Open for Business The Future of Open Source Technology Insight Paper.



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1. Introduction.

The days of IT being just a back office function are long gone. Today technology is recognised as a business enabler - a valuable contributor the overall to competitiveness of an organisation. Very little can be achieved in terms of business transformation or growth without the right technology solution underpinning it - and with innovation rife among vendors the products and solutions available are rapidly evolving. IT departments face a vast array of options when making technology decisions and it is imperative they make the right choice for their organisation.

The increasing maturity of Open Source software and Open Source platforms has further broadened and arguably complicated the choices that IT decision makers need to make but they are choices that need to be explored thoroughly. Open Source software development, using open standards, can support greater interoperability between systems and enable system sharing. It can offer original solutions to problems not addressed by proprietary software and it has the potential to lead to significant savings in information expenditure on and technology At communications (ICT). Reconnix, we feel passionately that Open

Source presents a valuable opportunity for businesses and organisations in the UK. However we also believe that each organisations route to and level of adoption of the technology is unique to them.

There is a real drive to explore the opportunities presented by Open Source in both the public and private sector. While the private sector is currently leading the field in Open Source adoption in the UK, the Government has pledged to reduce ICT spending dramatically, stating that by December 2015. 50% central of departments' new ICT spending must be on public cloud computing services. More recently, there is a push towards agile principles of project delivery and sharing of knowledge and systems across departments.

With this study, we wanted to understand how IT departments view Open Source in the context of the challenges they face today and priorities they need to deliver on. The main findings are outlined in this Insight Paper – we wanted to share the information we uncovered and enable you to draw your own conclusions from it. I hope that you find it to be an insightful read, and would love to receive your views on it.

> Steve Nice CTO, Reconnix

2. Research Methodology.

To provide a view of the current and future state of Open Source technology adoption in the UK, we gathered data from IT leaders specifically focusing on their challenges, aspirations and the barriers they face.

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 April 2013.

¹ Chime Insight and Engagement

3. The current challenges facing IT leaders.

Today, an unpredictable economic climate is forcing private and public sector organisations to tackle a range of challenges in a bid to remain competitive within their respective markets. For many of these organisations agility, and therefore their relevancy, is underpinned by access to fit for purpose technology. What technology an organisation invests in; how that is implemented; and how it will fit into the organisation now and in the future are all of great concern to IT decision makers.

Yet, despite the recognition that technology is a cornerstone of agility, IT leaders are increasingly being challenged to justify their investments, and are expected to do more with less. Their strategic leadership teams are asking them to be more strategic with regards to the types of technologies they invest in, and to prove return on investment (ROI) at every turn.

According to IT leaders, the top five challenges they will face over the next twelve months are:

1. A lack of funding or budget cuts

The economic climate continues to pressurise IT departments. Nearly half (49%) of IT leaders revealed that a lack of funding

or budget cuts will be the biggest challenge they face in the next twelve months.

2. Managing increasing complex IT infrastructures

Second to budget cuts, nearly half (47%) of IT leaders revealed that managing increasingly complex IT infrastructures within their organisations will be a big challenge in 2013/2014.

3. Staffing issues

Finding and keeping the right talent within any organisation is a key priority right now and it appears to be no different in the IT sector. We have already mentioned the rapid evolution of technology and 42% of IT leaders believe recruiting and retaining staff with the skills to manage and get the best from technology is another significant shortterm challenge.

Supporting remote and/ or mobile workers

As workers become more mobile IT leaders face a new challenge – how to support them and provide a consistent user experience. A third (34%) of IT leaders stated that this is increasingly becoming an issue they need to address.

5. Managing an increasing number of different devices

As the bring your own device (BYOD) trend continues to proliferate across the public and private sector, nearly a third (31%) of IT leaders also believe that they will be challenged by having to manage an increasing number of different devices. Different devices, more often than not, mean different operating systems, adding to the complexity of the current IT environment. Outside of the five key challenges IT leaders also suggested that they have trouble moving to a Cloud based delivery model (28%), justifying IT spend to their Boards (26%) and in finding the right partner that will provide them with the strategic advice they need (16%). In addition, implementing Open Source alternatives (15%) was revealed as a challenge amongst IT professionals.

