



THE EUROPEAN TECHNOLOGY INDEX

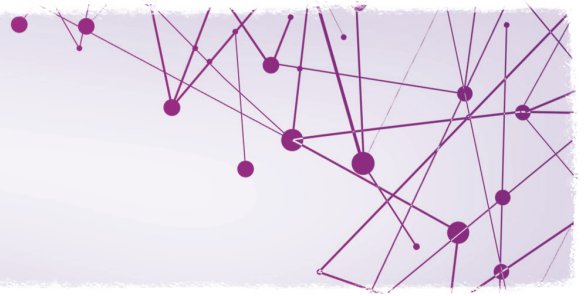
Technology – An engine for growth?



CONTENTS

Overview and Foreword.....	03
Intellectual Property (IP).....	06
Access to Finance.....	07
Regulation.....	08
Tax.....	09
Access to Talent.....	10
Potential Areas for Growth:	11
– <i>Emerging Markets</i>	12
– <i>Cloud</i>	13
– <i>Mobile Computing</i>	15
– <i>Social Media and Online Channels</i>	16
– <i>Big Data</i>	17
– <i>Renewables and Green Technology</i>	18
Appendix.....	19
Contact Us.....	22

OVERVIEW AND FOREWORD



In 2012, in light of the Euro crisis and uncertainty of a double dip recession, DLA Piper launched the first Tech Index survey. This was to review the perceptions and attitudes of European technology growth in light of market events and shifts, the financial regulatory landscape and Government policies aimed to spur business innovation.

This year's report focuses on whether respondents have a more positive outlook on the current technological landscape, the "hot" growth areas and what, if any, barriers to growth are impacting businesses. The report also allowed us to draw comparisons between 2012 and 2013 and allowed us to get a greater understanding as to the trends shaping the market.

It's clear from our results that the tech sector plays an important role in contributing to innovation and employment in Europe and that a renewed level of cautious optimism is being seen.

The drive in consumer expectations and demands has also given rise to new focuses and growth for the year ahead, with a more prevalent focus being seen in areas such as: big data, cloud, mobile and social media.

Cloud adoption is continuing to grow across Europe, as the market matures so does its popularity. However, our research highlights an interesting and growing theme, that cost, although ranked as the top feature driving adoption, is also seen as a barrier for many looking to use cloud-based solutions.

The importance of IP as being a key driver for technology advances and new applications is also on the rise with technology executives now recognising the impact IP is having on growth in the sector. Access to capital is another area indicating positive signs

of growth, this could be partly down to the proliferation of crowd funding, offering up new and previously untapped access to finance to those willing to explore the potential.

The UK is also growing in popularity as a market that can help drive technology growth. With 30% of respondents outlining the UK as the top country to do business, it's clear with aids such as London's Tech City, the UK's technology market is growing at unprecedented rates. Coupled with the government's commitment to continue to focus on support and investment across the wider technology sector – the UK is continuing to be an attractive option for foreign and domestic investors, alongside entrepreneurs.

The European Commission has also publically stated recently in a report on "Research and Innovation" that one of the Europe 2020 targets is to reach an R&D investment intensity of 3% up from 2.03% in the EU (just behind Japan's intended target of 4%), and in line with the United States. The Commission also observed that European enterprises have slightly increased investments in R&D as a share of GDP since 2008. Despite the optimism, the challenge is clear, with only Sweden and Finland currently at these levels. Making good progress towards the Europe 2020 strategy's R&D targets will require fundamental changes in the economy and the educational and labour market system.

That said, the general impetus in favour of R&D investment aligns with DLA Piper's second Tech Index survey – organisations are broadly optimistic about the economic horizon.

The Survey

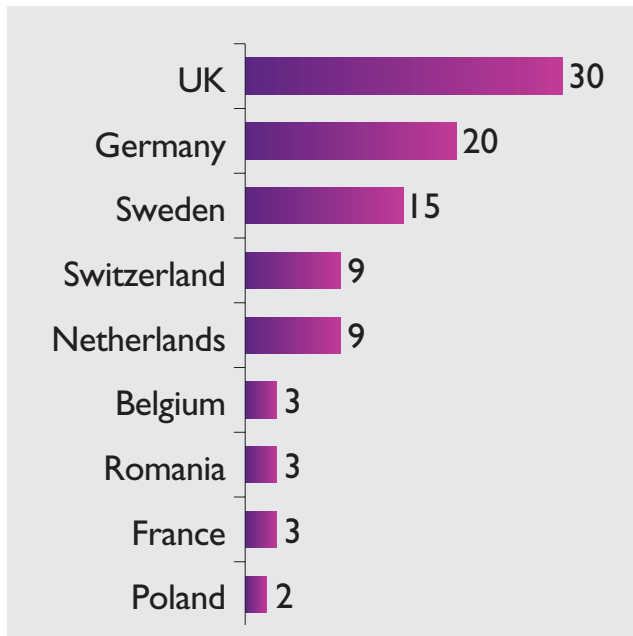
The 2013 study asked similar questions to those in 2012 to assess what issues may be impacting growth, positively or negatively. Some 350 experts, including business executives of technology firms and investors, policy makers and officials aligned with the technology market completed the survey.

In this second study, we have been able to compare and contrast with the 2012 study across the following key areas:

- 1. regulatory environment**
- 2. tax environment**
- 3. availability of finance**
- 4. availability of talent and**
- 5. protection of intellectual property rights**

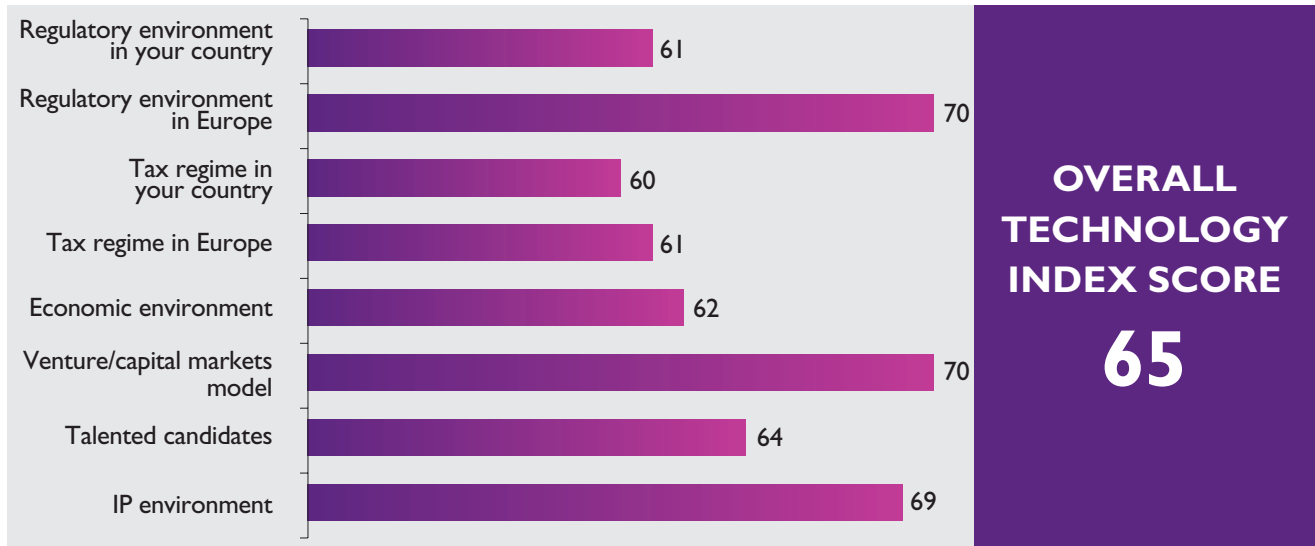


Best European countries in which to do business (%)



