Today’s challenges, Tomorrow’s CIO

Laying the groundwork and creating conditions for success
Introduction
Gone are the days of Chief Information Officers (CIOs) being responsible solely for delivering reliable Information Technology (IT) to the business. Contemporary CIOs take a much broader role in the business, driving business transformation, innovating for competitive advantage and acting as key strategic partners to the Chief Executive Officer (CEO) and wider organisation.

How is this achieved? IBM conducted in-depth face-to-face interviews with CIOs who have either made the transition to senior roles beyond IT or extended their responsibilities, keeping IT and including more business focus accountability (see Diagram 1). The results confirm that today’s CIOs have the opportunity to extend their reach and remain relevant to the enterprise of the future.

The interview results and associated research indicate that there are three key factors that influence CIOs’ evolution to a more business-focused role:

- their personal profile (personality, background and skills)
- the business environment in which they operate (in particular, the degree of change happening in the wider enterprise)
- the maturity of the IT function in which they operate

Of course, every company views the role of IT differently and there is certainly room for those that wish to maintain the traditional role of IT director. But there is an increasingly wide and exciting range of opportunities available to CIOs who want to take on more business responsibility and play a more creative role in the business.

Business background
The Evolving Role of the CIO described the trend for CIOs to have more of a mixed background of IT and business management. Those more predisposed to a strategic role will often have had previous experience managing areas of the business other than IT.

CIOs with broader backgrounds are more likely to want to lead business discussions and generally have more empathy with the business. They have managed other business areas before and are therefore better able to build credibility at Board level. They will work as partners solving business problems, rather than just providing support.

Strong relationships with Board-level colleagues are vital for successful evolution. These relationships enable CIOs to demonstrate that they have the personal credentials needed to take ownership of domains beyond the traditional confines of IT.

“CIOs need to have a passion for the business. Business innovation requires emotional empathy with customers and the business.”
- David Lister, Chief Architect, Royal Bank of Scotland

Leadership skills
Tomorrow’s CIOs are likely to have well-developed leadership capabilities, skilled in creating a vision for the business and in collaboration, decision-making and execution. To succeed, they need to be focused outwards towards the enterprise and its customers, as well as inwards towards the IT organisation. They should be able to articulate where and how technology contributes to business strategy, identifying business change issues and driving operational innovation.
Diagram 1: The evolving role of the CIO

The Evolving Role of the CIO, IBM’s recent survey of successful CIOs from a number of industries, identified three transitions that progressive CIOs make in evolving from an IT-centric to a more business-oriented role. They would move:

- from “keeping the lights on” to “keeping the business running”: CIOs would no longer just be responsible for providing applications and infrastructure. With the rise of shared services and outsourcing arrangements, they would be increasingly responsible for business process services, too.

- from “delivering IT-centred change” to “driving business transformation”: CIOs would no longer just react to changing business requirements. They would be at the very heart of business transformation initiatives, identifying opportunities for performance improvement and taking on accountability for business change.

- from “aligning IT and business strategies” to “enabling business innovation”: while today’s CIOs would ensure that IT strategy was aligned with that of the organisation, tomorrow’s CIOs would expand possibilities for business innovation through the use of IT.

Within the enterprise, next-generation CIOs will use their collaborative skills to build relationships across different areas rather than taking a silo approach. CIOs often have a panoramic view of the business, gleaned from implementing IT-driven transformational change across their enterprise. The wider view can give CIOs deep understanding of the strategic and operational levers affecting business performance, a distinct advantage for stepping into more broadly based roles.

Externally, tomorrow’s CIOs will be focused typically on developing networks of executives across industries to grow their personal capabilities and to gain insights that can be applied in their own industry.

Decision-making for tomorrow’s CIOs will involve multiple levers, including business processes, operating models and vendor relationships.

Personality traits

IBM’s research indicates that CIOs who have made the transition to a more strategic business role are often charismatic, always energetic and have considerable flair and vision.

Tomorrow’s CIOs exhibit traits that are distinctly entrepreneurial – they are innovative, inspirational and willing to challenge the status quo in their approach to business.

These CIOs are natural networkers who extend themselves across the enterprise and beyond, rather than confine their contact only to direct customers of IT. Their day-to-day focus does not lie solely in IT innovation; instead, they are interested in building creative new business models that apply to the entire enterprise.
They have a passion not just for IT solutions, but for solving knotty issues across the enterprise, using IT as just one problem-solving tool.

CIOs who evolve into business leadership roles can drive the enterprise-wide agenda, elevating their influence beyond the traditional limits of their position. They will be invited to lead initiatives where they can add significant value to complex, cross-boundary issues.

Their personal profile – a combination of personality, business background and leadership skills – allows them to go beyond the realms of the traditional CIO.

