

The Future
CIO.

Contents.

1. Introduction
2. Research methodology
3. Tomorrow's IT landscape
4. The skills gap
 - a. The question of leadership
5. The Future CIO
 - a. Key skills and attributes
6. Conclusion and recommendations from Reconnix
7. About Reconnix

1. Introduction.

Drastic changes to the role of the CIO have traditionally been driven by leaps in technology. But today this role is changing; not only because of advancements in technology but, because business demands it. Companies and their boards are looking for IT leaders to become trusted business advisors: individuals that can help businesses take full advantage of the opportunities technology provides with regards to greater performance, productivity and flexibility.

CIOs are expected to become strategic business leaders and valuable contributors to the overall competitiveness of their organisations. To achieve this CIOs need to have a good understanding of what the future technology landscape will look like, and how changes within it will help drive innovation within their own business operations.

Ultimately, there is no doubt that the CIO role is going to change dramatically over the next five years. CIOs will quickly have to

come to accept that their roles will stretch beyond just being IT service providers and cost centres to other business leaders.

Changes to the CIO role, are in my opinion, necessary today, because, if truth be told, very little can be achieved in terms of business transformation, success or growth without the right leadership or fit-for-purpose technology. And as CIOs hold a view of both these areas, it is only fitting that they should step into this role – the role of strategic leadership.

With this study, we wanted to understand if and how the role of the CIO was changing, and wanted explore what characteristics they will need to possess to ensure IT and business success in the future. The main findings are outlined in this Insight Paper, which we wanted to share with you to help you gain insight into the future role of the CIO. I hope that you find it to be an insightful read, and would love to receive your views on it, especially if you are a CIO of the future.

Steve Nice
CTO, Reconnix

2. Research Methodology.

To provide a detailed view of the future skills CIOs will require in an increasingly business driven and Open Source world, we gathered data from IT leaders specifically focusing on identifying current skills gaps and the common characteristics this group of individuals will need in the future:

Working with an independent research consultancy¹, Reconnix surveyed:

1. 100 IT leaders – drawn from the public and private sector, this audience was comprised of IT directors, managers and other decisions makers with financial control or sign-off on IT procurement

Research was conducted during August and September 2013.

¹ [Chime Insight and Engagement](#)

3. Tomorrow's IT landscape.

Today, the enterprise IT landscape is in a constant state of flux. There is an ever increasing inflow of new technologies, services and challenges, all of which remain set against the backdrop of an unpredictable economic climate. In addition, more and more boards are looking to CIOs to help their businesses to become more agile, innovative and gain some degree of competitive advantage through the use of fit for purpose technology.

Combined, these factors are forcing CIOs and IT leaders to become more business savvy. Not only do they have to make sure that they can do more with less they also have to ensure that the technologies they choose today will be fit for purpose tomorrow and help their companies reach their overall objectives.

This of course begs the question: just what are the technologies that will be fundamental to the delivery of IT services within businesses in the next five years?

According to today's IT leaders it will be:

1. Cloud - IaaS, SaaS and PaaS (57%)
2. Stable and secure Internet (54%)

3. Secure transactions across all platforms (48%)
4. Big Data/ data management (35%)
5. Identity management and single sign on technology (35%)

Other technologies such as vendor neutral cloud platforms, Open Source software, Open Standards, Hybrid IT, bring your own device (BYOD) and device independence will also be key in the delivery of IT services within businesses in the next five years (See Fig 1).

But knowing what technologies will be fundamental to the delivery of IT services in the future, alone, is not enough. CIOs and IT leaders have to have a fair degree of understanding of these technologies to make the most of them.

Worryingly, the research revealed that IT leaders feel that today's CIOs have little to no understanding of these technologies overall, with nearly two fifths (39%) suggesting this to be the case. In addition, only 4% said that CIOs have a high degree of understanding of these technologies today (see Fig 2).

