

VIRTUAL ROUND TABLE

CORPORATE *LiveWire*

TECHNOLOGY, MEDIA & TELECOMMUNICATIONS 2014



MEET THE EXPERTS



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Justin is a Technology and Outsourcing Partner based in the Cardiff office of Blake Morgan. He advises customers and suppliers on all aspects of technology procurement and outsourcing. At various times in his career since qualification in 1994, Justin has worked on some of the largest and most complex IT projects in the UK. Justin has spent time in-house on secondment to IT consultancy Accenture, the Department of Health (Private Finance Unit) and the Home Office. A member of the Society for Computers and Law, Justin is a prolific author on his specialist areas of expertise. He also gained an LLM qualification from University College London.



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Paul Barton is a recognised legal expert in the TMT sector with over 20 years experience. He specialises in all areas of intellectual property, information technology, data protection and e-commerce and internet law, including advising on the procurement, licensing, development and outsourcing of computer systems and software.

Paul's clients include technology start-ups, leading service providers and suppliers of technology, multinational companies and government bodies.

As well as advising on technology projects, outsourcing, the licensing and exploitation of digital data and databases, Paul regularly advises on cloud computing, digital media, e-commerce and internet law issues.

Paul regularly speaks on intellectual property and technology law issues. For many years he lectured for the Bristol University Diploma in Intellectual Property Law and Practice.



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Oluwatosin Lewis is an analytical and persuasive lawyer with a strong ethical background.

An associate in leading Nigerian Law Firm, Professor A. B. Kasunmu's Chambers from 1994 till 2003 and partner till June 2013. She set up the Law Firm of Lewis Alexander Legal in 2013.

A graduate of the Lagos State University in the year 1991, she was called to the Nigerian Bar in the year 1992. She obtained the International Practice Diploma in International Business Organizations in 2003 and a Postgraduate Diploma in Maritime Law with Distinction in 2003 from the London Guildhall University. She is the exclusive TMT Nigerian member for International Referrals.



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Mathys & Squire LLP is a full service Intellectual Property firm. Our head office is based in The Shard in Central London, with regional offices in the UK technology hubs of Cambridge, Manchester, York and Reading. We have trade mark and patent attorneys qualified at both a UK and European level.

Partner, Ilya Kazi, specialises in IT, and has detailed knowledge of networking and communications technologies, video and audio processing and transmission and electronics. He also has extensive experience of medical devices, particularly electrosurgical devices and catheters, and robotic equipment and controls, and green energy such as heat pumps, turbines and energy recover.

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Purvi is an international telecoms and technology lawyer and is co-head of Olswang’s telecoms practice. Her experience spans all kind of network and platform, including mobile, fixed, cable and satellite, and the converged aspects of where telecoms meets technology (and vice versa). She has advised on some of the most innovative projects affecting the market today, including network sharing (active and passive, light and deep), MVNOs, Machine 2 Machine, mobile payments, convergence and 4G/LTE. Purvi also advises on the regulatory aspects of telecoms and technology work. Her experience in telecoms regulation includes proposals for the EU single market, network access, MVNO regulation, leased lines, net neutrality, big data issues and security. Purvi also specialises in outsourcing and procurement work across the telecoms and technology sectors. She has extensive experience in both private sector and public sector outsourcing and offshoring where she has acted for both customers and suppliers.



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Mark Lello is an associate trade mark attorney and has headed up the intellectual property section of Parker Bullen since 1996. He specialises in the registration of trade marks and patents as well as general advice on copyright and other areas of intellectual property. He is supported by a team of experienced practitioners in all areas of intellectual property, including litigation matters. He also is an affiliate representative of the British Franchise Association, which enables him to give accredited advice on franchise matters also.



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Member: Mexican Center of Arbitration; México City Chamber of Commerce-Arbitration; “MCI Arb The Chartered Institute of Arbitrators”, London. President Elect: Mexican Bar Association; Federal Communications Bar Association, International Bar Association; American Bar Association. Administrative, Founder and Chairman of the Board of Ríos Ferrer, Guillén-Llarena, Treviño y Rivera, S.C., law firm focused on infrastructure, including project finance, corporate, commercial, antitrust and litigation mostly related to the core practice of the Firm. Counsel, member or Chairman of the Board of Directors of AAA Mexican and transnational companies. Has also been special counsel to business associations such as US Chamber of Commerce, Washington, D.C. and Consejo Coordinador Empresarial. Arbitrator at Centro de Arbitraje de México; Cámara Nacional de la Industria de la Construcción; Superior Court of Justice of the Federal District, Mexico; Mexico City Chamber of Commerce; Chartered Institute of Arbitrators, MCI Arb. Member of International Chamber of Commerce.

For over a decade Mr. Ríos-Ferrer has been consistently mentioned as a leading attorney in Mexico, by prestigious Mexican and international independent research publications, such as Chambers & Partners, Best Lawyer, Who’s Who, Revista Expansión, Revista del Abogado, and others. Recognized by Best Lawyer as the lawyer of the year in telecommunications, 2012. Has also published many articles in law publications in Mexico, Brazil, U.S.A. as well as in other national and international prints.

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Paul is a very experienced commercial litigator and Solicitor Advocate with Extended Civil Rights of Audience. Building upon his experience gained as a Barrister and Solicitor of the High Court of New Zealand in the early 1990s, Paul has always made extensive use of his Scottish Rights of Audience since gaining them in 1998. He is mentioned for Data Protection work in Chambers UK (Band 4 UK ranking) and for both Commercial Litigation (Tier 3) and Technology/Media/Telecoms disputes (Tier 3) in Legal 500.

