GET CREATIVE:

MAKE THE MOST OF THE GLOBAL OPPORTUNITIES FOR THE UK'S CREATIVE & DIGITAL SECTORS

17 MAY 2012

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INTRODUCTION

Fiona Clarke-Hackston, Chief Executive, British Screen Advisory Council (BSAC) opened the conference, which was jointly hosted by Oliver and Ohlbaum (O&O) Associates and BSAC. The purpose of the day was to consider how the UK's creative and digital sectors could grasp as much of the economic value from globalisation as possible. The sub-sectors within the creative and digital sectors including technology, music, finance, publishing, television, games and film did not often meet and this conference was an opportunity to think outside those silos. This was a time of austerity but also of enormous opportunity for the creative and digital sectors. Officials from DCMS, the European Commission, BIS and other key departments were in attendance over the day, as well as senior executives, entrepreneurs, investors and policymakers. Ajay Chowdhury, CEO, ComQi, a global multi-channel messaging technology company, and a BSAC Member, would chair the morning, and Adam Singer, BSAC Chairman, would chair the afternoon.

Ajay Chowdhury introduced Mark Oliver, Chief Executive, O&O. The first presentation 'The Challenge to The UK' would contextualise the debates over the day by providing a definition of the creative and digital sectors, detailing how they contributed to GDP and added value in the UK, and explaining the challenge to the UK from global competitors.

THE CHALLENGE TO THE UK

Mark Oliver said that he had three aims in mind for the conference:

- distilling all of the research which had been done on the creative and digital sectors and providing evidence across those sectors;
- aiding understanding on the issues which faced the sector and encouraging dialogue between sub-sectors which would be positive for the prosperity of the sector as a whole; and,
- providing focus for the industry on what could be done to increase competitiveness, and focus for Government on where intervention was needed.

The sectors under discussion could be described as the creative sector, the information communication technology (ICT) sector, and the digital commerce sector. Some sub-sectors could be characterised as solely within a larger sector, for example, film was part of the creative sector, whereas some cut across different sectors, for example social media sat within the creative, ICT and digital commerce sectors. Some sub-sectors were related to but not part of these three large sectors, for example, sport was separate but interfaced with the creative sector. The creative, ICT and digital commerce sectors formed part of the core functions of the economy, its creativity, culture, technology and commerce, meaning that these sectors were more than their own output, they indicated the capabilities of the UK economy.

In measuring these sectors, the figures on their size were sector-based not activity-based. Companies classed as within a sector were measured rather than companies which were not classed as within the sector but which undertook activities which were. For example, an ISP would count towards measurement of the ICT sector, but an internal IT department in a company operating in another sector would not. This was an issue as it underestimated the importance of these sectors. There were six ways to measure the importance and strength of a sector: total spending (by consumers, government and business); contribution to Gross Value Added, trade and jobs; measurable gross economic impact (direct, indirect and induced GVA plus consumer surplus); measurable net economic impact; broader total impact e.g. including 'spill-over and ripple' effects; and assessment of competitive advantages and disadvantages. Therefore, it was problematic to compare sectors which had been measured in a different way. Since 1997, the DCMS had produced an annual study estimating the size of the creative industries taking into account GVA contribution. It had changed its basis for defining the sector in 2008 removing a lot of the business software industry and some parts of the design and fashion industry, so it appeared that the creative industries had shrunk when in reality, they had not. Other sector studies considered the impact of the sector such as the Boston Consulting Group (BCG)/Google financed study of the UK Internet Economy, which had measured the size of the sector in terms of spending but had then expressed this as a proportion of GDP (8.3% of GDP) which was not comparable to the DCMS Creative Sector GVA contribution number. The UK Film Council Economic Impact of the UK Screen Industries in 2005 had concluded that for every £1 invested in the UK screen industries, there was a £2 multiplier effect on the economy as a whole. Finally, the Deloitte study on the

Economic Impact of Facebook had measured Facebook's GVA impact as €2.6bn but had focused on the broader impact on the European and UK economy for the future. There had also been studies undertaken to measure the impact of individual companies within these sectors. The most intellectually robust of which was a 2010 Deloitte study on the impact of the BBC on the UK creative sector. This study had measured the GVA contribution of the BBC, which was £7.7bn, and the 'counter-factual', for example, if the BBC ceased to exist, a commercial broadcaster might appear in its place and that would create value, and if there was no licence fee, consumers would have £145 in their pockets to spend on other things.

Mark went on to outline the contribution of the three sectors to GVA and trade. The UK's creative sector made up a higher proportion of contribution to GVA than any other OECD nation, it made a trade surplus in contrast to other EU nations and was second place in the world to the USA, it currently contributed about 10% of service exports (mostly to Europe and North America) ahead of its GVA contribution and was especially strong in publishing, TV, advertising and architecture, and was undergoing a shift towards exports away from domestic demand. However, total contribution of the UK creative industries to GVA had not been growing that rapidly recently, even taking into account the changes in measurement. In terms of the contribution of the internet sector to GVA, BCG had measured the size of the sector by considering the building blocks for the core internet sector and found that the digital internet sector in the UK generated sales of approximately £50bn with a GVA contribution of £30-35bn. This meant that the core internet sector may be smaller than the traditionally defined creative sector. The study had looked at total expenditure which was £100bn in the UK in 2010, and compared that to other countries in 2011 on an expenditure vs. GDP basis. One could not compare the UK directly to other countries as the figures were measuring different things but it was clear that the UK was ahead of the game in terms of its internet expenditure. The ICT sector contributed 9.6% of business sector value added in the UK which compared quite well with some European and international competitors, the OECD average was 8.2%. In terms of trade, there were no official numbers on the trade in software which was the biggest traded product, however in terms of ICT services and goods, most countries imported goods in the developed world and some exported services. The UK was ahead in terms of exporting services.

However, measuring the sectors based only on GVA contribution did not sufficiently take into account the importance of the creative and digital sectors to the UK, as the sectors impacted on the overall efficiency and competitiveness of the UK economy, and the image of the UK to global consumers and investors. The digital sector was important in terms of what it did for the UK economy. E-government could change the way government was run and the cost of government. The digital sector enabled greater transparency in marketplaces and brought increased competition from overseas and domestically into markets, which should raise productivity and international trade. In terms of the creative sectors, as well as the creative skills base within the sector, people in other sectors learned creative skills. The sectors may also encourage a way of creative thinking which permeated all businesses in the UK and helped communication skills. These were the broader benefits to the economy. In terms of 'halo effect', the creative sectors encouraged tourism, and created an image of the

UK as an ideas leader and a soft power image in terms of the UK's influence globally. The image of UK lifestyle which was created had a halo effect on exporting British products and services overseas. Similarly, the digital industry created an image of the UK as being leading edge, innovative and a modern economy, which influenced the decision to do business in the UK. The creative and digital sectors also had social and ethical implications for society as a whole. For example, the internet raised issues of privacy and allowed globalised crime to develop, as well as cyber bullying. However, it had positive effects on political engagement and democracy. The creative sectors also influenced social issues like political accountability, violence, and well being. This was why politicians took such an interest in these sectors.

Mark compared the e-intensity score (a combination of spending, engagement of business, and the general influence of the internet on society) of various countries with their GDP to give an idea of the sectors broader impact on the capabilities of the economies globally. In terms of e-intensity, the UK performed well alongside countries from the Nordic area and South Korea, which had had a long term policy of building up broadband and encouraging the adoption of technology. Considering the UK's strengths and weaknesses in this area, the UK scored highly in terms of expenditure, especially online e-commerce spending, but lower in terms of 'enablement', broadband speeds and penetration, and 'engagement', the use of the internet across SMEs and government. A BCG study found that SME's in the UK embraced the web slightly more than those in the BRIC countries, and those SME's that did embrace the web were higher growth than those that did not. In terms of trade, the creative and technical sectors were major drivers of the UK's strong service sector trade performance. There was a trade surplus of £14.1bn for business and professional services, £1.1bn for communications services, £4.1bn for computer information services e.g. publishing and business information, £2.2bn for personal, cultural and recreational services e.g. audiovisual services, £4.1bn for royalties and licenses, which cut across all the creative sectors, and £5.4bn for technical services such as engineering services. The UK was second only to the US in exports of personal, cultural and recreational services. Many European countries experienced a trade deficit in this area, so this was certainly an area where the UK punched above its weight.

Mark described the macro-challenge to the UK in terms of the creative and digital sectors. In terms of globalisation, the challenges were:

- World trade had been growing twice as fast as world output since 1985;
- A shift in dominant global trade flows from North America/Europe to Asia/North America/Europe and a rapid acceleration in inter-regional trade within Europe, the Americas and Asia;
- The global spread of the internet and the upgrade of internet speeds and capability, with a third of the world's population now connected (over two-thirds penetration in OECD countries);

- The consequent spread of globalisation to services and outsourced/offshored service functions;
- A changed flow of foreign debt investment, growing rapidly and shifting from a developed to developing world flow, to a developing world to developed and less developed world flow.

Consumer adoption of technology times had halved in the UK over the last ten years. For example, it had taken mobile phones 15 years to reach a 50% penetration rate in the UK, broadband 7 years and social media 4 years. This meant that the UK was in a much faster cycle of innovation and development. The capabilities of the web itself were progressing rapidly, as web 2.0 had many more features than web 1.0, such as mass adoption of portable media devices, widespread streaming and downloading of 'fat' content, mass adoption of social media, virtual reality and multiplayer platforms, new business models emerging and new ways of searching the internet. The basic architecture of the web was now led by a small number of global virtual network firms, Microsoft, Apple, Google, eBay, Amazon and Facebook, emerging from the US. The reasons for this were the 'network effects' of the internet, the fact that a service grew in value the more users it had, and the unique size and scope of the US market.

Mark explained that globalisation, and the rapidly progressing capabilities of the web were causing value shifts. There were shifts in value from: physical/traditional to digital content and trade; media/creative content providers to consumers and advertisers (causing low revenue growth in individual media/entertainment markets); the middle to the "head" and "tail" within content and product markets (meaning companies were under pressure to come up with global large-scale hits); semi-skilled and skilled workers to highly skilled and entrepreneurial; local market leaders with access to scarce resources to local/regional/global brands with access to consumer loyalty at scale; and a shift in focus from domestic markets to regional/global markets. In terms of the shift from physical/traditional to digital content, it could take time to build up but then moved rapidly. For example, it took 7 years after Google was founded for the effects of internet search on direct mail and classified newspapers to be felt, after which decline in those sectors was rapid. Digital was bringing revenue pressures on other traditional media activities, for example the shift to online film distribution. The shift from DVD to online could actually make the sector more profitable, but total spending may decline. Book publishing was experiencing a similar shift from physical to e-books, which made up 30% of the market in the UK expected to rise to 60% by 2016, with the consumer book market as a whole shrinking. This did not mean that there was less profit in the system but that the headline revenue was starting to shrink in the domestic market.

Considering the UK economy as a whole, since the internet reached maturity in about 2001/2, advertisers and consumers had used it to save money and to consume more. Advertising had not grown as fast as GDP since then, so ad funded media was not a beneficiary of web 2.0.

There had been a spurt of spending on IT and devices by consumers to get access to the internet and services, but spending on communication services and in-home leisure entertainment had not increased by that much in real terms. Therefore, the major beneficiaries of this change had been consumers, not suppliers, in a domestic market. Some sectors were in decline due to the impact of the internet on their core business. For example regional newspapers, direct mail, DVD and recorded music had been steeply declining from 2007 to 2010. Some sectors were still prospering such as TV, cinema and internet advertising. The outlook for commercial radio, books, consumer magazines, outdoor and national newspapers was unclear. The impact of the internet meant that some sectors were changing their overall definition, for example, the TV advertising market became the audiovisual advertising market, and the newspaper market became the news market. In terms of the distribution of sales, the 'long tail' effect meant that obscure titles could be given a new lease of life by the web and the global market for top performing titles was enhanced, whilst mediocrity was punished. This polarisation reduced hit ratios while increasing the returns to hits. For example, only one in 12 reality TV shows on UK TV was a hit, with two-thirds misses. This made the sector skewed in terms of its distribution of returns leading to the globalisation of media markets. Revenue pressures in domestic markets, and higher risks, caused content producers to seek global markets and "syndicate" risks, hoping to sell formats globally. The UK had a global market share by volume of hours of 29%. Revenue for independent producers from non-UK activities had been growing steadily since 2007. Exports were also growing for the publishing industry, taking advantage of the spread of the English language globally. Another challenge presented by the shift to globalisation was the power of global players in the UK domestic market. Google, Amazon, iTunes and Facebook all had very high market shares in the UK for online search, online bookshops, digital media and social media respectively. This presented a challenge for local players in the battle for consumer trust and loyalty across the digital and creative sectors. There was a huge macro challenge for the UK's creative and digital sectors to shift away from low growth domestic markets to global markets, to challenge and handle global risk, and to manage the inversion of many sectors caused by the internet.