Fig 1. Technologies that will be fundamental to delivery of IT services by 2018

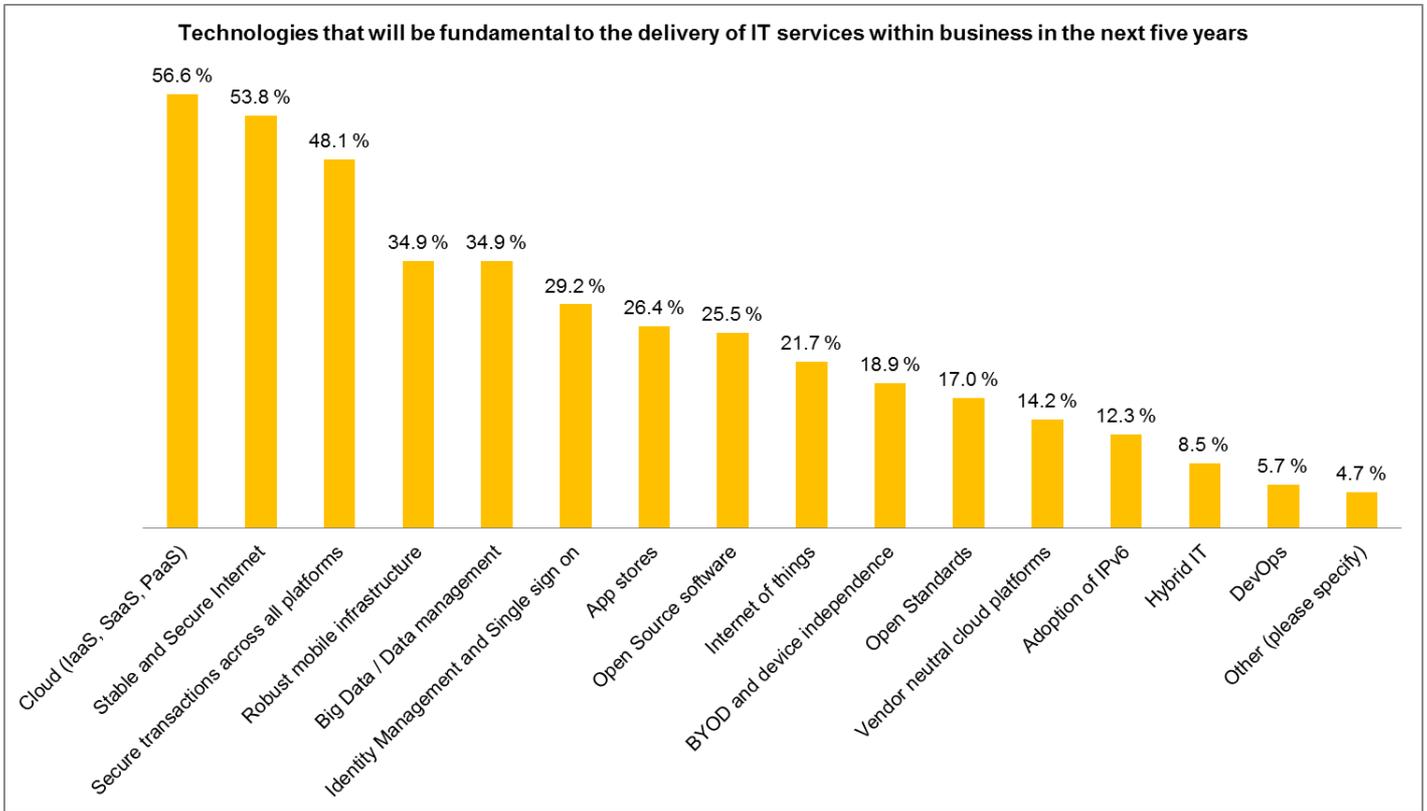
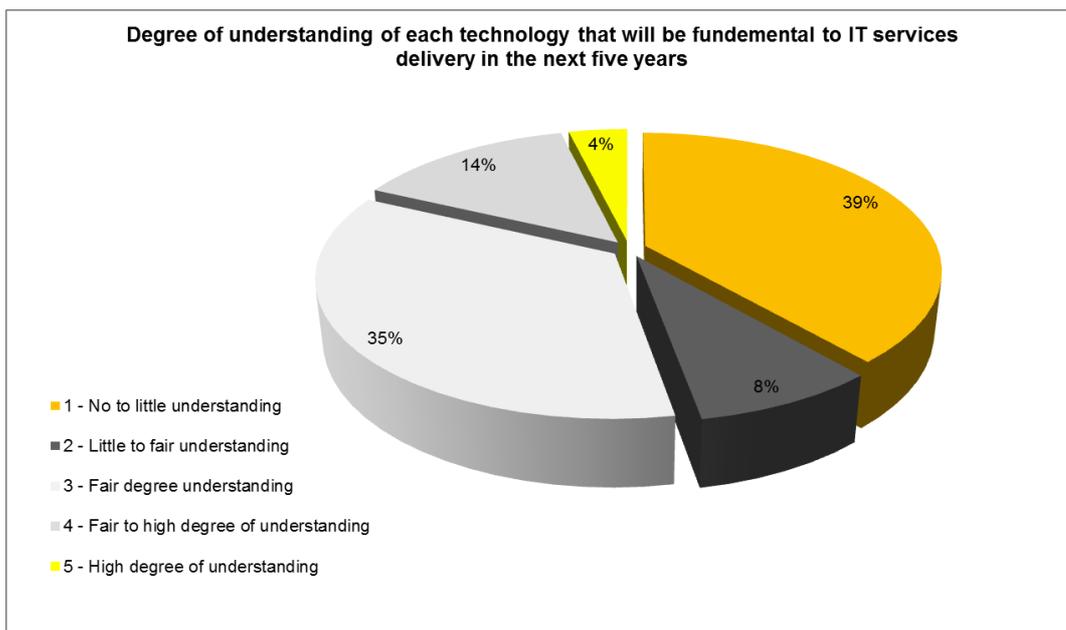


Fig 2. Degree of understanding of each of the technologies that will be fundamental to IT service delivery by 2018 amongst today's CIOs, according to IT leaders



