

# The Future for CIOs: Which way is up?

An executive summary of a survey  
by The Economist Intelligence Unit



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## A note on survey demographics

In September 2014 The Economist Intelligence Unit surveyed 1,000 senior executives from 13 countries across Asia-Pacific, including China, India, Australia, South Korea and six members of the Association of South-East Asian Nations (ASEAN).

Over 20 industries are included in the sample, with the largest representation coming from manufacturing (145), business services (109) and technology (97). Half the companies in the sample have an annual revenue over US\$500m.

Out of the 1,000 respondents, 594 have at least some involvement in the field of information technology (IT), while the remaining 406 come from non-IT backgrounds. There were 148 chief executive officers (CEOs) and 86 chief information officers (CIOs).

It should be noted that the term chief information officer is intended to mean the most senior IT person within an organisation. Thus, all references to CIO should be taken to include equivalent/synonymous job titles.

A full breakdown of the survey demographics and the results is set out in the appendix.



## The Future for CIOs: Which way is up?

Technology has thrust the CIO centre stage. There are now plenty of opportunities for ambitious CIOs to make their mark on the business. In recent years, a handful of CIOs have even become CEOs of major businesses<sup>1</sup>. Clearly, attitudes about the role among business executives are changing. The question for CIOs in Asia-Pacific is, are they ready?

To find out, The Economist Intelligence Unit conducted a survey, sponsored by Hitachi Data Systems, of 1,000 senior executives from across the region. To get a rounded view of the topic, respondents were drawn from the IT function and from non-IT functions (see A note on survey demographics). This executive summary highlights what businesses across Asia-Pacific expect from their CIOs and how CIOs view their future prospects.

The main findings to emerge from the survey are as follows.

**CIOs have become respected members of a business, but moving up the management ladder may take more time.** The CIO has a strategic role that goes beyond just managing the IT function in nearly nine out of ten (89%) organisations (see chart 1). This view is most prominent in emerging economies, particularly Indonesia (95%). True, IT executives are more likely (94%) to think this, but agreement on this matter among non-IT executives is still high (81%). In addition, the vast majority

of respondents agree that the CIO should be involved in all business-critical decisions at an early stage (see chart 2).

The main reason given for this is because IT is strategically important to most organisations. Yet, a sizeable minority give credit to the CIOs as individuals for their own elevated status. One in five board- or C-level executives (and more than one in four CEOs) view the CIO as having a strategic role because they value their input, something that CIOs are less likely to appreciate.

Making a contribution to strategy does not, however, necessarily equate to business leadership. Most respondents do believe that the CIO should be amongst the possible candidates to succeed the CEO, although a significant minority (41%) of non-IT executives are still to be convinced. There are significant regional differences, nonetheless. CIOs in developed economies such as Hong Kong and South Korea have more work to do to convince their colleagues of their leadership abilities than do their peers in emerging economies such as India and China (see chart 3).

**Efficiency has become the CIO's niche; now they need to become drivers of growth.** Many CIOs have been tasked with helping their firms cut costs by being more efficient. This is where CIOs have made their biggest contribution in the last 12 months. As the slow recovery from the global financial crisis stumbles on, improving

<sup>1</sup> <http://www.informationweek.com/it-leadership/yahoos-new-chief-a-cio-to-ceo-story-/d/d-id/1102059?>

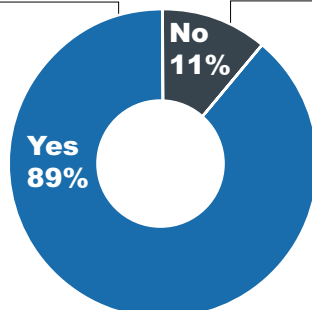
## Chart 1: Strategy for success

## Does the CIO at your organisation have a strategic role in the core business?

(% of respondents)

Why do you think this is?  
(top three answers)

1. IT is viewed as strategically important to the business
2. Current leadership values the CIO's input
3. CIOs have a unique viewpoint; they can see across the business

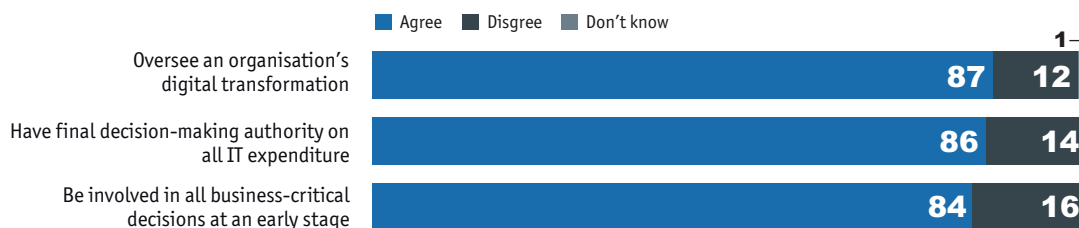
Why do you think this is?  
(top three answers)

1. It is not necessary; IT is not central to the business
2. It is not their job; CIOs should concentrate on running the IT department
3. Current leadership does not see the benefits of involving the CIO

## Chart 2: CIOs have earned their stripes

## A CIO should...

(% of respondents)



## Chart 3: Emerging CEOs

## A CIO should be a candidate for succeeding the CEO

(% of respondents, by country/region)

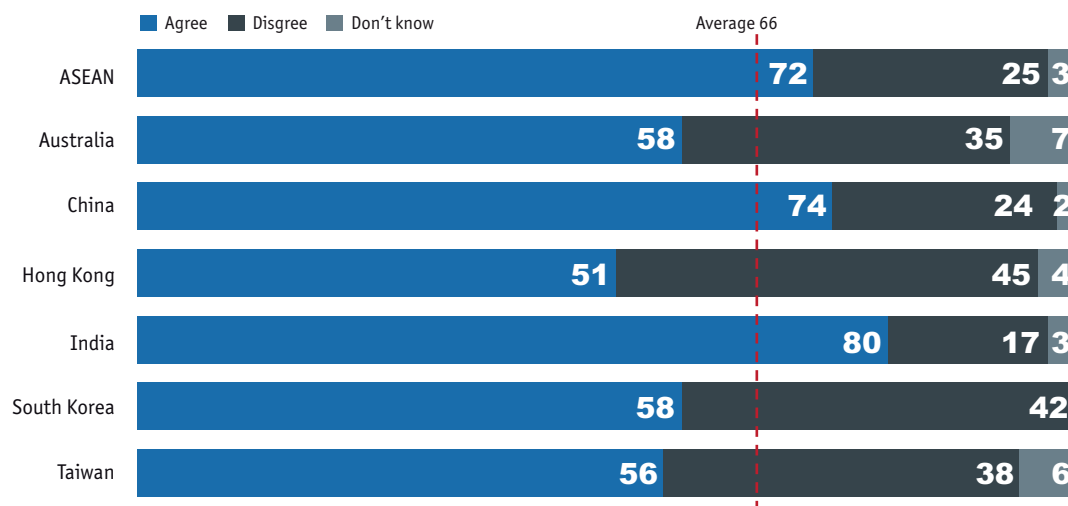


Chart 4: From cost centre to revenue generator

## Where will the CIO make the strongest positive contribution?

(% of respondents)



operational efficiency and business processes will remain paramount, but a subtle shift may be underway (see chart 4).

While the emphasis on operational efficiency is falling, there is a rising expectation that CIOs will contribute to business growth in the next 12 months. Although slight, there has been a move towards expecting the CIO to play a role in developing new products or services, as well as revenue generation. Three out of four (75%) executives believe that CIOs should be expected to generate revenue.