Mark concluded by discussing the sources of the UK's competitive advantage. In 2009, the Technology Strategy Board identified the key competitive strengths of the UK. In terms of national characteristics, English was the leading language of trade and the web, the UK's time zone was ideal for international trade as it was between that of the Americas, Europe and Asia, and the UK was multi-cultural, especially in large cities. In terms of capability of the population, the UK had world class creative sector training, science and technology universities with world leading reputations, a high penetration of the web, devices and digital TV, and a strong track record in innovative content. In terms of the UK market, the UK had a robust copyright and IP regime, the critical mass to create brands and quality content, growth in the creative and digital sectors and competitive domestic markets, and strong public institutions, such as the BBC and cultural institutions. However, the UK's national characteristics may be losing power: English was spoken by about 40% of non-UK EU citizens, especially the under 35s, the time zone was useful for European trade into the US and Asia but did not impact on US direct trade with Asia or intra-EC trade, and multiculturalism could be limited by immigration caps, and existed only in large cities especially London. The panels over the rest of the day would consider the capabilities of the UK population, market and institutions in relation to the global competitiveness of the UK. One final example of the challenge facing the UK's creative and digital sectors was the example of the UK car industry. The UK produced 1.27m cars in 2010 compared with 1.64m in 1970, and exported more cars now than in 1970. The UK's share of world car production had declined from 10% to 3% as cars had grown as an industry. However, there were now no mass market UK brands manufacturing cars. They were all foreign owned. The UK now produced cars for mass manufacturers overseas. The car industry in the UK was still prosperous but the shape of the sector had shifted. It was possible that a similar change could happen in the creative industry sectors.

Audience Q&A

Ajay Chowdhury asked about the effect of the UK's position in terms of internet infrastructure and how this would affect internet use and enablement where the UK was doing very well. If broadband speeds and penetration increased, would this have a multiplier effect on internet use?

Mark Oliver said that it was assumed that improving the infrastructure would cause the internet industry to grow. However, it had grown without the UK's infrastructure being better than other countries so there was a question about the marginal benefit of spending on super fast broadband in major urban areas or universal broadband across the UK at good speeds. The web had grown in its early stages as consumers' main activity was buying things rather than streaming and downloading 'fat' content which relied on high speeds.

Nicholas Lovell, Gamesbrief asked whether the value shift in the creative industries which meant that consumers benefited from spending less money and consuming broadly similar content, meaning that companies lost out, was permanent?

Mark Oliver did not know whether this was permanent, it was an observation of what had happened. There were certain issues or features of the internet which encouraged price transparency. There was also a high availability of free content online which impacted on consumer expectation. This meant that there was likely to be a bias towards downward pressure. However, the internet also allowed local players to enter global markets more easily. On a global basis, the shift was an opportunity not a threat.

Prof Ian Hargreaves, Cardiff University asked about the definitions of 'creative' and 'digital'?

Mark Oliver said that he would like one of the outcomes of the day to be that the digital industries began to be properly measured as they were not currently. The creative industries were measured regularly but the e-commerce industry and ICT were only measured occasionally. The creative industries were measured in detail in terms of value added because of the amount of policy relating to them. The three sectors were equally important and should all be measured regularly and with regard to their impact on the capabilities of the economy not just their GVA. He thought that the concept of the creative industries as an economic classification would continue, however, the three sectors, creative, e-commerce and ICT were likely to become one sector as the current delineation suggested that the digital sectors were not creative and vice versa, which was misleading.

Will Page, PRS for Music said that there was a study on piracy in emerging markets which suggested that one of the causes of piracy was price, as pricing a CD for the same amount in an emerging market as in the US did not take into account the difference in spending power of the local population. Taking a recent example of live concerts in emerging markets, tickets to Lady Gaga in Indonesia had cost $220 and that was by no means an exception. Promoters had realised that although emerging markets were poorer overall, there were wealthy people who were willing to pay higher prices for live concerts than those in America were. He asked Mark Oliver about these pricing issues.

Mark Oliver said that there had been a divergence of where the value was in terms of recorded and live music in all markets. The internet could not yet replicate the live experience so live was still very important. Pricing of live was also based on custom and practice.

Frank Mather, European Commission said that with the advent of super fast broadband, people would be able to download a film in the amount of time it currently took to download a song. Was the creative sector ready to deal with the threats and opportunities that brought?

Mark Oliver said that some sectors had done a better job historically of protecting copyright than the music industry had done. However, the threat to all of the creative industries was now apparent due to the value transfer to the consumer. However, the opportunity was that there was suddenly a global market and global access to consumers. It was the role of Government to set the rules so as not to allow the threat to become so great that the chance to exploit the opportunity was lost.

An audience member said that there was a danger that intervention from Government to aid particular sectors often had unintended consequences for other sectors. For example, the deregulation of the pay TV movie market had allowed Netflix to enter the UK market.

Mark Oliver thought that there needed to be a cross-sectoral approach by Government in considering what impact the introduction of a policy in one sector might have on another. One should think in terms of what competitive advantages the UK's creative and digital sectors possessed and play to those strengths. In terms of competition with the US, the UK's competitive advantages did not lie in owning film studios, or in owning the architecture of the global web, for example.

Ajay Chowdhury said that Mark Oliver's allusion to the car industry had highlighted the possibility that in the creative industries too, there may be a shift from local consumption to exports and from local ownership to foreign ownership. He asked whether this mattered as long as the economic impact was positive?

Mark Oliver said that this was difficult to judge. In economic terms it did not matter as long as GVA was being generated. However, there was an issue about focus on the country and commitment to long term investment.

HOW WELL PLACED IS THE UK COMPETITIVELY

The rest of the morning was spent on two separate sessions exploring the potential sources of competitive advantage for the UK going forward. Each session began with a short presentation from O&O summarising the current position and issues, followed by a panel discussion and then Q&A from the floor.

DO WE HAVE THE BRANDS, VIRTUAL NETWORKS AND INFRASTRUCTURE?

Introductory presentation: Brands, Virtual Networks and Infrastructure

Mark Oliver said that the panel would address some of the following issues concerning brands:

- how many world leading technology, media and telecoms brands did the UK have?
- did the UK have the marketing infrastructure to make the most of UK brands/products?
- where were the UK's brand strengths, in B2C propositions, B2B services or core content/IP?

In terms of virtual networks the issues were:

- who controlled the 'architecture' of the web and how did consumers/businesses interface with it?
- did the UK need its own global (or even UK) virtual networks, or could it just utilise those built by others?
- how should UK businesses and brands approach the leading virtual networks?

In terms of infrastructure, the issues were:

- did the quality of UK infrastructure impact the UK's competitiveness in the global creative and digital markets?
- was technical reach (to the last c.20%) more important than average or top speeds of connection in urban hubs?
- what was the relative importance of fixed and portable connectivity?

Large US virtual networks such as Google, Facebook, Microsoft, Twitter, Linked-in, eBay, iTunes, YouTube, Tumblr and Amazon had all become global operators with high market shares outside of the US. The market share of Facebook, for example, was consistently high across Europe as well as in Brazil and India, but there were strong local rivals in some Asian countries such as Japan and South Korea. Google also had a low market share in Asian territories such as China and South Korea. There were two models for responding to the US domination of virtual networks on the web. China had created and backed national rivals in fields such as search and social media, whereas Germany had established their own virtual networks that were similar to the dominant US companies, and then sold them to the US.

In terms of measuring brands, both Interbrand and BrandZ measured the top 100 most resonant consumer brands. Both showed that TMT companies were important, Interbrand had 15 TMT companies in the top 50 most resonant brands and BrandZ had 19. In terms of UK TMT brands, Vodafone was ranked as 12th most resonant brand in the BrandZ ranking and Thomson Reuter 37th most resonant brand in the Interbrand ranking. The UK had some of the top global news sites, and a number of IP brands that delivered significant revenues from overseas. The Mail Online, BBC News and The Guardian were some of the highest reach news sites in the world. The penetration of the US market by UK newspapers was greater than the penetration of the UK market by US newspapers, which was a great success story. The power and diversity of the UK press was considerable, especially given the issues that the industry was currently struggling with. The companies that the panel members represented generated significant amounts of their revenue from outside the UK, for example, the Economist Group generated 90% of its revenues from overseas. The UK's strengths in terms of brands lay in IP content and franchises, for example, FA Premier League, *Harry Potter*, and Adele to name a few, and in media services and products, for example, the BBC, the Guardian, the Times and Penguin. The UK was weaker in terms of global connectivity and virtual network brands, but also had some strong business to business players, such as Thomson Reuters, Autonomy and Arm. In terms of broadband infrastructure, the UK was equal to many of its peers in broadband subscriptions per 100 people at 32.6, although the Netherlands, Denmark and South Korea were ahead. In actual measured speed, the UK was on a similar footing to the US and many European countries although may be falling behind some of the more developed countries in Asia.

Panel Chair: Ajay Chowdhury

Nick Blunden, Global Digital Publisher, Economist Group
Bill Bush, Director of Communications and Public Policy, Premier League
Graham Hales, CEO UK, Interbrand
Frank Mather, Senior Policy Developer, DG Connect European Commission
Kip Meek, Founding Director, Communication Chambers

Panel discussion: Brands, Virtual Networks and Infrastructure

Ajay Chowdhury noted that the Economist was an example of a company that was internationally successful and had adapted well to digital. It also had a recognisable editorial style which did not change between different local editions. He asked Nick Blunden about the challenges The Economist faced and the approach they had taken to dealing with them?

Nick Blunden explained that the international success of The Economist was partly luck as for 169 years The Economist had produced a magazine that considered international affairs in English, and that had increasingly resonated with people because of the changing nature of the global economy. They had certainly learnt lessons about how to take advantage of change. The Economist brand resonated well globally. Advertising and marketing talent in the UK was second to none and yet the UK did not have many global brands. The Economist had focused on the universal aspect of their brand when expanding internationally rather than producing local versions of the magazine. They had focused on the fact that increasingly people were interested in being informed about the world from a global perspective not from a local perspective. They had not tried to create a local version to compete with the New York Times or Time Magazine in the US, for example, but had identified what was unique about The Economist on a global scale. Digital provided the opportunity to scale a universal proposition very rapidly, which they were seeing in their print business. The top five markets for the print edition were the US, Canada, the UK, France and Germany, but for the digital edition the top three were the same but markets four and five were India and China. The fact that the magazine was in the English language was an advantage as their addressable market was growing very rapidly from a publisher's perspective. The Economist had been very happy to piggyback off of global networks such as Facebook as their priority was to take the content to as big a market as possible.

Ajay Chowdhury asked Bill Bush how the Premier League distinguished between building its brand, for example on social media, and the clubs building their own brands and what challenges had the Premier League faced?

Bill Bush said that the Premier League had also been lucky in how internationally successful they were. For example, there were certain features of English football that people around the world liked. It was a faster game than anyone else's, English football matches had much better attendance than many other countries, and the stadia were built so that fans were close to the action. None of these features were aimed at the international market, but they had allowed the Premier League to take advantage of a major globalisation trend. The UK had been first into most markets and had capitalised on the Bosman Judgment which allowed players in the EU to move freely to another club at the end of their contract, by bringing in foreign players early. The diversity of English football teams appealed internationally, for example, if a Uruguayan player was in a Premier League side, the viewing figures in Uruguay rose. In terms of the Premier League brand versus club brands, in many markets the two were complimentary. There could be a point in expansion where they ceased to be complimentary but that had not been reached yet.