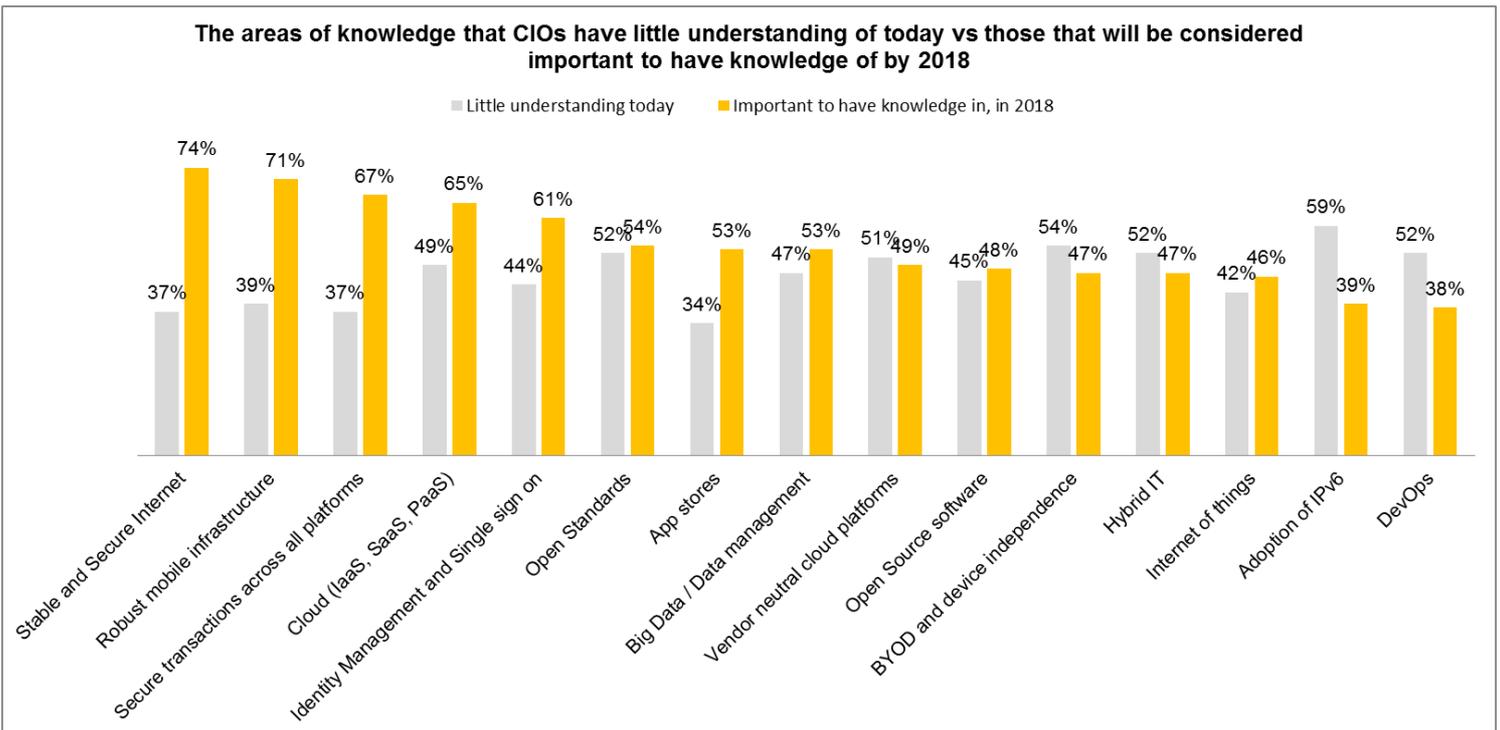
In addition, to the low degree of overall understanding of the key technologies that will be fundamental to the delivery of IT services by 2018, IT leaders highlighted the adoption of IPv6 (35%), Open Source Software (30%), DevOps (29%), Open Standards (27%), vendor neutral cloud platforms (27%) and BYOD (27%) as areas that are particularly poorly understood by today's CIOs.

The lack of understanding around Open Source software is of particular concern as research commissioned by Reconnix earlier this year, The [Open for Business](#) study, revealed that more than half of UK private and public sector organisations will spend at least 20% of their IT budget on Open Source

applications and software within the next five years. In addition, 61% of respondents to that study suggested that they intend to invest 20% or more into Open Source, with the majority (48%) expecting to invest between 20% and 40%. 10% believe that their Open Source spend could account for as much as 60% of their total budget – making this a crucial technology to have knowledge of as a CIO of the future.

IT leaders also shared their views on which of these technologies, that will be key to the delivery of IT services in five years, CIOs have an understanding of today and which would be important to have knowledge of by 2018 (see Fig 3).

Fig 3. The areas of knowledge that CIOs have little understanding of today, and which of these areas will be most important to have an understanding of in 2018