CIOs and other executives in the IT function seem to be aware of the areas where they will

be required to deliver. However, they may underestimate the skills and experience needed to achieve this. According to CEOs, the top three areas where CIOs should develop their skills are: a greater understanding of the business; the ability to think strategically; and an awareness of broader industry developments. However, none of these three features are at the top of the CIOs' own development goals (see below).

**CIOs need to expand their existing skill set, rather than specialise further.** The primary focus for CIOs currently sits somewhere between IT and corporate strategy. The momentum, moreover, is shifting from the former towards the latter. Thus, if CIOs want to build on their hard-won reputation and become more involved in the business then they will have to start thinking beyond a narrow technology remit. Simply demonstrating that they have the technical skills to do their job will not be enough to lift CIOs above the IT function.

Yet most CIOs believe that their primary focus should be on making a better business case for IT investments. Other top-ranking priorities include developing the technical skills to integrate new technologies, and knowledge of emerging technologies. These beliefs do not appear to be shared with the majority of CEOs (see chart 5). What is more, executives in non-IT functions are more open to a CIO having a non-IT background than counterparts in the IT function. So this blind focus on technology skills may be misplaced.

Chart 5: Career counselling

## Top three skills, experience or qualities that a CIO needs to develop in order to progress

Rank	CEOs	CIOs
1	Understanding of the underlying business	Demonstrating business case for IT investment
2	Ability to think strategically	Technical skills to integrate new technologies
3	Awareness of broader industry developments	Knowledge of emerging technologies



## Stepping up to CEO

*Four in five CIOs in our survey believe they could be a candidate to replace the CEO. These strategic CIOs should make a note of the following areas in their career development plans:*

**1. Taking ownership of information:** CEOs are looking to better data management and analytics to drive sales growth. Providing greater insights should be an easy win for CIOs, placing them at the centre of most—if not all—strategic discussions.

**2. Facing the right customer:** CEOs are not the sole customer to satisfy. To align IT with the business, CIOs should be looking outwards, focussing on discovering new ways of harnessing technology to increase their organisation's competitive offering.

**3. Delivering real returns on IT investment:** A CIO's future prospects are likely to be determined by money made more than money saved. The vast majority of executives now expect CIO to generate revenue—particularly among CIOs themselves.

**4. Showing leadership requires taking the lead:** Ambitious CIOs need to acquire additional knowledge and experience beyond their traditional IT skillset. This requires taking the initiative, getting immersed in the business and actively contributing to strategic decisions.

**5. Investing in IT does not equal innovation:** Technology can facilitate—or obstruct—innovation, but it is no panacea. Executives expect CIOs to drive innovation across the business, not just deploy new IT, so working closely with C-level colleagues is essential.

CIOs may believe that they already have a good understanding of the business. After all, the IT function has captured every working cog of the organisation with use case diagrams, process maps and other business analyst arcana. However, this “360 degree” view of the business is clearly not comprehensive enough or deep enough to impress senior management. For their part, CIOs show willing: most see the benefit of spending time in other parts of the business—if they could get the chance.

**Technology can differentiate companies in a crowded market, so CIOs must be aligned with external business goals.** CIOs need to make sure that IT is serving the needs of the business. It is a positive, therefore, that IT is completely aligned with the business at 30% of organisations, while only 2% of respondents say that IT is completely out of alignment with the business. However, a worrying 29% of respondents overall—and 42% in China—say that IT is heading towards becoming out of alignment with the business. By

contrast, only 12% of respondents report a shift in the opposite direction.

There are signs of misalignment when it comes to strategic priorities for IT investment. The top-three priorities overall are enhancing competitiveness, improving customer satisfaction and increasing sales. The majority of CEOs would like to see their IT investment used to increase sales. Meanwhile, CIOs rank increasing sales seventh on their list of strategic priorities for IT investments. For them, increasing organisational flexibility is the top priority.

Close alignment with the business is important at a time when IT departments are increasingly taking control of the overall IT budget. Nearly one in three firms is moving from a situation where some of the IT spend is devolved to business units to one where the IT department exclusively controls all IT spend (87% of board- or C-level executives agree that CIOs should have final decision-making authority on all IT expenditure).

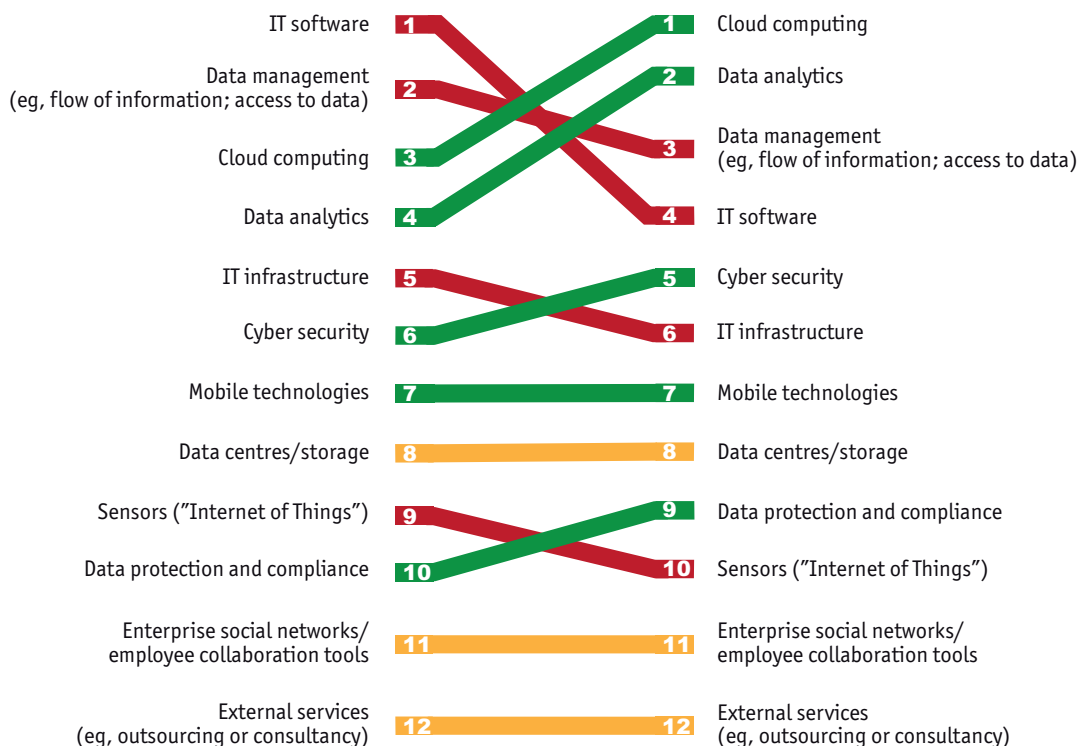
Chart 6: Getting cloudy

## Focus for IT investment

## Last 12 months

## Rank

## Next 12 months



This is potentially a positive development, but only if the IT team works in close consultation with all the business units to agree on their IT needs.

**Some CIOs have their head in the cloud, while CEOs are demanding hard data.** When it comes to IT investment, respondents would like more resources spent on cloud computing and data analytics (see chart 6). Priorities vary slightly, nonetheless. Respondents from the IT field—particularly CIOs—would like to see an increase in investment in cloud computing. Those from non-IT functions, however, express a preference for data analytics and data management (although the top choice for CEOs is “none of the above”).

These different objectives reflect the varying outlooks: CIOs and other IT executives prioritise

organisational efficiency and agility. Other executives want revenue growth. According to a 2013 survey of business executives in Asia-Pacific by The Economist Intelligence Unit<sup>2</sup>, 45% believed that big data insights could boost revenue by 25% or more. Understanding this shift from efficiency gains to sales would enable CIOs to frame IT investment in a language that the business understands. After all, cloud computing and data analytics are key components of any big data play.

