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Harnessing the power of the private sector: An interview with Francis Gurry

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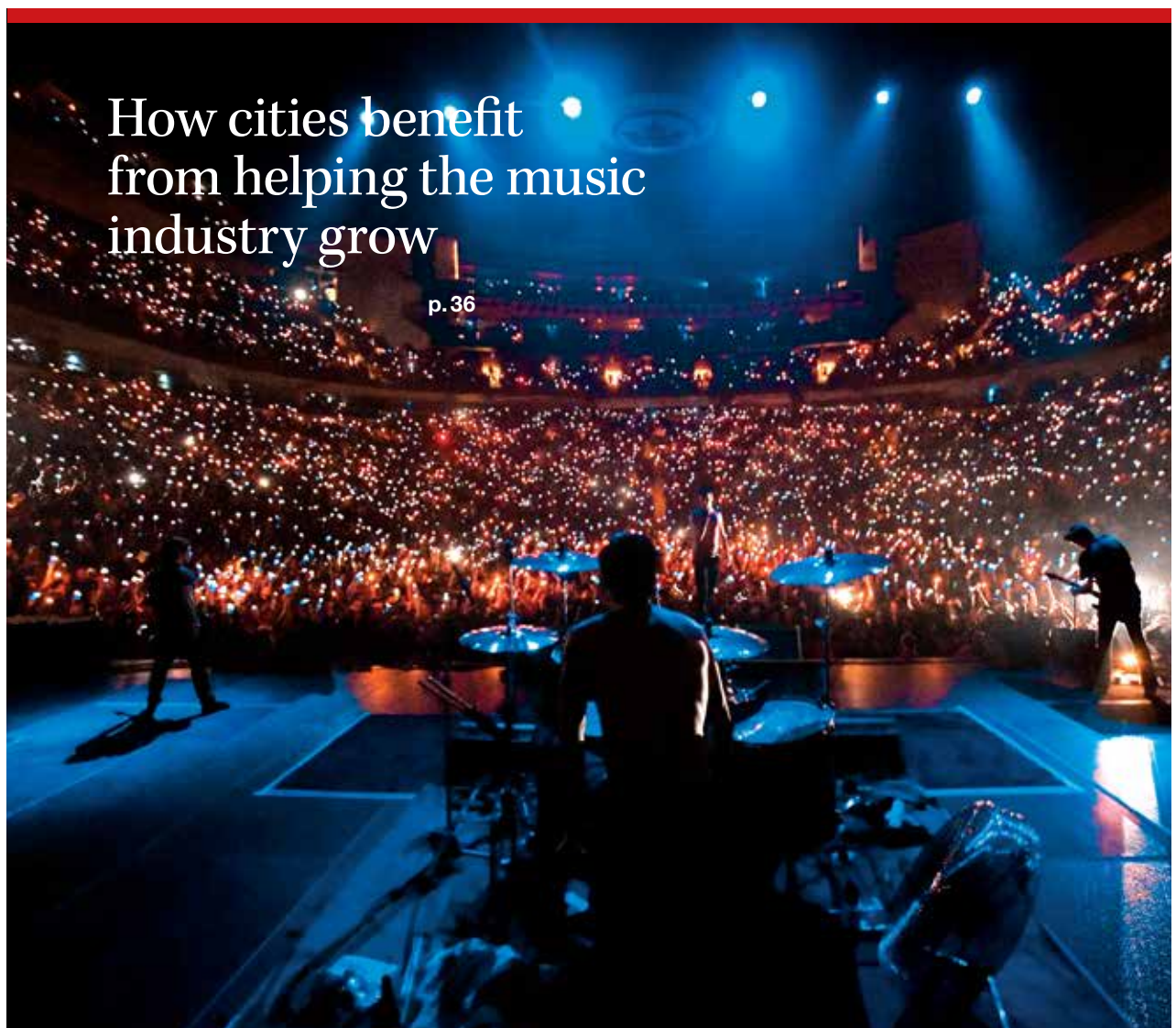
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Harnessing the power of the private sector:

An interview with Francis Gurry



Photo: WIPO/E. Barrod

WIPO Director General Francis Gurry believes that closer engagement with the private sector, through public-private partnerships offers an opportunity for the Organization to boost its capacity to advance agreed public policy goals. Mr. Gurry explains the relevance of these partnerships to WIPO and discusses the opportunities and challenges they present.

There is strong interest in public-private partnerships at the moment. Why is that?

We have seen a general trend over the past 25 years towards the privatization of public functions and utilities, which means the size of the private sector has grown. On top of this, spare capital in the public sector has dried up as governments grapple with austerity measures following the global financial crisis. Today we see that spare capital now lies mainly in private sector hands. For example, in 2012, the budget for the United Nations (UN) system as a whole amounted to USD40 billion. In the same year, private giving in the United States alone amounted to some USD320 billion. It is therefore desirable to find a way to harness some of that capital to fund public programs.