4. The skills gap.

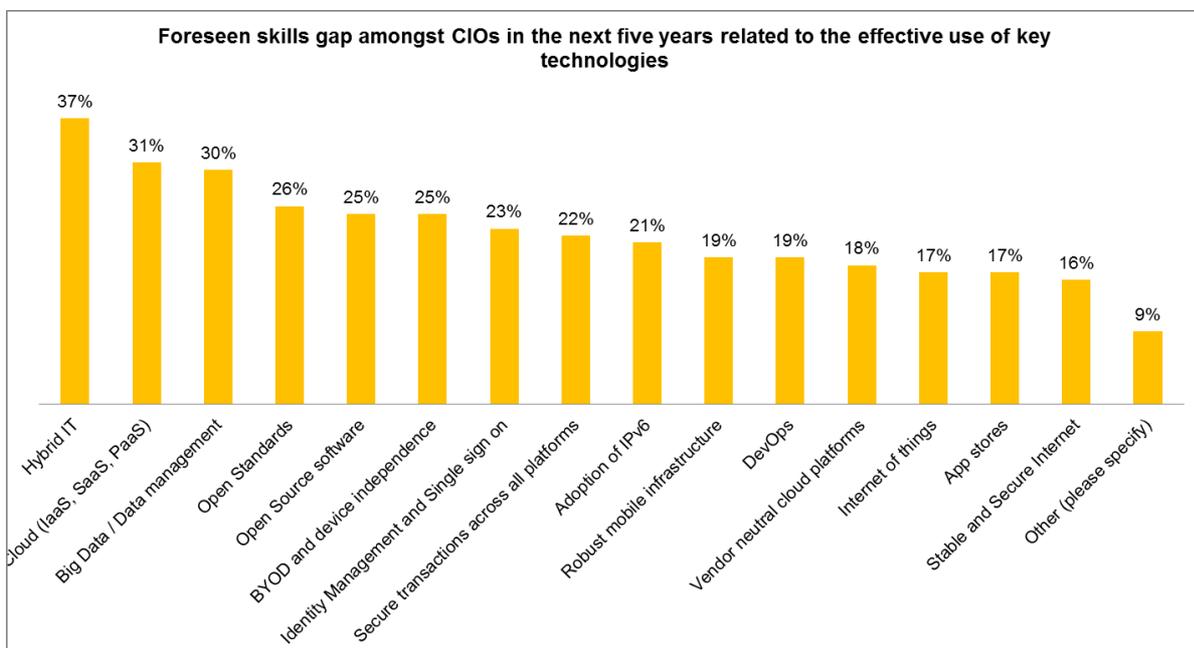
The fact that there is a growing IT skills gap that has to be dealt with, within the industry is an ongoing debate. In fact, the recent [“Technology and Skills in the Digital Industries”](#) report suggests 300,000 new recruits are needed to fill IT employment gaps by 2023. Our research echoes these findings. But it also highlights another alarming skills gap forming, one that stretches beyond just the 300,000 new recruits that need to be brought into the IT industry right into its leadership.

IT leaders reveal, not only that they are concerned that today’s CIOs do not possess the understanding of technologies that will be key in delivering IT services in the next five years but, that there will be a significant

skills gap amongst CIOs during the same time period related to issues in using technologies effectively to ensure the best business outcomes.

More than a third of IT leaders believe that the effective use of hybrid IT (37%) will be hindered by a CIO skills gap. This skills gap will also affect the effective use of cloud (31%), Big Data/data management (30%), Open Standards (36%) and Open Source software and BYOD and device independency (both 25%) and identity management and single sign-on technologies – all of which will become key technologies in ensuring business effectiveness and success in the near future.

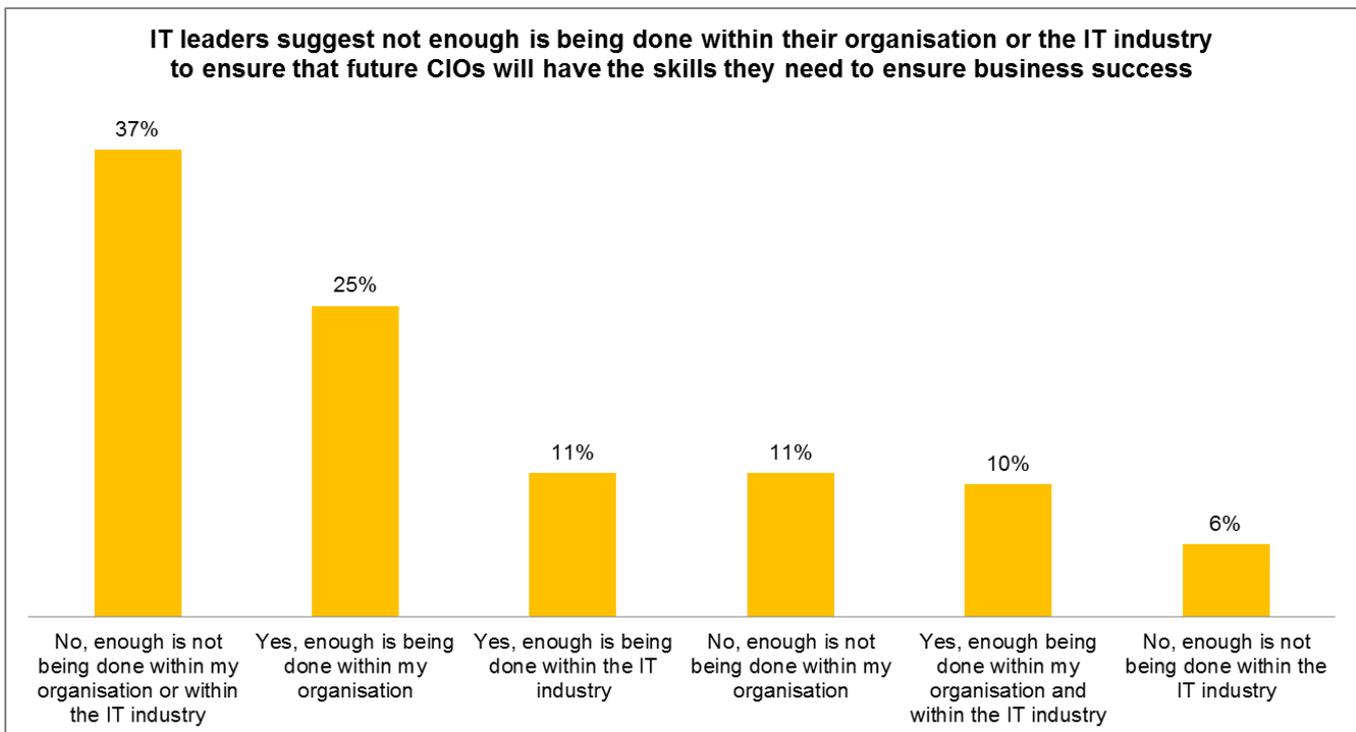
Fig 4. IT leaders’ foreseen skills gap, amongst CIOs in the next five years, related to the effective use of key technologies



Yet, while it is widely recognised that there is a skills gap looming, more than half of IT leaders (54%) feel that not enough is being done within their organisations and the IT

industry to ensure that future CIOs will have the skills they need to ensure business success (see Fig 5).