And crucially, they passionately want to do this.

**Business environment**

Personal profile is not the only factor in the development of the CIO. The state of the wider enterprise also has a role to play in determining whether that evolution will progress or falter; evolved CIOs take advantage of the opportunity to grow skills and competencies that their business environment offers them.

For the CIO to thrive, the business must also flourish. Another piece of research published by IBM, *The Global CEO Study 2008: The Enterprise of the Future* describes key characteristics of enterprises with sufficient scope to allow the CIO to step into an evolved role.

The Global CEO Study gathered feedback from over 1,100 CEOs world-wide and showed five traits which characterise the successful enterprise of the future. Diagram 2 shows maturity levels for each of these traits.

Through our interviews with CIOs, we found that the enterprise itself had to exceed the basic level of maturity for three of the five traits in order for CIOs to have enough headroom to demonstrate their broader operational ability. Let’s look at each of these aspects in turn.

**Hungry for change**

It's a question of improvement through transformation: the ultimate aim for the enterprise of the future will be an organisation that can change before being driven to do so. This involves enterprise-wide change leadership, combined with expertise in managing a portfolio of change programmes – both tried and tested waters for the CIO with a grounding in leading IT-centred change. Under these circumstances, ambitious CIOs have an opportunity to form and drive business-wide transformation, rather than be confined to IT-centred change.

**Innovative beyond customer imagination**

As organisations try to exceed their customers’ growing expectations, the astute CIO will position him or herself at the heart of this mission. Customers are searching for organisations that offer consistency of service across an increasing number of channels; CIOs can answer the challenge through IT-based innovation, enabling closer collaboration with customers, at a faster pace and with greater accuracy and efficiency than ever.

*The area of ideas I find most interesting right now is the shift from the structured world (including business) of today and yesterday into a more unstructured place in the future. For the world of the CIO, this means a shift in many ways, including from a focus on technology projects and business cases towards the implications of truly networked businesses.*

- Neil Cameron, Global CIO, Unilever
**Globally integrated**

The globally integrated organisation is “joined-up, able to adjust its business model to be able to do the right thing, in the right place, to the right level of quality, at the right cost, for the right price, at the right level of service,” according to IBM’s Global CEO Study. It operates under a flexible business model, based on common enterprise-wide disciplines, processes and supporting applications and infrastructure.

For CIOs this will involve traditional IT challenges, such as extending IT networks. It also allows them to lead the agenda that includes driving global capabilities, for example, through business process management innovations or by developing centres of excellence.

**Disruptive by nature**

CIOs have a cross-boundary view of the organisation in which they work. They can see the challenges and opportunities of new business models in a way that other Board members may not.

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**Diagram 2: Minimum organisational conditions for the CIO’s role to evolve**

The Enterprise of the Future will provide the ideal environment for a CIO seeking to expand beyond traditional IT activities. With these characteristics in place, the motivated CIO will find the path to a more business-driven role easier to follow. Based on interviews with CIOs who have evolved their roles, the highlighted maturity level for each of the traits of the Enterprise of the Future was the state of the wider enterprise at the time the evolution took place. For CIOs who are keen to move beyond their traditional IT remit, recognising this pattern of maturity in their enterprise is critical to identifying opportunities to evolve.

**Increasing level of maturity**

- **Ad-hoc and Reactive Change**
- **Change Portfolio and Programme**
- **Customer Information Transparency**
- **Driving Specific Global Initiatives**
- **Customer Collaborative Development**

**Globally integrated**

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- **Driving Specific Global Initiatives**
- **Customer Information Transparency**
- **Change Portfolio and Programme**

**Disruptive by nature**

- **Customer Collaborative Development**
- **Driving Specific Global Initiatives**
- **Customer Information Transparency**
- **Change Portfolio and Programme**

**Globally integrated**

- **Radical and Pervasive Business Model Innovation (BMI)**
- **Multiple BMI Strategies**
- **Building Global Capabilities Systematically**
- **Implementing BMI Initiatives**

**Globally integrated**

- **Expanding Customer Aspirations**
- **Global Enterprise Innovation**
- **Building Global Capabilities Systematically**
- **Implementing BMI Initiatives**

**Disruptive by nature**

- **Corporate Social Responsibility (CSR) as Growth**
- **Efficiency Through CSR**
- **Value-Based Self Regulation**
- **Strategic Philanthropy**

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The “Enterprise of the Future”: five traits of future success

Source: The Global CEO Study 2008®
Experience gained in other areas of the business before becoming CIO, combined with a deep understanding of the power of technology to transform operating models, will position the CIO as a driving force in business model innovation.

**Genuine, not just generous**

The enterprise of the future sees corporate social responsibility (CSR) as an opportunity to stand out from the crowd and to grow the business by servicing new market segments with responsible products and services. However, CSR requires a high degree of transparency.