Public-private partnerships can be very effective vehicles for implementing policies agreed by our member states. For example, the *Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled* seeks to address the famine in accessible-format books by establishing the legal framework for such works to move more freely around the world. But while the Treaty creates the possibility of cross border exchange of these books, it does not actually move them. To help make that happen – in line with the agreed policy objective of WIPO member states – we formed a public-private partnership, namely the Accessible Books Consortium (ABC), which in fact evolved from the WIPO Stakeholders' Platform established by member states in 2009.

How are WIPO's public-private partnerships managed?

I want to underline that that public-private partnerships are not a vehicle for establishing intellectual property (IP)

laws or policies. WIPO's normative program remains the prerogative of member states, and member states alone. It is a purely public function.

Public-private partnership initiatives at WIPO are carefully managed in line with the Organizations principles of good governance. They feature in our Program and Budget proposals, which are reviewed and adopted by member states, and like any other program activity, they are subject to rigorous oversight, audit and reporting requirements.

They must also have a practical mechanism, a committee or a board made up of stakeholder representatives, to guide the operations of the partnership.

Can you describe examples of WIPO's successful involvement in public-private partnerships?

WIPO Re:Search and the Accessible Books Consortium are two of our most prominent public-private partnerships.

The very successful WIPO Re:Search partnership was established, broadly speaking, to address the acceleration of drug discovery for neglected tropical diseases, malaria and tuberculosis. It is not concerned with the delivery of health services, but is very much upstream in the research, development and commercialization spectrum.

WIPO Re:Search enables participants to share their IP assets among themselves to advance research into neglected tropical diseases, malaria and tuberculosis. It is designed to address a deficit in research and development (R&D) funding in these diseases which particularly affect the poorest populations of the world. These populations have no purchasing power so the ordinary market incentives for investment in R&D and product development do not exist. There is no market for these products but there is a very real health need, making it a classic case for public intervention.

The Japanese pharmaceutical company Takeda recently joined the WIPO Re:Search Consortium increasing its membership to 98. Ninety-four research collaborations have also been concluded between participating institutions to date. We are very grateful to our partner, BIOVentures for Global Health (BVGH), which facilitates these collaborations [see box].

Similarly, the ABC brings together all relevant stakeholders: authors; rights-holder organizations (collective management organizations) for authors and publishers; publishers; libraries; the World Blind Union; and the Daisy Consortium, an umbrella organization which is working to create technical solutions for people with

visual impairment. It is getting considerable buy-in from stakeholders.

To meet its aim of increasing the number of books available in accessible formats worldwide, the ABC does three things. First, it acts as a cross-border book exchange, enabling participating libraries to download for free books that have already been produced in accessible formats by other participating libraries. Until the Marrakesh Treaty enters into force (when 20 countries ratify it) the ABC is responsible for clearing rights with the relevant rights-holders to permit accessible format books to move across borders.

Secondly, the ABC builds up the technical skills and institutions that developing countries need so they can themselves produce and distribute more books in accessible formats to people who need them.

Finally, through its Accessible Publishing activities, the ABC is encouraging publishers to ensure that every time they publish a work, it is produced in formats that are accessible both to sighted people and to those with visual impairments.

WIPO GREEN [see box] is yet another interesting public-private partnership. It aims to support the market in eco-friendly and clean energy technologies by increasing transparency and enabling actors to come together more easily.

What would you say are the main lessons from WIPO's experience so far?

We are still learning about public-private partnerships, but it is very important to implement them gradually and to establish very clear objectives. All relevant stakeholders need to be on board and to participate in shaping operations. And that takes time.

Consultation and reporting are also extremely important. We endeavor to ensure member states are fully on board and understand the nature of each partnership. In addition to keeping member states informed through our usual, established institutional reporting mechanisms, we also report on progress through the dedicated website of each partnership and through the main WIPO website.

What new partnerships are in the pipeline?

There are no specific plans at the moment. It depends on the opportunities that present themselves, but we have to proceed gradually and carefully to ensure that any new partnerships pursue objectives that are agreed by member states. At present, we are consolidating existing



Photo: WIPO

About the Accessible Books Consortium (ABC)

Launched in June 2014, the ABC aims to increase the number of books worldwide in accessible formats and to make them available to people with visual impairment. The ABC is an alliance comprising WIPO, and organizations representing people with visual impairment, libraries and rights holders.

Results to date:

- 14 participating libraries have contributed their catalogues of searchable titles to the ABC Book Exchange (i.e., the TIGAR Service), which now includes some 290,000 titles in accessible formats in 55 languages.
- Since June 2015, some 3,000 books have been downloaded by participating libraries generating savings of around USD6 million.
- In just one year, the ABC capacity-building program has enabled the production of 1,588 academic books in accessible formats, benefitting 23,500 students in Bangladesh, India, Nepal and Sri Lanka. It has also conducted multiple training courses on the latest accessible book production techniques for non-governmental organizations, government agencies and commercial publishers.
- Twelve publishers have signed the *ABC Charter for Accessible Publishing*.