Ajay Chowdhury asked Graham Hales why the UK only had one or two media and tech brands in the top 100 list? Was this an issue of capability, or focus?

Graham Hales was not sure if it mattered. British businesses often had an appetite to sell when the rest of the world wished to maintain their ownership. The reasons for this were partly cultural and also that we might be slightly agnostic about where these brands actually came from. Did one think of Google as being a US owned business or as being a global organisation? There were many examples of organisations seeing themselves as being global organisations, and therefore being able to embrace global culture better. The UK had historically been quite agnostic about ownership. The UK had strong creative industries and professional services but there was a gap in the middle. When businesses started to fail they tended to be bought by other businesses quite quickly so they were absorbed and disappeared from view. There were certain market sectors that were more difficult to replicate in international markets, for example, grocery multiples which relied on their supply chains and their knowledge of their local customers seemed to struggle internationally. It was not just about UK examples, either, Wal-Mart could not penetrate the UK, it had bought ASDA in order to replicate the model as best it could, but in reality it was having to do it through someone else's business. The great thing about media brands was that they transferred themselves seamlessly across geographies.

Ajay Chowdhury asked Kip Meek about the extent to which infrastructure mattered, as Mark Oliver's presentation had highlighted that internet usage in the UK was high despite middling infrastructure? Did the UK need superfast broadband and did it need universal reach?

Kip Meek said that the UK was doing well relative to its international peers in terms of internet advertising or transactions that were completed online. However, the UK did not do so well in terms of average broadband speeds. He thought that one could place too much emphasis on the gap in performance and it was possible to invest too fast and wastefully. Australia was spending $42bn AUD attempting to blanket Australia in fibre, which was a vast experiment in public expenditure. Investing too much from the public sector too quickly seemed wasteful and was quite possibly crowding out private investment which otherwise might have come more slowly. In terms of fixed infrastructure, the UK was doing fine. There was a limited intervention through Broadband Delivery UK proportionate to the state of the public finances and the underlying level of demand as well as encouraging companies to compete. The UK had a good environment which would continue to experience progressive increases in speed into people's homes over a broader part of the country. In terms of mobile, the UK was in a slightly less satisfactory period in which the industry had torn itself apart in various disputes over the last decade. People assumed that 4G was associated with the spectrum auction but it was possible to launch 4G using existing spectrum either at 900 or at 1800MHz. This was not happening due to the current litigious industry stance and Ofcom and Government did not have the powers to cut a way through that and impose good sense on the industry. The UK was in danger of falling behind in mobile. There were 34 countries that had launched 4G and the UK had not but hopefully that could be addressed. Competition in fixed and mobile infrastructure would deliver appropriate levels of speed and coverage at the time that it was needed. The area that was sometimes ignored in terms of possible public intervention was persuading people to take up broadband. Martha Lane Fox had made a small scale intervention in that area which had now been wound down and was being replaced by something else. More public policy thinking would be useful on the digital divide.

Ajay Chowdhury said that the stated reason for Facebook buying Instragram was that mobile had become the platform for Facebook in the future, and if the market was now moving towards mobile being the way most people started accessing the web, was there a danger that the UK's position would be weakened if 4G was mishandled?

Kip Meek said that there was a danger. If, for example, the auction was further delayed by litigation and 4G was not launched using existing spectrum, the UK would suffer competitively and it would stop investment. There was about £5.5bn of investment associated with 4G if it got going quickly. Equally, if 4G was delayed the longer term effect of a lack of innovation would also be damaging.

Ajay Chowdhury asked Frank Mather whether superfast broadband and universal reach mattered?

Frank Mather said that, by European standards, the UK's infrastructure was above the EU average in almost every area. For example, everyone in the UK had a DSL connection and about 80% of British people were connected to the internet. However, the UK was not doing so well when compared to non-EU countries. He thought superfast speeds were very important. He had been involved in broadband policy for many years and remembered having similar discussions on the importance of speed 10 years ago when the issue was whether the move from dial up to basic broadband was necessary. It had been difficult then to predict demand for a service which had not existed. The opportunities were all in the new superfast sector. The internet was essentially at the moment still a text medium but it was moving to video and the speeds would really be needed then. Last year he had attended a series of meetings with UK cities about their hopes to move towards superfast broadband. The most interesting city in this respect was Bristol where Aardman Animation were based. Aardman told him that if they produced a 5 minute HD Wallace and Gromit advert it took them 12 hours to send it to Hollywood, for a 300GB cartoon, it took 14 days. This meant that they had to fly over the videos as it was much quicker. Aardman directly employed 400 people in Bristol and had 200 other collaborators. It needed superfast connections in the whole area. The same was true for Birmingham which had 25% of the UK games industry and Manchester with its new BBC Centre and associated industries. In terms of implementing superfast speeds, he agreed with Kip Meek that the answer was not for either the European Commission or the UK Government to invest solely. He made a slight correction, what Australia had done was to attempt to kick start this process by investing $5bn in order to encourage private investment to cover the whole cost of rolling out superfast broadband. The Commission proposed to include €7bn for superfast broadband in the next financial budget, not as a grant but rather to use financial instruments to stimulate the market. The other issue to do with infrastructure was research and development. There was a discussion earlier on whether or not it mattered if a company was UK owned. He thought it generally did not, however, it did affect where the R&D base was, and in general all European countries were behind in terms of R&D investment.

Ajay Chowdhury said that through virtual networks, the consumer now had the ability to criticise brands in a public way, he asked Graham Hales what differences he thought virtual networks such as Facebook had made to brand and how they dealt with the challenges?

Graham Hales said that traditionally, there was a 'purchase funnel' where the customer had a disposition around a number of brands that they might want to do business with. If a customer bought a washing machine, there might be three brands that they trusted. They would go to a store, be introduced to the brands, and would take the advice of the sales person combined with advertising and make a decision. It was a linear process and it was very easy for businesses to understand what was going on. There was now increased complexity. One might have a disposition towards a number of washing machine brands, go online, and start to understand what other people were saying about these washing machine brands. The customer may then find that they added some brands that they had not heard of before to their idea of washing machine purchase. If one saw three negative reviews about any brand at all, they would be wiped off one's list. This was a very different way of purchasing and social networks had a massive opportunity to influence what consumers thought about brands. 'Word of mouth' had transferred itself onto the web but the power of that word of mouth was now above and beyond what anyone had imagined. There was also an issue that people were potentially more comfortable criticising than becoming advocates of brands. This meant brands had to be very smart about creating the right sort of messages. NatWest had advertised itself as the helpful bank which meant it created a series of expectations that if a customer went to a branch and they did not find the experience very helpful, they would not necessarily tell the bank directly but would go online and tell everyone about it. From a brand perspective, virtual networks meant that brands had to keep their promises. This was not a bad thing but there was an opportunity for organisations to get these messages wrong, to use corporate machismo as opposed to thinking deeply about the brand. It was difficult for organisations as they were still learning the rules of the new environment but they found it difficult to communicate that to consumers. The point about broadband was very well made. It was impossible to know where the technology would take us. Every organisation was operating in a beta environment constantly creating things, evaluating and recreating them.

Ajay Chowdhury said that the UK had very few virtual networks. He asked Nick Blunden whether it mattered that essentially the US was building all the roads and the UK was driving the trucks on the roads?

Nick Blunden thought that it mattered to some extent. He thought that it was a question of adding value regardless of who owned the infrastructure. The terminology was interesting in terms of social networks as to some extent the ownership of the social networks was less important. Thinking of Facebook or Google as platforms was interesting as there seemed to be a slide towards thinking of all dominant US technology companies as platforms. eBay was in essence a platform as was Amazon. The fact that from a platform perspective the UK economy was not strong was concerning. The fact that the value chain was shifting with power moving from areas that traditionally the UK had been very strong in, such as the creation of content, towards the platform owners, was concerning. It was necessary to consider why other countries, particularly the US, had been so successful at building platforms not just products. He thought that it was part of the ecosystem that had built up around Silicon Valley with companies both cooperating and competing. There was also a mindset that pushed people towards thinking about this concept of building a platform not just a product. In the short term, the UK should make as much use as possible of those platforms that already existed but the goal should be to create a UK platform that competed with the existing ones. Social media was causing brands to rethink their role to some extent. For example, people did not read The Economist because they wanted to be told what to think, they read it because they wanted to think, meaning that the role of the magazine was to stimulate the thought process rather than to tell people what to think. This had become much clearer in the last few years with the rise of social media and had taken a period of time to embrace.

Ajay Chowdhury said that during the course of the panel discussion, they had heard that the UK had very few global brands but strong exportable IP in terms of content, very few virtual networks and middling infrastructure. He asked the panel what they thought the UK should be doing to improve its competitive position in these areas?

Frank Mather said that his expertise lay in infrastructure. In general, the UK was well placed but there were challenges ahead. The DCMS had launched its Urban Broadband Fund which was a step in the right direction but a lot more needed to be done. It was extremely important that the openness of the internet was protected and that virtual networks and platforms did not create walled gardens.

Kip Meek said that the UK should not worry about the success of others in terms of virtual networks; US dominance in some areas often enabled other businesses to be successful. Issues arose where those businesses exercised an inhibiting market power. There were issues with big platforms ‘free riding’ on the content of others to build their businesses too. He was not against intervention to build the UK’s or Europe’s infrastructure, but felt it had to be proportionate and well timed.

Graham Hales said that it was important that the UK had the best infrastructure possible for its creative industries so that businesses were well placed to take advantage of market opportunities.

Bill Bush said that consumers did not care about infrastructure; they wanted the things that infrastructure and fast speeds could deliver. Consumers wanted services to match their demand at that moment. It was important to remember that it was the UK’s strengths in film, music, sport, games and book publishing that necessitated an efficient online distribution system. Intermediaries were important in order to allow users to navigate the crowded universe of the internet. However, there needed to be a balance where an intervention by Government considered the whole ecology and acknowledged that the health of content generation was a prerequisite for the rest to be worthwhile.

Nick Blunden agreed with many of the comments by the other panellists. He thought that the brand problem was a market problem which would eventually solve itself. In terms of virtual networks, an environment needed to be created within the UK that allowed platforms to flourish. He was glad to see initiatives such as Silicon Roundabout encouraging the tech and creative industries to come together in a single place. The biggest issue for him was infrastructure where he felt intervention was required. The UK should be careful not to be complacent in terms of the strength of its infrastructure compared to its peers. This was a space which moved very quickly and generally moved in waves. The companies that had done well in Web 1.0 were struggling in a Web 2.0 world, for example, AOL. That kind of change was incredibly disruptive. He felt infrastructure presented a similar challenge; we needed to think about the UK's position in 10 years time rather than now. Although it would be very difficult to predict the services that would be demanded, it was clear that those services would need a superfast broadband infrastructure to support them.

Kip Meek said that what would have an impact on the complacency of the UK, with respect to infrastructure, was investment by companies in a competitive market place. Companies such as BT, Sky, and Everything Everywhere would invest if they were worried that other companies stood to gain a competitive advantage from investment. The best environment for investment was a highly competitive one. The main driver behind the move from dial up to broadband was that there was an environment where BT and other players were incentivised to invest.

Audience Q&A

Derek Wyatt said that Kip Meek had mentioned that he was worried about litigation and how it slowed down improvements in the UK's infrastructure, such as the launch of 4G. Why wasn't there a mechanism to deal with litigation quickly and efficiently, for example, an arbitration court?

Kip Meek said that that would perhaps be a solution. In the period since Ofcom's creation in 2003, there had been a steady ramping up of the litigiousness of the UK's telecommunications and media industry, especially fixed and mobile operators as well as pay TV operators. The switch from appeal on the basis of the judicial review to appeal on merit was a key reason for this. He sympathised with the viewpoint that if companies could not appeal on the merits of a case then they would be vulnerable to high handed decisions from regulators and others. However, the current level of litigation was a problem. A solution needed to be found as there was a danger that the quality of the UK's infrastructure would be jeopardised.