Smart CIOs will work with fellow Board members to shape the CSR agenda, for example, by creating management information systems that give data on the environmental impact of the organisation’s sourcing strategy.

**The IT organisation**

To have scope for the CIO’s role to grow, the IT organisation which he or she leads will need to be performing at a mature level. CIOs running mature IT organisations are not just concerned with traditional IT issues – they are also expected to deliver against the wider needs of the enterprise.

IBM’s Component Business Model for the Business of IT framework describes seven core competencies in a typical IT organisation:

1. **IT customer relationship**
   - The CIO and his or her team’s ability to manage good communications and interactions between IT providers and the users of IT is critical to the success of both the IT organisation and the larger enterprise. Fostering good relationships also helps build credibility and earn trust with the Board.

2. **Service and solution development**
   - A CIO competency that encompasses development of classic IT activities as well as service-oriented architecture (SOA) environments and solutions. An optimised level of performance in this ability means that new services are brought to market quickly and cost-efficiently, making a significant contribution to business strategy and competitive advantage.

3. **Service and solution deployment**
   - Covering all aspects of change and release activity including assignments, scheduling, synchronisation, installation and monitoring, the IT organisation’s capability in service and solution deployment balances the objectives of new or revised functionality with maintaining service availability. In a mature IT organisation this enables business capabilities to be rolled out systematically across the enterprise, which in turn drives competitive advantage. The CIO’s organisation is seen as crucial to delivering products to market successfully.

4. **Service delivery and support**
   - Meeting service requirements within budget and to a high degree of customer satisfaction, while also delivering IT services as defined by the IT Service Catalogue is a pre-requisite for the evolved CIO. He or she can clearly articulate the business benefits of IT services – and the impact of IT service failure – in order to prioritise services across the enterprise. The CIO who delivers successfully is seen as business-aware, focused on the same priorities as those of the enterprise.

Of these, the first four in particular need to be at an optimised level of maturity to allow the CIO further scope for development (Diagram 3).
CIOs who run an IT organisation with high customer satisfaction; develop and deploy new IT services efficiently and cost effectively, and who deliver pervasive but invisible support to the business have achieved the fundamental requirements for their personal growth. While the remaining IT competencies are important, a “managed” level of maturity in these areas is enough to enable the CIO’s role to evolve.

5 Information management
Here the CIO focuses on capturing, managing and distributing onwards business information. If the enterprise cannot process information well or refine it into useful insight, it will miss its business objectives. Managing information across the enterprise so that it cuts across silos and delivers value through information needs a solid base in clear and reliable processes.

6 IT business management
Delivering the IT business strategy and IT administration in a well-run IT organisation adds value by:

- integrating business and technology to ignite innovation
- creating and delivering integrated business strategies that leverage technology, while measuring and managing the money spent (and the value received) from the IT portfolio
- actively communicating the business value of IT investments

For the CIO’s role to evolve, the CEO and the executive team need to have a clear understanding of the value-add IT brings to the business.

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**Diagram 3: IT organisation competency maturity levels**

<table>
<thead>
<tr>
<th>Maturity level</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Basic</td>
<td>IT processes/services/solutions not fully documented and not standardised across business units</td>
</tr>
<tr>
<td></td>
<td>Processes/services/solutions not aligned to business needs</td>
</tr>
<tr>
<td>2. Controlled</td>
<td>IT processes/services/solutions are designed for parts of the major business areas, but not coherent enough to meet all business needs</td>
</tr>
<tr>
<td>3. Managed</td>
<td>IT processes/services/solutions are designed for all the major business areas based on business needs</td>
</tr>
<tr>
<td></td>
<td>Understanding the business needs and designing the IT strategy are formulated at some level</td>
</tr>
<tr>
<td>4. Optimised</td>
<td>IT processes/services/solutions contribute to the business area, with understanding of the management plan and business needs</td>
</tr>
<tr>
<td>5. Advanced</td>
<td>IT processes/services/solutions contribute to the business area, with understanding of how IT can drive business strategy and vice versa</td>
</tr>
</tbody>
</table>

Source: Component Business Model for the Business of IT and IBM research
Risk and compliance management

The last competency focuses on risk management, enabling firms to rapidly adapt and respond to any internal or external opportunity, demand, disruption or threat. Silent running of this competency is needed to demonstrate control of the traditional IT function.

To evolve into a more business-focused role, CIOs will have developed their IT organisation to an appropriate level of maturity, while gaining respect for their achievements from their peers across the enterprise. The IT organisation will be run as a business unit, with pricing, services and performance comparative to the market. The value of IT will be clearly understood by key business stakeholders, with whom the CIO will enjoy productive relationships. In short, the CIO who is ready to evolve will have created a successful IT organisation that is ready and able to support his or her future development.