Fig 5. IT leaders opinion on level of industry engagement with CIO success

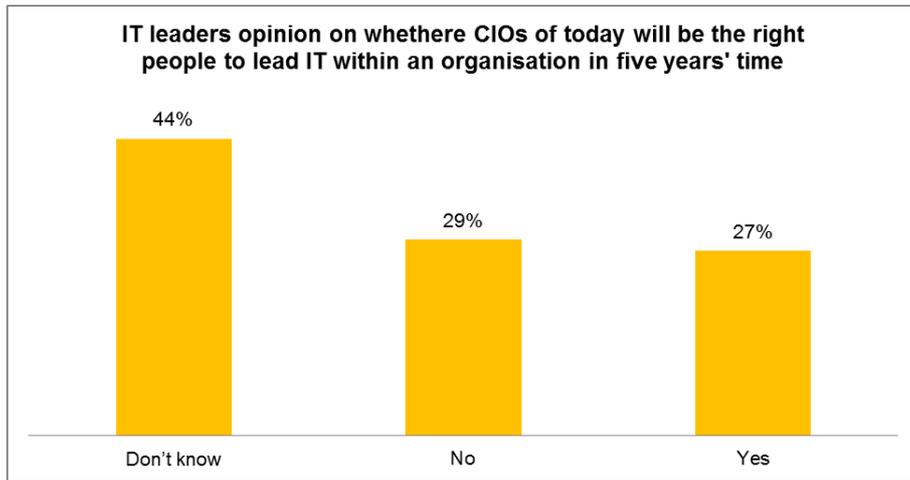


a) The question of leadership

The evident lack of understanding of and knowledge about key future technologies calls into question the ability of today's CIOs to lead IT within business, amongst IT leaders. The majority of IT leaders (73%) do

not believe, or do not know if they believe, that the CIOs of today will be the right people to lead IT within an organisation in the next five years, while less than a third (27%) believed they would be up to the job (see Fig 6).

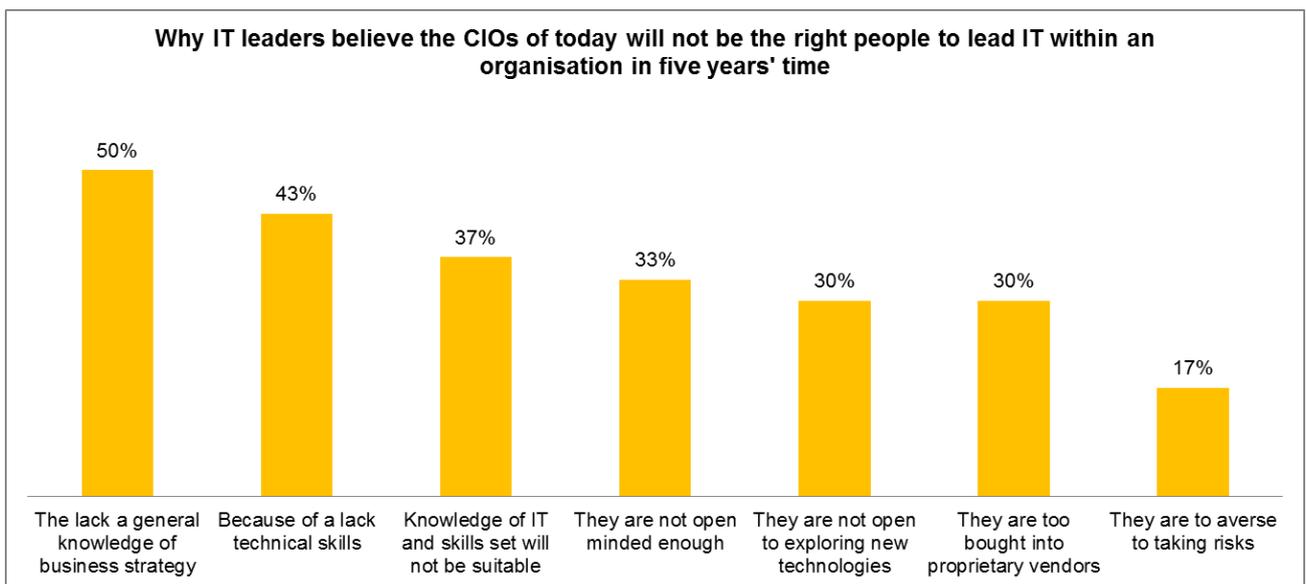
Fig 6. IT leaders belief in today's CIOs ability to lead IT within an organisation in the next five years



When asked why this was the case, IT leaders cited today's CIOs lack of general knowledge of business strategy (50%), technical skills (43%) and the fact that their knowledge of IT and skills set will not be suitable (37%) as the top reasons.