Steve Folwell, the Guardian said that Nick Blunden and Bill Bush's comments about luck in the way that their brands had grown overseas were interesting. Some of the Guardian's growth could be characterised in similar terms; that, to some extent, one either had a brand that would travel or not. The discussion on infrastructure was interesting because it was within the control of the UK if a solution could be found. The issue around economic power moving to platforms and characterising the relationships of content owners with their consumers was not something which could be controlled domestically. He asked the panel for their views on the ability to influence global platforms over time?

Frank Mather said that it was difficult to influence global platforms. However, Brussels was the telecommunications legislator and had considerable power and influence in that area. The Commission had been looking recently at the openness and freedom of the internet, which he thought, in itself, had influenced some of the big companies.

Bill Bush said that this was an important issue. Ownership did not matter that much but the ‘rules of the road’ and how the road was operated mattered. Competition was really important. Premier League and other content producers needed as many competitors for their products as possible and obstacles in distribution could be serious. The content industries were high investment industries. The Premier League was based on reinvestment in players, training and stadia and needed to be able to recoup its investment. Therefore, if the rules of the road became inimical to investment then they would be in trouble.

Nick Blunden thought it was difficult to influence individual companies within that framework as such companies were increasingly powerful. The pace of change was incredible as no one ten years ago would have predicted the dominance of Google or Facebook, for example. One of the big questions was would Facebook exist in its current form in ten year’s time? The crucial thing was to ensure that the environment was open so that the next Facebook or Google could come along. Although it was difficult to influence an individual company the market would eventually decide and the next wave of companies that owned those platforms would emerge.

Stewart Purvis, City University London had previously worked at Ofcom where one of his roles was to engage with global companies in matters such as child internet safety, media literacy, and digital participation, etc. and he had observed that it was difficult to encourage global companies to engage with national governments or regulators. They were happier to deal at a European level as they couldn’t get involved in detailed debates with each nation about legislation. The UK was an enormous consumer market and these companies wanted to engage with the UK’s consumer markets, but did they want to engage with the UK as a corporate state?

Kip Meek agreed that control was the issue. The problem was that the UK did not matter; even Europe was just about big enough to be taken seriously. He was not sure whether the institutional framework or the incentives were right between the US, Asia and Europe to address problems of this type. It was complacent to assume that the market would solve all dominance issues. There would be times when coordinated intervention across the trading blocks would be the only way of dealing with some problems and that would be very difficult.

Will Page, PRS for Music said that in Vietnam he had been struck by the fact that the cities and towns came to a standstill late on a Saturday night to watch live premiership football, and by the level of brand recognition associated with English football. He asked how much time zones and kick off times helped the Premier League make headway into south-east Asia? Spanish football kick off times were later so presumably that made it harder for them to enter those markets.

Bill Bush said that there was not a silver bullet type solution to making it in a specific market. However, time zones mattered and the fact that for domestic reasons the Saturday afternoon kick off times had been protected helped to enter south-east Asia. In terms of brand recognition, Premier League had done some market research in key markets, such as Vietnam and China, specifically in urban markets where people had access to pay TV, were on a higher income and better educated. A challenge for the UK was that the level of recognition of what the UK produced was phenomenally low and in many markets there were three things that people recognised about the UK; the royal family, the BBC, and the Premier League. Sometimes people recognised youth culture such as rock n' roll and fashion but the UK was seen almost as an extra state of the US. It was very difficult to achieve profile overseas and once a brand did get that profile, they had to fight hard to keep it.

DO WE HAVE THE SKILLS, RESEARCH INFRASTRUCTURE AND FINANCE NECESSARY FOR SUCCESS?

Introductory presentation: Skills, Research Infrastructure & Finance

Mark Oliver explained that the panel would address the following issues in relation to skills:

- whether the UK had the right mix of technical and creative skills;
- whether high end technical or basic/generic skills were most needed, and whether the UK had the right mix of both;
- whether current Government initiatives on skills were delivering;
- and, the issue of entrepreneurship.

In terms of research and development infrastructure, the issues were:

- whether UK firms spent enough on ICT R&D;
- whether the UK had enough centres of excellence across its universities;
- whether there was a need for hybrid technical/creative centres of excellence;
- and, whether knowledge transfer was working; and what the role of tech cities was.

In terms of finance, the issues were:

- was there a gap in access to finance and, if so, at what stage of the funding chain;
- and, were the creative/technical sectors particularly problematic, and if so, why.

He said that UK spending on R&D was on a par with leading European rivals, such as Germany and France, but behind the US where there was a disproportionately large amount of R&D investment in the computer industry. However, the number of patents granted in the UK was quite low. The UK had some of the world's leading education institutions in ICT and computer studies, such as Cambridge University and Imperial College London, but fell further down the list when it came to the next tier of institutions. The UK only had 5 ICT institutions in the Times Higher Education List compared to 21 in the US. In terms of a gap in access to finance, it had been suggested that there was a gap at the development phase and that subdued listed markets had created no exit path for venture capital and private equity. UK venture capital funding levels stood comparison with other major European economies but were a long way behind the digital hubs of Silicon Valley and Israel. There had been a report from Demos measuring new business survival rates in the creative industries, which had concluded that the creative sectors were not riskier than other UK sectors. However, the report may have ignored other key factors such as: more skewed and erratic returns from many creative sector activities given low and unpredictable hit ratios, but very high returns to those hits; the overall uncertainty in the sector over the impact of the switch to digital; the difficulties involved in scaling up some of these activities to maximise the impact of success; and reliance on key creative individuals who could not be completely tied-in, or forced to be ‘creative’ by investors. In terms of start-ups, over recent years some areas of Europe were emerging as new start-up hubs, including London.

There was intense competition as a number of countries were launching 'tech city' initiatives in an attempt to become digital/creative sector hubs. Methods to support tech hubs included rent subsidies, guaranteed superfast broadband infrastructure, cooperation with leading universities, some tax and duty concessions, some access to financiers, network opportunities, and improved transport links. Tech hubs in San Francisco and Singapore benefited from all of these interventions, while other territories employed a mix of them. In terms of skills and employment, the creative sectors made a significant contribution to UK employment, ahead of their GVA contribution. However, was the UK producing enough graduates equipped for the web 2.0 world? The Livingstone-Hope Report had noted that the number of computer science graduates was shrinking, which was a failure of the education system.

Panel Chair: Ajay Chowdhury

Dave Coplin, Chief Envisioning Officer, Microsoft
Anne Glover, Chief Executive and Co-founder, Amadeus
John Hahn, MD, Providence Equity LLP
Rob Lewis, Chairman, rara.com
Professor Paul Moore, University of Ulster

Panel Discussion: Skills, Research Infrastructure & Finance

Ajay Chowdhury said that one of the themes of the previous panel was a lack of investment in infrastructure and platforms in the UK compared to the US. He asked John Hahn whether, as a big investor globally, this was an area that Providence should be investing in?

John Hahn said that investors would invest in a particular sector when it was likely that they would receive a return. For example, the average US citizen paid considerably more for the triple play of broadband, TV and telephony than the average UK citizen. If UK citizens paid what US citizens did for these services, he thought that the investment would follow. The other way of improving infrastructure was through Government subsidy. It was necessary to recognise that the infrastructure needed to deliver the internet was very expensive to put in place. If the return on capital employed was not there, there would not be investment.

Ajay Chowdhury asked why consumers paid less in the UK than in the US for broadband and telephony services?

John Hahn said that the reason these services tended to be cheaper in the UK was a function of what companies had paid for the assets they held. On occasion prior infrastructure providers had taken a write-off in the investment due to bankruptcy, for example, so the cost basis became lower. The return on capital adjusted to what had been invested in the business. Providence had bought a cable business from Deutsche Telecom, for which they had likely paid less than had been invested into it as it was not generating a good return. On that basis Providence were then able to invest and upgrade the service.

Ajay Chowdhury observed that venture capital in Europe had recently been described to him as ‘returns-free risk’. He asked Anne Glover if there was still a market for venture capital in Europe?

Anne Glover said that the premise of venture capital was that people had savings which were not earning anything and which they wanted to invest in new ideas which had risk but with a significantly more attractive potential return on capital. The industry as a whole had performed poorly in Europe in the last decade. However, there were players within it that had performed well and many that had not, which was inevitable. The formula of saving, seeking risk and backing entrepreneurs was unchanged. The danger with discussing how the sector was doing on average was that averages were irrelevant in the venture capital business; what mattered was the top performers. Interestingly, due to the effect of globalisation in the digital world, the exponential curve of returns was becoming more skewed. The top players made more money faster than ever before and the rest were struggling. The key was for the UK’s entrepreneurs and venture capital to try to be the best globally rather than in a region, and to do that very quickly. This related to the need for creative and technology clusters as companies could not be as fast as they needed to be unless they could gather the resources that they needed to grow quickly from a talent pool that did not need to relocate.

Ajay Chowdhury noted that Rob Lewis had raised money in Europe and in the US, what were the differences that he had seen between the US approach and the European approach, as an entrepreneur?

Rob Lewis said that he was pleased that Mark Oliver’s presentation had shown that the UK was performing relatively well compared with other territories in Europe. The UK had a lot of factors in its favour, language, tax regime, regulatory regime, and entrepreneurial spirit. Many people in Europe wanted to come to the UK as it felt like the natural place to set up a company. However, the UK had a very haphazard approach to how money was raised in the early and the development stages. Often people put money into businesses that probably should not receive investment and a lot of companies that should, didn’t get it. The reasons that angel investors chose particular entrepreneurs and companies to invest in was often to do with who approached them rather than because there was a proper market for angel investment. In order for the UK to be a leader in this field, it was necessary to ensure that businesses could act fast and be able to raise money when they needed it.

Ajay Chowdhury said that Microsoft had been investing around the world in terms of R&D, and had picked the UK as one of its first centres outside the US to invest. He asked Dave Coplin why the UK was chosen?

Dave Coplin said that there were a number of reasons. Microsoft had had a lab in Cambridge for 25 years and had only existed in this country for 30 years, so the company had begun to invest in R&D fairly early on. The UK had a rich heritage of academic capability so Cambridge was an obvious choice as a centre. Microsoft only had about ten labs around the world and Cambridge specialised in a number of key fields. The body recognition function of the Xbox Connect was developed entirely in Cambridge.

Ajay Chowdhury said that it seemed that 'pools of capital' were needed as fragmented capital meant companies could not grow quickly enough. He asked Professor Moore if 'pools of skills' were needed?

Prof. Moore said that whether or not there were specialist centres for skills for particular industries, it was necessary to admit that there was a crisis in this area, certainly within the HE system. There were a number of institutions which were doing very good work. However, in general there was a crisis in the system because of the way that universities grabbed the zeitgeist by putting the word 'creative' in front the titles of many course, and the way that programmes were developed through 'rear-view mirror' policymaking, which was attempting to fit what already existed within the institution into a new space. The bulk of his students did not see the internet as a thing which they used, but as a space they inhabited. The university system was an old system based on notions of uniformity, regularity, standardisation, supposed objectivity, etc, none of which were relevant to a 21st century digital world. There was a dichotomy between the sciences and the arts where subjects were delivered in silos. At the University of Ulster in Derry, they had established a new programme, Creative Technologies, which brought together theorisation around creative industries and high-end practice in the digital sector, with programming key to that. He believed that computer programming should be part of the national curriculum as it was part of the new literacy. It had taken four years for the Creative Technologies programme to be approved and he was told by UCAS it was the only one in the UK. It had the highest growth rate in the UK, 78% growth in the number of applications in 2012. The outcome was young people producing high-level digital content which was platform neutral and which had a profoundly theoretic and artistic base. It had been a struggle to set up the course because of the way that institutions delivered skills, science, and art separately. There was a split between the academic and the vocational which was peculiar to the UK.

John Hahn asked if Professor Moore thought that if venture capitalists invested in higher education institutions that would have a positive impact on the skills gap?