Paul has a special interest in data protection as well as technology and all intellectual property issues as well as FOI/FOISA. Paul heads three bto teams: Data Protection, Online Reputation and Technology & IP team. Clients have praised him for being a lawyer who “...understands the legal process and how to influence it.”

In 2013 Paul teamed up with bto’s criminal Solicitor Advocate, Laura Irvine (Associate), and successfully overturned a £250,000 data protection fine imposed on Scottish Borders Council. This case has attracted widespread interest as it is the only successful appeal against a fine under the Data Protection Act 1998.



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Associate Indrė Burbulytė is specialising in TMT and IP law. She graduated Vilnius University, Faculty of Law in 2010. In 2010-2011 Indrė had internship in Cancellation and Litigation Department in Office for Harmonization in the Internal Market (Trademarks and Designs) (OHIM), Alicante, Spain, where she defended her master thesis.

Since 2008 Indrė Burbulytė constantly advises clients in matters related to communication and media law. She specialises in cross border issues, including jurisdiction matters, licensing and related matters. Indrė Burbulytė participated in various transitions that included the mergers and acquisitions of communication and media companies and was responsible for the legal due diligence of target companies.



Technology, Media & Telecommunications 2014

In this roundtable we spoke with nine experts from around the world to discuss the latest changes and developments in Technology, Media & Telecommunications. Among the highlighted topics, our chosen experts discuss new technology such as 3-D Printing and wi-fi enacted refrigerators, the security concerns surrounding cloud technology, and the contentious issue of cybernetic attacks in Lithuania stemming from Russia.

1. How does a firm benefit from using a TMT expert?

Barton: TMT businesses often operate in a complex and rapidly changing environment. A TMT expert can help a business successfully navigate this environment. They can support projects across multiple jurisdictions enabling seamless execution by deploying extensive experience and adopting a pragmatic approach. In addition, they will be able to offer firms technical excellence, knowledge of regulators and experience gained from driving practical solutions for other industry partners. I'm often engaged because of my specialist expertise and the fact I have "been there and done it before".

Harrington: As a specialist in providing legal advice to the technology, media and telecommunications industry we consider that our experience in the industry is invaluable for getting our clients the best outcome. Technology and telecommunications contracts in particular are considered to be among some of the most complex commercial contracts as the contracts need to adapt to keep pace with this rapidly evolving industry.

We also see the scope of technology and telecommunication projects changing through the life cycle more than projects in other industries and an understanding of the commercial and legal requirements of the industry ensures that advice is given which is specific to that particular customer or supplier's needs.

Lewis: TMT experts work with leading providers across the technology sector and have experience in strategy, performance improvement, organisation and mergers and acquisition in the sector. They are conversant with the relevant legislation and key trends and can therefore match their expertise to that of the firm. This is essential because of the challenges that TMT firms face and the on-going need to bring coherence and clarity to very complex projects, which are the hallmark of TMT firms.

Parekh: We are now seeing new products and services, convergence, and innovation at a faster rate than ever before. In the digital age in which we live all companies have – or certainly should have – a digital strategy. Having TMT sector experts to support implement this is fundamental to that strategy's success.

It is through digital that TMT really comes into its own. Digital inevitably involves at least one of "T" (technology) "M" (media) or "T" (telecommunications) and increasingly so, more than one of those sectors. Having experts on board who understand TMT and where these sectors operate individually and collectively is hugely beneficial to a firm - particularly as the newer products and services require stronger collaboration and partnerships across TMT industries and companies.

Lello: TMT is one of those areas of work that is genuinely complex. The difficulty in trying to cover that area without specialist expertise is that there is a fair chance of failure. One example of this is in relation to what is referred to as an action for groundless threats. To briefly explain, the way in which intellectual property litigation typically commences is with a complaint by one side to the other that the other has in some way infringed the complainant's rights. This may be infringement of a trade mark, unlawful copying, or infringement of someone's registered invention rights (as in relation to patents). The difficulty is that if the complainant makes threats which they cannot substantiate then the

recipient of the claim can institute an action for groundless threats. This is not merely a problem for the complainant, it is also a problem for their advisers, who are also exposed to personal liability for this and not a little embarrassment. Currently the law of groundless threats does not extend to the area of copyright and so even within this specialist corner there is still a further level of detail that needs to be understood. There are discussions about potentially changing that law in the debates about the Digital Economy Bill, so watch this space.

Burbulyte: The TMT market is constantly growing in Lithuania and covers more and more industry specific sectors. Therefore experience and knowledge of the regulated market is extremely beneficial for ensuring full legal services for our clients.

2. Have there been any recent regulatory changes or interesting developments?

Barton: 2014 has seen a number of significant developments. Privacy has again become a very hot topic following the European "right to be forgotten"

ruling, which concerned a Spanish individual's request to prevent a news story they were featured in from appearing in Google's search results.

In June, the Consumer Rights Directive came into force in the EU and has resulted in a real impact on e-commerce businesses and distance contracts, and specifically addressed certain aspects of digital content. The regulations have brought with them numerous challenges which businesses have had to meet.

Harrington: The recent decision by the European Court of Justice in *Google Spain SL and Google Inc. v Agencia Española de Protección de Datos (AEPD) and Mario Costeja González (Case C-131/12)* on 13 May 2014 regarding an individual's "right to be forgotten" has been widely discussed in data protection and privacy circles. Following the ruling, individuals can apply to online search engines to have links to their personal data removed where that data is "inadequate, irrelevant or outdated". It is reported that following the decision Google is receiving 10,000 daily requests from individuals. The decision has received criticism, not just because of the significant costs imposed on search engine operators, but also because the decision has muddied the waters as to the scope of individual rights under current DP rules where personal

data is inadequate, irrelevant, outdated, or otherwise held in breach of general data protection obligations. There are also obvious concerns regarding the potential interference with legitimate freedom of expression. We wait to see if the right to be forgotten (now renamed the right of erasure) will be enshrined in the new European Data Protection Regulation.

