

WHITE PAPER

Digital Literacy Amongst Senior Executives | August 2012

future role of the CIO: digital literacy amongst senior executives

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executive summary

Challenge

A lack of 'digital literacy' across the senior teams of many businesses is hampering their growth, efficiency and competitiveness, according to 80% of CIOs. Senior leaders urgently need to include their CIOs in strategic business conversations and decisions.

Opportunity

CIOs are in a strong position to grow the business by driving digital strategic thinking within the senior leadership team.

Benefits

CIOs can improve the digital literacy of their executives, harness IT innovation to bring business efficiencies and growth, and enable senior leaders to recognize the central importance and value of technology in their organization.

Background

For this White Paper, CA Technologies commissioned independent market research company Vanson Bourne, which conducted 685 telephone interviews during summer 2011 amongst CIOs in organizations of 500 or more employees, in the telecoms, retail, financial and manufacturing sectors.

Country breakdown: 30 CIOs were interviewed in each of the following countries: UK, France, Germany, Italy, Spain, Benelux, Austria/Switzerland, Israel, the Nordics, Australia, China, Hong Kong, India, Malaysia, Singapore, Korea, Taiwan, Thailand, Canada, the USA, and 15 within Portugal.

Section 1: Challenge

Digital illiteracy amongst senior executives

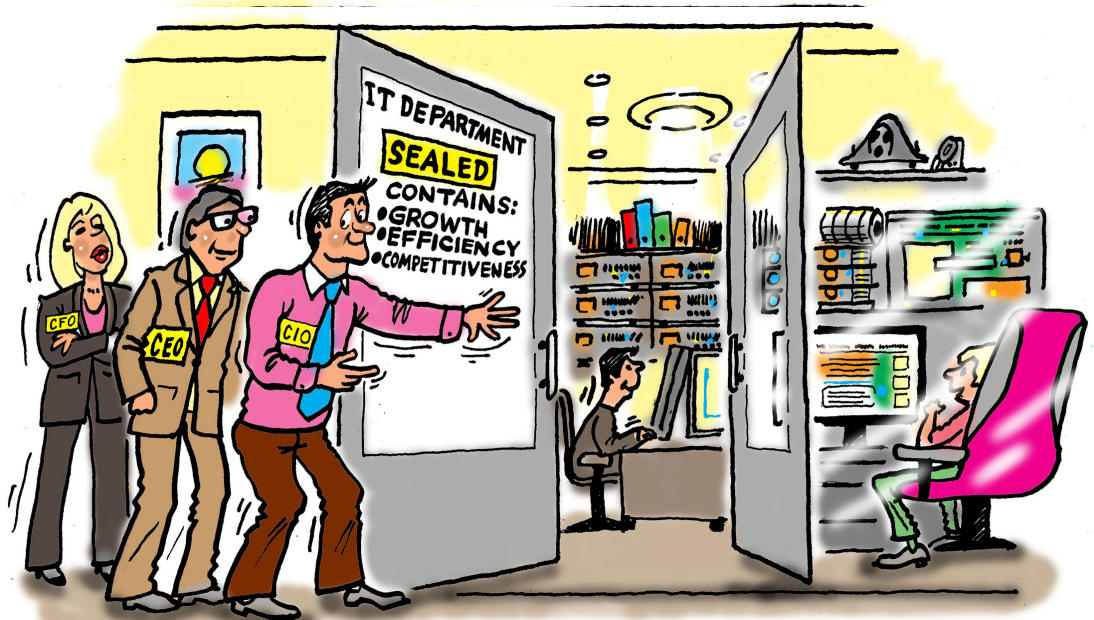
Hampering growth, efficiency and competitiveness

Many businesses suffer a lack of 'digital literacy' amongst their senior leadership team, to the extent that it is hampering the organization's growth, efficiency and competitiveness, the vast majority of CIOs believe. In fact, 80% of CIOs surveyed are concerned that their top-level management team is not "fully digitally literate" to the detriment of the business.

They argue that the sorts of problems senior-level digital illiteracy can cause for the business include responding slowly to market changes, missed business and investment opportunities, poor competitiveness, slower time to market and IT investments that are underachieving.