Photo: iStock.com/Diyana Dimitrova

About WIPO GREEN

WIPO GREEN is an interactive marketplace that promotes innovation and diffusion of green technologies. Launched in 2013, it consists of an on-line database and network that bring together multiple players in the green technology value chain, and connect owners of new eco-friendly technologies with individuals or companies looking to commercialize, license or otherwise access or distribute them. WIPO GREEN is setting its sights on becoming the “go-to” platform for green technologies.

Results to date:

- 63 partners have joined the platform, and over 400 users.
- The WIPO GREEN database is growing by 20 entries per month and includes some 2000 records of available technologies for licensing or sale and identified needs.
- At a matchmaking event in April 2015, 16 potential business collaborations were initiated involving technology owners from Malaysia and the Republic of Korea and technology seekers from Indonesia, the Philippines and Viet Nam.



Photo: iStock.com/Haykirdi

About WIPO Re:Search

WIPO Re:Search catalyzes the development of medical products for neglected tropical diseases, malaria and tuberculosis through innovative research partnerships and knowledge sharing. These diseases affect over one billion of the poorest people on the planet. It was established by WIPO in collaboration with BIO Ventures for Global Health (BVGH) in 2011.

Results to date:

- 98 leading pharmaceutical companies (including Alnylam Pharmaceuticals, Eisai, GSK, Merck KGaA, MSD, Novartis, Pfizer, Sanofi, and Takeda) and other private and public sector research organizations have joined the consortium to share their IP, compounds, expertise, facilities and know-how royalty-free with researchers around the world working on therapies to treat these diseases.
- By September 2015, the WIPO Re:Search partnership hub had established 94 collaborations for knowledge-sharing between participants.

partnerships and working to ensure their financial sustainability and success.

What are the main advantages of public-private partnerships for WIPO?

Public-private partnerships can deliver on the objectives set by member states. They provide access both to intellectual resources and to financial capital that do not exist in the public sector. With WIPO Re:Search, for example, the private sector is opening access to compound libraries, unpublished scientific data and other IP. With the ABC, publishers and authors are contributing intellectual assets in the form of their published works, and of course libraries are also playing a key role in contributing their collections. In each case the private sector is also contributing financial resources.

And the challenges?

Keeping everyone on board is extremely important. This involves making sure that everyone, from member states to all the different stakeholders involved, feel they are part of and have a say in the operation of the partnership. Maintaining regular communication among partners is also necessary to ensure they are up to date with new developments.

Financial sustainability is also extremely important. One of the reasons for public-private partnerships is to access the financial resources of the private sector. Sustaining that interest is a challenge. Private sector stakeholders need to see the fundamental importance and merit of the project, and to perceive it as non-threatening to and compatible with their business interests. Companies involved in WIPO Re:Search are actually helping to create new markets. The same goes for books in accessible formats and for WIPO GREEN.

Do public-private partnerships require a cultural shift for the Organization?

We have to remember that WIPO is an intergovernmental organization and is driven by the priorities established by member states. But the world is rapidly changing and if the Organization is to remain relevant, it has to adapt to that world.

Public-private partnerships do not affect the Organization's intergovernmental character. Member states still drive the Organization and establish its normative program, but public-private partnerships can help WIPO in implementing public policy objectives set by member states. This is evident from our experience with WIPO Re:Search, the ABC and WIPO GREEN which, thanks

to the support of the private sector, are enabling us to advance generally agreed public policy goals with respect to health, literacy and the environment.

Can these partnerships expand WIPO's ability to respond to the rising demand for development assistance?

If you look at the delivery of capacity building and technical assistance activities at WIPO, it has always involved the private sector. For example, we rely on trained patent attorneys to provide technical assistance in drafting patent applications. In many instances, of course, technical assistance is also provided by the IP offices of member states. We need to draw on relevant external resources, whether they exist in the public or the private sector, to ensure that developing countries are able to improve their capacity to use the IP system.

How do you measure success?

There are many ways to measure the success of these partnerships, but each should be judged according to its own set of indicators. In the context of the ABC, for example, when a participating library can get hold of books in accessible formats from a counterpart in other countries, they can use the money they would otherwise have spent on converting that work to convert other works that are not as yet available in accessible formats. When *Harry Potter* was first published, accessible versions in English were created separately in five different countries. The ABC helps to reduce such costly duplication. The money saved can be used to create more new books in accessible formats. Since May 31, 2015, participating libraries have downloaded over 3,000 books via the ABC, generating savings of around USD6 million.

Similarly, WIPO Re:Search is creating opportunities for scientists working on specific disease challenges in developing countries to work in the laboratories of leading pharmaceutical companies and universities in the industrialized world. Sharing intellectual assets for research improves the quality of primary materials available to scientists, which in turn improves research outcomes considerably.

Public-private partnerships bring together the different contributions of multiple partners – governments, industry, civil society, academia – so that we are able to reach beyond what we could otherwise achieve.

Global Innovation Index 2015: Effective Innovation Policies for Development

By **Catherine Jewell**,
Communications Division, and
Sacha Wunsch-Vincent, Economics
and Statistics Division, WIPO

Mature economies have long recognized the far-reaching benefits associated with investing in and strengthening their capacity to innovate. This year's Global Innovation Index, which offers a snapshot of the state of innovation around the world, shows that many middle and lower-income economies are now also actively focusing on strengthening their capacity to promote innovation-driven growth.