- Respondents were, more optimistic in 2013, achieving an increase in the Overall Tech Score from 59 to **65** points in 2013. Only one area, “talented candidates”, or the reduction of talented resources, showed a decrease of 6 points since 2012.
- The UK (30%), Germany (20%) and Sweden (15%) were the top three countries in which respondents felt it was the easiest to do business in for 2013 compared to UK, Switzerland and Germany in 2012.
- When asked to consider the impact of the current **economic environment** and its ability to support future growth, 45% of respondents felt that it had a positive effect on growth, and just 21% felt that it had a negative effect on growth.
- There was a marked increase in respondents expressing a positive view about capacity within **current venture/capital markets**, 53% of respondents in 2013 (37% in 2012) claiming that it is positively affecting growth in the technology sector.
- When considering the current **regulatory environment**, 54% of respondents viewed it as positive and 42% felt that it was also influencing growth within their own country's sector.
- Respondents were mostly positive about **Europe's tax regime**, with only 16% indicating that current regimes were having a negative effect on growth and 38% saying that it had improved growth. (Similar levels were seen for the effect of tax regimes in respondent's own countries.) We also asked respondents which European country they felt offered the best tax regime, 34% stated the UK as the best tax environment, followed by 19% for Switzerland, 18% for Germany and 14% for Sweden.
- In terms of the total number of **candidates for hire** in their sector, 41% of respondents perceived that the talent pool was increasing, with only 13% of respondents expressing a concern about the diminishing size of the talent pool.
- There has been a noticeable increase amongst those respondents having a positive attitude towards the current **Intellectual Property** environment (49% in 2013 vs. 30% in 2012) with just 11% claiming that it is negatively affecting growth.
- We asked a series of questions which asked respondents to rank which areas they thought offered the greatest opportunities. The top four areas were:
 - **Emerging Markets (70%),**
 - **Cloud Computing (67%),**
 - **Mobile Computing (57%) and**
 - **Social Media and Online Channels (57%).**
- The following all scored slightly lower:
 - Big Data (47%),
 - Renewables & Green Tech (37%).

The European Technology Index 2013



In 2013, the overall DLA Piper Tech Index score increased from 59* in 2012 to **65** as a composite score, indicating further optimism in the sector from 2012. The score, points to the continued – yet likely cautious – optimism expressed by the market of the economic horizon.

After five years of economic doom and gloom, it's refreshing to see European businesses, financial experts and policy makers feeling more buoyant about the

landscape and this chimes with the positive messages that we are seeing from our tech clients across Europe pointing towards the green shoots of recovery and growth.

Areas most affecting the rise in the index included the IP environment and the review vigour in funding in the sector, both of which showed a substantial increase of 11 points each.

* The 2012 DLA Piper Tech Index score was boosted initially by an added tax weighting due to the impact of the financial markets and EuroZone crisis. In 2013, given the tax sensitivity is not as prominent, the tax "boost" was not applied and the index score was adjusted accordingly.

INTELLECTUAL PROPERTY (IP):

Becoming a Game Changer for Many Tech Firms?

How is the current intellectual property (IP) environment affecting growth in the sector? (%)



Technology firms have always led the way in exploiting IP, in 2013 we have seen a jump in the perceived importance of the IP environment as a driver for economic growth. Thus, from 2012, the DLA Piper Tech Index score for IP has risen 19%, rising by 11 points from 58 to **69**, showing a noticeable improvement in the perceived impact of the IP environment on growth in this sector. Technology executives have driven this increase over financial and public sector respondents.

One reason for the jump could be the increasing recognition of the value of patent portfolios gradually seeping through the board room from the wave of technology firms buying up patent portfolios for headline grabbing amounts. This peaked in 2011 with the purchase of Nortel Network's portfolio for \$4.5 billion by the Rockstar consortium (including Apple and Microsoft) and Google's acquisition of Motorola Mobility for \$12.5 billion. Seen by some tech players as a defensive move, it is also viewed as a potential value-creator, with the ability to license IP use and create additional revenue streams, potentially creating the optimistic view of the 2013 respondents.

It is however interesting to note that more recent patent portfolio sales have cast some doubt on how robust valuations of patent portfolios actually are, such as Eastman Kodak's sale of its patents in December 2012 to a consortium including Intellectual Ventures and RPX for \$525 million,

which was well below the estimate of \$2.2 to \$2.6 billion, or the recent news that Rockstar is looking for buyers for part of the Nortel portfolio.

Whilst IP litigation, particularly in the technology landscape, has increased significantly in recent years, the worst of the "patent troll" activity has remained confined (at least for the moment) to the USA and for those that are exposed to the USA market, the "American Invents Act" has raised hopes that the quality of software and business method patents will gradually improve. On the European side, 2013 has seen further clarification of key legal issues, such as the extent to which copyright owners are able to force ISPs to block access to sites which make pirated content available, and of the position on Google Adwords. Renewed legislative efforts on adapting copyright laws for the digital age are also a cause for optimism. There has also been a general "settling down" in the patents and standards arena, as protagonists agree license terms.

However, the factor that outweighs everything, in our view, is that IP goes hand in glove with technology, and the year has seen a plethora of exciting technological advances and new applications which open up new business opportunities. Tech execs recognise that they can use IP to give them a competitive edge which may enable them to capitalise on these opportunities.

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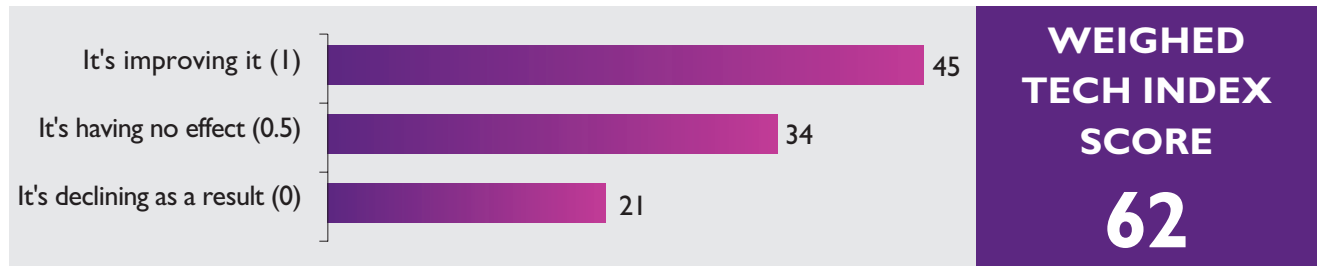
We are increasingly seeing our copyright-owner clients realising that there are now effective steps that can be taken to combat online piracy, such as obtaining blocking injunctions against ISPs. While some uncertainty in the law on online infringement remains, decisions at both European and national level have helped to make online copyright enforcement actions a more certain and therefore a more viable prospect (John Wilks, Partner, DLA Piper).

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ACCESS TO FINANCE:

Is there greater access to capital or more optimism of sector performance?

How is the current economic environment affecting growth in the sector? (%)



In comparison to 2012, the overall DLA Piper Tech Index score increased slightly from 57 to **62** points, indicating a positive growth in attitude towards the current economic environment, particularly amongst technology companies. However, some respondents still felt that the current economic environment was having a negative effect on growth (21%), which was influenced mostly by the Public Sector (27%).

With limited liquidity in the market in recent years post the economic crisis, firms have been rather downbeat about the lending environment. Private equity and venture capital firms have had equity to invest, but it is likely that, either prices have been high, there has been a lack of confidence in the sectors, or, venture capital funds may not have deep enough pockets to fund companies on their own.

Perhaps reinforcing why we have noted a strong rise in corporate venturing since 2012, for example three of the most significant venture deals in 2013 (Snapchat, Uber and Angel List) were led by Google Ventures. It is estimated that the top 30 public technology companies (by market cap) have \$180 billion of cash on their balance sheets and that they are on the lookout for investments.

Of course, we are also witnessing the continued proliferation of crowd funding, offering up new and previously untapped access to finance to firms willing to explore the potential. Perhaps the biggest obstacle to further growth and to becoming a mainstream funding channel is the question of how to protect small investors, although equity crowd funding is already legal in the UK, the Netherlands, France, Austria, Germany, Australia and Hong Kong, among others.

Overall, as the lending environment is relaxing, M&A activity has increased and more deals are completing. This may be in part adding to the optimism felt by respondents.

Equally, SME loan programmes, implemented by various member states, may have started to be formally rolled-out with greater participation. This has spurred competitiveness and opportunities, particularly for SME business owners, many who have sound business models but have struggled gaining access to cheaper forms of capital in the years post the crisis.