According to the survey, a quarter of CIOs said their senior executives did not understand the impact of new and emerging technologies, and 37% of CIOs said their executives believe their business does not use IT to grow the business to the extent that it should.

Almost a third said the senior management team sees IT as a cost of doing business, rather than viewing it as a means through which to grow the organization, make processes more efficient and introduce greater agility and competitiveness.



The transformational ability of IT overlooked

Professor Joe Peppard, Director of the IT Leadership Programme at Cranfield School of Management, agrees, “Many members of the top management team can be unacquainted with the strategic potential of technology for their business. Rather than shy away from discussions about IT and information, senior managers should get involved in necessary conversations and be able to contribute. Unfortunately, a lot of organizations do not view the CIO as part of the inner sanctum, or even as a member of the top team and consequently such conversations do not occur.”

However, senior managers must acknowledge that the value from IT comes not from technology but from the ability to manage and exploit information. Technology in this sense plays a vitally important role in today’s businesses in a broad range of sectors including retail, transportation, construction, public sector and financial services. “A lot of organizations just wouldn’t be able to survive for very long without their IT systems,” says Peppard.

There are some CEOs who do understand the transformational power of IT and the role they and their C-suite colleagues must play in realizing real business value from their investments in IT. The chief executive of Tesco is probably one of the first CIOs to move into the CEO role in a large UK plc. Another example of a CEO “who gets it” is Gary Loveman of Caesars Entertainment Corporation (formerly Harrah’s) who has a deep understanding of the role that information and IT can play in driving his business forward. He has led Caesars to become the world’s number one gaming company based on a comprehensive understanding of his customers, Peppard continues.

However, this senior management-level understanding of managing IT at an enterprise level is generally absent, says Peppard. “In addition, a lot of C-level executives can get caught up in the technology, not really understanding that it’s not really about the technology per se. It’s ultimately about how the business can leverage information, whether to innovate processes, inform products or services, impact the customer experience or create new business models. This is what transforms forward-thinking companies into industry leaders.”

The changing role of the CIO

The consequence of this lack of digital literacy in the senior leadership team can limit the CIO in his or her ability to drive technology advances, frequently leaving them frustrated, but more importantly, on the outside of critical conversations where their understanding of technology could prove invaluable. Furthermore, without the support of the senior management team, and an invitation to the top table, pioneering CIOs can remain powerless to transform the business, argues Peppard.

But things could change in the future. Providing they are considered part of the senior leadership team, CIOs are in a good position to become more involved in strategic discussions. This will enable them to demonstrate how a particular digital strategy or project can deliver value, and win the credibility to take it forward. “It’s all about how the business can leverage information and technology, whether it’s

to improve business processes, optimize the supply chain, or apply analytics to Big Data to generate new insights and knowledge.”

Moving forward, CIOs will hold several key roles as business processes, services and infrastructure continue their relentless transition to the cloud. “CIOs will be brokers of IT services; they will also be orchestrators of decisions concerning the architecture of the enterprise, innovation with IT, compliance, and policies, and will have closer involvement with line of business managers in realizing value from their digital strategies,” predicts Peppard.

He believes that by working in this way, both the IT organization and the CIO role will evolve and be able to lead discussions about how they drive the business forward through IT innovation.

Peppard concludes that although many leadership teams today display a lack of digital literacy that can hamper their organization’s growth, this provides a great opportunity for CIOs to position themselves advantageously if they can demonstrate their own leadership capability. With this in mind, the CIO should be focused on working alongside their colleagues in the C-suite to identify opportunities for innovation around the business model, processes, products, services, management and customer experience that are both enabled and shaped by IT. The CIO should also be engaging in conversations, particularly those of a strategic nature, related to all aspects of the business, not just IT. Ultimately, the CIO is a business leader with a special responsibility for IT in the same way that the CMO, CFO and COO are business leaders, but with special responsibilities based around their functional expertise.