The Global Innovation Index (GII), now in its eighth year, benchmarks the innovation performance of 141 economies according to a broad range of indicators which measure innovation inputs – what countries are doing to strengthen their innovation ecosystems – and innovation outputs which measure performance and results. While the GI ranks the innovation performance of the countries surveyed, its overriding aim is to generate insights, identify good practices and to provide practical support to policymakers and business executives in their efforts to improve innovation performance.

The GI 2015 focuses on *Effective Innovation Policies for Development*, and discusses new ways in which policymakers in emerging economies can harness their innovative potential and drive economic growth.

“Innovation holds far-reaching promise for spurring economic growth in countries at all stage of development. However, realizing this promise is not automatic,” said WIPO Director General Francis Gurry. “Each nation must find the right mix of policies to mobilize the innate innovative and creative potential in their economies,” he added.

“Innovation really is a long-term game. It requires perseverance,” Mr. Gurry said pointing to the “perilous” and “complex” process associated with translating an idea

into a successful commercial product. “For many developing countries, this is a major challenge,” he said at the launch of the GI 2015 in London, noting that the report offered interesting lessons for policymakers everywhere to improve their innovation performance.

RANKINGS

GI 2015 indicates that Switzerland, the United Kingdom, Sweden, the Netherlands, and the United States are the world's most innovative nations. These countries share fully integrated innovation ecosystems in which investment in human capital combined with strong innovation infrastructures contribute to high levels of creativity.

The GI also shows that the group of top 25 performers – all high income economies – remains largely unchanged, with some exceptions, suggesting that it is very hard to break into the league of top performers. The Czech Republic (ranked 24) moved into the top 25 group and Ireland (ranked 8th) moved into the top 10 countries this year.

Chile, India, Israel, Mauritius and Singapore were also identified as leaders in their respective regions.

QUALITY MATTERS

Top innovation performers also share a capacity for quality innovation. By this measure, the UK and the US are ahead of the pack, largely as a result of their world-class universities, followed by Japan, Germany and Switzerland. Among middle-income economies, the top scorers are China, Brazil and India, with China increasingly out-pacing the others.

Global Innovation Index 2015 Who is leading innovation?

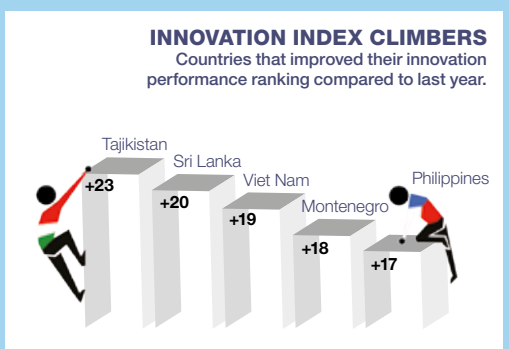
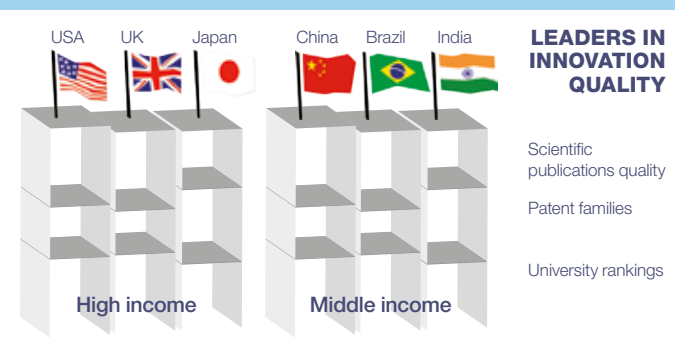
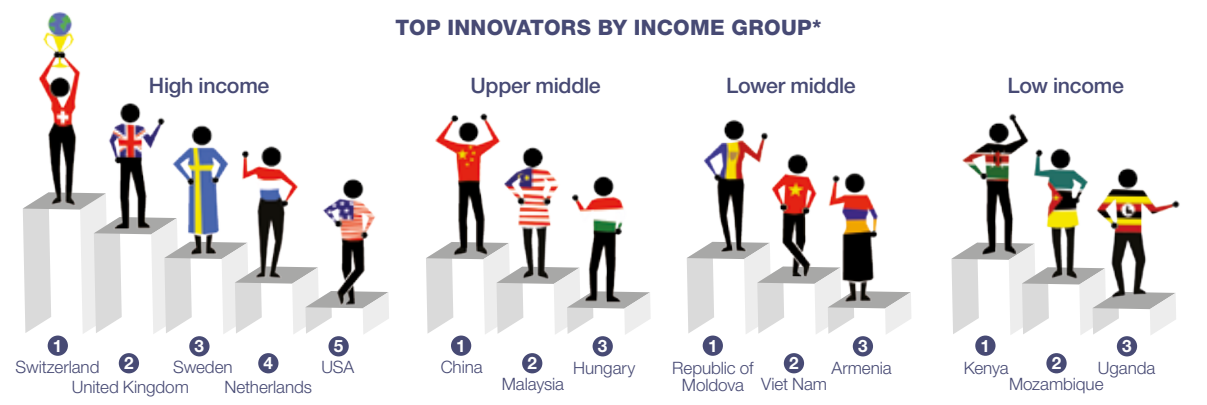
Every year, the Global Innovation Index ranks the innovation performance of more than 140 countries and economies around the world. Each country is scored according to 79 indicators. #GII2015