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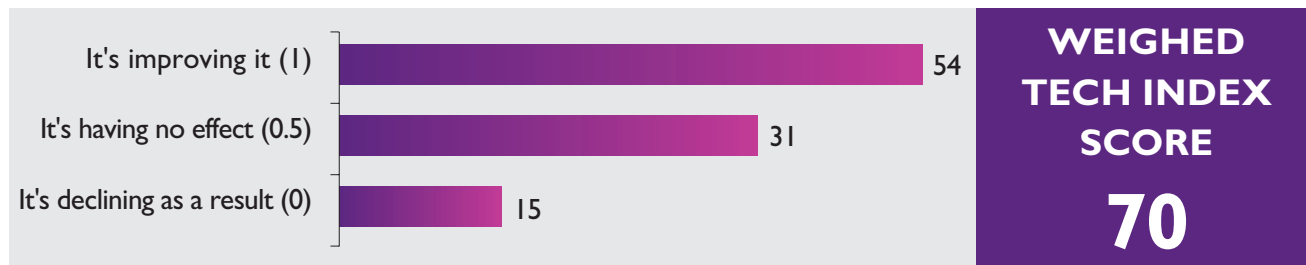
Tech IPOs and M&A are back and a renewed vigour in availability of funding.

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REGULATION:

Which country is best for doing business in Europe?

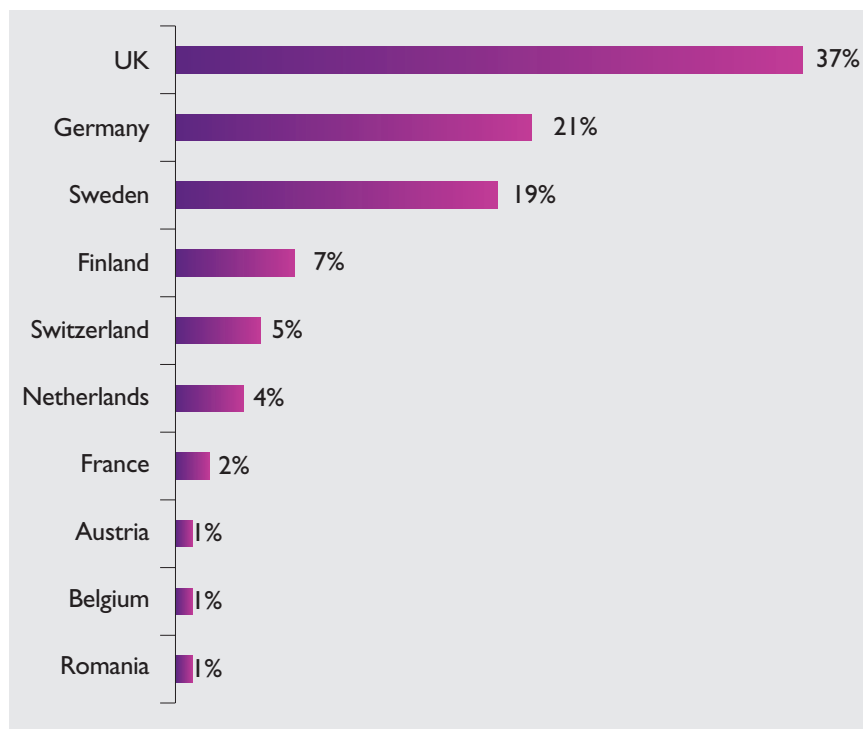
How is the regulatory environment in Europe affecting growth in the sector? (%)



Since 2012, there has been a substantial increase in the level of positive growth in the attitude towards the regulatory environment within Europe from 33% to 54% citing that it is improving.

When respondents were considering the effect of the regulatory environment in terms of growth within their own country, the regulatory DLA Piper Tech Index score was lower compared to the regulatory DLA Piper Tech Index score for Europe – 61 vs 70.

Which country in Europe has the best regulatory environment? (%)



In 2013, the UK (37%) leads the field for the best regulatory environment to do business within Europe followed by Germany (21%) and Sweden (19%).

Although the UK tops the charts for the second year, Germany has outplaced Switzerland in 2013. Some of the reasons for Germany's lead could be down to a relatively strong bounce back from the economic downturn and continued pro-export regulatory environment in Germany.

In addition, Swedish agencies have made great improvements where some other countries may perhaps still lag behind. In recent years the Swedish Government has made efforts to modernize and make regulatory authorities more efficient and helpful.

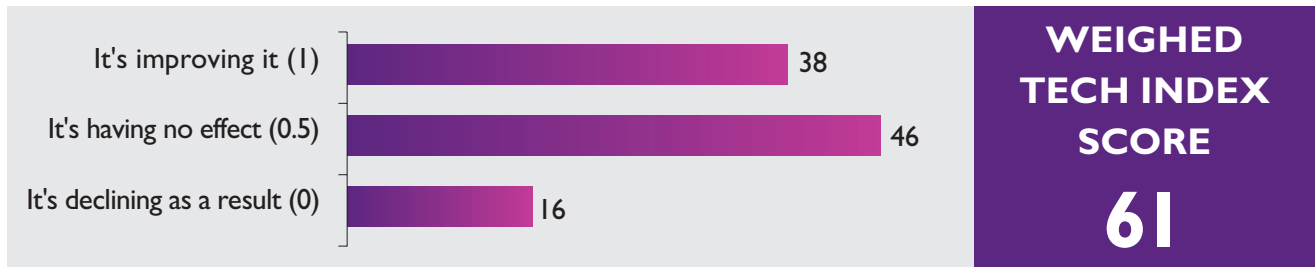
Websites are more accessible and informative and most agencies have efficient helpdesks providing helpful

information to applicants in both Swedish and English. Agencies have adopted a practical and less formalistic approach which makes many regulatory processes less costly and time consuming. With respect to government oversight many agencies have made efforts to provide clear information on priorities and understanding of legal issues, increasing predictability and understanding of regulatory environment for companies and individuals which may be concerned.

TAX:

Taxation Vacation?

How is the current tax regime in Europe affecting growth in the sector? (%)



More respondents now consider that the tax regime across Europe is having a positive effect on growth in their sector (38% in 2013 vs 28% in 2012). However, the DLA Piper Tech Index score for tax regime in Europe remains similar – 58 in 2012 vs 61 in 2013.

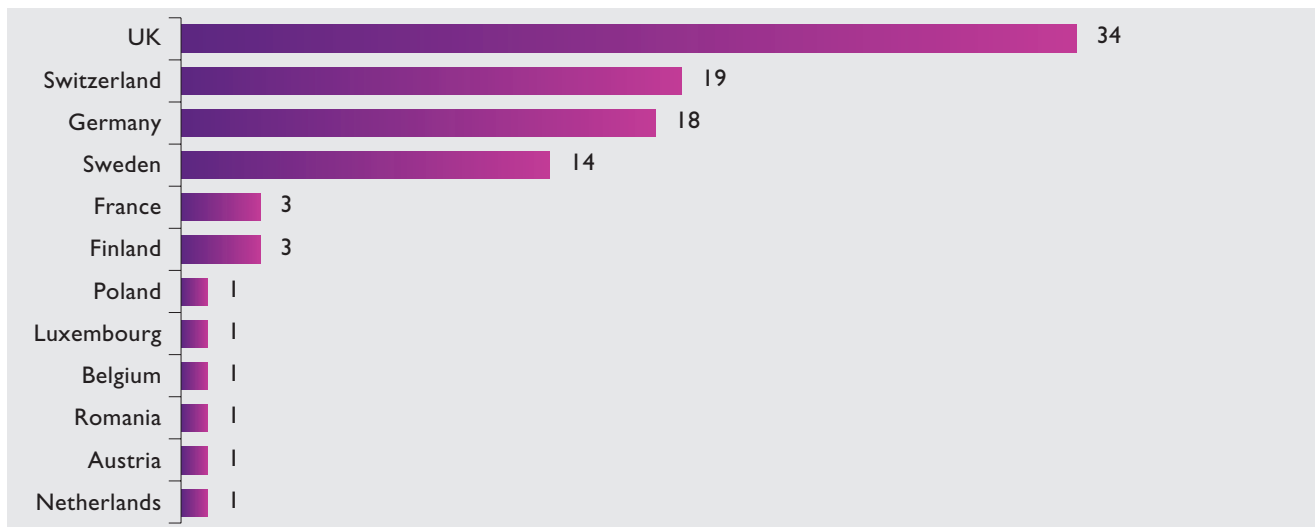
The tax regime in 2013 appears to be slightly more optimistic and this might be down to new corporate

and personal tax legislation possibly impacting perceptions. Equally, a slowdown in new tax laws may also contribute to European companies feeling that the prudent tax applications after the financial crisis is contributing to new growth.