Section 2: Opportunity

Collaborating with the senior team to innovate with IT

CIOs are in a strong position to raise the level of digital literacy amongst senior managers, and more importantly, to be the driver for digital strategic thinking in the organization. They regularly interface with both the IT team, the skilled professionals at the technology coal face, as well as the business management team, who bear the responsibility of expanding the business and making it more efficient and profitable.

However, there is work to be done in terms of educating the senior team to generate business through the use of technology. Of the CIOs surveyed, just over half considered their management team executives as being digitally literate, and only a fifth said their management team executives fully understand the capabilities and impact of new and emerging technologies.

Also, 55% of CIOs said they are never involved in driving business strategy, despite 60% believing they have the necessary skills to be involved in high-level strategic discussions.

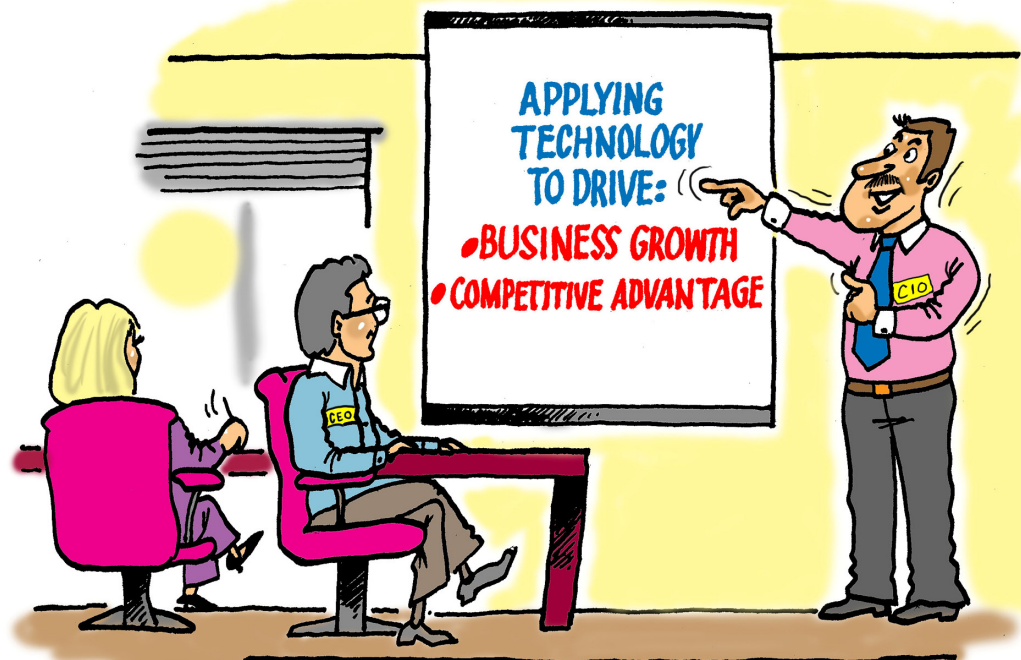
So, as the CIO looks for greater credibility, how can he or she become the educator on how IT can drive business strategy to grow the business?

John Michelsen, CTO at CA Technologies, argues that CIOs need to maneuver in the executive environment, showing senior leaders where the opportunities lie. “Where I see the biggest gap is in the CIO’s ability to communicate value to the business,” he observes.

He adds that the lack of digital literacy within the top management team poses a conundrum for the CIO, who is charged with implementing technology and delivering value to the business. The CIO is fighting the belief that technology can create process efficiencies but it can never deliver value on its own. Technology initiatives need the support, understanding and adoption of the whole business, from the top management down, says Michelsen.

For example, if a CIO is in charge of rolling out a new customer relationship management (CRM) system, while he or she can ensure that the implementation goes well, the sales and marketing teams who will use it are not likely to report to the CIO.

Michelsen comments, “You would hope that in an enlightened organization, the CIO is part of the larger conversation. This is because the success of the CRM investment depends on successfully deploying the technology, while also managing cultural change. Delivering value through technology itself is part of a joint responsibility along with the rest of the leadership team.”



A new breed of CIO

Michelsen sees a new breed of CIO emerging, able to own and direct both the technology and the business processes that they impact. What's more, he says that CIOs are starting to show improvement in how they communicate the business value of their technology decisions.