Prof. Moore said that he thought private investment would make a profound difference. On the Creative Technologies course, the final year students started their own businesses using money from the Department of Culture, Arts and Leisure in Northern Ireland. If the business was still running at the end of the course, the Department provided more money to run for the next six months. Bringing in expertise from investors and entrepreneurs would have a significant positive impact for the students in running those businesses. They had begun to do this, Adam Singer was a Visiting Professor at the University, and the Entrepreneur of the Year in the UK taught the entrepreneurship section of the course.

John Hahn said that currently students were being forced into a centuries old system that was fairly inflexible and slow to change. If a University had a board of directors rather than a board of trustees, the decision making process and reaction to demand from the market would be transformed. Providence had invested $2.5bn globally in education and it was a hot topic because introducing a profit element into the education sphere was controversial.

Anne Glover said that it was not just skills that mattered but experience, especially once one got past a certain level in one's career. Many companies were looking for experience when recruiting, for example, someone who had worked in a start-up or a major corporation that was on the cutting edge. The problem was finding the people with a level of experience and the speed with which they acquired it also mattered. It was depressing that the very best and brightest in the UK still went into the City. When Amadeus hired, they looked for someone who had hands-on experience of a product, working to a delivery timetable and solving problems. That was not experience one received in the City, where there was a rigid hierarchy with people in fast-paced environments working on narrow interests. The way for young people to take on broad responsibility quickly was by starting their own businesses. Schemes to enable young people to start their own businesses at school, for example, were valuable and should be further rolled out. Entrepreneurialism was not applauded nearly enough. There was a preoccupation with fat salaries and bonuses as opposed to building businesses. Amadeus recruited mostly non-UK citizens as a result of these issues.

Ajay Chowdhury asked Dave Coplin whether Microsoft encountered the same issues?

Dave Coplin said they did not. Microsoft in the UK, apart from Cambridge, was fundamentally a sales and marketing organisation. Therefore, they needed great marketing professionals. The challenge for them was in finding people who had the agility to gain experience quickly. In terms of the Next Gen Campaign, there was not a need for every child to be an expert in computer programming, what was desirable was to encourage a nation of tinkerers. Dave was part of a broad community from the public sector who met every year to discuss how public service could be made better using digital technology. The best bit about that community was that there were only three people who would class themselves as being from IT, and he was one of them. The others were people who worked in the public sector and wanted to use technology to make a difference. These were the people that Microsoft needed, not just the coders. Every business in the UK needed people who had got the confidence and capability to take things apart and put them back together again.

Prof. Moore said that this was an interesting point. The Creative Technologies programme used behaviours and cultural practices that were expected in 5-10 years time as its starting point rather than technology, and then considered the platforms needed to allow that to happen. The Pugh Institute pointed out that 64% of young people between the age of 11 and 19 in America who were on the web were making content. The starting point should always be what will people be doing and then what technological platforms will facilitate that. The notion that Amazon, Facebook, etc, would exist in their current form in 5-10 years was questionable. The acquisition of Instagram was a sign of weakness, not a sign of strength.

Ajay Chowdhury asked Rob Lewis, from his perspective at rara.com, and as an entrepreneur, what skills issues had he encountered?

Rob Lewis said that it was very difficult to quickly recruit people with a high level of software development experience as they were able to work anywhere in the world. It was alarming that the number of people doing these courses was declining significantly each year. He agreed that entrepreneurialism was undervalued in the UK. Throughout his education, and that of his business partners, there had been no education relating to entrepreneurialism at all. He believed that educating people in entrepreneurship would help the UK to be a leader.

Ajay Chowdhury asked John Hahn how long term he looked when investing in a business and in considering when to exit?

John Hahn said that the kinds of businesses that Providence invested in were often very much on the growth end, meaning it took time to build the business to the point where good returns were delivered to the investors. If one assumed it took five to seven years to get to a point where the right level of returns were delivered to investors, the investors may be interested in divesting the business to a third party, that third party would be looking at the prospects of the business over the next 5-10 years. So at the time one made an investment one was considering the business somewhere between a 10-15 year window. This was what made investing in the creative industries particularly complex as it was very difficult to predict how any business would be doing over a 15 year period currently. There was a degree of volatility and uncertainty to certain business models which did not lend itself to investing.

Ajay Chowdhury asked Anne Glover how long term Amadeus looked when investing in a business as Amadeus invested earlier in the cycle than Providence.

Anne Glover agreed that it was necessary to have a view of the long road ahead with lots of different exit opportunities, for example, post-product, pre-revenue or in the early revenue stage, or when a successful business had been built. That vision was particularly important in Europe. In terms of innovation in the creative space, it was clear that there would be more video on the internet so ways needed to be found to deliver that efficiently. The choice of time to exit from an investment was a function of the financing environment, for example, could the company continue to raise money at a decent price? Was the acquirer willing to pay a decent price?

Ajay Chowdhury asked what role the capital markets played? Were IPO opportunities different in the US versus Europe?

Anne Glover said that for the last decade both capital markets were fairly moribund for new issues, partially due to regulation and partially due to risk aversion. In the US, the bipartisan Jobs Act had been passed removing the heavy burden of regulation from young companies. Although that was not the reason for the recent spate of IPOs, it was easing the way for the smaller companies to come to IPO. Unfortunately, the UK capital market was currently depressed by a general move towards bonds, which meant there was a pull-out of public and private equity, and a risk aversion in Europe, caused by the Eurozone crisis which was clouding the ability of capital markets to pay value. As a result, the best companies would go to the US.

Ajay Chowdhury asked John Hahn about IPO opportunities, and, as Providence invested in both tech and media companies, what were the differences between those types of investing?

John Hahn said that Providence invested in technology services as well as telecommunications, and whether in Europe or the US, generally capital was available as this was a very competitive world. On the venture capital side, Europe had not generated great returns, whereas Silicon Valley had done, so that was where the capital and the people flowed. There was no Government policy that would change that. London was generally an extremely vibrant and important financial centre so he did not think it mattered too much if a few IPOs happened in the US instead of here. The good news was that companies had that option.

Anne Glover said that on the issue of experience and skills, unless multi-billion dollar capital companies were built and domiciled in the UK, there would not be the senior management skills resident in that UK doing global thinking about acquisition and strategy. If companies were listed in the US, by definition the senior management would locate there. It was not just the engineers that needed to be based in the UK but some senior management as well, which was why the London capital markets mattered. It was great that Mike Lynch had sold Autonomy to HP on one level as it was a venture backed success story. However, it was also a shame as Autonomy had been one of the only icons on the London market.

John Hahn said that this was not a capital markets issue. In order to build good companies resident in the UK, an environment needed to be created to facilitate that. For example, tax policies which encouraged start-ups in the UK, and policies to encourage hubs.

Ajay Chowdhury asked Rob Lewis if, as a UK company became successful globally, which usually meant success in the US as that was often the biggest market for UK companies in this area, was there pressure on such companies to relocate to the US?

Rob Lewis said that in digital media there was a pressure to become global almost instantly, because unless a business was global instantly it would miss out on many partners. The issue was whether one had access to the resources to make a service properly localised as well as properly globalised. There was a role for Government in providing incentives for investment, for example, EIS had been beneficial. It was worrying that the UK only had one tech company on the FTSE. This was a space in which the UK should naturally be a leader.

Dave Coplin said that the basis of Microsoft's success was in providing the platform and creating the tools to enable start-ups to create technology solutions. Microsoft in the UK had over 30,000 partners. It was important that people were able to use the technology effectively, which was where the need for skills came in, but also that the basic infrastructure existed. Microsoft had had conversations with the Welsh Assembly, for example, where they had discussed the problem that Wales was a very dispersed rural community with little infrastructure. The next Facebook could never come from Wales because the infrastructure was not there.

Ajay Chowdhury asked the panel how well placed the UK was in terms of skills, research infrastructure and finance?

Prof. Moore said that he did not think the UK was well placed but there was huge potential. In the skills area, it was necessary to move to a recognition that the education system was based on old standards and to think about what the new standards should be, for example, collaboration, teamwork, risk taking, relationships with business. The silos in which different skills were delivered needed to be broken down.

Rob Lewis said that he thought that the UK was doing reasonably well compared with Europe but that was to be expected considering the advantages that the UK had. There was definite room for improvement.

John Hahn said that the UK punched above its weight in many respects and it was not fair to compare our performance to that of the US as it was a far larger market. In terms of infrastructure, he thought that the UK was not doing better or worse than many other markets. In terms of the media industry generally, Sky and Virgin had done a good job of creating a pay culture which meant that money was flowing back into the media sector. This was not the case in a number of continental markets.

Anne Glover said that there was a need to be more positive. She thought that entrepreneurs should not focus on the US market as it was oversupplied. Instead, they should figure out how to sell their product in markets such as Indonesia, which was one of the most interesting digital media markets in the world currently. The UK benefited was massive opportunities and English was a benefit, she argued, not in dealing with the US, but because it was the common language in international communities.

Dave Coplin said that he agreed with Professor Moore's comments. He worried that treating computer science and IT as separate areas of study was very counterproductive. These were things that underpinned every facet of activity in people's lives. A new approach to deliver skills across every aspect of businesses was needed.

Audience Q&A

Nik Powell, National Film & Television School said that the NFTS had always combined technical, craft and creative skills, and now entrepreneurialism had been integrated into that. Students of the School should be creating jobs rather than getting jobs. He agreed that entrepreneurialism was undervalued in the UK and that too much emphasis was placed on getting a job, as opposed to making a living. The culture of the middle classes in the UK was very different in that respect to some of the UK's competitors globally. There needed to be greater investment in infrastructure to deliver to the skills needs of the creative industries. Film schools around the world had received capital investment to compete, but in the UK, there was no mechanism for investment in infrastructure for film schools. Nik wanted to promote the idea of a new university that did not have the old cost structure, did not do research, taught BAs in two years, and combined with a successful brand like a Virgin, for example. There was a fantastic market there.

Prof. Moore said that a major investor had a new university in Ireland which allowed students to take modules in different universities across Ireland and construct their degree around a creative project, which would have a business outcome.

Helen Kogan, Kogan Page said that she had spent the last year involved in Young Enterprise and it was a fantastic scheme. Kogan Page, a publishing company, struggled to recruit employees with good commercial acumen. Many graduates came out of university with great academic skills but not commercial ones. Helen also felt that media studies was going in the wrong direction. How could the industry communicate to universities the need to create graduates with strong commercial acumen? And what should be done about media studies?

Prof. Moore said that he had taught media studies for 20 years and the Creative Technologies course had came out of the same disillusionment with media studies. Media studies was right for its moment which was a '70s background of critiquing the media industries. In the '80s and the '90s, an attempt to resolve the antagonism that this created with the industry was to include some practice in media studies degrees. The end result was a mismatch. Media studies degrees were strong, highly academic humanities degrees. They did not, in his opinion, address the industry. Many media studies degrees had accepted that, and broken down the various components to humanities, media history, journalism and media arts, which was creative technologies.

Dr Martin Smith, Ingenious Media said that it was important to acknowledge that equity finance was not the same as project finance. Ingenious was involved in both, one of their first VC funds invested in 19, Simon Fuller's company, which brought the world *Pop Idol*, and in terms of project finance, they had raised $11bn to invest in creative assets. For content producers, the key was finance to make their projects, and there was far too little discussion about access to finance in this area. Mark Oliver had referred to the DEMOS report 'Risky Business' which was completely wrong analytically about the question of risk as it misunderstood where finance risk lay in terms of balance sheets. He asked why there was so little discussion about the distinction between equity and project finance and risk, and what could be done to ensure that there was more project finance available?