This will be important as IT investment hangs in the balance. Over one-third (38%) of companies are currently increasing IT investment, but intentions differ significantly by country (see chart 7). Within ASEAN, Indonesian firms are twice as likely to be increasing IT spend than their counterparts in Singapore and Malaysia

<sup>2</sup> *The Hype and the hope: The road to big data adoption in Asia-Pacific* (2013), The Economist Intelligence Unit, sponsored by Hitachi Data Systems.

(44% vs 22%). Across the entire sample, a larger percentage of firms are shifting from spending more on IT to spending less than the other way around. Moreover, the business case for investing in new IT has yet to be proved at many companies—particularly in developed markets, such as Australia, Hong Kong, South Korea and Singapore. Creaking IT infrastructure is already one of the top barriers to innovation (see The CIO x Innovation), so cutting investment further could prove costly.

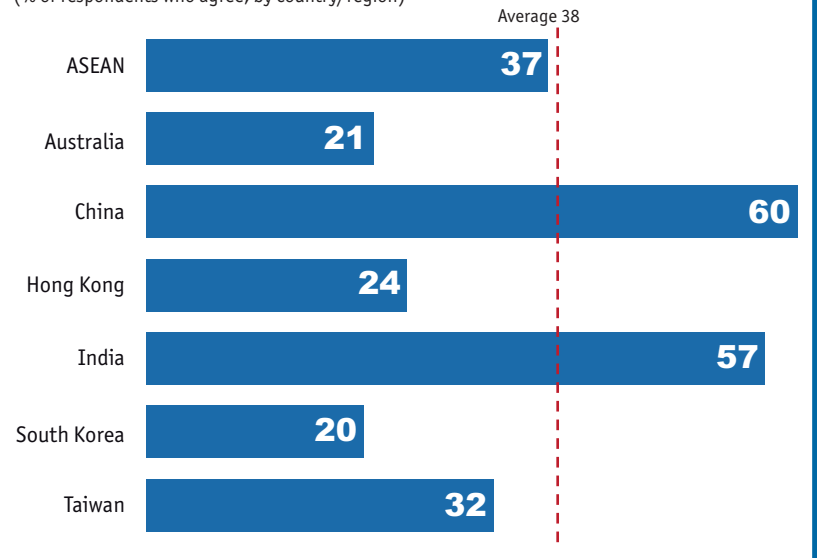
## Conclusion

CIOs in Asia-Pacific are at a crossroads. Having largely focused on cutting costs and improving business-process efficiency for the past few years, they are now going to have to switch their attention to revenue growth. Firms are expecting them to deliver on a number of fronts over the next 12 months, including enhancing competitiveness, improving customer satisfaction and increasing sales. This is an opportunity that CIOs should not squander by overly focusing on the minutiae of their existing remit.

Until recently it was believed that cloud computing and the “consumerisation” of technology would make the CIO irrelevant, or at least reduce his or her responsibilities to simple technology governance and information security. This survey shows that, in Asia-Pacific at least, this is not the case. Executives across the region believe that the CIO should be involved in critical

### Chart 7: Digital wallet

**My organisation is increasing the amount that we spend on IT year on year**  
(% of respondents who agree, by country/region)



decisions across the business and have the final say on IT expenditure.

To succeed, CIOs need an accurate idea of how existing IT assets can increase their organisation’s revenue, and should not focus just on making better business cases for yet more technology. Accepted wisdom may be that CIOs have a “helicopter” view of the business, as a result of IT having a role in every department, but this level of insight is not enough for CEOs. Ultimately, any CIO with an eye on strategic responsibility will have to fly closer to the ground.



## The CIO x Innovation

### *CIOs have an important part to play in innovation, attracting more attention to their role*

Innovation\* has been a major driver of revenue growth at almost three in five (59%) companies in our survey. This relationship is expected to continue on an upward trend, despite some respondents expecting the significance of innovation to tail off. The link is particularly strong in Indonesia (82%)—double the equivalent figure in Singapore (40%), as well as in China (63%), where spending on research and development by manufacturers is expected

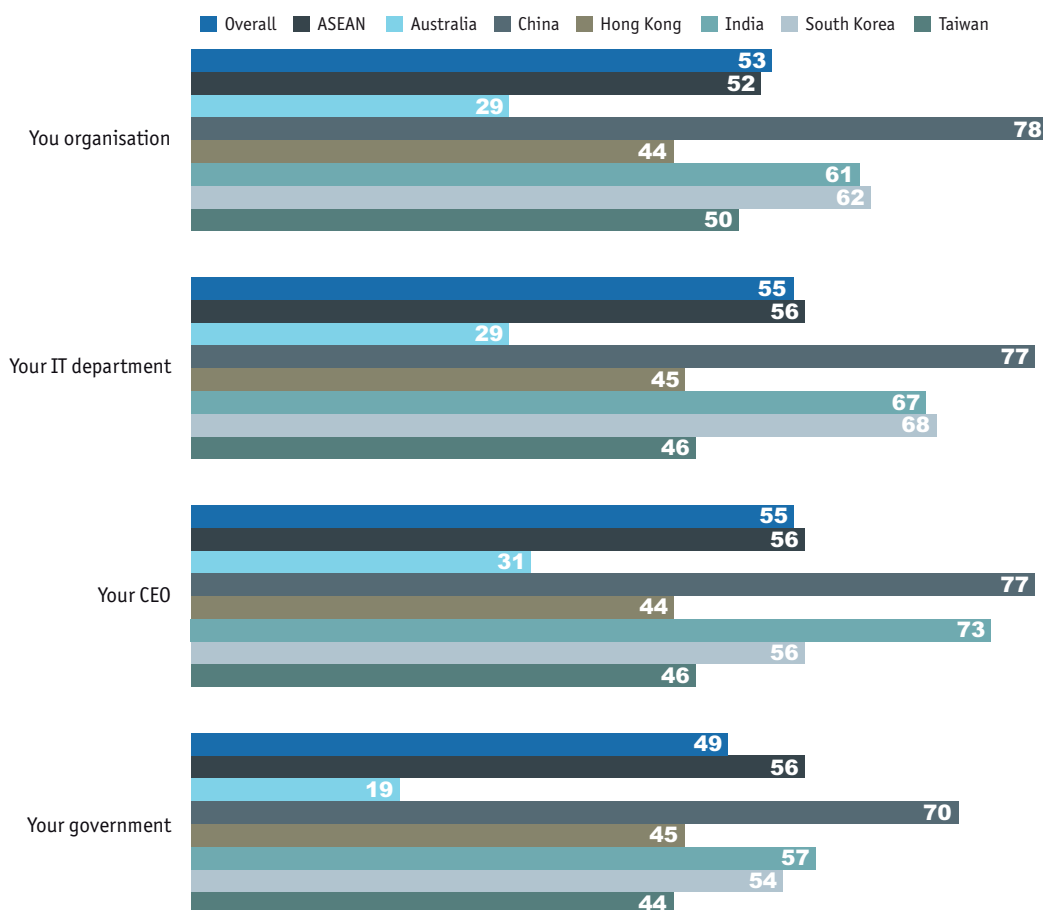
to increase rapidly<sup>3</sup>, although it is starting from a low base. Unlike elsewhere, the biggest barrier to innovation in the Greater China region (China, Taiwan and Hong Kong) is a lack of talent and skills.