Of all respondents, Financial companies appear to be the least positive about the effect of the tax regime in Europe

on their sector, scoring a DLA Piper Tech Index score of 54 compared to the overall score of 61. This is understandable given the increased spotlight and focus that they are facing from regulators and the right of new regulation being brought in as a result of the new credit rules and International regulatory framework for banks (Basel III).

Which country in Europe has the best tax regime? (%)



The UK (34%) was considered to have the best tax regime in Europe. Switzerland (19%) and Germany (18%) also dominated the list of European countries with the best tax regimes.

Perhaps the UK continues to be considered to have the best tax regime because the Government has established numerous tax incentives which provide invaluable benefits for start-up businesses in the technological sector. Any company undertaking a project to bring about an advance in science or technology can reduce its

corporation tax by claiming an R&D tax credit. Companies with fewer than 500 employees and an annual turnover of less than €100 million can claim relief equivalent to 225% of qualifying expenditure, which includes labour, materials, software, utilities and, in some circumstances, capital expenditure. Large businesses can claim relief of 130% or an above-the-line credit worth 10% of eligible costs. Another initiative, the Patent Box, allows companies to apply a 10% rate of corporation tax to all profits attributable to qualifying patents,

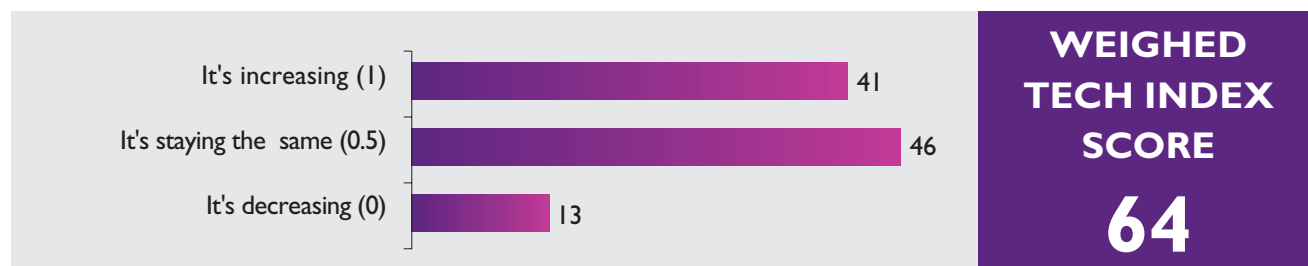
whether paid separately as royalties or embedded in the sale price of products. This scheme aims to provide a further incentive for companies to exploit new ideas whilst compensating for the cost of the patent process itself. HMRC predicts the Patent Box will provide £1.1 billion in tax relief by 2019.

Switzerland and Germany also appear prominently on the list of the best tax and regulatory regimes. This may be reflected by the very stable political and regulatory environment in addition to relatively high levels of R&D attracting tax credits for such expenditure.

ACCESS TO TALENT:

Is Talent Management Higher on the Business Agenda?

How would you rate the availability of talented candidates for hire in your sector? (%)



In 2013, the DLA Piper Tech Index score for availability of talented candidates was the only score which has seen a decrease from 2012 (70 to 64 points). Respondents in the Public Sector felt the reduction of available of talented candidates was particularly noticeable with 33% citing that it was decreasing.

It is clear that although businesses are more optimistic about future growth, the selection of viable candidates with the right status to help the business leverage growth are critically in demand. Thus, we are now in a state where this is a candidate's market, and, businesses will have to pay a premium for qualified candidates in high demand.

We are also seeing an increase of businesses not being able to fill roles, especially in sectors such as marketing & PR, web design, coder developers and user experience. However, it's not just recruitment but staff retention that is also a challenge with growth hindered because most recruitment activity has been to replace lost, rather than to create new jobs to support business expansion.

The right people, with the right entrepreneurial skills, are key to the survival of the sector, so it is more important now than ever for employers, educators and others to take all steps possible to support the development, progression and

retention of skills. Providing the right training not only gives employers the opportunity to address the skills shortage by developing the skill-sets of existing employees, but investing in employees can also be a crucial factor in retaining cutting edge and inspirational talent.

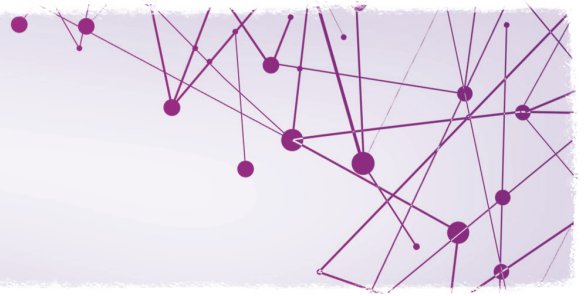
Employee mobility is also key, equipping employees with more diverse skills and providing opportunities for talent to flow within the organisation and across the region. However, as the report identifies, mobility presents its own challenges.

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We need a system to easily allow talent in, otherwise the opportunity is lost and will go elsewhere. Mathew Fell, Director of competitive markets, CBI.

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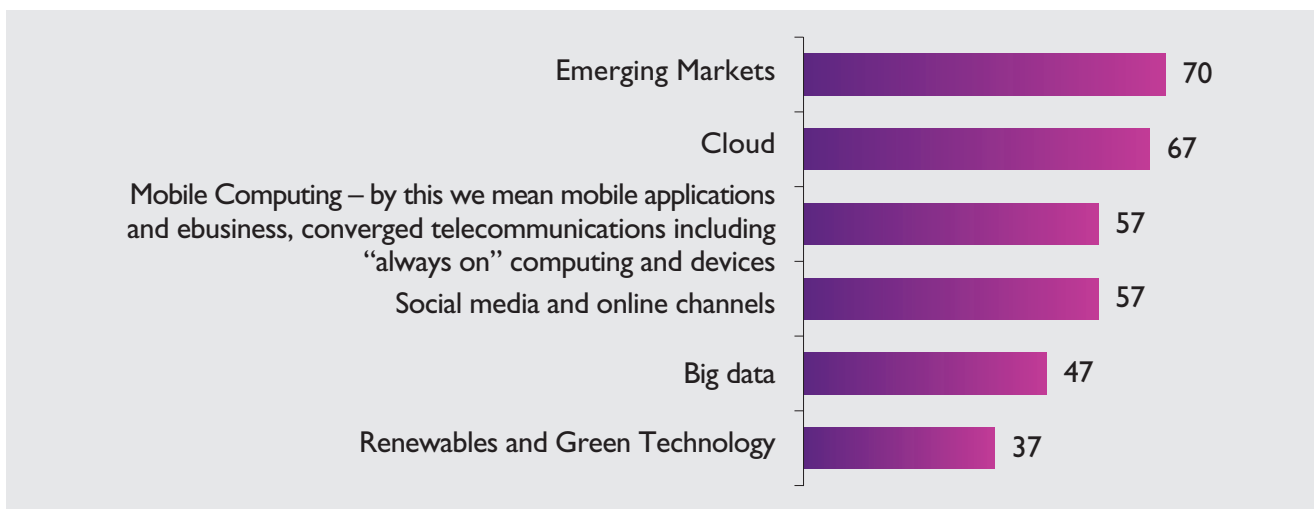
POTENTIAL AREAS FOR GROWTH



As market dynamics shift and new trends emerge, new growth areas were added in the 2013 Tech Index for respondents to rank. The rankings for the “top” areas that were most viable for future business growth included:

- 1 **Emerging Markets (70%)**
- 2 **Cloud Computing (67%)**
- 3 **Mobile Computing (57%)**
- 4 **Social Media and Online Channels (57%)**

How would you rate the availability of talented candidates for hire in your sector? (%)



Slightly less important, but nevertheless still achieving solid scores were the remaining two areas:

- Big Data (47%),
- Renewables and Green Technology (37%) – having dropped from third position in last year’s ranking with 67%.