John Hahn said that concentration of risk in project finance was extreme. Institutional investment of that nature was hard to find and necessitated a portfolio approach by definition.
Ian Livingstone, EIDOS said that access to finance and skills were crucial for video games. Games in the UK had suffered from low skills and high costs as well as a deep misunderstanding by the investment community of what games were and what digital content was. He agreed that a portfolio approach was needed. In terms of skills, the UK used to lead in physical manufacturing but was now reliant on knowledge and creativity so delivering the right skills was crucial. The Review which he and Alex Hope had undertaken resulting in the Next Gen report on skills had identified that the UK did not have the skills good enough for a digital economy. The teaching of ICT as learning secretarial and office skills would never equip the workforce of tomorrow to create the digital economy. The report had resulted in a campaign for the adoption of computer science onto the national curriculum, and the Secretary of State had recently announced that that would be happening in September. He hoped that this would be transformational for the UK. Computer science was the new Latin. It underpinned the ability of the UK's creative industries to reach global audiences. To create a truly globally competitive environment in the UK, there were other factors apart from access to finance and skills, such as the IP regime, the tax regime, as well as distribution infrastructure. The UK was one of the most creative nations in the world. However, the UK had tended to be a work for hire nation for other people. UK creatives received the plaudits and accolades, but the money was usually banked offshore. This was something that should be changed.

Ajay Chowdhury asked Dave Coplin what he thought would be the big trends of the next few years?

Dave Coplin said that the concept of what a screen was would fundamentally change. In five or 10 years time, every surface in the home would be a display surface and would display something contextual to the user. Unlike the screens of today, the experience would not be one-dimensional; it would be two dimensional. The screen would bring a new generation of personalisation. Today personalisation meant Amazon suggesting similar products to the products that one had already bought. The next generation of personalisation was knowing the consumers emotional state, social context, location and activities that person was undertaking. Finally, personalisation would include a broad external context about what was going on in the world which could influence the service channels and content that was being consumed in real time based on those experiences. All of those technologies existed today; some at a very basic level, but in the next five to 10 years would be developed to a high level. Similarly, the concept of smart TV would also change. Smart TV would become truly immersive and personalised, and pervasive everywhere.

WHAT SHOULD GOVERNMENT BE DOING?

Introductory presentation: Direct Intervention and/or Fair Rules – a Summary of Current Practices and Issues

Mark Oliver said that Government had a role in terms of direct action, for example in Lottery funding, gifted spectrum, and the licence fee, etc, and in setting fair rules, for example, tax treatment and competition policy which was across industries, and copyright, media plurality, quotas and terms of trade, which were specific to media and telecoms policy. The Government also had a role in consumer protection issues, such as privacy, cyber crime prevention, advertising standards, e-commerce and trade standards. In terms of which parts of Government were responsible for policies affecting the creative and digital industries, there was a split responsibility between DCMS and BIS for many activities. There were also other ministries involved, for example, HM Treasury dealt with tax, the Foreign Office through the British Council dealt with trade, and the Ministry of Justice through the Information Commissioner's Office dealt with some consumer protection issues. In terms of the framework of responsibility for the creative and digital industries in Europe, there were no intermediary quangos and regulatory bodies but there were several directorate-generals with responsibility in this area, some of which was overlapping. DG InfoSoc would become DG Connect in July and was more across issues, for example, it had influence on copyright as well as DG Markt. DG Education and Culture had responsibility for specific creative funds, DG Justice for privacy and freedom of information and cyber crime prevention, and DG Competition for trade policies and state subsidies, along with DG Trade. There were some issues which were left to national governments such as PSB, where the only involvement of the EU was regarding state subsidies.

Direct action issues fell under the headings of tax, creative funds and state subsidy/ownership. The Chancellor had announced that the tax relief for film would be extended to games, animation, and high end TV production. Other issues in relation to tax included VAT discrepancies across Europe and corporate tax treatment of multinational companies. Activities in relation to creative funds included regional growth funds, 'catapult' funds for high tech SME growth, NESTA and the Technology Strategy Board were active in this area, and local government initiatives under 'general competency'. The issues in this area were the coordination of funds and initiatives, knowledge transfer, and the impact of the abolition of the Regional Development Agency network. In terms of state subsidy issues and ownership, activities included the BBC licence fee, Government ownership of Channel 4, and use of public subsidies and Lottery funds across the sector.

Mark Oliver made comparisons with France, Germany and Canada in terms of the creative funds and tax breaks they offered. France had the highest content fund investment per head at just under €10. Levies and re-transmission fees were recycled into content funding through the CNC. Germany was less interventionist with some smaller content funds and some levies. The main focus of state support remained on film and per head funding was low at €5.

Content funding per head in Canada was close to that of France. However, including tax break incentives this took the per head investment to just under €25. Reasons for this included the fact that Canada had to compete with the US which had a very large media industry, and that it was a dual language country. The extension of the tax relief in the UK to high end drama would have a positive impact on the UK economy. £100m of tax relief for high end TV would attract £500m of activity, which if one used the standard multiplier for the UK, would create £1bn of wealth for the UK economy. On top of this, the 'spillover' impact on tourism was expected to be about £300m. There were issues with this intervention, however. Total fiction production in the US was £5bn a year, would the UK be able to attract 6-8% of that production with the new tax relief? Would other countries react by making their own schemes more generous to counteract ours? How many UK productions would return from being filmed overseas? And would the European Commission be happy as they had already raised concerns about national tax relief schemes?

On media/telecoms policy issues, the main areas were copyright/piracy where the UK, European Commission and WIPO had jurisdiction; media plurality/ownership; net neutrality/access, including the extent to which differential charging would be allowed to content providers and what the quality of service impact was to the consumer; and public service broadcasting, with the current licences for ITV and Channel 5 expiring in 2014, and a new BBC Charter and licence fee in 2016/17. On attitudes to copyright reform among SME's, a survey commissioned by Google and COADEC found that 63% of SME's were in favour of a move to a US 'fair use' type approach, but few thought that the current law was a big problem and 60% were in favour of DEA enforcement. Vint Cerf, one of the founding fathers of the internet and now at Google had said at a Nominet conference in London this year that there were 7 wrongs on the internet that needed to be dealt with: fraud/theft, viruses, bullying/stalking, denial of service, counterfeiting, piracy and privacy. These would probably have to be tackled at international level.

In terms of consumer protection and rights, the main issues under privacy and data use were: the opt in and opt out debate on data use and cookies and the European Commission's proposals on that; restrictions on the range of data that could be held and for how long; and restrictions on data resale and reuse. Under taste and decency the issues were: applying traditional media rules to the internet or applying lower level rules to all providers; and specific web opt outs or opt ins for parents (to protect children). Under e-commerce and cyber crime the issues were: enforcement of trading standards rules to global e-commerce operators; and the role of ISPs in tracking criminal activity (e.g. malware).

In terms of general economic policy, under competition policy the main issues were traditional media players' ability to co-operate on the web and how to treat web 'market makers' with high headline share. There was a tendency amongst competition authorities to stop traditional media players getting together to operate in a new media world on the basis that they had high shares of the traditional media market, for example the prevention of Project Kangaroo and the FTC's interest in the book agency agreement in the US. There was a notion that such cooperation quickly became collusion. Concurrently, there was a general attitude amongst competition authorities that many of the new media players such as Amazon and Google, even though they enjoyed very high market shares, did not present a problem in terms of competition as they were ‘making’ the market where others competed. This was a very important notion because it justified very high market shares without the need for intervention. Trade policy issues included overseas ownership and investment rules, duties and levies on media and digital products especially outside the EC, and overseas copyright.

The rest of the afternoon was spent discussing what the Government could be doing to help the UK’s creative and digital sectors grow.

DEAR MINISTER

Senior UK policy advisers set out what they think the UK Government should focus on in terms of direct intervention or establishing fair rules.

Chair: Adam Singer, BSAC Chairman

Baron Birt, of Liverpool in the County of Merseyside, House of Lords

Lord Birt reflected that for centuries the UK had enjoyed an extraordinary vitality and originality in its cultural, intellectual, scientific and political life. This liveliness had brought enormous social, cultural and economic benefits. Previously, most of that vitality occurred without a great deal of involvement from the State. However, over the last century, the State had played a much bigger role, the reasons for which included the power of emerging technologies, the opening up of universities in a more meritocratic society, the importance of arts colleges, and the introduction of PSB into the UK.

In the last decade or so, Lord Birt contended that the State had lost its way in delivering effective intervention and regulation. There had been a failure of public policy in relation to PSB. Due to the changing economics of broadcasting, ITV, which had once punched above its' weight in PSB across all genres, had gone into long term decline, and Channel 4 was gradually morphing into a primarily commercial broadcaster. The policy challenge for Government was not to allow a return to the 1950's where the BBC was the one and only monopoly provider of public service broadcasting. There had to be competition as in other spheres of national life. There had also been a failure of public policy in relation to media dominance. The UK had extraordinarily archaic media ownership rules. News International was barred from owning more than a 20% stake in ITV but, except for the phone hacking scandal, News International would have been allowed to own 100% of Sky. A situation had been allowed to develop where one party was dominant in print media, and as in all spheres of human activity, dominance of this kind had led to an abuse of power. Lord Birt contended that Sky was also emerging as too dominant a force. During his time at the BBC and since, he had always welcomed Sky as a bold, risk taking, innovative venture which had done an enormous amount of good for the British broadcasting scene. However, it was not healthy to see Sky emerging as it was now and was predicted to be going forward, as a giant towering over the rest of British broadcasting media, far bigger than all of the other component parts put together in a few years' time. This was not specifically a Murdoch issue, although it would be if he were to own a majority stake in Sky. It did not matter who owned Sky, it was still too dominant and too integrated through the value chain, and it was amazing how little public discussion there was of these questions. Public policy had also failed with regard to infrastructure. The UK had got off to a very slow start with broadband because BT's monopoly had not been properly regulated. This was a public policy issue and one which there was no proper means of addressing.

Public policy also needed to consider whether there was market failure in fostering start-ups, and whether there was anything wrong with our capital markets or skill mix, for example, Ian Livingstone's Next Gen report had highlighted the importance of computer science. There may be failure in the UK's national infrastructure, education, and the way capital markets worked. Finally, there had been a failure of public policy with regard to regulating the internet. Lord Birt had been a passionate advocate of digital whilst at the BBC and since had been delighted that the internet had fulfilled the expectation that it would increase individuals' engagement, access to information and knowledge and ability to share. However, the internet was also a lawless environment. It had to be regulated globally in the same way that the air industry was regulated globally for safety, for example. Piracy was economically undermining the content industries, which was in no one's interest as it had a negative effect on creativity. Globally and nationally, the response had been pathetic. It would be four years after the Digital Economy Act was passed before the first notification letter would be sent out. There were no national or international policing arrangements which were fit for purpose in this respect. Law enforcement had taken child exploitation and abuse over the internet more seriously, but not enough had been done. Not enough had been done about the use of malware to infiltrate personal PC's on a huge scale and attack national institutions. ISP's had access to knowledge about malware on PC's but did not disclose this to users who were unaware that their PC's had been infiltrated. This was another example of major internet companies turning a blind eye to crime. Finally, the right to privacy for individuals needed to be upheld. There had been many controversial cases of internet companies collecting personal data without notifying users, for example, Twitter had harvested data from users personal telephone directories when they signed up to the service, and Google had secretly extracted personal information through wi-fi networks as they undertook the Street View project. Google's response when the incident had been investigated by the FCC in the US lacked any sense of corporate responsibility. This was something the company would need to develop.

Lord Birt said that a complete overhaul of policy was needed. The machinery of Government to deliver the best outcomes also needed to be considered. The division of responsibility between DCMS and BIS was simply not fit for purpose. Lord Carter when undertaking his digital economy review had struggled to find civil servants with the right level of expertise to help him. He had done a good job nevertheless, but the example highlighted the fact that there was no proper focus in Government to address the myriad of issues the industry and consumers and citizens were facing in this area. Global as well as national institutions were also needed to deal with these issues. Lord Birt was Chairman of Paypal Europe and knew a great deal about online crime. There was an industry penetrating leading websites and databases for commercial gain where those committing crimes were doing so in a different jurisdiction to where the websites they were penetrating were based. This necessitated the need for global institutions empowered to regulate the internet.