Conclusion

Based on IBM's research, there are three key factors that influence the CIO's evolution to a business-focused role. Of these three, personal profile is the most important – all CIOs interviewed took personal initiative to drive their own evolution. The second most important factor in evolving is the context of the wider enterprise, since a turbulent environment will create countless opportunities for ambitious CIOs to grasp. Finally, the health of the IT organisation itself, where the CIO will need to demonstrate exemplary capabilities in managing their own ground, serves as the minimum platform for growth.

The CIO cannot evolve without Board-level acceptance. The CEO and fellow executives must be convinced that the incumbent CIO is able to step up to broader responsibilities while continuing to deliver excellent IT services and applications.

Tomorrow's CIOs need to be self-aware, smart about their business environment and agile enough to build a strategy for their personal success. As the forces of change grow stronger, the pressures on CIOs to evolve will only increase. Those who step up and create their own opportunities will be in a better position to take control of their careers.

While the traditional responsibilities of the CIO role will remain, the role will become broader. In future, CIOs performing a 100 per cent traditional role may only exist in organisations that do not value IT as a key strategic business driver.

However, CIOs capable of crafting a post-evolutionary role are likely to progress to Board level with aspirations of reaching COO or even CEO. CEOs in the 1960-1980s often came from a sales and marketing background; in the 1990s-2000s CEOs were more likely to come from backgrounds dealing with finance and risk management. In future, CEOs may well come from the ranks of those with deep-rooted IT service, transformational change and business innovation experience, especially those who have grown up with technology and who see IT as part of the status quo. For CIOs willing to grasp the nettle, the opportunities are immense.

“As a result of my influence, the business changed its perception of how the CIO should be involved and this was catalysed by it being a time of accelerated organisational change…the business came around to the view that the CIO should be held accountable for the business, as well as IT deliveries/outcomes/results and I was able to gain greater influence and involvement in business executive teams.”

- Gary Edwards, CIO, Cattles
**Diagram 4: Summary of characteristics needed for the CIO's role to evolve**

<table>
<thead>
<tr>
<th>Personal profile</th>
<th>Business environment</th>
<th>IT function</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Well honed CxO level capabilities</td>
<td>• Significant levels of external factors impacting the organisation</td>
<td>• A mature, well run IT function that delivers business value to the organisation</td>
</tr>
<tr>
<td>• Able to create a vision for the organisation with a clear understanding of the role of IT in business strategy and operating model innovations</td>
<td>• Organisation response to external drivers of change is multifaceted through transformation in all aspects of the organisation</td>
<td>• The IT function excels in core IT activities, such as IT service and solution development and delivery, IT service and support, and customer relationship</td>
</tr>
<tr>
<td>• Externally, focused on developing networks of equivalent executives across industries</td>
<td>• The enterprise is striving to become an “Enterprise of the Future” — with plenty of opportunities for the CIO to extend his or her impact and move the organisation forward</td>
<td></td>
</tr>
<tr>
<td>• Internally, focused on building links and relationships across multiple and complex areas of the business with a cross enterprise view</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Communications are focused on enterprise-wide benefits, based on deployment of multiple levers, eg IT, business processes, vendor relationships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Execution includes IT and business areas not directly related to IT to an equal extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• A natural at networking, curious about the total enterprise, innovative, has entrepreneurial spirit and great at building relationships</td>
<td></td>
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Further information
For more information please send an e-mail to cioforum@uk.ibm.com or visit ibm.com/services/uk/cio/evolving_role_of_cio

About the authors
Robin Riordan is a Partner in IBM Global Business Services and leads the Strategy and Change Consultancy practice in the Distribution Sector covering Pharmaceutical, Retail, Travel and Transport and FMCG clients. Robin has a wealth of experience in IT transformation and governance, IS strategy development, strategic IT/ Business transformation outsourcing, IT systems integration strategy and major change programme leadership.
Email: Robin.Riordan@uk.ibm.com

Janet White is a Senior Managing Consultant in IBM Global Business Services working in the Strategy and Change Consultancy practice focusing on Technology Strategy consulting. Janet works with clients across industries to develop IT strategies, designing and implementing IT transformation programmes for global organisations.
Email: JanetWhite@uk.ibm.com

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About the Executive Sponsor for the Evolving Role of CIO series
David K. Henderson is a Partner in IBM Global Business Services consulting practice. David has over 30 years of experience in multiple client industries, working with clients to develop IT strategies, design and implement IT transformations. David is a Fellow of the Institute of Management Consultants, the Chartered Institute of Management and the British Computer Society.
Email: David.K.Henderson@uk.ibm.com

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References