Michelsen says, "CIOs are traditionally poor at communicating the value that a particular IT capability brings, but this is changing, and CA Technologies regularly works with CIOs to help ensure they have the tools they need to communicate value effectively to the business. We see CIOs starting to become more involved with their business colleagues and communicating the value of technology more effectively."

"At CA Technologies, we are working with CIOs who are much more in tune with their businesses than they were ten or twenty years ago." He adds that CA Technologies is helping them to have business-level conversations about the value of their technology implementations and innovations, and also provides them with a range of technologies to make them more productive.

However, Michelsen recognizes that the CIO has a challenge in straddling both the technical and business sides of the business, firstly because senior business managers still view IT as a cost center, with many CIOs reporting to the CFO and having to argue the financial case for any new project.

Second, IT operations typically involve a high degree of complexity, and involve legacy systems as well as cutting-edge technologies, which can take time to roll out and integrate. Consequently, it is often difficult for CIOs to have business-level conversations that adequately communicate the value of utilizing, expanding or changing particular technologies, using non-technical business language.

In the few situations where senior business managers, and even CEOs, have come from a technology background, Michelsen says the result is a stronger partnership between the CIO and the senior management team, which gives the CIO the confidence to promote the use of technology in their organization.

Michelsen concludes that it is this confidence, and perhaps courage, that CIOs need to drive forward innovation and change in their organizations, through the use of technology. "A CIO recently told me that one of the smartest things he had ever done was to ask the board for a significant amount of money to invest in infrastructure at a time when their competitors weren't. It was done off the back of a sound business case, but was still a very courageous thing to do, and yielded great rewards for the business."

Section 3:

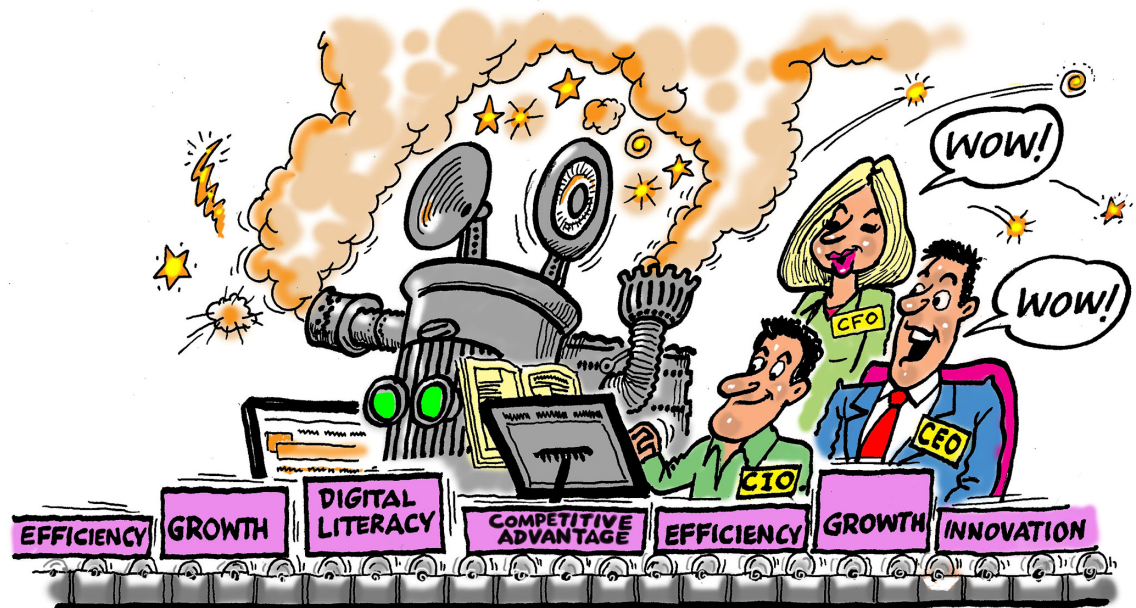
CIO driving business using technology

Jaguar Land Rover

Jeremy Vincent is CIO of Jaguar Land Rover and a good example of a CIO who has a deep understanding of both technology and business, and an ability to communicate well with his senior business colleagues, including the CEO and CFO.