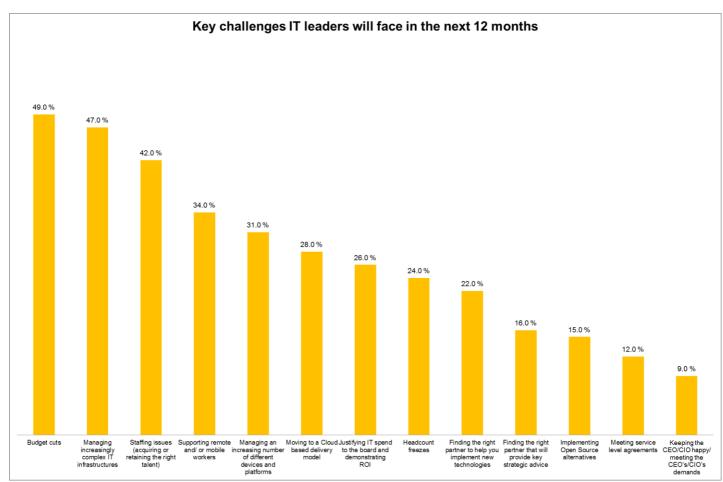


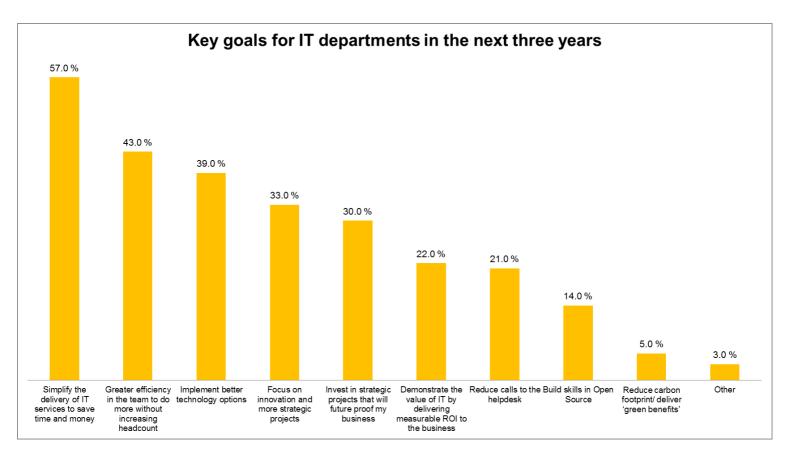
Fig 1. Key challenges IT leaders will face in the next twelve months

a) Key performance drivers for the next three years

Despite the plethora of challenges they are facing IT leaders appear to have a clear vision of what they would like their departments to achieve over the course of the next three years. Over half (57%) want to simplify the delivery of IT services within their organisations to save time and money. 43% of them also want to achieve greater efficiency within their teams do more with less without increasing headcount. And nearly two fifths (39%) want to implement better technology options while almost a third (33%) want to focus on innovation and strategic projects.

For over a fifth of IT leaders (22%) it is also important to be able to prove ROI and at least 14% want to focus on building Open Source skills into their departments. When we look into the expected investment into Open Source Technology over the next decade, in the next section of the paper, it becomes evident that this last point about building Open Source skills into the business may become increasingly relevant.

Fig 2. Key goals for IT leaders for their departments for the next 36 months



4. Current and future IT investments.

What will change within the IT landscape over the next ten years? And if you think you know, are you willing to put money on it? Long-term changes to factors such as security, agility and operating systems are shaping the ROI you will receive for years come, so identifying the right technology early on is the Holy Grail for IT leaders.

While no one knows exactly what is around the corner we wanted to set the scene for the future by identifying some of the key investments IT leaders are making now.