Lewis: Nigeria recently launched a new National Identity Card scheme in partnership with MasterCard. The card, which has 13 applications, including MasterCard's prepaid payment technology, is one more step in Nigeria's Central Bank's cashless policy. The enrolment process to obtain the card involves the capture of biometric data with the intent to eliminate fraud, embezzlement and money laundering. It is intended that other identification schemes such as Drivers' License, Voters' Registration, Taxation, SIM Card Registration, Pension Schemes and Health Insurance would be integrated in the new identification card scheme.

Parekh: One of the highest profile regulatory changes – causing surprise in legal and technology circles – is the 13 May 2014 judgment from the European Court of Justice which called into question the legality of search engines collating personal information and then

facilitating respective searches (widely known as "the right to be forgotten"). The implications of this judgement are far reaching and not just for European search engines.

The introduction into UK copyright law (with effect from 1 October 2014) of an exception to a copyright owner's exclusive right to reproduce, and authorise the reproduction of their works where a person uses the work for caricature, parody or pastiche also has important consequences for IP protection.

In the telecoms space the amending of the EU telecommunications regulatory framework continues its parliamentary journey. The new legislation aims to move towards a single market for electronic communications without cross-border restrictions or unjustified additional costs.

Lello: A recent development in this area in terms of legislation is the Intellectual Property Act 2014, which modernises intellectual property law to help UK businesses better protect their IP rights in the UK and abroad, according to the Intellectual Property Office. As they put it, the provisions all aim to support businesses in driving economic growth, encourage innovation and expand the range of economic sectors in the UK. It also implements the reforms

to the design IP framework which flow from the Hargreaves review of intellectual property and growth in 2011. The main benefits they state are to save businesses up to £40m per annum in language translation costs when applying for Europe-wide patents (£20,000 per patent), to simplify and strengthen design protection for the UK's hugely important design sector, to make the IP system clearer and more accessible to small and medium sized businesses and to ensure the UK IP system is operating efficiently. This all sounds like good news! Hopefully that will all be reflected in practice. The provisions will start to come into force from 1 October 2014.

Rios-Ferrer: Yes, in 2013 a reform to the Mexican Constitution was approved, in relation to telecommunications and economic competition matters ("the Reform"). The Reform brought substantial modifications to the telecom regulatory scheme, which are reflected in the new Federal Law of Telecommunications and Broadcasting ("FLTB") that entered into effect on 13 August 2014. The FLTB aims to regulate in a convergent manner the use of the radio-electric spectrum, telecommunication networks and the provision of broadcasting and telecommunication services. Some of the main highlights of the Reform and the FLTB are:

- Creation of a new telecom regulator with broader powers (in charge of all economic competition matters related to telecom or broadcasting agents).
- New concessions regime
- Classification of telecom and broadcasting services as “public”.
- Asymmetric regulation for the “leading economic agent” (with market participation above 50%).
- Regulation of infrastructure sharing and use of the State’s assets for the deployment of telecom infrastructure.
- Must offer / must carry regulation
- Broadcasting user’s and audiences’ rights
- Concessionaires’ obligation to collaborate with the justice system: geo-location of equipment, call intervention, signals blocking, etc.
- Regulation over broadcasting content and publicity.

Burbulyte: The main hot topic in Lithuania is proposed changes in Media Law. The President of Lithuania proposed amendments which oblige TV re-broadcasters to ensure that their TV packages will contain no less than 90 programs in official EU languages. In addition the proposal suggests broadening the definition of re-broadcasters to also include satellite TV distributors (which essentially will mean that such distributors will be obliged to obtain a license and pay additional taxes).

These changes were proposed in order to combat propaganda which is being disseminated by Russia.

3. What are the main attractions and challenges for investors in your jurisdiction?

Lewis: The greatest attraction is the rate of growth in entertainment and media revenues which have been estimated to reach USD 8.5 billion in 2018, more than doubling the 2013 figure of USD 4 billion – a CAGR of 16.1%. The greatest challenge remains the unavailability of supporting infrastructure. This is quite glaring in the struggle being faced by Mobile Network Operators in providing acceptable Quality of Experience (QoE) to mobile users. With a lack of supporting infrastructure driving up operational costs and Average Revenue Per User (ARPU) for voice services expected to decline steeply over the next five years, this is a major challenge.

Parekh: Network infrastructure, next generation technologies, and rapidly adopted market trends (take wearable tech – a year ago most people were still asking what it was) create challenges and attractions for investors. On the one hand investment is costly but on the other it is a necessity so as to stay competitive with others in the TMT market.

As a side note, MIFID 2 will also bring with it investor protections that will influence conduct, in wholesale and retail. Given the converging of technology and telecoms with money and the drive behind digital and contactless payment schemes, it is worth having an eye to whether these changes will influence – negatively or positively – proposed business plans.

Lello: The culture in the United Kingdom continues to be supportive of entrepreneurs generally and inventors in particular. We have good financial incentives in terms of R&D tax credits such as the tax breaks involved with Patent Box, not to mention various grants that can be provided by Government, particularly through the chambers of commerce. This includes initial advice for smaller businesses of typically up to £1,500 for invoices rendered by professional advisers of up to £3,000. This all enables budding business owners, particularly within the innovations sector, to commence trading with reasonable support alongside their bright ideas. The challenges for investors continues to be a considerable volume of regulation, and access to specialist advice in this field continues to be hard to find, expensive, or both.