Vincent is perhaps unusual in bringing valuable business skills with him when he joined Jaguar Land Rover: he was an engineering officer in the Navy, has degrees in mechanical and electrical engineering and has also achieved an MBA. However, he has also developed relationships with his board in order to drive the business forward through the use of IT.

Vincent says, “The level of digital literacy amongst enterprise management teams varies from industry to industry but is very low overall, and can even be nonexistent for some international corporations.” He argues that this is not acceptable, because businesses would not recruit a C-Level executive who does not understand financial statements or common accounting terms. “But today, we still tolerate at board level the recruitment of individuals who lack digital literacy.”



Conversely, for Vincent, the type of leadership his CEO has provided has enabled him to innovate and introduce new and successful IT projects to the business during his four years as CIO of Jaguar Land Rover. “My board level colleagues don’t necessarily understand the ‘what’ or the ‘how’ of the technologies, but they have given me their trust and very wide latitude to define and execute strategies that I believe to be right,” says Vincent.

For example, Vincent’s team recently developed a pre-production prototype of a virtual car dealer showroom ahead of competitors. Rather than go through the conventional channels for project approval and funding, he demonstrated the prototype directly to the CEO and CFO, ensuring it had the “wow factor” to convince them. The pre-pilot demo showed how new technologies could be used to help the business to reach new geographical areas and new consumer segments, and he was successful in securing the finances to develop it more fully and roll it out swiftly.

“Innovative CIOs have to find radically different ways to move very quickly and spend low amounts of money to get to a position where they can demonstrate something of worth to the business. Once you have the backing of the senior management team, you can finance and develop them properly with a rigorous project schedule and milestones. If I had relied on traditional processes, we would not have developed this innovation so quickly,” says Vincent.

Another successful project that Vincent pioneered, and which is now in production, was the prototype for a real-time global management dashboard that can show individual vehicle sales across the globe from a web-based interface. “When I developed it, the prototype that I demonstrated to the CEO, Group CFO, and head of HR, was not fully functional, but it had the ‘wow factor.’ It is now a global solution, integrated into our ERP solution, which we are deploying across the world.”

Vincent says CIOs are well placed to identify strategic business thinking from an IT perspective, but to do this successfully will take leadership, innovation and a holistic view of technology and the business. He concludes, “The successful CIO has got to be able to stand their ground, show people they have an opinion, and be able to demonstrate business value and understanding.”

Section 4:

Conclusions

The lack of digital literacy amongst senior business leaders is a concern for many CIOs who see it as an issue for the organization, particularly when they are left out of strategic conversations where their expertise could benefit the business. It could mean missed market opportunities or failure to be as competitive or efficient as other businesses. Digital illiteracy amongst senior management also has the potential to limit the effectiveness of the CIO and their technology programs through lack of senior support and buy-in from the organization as a whole.

However, CIOs are in a good position to raise the digital literacy of their senior management teams by effectively communicating the business value of IT. CA Technologies can help them to have business-level conversations about the value of their technology implementations and innovations, and also provide a range of technologies to make them more productive.

Ultimately, the CIOs who will be the most effective for their organization will be the ones who identify strategic business thinking from an IT perspective, are proactive in presenting solutions, and communicate their business value in language that other C-level executives and the board understands.

Finally, as IT systems increasingly become cloud-centric, CIOs are positioned to be important brokers of IT services—orchestrating them across the organization and working more closely with line of business managers to realize the value of their digital strategies. The time has come for the CIO to lead the way ahead.

CA Technologies is an IT management software and solutions company with expertise across all IT environments—from mainframe and distributed, to virtual and cloud. CA Technologies manages and secures IT environments and enables customers to deliver more flexible IT services. CA Technologies innovative products and services provide the insight and control essential for IT organizations to power business agility. The majority of the Global Fortune 500 rely on CA Technologies to manage their evolving IT ecosystems. For additional information, visit CA Technologies at ca.com.