David Elstein, Chairman, Open Democracy

David Elstein said that Government should do less and think more, and remember the iron law of unintended consequences. Lord Birt had rightly bemoaned the ‘job lot’ way in which Government attempted to run the UK creative industries. The Digital Economy Act had been a collection of different policies which became quickly out of date. However, he was not greatly attracted by the thought of Government having a grand vision as the French did. It had to do with competence. The DCMS was the smallest Whitehall department by a large margin and by common consent it was the least competent department, possibly because it was the smallest and therefore attracted the least talent. There were typically no sunset clauses in the legislation Government passed which led to an accumulation of historic activities, legislation, and precedents. However, what was the alternative? Ofcom had recently made the proposition that it should have unlimited powers in unspecified ways to intervene in media transactions without pre-published criteria. He found it stunning that Government should encourage Ofcom to pursue that proposition.

In terms of public service broadcasting, he welcomed Lord Birt’s warning against allowing a situation to develop where the BBC was the monopoly provider. Those elements of TV and radio output which the market would not normally support were increasingly concentrated in the BBC. He calculated that 95% of ‘public service content’ by that definition came from a single supplier with a single editorial structure which was a deeply concerning proposition. The response to this was to put Ofcom in charge of public service broadcasting but not to give it power over the BBC, which did not make sense in policy terms. The outcome which he advocated, and which was originally urged by Sir Alan Peacock and Lord Burns, was that there should be a public service broadcasting fund. However, Government had never acted on this. 88% of all the viewing on Freeview was to channels owned or run by the BBC, ITV, Channel 4 and Channel 5. When ONDigital was launched, most people predicted that it would fail and it duly did, but what most people failed to predict was that it arguably succeeded for just long enough to tip both NTL and Telewest into bankruptcy. This had consequences for the cable industry in falling further behind Sky. Following ONDigital’s rebranding as ITV Digital and its subsequent failure, the BBC turned it into Freeview. The reason 88% of all viewing was controlled by the original dominant players in broadcasting was because they were guaranteed all the major positions on the Freeview system. 71% of all viewing including via satellite, cable and Freeview in the UK was to the PSB channels and their spin offs and the channels they controlled. 61% of all news consumption in the UK was of BBC output which was worrying. The reason that no action was taken to remedy this was that the situation suited Government. The licence fee was originally set up as a subscription payment to the BBC to receive radio and later TV services. When the BBC monopoly was ended, the licence fee persisted and it became something much more insidious, which was a licence to watch any television, not just the BBC. As a result there was £3.6bn per year which was looked at as a honey pot by governments for activities such as rolling out broadband, local TV services, paying for the World Service and S4C. Funding these activities was not what consumers paid their licence fee for, but Government and the BBC between them both conspired to protect the licence fee. 60% of all original drama commissioned in the UK was commissioned by two public employees, the head of drama at the BBC and the head of drama at Channel 4. Not only did Government have to think more and do less, they needed to tackle the various kinds of concentration that had grown up which operated against the public interest. Specifically, the DCMS needed to be rolled into BIS to give provide greater brain power, muscle power and strategic thinking to start addressing some of these issues.

Dr Damian Tambini, Senior Lecturer, LSE

Dr Damien Tambini explained that he would consider the nature of governance. The BRIC countries were where the growth was, particularly given the state of the Eurozone. In particular the areas with the largest potential for growth, over the coming decades were also areas where there were fundamental problems with the rule of law and in particular protection of human rights, such as freedom of expression and privacy. The UK needed to be thinking long term about the challenges that raised. In January 2009, the estimates were that creative industries excluding crafts and design accounted for 6.4% of gross value added and grew by an average of 4% per annum between 1997 and 2006 compared to 3% for the whole of the economy over this period. If one accepted that growth in exports to the BRIC countries was crucial to the growth of the UK industry, this raised issues about freedom of expression, privacy and censorship in target markets and what Government could do to help resolve the ethical, reputational and practical risks that arose from that. For example, Google had experienced problems in China where China appeared to be blocking and re-directing Google requests and search queries, and as a result there were a succession of Bills introduced to US Congress calling for regulation of US ICT companies operating abroad. However, such issues were not restricted to authoritarian or post-authoritarian countries but were part of a more general category of regulatory risks associated with the media sector, as News Corporation was finding out about their UK investments.

In terms of action by Government to deal with these risks, not a lot was being done. The FCO continued to provide its detailed annual report on human rights around the world, but this did not offer practical help for a telecoms or software company seeking to invest in China or Russia. Dr Tambini argued that it was two stakeholder projects rather than Government that were doing the most to help in this area. The Global Network Initiative was a self regulatory initiative involving a consortium of companies, but also universities and civic society organisations, to develop a code of conduct and a set of principles which should govern media and communications companies operating in authoritarian countries. Google, Yahoo and Microsoft were involved. Five years into that project the problems they were experiencing could have been predicted, there were limitations within a voluntary system to what companies were prepared to sign up to, particularly with the juicy carrot of 300 million viewers in the Chinese market, for example. The second project was the Mapping Digital Media Project, which was a civil society initiative funded by SOROS. 60 reports were being published on different countries including industry data, data about censorship, domestic law and how that impacted opportunities for civil society organisations campaigning for freedom of expression in those countries, and also potentially for companies hoping to enter those markets. The Chinese report noted that the share of CCTV in China, the state broadcaster, was down between 2005-2009 from 22.9% to 13.3% audience share. The report also noted that television penetration in China had reached 90% of households, whereas interestingly radio had less than 30% in China. The problem with the initiative however, was that it did not work as a one-off as the data would go out of date very quickly. The question was, if civil society was doing so much, why should Government? Dr Tambini argued that apart from continuing to support the sustainability of these kinds of projects, one reason that governments should do more was to engage with other governments. Government was probably the most effective body when it came to coordinating collective action between governments and between private actors. A proposal worth considering was whether there should be a working group involving BIS, the Foreign and Commonwealth Office, and the likes of BSAC, working on these kinds of issues. This would call for a different approach, and, more vision at home, both from industry and from Government. When lobbying for new controls and enforcement at home, for example, filters and blocks and new forms of intermediary liability for IP protection and other harms and forms of illegal content, companies would do well to consider the role of the UK in 'normalising' such an approach, and how such controls would be enforced in countries without adequate human rights protection. As well as considering in more depth the global implications of domestic regulation, the Government could do more to help companies: negotiating co-production agreements; issuing guidelines in relation to privacy, freedom of expression and rule of law in the communications sector; using trade agreements to undermine censorship (censorship could be a barrier to market access); engaging with civil society initiatives; and providing accessible industry data. This was not an invitation to engage in liberal hand wringing and stay away from those markets. The global flow of ideas was too exciting for that. It was to question whether Government should be joining up existing human rights work with the work on export oriented culture and communications.

THE WIDER VIEW: PANEL DEBATE

Each panellist was asked to identify the two most important areas requiring action by Government, either on a national basis or in its dealings with the European Commission.

Panel Chair: Adam Singer

Andrew Barron, COO, Virgin Media
Sarah Hunter, Head of UK Public Policy, Google
Robert Levine, Author of *Free Ride*
Andrew Miller, CEO, Guardian Media
Mark Wood, CEO, Future

Adam Singer said that this panel would focus on the most important areas requiring action by Government. He asked Robert Levine about his assessment of copyright issues in the UK as someone looking in from the outside?

Robert Levine said that in many ways the UK copyright regime was working well as the UK enjoyed a very successful digital sector. Governments across the world needed to spend less time changing copyright and more time enforcing the current rules. The rules in the UK were flawed for various reasons but the biggest problem was that they were not enforced effectively. Hal Varian, a respected economist, later to become the Chief Economist at Google, wrote *Information Rules* which argued that copyright was not outdated and that one should not ignore basic economic principles just because technology changed. However, there were ways in which copyright should change, the term of copyright protection was arguably too long and covered too much. The function of copyright from an economic perspective was sound. It was argued that authors should give away their books as it cost nothing to distribute them online. However, this did not take into account a necessary reward for the author, and for the publisher who had taken a risk in advancing money to the author. One out of every eight books was profitable, so it was necessary for publishers to aggregate that risk. Copyright gave creators a right that could be licensed and sold in order to receive a reward for their effort.

Adam Singer asked Sarah Hunter for her view on what Government should be focusing on?

Sarah Hunter said that what Government should be focussing on was how to grow the economic potential of the creative industries. From a Google perspective, the start-up sector had great potential and the voices of those nascent companies, and individuals who had yet to create a company, were not being heard in this debate. Government should focus more on what its policy could do to support the potential growth of these nascent start-ups. Google had recently opened a venue in east London to be a home for start-ups in the UK as they felt the UK had one of the most potentially successful start-up communities in the world.

Adam Singer asked Andrew Barron for his views on what Government should be focusing on?

Andrew Barron said that net neutrality was an emotive subject and often became confused with related but separate topics such as traffic management and access in its broadest context. Five years ago two thirds of Virgin Media customers were on a broadband speed of 2MB. Today the entry speed was 30MB and 100MB was available in 10 million homes across the country. Those speeds were incomparably greater today than when the net neutrality debate began to become prominent. To make an analogy, when the debate first began, there were two lanes on the M25 of broadband, now there were roughly 50 lanes available and the slow lane debate was still ongoing. The reality was that the underlying capacity and capability of broadband internet had moved on unrecognisably from when that debate started. Copyright was also an emotive topic. Virgin Media, as other ISPs, looked for a lead on what infringed copyright. They recently received a court order to shut off Pirate Bay very specifically which was deemed to be infringing copyright, which they complied with. They had been under aggressive denial of service attacks for the last week from people who disagreed with that court decision. The traffic to Pirate Bay had gone up since the banning order. Anyone who was technically literate could circumvent the restrictions on a site. Therefore, there was an issue around how to protect copyright which was a practical challenge for the sector. Virgin had always argued that in parallel with enforcing copyright protection, there needed to be commercially viable and attractive alternatives to access the same content. Virgin had done a deal to bring Spotify to their broadband customers as a viable legal alternative. They were seeing decent take-up and saw this as an interesting precedent for the video age.

Adam Singer said that prior to the event he had spoken with Andrew Barron about the increasing pressure brought to bear on ISPs to essentially ‘police’ the nature of the net. Andrew had alluded to this pressure as an abdication by Government of its normal regulatory role leaving it to businesses such as ISPs to in effect regulate the web, a role which they were not qualified for.

Andrew Barron amplified this view. There were important political, legal and moral issues in this space. There was an absence of moral consensus on these issues. ISP’s needed guidance, clarity and consistency from the Government, from the legal framework and from a moral consensus so that the correct action could be taken. In these debates, different parties expressed what appeared to be irreconcilable points of view on fundamental issues. Virgin Media, as other ISP’s, was not qualified or competent to make those judgements and looked to other institutions, industry wide forums, Government and the courts, to make those judgements so that they could enforce and comply with them.

Adam Singer asked Andrew Miller what he thought Government should be focusing on?

Andrew Miller said that the sector was undergoing phenomenal change and there were fantastic opportunities to grow and enhance strong British businesses. What was needed was to find the right business models that embraced digital content. He hoped Government would work hard to create the right tool kit for UK business to operate, for example, delivering the fastest infrastructure possible through 4G and broadband, embracing open data and ensuring the right skills were being delivered in terms of the ability to build and work technology. He also hoped that Government would make clearer statements on policy to enable businesses to work within those parameters and develop those models, for example, businesses needed clearer guidance on issues such as privacy and protection of minors.

Adam Singer said that the nature of VAT currently illustrated the lack of joined up thinking. Printed publications were not charged VAT and electronic copies of the same publication were charged VAT. He asked Mark Wood to comment?

Mark Wood said that Future was a magazine publishing business which was advanced in digital markets. The VAT issue presented a challenge for them. It appeared if you bundled a print subscription with a free iPad edition, there was a risk that you'd have to charge VAT on the print subscription as well. It was potentially possible to reverse VAT in the print area only. However, there was confusion as they had received three conflicting pieces of guidance from HMRC. Another issue for Future was piracy. Future was one of the publishers which had done extraordinarily well on a global basis on the iPad. Interestingly, over 30% of all the digital content on the iPad worldwide currently was British. However, as with music, where piracy started to invade a paid-for model, there was an emerging pirate market in digital magazines which were downloaded, stored on pirate sites and sold at a fraction of their cover price cost. This was a small market now, but it was growing. The sites were known to industry but Government intervention was needed.