Rios-Ferrer: The Reform authorises direct foreign participation: up to 100%

for telecommunications and satellite communications and up to 49% for broadcasting services. This constitutes a new opportunity for investors, particularly within the telecom and satellite communications market, who may now file for their own concession and provide services in Mexico without requiring a Mexican partner.

One of the main challenges for new participants in the telecom industry (mainly telephony) is the investment required for installing infrastructure or obtaining frequency bands. In this regard, the FLTB enforced the regulation for the operation of mobile network operators in Mexico, which we expect will result in more MVNO emerging during the following year, as an important competition factor in the mobile market.

Burbulyte: The most important attraction is high level infrastructure. However, the most challenging aspect of this sector is constantly changing regulatory environment.

4. Are there any key trends or strategies currently being implemented?

Harrington: In terms of large scale technology procurements, we are seeing a move away from traditional large prime contractor models and more to-

wards management of several suppliers by the customer and a best of breed approach. In some cases this is linked to a SIAM (service integrator and manager), usually an integrator who takes risk in respect of the other suppliers it is supposed to be managing on behalf of the customer. In all cases however, in our experience the key to a successful contract is getting the basics right: clear specification and clear allocation of risk.

Lewis: The Nigerian government has put in place strategies to ensure that the country produces at least 25 indigenous and sustainable software firms in the next two years. The initiative is expected -according to the government - to catalyse the technology industry by helping Nigerian technology entrepreneurs create successfully businesses that can compete internationally.

The Central Bank of Nigeria is also developing a cashless model for 'smart cities'. These 'smart cities' (now identified) will ensure that minimal cash is used as payment at retail outlets, for transportation and other services including health, entertainment and education. Electronic payment companies - both indigenous and foreign - have come into the market with a positive impact on investments and employment.

Parekh: The buzzword is "mobile", whether we are talking about mobile health, mobile money or mobile content, mobile will continue to dominate all sectors and not just in TMT. Vertical sectors - automotive, life sciences, infrastructure - will all be influenced. Industrial connectivity through the internet of things and Machine2Machine communications will continue to explode into businesses as well as our ordinary day to day lives. We will also continue to see transformation projects and technology and telecoms driving smarter ways to work and live.

The cloud is also evolving. We are seeing newer models, hybrids and a focus on devices. Emerging markets will continue to embrace mobile, bypassing more traditional technologies, and be a huge source of growth across TMT. Content and value added services also continue to grow with the focus on gaming, video and TV.

Lello: At a national level, the commitment is to support small businesses, particularly through the chambers of commerce. However, they are themselves looking to groups of advisers who have specialist skills to support them in this regard. At Parker Bullen LLP we are also at the forefront of coordinating groups of professionals who have relevant skills to be able to advise

inventors and entrepreneurs. One significant development that we initiated last year was to set up what we have termed 'Innovations Hub', a one-stop shop for inventors to access relevant advice cost-effectively from professionals who know the ropes. The early signs are that this portal is very important and becoming ever more popular as a resource for businesses which are either in the start-up, development or - in some cases - mature phase of their life cycle. The website can be accessed at www.innovationshub.net.

Rios-Ferrer: The Reform ensures that the Federal Executive shall install a shared network of wholesale telecommunication services that promotes the effective access of the population to broadband communications and telecommunication services. Such networks (or 'This network') will use at least 90 MHz of the released spectrum from the analogue blackout, (700 MHz) fibre optic from the Federal Commission of Electricity and any other asset from the state that may be used in the installation or operation of such network; and may be funded publicly or privately. For such purposes, the new FLTB establishes that a concession for commercial use will be granted to a public entity (or through a scheme of public-private partnership) that under no circumstances may provide services

to final users. The installation of this shared network must initiate in 2014 and shall be operating before the end of 2018, and it is expected that this new available infrastructure will facilitate the entry of new competitors and the growth of small operators.

Burbulyte: The most important trend is strengthening the Radio and Television Commission (a regulatory body) to ensure effective means to react to the propaganda war and other breaches of the Law on Communication of Information to the Public.

5. What types of litigation and disputes are creating the most work for media & entertainment lawyers?

Barton: Online copyright infringement remains in the limelight, within recent decisions relating to online linking and browsing in cases such as *Meltwater* and *Svensson*, and ISP blocking injunctions as in the case of *Telekabel*. Copyright law did not envisage the technical exploitations these technologies introduce so the law is playing catch up with technological development.

There has also been a rise in media tax disputes relating to investments into films by high net worth individuals, as the Government has contested a high number of claims by individuals who

have sought various tax reliefs on their investments.

Finally, disputes relating to User-generated content remain common. Easier access to content generation technologies, wider distribution via the internet and social media, and lack of awareness regarding issues such as intellectual property are significant factors in these types of disputes.

Lewis: At the moment media and entertainment lawyers derive most of their work from disputes and litigation relating to joint venture conflicts, shareholding (pre-emptory rights) claims, service level agreements disputes and conflicts with regulatory authorities. There are also some competition and monopoly issues along with matters of copyright and patents.

Parekh: Perhaps the most interesting area of development is in respect of the use of data online. We are bringing an action on behalf of some individuals against Google in respect of its collation of data regarding Internet use by means of the Safari browser. In addition, there are a number of cases relating to the right to be forgotten on search engines arising from the Google Spain case. Meanwhile, the ICO has taken to imposing hefty fines on entities which breach data protection law, some of

which are challenged in legal proceedings. Reflecting that mood, corporates are becoming increasingly concerned with the potential for data security breaches with breach of confidence actions pursuing information which has inadvertently gone astray becoming more common. Moreover, the European Commission is debating a new data protection law with even stricter laws and greater fining powers.

