs and other business leaders have learned the enormous impact that IT can have on an organisation’s strategic decisions and its ability to prosper. As such, many are looking to their IT organisations to fuel innovation efforts and to their CIOs to lead the charge. Today’s CIO is expected to provide the technology insight to develop corporate strategy, drive innovation and stimulate growth.

The majority of CEOs interviewed for the Global CEO Study recognise that bold, innovative ideas cannot be put into play without technology. Technology not only enables innovations that benefit the business, it enables the business to spot emerging trends that competitors miss. It enables companies to create new distribution channels, integrate customers and partners into larger business ecosystems and uncover hidden profits.
Componentization enables IT organisations to understand the business processes that drive revenue for the organisation, and this allows them to prioritize IT investments for the greatest gain.

Deepen business understanding through componentisation

Understanding the business is requisite to being a successful business model innovator. If IT is to make decisions appropriate for the business, it only makes sense that IT must first understand how the business functions, the services it provides and its strategic objectives for the future. Only then is IT equipped to understand the service and technology demands of the business and to build and deliver on those demands.

One way companies, and IT organisations in particular, can develop a deeper understanding of their current business model is by breaking down, or ‘componentising,’ the operation into its individual processes. Components, comprising a company’s activities, resources, infrastructure and applications, allow a more granular examination of the enterprise. Componentisation is not a random dissection of the enterprise, but rather a systematic means of understanding which processes create differentiation and value for the business. It helps both business and IT leaders to determine the core strengths that set their company apart and are the major value drivers for the business. This enables company leaders to prioritise IT and business investments more prudently and maximise value.

What’s more, breaking down into component parts gives a perspective of the business that does not hamper a company’s ability to make meaningful changes. It shows activities across all of a company’s business lines without the traditional constrictions. It enables a company to take an enterprise view and look beyond individual geographies, business units and internal silos. By doing so, componentisation enables company leaders to identify where gaps exist between its current and desired capabilities, costs and efficiency levels. It also encourages consideration of alternative approaches that could produce greater business value for the entire organisation, such as partnering with other enterprises to create a new business model or sourcing non-core business functions to external providers.
By viewing the organisation as a set of business processes unconstrained by business line and geographic boundaries, componentisation makes it easier to identify where efficiency and cost improvements can be made.

For CIOs and other IT leaders, componentisation can be an invaluable resource, methodically identifying the ways in which IT provides support to the business operation as well as the best opportunities for improvement, based on the relative business value each IT activity provides. In a componentised framework, the components are linked via the infrastructure. The infrastructure is the glue that holds together and supports a company’s IT-enabled business services. Componentisation focuses attention on the infrastructure and its integral role in driving business efficiency.

Currently, many companies are exploiting ‘component business modeling’ techniques to identify IT process improvements and sourcing strategies that can drive higher levels of efficiency and value for the organisation. In fact, IBM has created component business models for more than 50 different industries. These industry-specific models incorporate the business functions and value chain that are unique to each industry, making the componentisation process more meaningful and enabling core strengths and improvement opportunities to be identified more quickly.

Apart from its ability to drive greater business understanding, this also contributes to the creation of a more dynamic business model. Rather than being viewed as a large, monolithic structure, an enterprise is viewed as a set of integrated, granular components, which connect dynamically to each other and which can also connect to those of other enterprises. This makes it easier to see how these components supply and receive resources from one another, which in turn makes it easier to identify opportunities to improve efficiency and lower costs.
Innovate the IT business model first

The IT culture is not traditionally customer-centric. Rather than being driven by market demand, service development and innovation initiatives are generally driven by internal need. Business model innovation requires a customer-centric approach. It is about redefining customer segments, targeting customers who are under-served and, in general, creating new value for customers. Ultimately, a company redesigns itself to deliver its value proposition effectively and efficiently. For the typical IT organisation, that requires getting much closer to the customer.

With business services increasingly enabled and delivered by technology, CIOs must take the lead in helping the IT organisation move in a customer-centric direction. To do this, IT’s own business model will need to change.

At a high level, one can view the IT business model as the interaction of people, activities and technology for the purpose of achieving defined business goals. When considered in this manner, the IT organisation essentially is no different than any other business unit, and the same type of business logic and analytics can be applied to it. Just as componentisation can be used to deconstruct the business for greater understanding, so too can it be used to deconstruct the IT organisation.