But what in 2013 is driving respondents to choose these core areas for growth? We probed further to gain insight into respondents choices.

Emerging Markets

Again taking the top spot in 2013, respondents still find significant opportunities in emerging economies. Seen to have more resilience in the economic crisis, many firms have developed emerging market strategies as a defence against any further “dips” or global recessions.

The respondents that ranked emerging markets as top for potential growth, were also asked which countries offered the greatest potential for their business and where they felt there is an opportunity within each of these markets.

Emerging markets with greatest growth potential in the next three years (%)

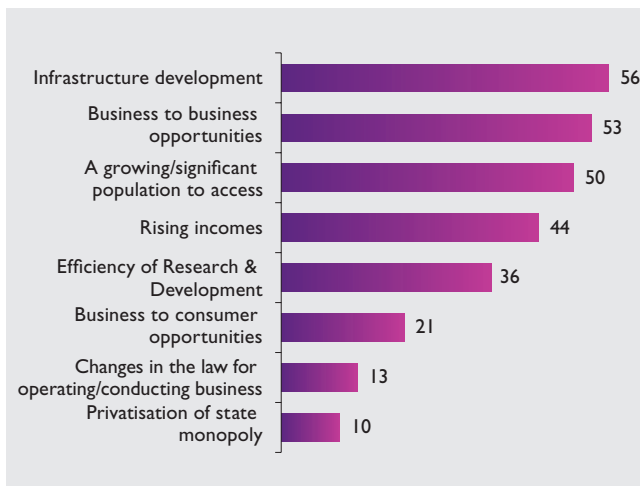


Over two-thirds of respondents (69%) felt that South Asia (including India) has the greatest potential for growth in the next three years. Other countries with potential included Central and Eastern Europe (48%), Brazil (41%), the Middle East (40%) and South East Asia (*excluding China) (38%).

** We have deliberately excluded China as a potential response partly in recognition that China as the world's second largest economy could be argued to no longer be a true “emerging market”. The nature and size of China as a marketplace would also skew the results in such a way that meaningful assessment of the other responses would be difficult.*

“25% of growth from 2012 was seen across the BRIC Countries – uptake of cloud is also much higher in emerging markets.”

Areas of greatest opportunity within identified emerging markets (%)



The opportunity for firms to support the infrastructure growth in developing nations is supported by over half of respondents. This is particularly true for the telecoms industry where liberalisation of emerging markets, overseas investment and government subsidiaries are promoting growth as telecoms infrastructure (including both better mobile coverage and increased access to internet) is seen as essential to these areas offering significant opportunities.

Private equity and venture capital firms have developed a number of funds in these emerging economies, bringing greater access to capital for new ventures and or joint ventures, spurring economic development, particularly in innovative technologies.

Equally, emerging nations offer some of the greatest opportunity in mobile development – as they leapfrog Western nations with smartphone technologies and the value-added services from mobile operators they are having greater adoption rates than their Western counterparts. According to Bloomberg News, smartphone shipments to China topped almost 24 million units during Quarter 2 of 2013, nearly 1 million more deliveries than the U.S. Also more than 25% of mobile web users in emerging markets connect to the Internet solely through mobile devices. That's the case for 70% of mobile web users in Egypt, 59% in India and 50% in Nigeria — and only 25% of U.S. and 22% of U.K. mobile web users.

Cloud



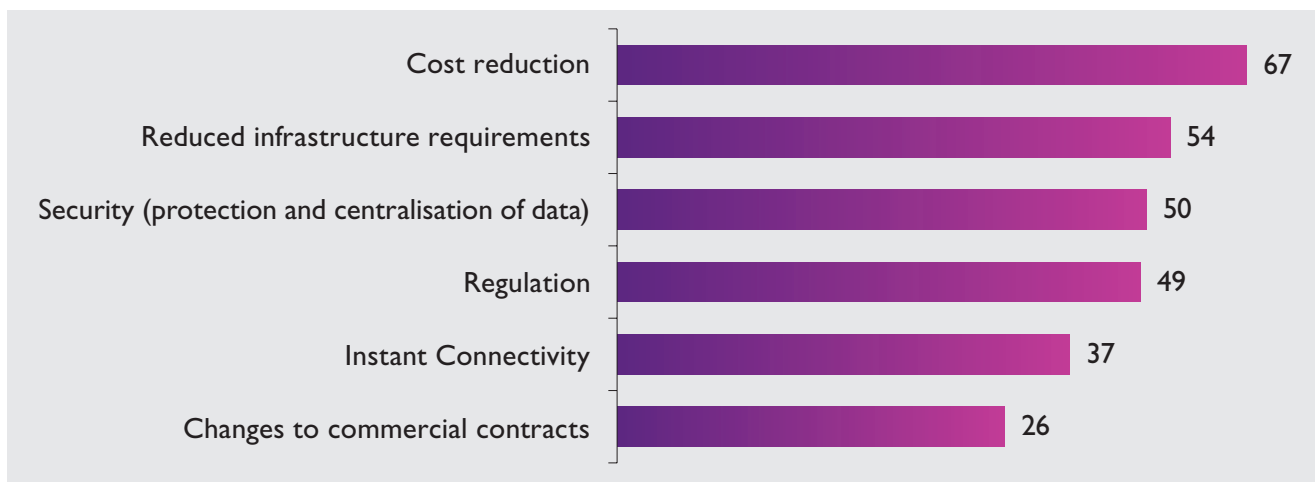
Because “Cloud Computing” has been a buzz word for a few years now, we were interested to see if it would continue to rank highly in 2013. Cloud adoption has become more mainstream in the last year with companies more readily adopting Cloud-based solutions, and the market maturing as a whole, so it is pleasing to see that there is still continued popularity for growth which helps demonstrate what a game-changer cloud can be and the fact that it still hasn't reached the adoption levels originally predicted.

The respondents that ranked cloud computing as top for potential growth, were also asked which areas would most drive their company's adoption of cloud computing, and what would be the key benefits and potential drawbacks for their business.

Although cost reduction is seen by the majority of respondents as a driver for Cloud adoption, we suspect firms are judging this by way of the long-term benefit that Cloud brings. For many firms, there has been a resistance to adopting Cloud-based solutions because of the high cost of shifting from a legacy environment to that of the Cloud and although 67% see cost as a driver, the same percent – 67% also see it as a drawback to adoption.

Thus, it's encouraging to see firms may be starting to see the long-term value that the Cloud can bring.

Features that will drive the adoption of cloud computing (%)



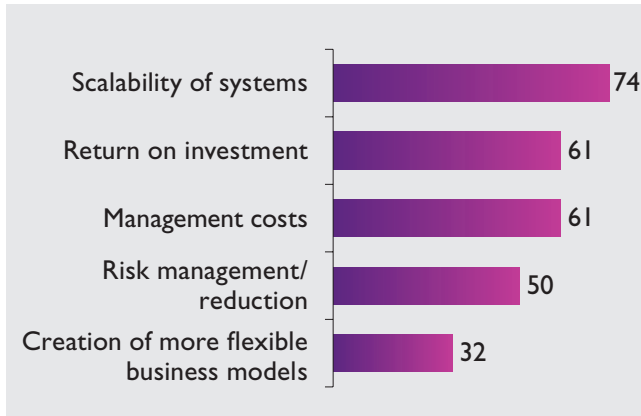
Discouragingly, still half of respondents still do not find security as a driver for Cloud adoption and, in fact, 62% still see security as a barrier to Cloud-adoption. Tech firms have developed advanced solutions to improve Cloud-based security, so it is discouraging that only half of our technology savvy respondents find security to be a key driver and the other half don't. However, this is starting to change, as suppliers develop solutions that are more appropriate for regulated customers and markets.

Those Cloud vendors that are able to unlock this relatively untapped market are likely to see significant growth over the next few years as they look to sign up enterprise wide deals.

The legal landscape for Cloud is still relatively unclear, explaining why 49% of respondents, mainly from Financial Services and Public Sector, feel data privacy and data sovereignty issues and policies are not clear nor fully developed.