In terms of more traditional media claims, libel lawyers are still digesting the Defamation Act 2013 which came into force on 1 January 2014. In particular, the effect of the “serious harm” test in section 1 is being carefully assessed. Currently, this is providing a significant deterrent to new libel claims.

Rios-Ferrer: The main disputes / litigation that have arose during the last years between telecoms operators are related to interconnection disagreements, particularly the applicable interconnection tariffs. Due to the new regulation established in the FLTB we expect to see in the near term more litigation regarding must carry / must offer, infrastructure sharing and the compliance of the obligations imposed to the “leading economic agent”.

It is important to note that the Reform eliminated the administrative appeal

and ordinary trials, now all resolutions (act or omissions) or general norms issued by the telecom regulator may only be challenged through the ‘*amparo indirecto*’ and the challenged act may not be suspended. The amparo trial is resolved by a District Judge and its purpose is to revise the constitutionality of the regulator’s acts.

Burbulyte: Breaches of advertising restrictions and prohibitions.

6. What capital raising opportunities exist in local and international markets?

Lewis: Leading e-commerce retailers might just mimic what Alibaba has done with its Initial Public Offering. Nigeria, like China, has a massive population and has witnessed a digital revolution in recent years. Although the country’s Internet potential has not been fully harnessed, there are already more than 100 million mobile connections and 67 million Internet connections with the result that it is the largest mobile market in Africa. Top e-commerce stores average USD 2 million worth of transactions weekly. The country is the seventh most populous nation in the world with 70% of its population being young people. The consumer market is worth nearly USD 400 billion annually and estimated to reach USD 1.4 trillion

annually by 2030.

Parekh: Capital raising opportunities are strong in both local and international markets. According to Renaissance Capital, IPOs in the US have raised a collective \$40.5bn already this year, making 2014 the most successful year since the dot-com bubble boom of the early 2000s.

In the UK, public markets are (finally!) very receptive to new capital raisings, especially those with the strong equity growth stories that typify TMT businesses.

Consumers remain driven by the need for the latest smartphones and mobile devices and apps; unified communications, greater bandwidth. BYOD will continue to rise. Apps will continue to flood the market, but they will be more targeted.

Lello: Throughout the recession it has been difficult to find funding for many businesses. A relationship bank which can point to a good track record of an existing client has been a successful formula for many of our clients. However, for new start-ups and those who do not have access to such resources it has been more sporadic. Some business angels have been able to assist in relation to certain propositions. A number

of clients have self-funded their growth and this has led to a self-sufficiency which has served them well up to a point. One business structure of which we have seen less than last time round when business dropped off is the franchise concept. We are seeing a small number of clients using this as a vehicle for growth but we are surprised that more have not done so. It is a tried and tested way of enabling your business to expand, provided it is done in a correct and committed way. As affiliate members of the British Franchise Association, we are accredited advisers in this area and can therefore point clients in the right direction. This has served our clients well and we would expect that trend of more businesses using such structures to continue.

Burbulyte: No specific measures are created for TMT.

7. How can the TMT sector sustain its recent growth?

Parekh: By continuing to invest and innovate. As tripleplay moves into quadplay and TMT investment, consolidation and acquisition trail continues, embracing digital change and ensuring the implementation of a digital strategy is paramount.

From an individual company perspec-

ive, it is very much about differentiation from competitors. Hence focusing on customer experience, best network, efficient cost management, smart IP protection and proactive portfolio management are all tools to ensure continued growth.

Lello: There is no doubt that the technology sector in particular is one that benefits from a more buoyant market. With more money available and more opportunities arising, the technology market is an easier sector within which to operate. That said, the underlying concept of the business has to be sound and the management has to be excellent. There are definitely opportunities for those who have innovative ideas but, importantly, are also able to bring them to market.

Burbulyte: By investing into new technologies and exploring Lithuania's exceptional infrastructure and geographic position that allows Lithuania to be among leaders in the fastest internet and cell phone services.

8. What considerations need to be taken into account when a company is looking to update its portfolio?

Kazi: There are three main high-level considerations that need to be taken into account when a company is look-

ing to update its IP portfolio: cost, competitive advantage and quality.

(a) Total portfolio cost needs to be trimmed over time to ensure that sufficient value is derived from legacy IP assets, e.g. to avoid excessive levels of renewal fees for legacy patent families. Ideally patent portfolios need to be mapped to the commercial success of products and technologies to ensure that only patents relevant to current commercial success are maintained;

(b) where patents are filed and maintained to cover technologies that are not implemented in current products or services, businesses need to maintain a corporate memory of the reasons for holding each of these patents and policing and monetisation of these patents is essential; and

(c) a small portfolio of high quality IP assets covering your technology roadmap is usually significantly more valuable than a large portfolio of low- or variable-quality IP assets.

Parekh: Smart portfolio management is essential which in turn means a proactive (not reactive) approach. Disposing of weak performance or non-controlling assets is only one part of this. The parallel part is identifying where to invest and being quick to respond to

market trends and opportunities. This could mean the acquisition of new complimentary assets (Google buying Nest, Vodafone buying Ono in Spain and Kabel Deutschland in Germany) or the acceleration of investments.

Lello: The challenge of every business is to stay ahead of the competition. In the technology sector this means constantly looking for ways in which to update and increase the range and application of its services and products. This demands large investments in research and development and importantly highly capable and creative personnel who are able to see new ways of looking at the market and providing services to introduce into that market. IT is a core part of any such strategy and as lawyers at Parker Bullen LLP we are very conscious of this and always keen to stay ahead in terms of those and other resources.

9. How can you effectively finance and value TMT assets?

Kazi: The term "TMT assets" can cover a wide variety of tangible (such as building and infrastructure) and intangible assets (such as IP). Generally, tangible assets can be valued within a reasonable margin of error using both valuations from company accounts and valuations based on similar assets in the market.