More than half of IT leaders (51%) suggested that between 20-60% of their allocated budgets are spent on IT investment. At present a large portion of this investment is spent on systems on systems maintenance. In fact, 96% of IT leaders cite that they spend up to 60% of their funds on this. The survey also revealed that the majority of IT leaders (90%) spend up to a fifth (20%) on overtime and over a guarter (27%) admit to spending anywhere between 20-40% of their budgets on outsourcing.

In stark contrast to this figure, 80% of IT leaders spend 20% or less on innovation and development and more than two thirds (69%) also spend 20% or less on training at present.

a) Investment in Open Source The majority of IT leaders (77%) are currently investing less than 20% of their total IT spend on Open Source technology. However over the mid-term (the next five years) 61% of respondents revealed they plan to significantly increase levels of investment in Open Source technology (with 48% revealing their intention to increase this to around 40% of total IT spend and 10% expecting to invest 40-60% of overall spend).

Long-term (over the next ten years) the investment levels rise again with 16% of IT leaders suggesting that they expect to allocate 40-60% of their budgets to Open Source technology investment. And as much as 6% and 4% respectively believe they will be allocating between 60-80% and 80-100% of their budgets to Open Source technology investments.

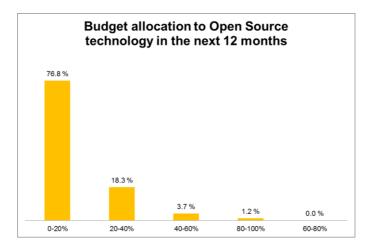


Fig 3. Budget allocation into Open Source technology over the next twelve months

Fig 4. Budget allocation into Open Source technology in the next five years

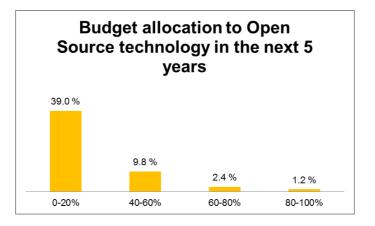
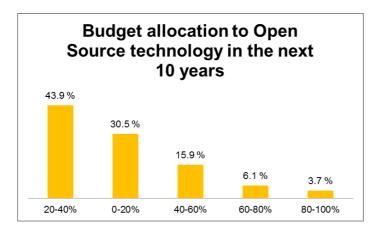


Fig 5. Budget allocation into Open Source technology in the next 10 years



5. The Open Source imperative.

Despite more than half of IT leaders (58%) suggesting that their current IT estate is made up of 20% or less Open Source technology, their apparent commitment to invest increasing amounts of their allocated budgets into Open Source technology over the next decade provides us with abundant anecdotal evidence that it is a technology on the rise – and for good reason.

a) Major inhibitors to IT effectiveness

Before deciding to switch technologies, the majority of IT organisations review their strategies and goals for a number of years to come. This is no different when building a case to switching to Open Source. In order to find out where the organisational pain points are for IT leaders we asked them to share with us what the major inhibitors to IT effectiveness is within their organisations at present.

Unsurprisingly, perhaps due to the economic environment, 58% of IT leaders cited that budget cutbacks or the lack of funding is a major inhibitor to IT effectiveness within their organisations. This finding was on par with another 58% IT leaders indicating a lack of staff with the right skill set as another blocker to IT effectiveness. This was followed by the speed of technology development (48%) and a lock-in to legacy or proprietary systems (33%) – both of which can be overcome by adopting the right Open Source solution.

