



# THE CREATIVE CIO

HARVEY NASH / KPMG  
CIO SURVEY 2016



The Power of Talent



# EXECUTIVE SUMMARY



Once again, thousands of CIOs and IT leaders from all over the world have given their valuable time to respond to the Harvey Nash / KPMG CIO Survey. The survey is now firmly established as the largest poll of its kind in the world. It charts trends in the industry as well as providing unrivalled insight into

the thoughts of influential leaders. This year we are delighted that the world-class Center for Information Systems Research at the Massachusetts Institute of Technology has joined Harvey Nash and KPMG.

There is little doubt that our industry is changing rapidly. In the last two years, IT leaders have become newly invigorated. The days of budget cuts and staff losses are well behind us. New challenges such as 'digital' have emerged. Was this yet another technology fad? No, was the resounding response from last year's respondents. Digital is most definitely real and it is changing the way in which everyone thinks about IT. CIOs are experimenting with innovative apps and some are even changing long-established core business models. Everyone it seems is now focused on finding ways to give their organisation an edge in an increasingly challenging business world.

## CIOs are becoming more strategic and outward focused

The CIO has never been more relevant or influential. Participation at the most senior level of decision-making is at an all-time high. Many respondents report that they are also spending increasing amounts of time with external stakeholders. Organisations are seeing the role of the CIO change from the 'purveyor of technology' to the 'agent of change' for the enterprise. IT organisations have largely cracked the problem of service quality and reliability, freeing up their leaders to take a wider role.

## CIOs are increasingly 'creating' rather than 'operating'

This year we see a marked shift away from operational priorities. Hints of this in previous surveys have now developed into a strong and clear

trend. CIOs tell us that they are exploring ways of creating innovative methods of working. Some now strongly emphasise the importance of nurturing relationships both with their C-level peers and outwards to suppliers and customers.

We believe CIOs are starting to see their value to the organisation differently. Recent 'turf-wars', for example over who 'owns' digital, have largely receded. Respondents report that CMOs, CIOs and new CDOs (Chief Digital Officers) are collaborating more effectively. The creative CIO can now step out of the shadows and lead the changes.

## Digital is here to stay and it is changing the way we think about IT

At a number of our launch events last year, some questioned whether the concept of digital was going to turn out to be just another passing fad. This year's results suggest this is emphatically not the case. Indeed we may be on the cusp of a new Information Age. The relentless march of smart-phones and tablets means that 'always on' technology has become ubiquitous all over the world. Much has been written about digital game-changers such as Uber, but leaders are telling us that digital innovation is deeper and more extensive.

We learned that there is a vast infrastructure of projects which are making a myriad of incremental changes to operations and even to core business models. Collectively these pack a massive digital punch. And digital isn't just a private sector phenomenon. Demand from the public who see themselves as consumers will see to that. Last year we explored how companies were responding to the digital challenge. Few organisations thought they were ahead of the curve. However, we discovered that the visionaries who had a clear enterprise-wide strategy seemed to be outperforming their peers. And now the pack is following. Many more organisations are taking a mature, company-wide approach in how they deal with digital challenges.

## Big data has become a bigger thing

In the 2014 survey we saw a shift in priorities towards big data, which became a surge in 2015. This year, big data is firmly in the centre of the headlines. At the World Economic Forum at Davos this year, for example, there was a major debate as to how organisations can respond to the big data

challenge. This is clearly creating stresses. Data analytics was the most in-demand technology for the second year running.

Nearly 40 per cent of IT leaders tell us that they suffer from skills shortfalls in this area. We think that big data and digital are closely entwined. As organisations increasingly use digital platforms to reach their customers in new ways, data volumes are rising at a spectacular pace. We think that those who understand what they need to collect and what they should do with this data are going to be the big winners in the years ahead.

### Skills and talent retention challenges are once again a thorn in the side of IT leaders

The proportion of CIOs and IT leaders reporting skills shortages has risen to the highest level since the Great Recession. This year, 65 per cent tell us that a lack of talent will prevent them keeping up with the pace of change – 10 per cent more than last year. But the shortfalls are asymmetric in nature. CIOs in Asia-Pacific, for example, are significantly more worried about skills shortages compared to their European and North American counterparts. Unsurprisingly, big data and analytics have moved further ahead as their major areas of concern. Forty per cent of all IT leaders feel pressure in this area.

Meanwhile, long-suffering architects can breathe a sigh of relief. After seeing falling demand for their skill-set in the last couple of years, the balance is shifting back. Architects are now much more sought after with significantly more demand, particularly for technical and security specialists.

### Cyber security just isn't going to get any easier

Last year we reported the positive message that many CIOs felt that their boards understood the challenges of cyber attacks. Following feedback from CIOs at the launch events, we asked some further questions this year. The results show that IT leaders see security as an escalating challenge. Nearly a third reported that they had to respond to a major security incident in the last two years. Organised cyber crime is at the top of this list – nearly seven in ten felt that this was their biggest threat. Amateur hackers came a distant second, with malicious insiders an even more distant third. Encouragingly, few CIOs felt that their competitors were out to hack them. However, on the world stage a sinister message has emerged.

Nearly three in ten leaders are very concerned about the actions of foreign powers. The outlook is unsurprisingly one of caution. The proportion of IT leaders who believe that their organisation is very well prepared to identify and respond to cyber attacks continues to fall. Only a fifth felt confident compared to nearly a third in 2014.

### Diversity surges past a new milestone

And finally, we are thrilled to be able to report that all the efforts of organisations to address their gender imbalance seems at last to be bearing fruit. For years, the number of female respondents to the survey remained stubbornly low. This year we have seen a powerful surge in numbers. Eleven per cent of the respondents were female, breaching the 10 per cent barrier for the very first time in the survey's 18-year history. This represents an increase of 37 per cent compared to last year. We think that around 200 organisations have appointed more women into senior IT positions in the last two years. While we are starting from a low base, there is a clear direction of travel and hopefully the pace will continue to accelerate. We believe that women are increasingly seeing IT as an attractive career option and that organisations are increasingly recruiting and developing their female professionals.

In summary, the IT landscape bears very little similarity to the barren wastelands of five years ago. The hopeful optimism that returned two years ago has turned out to be well founded. Budgets are growing, and many organisations are expending boundless amounts of energy looking for new ways to embrace the digital revolution enhancing the way they interact with customers, suppliers and all manner of stakeholders. A growing band of CIOs are even taking on a wider remit beyond their traditional role. Digital is exerting a pervasive and refreshing impact on the industry, which threatens to change the whole way we think about technology. And on the people side we are seeing moves towards a better gender balance in the industry. Indeed, the only constant element we have seen over the years in our industry is the relentlessness of change. And that is sure to continue.

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