Intangible assets, especially Intellectual Property, are much harder to value and thus more difficult to use as collateral for finance as individual IP rights are extremely variable in their value. As IP portfolios increase in size, however, valuation in aggregate becomes more reliable: as the well respected former Court of Appeal Judge Robin Jacob put it: *“it’s just like bullets: if you just have one, it may hit the target but may also miss it. However, if you have 100, even if your aim is not very good there’s a far better prospect of hitting the target – and you only need one bullet to do the job. So too with patents: however many a bundle of patents turn out to be ineffective, you only need one that works properly in order to provide the requisite protection.”* Thus, to effectively finance and value TMT intangible assets such as IP, it helps to start with a larger portfolio.

Parekh: The key to effectively financing TMT assets is firstly identifying the asset and secondly knowing what is bankable. To have an opinion on this you need to know the sector - not just know what the assets are but also understand their interdependencies and the impact that the legal and regulatory TMT environment may have. “Assets” mean different things in different TMT industries and depend on what network or platform a company is valuing; for network infrastructure it could mean any-

thing from towers to cable, data centres to copper wire; for a MVNO it could mean its customer list, for a technology company its software and hardware.

It is also vital to work from valuations which are trustworthy. Fixed assets will have valuations in company accounts. Intangible assets are more difficult but specialist valuers work in the TMT sector. The secondary market for assets of this type continues to grow hence improving the accuracy of valuations and valuation methods.

Lello: As lawyers at Parker Bullen LLP we are able to call upon the resources of our strategic partners in Innovations Hub who can offer, amongst many other skills, the ability to provide finance and valuations for TMT assets. This has broken the mould of the old barrier between professionals which has existed heretofore. It means that we are able to provide a complete solution to clients and in that way, as we put it, ‘treat the whole patient’.

Rios-Ferrer: The most active financial investor in the telecoms market in Mexico is private equity. We expect that the next 12 months will continue to see the bulk of financing in the telecoms sector through this type of investor.

BANOBRAS is the Mexican Develop-

ment Bank in charge of promoting and financing infrastructure projects and public services in Mexico, which together with the National Infrastructure Fund offers financial schemes that assist public-bidding participants get financing for the development of a specific projects. The fund is integrated with a contribution from the government (usually non-repayable) and a contribution from the client (its own resources and additional credits), secured by subordinated security rights.

In relation to cross border financing it is important to take in consideration the limits to foreign participation in the broadcasting sector and the approvals required from the regulator, particularly in case of the incorporation of pledge of shares or partnership interests, due to the fact that concessions cannot be pledged. Regarding collateral securities, it is important to consider that under the current legislation there is no step in right so it is necessary to go to court first and that for some assets the foreclosure will be limited to the regulator’s approval. Moreover, for some assets (such as warranty trusts and non-possession transmission pledges) the applicable law establishes simpler and expeditious procedures for the execution of the collateral securities and new rules for the incorporation of such warranty trust, which consider as manda-

tory the recordation in the Only Registry for Guaranties to be valid before third parties.

Due to the financial reform approved last year the securities regime has been modified, in order to simplify its execution and give certainty to the creditors in the recovery of their resources.

10. Are there any exciting technological developments on the horizon?

Barton: There are always new technological developments to be excited about! 3-D printing is very topical at the moment. Mainstream adoption of 3-D printed items could have a revolutionary impact on businesses across the country, and with that will come a plethora of interesting regulatory and legal considerations that will need to be addressed, ranging from intellectual property rights to legislative input regarding items that can be produced. New technology always brings with it a host of new issues which businesses will need to address in order to remain effective players in the market.

Harrington: We will continue to see a rapid growth of machine-to-machine interconnectivity known as the “internet of things”. Every day electronic devices will connect to the internet and communicate with each other to pro-

vide better living. Wi-fi enabled fridges are already being manufactured which communicate directly with online food retailers and automatically place orders when they detect food is running low. As the technology gets cheaper and increasing numbers of potential applications are identified, there is no doubt its use will become more widespread. In particular the application of such technology in the automotive industry will allow for cars not only to communicate with each other to improve efficiency, safety and traffic management. During periods of heavy traffic, data received from vehicles will be processed in real-time and traffic lights will select the sequence to allow the most effective and efficient flow of traffic through the city. Whether people will appreciate the benefits of such technology or see this as 'big brother' living is a different matter, particularly where the interests of insurers is factored in.

Lewis: One of our banks just launched a Quick Cash App tagged *Social Lender*. The app allows account owners to access loans if they have Facebook or Twitter accounts. These micro credit loans come without interest rates but include a very small service charge of less than USD1 on each loan accessed and a pay back window period of one month. The funds are accessed without provision of collateral. Users who

make loan requests on the platform are rated using an algorithm, which calculates their social reputation. The back end social credit officer then uses the calculation to either grant or reject the loan application.

Parekh: Small cell architecture (basically, low powered radio access nodes that have a short range and operate in both licenced and unlicensed bands) will play an exciting role in the future of mobile. It is already an important part of 3G data and of 4G services and is expected to play a more vital role when we get to 5G. The big players are embracing the opportunities; indeed only a few days ago Alcatel Lucent announced small cell related partnerships with Qualcomm and JC Decaux.

White space technology will move from pilot to reality. We will see more regulators follow the path (already established by regulators such as Ofcom in the UK and the FCC in the US) of liberalising and facilitating the use of white spaces spectrum – the unused frequencies of spectrum that are allocated to broadcasting services. It is similar to the spectrum used for 4G and hence has significant potential to deliver widespread broadband internet.