Across Asia-Pacific, senior executives are generally satisfied with the level of innovation at their organisation. When asked to score their company on its contribution to innovation compared with its peers, just over half (53%) of respondents selected a positive score, equivalent to either leading the way (+1) or out in front (+2) (see chart 8). Only 12% awarded

**Chart 8: Innovation scorecard**

#### How would you score the contribution to innovation made by the following?

(% of respondents giving positive score of +1 or +2)



<sup>3</sup> <http://www.kpmg.com/cn/en/pressroom/pressreleases/pages/press-20140618-china-manufacturers-to-boost-research-and-development-spend.aspx>

their business a negative score, either falling behind (-1) or left behind (-2), although Taiwanese respondents are noticeably more negative here (26%). One-third of respondents give their organisation a neutral score, equivalent to keeping up with peers.

When asked to score the contribution to innovation at their organisation made by the IT department and the CEO, each was awarded a positive score by the same percentage of respondents (55%). IT executives had a tendency to rate the IT department higher, while non-IT executives scored the CEO higher. CIOs and other IT executives consistently awarded higher positive scores, suggesting that they may have an inflated view of innovation. Even so, in both cases the scores remain close.

When it comes to leading innovation, not just contributing to it, the majority of executives from across functions agree that the CIO should drive innovation across the business (see chart 9). Over four out of five respondents share this view, even though IT is considered a driver of

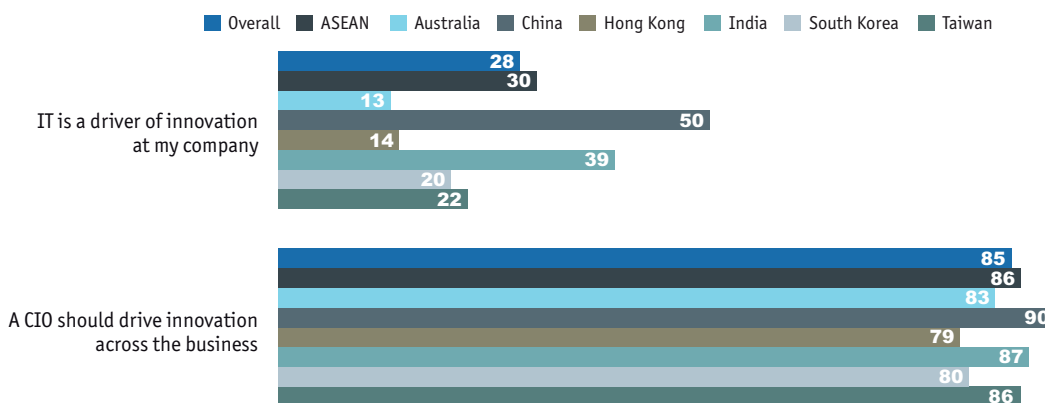
innovation at only 28% of firms —and only 11% in Singapore. In fact, the current trend sees IT playing a lesser role in innovation in the next 12 months. Underinvestment certainly plays a part here: the standard of existing IT infrastructure is considered the second biggest barrier to innovation, behind a lack of budget/resources.

Thus, technology may have thrust the CIO into the spotlight, but his or her career is not tied to IT. As in other areas, the future CIO's role in innovation now goes beyond deploying and managing IT. Early-stage involvement in business-critical decisions means the conversation with other C-level colleagues has to focus on achieving business goals first and foremost, rising above the specifics of hardware and software. Looking ahead, the strong link between innovation and revenue growth should cast an even brighter spotlight on the CIO.

\* For the purposes of this survey, innovation was defined to mean the action of bringing a new idea, new method, new process or new product—however big or small, radical or incremental—to an organisation, which, when implemented, leads to positive change.

**Chart 9: More to innovation than meets the eye**

(% of respondents agreeing or selecting statement)



# Appendix

The Economist Intelligence Unit surveyed 1,000 senior executives from Asia-Pacific. The survey took place in September 2014 and our thanks go to all those who took part.

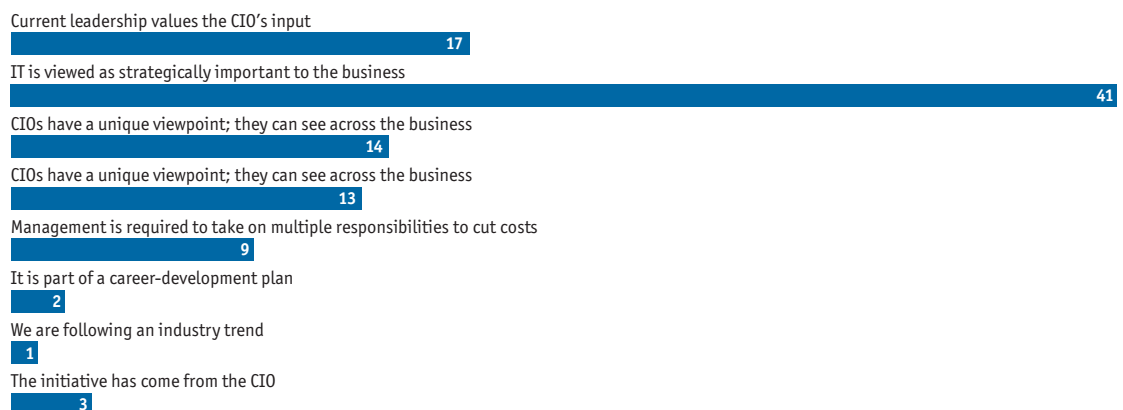
Each respondent answered “yes” to the following screener question: Do you have involvement in, or working knowledge of, the IT budget at your organisation?

Please note that not all answers add up to 100%, either owing to rounding or because respondents were able to provide multiple answers to some questions.

- 1. In your view, does the CIO at your organisation have a strategic role in the core business (ie, his or her responsibilities go beyond managing the IT function and maintaining IT systems)?**  
(% respondents)

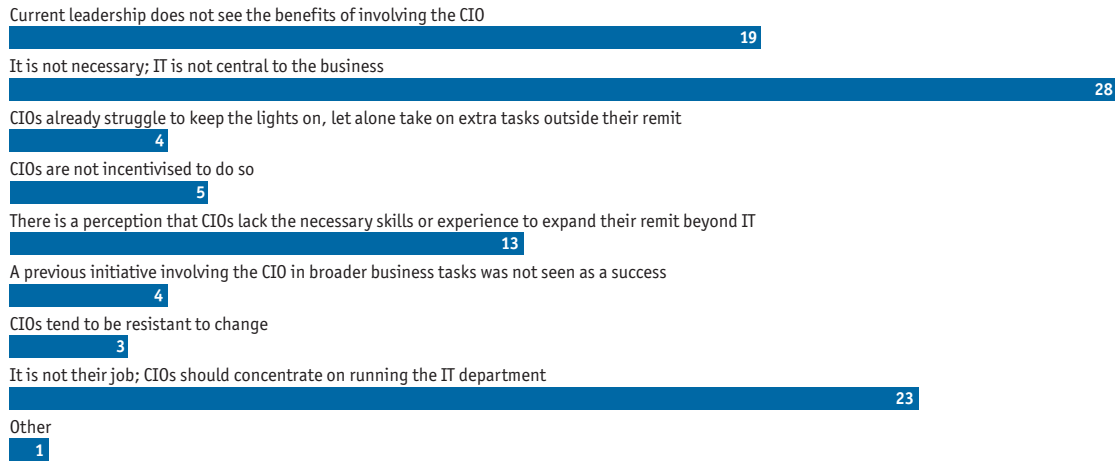


- 1a. Why do you think he or she has a strategic role?**  
(% answering ‘yes’ to Q1)