TOP PERFORMERS PER REGION*



TOP INNOVATORS BY INCOME GROUP*



Universities are powerful magnets for talent. “Universities are key sources of knowledge and expertise for business. They provide us with the highly-skilled work force necessary to drive innovation,” noted by Baroness Neville-Rolfe, UK Parliamentary Under Secretary of State and Minister for Intellectual Property.

“The UK’s progress over the last 5 years reflects the increasing strength of our economy and also the link with an efficient innovation infrastructure and, of course, the universities,” the Minister said. The UK’s GII position rose from tenth in 2011 to second in 2015.

“Innovation is a vital driver of global growth, and economic prosperity,” Baroness Neville-Rolfe said, noting that it was central the UK’s economic recovery. Innovation, she explained, “underpins our competitiveness and it helps capture the new customers and the new markets that we all need for the longer term.”

TECHNOLOGY GAPS ARE NARROWING

While an innovation divide persists between developing and developed economies, technology gaps are narrowing, and national innovation programs, especially in emerging economies, are flourishing. The GII 2015 reveals that an expanding group of these economies, including China, Malaysia, Viet Nam, India, Jordan, Kenya and Uganda are outperforming their economic peers in the innovation stakes.

SUCCESS FACTORS

In focusing on the theme of *Effective Innovation Policies for Development*, the GII 2015 explores whether the types of innovation policies prevailing in high income countries can be adapted to emerging and lower income economies. Effective innovation policies in high income countries place emphasis on improving the conditions for innovation to actually take place by, for example, establishing an enabling business environment and facilitating access to finance. These policies also focus on creating a strong human resource and research base and ensuring that all actors within the innovation ecosystem are strongly interlinked. They also include direct support to businesses, research and development and innovation through grants, subsidies and tax credits.

But simply migrating the innovation policies of high income countries to emerging economies is unlikely to bear fruit. The GII 2015 highlights the importance of developing context-specific policies that reflect the “heterogeneity and varying trajectories” of countries.

Emerging economies face a very different innovation landscape, one frequently characterized by poor infrastructure, weak product, capital and labor markets, underdeveloped educational systems, regulatory gaps, and intense inequalities. That said, a growing number of developing economies are making significant progress in overcoming these challenges and in developing effective national innovation ecosystems. These include China, Malaysia, Viet Nam, India, Jordan, Kenya and Uganda.

LESSONS

While the innovation policies of emerging economy innovation achievers vary from country to country, they share some key characteristics and offer useful lessons.

First, these countries give innovation strategic importance. Government has a key role to play in ensuring that innovation is high on the political agenda. Such visibility helps to cultivate a pro-innovation mindset, to support the development of the private sector (by making it easier to set up businesses) and to strengthen linkages between innovation actors, in particular, the private sector and academia.

Second, innovation is a long-term undertaking that requires perseverance. “There is no stop and go in innovation policy,” noted by Bruno Lanvin, Executive Director for Global Indices at INSEAD and co-author of the GII 2015. Without persistent investment in fostering the institutions and the actors that support innovation, and without strengthening the linkages between all those that have a role within the complex innovation ecosystem, performance can and will diminish rapidly.

Third, a well-coordinated national innovation policy with clear targets and a matching institutional set-up are important ingredients for success. An initial thorough evaluation of existing innovation systems to identify strengths and weaknesses offers a useful roadmap for policymakers to move forward. Ensuring that key innovation actors, including successful national innovators, are on board is also critically important.

Establishing cross-cutting innovation agencies and councils – as witnessed in Georgia and Kenya – with a direct link to the highest levels of government is an effective way of ensuring that innovation policy is well coordinated with other policies including for education, skills, foreign investment, and trade policy. Closer coordination between intellectual property and innovation policies is also useful in terms of creating incentives for innovation, securing a competitive advantage and supporting value creation across the economy. Effective policy coordination is of particular importance in resource-limited contexts.

Fourth, steering innovation and research towards context-specific solutions that address local needs offers huge potential for economic growth. In certain African

countries, such as Kenya, the spontaneous grass-roots development of remarkable technological innovations like the M-Pesa mobile banking service, and the iCow agricultural information service, are having a significant impact on the lives of millions of people.

Greater attention to better harnessing spillovers associated with foreign investment activity into the local economy also offers huge scope for fostering local entrepreneurship and innovation which often go hand in hand. In this respect intermediary organizations, such as non-governmental organizations, have a key role to play in facilitating the transfer of know-how and expertise.

Rallying national efforts around challenges common to all developing countries, also offers significant potential for growth. South-south trade in tailored innovative goods and services is increasingly a reality and a goal.