Burbulyte: One cell phone operator launched 4Glite services in Septem-

ber 2014, therefore, we are expecting other players in the field to concentrate on enabling 4G services to their consumers.

11. How can TMT companies harness breakthrough innovation to boost revenue?

Kazi: By capturing and protecting the IP in breakthrough innovation, that innovation can be controlled and either kept as a competitive advantage over competitors or licensed to competitors as part of a standard embodying the breakthrough innovation.

Parekh: The Chinese e-commerce giant Alibaba is a poster child example of how recognising a market trend early (for them it was the growth of the Chinese consumer) and building a business around it can reap huge financial success. In September of this year Alibaba generated the largest IPO in history by raising a record-breaking \$25bn.

On perhaps a less "headline worthy" but more fundamentally important note is IP protection. Breakthrough innovation can only boost revenue if it is properly protected at its inception. A company-wide international patent strategy is not merely nice to have; it is a necessity in the world of TMT.

Motion: The TMT sector in the UK is unlikely to see growth in line with what it has experienced in recent years. The real opportunities for the TMT industry lie in the emerging markets of the developing world. TMT businesses need a strategy that will allow them to be agile in these markets. They would be well advised to develop connections with government and nascent technology providers in these regions as in many areas legal and policy developments in these developing markets are already struggling to keep pace with the rapid advance of technology.

Infrastructure issues and physical geographical features in developing countries may mean that initially TMT providers should initially focus on wireless broadband or affordable satellite broadband in many of these markets, with wired services following in key markets or limited areas once demand supports the cost of installation of fibre optic cable backbone and associated infrastructure.

12. Can you outline the opportunities and obstacles presented by big data?

Barton: Big data provides an opportunity to collect valuable, accurate and detailed information on individual behaviours. It has been made possible by

automated data generation, processing and sharing. Consumers benefit as it leads to more tailored products and services. Businesses benefit as insights gained from behavioural metrics can be used to increase productivity, gain competitive advantage and create substantial economic value.

However, there are important data privacy considerations which must be taken into account, which can be challenging for businesses to handle effectively without support. Applicable law, transparency, security, data management, retention and intellectual property considerations must all be taken into account when handling big data. Integrating information from multiple data sources can also be problematic and can require effective management of third parties. Organisations must also identify how to provide meaningful access to information in order to realise its value and satisfy data privacy 'access' and 'notice' requirements.

Harrington: Big data has been one of the fastest moving developments over recent years. This is as a result of an improvement in technology to allow the relatively cheap implementation of big data technologies. We have seen some businesses failing to see the potential value of the big data they hold whilst others simply fail to maximise its value.

However, companies which have the necessary capability and data analytics know-how are successfully exploiting the potential of big data in lucrative ways. The main challenge posed by big data arises from the plethora of legal controls imposed globally on personally identifiable data. There is therefore an obvious imperative to design big data projects in a way that avoids the use of identifiable personal data and builds in effective anonymisation. Projects that depend on, or inadvertently involve the use of, identifiable personal data, will have to comply with the full range of data protection obligations, including obligations to protect personal privacy, ensure data security and make sure data sharing arrangements are properly managed. It remains to be seen what effect the new European Data Protection Regulation will have on companies' use of big data (especially given provisions in the Draft Regulation dealing with analytics and biometrics), but one thing for certain is that big data is here to stay.

Lewis: As the term 'big data' is largely dependent on whether the applications traditionally used by the organisation managing the data sets has the requisite capabilities, the most important opportunity I see is the opportunity for creators of applications used to analyse and process data to constantly expand

their product offering and offer organisations new data management options as their businesses evolve.

A major obstacle is the sheer volume and variety of data that an organisation receives daily. Managing the data, determining its relevance, merging varieties of data and using analytic tools to derive value from data can sometimes be an uphill task for organisations.

Parekh: Organisations are still slow to embrace 'big data'. The challenges remain the lack of metrics and benchmark price points for data and data applications, reluctance by organisations to share customer data with third parties due to a fear of losing competitive advantage and technical challenges stitching together old and new databases.

More fundamentally, the sheer volume of data which is now generated and stored by many organisations makes it much harder to even know where to begin extracting value from that data. With more data, comes less focus.

Burbulyte: The biggest issue big data presents is the protection of personal data. The trend is the fact that regulatory bodies take a closer look as regards infringements of personal data protection rules and increase monitoring.

Motion: It has been estimated that 2.5 quintillion bytes of new data are created daily. The sheer volume offers both opportunity and challenge.

There is potential for value creation in various sectors but I would highlight GPS location related data for people, shared data created by the internet of things, healthcare data, construction and engineering, retail, manufacturing, and social data.

Challenges presented by the processing of big data may include issues around how to retain data and the quality of the storage media. The reliability of the method of capture and storage will have an impact upon its quality and the extent to which it can be relied upon and then reused. Data controllers and regulators will be tested by issues affecting data privacy, data management, data security and governance of the data under their control.

Another challenge is how to achieve focused data extraction and how to combine this with analytics (and perhaps visualisations) that render the data meaningful. If data analytics can be presented to the wider community in a meaningful way which brings benefit to a broad section of society, the gathering and mining of big data may be more readily accepted. The furore in the UK

over Care.data shows how readily the public will react unfavourably to a data sharing regime that is perceived to have been imposed by Government for the benefit of drugs companies without proper consultation and with little regard to the data subject's rights.

The falling cost of storage, management and analysis of big data means that a variety of commercial entities will have opportunities to analyse and review their processes in ways they could not previously afford to do. It will be possible to carry out monitoring and evaluation of service provision and equipment in far greater detail than was previously possible. If information is power then more information is more power, hopefully in the hands of more people and not just large corporate entities.