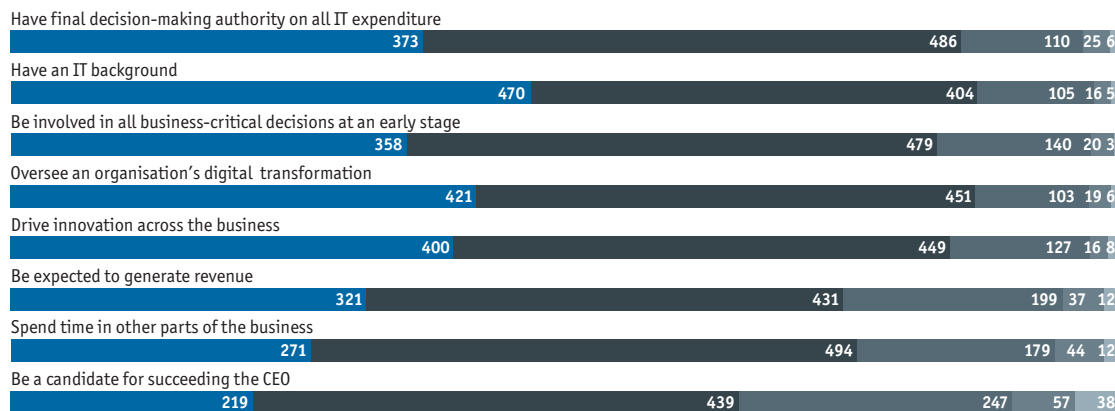


**1b. Why do you think he or she does not have a strategic role?**

(% answering 'no' to Q1)

**2. To what extent do you agree or disagree with the following statements?**

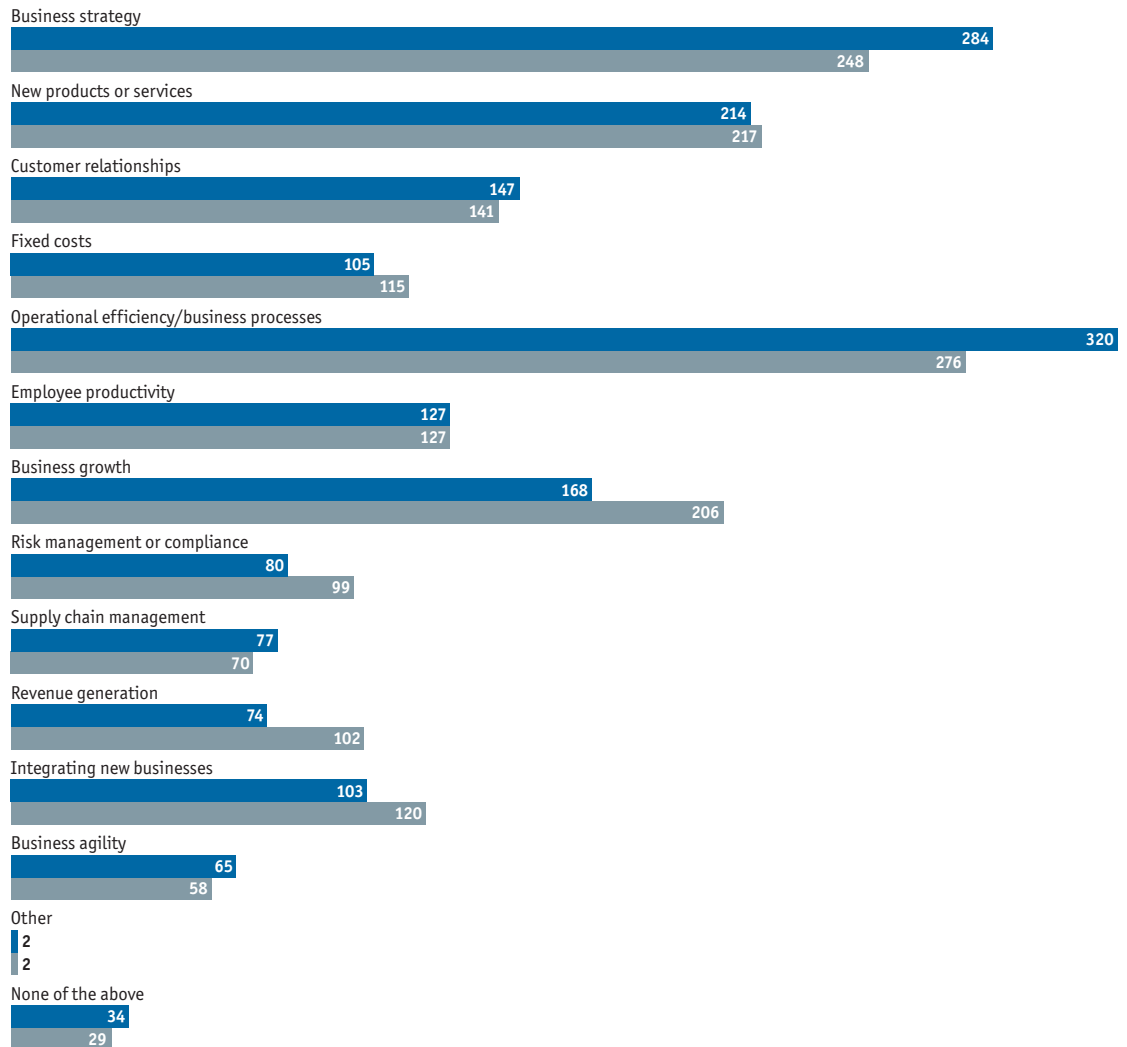
(number of respondents)

■ Strongly agree   
 ■ Somewhat agree   
 ■ Somewhat disagree   
 ■ Strongly disagree   
 ■ Don't know
**A CIO should ...**

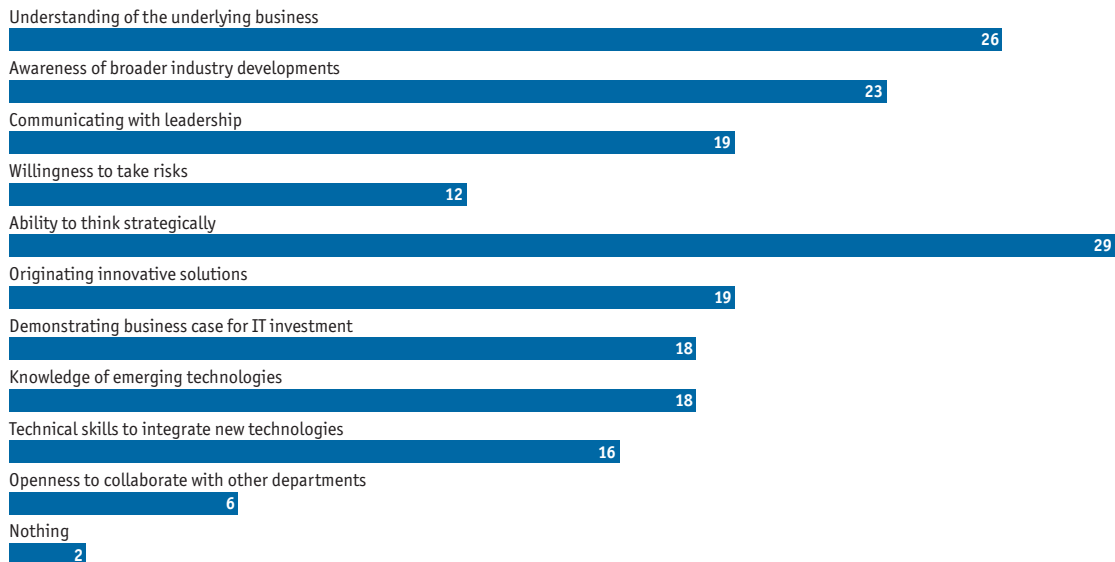
**3. Consider the following aspects of your business. Where, if at all, has the CIO at your organisation made the strongest positive contribution in the last 12 months? Where, if at all, do you expect the CIO to make the strongest positive contribution in the next 12 months? Select up to two in each column.**