The data captured in the GII 2015 offer a basis for optimism as economies around the world continue to make solid progress in laying the foundations of future innovation-driven growth. The remarkable developments witnessed in an expanding number of emerging economy innovation achievers suggests that we are in store for some interesting developments in the global innovation landscape in the coming years.

The GII 2015 is available at: www.wipo.int/econ_stat/en/economics/gii/.

Micromax, Madrid, and the 1.25 millionth international trademark

By Catherine Jewell,
Communications Division,
WIPO

WIPO's Madrid International Trademark System reached a milestone this summer when leading Indian consumer electronics company Micromax registered the 1.25 millionth international trademark in the System.

Micromax Informatics Limited is one of a growing number of Indian companies that are taking advantage of the Madrid System to support their ambitions for commercial expansion into global markets. Members of the company's management team explain the origins of their brand and why the Madrid System is an important part of their business strategy.

THE MICROMAX MARK

The trademark Micromax was born of a vision to democratize technology in India. "From the outset we wanted to make connective devices – smartphones, tablets, and more recently LED televisions – available at affordable prices for mass consumption," explains company CEO Vineet Taneja.

"When we were forming the company, we were looking for a name that would connect with users in a meaningful way," says cofounder Sumeet Kumar. "Our aim has always been to give more and more value to users by getting the maximum out of micro things. That is what Micromax means – deriving the maximum value from micro things."

UNDERSTANDING THE MARKET

The "micro" in Micromax, however, is not confined to using high performance micro-electronics. It also involves a "microscopic" understanding of what consumers want. "We pay close attention to understanding consumers. We try to solve some of the problems they face and to derive the maximum benefit in terms of the usability and reliability of the technologies we deliver," notes Mr. Kumar.

The company's marathon phone battery is a case in point. Recognizing that intermittent power supplies are a big problem for phone users in India – many have to travel long distances to charge their phones – Micromax produced the marathon phone battery which lasts up to a month on a single charge.

Similarly, responding to the high demand for Internet access among young users, the company launched its Canvas range of large-screen mobile phones. "In India, mobile phones, especially smart phones, are the first and only device that the consumer has to connect with the Internet," explains Mr. Taneja. "We have actually been able to grab a big share of the market by enabling young consumers who do not have a laptop to connect to the Internet with their phones."

Micromax's Unite series of phones is another example of how the company delivers innovations that are relevant to its customers. Unite supports 21 different languages spoken in India and "is the first device in the country to help consumers use their local language to connect to the Internet," Mr. Taneja explains.

REINFORCING BRAND VALUE THROUGH INNOVATION

By consistently delivering market-relevant technologies and steadily building connection with its customers, the company has seen its credibility as a trusted producer of consumer electronics soar. "The connection we have created with our end-users is fantastic," says Mr. Kumar.

"For people to buy an electronic product in India, in a developing country, where *per capita* incomes are low, trust is a very important factor," says Mr. Taneja. "Consumers buy our products because they trust the Micromax trademark. They really expect the best from Micromax. They want products that are affordable and relevant to them. Users now understand that Micromax is all about looking for the maximum from our micro offerings."

The Madrid System simplifies

Since 1989, the Madrid System has been governed by two international treaties: *the Madrid Agreement Concerning the International Registration of Marks* (1891) and the Madrid Protocol relating to that Agreement (1989), which modernized the system.

The accession to the Madrid Protocol of Algeria – the last remaining member of the Madrid Agreement to join the Protocol – in July, means that, as of October 31, 2015, when the Protocol enters into force in Algeria, the Madrid System will operate in practical terms as a single-treaty system. As of that date, all transactions between contracting parties and users will be governed by the Madrid Protocol, making it simpler for trademark owners to register and manage their trademark rights worldwide.

“We are a company that lives by innovation,” explains the company’s Chief Marketing Officer, Shubhajit Sen. “We are nimble in picking up insights from the market and developing and delivering solutions that surprise and delight consumers, and that has made us very successful.”

THE IMPORTANCE OF TRADEMARKS

In the highly competitive consumer electronics sector, Micromax’s trademark enables it to stand out from the crowd. “There is an incredible amount of competition in this sector. New products and new brands launch every day, so our trademark, our brand is critical, because it differentiates us and enables us to communicate with our consumers,” says Mr. Sen.

“Trademarks are how consumers recognize us. They trust our products because they trust the Micromax trademark. Our company’s most valuable assets, after our people, are our trademarks, notes Mr. Taneja. “Trademarks give us huge business value. Without them there is very little business opportunity for companies like us.”

“In the age of the Internet and social media, having a trademark is really important because today consumers learn about brands through social media well before physical products reach them,” explains Mr. Sen. “Trademarks protect our identity, they communicate a promise of quality and reliability and they also have emotional value.”

The company’s brand also fuels its strong team spirit. “Micromax drives every employee in the company. When we say, “Micromax: nothing like anything” every employee has to live up to that,” notes cofounder Rahul Sharma. “Your brand is your blood. Your commercial survival depends on it.”