Robert Levine said that, with all due respect, if one asked an ISP or a search engine what piracy it was possible for them to stop they were very reluctant to take action. However, they did not have a problem stopping spam. Google had de-listed whole domains because of spam. Spammers had free speech rights too and were cut off without review, whereas the Pirate Bay had lost several court cases in Sweden. On a separate issue, he felt that although there were some good ideas in the Hargreaves Review, it was founded on a false pretence, which was that Google could not have started in the UK because the UK did not have 'fair use' rules which the company depended on to search the internet. However, this was a false argument as Google worked in the UK and other jurisdictions without fair use, so if the service depended on fair use to search the web, they were breaking the law in every jurisdiction without fair use. If they were not breaking the law to search the web then Google would not have needed fair use to start in the UK.

Audience Q&A

Ian Hargreaves, Cardiff School of Journalism said that the debate about fair use had come from a question put by the Prime Minister, which the Review had answered. He had recommended that introducing fair use to the UK was unfeasible. However, there was an argument to be made that if fair use was as terrible as some European and other creative companies portrayed it to be, why had it worked in the US? He felt that the arguments were overstated on both sides. What was needed on copyright, which was what the Review attempted to lay out, was a balanced proposition which would enable there to be much less confusion in the public mind about what the copyright rules were and to achieve the right volume and nature of legitimate supply across digital content making it possible to run an enforcement regime which commanded a reasonable level of public support.

Ajay Chowdhury said that he had been a venture capitalist and one of the first companies he was involved in was Shazam, which was a British success story with over 200 million users worldwide and a valuation approaching half a billion dollars. Shazam allowed the user to recognise music on their mobile phone. It took a fingerprint of a song and matched it against a fingerprint database. When it launched, all the music companies tried to stop it arguing that taking a fingerprint was an infringement of copyright. Shazam spent money, time and effort insisting that this did not amount to copyright infringement. Finally the music companies backed down when they realised Shazam actually helped to sell more music. However, it set them back a few years. This was an example of how the copyright regime could be misused against young start ups by big companies, backed by lawyers and the Government.

Sarah Hunter said that the copyright debate had become polarised in some people's minds. However, in reality, the vast majority of those working in creative and internet businesses believed that stealing content was wrong. What they disagreed on was the mechanisms by which an attempt to prevent copyright infringement was made. Google spent an enormous amount of time and money taking links out of their search engine when they were notified that the websites involved were infringing copyright. Therefore, to say that Google was relaxed about piracy was untrue. However, they were opposed to laws that did not work and could cause unintended consequences. On the broader theme about what should Government do, it was necessary to be realistic about the extent of what Government could do. The architecture of the internet was not created to be controlled; rather it consisted of lots of inter-dependent networks. To suggest that it was easy for governments, or even global coalitions of governments, to come together to write laws on this was not true. The internet was currently in a stage of development whereby there were problems that laws could not adequately address. A stage had not yet been reached where technological developments could remedy these problems. She believed that there would be technology capable of solving these problems; it had just not arrived yet.

Robert Levine said that a similar argument had been made by the financial business in the US which argued that the derivatives market was too big and complex to be regulated. There was an attitude on the part of many smart technical people that the internet was the way it was. The internet was not a force of nature it was built by people and created by a series of regulatory decisions. It was not accurate to imply that it was not possible to regulate the internet. Google took down links to material which infringed copyright as an obligation under the Digital Millennium Copyright Act in the US. Perhaps they would do it anyway. However, this was an example of where Government intervention obliged action.

Sarah Hunter said that she had not suggested that it was not possible to regulate the internet, but that this was a difficult area for Government intervention. She spoke to nine separate Government departments of which they were probably about 20 Government officials responsible. When she had worked at the BBC, she had spoken to two Government departments. There were many interested parties and many laws governing different bits of the internet, and it was not simple to make sense of how it fitted together. There were jurisdictional and technical issues. In Google's view, it would be as sensible to invest time and money in developing technologies that helped prevent the problems which arose as it was developing laws. The Digital Economy Act was an example of this, it took many years to reach the statute with the first notification letters being sent in 2014 by which stage peer to peer file sharing would no longer be the main source of infringing activity.

Adam Singer said that there were now new entrants coming into the content market, such as Future, providing content online, and competing with incumbents. However, they were all acting through gatekeepers. There was the possibility that these gatekeepers could abuse their dominant position in the future. He asked Mark Wood for his view?

Mark Wood said that currently gatekeepers simply created new channels to market, and in the case of companies such as Apple created devices for distribution of their content, and in the case of Google helped Future find millions of new users. They had requested pirate sites be taken down and Google always reacted very promptly. There was a threat of dominance by companies such as Apple, Google and Amazon. However, he thought that it was possible that market forces would take care of it. There was a question about whether Government understood enough about what was happening in the digital universe. Where Government could help, for example, was in providing better analysis of opportunities in other markets. Indonesia was a big market for Future on the iPad. However, the Foreign Office was not able to offer advice on the digital market in Indonesia as they did not have the expertise.

Andrew Barron said that in terms of gatekeepers, new platforms emerging for connected TV were relevant. YouView, the joint venture with the BBC, ITV, Channel 4, Channel 5, and BT and Talk Talk as ISP partners, was a very powerful consortium which would own and control the platform. Virgin had a different philosophy from many others in this space. They believed that the right model for the future was a mass scale platform that many people could publish to in a responsible way with some parental controls and basic quality thresholds. The objective was to publish to a common platform.

An audience member said that he was a digital start-up entrepreneur. He was working on e-books currently. Amazon had a unique position in the e-book market, 92% of e-readers sold last year were Kindles and about 80% of e-books sold in the UK were through Amazon. Amazon was based in Luxembourg so paid 3% VAT, which was an enormous problem for UK businesses that had to pay 20% VAT. A sensible government should quickly consider the problem and reduce, if not remove completely, VAT on e-books so that UK businesses would be able to compete with Amazon.

Adam Watson-Brown, DG Connect, European Commission said that the Commission was dealing with the VAT issue and the rules were changing in 2015. The basis of taxation would alter so that it would be based on country of destination.

Adam Singer asked Adam Watson-Brown about the speed with which it was possible to regulate in this environment. By the time a decision had been made and implemented across Member States it was possible that the issue would already have been resolved, or that those who had complained had already been killed off. Lord Birt had referenced this problem in his presentation; could Government move at the speed necessary to regulate in the context of technological developments and still maintain some form of democratic principle?

Adam Watson-Brown said that, at EU level, the aim should not be to be on the leading edge because the processes did not enable that. Rather, there should be enough flexibility for Member States to proceed at a high speed on these issues should they choose to.

Adam Singer asked the panel for their thoughts following comments from the audience, especially on how Government thinking could be more joined up? Should BIS be merged with DCMS, and how much of a difference would it make?

Mark Wood said that Government was disconnected with the reality on the ground. The UK and the US were the most advanced digital economies in the west. The industry was undergoing a big learning curve and the UK Government could be the thought leader in this area and could be moving faster on issues like VAT on e-books. Government needed to find a way to better understand these issues.

Andrew Miller said that it was true that Government did not understand this environment, but then it was not fair to expect them to, as industry itself was still coming to terms with the speed of change. The main thing was understanding where the consumer was going and how they were consuming content across a multitude of platforms. Government should focus on opportunities for British companies to compete with the large behemoths such as Apple, Google, Facebook and Amazon, who were critical in helping nascent businesses and start-ups to grow.

Robert Levine stressed that more effort should go into enforcing existing laws rather than making new regulation. Also, it seemed that a lot of effort was expended making life easier for companies that only paid tax in Luxembourg. More resources should go into helping UK companies that paid taxes in the UK.

Sarah Hunter said that there should be more transparency in terms of Government policy making. There was a tendency by Government, in recognising that law making was difficult in this area, to put companies in a room and try and put pressure on them to do things whether that was introducing filters for pornography or for infringing material. These conversations should be more open so that people knew they were happening. These issues were social and moral issues for citizens, not just for companies or for policy makers. It was important that consumers were involved in deciding what kind of internet they wanted.

Andrew Barron thought that there was a problem with the speed of Government intervention and regulation more broadly compared to the pace of change of business. The industry measured in months and Government and the European Commission in years. This was not a question of the people involved but of the way in which those institutions functioned. It was clear that continuing to accept two different speeds between the market and between Government intervention and regulation would be damaging. One way of speeding up the pace at which Government, the courts and Ofcom operated was that, interventions to date had often been deeply tactical seeking to redress specific ills, going forward they should be much more strategic and structural about interventions in these markets.

CLOSING THOUGHTS AND DISTILLATIONS

Panel Chair: Adam Singer

Jon Gisby
Mark Selby

Adam Singer explained that John Gisby and Mark Selby would give their personal reflections on what they had heard over the day.

Jon Gisby said that it had become clear that Government and the education system were not geared up for facing the current challenges. The statistic which David Elstein quoted, that 71% of all television viewing in the UK was to the PSB channels and the channels they controlled, was interesting. In the online world, the percentage of time spent viewing content from PSBs was vastly lower than the broadcast share. This raised implications which had not yet played out. The UK was late to broadband which had had consequences for our competitiveness. The UK should be investing or encouraging investment in open data, which was an area where a series of businesses would be build over the next few years. There needed to be an extensive, radical reinvention of education. This was not a technology problem; it was a proposition, financing and invention problem. It was a travesty that he had received more coding education at secondary school than his son was currently getting 30 years later. One thing that had become clear through the discussions was that emerging digital businesses had been rolling up their sleeves and figuring stuff out by doing it. That way of working was very difficult for incumbents alongside running an existing successful business. The end game was likely to look radically different from a lot of the businesses that were represented in the room. It would be global by default; the days of businesses being able to operate a successful commercial model from the UK only were rapidly coming to an end. Some players were building interesting businesses on the back of the positions they had enjoyed, but the really successful businesses were the ones that were global now. He applauded businesses that were successfully transitioning in this environment. Some big themes had emerged from the afternoon discussions about how Government was functioning in terms of joined-up thinking and the pace of action. Just as the internet was a human construction so was Government and clearly things needed to move on.

Mark Selby said that there were three things that struck him concerning the discussions over the day. Firstly, there were challenges in terms of delivering inter-disciplinary work in the academic field, and in industry and academia understanding each other and being able to collaborate. Secondly, he was delighted to see agreement on the fact that rather than focussing on specific elements of technology or solutions, there was a need for a platform approach in the UK. There needed to be a vision of what that platform should be which would enable multiple parties to realise benefits. He was reminded of a Chinese proverb: ‘you do not fatten a pig by weighing it all the time’. The UK needed to adopt some of the ways of working that had been demonstrated as being required by platforms. The comparison of the UK's creative and digital industries to the motor industry was interesting as Japan had been the first to adopt the principles of lean manufacturing, which had now been adopted globally. Lean working was seen as critical to success in technology development, the principles of which were: create a hypothesis, build against that hypothesis, measure performance against that, and learn from the outcome, and make a change. This was the exact opposite of the Chinese proverb; it was necessary to constantly weigh a pig in order to fatten it in the most effective manner, at least from a digital perspective. The third thing that had struck him from the discussions was that Government had enormous difficulty in keeping pace with the speed of change in term of the adoption and use of technology. Web 2.0 made it clear that it was no longer about broadcast, but about dialogue. If Governments could not move at speed, it was necessary to go back to the principals of what made platforms work. Quite apart from lean development, it was about crowd sourcing; the only people that could regulate this environment were the people using the environment. Andrew Barron had commented on Pirate Bay that it was all very well putting the barriers in place, if the policies were not bought into by the users, they would not work.

Adam Singer, BSAC Chairman thanked the speakers and panellists over the day for their insightful contributions, as well as Oliver & Ohlbaum Associates for their extremely informative presentations and for co-hosting the event.