(number of respondents)

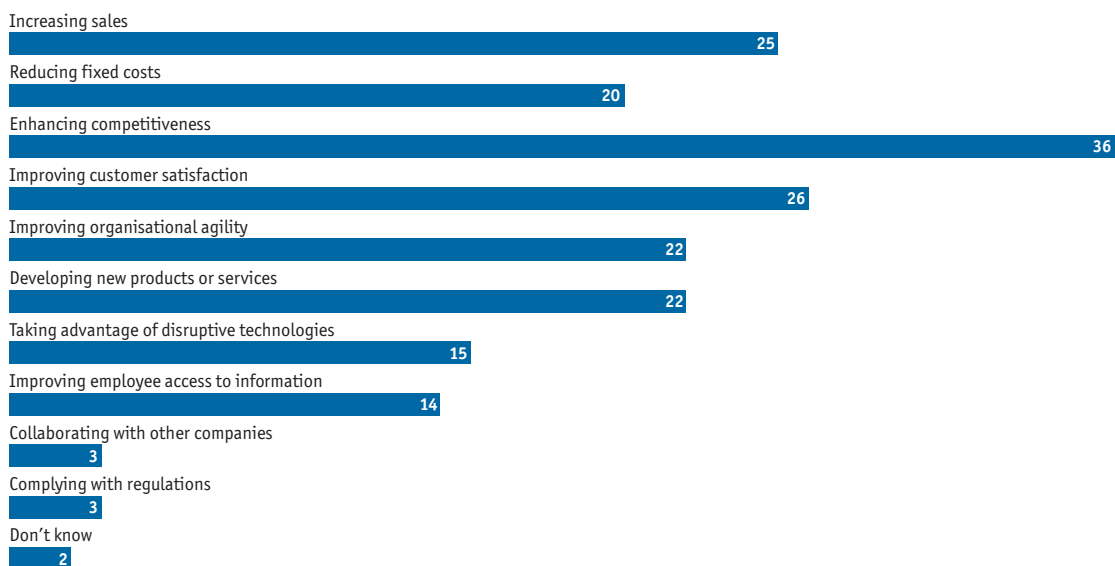
■ Last 12 months ■ Next 12 months



**4. Which of the following skills, experience or qualities are most important for CIOs to develop if they seek greater involvement on the business side? Select up to two.**  
(% respondents)



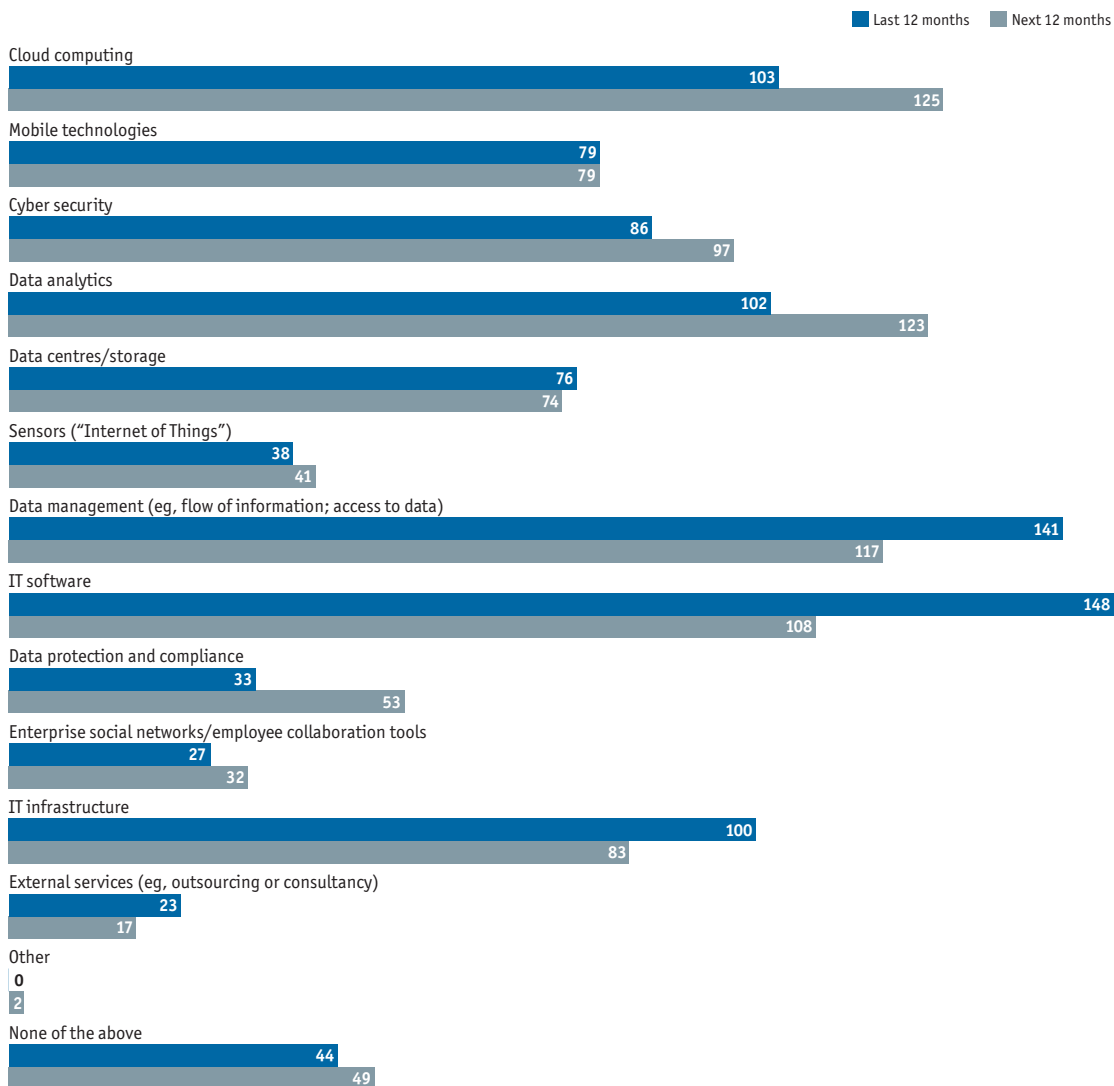
**5. Which of the following strategic priorities is your organisation pursuing through its IT investments? Select the two top priorities.**  
(% respondents)





**6. In which of the following technology areas has your organisation invested the most resources in the last 12 months? In your view, where (if anywhere) should it be investing more?**

(number of respondents)



**7. In the question below, there are pairs of statements that describe opposing situations for IT investment. For each pair, select the column that best describes the situation at your organisation.**

(number of respondents)

■ A ■ Transitioning from A to B ■ Neither at A nor B ■ Transitioning from B to A ■ B

(A) My organisation is increasing the amount we spend on IT year-on-year	(B) My organisation is decreasing the amount we spend on IT year-on-year
378	257 256 85 24
(A) Other departments control an IT budget, not just IT	(B) Only the IT department controls an IT budget
173	304 314 126 83
(A) The IT function at my organisation is completely aligned with the business	(B) The IT function at my organisation is not at all aligned with the business
303	293 271 116 17
(A) We are too quick to integrate the newest IT available into our business infrastructure	(B) We are too slow to integrate the newest IT available into our business
210	280 304 166 40
(A) The business case for investing in new IT has been proved at my organisation	(B) The business case for investing in new IT has yet to be proved at my organisation
273	290 272 122 43
(A) The primary focus of the CIO is on information technology, not on corporate strategy	(B) The primary focus of the CIO is on corporate strategy, not on information technology
183	251 357 160 49
(A) IT is a driver of innovation at my company	(B) Innovation at my company does not depend on IT
282	277 277 118 46