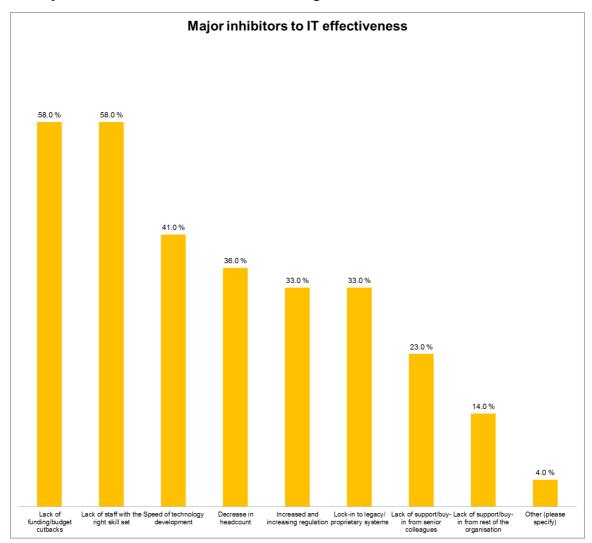


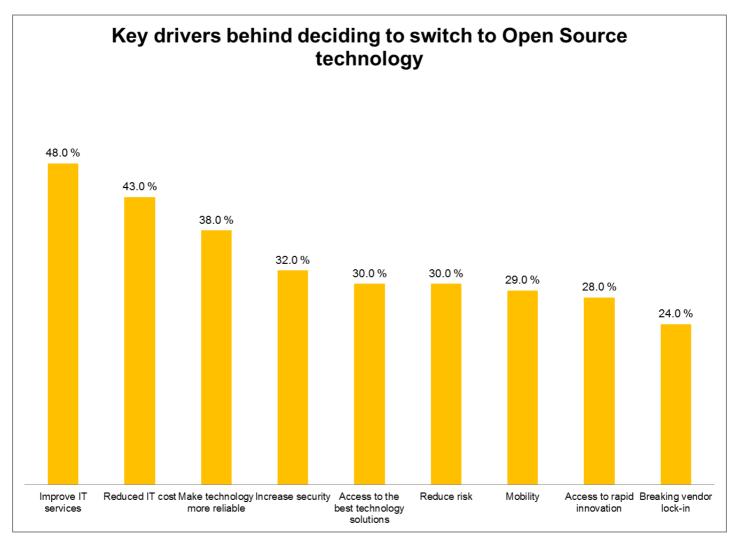
Fig 6. List of major inhibitors to IT effectiveness according to IT leaders

b) Drivers behind deciding to switch to Open Source technology

IT leaders cited improvements to IT services (48%) and reducing IT costs (43%) as highly important drivers to switch to Open Source technologies. This was followed by making technology more reliable (38%), increasing security (32%), gaining access to the best technology solutions while reducing risk

(30%), and being able to break vendor lockin (24%).

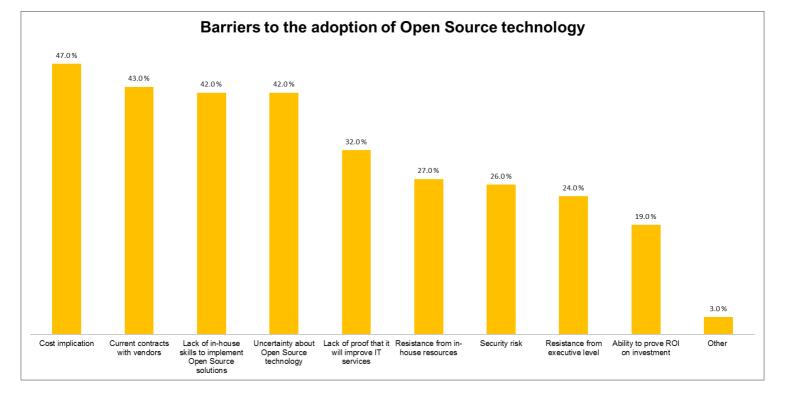
In addition, IT leaders suggested that increasing mobility (34%) and transparency (32%) and being able to access rapid innovation (31%) were moderately important drivers when deciding to switch to Open Source technology. Fig 6. Provides a snapshot of the drivers, which are considered of high importance, behind IT leaders deciding to adopt Open Source technology