13. The recent celebrity hacking scandal has reopened the debate as to whether cloud technology is secure. Are we becoming over-reliant on cloud computing, and can you outline some of the more successful measures firms are taking to mitigate risks?

Barton: Cloud technology is seeing use by consumers and businesses large and small, but with it comes various risks that must be addressed. Data safety is of great concern to many, as several

recent high profile data breaches have demonstrated. Businesses that successfully utilise cloud technology have in place robust security measures and policies to handle all manner of access and interference, and contingencies if things go wrong. These not only include physical and digital security, but also contractual provisions giving assurances around safety (and sometimes location) of data. However, some cloud providers are still reticent to give such contractual assurances. This can be concerning for regulated businesses (especially financial institutions) as, although they may have faith in actual levels of security, they are unable to obtain the contractual certainty required.

Harrington: A lot has been made about the security of cloud storage following the celebrity hacking scandal. It should be remembered though that hackers accessed user accounts as a result of guessing weak and ineffective passwords, rather than exploiting a chink in Apple's security protocols (which as you would expect are extremely robust). In fact, the Cloud offers a two-factor authentication system where a separate pass code is sent by SMS to the user which is used in conjunction with the password when logging in. None of the celebrities had chosen to utilise the two-factor authentication, which is surprising given the sensitive nature of the pho-

tos they had stored online. Similarly, recent data breaches that have resulted in the imposition of financial penalties and enforcement action have resulted from human error in the form of lost laptop, misdirected emails, cutting and pasting errors, and failures to follow established policies in relation to safe data handling. Risk mitigation therefore requires attention both to IT security but also improved user awareness and understanding. The current focus on "privacy by design" principles, which promote a whole systems approach dealing with IT and physical security, effective policies, procedures, staff training and user awareness, offers obvious benefits in this regard. In the context of cloud computing it is advisable for organisations with responsibility for handling highly sensitive information to exercise great caution. In these circumstances, unless contractual arrangements allow a high degree of control to be exercised over cloud based data storage, cloud based solutions should be avoided.

Lewis: It seems that firms are now more aware of the fact that a key element of using cloud technology is finding the right solution for your unique business challenges. Some firms now have hybrid systems and make sure that they have in place some form of on-premises systems particularly for more sensitive data. Firms are now as a first approach

determining the type of functionality required before determining the right platform for their businesses. As a result, systems are now being put in place where bespoke applications encompassing both cloud and on-premises applications and select components are being deployed.

Burbulyte: At the moment the Lithuanian market does not pay much attention to cloud technology. The celebrity hacking scandal did not make any impact or even raise any public discussion. The most important issue Lithuania now faces is constant cybernetic attacks and propaganda from Russia.

Motion: In my view the key risks have not especially changed since the University of Oregon carried out its seminal Capstone Study in February 2010. The risks are policy and organisational risk, technical risk and legal risk.

The risk mitigation strategies generally proposed are audit controls, internal policies and procedures, suitably tight service level agreements, and broader 'governance'. In the latter category we might note that the Law Society of Scotland led the way by publishing Cloud Computing Guidance for the Profession in January 2012.

As to technical risk, reassurance that the

provider can comply with recognised security standards such as ISO27001:2012 may alleviate security concerns in the sense of penetration and integrity of storage. However obtaining a proper understanding of where a cloud provider stores data remains fundamental and a particular concern is “under the covers” data replication whereby a provider, without the user’s knowledge or consent, replicates data in many geographical locations to provide high levels of fault tolerance.

Legal risks and specifically the risk of awards of damage associated with data loss arguably have the greatest potential to influence the choice of cloud storage and cloud provider. For the EU cloud user subject to the EU Data Protection Directive and the proposed EU General Data Protection Regulation, the prospect of data unwittingly landing on a US-based server where it becomes susceptible to disclosure under the Patriot

Act is of concern. As is the ongoing legal battle as to whether a Texas court order requires Microsoft to hand over cloud data held on an Irish server. Not least because the latest draft GDPR proposes fines of up to €100million or 5% of global turnover for data protection breaches.

14. What key trends do you expect to see over the coming year and in an ideal world what would you like to see implemented or changed?

Lewis: It would be refreshing to see new legislation and case law on how information and evidence obtained from the Internet and social media can be used in the law courts. The great majority of Nigerians are internet users and post messages on Instagram, Facebook, Google+, Pinterest and Tweet daily. These comments and information must be governed by legal principles and for the most part there is an assumption

that they are so governed. The question though is, whether and how this information would stand up in a court of law as evidence. The waters are yet to be tested.

Parekh: In short - More of the same and then some on top!

Just to name a few: We will continue to see the rise of the internet of things being adopted by all sectors in some shape or form with healthcare, transport, life sciences and energy leading the way. 3D printing will grow, it won’t become the norm but it will become more affordable and hence more accessible. Adtech (advertising technology) will drive innovation, not just for online media but for software, systems, hardware.

With a new European parliament taking office on 1 November 2014, the natural progression of several key proposed regulatory changes has slowed down.

However we are still expecting the new commission to continue its drive towards a telecoms single market.

Rios-Ferrer: Additionally to the installation of the shared network for wholesale telecommunication services (to which it will be assigned at least 90 MHz of the 700 MHz frequency band), derived from the Reform two bidding processes are now in place: a) bid of frequencies for broadcast TV services (246 channels), in order to create two new TV stations with national coverage, and b) bid of two orbital positions for commercial use.

Ideally over the coming year we would expect to have two new TV stations with national coverage and an increase number of telecom operators using the shared network, which would reflect in more services and less prices for the consumers.



RÍOS-FERRER, GUILÉN-LARENA, TRIVIÑO Y RIVERA, S.C.