FROM INDIA TO THE WORLD VIA MADRID

With ambitions to expand into global markets, Micromax is using WIPO’s Madrid System to register its trademarks abroad. “The Madrid System is easy, fast and very cost-effective,” says Mr. Sen. “It gives us a global reach and is a simple and convenient way to register our trademarks in many countries. The System is managed centrally, so we only have to file one application in one language. There is no need to keep filing separate applications to register or renew our trademarks in the countries we are targeting. This saves us a lot of time and money and means we can focus on innovating and developing our core business.”

“The Madrid System cuts through the bureaucracy and is flexible and convenient to use. We found the Madrid Fee Calculator, the Madrid Goods & Services Manager and the International Application Simulator very useful because they gave us a good idea about the fees we would have to pay and helped us plan better.”

The Madrid System also allows trademark owners, by way of a single request, to designate additional Madrid member countries

after the initial registration, and thereby extend protection of their trademarks to new export markets. “Subsequent designation really helps because it gives us the flexibility to expand trademark protection in new countries as the business expands,” explains Mr. Sen.

“We have been using the Madrid System for a little over a year now. Our first point of contact was the Indian Intellectual Property Office, which was very helpful in guiding us through the process and ensuring that we met all the requirements,” notes Mr. Taneja.

GLOBAL BRAND VISIBILITY

“In today’s interconnected world, a company can no longer remain a single-country brand. We want to bring our innovative products to consumers outside of India and the Madrid System is helping us to do that,” explains Mr. Sen.

So far, Micromax has 30 trademark registrations covering around 70 percent of its global product portfolio, but the company expects that its use of the Madrid System will “ramp up” as it expands.

A SMART BUSINESS SOLUTION

“International trademark registration is an important first step when a company expands abroad, and the Madrid System opens the doors for Indian companies to export by simplifying the process of registering trademarks internationally. I think it is really important for Indian companies to use the Madrid System because it is a really cost-effective, convenient and fast option for anyone planning to expand into markets outside of India,” says Mr. Sen.

In the two years since India joined the Madrid System, there are already a growing number of domestic companies taking advantage of it to protect their trademarks abroad. Similarly, the number of foreign companies seeking a foothold in the Indian market and designating India in their international applications is on the rise.

The Indian economy is booming, with a projected growth rate in 2015 of 7.5 percent. As Indian companies eye opportunities in foreign markets and as awareness of the advantages of the Madrid System among India’s business community grows, it is not hard to imagine that before long, India will become a major user of this rapidly expanding System.

“The Madrid System is a big enabler for businesses. It gives us global reach and covers around 80 percent of world trade.”

Vineet Taneja, CEO, Micromax

“The Madrid System is the best platform for companies to make their brand visible worldwide.”

Rahul Sharma, cofounder, Micromax

Minister of State (Independent Charge) for Commerce and Industry, Nirmala Sitharaman conferring the Trademark Registration Certificate for the 1.25 millionth trademark under the Madrid System to Vineet Taneja, CEO, Micromax Informatics, Ltd., in July 2015.



Photo: Micromax Informatics Limited

First impressions of the “dot.anything” world

By **Jason Miller**, Fellow, WIPO
Arbitration and Mediation Center

Just a few years ago the Domain Name System comprised a handful of generic Top Level Domains (gTLDs). Today there are over 1,000 Top Level Domains – with still more set to come online. Familiar gTLDs like “.com” and “.net” now share the Internet with newcomers such as “.online” and “.ngo”. The Domain Name System is becoming a “dot.anything” world.

The Internet Corporation for Assigned Names and Numbers (ICANN) – which oversees the Domain Name System (DNS) – has predicted that its “New gTLD Program” will transform the way people use the Internet by introducing competition, choice and innovation (see <http://newgtlds.icann.org/en/about/program-materials/fast-facts-27feb15-en.pdf>). At the dawn of the expansion, the author of a 2012 WIPO Magazine article on *The Evolving Domain Name Landscape* wrote: “Only time will tell what the impact of ICANN’s introduction of over 1,000 new gTLDs will be on brand owners and the Internet-using public.”

What have the last three years revealed about ICANN’s DNS expansion plans? Have ICANN’s predictions been borne out, or has its New gTLD Program fizzled? The answer may differ for domain name prospectors, the general public and brand owners.

THE 2012 EXPANSION

ICANN began accepting applications for new gTLDs in January 2012. Entities ranging from brands (“.hsbc”) to municipal governments (“.nyc”) to non-profits (“.hiv”) applied.

ICANN received 1,930 applications from 60 countries and territories. Around 47 percent of applicants were North American, 35 percent European and 16 percent were from the Asia-Pacific region. South American and African applicants accounted for the remaining two percent. Reflecting the Internet’s global reach, ICANN received 116 “internationalized” applications for gTLDs in, among others, Arabic, Chinese, Cyrillic, Devanagari and Greek script. These include, for example, .公司 (Chinese for “.company”), and .онлайн (Russian for “.online”).

The first of these new gTLDs (شبكة, or .shabaka – Arabic for “.web/.network”) went live in October 2013, and as of now over 700 TLDs from the 2012 round are live on the Internet.