c) Barriers to Open Source adoption

But there are still barriers to Open Source technology adoption. Nearly half of IT leaders (47%) revealed that cost implications and another 43% that vendor lock in are current barriers to the adoption of this technology. IT leaders also indicated that a lack of inhouse skills to implement Open Source solutions (42%) and uncertainty about the technology (42%) were holding them back. They also cited a lack of proof that it will improve IT services (32%), a resistance from in-house resources (27%) and the potential security risk it presents (26%) as barriers to the adoption of this technology. More than half (55%) of IT leaders also agreed that that there is little to no understanding of Open Source amongst Clevel decision makers outside of the IT department – potentially making it harder to justify investment into this technology to the executive level at present. This sentiment is echoed by the fact that nearly a fifth of IT leaders (19%) are also concerned about being able to prove ROI – leaving this as yet another barrier to adoption.





6. Vertical snapshots.

It is important to understand the difference the private between sector and public Whilst enterprise sector IT landscapes. companies in the private sector share many characteristics with government IT, especially with regards to the size and complexity of their IT infrastructure, their drivers for seeking change and their ability to adapt to new technologies at speed differ vastly.

The next two sections of this insight paper aim to give you, the reader, a brief overview of both these sectors, the challenges they face and how they are individually approaching Open Source technology adoption.

a) Private sector

UK IT decision makers in the private sector suggest that their top three challenges for the next twelve months will be managing increasingly complex IT infrastructures, (46%) moving to cloud based delivery models (38%) and managing an increasing number of different devices and platforms (36%). The survey also revealed that a lack of staff with the right skill set (64%), the speed of technology development (50%) and a lack of funding or budget cutbacks are considered to the be the major inhibitors to IT effectiveness in the private sector. But despite the challenges they face, these IT leaders want to achieve change in their departments over the next three years. 60% of private sector IT leaders say that they want to simplify the delivery of IT services to save time and money. 44% also said that they want to build efficiency into their teams to do more without increasing headcount and 36% want to implement better technology options.

Half (50%) of private sector IT leaders indicated that they are currently investing 20% or less of their total IT spend on Open Source technology and only a further fifth (20%) suggested that this could be higher at between 20-40%. But the survey also revealed that while the majority (73%) of IT leaders would only invest up to a fifth (20%) of their allocated budgets into Open Source technology over the next twelve months that looks set to change over the next decade.

In the next five years half of IT leaders in the private sector expect 20-40% of their budgets to be allocated to Open Source technology. While this remains the same in ten years' time almost a fifth (18%) suggested that 40-60% of their budgets will be allocated to Open Source technology investment and another 10% indicated that, that figure could rise to between 60-100% of their budgets.

In the private sector It leaders suggested that factors such as an improvement to IT services (50%), a reduction in IT costs (46%) and risk (42%) and increased security (40%) would be factors they would consider as highly important drivers to making the switch to Open Source technologies.

Despite the fact that investment into Open Source is set to increase in the private sector, IT leaders still find that there are barriers to the adoption of these technologies. Chief amongst those is the cost implication of switching to Open Source with 46% of IT leaders revealing this as a concern. This is followed by uncertainty about the technology (40%), current contracts with vendors (38%) and a lack of in-house skills to implement Open Source solutions (36%).

b) Public sector

In the UK public sector things look different as IT leaders cite their top challenges over the next twelve months as budget cuts (64%), acquiring and maintain the right talent (52%) and managing an increasingly complex IT infrastructure (48%). In line with these key challenges public sector IT leaders face they suggested that a lack of funding or budget cuts (70%), lack of staff with the right skills set (54%) and lock-in to legacy or proprietary systems are the major inhibitors to IT effectiveness in their organisations. But despite an increasing lack of funds and a mounting pressure to do more with less, public sector IT leaders are also clear on what they want to achieve over the next three years. Much like in the private sector, 54% of them want to simplify the delivery of IT services to save time and money. They also want to implement better technology solutions (42%) and achieve greater efficiency in the team to do more without increasing head count (42%). Interestingly, as much as two fifths (40%) also want to focus their attention on innovation and more strategic projects in the next 36 months.