**8. Generally speaking, which of the following statements best describes the link between innovation and revenue-generation at your business?**

(% respondents)

Innovation has been a major driver of current revenues, and it will continue to be vital for future growth	43
Innovation has been a major driver of current revenue, but it will be less important for future growth	16
Innovation has had a minor role in revenue generation so far, but it will become more important in the future	20
Innovation has had a minor role in revenue generation so far, which will continue in the future	10
Innovation has had little or no role in revenue generation so far, but it will become more important in the future	4
Innovation has had little or no role in revenue generation so far, which will continue in the future	2
Innovation does not contribute to revenue generation at my company, but it is driving growth at some of our competitors	1
Innovation does not contribute to revenue generation at my company, nor in our industry	2
Don't know	2

**9. How would you score the contribution to innovation made by each of the following stakeholders during the last 12 months: (a) your organisation; (b) your IT department; (c) your CEO; and (d) your government?**

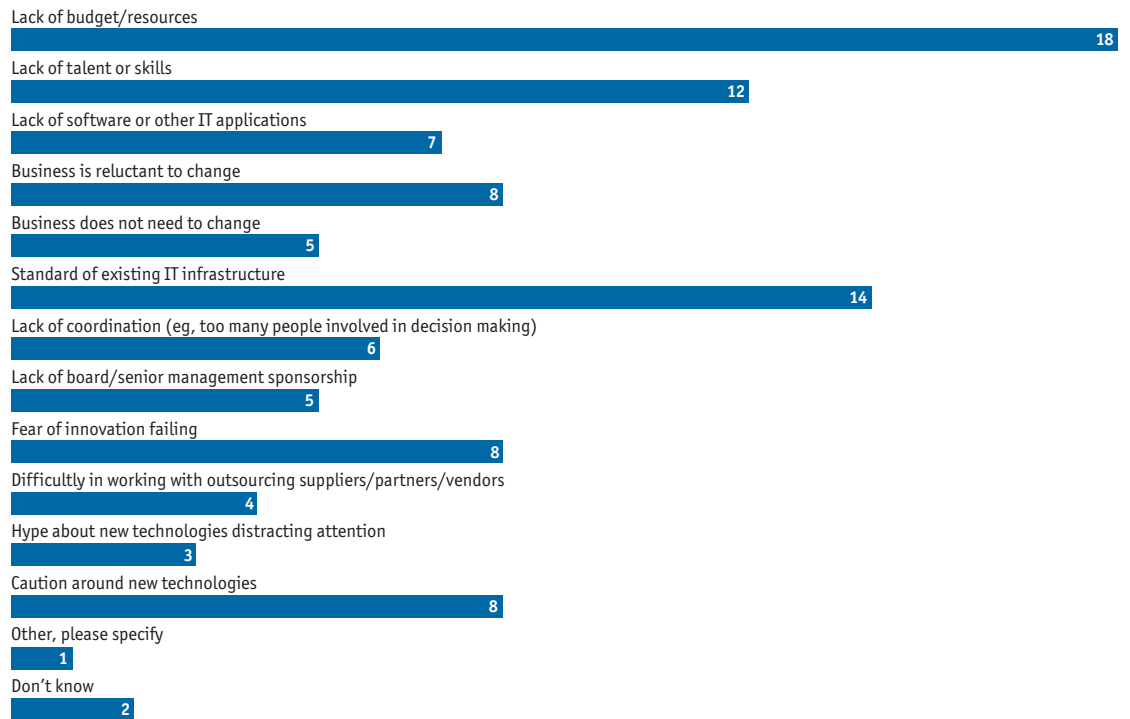
Select one column in each row, where +1 and +2 are positive scores, 0 is a neutral score, and -1 and -2 are negative scores.

(number of respondents)

■ Left behind -2 ■ Falling behind -1 ■ Keeping up with peers 0 ■ Leading the way +1 ■ Out in front +2 ■ Don't know

Score your organisation on its contribution to innovation in your industry	30 93 330 382 145 20
Score the contribution of your IT department to innovation at your organisation	18 100 316 354 192 20
Score the contribution of your CEO to innovation at your organisation	23 64 337 350 201 25
Score the level of government support for innovation within the country you are located in	51 111 316 342 143 37

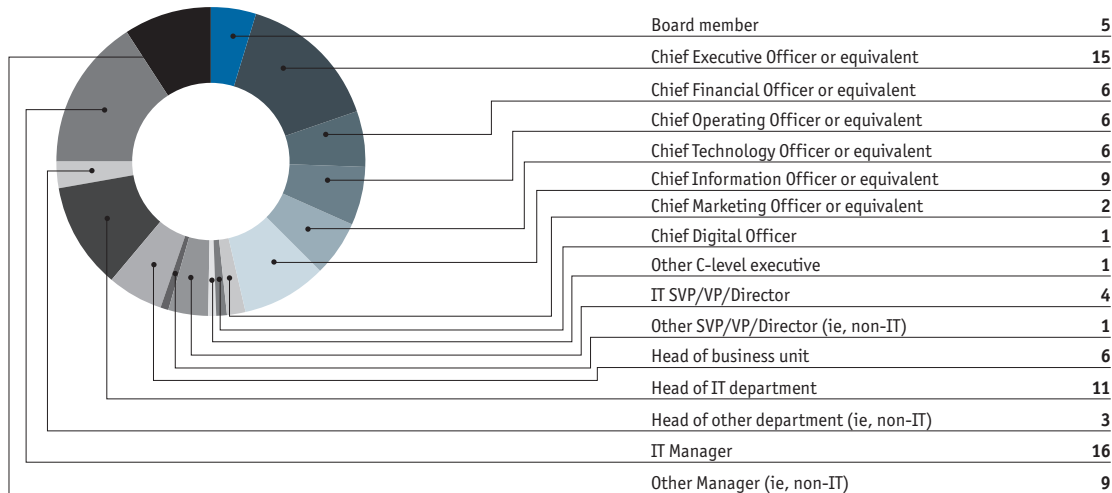
**10. What are the top barriers to greater innovation at your organisation during the next 12 months?**  
(% respondents)



# Survey demographics

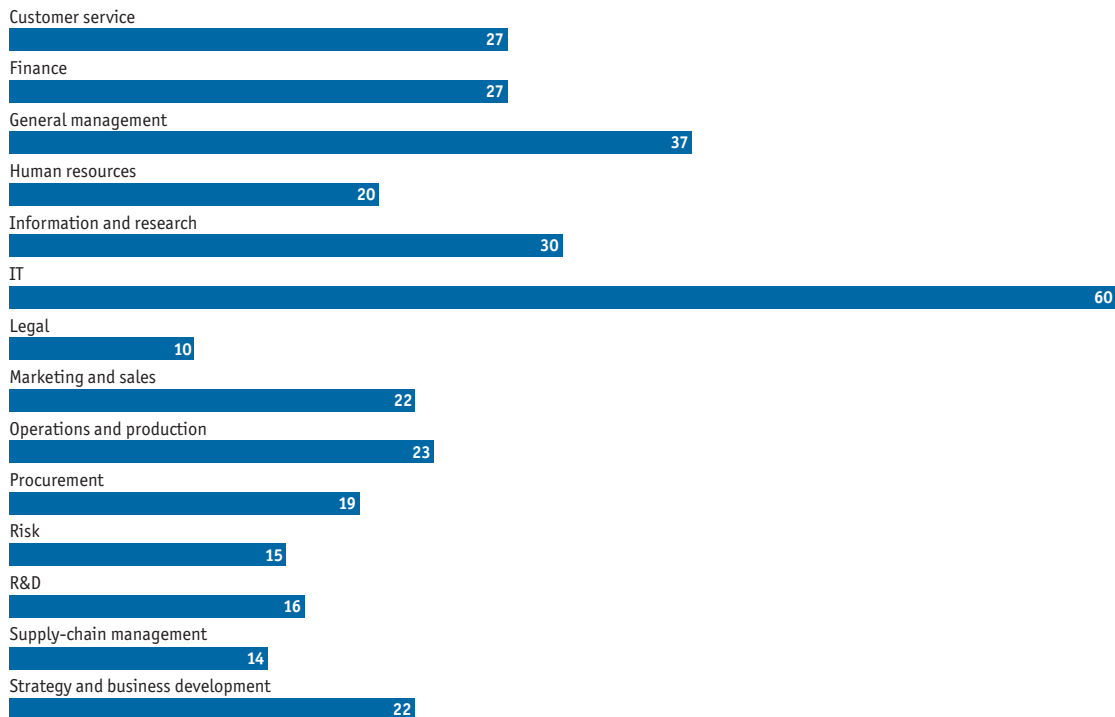
## A. Which of the following best describes your job title?