Cloud

Key Benefits of the Cloud system



The scalability of systems (74%) was cited at the top benefit of Cloud, particularly amongst the Financial sector (84%) ROI (61% and Management Costs (61%) were also seen as key benefits. It is positive to see that the benefits of Cloud are widely accepted by respondents – so why are companies still slow to adopt?

As noted above, cost, although seen as a benefit, is also still seen as a barrier. Companies need to prove a business case to eradicate, costly, yet still functional, legacy systems. However, just under half of respondents believe that a key barrier is a lack of vendors that offer viable Cloud-based solutions – which is partly due to the

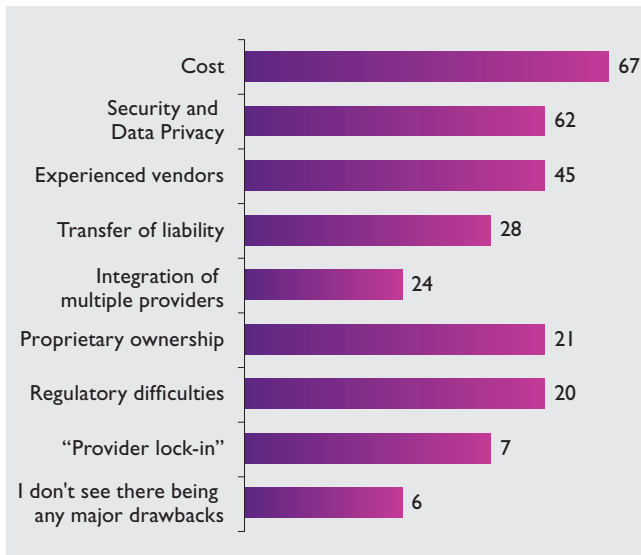
large growth in the sector and the sector now only starting to realise what large corporate customers and regulated entities actually want from their cloud vendors.

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Those Vendors that are able to offer solutions that give the customer the flexibility they are looking for but the support and protection that they need for operating in a regulated market will be the vendors that unlock the new wave of growth we are expecting with the cloud market

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Key Drawbacks of the Cloud system



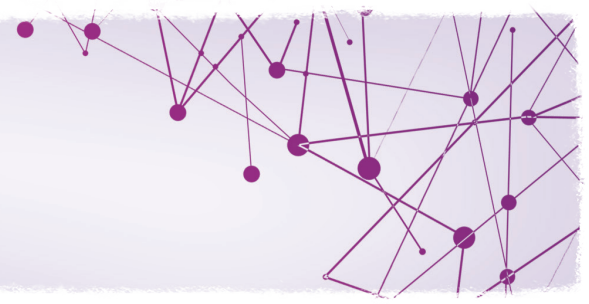
Data security and data privacy are often cited as a concern from those that are perhaps new to using Cloud or are first time adopters. In fact Cloud vendors are similar to legal service providers in that they are increasingly being more open as to where their infrastructure resides and data is stored, helping quell concerns from customers, who are more willing to sign up to terms protecting the security and integrity of their data being stored.

Transfer of liability is a particularly interesting one as it is fair to say that previously Cloud terms have been very one sided on the part of Cloud vendors with many services being provided on an “as is” basis with limited remedies for the Customer if things were to go wrong or commitments in terms of levels of service that the Cloud service would be provided to.

However, we have in recent months seen a significant rise in the number of Cloud services contracts which are being subjected to more intensive negotiation. The balance seems to be shifting as customers become more experienced using Cloud solutions and the market matures as a whole.

Over the next 12-18 months we expect the market will “self-adjust” in this respect and reach a more developed appreciation of new market norms and standards.

Mobile Computing



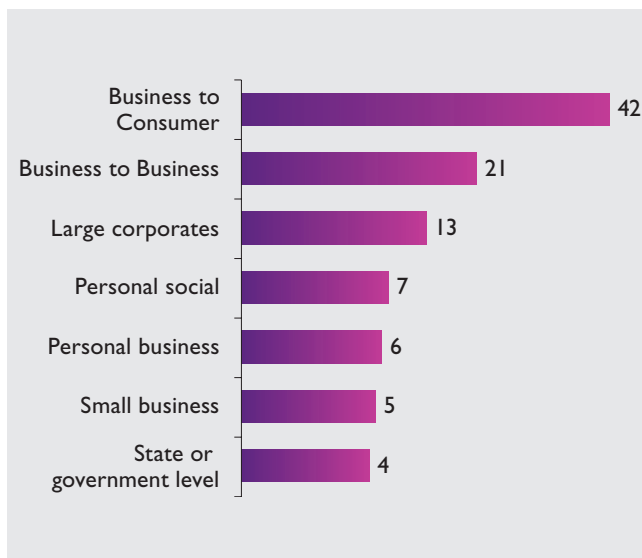
There is no doubt that mobile computing has been an on-going trend for a number of years and new advancements in mobile technology mean that this area will continue to grow at a relentless pace combined with insatiable customer demand for new devices and data hungry applications.

Business to Consumer adoption is by far more prominent today and 42% of respondents believe that this will continue in the future. Less than a quarter of respondents see growth in B2B mobile computing options, but the lines between B2B and B2C adoption over mobile channels can often be blurred. For example, the usage of sites like

LinkedIn, Facebook and Twitter are now commonly used across mobile and Web and, merge between personal and business usage.

This is supported with 49% of respondents seeing mobile financial/business transactions as an area of most growth, and that functionality will likely be used for both B2B and B2C requirements. Under a quarter of firms (20%) see "bring your own devices" as a growth area – a topic that has created much challenge for the corporate CIO as the convergence of these technologies on business networks has proved challenging.

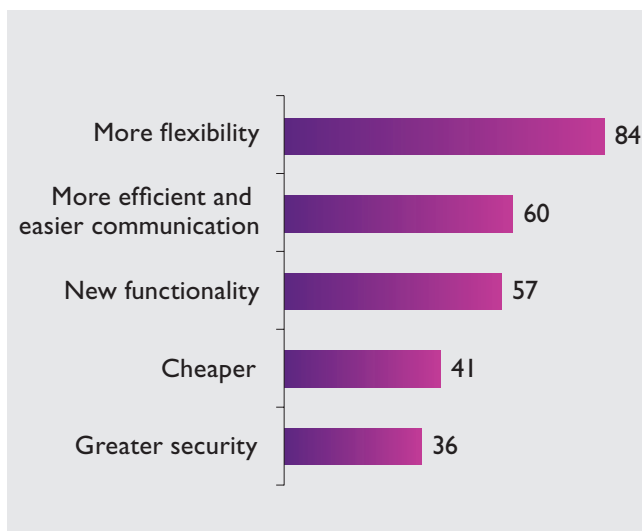
Target groups that offer the most growth potential in Mobile Computing (%)



Key Challenges/Risks of the Mobile Computing (%)



Key Benefits of the Mobile Computing (%)



Mobile computing was seen to be beneficial as it offers more flexibility (84%), offers more efficient and easier communications (60%) and allows new functionality (57%). With the pace of technological development, and operating systems becoming ever more stable, that flexibility will drive further adoption. However, there are challenges with mobile computing and the business executive as we consider the creation of content over these new channels and the legislation that extends to these new devices.

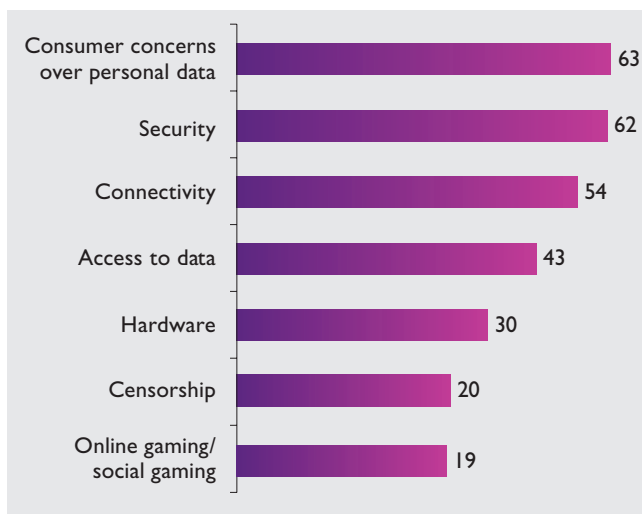
Social Media and Online Channels

Social media adoption is now a fact for many businesses. However, there is still uncertainty of how to manage this in a B2B environment.