66% of public sector IT leaders admit that only a fifth (20%) or less of their IT estate is currently made up of Open Source technology. This is despite the fact that, in March of 2011, the Cabinet Office introduced a directive that Open Source systems be selected ahead of proprietary systems on the basis of flexibility for public sector IT projects where the Open Source solution was not more expensive in terms of cost.

This directive has recently changed to level the playing field between Open Source and proprietary systems, and perhaps due to this the research revealed that this level of investment is not set to change over the next twelve months with 81% of IT leaders indicating that only 0-20% of their budgets will be allocated to Open Source technology. In addition, less than a fifth (17%) indicate that this will be between 20-40%. But this level of investment is set to change dramatically in the next decade.

In the next five years as much as 45% of IT leaders in the public sector say that between 20-40% of their budgets will be allocated to Open Source technology. In addition, a further 10% say that that figure could rise to between 40-80%. In ten years' time this figure rises again with 21% public sector IT leaders suggesting that as much as 40-80% of their budgets could be allocated to Open Source technology. There's also a very forward thinking 3%, who believe that they may be investing between 80-100% of their IT budgets into Open Source. Public sector IT leaders indicated that improving IT services (46%), reducing IT costs (40%) and making technology more reliable (38%) would be factors they consider of high importance with regards to them being main drivers behind deciding to switch to Open Source technology.

But public sector IT leader's clear desire to invest more in Open Source technology over the next decade may still be hampered by barriers. According to IT leaders these barriers include the cost implications of switching to Open Source (48%), current contracts with vendors (48%) and a lack of in-house skills to implement Open Source solutions.

7. Conclusion and recommendations from Reconnix.

This insight paper has shown that Open Source technology will fast be moving from away from its position as a mainstay of deeply technical developers and into mainstream IT infrastructure in the next decade. Open Source presents huge potential value and benefits to large organisations, in both the public and private sector. This is because Open Source technologies offer large organisations flexibility.

In fact, it offers organisations the flexibility to change rapidly as Open Source solutions can be changed dynamically to fit the requirements within organisations without IT leaders having to face unreasonable constraints from vendors. The priority for those organisations who are keen to adopt this technology must however lie in ensuring that the myriad barriers to successfully realising the benefits of Open Source adoption are broken down cohesively and comprehensively. With that in mind and having looked myself at the findings, we want to make three recommendations for any organisation looking to invest in Open Source:

1. **Open Source technology can be delivered through a measured approach** The opportunities presented by Open Source technology adoption should not be hampered by a "one-or-the-other" approach to technology procurement. Open Source technologies can more often than not work alongside existing legacy systems to enhance them – giving IT teams the luxury of saving money, as they do not necessarily have to overhaul entire systems, while remaining focused on innovation and improvement.

But for this to work Open Source technology implementation needs to be managed from a strategic level – the level at which changes to the organisation are directly communicated to IT to ensure that it can choose the technology that will help underpin organisational success.

2. IT needs to refine its understanding of Open Source

The IT department and business decision makers have different views on Open Source. At the same time, IT has a clear view on the potential benefits of the technology. Nonetheless, a rift exists between the two parties that prevent either party from truly capitalising on the potential of Open Source.

The priority for IT should lie in working with business decision makers to discover exactly how Open Source technology can help them to access the tools and services that enable an agile and productive working environment.

3. Gaps in skills need to be plugged, and quickly

That more than two fifths (42%) of IT leaders confess that a lack of in-house skills to implement Open Source technology is of concern when investment into this area is set to grow. It is therefore imperative for public and private sector IT leaders to find partners with the right skills and expertise to help them through the transition to Open Source and in the process help transfer the necessary skills employees need to maintain and enhance systems. Combined with ITs own admission that it is planning on increasing its investment into Open Source technology over the next decade and the fact that it is aware of what the barriers to adoption are, we see an immediate call to action. IT leaders must work with the right partner to ensure that they are able to realise the benefits of Open Source technology.

8. 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 100's 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.