(% respondents)



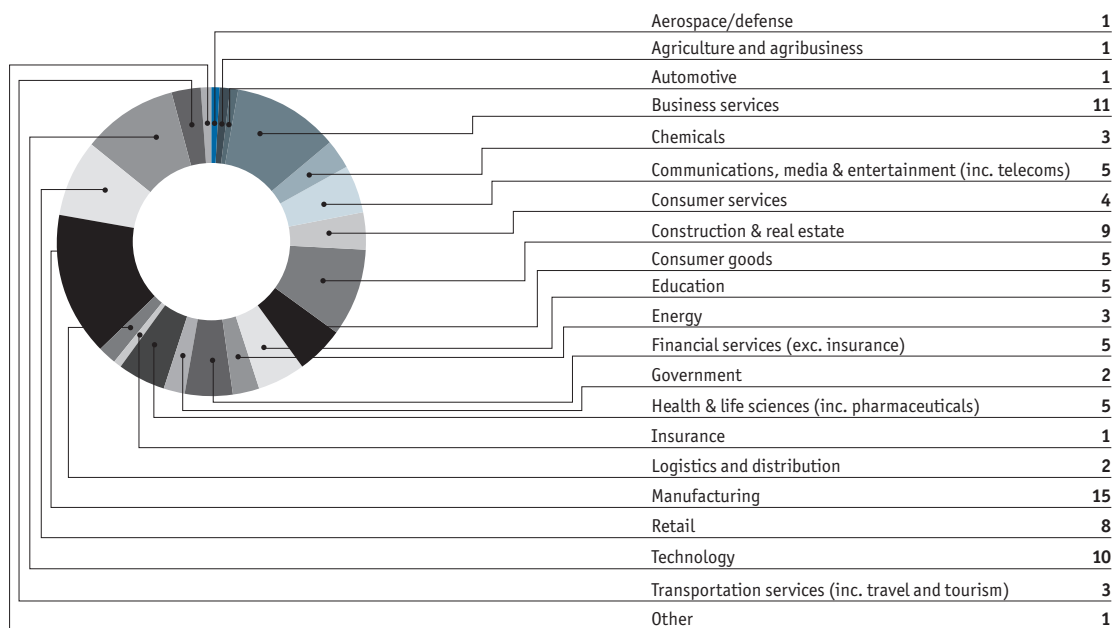
## B. What are your main functional roles?

(% respondents)

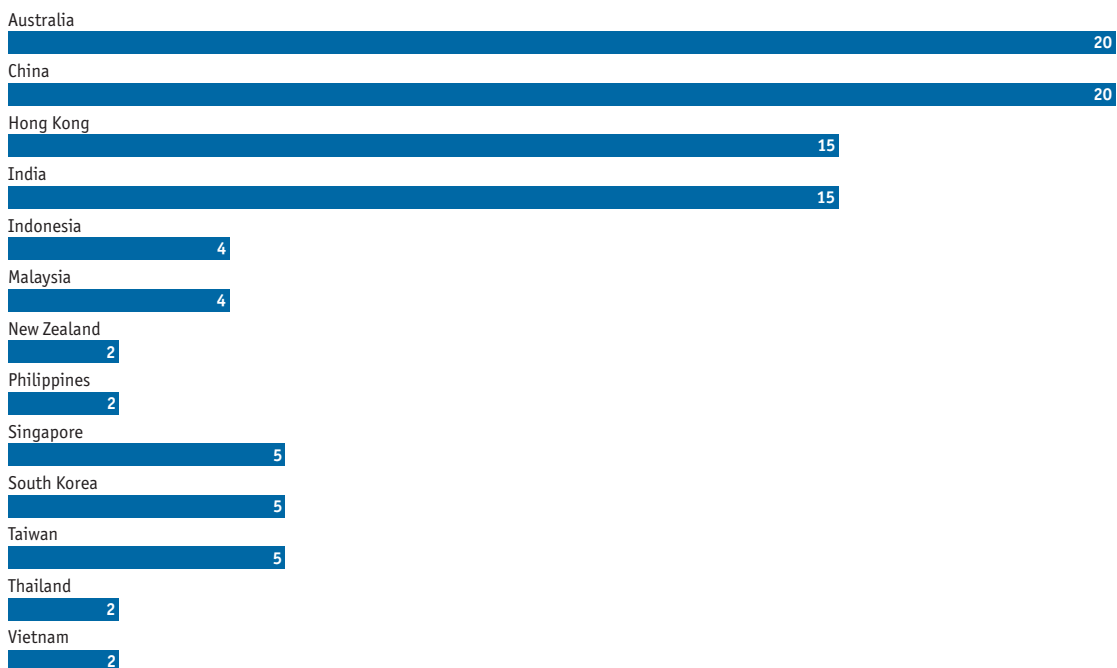


**C. What is your organisation's primary sector of activity?**

(% respondents)

**D. (i) In which country are you personally based?**

(% respondents)



**D. (ii) In what country is your organisation's main headquarters located?**  
(% respondents)

Same country as where I am located

90

In a different country to where I am located

10

**E. Which of the following best describes your company's legal status?**  
(% respondents)

Family owned

19

Other privately owned (partnership, limited liability, etc)

40

Government/ State owned enterprise

8

Private Equity portfolio company

17

Publicly listed

17

**F. What are your organisation's global annual revenues in US dollars?**

(Please select the most appropriate option if your organisation does not report revenue in US dollars.)

\$250m or less

34

\$250m to \$500m

16

\$500m to \$1bn

17

\$1bn to \$5bn

18

\$5bn to \$10bn

10

\$10bn or more

6



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LONDON

20 Cabot Square

London

E14 4QW

United Kingdom

Tel: (44.20) 7576 8000

Fax: (44.20) 7576 8500

E-mail: [london@eiu.com](mailto:london@eiu.com)

NEW YORK

750 Third Avenue

5th Floor

New York, NY 10017, US

Tel: (1.212) 554 0600

Fax: (1.212) 586 0248

E-mail: [newyork@eiu.com](mailto:newyork@eiu.com)

HONG KONG

6001, Central Plaza

18 Harbour Road

Wanchai

Hong Kong

Tel: (852) 2585 3888

Fax: (852) 2802 7638

E-mail: [hongkong@eiu.com](mailto:hongkong@eiu.com)

GENEVA

Rue de l'Athénée 32

1206 Geneva

Switzerland

Tel: (41) 22 566 2470

Fax: (41) 22 346 9347

E-mail: [geneva@eiu.com](mailto:geneva@eiu.com)