IBM Component Business Model for the Business of IT (CBM-BoIT) is specifically designed for this purpose. It offers a granular approach to optimising IT processes, developing new sourcing strategies, prioritising IT investments and structuring the IT organisation. With customer centricity as a guiding principle, CBM-BoIT helps companies identify each of the IT processes that provides service to the business, and it determines the relative value these processes bring to the business. By helping to identify the IT processes that add the most value, company leaders can make investments, shift personnel and reallocate resources where they will have the greatest impact.
Alignment with the business is also an important issue. If a company’s IT activities are not adequately aligned to the needs of the business, achieving business goals can be difficult. CBM-BoIT can facilitate the alignment of business and IT by helping companies determine the business value of each IT activity. It enables them to evaluate the cost of performing each activity, the effectiveness with which it is performed and the activity’s strategic importance to the business. In some cases, companies can find that spending and resources are out of alignment with business needs. In other cases, inflexible processes resulting from a lack of collaboration across business units may be inhibiting desired business growth. CBM-BoIT pinpoints where and how improvements can be made. It enables companies to change the way IT works, which in turn enables IT to innovate in ways that positively impact the business.

Changing the IT business model also requires that IT become a credible business partner to the rest of the organisation. That means CIOs have to see and manage IT as a business, rather than as a cost centre with its own set of rules and accountabilities. This does not mean that the IT organisation must implement a chargeback accounting system, but it does mean that the IT organisation must understand and control its ‘production costs.’ The IT organisation must also understand its ‘market segments,’ and determine the cost sensitivity of those segments. IT must change and evolve to a service-driven business orientation. That necessitates the development of competencies in areas like product innovation management, market planning and pipeline management.
Next generation IT leaders truly understand the ‘business of IT’ and are reconfiguring the IT organisation to run like a business. Advances in technology facilitate this transformation, enabling CIOs to consolidate operations, minimise infrastructure and application redundancies, enable cost transparency and integrate disparate systems and data across the enterprise.

Automation can also speed IT’s business evolution, making it possible to replace a disparate set of IT tools and processes with an integrated set of cross-enterprise applications. To take control of IT process complexity and inconsistencies, CIOs need to automate their business functions in the same manner as any other business unit. They need to implement an integrated set of IT management applications (based on emerging open standards such as ISO 20000) that streamline management for the range of enterprise technology they’ve chosen to deploy. This will enable the IT organisation to respond to rapid change and new opportunities in ways that support business goals and priorities. CIOs will need to orchestrate such business model innovations for the IT organisation and the services it delivers to the rest of business.

Demonstrating operational excellence in running the business of IT is central to establishing credibility with business leaders. It establishes the CIO as an innovation thought leader and change agent for transforming the firm’s business model. But changing the IT business model involves more than process changes. It requires cultural changes as well. In the Global CEO Study, more than one-third of CEOs identified an ‘unsupportive culture and climate’ as a primary obstacle to innovation, citing difficulty getting employees to suggest new ideas. As a member of the executive team, CIOs have a major role to play in establishing an innovative culture across the enterprise, but they need to begin by building the right climate within their own organisation.
By looking inward first, CIOs can improve the way IT approaches innovation and the rest of the business. They can change the IT business model to promote innovative thinking and reward achievements, creating collaborative platforms that encourage employees to initiate dialogues and debate new concepts. This often requires doing away with organisational silos that inhibit visibility and interoperability across the enterprise. CIOs must also take time to lay the cultural groundwork for a new IT business model by building a community that is free to question the status quo, is given the time to consider new ideas and is willing to take creative risks.

Implement a flexible, responsive infrastructure

Increasingly, IT is viewed as a strategic resource, yet the lion’s share of the IT budget continues to be directed toward day-to-day operations, and that can severely limit the funds available for innovation and new capability development. This predicament is typically due to challenges involved in maintaining large, heterogeneous environments. IT organisations must oversee increasingly complex multivendor environments, disparate platforms and technologies, plus countless one-off applications requiring their own delivery methods, infrastructure, security features, operating system and network requirements.

Often, the first step in creating a more agile infrastructure is the consolidation and simplification of existing technologies. The savings that result from these early initiatives are generally all that’s needed to prime the transformational pump for IT. The business benefits of a more flexible infrastructure become crystal clear.
To be sure, organisations that are heavily dependent on IT-enabled business services are only as flexible and responsive as the IT infrastructure and systems that support them. In many cases, business leaders learn the hard way that their ability to innovate is limited by inflexible systems that are difficult to enhance and too costly to replace. To move forward, they must find ways to increase infrastructure flexibility, to extend services wherever needed, and to easily reallocate resources as required by business changes.

By design, business model innovation introduces substantive changes into the organisation. As such, it relies on the infrastructure to be agile enough to respond to those changes. If, for example, a company’s new business model calls for the establishment of a worldwide research community and the infrastructure is unable to accommodate the volume of input or the security needs of the participants, the new model will invariably fail.