In the case of B2C firms, social media and online channels were cited as being an enabler for growth (62%). However, whilst B2B adoption has been slower, 50% of respondents now believe growth is on the horizon.

In 2012, Social Media Channels was ranked 5th amongst the top areas so the rise to third place indicates perhaps greater acceptance that social media is not just a trend – but instead to be viewed as a core channel of communication to be integrated with traditional forms of media.

What could create limitations for social media and online channels? (%)

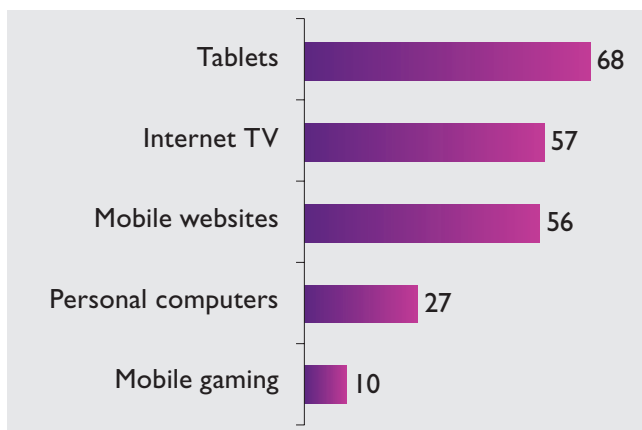


As was the case in 2012, concerns over personal data (63%) and access to data (43%) continue to be high amongst our respondents as a limitation to Social Media and online channels. This likely contributes to 62% of respondents also seeing security as a limitation.

Given the tech knowledge of our respondents, the high response for these sensitive areas is slightly discouraging. Technology pundits are typically the first to launch new technologies and advances, and their views on social media's limitations is certainly interesting if not somewhat perplexing.

We also see generational differences and the younger generations' use of technology to drive opportunities for this channel – the key for corporates is finding out how to tap into this youth audience who have much more savvy use of social media networks.

Which channels will offer greatest access to social media? (%)



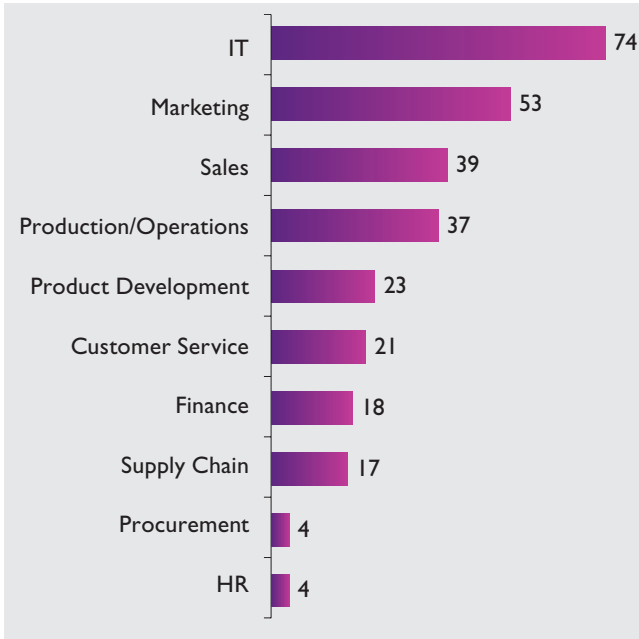
In 2013, with an increased market share, Tablets are seen as the channel to be most predominantly used (68%) for access to social media. Use of personal computers fell from 49% in 2012 to 27% in 2013, and outlines the growth seen in mobile computing. Internet TV was also selected by over half of respondents as a core opportunity to access as it did in 2012.

Big Data



With data being probably the **“Biggest”** issue discussed in 2013 amongst IT managers, the Tech Index added Big Data this year to the list of key growth opportunities. Thus, although it didn't take a top 3 position, almost half of respondents (47%) stated it as a growth opportunity.

Areas with growth potential within organisations for Big Data (%)



Nearly three-quarters (74%) of respondents felt that the IT department would benefit from Big Data within their organisation most. Just over half cited Marketing, as a function deemed to be the “new CIO” given the accessibility to multiple data points, and the second department to benefit from Big Data. Around a third felt that Sales (39%) and Production/Operations (37%) divisions would also benefit.

Many firms are in the process of defining a Big Data strategy and even if they have tools and technologies to access and mine it, they are still unclear how to use it. However, almost three-quarters of targets said better use of data will enable firms to “optimise business processes” and 64% believe it will “encourage innovation.”

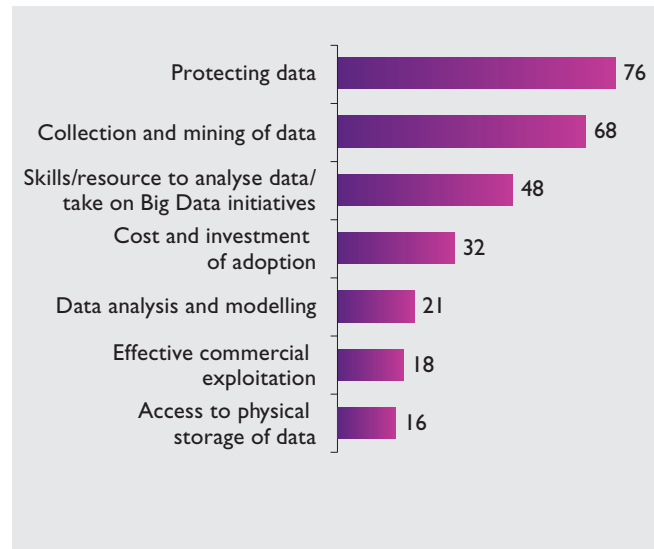
Unsurprisingly, about half believe it will generate more “informed decision-making” which is partly why Big Data has become so popular and is believed to help make firms more competitive.

Key Benefits of Big Data (%)



Despite the benefits, 76% of targets believe protecting their data will be a key challenge. 68% of respondents believe that collecting and mining the data is a challenge, with many SMB firms not having the capital available to implement the solutions available for strong data mining and collection.

Key Challenges of Big Data (%)



Equally, 48% of respondents note that even if the data is available, having the necessary resources available to analyse and do something with the data is a challenge.

Renewables and Green Technology

Renewables and green technology declined significantly as an area of growth from last year, falling to last place in 2013. Respondents that ranked renewables and green technology as top for potential growth, were also asked what will most drive their company's adoption of green technology, the key benefits and biggest potential drawbacks of this technology for their business.

Key benefits of green technology for business (%)

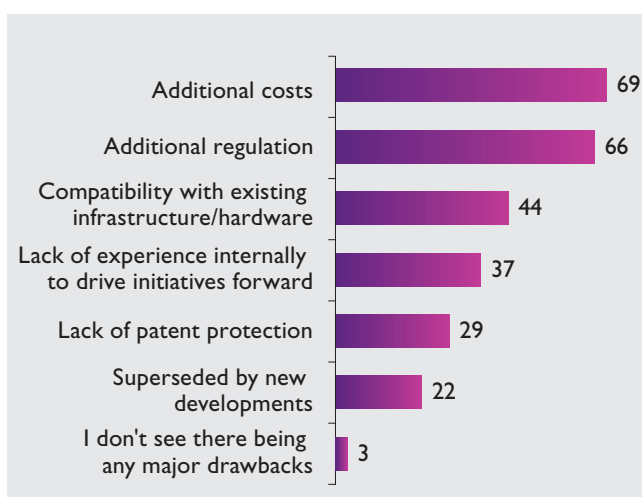


Overall, in 2013, renewables and green technology was seen as the least critical area for supporting growth in the technology market. Cost management/reduction (65%) was the key feature that would drive respondent's adoption of green technology. Improvements in the licensing of technology (52%) also seemed to be an important feature required.