This was followed by the fact that IT leaders do not perceive today's CIOs to be open minded enough (33%), that they are not open to exploring new technologies (30%) and that they are too bought into proprietary vendors (30%) – (See Fig 7).

Fig 7. Reasons behind IT leaders' belief that today's CIOs will not be the right people to lead IT within organisations in the next five years



5. The Future CIO.

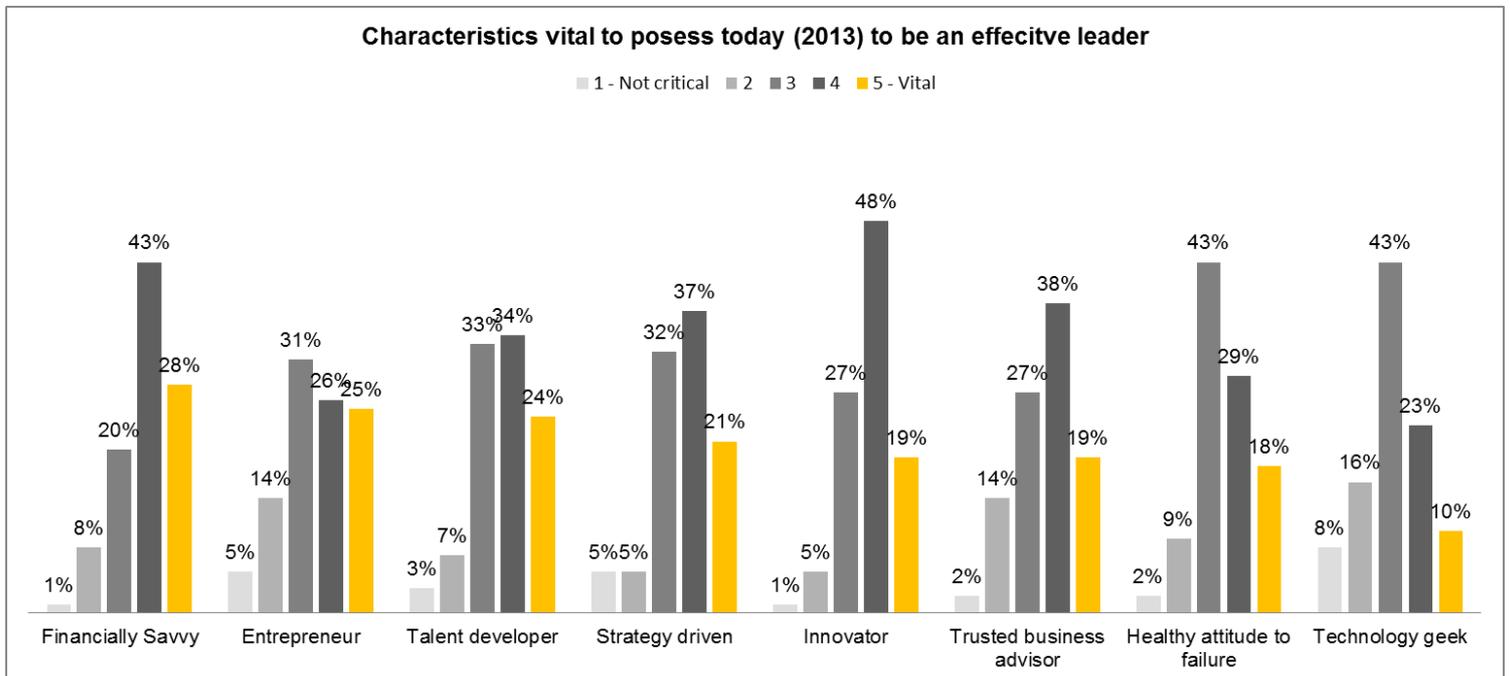
With nearly three quarters of today's IT leaders doubting the ability of today's CIOs to lead IT within businesses in the future it begs the question, who do IT leaders see as the CIOs of tomorrow? And more importantly, what skills and characteristics will those leaders need to possess to be effective?

a) Key skills and attributes of the future CIO

To answer that, we first have to look at the characteristics that are considered vital to be an effective CIO today.

According to IT leaders, it is vital for today's CIOs to be financially savvy (28%), entrepreneurial (25%), talent developers (24%) and strategy driven (21%). This is followed by buying innovators (19%), trusted business advisors (19%), having a healthy attitude to failure (18%) and technology geeks (10%) – (see Fig 8).