An infrastructure that is inherently flexible and responsive can address business changes like these more easily. But it requires CIOs to leverage open standards and infrastructure technologies like virtualisation and autonomic computing, which are designed to accommodate unpredictable change, improve efficiency and reduce the time to market for new business capabilities:

- **Open standards and architecture** enable global connectivity between heterogeneous systems and across silos and corporate boundaries.
- **Virtualisation** reconfigures internally- or externally-owned system resources dynamically and transparently to meet the demands of a changing business workload and application mix.
- **Autonomic computing** enables complex systems to heal themselves by dynamically diagnosing and repairing problems in accordance with company-specific business policies and without the need for human intervention.
But these technologies must be part of a bigger plan in order to be feasible and successful. By defining an enterprise architecture, CIOs can provide the context for integrating such technologies. An enterprise architecture should be robust – the IT equivalent of an urban plan. It should lay out the critical elements of the overall infrastructure and their interrelationships in sufficient detail. It should establish ‘zoning regulations’ for IT, identifying technology options that are and are not acceptable for use when actually implementing the infrastructure. And, most important, it should establish the governance mechanisms necessary for enforcement of the overall plan.

Complex software architectures must also be dealt with if organisations are to be able to respond quickly to new business requirements and collaborate more freely with new business partners and customers. Service-oriented architecture (SOA) offers a solution, facilitating system and application integration across a heterogeneous IT environment. SOA componentises and transforms the capabilities within a company’s applications into discrete modules or ‘services’ – like ‘create new account’ or ‘verify customer credit’ – that can be combined, configured and reused to address changing business priorities.

CIOs who leverage SOA can deliver a significant return to the business. Embracing SOA can:

- **Maximise the value of existing IT investments by leveraging the capabilities of legacy systems and heterogeneous environments**
- **Simplify and accelerate the deployment of new business applications**
- **Reduce application development and maintenance costs, enabling savings to be redirected to innovative activity**
- **Dramatically increase infrastructure flexibility, making innovative process and business changes easier to implement.**
In conjunction with component business modeling, SOA can also increase business understanding among the IT community. It forces IT professionals to think in terms of business architectures, not just technical architectures. When designing an inventory management system, for example, it requires IT to consider the company’s business flows and how best to meet the needs of the business. In general, it leads to a better dialogue between business and IT.

Savvy CIOs are using SOA to tie IT projects to their companies’ business needs, directly addressing issues such as human productivity, information delivery and business process improvement. In the latter case, SOA is enabling companies to select an underperforming business process, identify and remove its bottlenecks and deploy improvements quickly via reusable and optimised processes.

**Conclusion**

Faced with globalisation, rapidly advancing technology and dramatic market shifts over the next two years, most CEOs agree that they will have to make major business changes and fundamentally alter their current value chain in order to compete and grow. They know that the answer lies in an expanded innovation strategy – one that includes product, service and operational improvements but also emphasises business model innovations.

Technology is universally viewed as a driving force and enabler for innovation, and that makes the role of IT, and principally the CIO, an integral one in this new strategy. The CIO must take a lead role in establishing the right infrastructure, culture and climate for business model innovation.
To create real value for the business, IT organisations must understand how the business works. Componentisation and SOA provide effective ways to increase business knowledge on many levels. They enable IT and business leaders to look at the business through distinct but fundamentally compatible lenses, to rethink how they do things and to consider alternatives – and all of these things are paramount to business model innovation.

Business model innovation also requires a flexible infrastructure, which many companies are achieving through SOA. But SOA’s promise of a more agile development environment can’t be fulfilled unless the application architecture is properly managed. Establishing an integrated set of applications to manage technology across the enterprise can lessen the drain on IT resources and enable IT to respond more nimbly as business priorities change.

CIOs should take specific actions to meet these requirements and successfully drive innovation and growth:

- Deepen business understanding by leveraging componentisation techniques
- Innovate the IT business model first and implement processes to run IT like a business
- Implement a flexible, responsive infrastructure capable of supporting innovation initiatives.
Today CEOs are looking to their CIO to become a business partner in implementing the company's business strategy and vision and in driving business model innovation efforts. They recognise that the CIO will be instrumental in establishing the conditions and environment needed to ignite innovative ideas, drive their execution and ultimately capture the innovation dividend. These CEOs know that the success of their organisation's innovation efforts isn’t just about aligning business and IT; today it’s about being totally in sync and driving business value together. Success and effectiveness will depend on the CIO’s ability to develop these linkages quickly and proactively and to internalise the organisation’s innovation blueprint.

The CIO is in an excellent position to champion the company’s business model innovation efforts and execute its innovation strategy. No one is better equipped to assume the role of chief innovation officer, interpreting the potential of technology to transform the business and enabling the company’s innovation objectives to be realised.

For more information
For further details about the Global CEO Study 2006 or to learn how IBM is working with organisations around the world to help them become more innovative, visit:

ibm.com/cio/uk

To speak with an IBM representative in your region or industry, send an e-mail to: CIOAgenda@uk.ibm.com

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"Innovation: The View from the Top." BusinessWeek Online. April 3, 2006. http://www.businessweek.com/magazine/content/06_14/b397807300.htm


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