The key drivers for adoption of green technology were environmental impact (69%), cost management/reduction (57%) and tax incentives (52%). It is perhaps not surprising that fiscal incentives should be perceived as an important driver for the adoption of green technology, though this is an area which great differences remain between the EU

Member States and some other Member States, such as the UK, who are currently reviewing the support given to green technology and renewables because of changing energy policies. Inevitably the reduction in or withdrawal of support creates a less comfortable environment for investment decisions, though it must also be right, and necessary in order to avoid state aid issues, for subsidies to be focussed on technologies that would not otherwise be brought to market, rather than on mature technologies.

The biggest potential drawbacks of green technology for business (%)



However, the additional costs (69%) and additional regulations (66%) that adoption of green technology would bring, are still of great concern. In a sense, it is surprising that green technology should be perceived as bringing with it a greater regulatory burden, however it seems unlikely that a greater regulatory burden should attach to the actual acquisition and use of new technology and renewable energy sources. However, it may be that what respondents had in mind is the regulatory burden attached to some of the incentive schemes that are intended to favour the adoption of green technology or renewable energy. For example, the Green Deal introduced by the UK government has been criticised as being too bureaucratic and as providing insufficient incentives, resulting in a very low take-up, so that it has had to be

revised, and the UK CRC Energy Efficiency Scheme, while apparently quite successful in focussing business attention on wasteful use of energy, has also had to be quite radically simplified because it was too complex."

Compared to 2012 the issue of the cost of adoption has seen an increase from 27% to 69%, indicating that the 'bottom-line' is still the priority over becoming 'green'.

APPENDIX:

Methodology and Respondent Profile

DLA Piper commissioned Coleman Parkes Research to conduct this study in October 2013 using our expertise to examine views on the current climate across core business areas and future growth areas within European businesses.

How do we get the score?

The results of the survey have been collated and weighted to provide DLA Piper's second Tech index. This is based on a diffusion index which weights the percentage of respondents answers that are positive, negative and neutral – the results are presented as a scorecard next to each of the areas indicated above. The scorecard is designed to demonstrate degrees of positive feedback, where 50 represents a neutral score, 100 represents the maximum positive score and 0 represents an entirely negative score. This score then gives an overall view of the sentiment of the respondents, and therefore the index.

Further detail on the index methodology that we have used is set out in the appendix.

Respondents were also invited to consider the specific areas within their industry that offered the greatest opportunity for growth.

Respondent Base

350 interviews were conducted online with executives from key European technology firms, members of the investment community with a technology focus and finally Government officials focused on technology policy making.

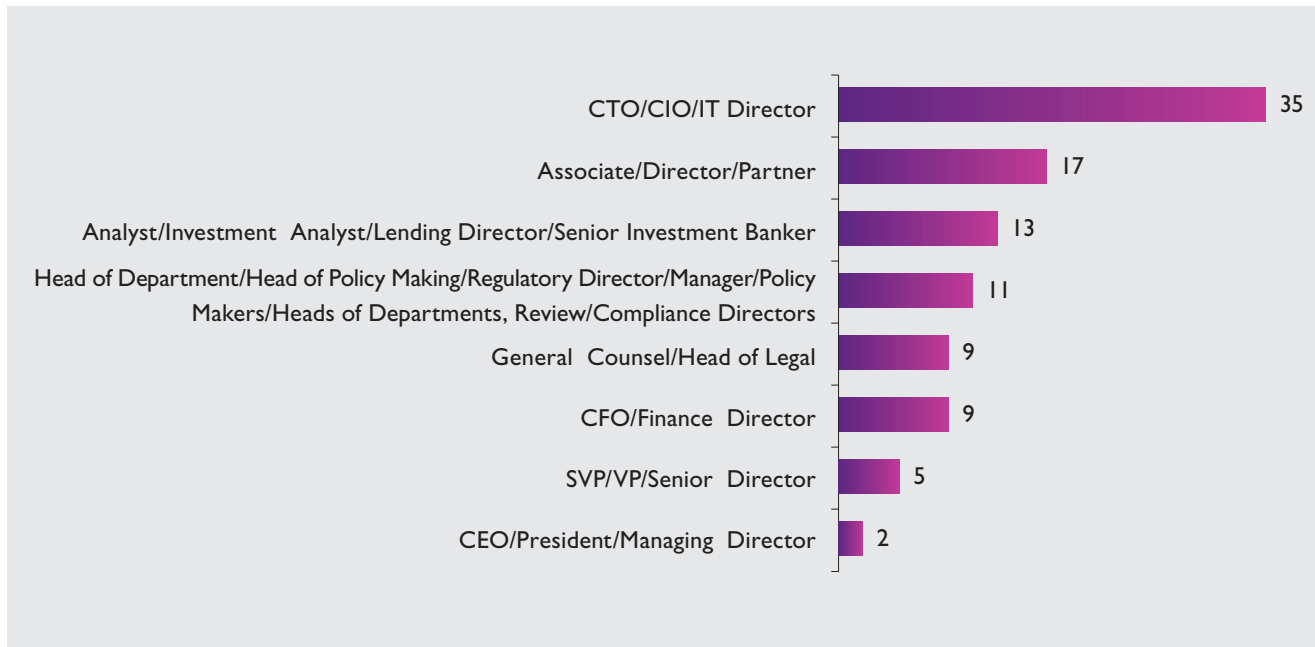
All interviews were carried out in the respondent's local language, within organisations with more than €10 million annual turnover.

Figure 1 – Sample breakdown by country and company type

Country	No. of interviews	Company Type		
Luxembourg	16	12	2	2
Belgium	17	12	3	2
Romania	23	17	6	-
Hungary	25	17	6	2
Italy	25	17	6	2
Austria	25	17	6	2
Netherlands	25	17	6	2
Poland	25	17	6	2
Finland	25	17	6	2
Sweden	25	17	6	2
Switzerland	25	17	6	2
Germany	27	17	7	3
France	33	18	12	3
UK	34	18	12	4

Respondent job functions varied by industry and focused on decision makers of technological advancement, policy and business issues and across various company sizes and revenues.

Figure 2 – Sample breakdown by job title (%)



Method

All surveys were conducted under the [MRS code of conduct (The Code of Conduct is designed to support all those engaged in market, social or opinion research in maintaining professional standards. The Code is also intended to reassure the general public and other interested parties that research is carried out in a professional and ethical manner.) The results were then collated and provided a weighting to align them to create DLA Piper’s Tech Index for 2013.

Tech Index Methodology

The actual index itself is based on a diffusion index. A score for each of the first seven technology index questions (focused on regulation, tax, financing, talent and IP) was generated using the calculation below.

$$\text{INDEX} = (P1*1) + (P2*0.5) + (P3*0)$$


P1 = Percentage number of answers that reported an improvement.

P2 = Percentage number of answers that reported no change.

P3 = Percentage number of answers that reported a deterioration.

Thus, if 100% of the panel reported an improvement the index would be 100.0.

If 100% reported a deterioration the index would be zero. If 100% of the panel saw no change the index would be 50.0 (P2 * 0.5).



Therefore, an index reading of 50.0 means that the variable is unchanged, a number over 50.0 indicates an improvement while anything below 50.0 suggests a decline. The further away from 50.0 the index is, the stronger the sentiment. E.g. a reading of 55.0 points to a stronger increase in a variable than a reading of 52.5.

As each factor (regulation, tax, financing, talent and IP) has a different level of impact upon the growth of the

technology sector, once each individual score has been calculated each have the following weighting applied:

- Regulatory = (10%+10%) 20%
- Tax = (10%+10%) 20%
- Financing = (15%+10%) 25%
- Talent = 10%
- IP = 25%

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FOR FURTHER DETAILS ABOUT THIS STUDY, PLEASE CONTACT DLA PIPER'S MARKETING/ PR TEAM

Jaime McFarlane

Technology Marketing Manager

T +44 131 242 5089

Jaime.mcfarlane@dlapiper.com

Hannah Roberts

PR Manager

T +44 161 235 4557

hannah.roberts@dlapiper.com

FOR GENERAL ENQUIRIES REGARDING TECHNOLOGY PLEASE CONTACT

Kit Burden

Head of Technology, Sourcing and Commercial Group
Global Co-Head of Technology Sector

T +44 20 7796 6075

kit.burden@dlapiper.com

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