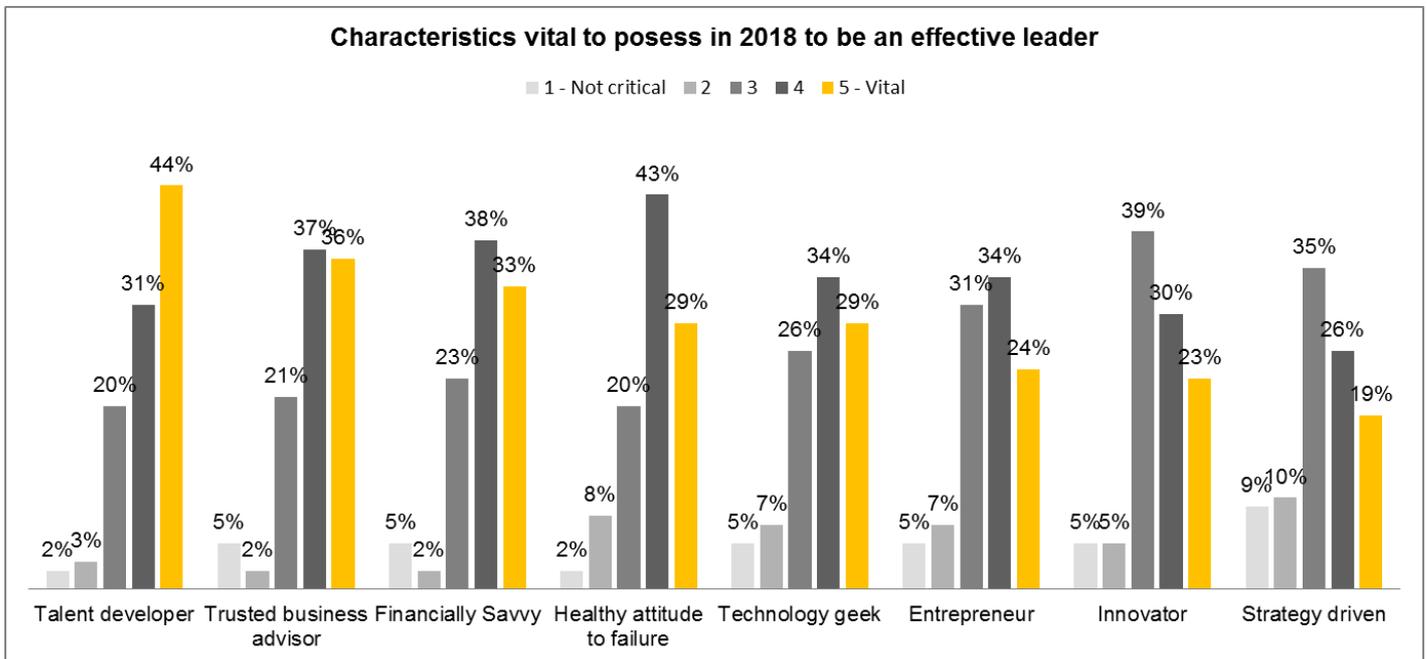
Fig 8. Characteristics that are vital to possess to be considered an effective CIO in 2013



This is however set to change significantly in the next five years. By 2018, CIOs will need to be talent developers (44%) first and foremost – this may well be down to the fact that there is such a skill shortage in the industry. This is followed by being a trusted

business advisor (36%), financially savvy (33%), having a healthy attitude to failure (29%), being technology geeks (29%) and only then entrepreneurial (24%), innovators (23%) and strategy driven (19%) – (see Fig 9).

Fig 9. Characteristics that are vital to possess to be considered an effective CIO in 2018



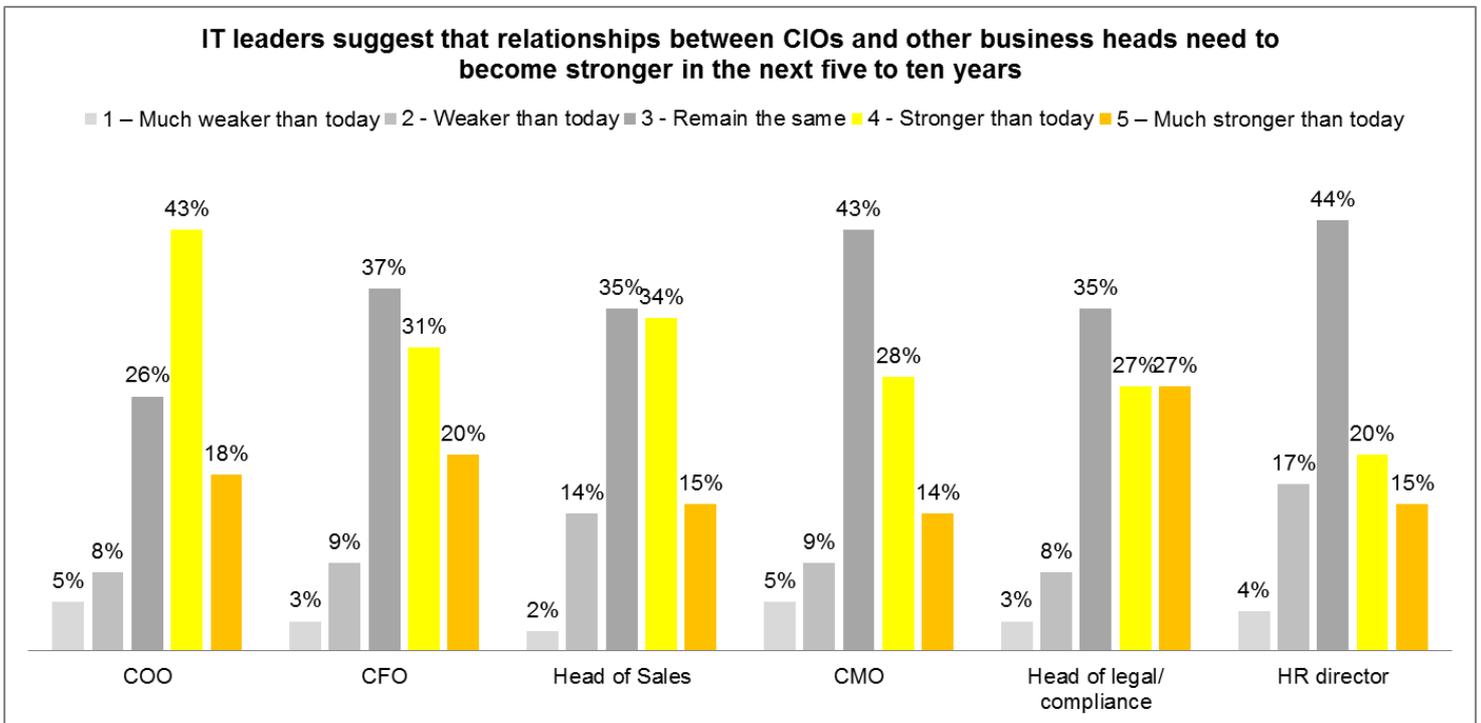
This switch in skill-set requirements is indicative of two things. Firstly, that the role of the CIO is changing and that their skill-sets will have to reflect this. Secondly it suggests that soft skills, such as being talent nurturers and business advisors, are going to become even more important than they

are today if CIOs are to ensure business as well as IT success. The need to become more business orientated may also be driven by the fact that compared to today; IT leaders expect that relationships between CIOs and other business heads will need to become much stronger.

In fact, IT leaders suggest that their relationships with COOs and CFOs, the Heads of legal, CFOs and Heads of Sales especially will have to become 48% stronger overall. The need to strengthen relationships between CIOs and COOs (61%), Heads of

legal (54%) and CFOs (51%) is especially high (see Fig 10). This again alludes to the fact that the role of the CIO is changing and that new relationships will have to be forged to ensure overall business success.

Fig 10. Characteristics that are vital to possess to be considered an effective CIO in 2018



6. Conclusion and recommendations from Reconnix.

The findings of this insight paper have highlighted that there is a growing opportunity for CIOs to become, not only more strategic, but more connected to their businesses so that they can have a greater impact on their success. It has also proven that the CIO skill set has to change in order to ensure business and IT success.

At the same time, it has shown that more can be done within the industry to help CIOs to build their skills and that there is a growing skills gap, at all levels, that needs to be addressed. With that in mind, and having ourselves taken a deeper look at the findings, we want to make five recommendations for any IT leader that wants to pursue the role of CIO, or any CIO that hopes to still be in a leadership position by 2018:

1. **Become more open minded and less risk averse**

The opportunities presented by technology for business should not be hampered by a lack of technical knowledge. As the IT landscape continues to change and become more complex CIOs will have to do more to keep up with changes. At the same time, they will have to learn to become less risk averse and open to new ideas and

technologies, such as Open Source technology, that could help them and their businesses achieve their goals while driving innovation.

2. **Gain deeper knowledge of technology fast or find alternatives to ensure successful IT service delivery**

The research suggests that almost half of IT leaders (47%) believe that today's CIOs have little to no understanding of the technologies (cloud, Stable and Secure Internet, secure transactions across all platforms, robust mobile infrastructure, Big Data/ data management) that will be fundamental to IT service delivery in the next five years. In an increasingly complex IT environment, this means that future CIOs will quickly need to up their technical skills or find trusted partners that have the expertise to deliver services in these areas – or risk being left behind the technology curve and their competitors.

3. Become a business guru

The fact that IT leaders point out that as much as half of today's CIOs (50%) lack general business knowledge is clear indication of the fact that a future generation of IT leaders will have to step up and get to grips with business strategy. The future CIO will need to understand, not only the changing IT landscape but, what their businesses are trying to achieve if they hope to develop IT strategies that will help drive their companies into the future while delivering efficiency and competitive advantage through technology.

4. Win friends and influence people

Beyond gaining an understanding of general business strategy, future CIOs should also be developing relationships and soft skills. These IT leaders will have to forge relationships with key business heads such as CFOs, COOs and the heads of legal within their organisations so that they are best placed to advise which technologies will help these department heads achieve their goals and thereby feed into the overall business strategy. Ultimately, the CIO needs to become part of the solution for each of these business heads, not part of the problem.

5. It is about more than leadership, it is about adding value above all

Perhaps the most important element highlighted by the research is the fact that the CIO role is undoubtedly going to change dramatically over the next five years. CIOs are going to have to become the board members within their organisations that enable better business decision making, provide platforms for competitive differentiation, be the drivers of innovation and enablers of agility, all through the use of technology. The research also revealed that nearly three quarters of IT leaders (73%) believed that that today's CIOs would not be the right people to lead IT within businesses in the next five years. So if today's CIOs hope to stay in charge, and for any future CIOs to be effective leaders, they have to start adding value to their businesses – on both technical and strategic leadership levels.

By embracing their roles as leaders, trusted business advisors, entrepreneurs and innovators, future CIOs can stay ahead of business demands and ensure IT is driving the business forwards, helping it to gain competitive advantage and achieving its overall objectives.

7. About Reconnix.

Reconnix is a UK technology services company specialising in providing Open Source Eco-Systems, Digital Delivery, Cloud and Managed Hosting solutions to Public and Private sector Enterprises. It has worked with hundreds of leading UK businesses on improving operational efficiency, and increasing real world Return on Investment of IT spend. Its consultancy, development and management services are characterised by an inherent drive to manage operational complexity for commercial competitive advantage and service improvement. Taking a practical approach to real data and service challenges, Reconnix provides its clients with IT solutions that deliver against stringent targets.

For more information please visit <http://www.reconnix.com> or email sales@reconnix.com.