BUILDING NEW GTLD AWARENESS

ICANN launched the 2012 program ostensibly to increase consumer choice, in part by facilitating competition among gTLD operators (known as “registries”). Would-be domain name registrants are no longer limited

Domain name dispute resolution services at the WIPO Arbitration and Mediation Center

- The WIPO Center provides neutral, non-profit dispute resolution services in IP disputes, notably those brought under the Uniform Domain Name Dispute Resolution Policy (UDRP).
- The WIPO Center is the global leader in UDRP services, having administered over 30,000 proceedings since 1999. In 2014 the Center processed 2,634 cases.
- In 2014 the top five countries by UDRP filing volume were the US, France, the UK, Germany, and Switzerland. The top five areas of commerce were retail, banking and finance, fashion, Internet and IT, and heavy industry and machinery.
- Unique among UDRP service providers, the WIPO Center makes jurisprudential resources freely available online; it also provides filing-fee refunds in cases of party settlement (representing nearly 25 percent of cases).

to a narrow range of options to the right of the dot. An attorney, for example, can now hang a digital shingle in the “.lawyer” or even “.abogado,” “.attorney,” “.esq,” or “.law” registries.

In the newly crowded domain name market, registries must promote their name spaces to survive. Some tout the expressive potential of their offerings. The “.sucks” registry, for example, has put up a billboard outside Boston’s Fenway Park baseball stadium proclaiming “NEWYORK.SUCKS,” using the longstanding sports rivalry between the two cities as an eye-catching example of how its gTLD could be a platform for debate. In reality, however, users visiting “newyork.sucks” are greeted with an invitation to register their own “.sucks” domain name. Indeed, while the “.sucks” registry has trumpeted itself as a platform for criticizing others, it has itself faced mounting criticism for preying on the enforcement concerns of brand owners and extracting registration fees upwards of USD2,500 when members of the public are charged less than USD250. US Senator Jay Rockefeller called this a brazen “shakedown.”

Others promote the authentication value of their strings. The “.vote” TLD, for example, is being marketed to political campaigns as something of a “seal of approval” for Internet users, as only those officially associated with a campaign can register “.vote” domain names. They will have competition, though, from “.voto,” “.democrat,” “.republican” and even “.gop” in the United States.

Still other registries market their new online identities through “founders” programs. The “.nyc” founders program, for example, sought 50 applicants whose “work embodies the spirit and opportunity of New York City.” Those chosen included New York City-based nonprofits (Bike New York; “bike.nyc”) neighborhoods (Flatiron District; “flatirondistrict.nyc”) and local culture (Gothamist; “gothamist.nyc”).

Whatever the strategy, new gTLD registries are determined to build end-user awareness to avoid becoming digital ghost towns.

NEW GTLD ADOPTION AMONG DOMAIN NAME REGISTRANTS

Three years into the program, no new gTLD has come remotely close to displacing the popularity of “.com”





In the three years since ICANN launched its new gTLD program, no new gTLD has come close to displacing the popularity of ".com" or ".net" among domain name registrants.

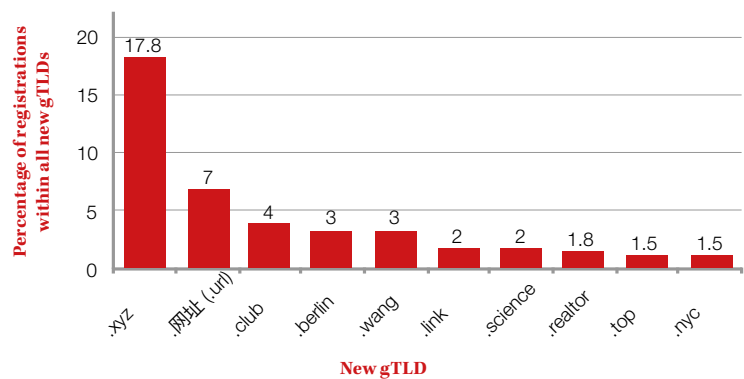


or “.net” among domain name registrants. The first quarter of 2015 closed with 294 million total domain name registrations across all Top Level Domains (i.e. both gTLDs and ccTLDs): 117.8 million registrations were in “.com” and 15.1 million were in “.net,” together accounting for approximately 45 percent of total registrations.

New gTLDs, by contrast, accounted for only 4.8 million registrations by the end of Q1 2015, or 1.6 percent of total domain name registrations. However, even these modest registration numbers may indicate a misleadingly high user adoption level, as some registrars have apparently gifted domain names in new gTLDs to registrants (<http://domainincite.com/16771-xyz-launch-inflated-by-massive-netsol-giveaway>).

Top 10 new gTLDs by registration Q1 2015

(source: VeriSign Domain Name Report June 2015).



Moreover, the majority of these registrations do not appear to be in use. According to www.ntldstats.com, as of August 7, 2015, 78 percent of registered new gTLD domain names are “parked”, meaning that they resolve to “pay-per-click” websites without developed content.

NEW GTLDS AND INTERNET USERS

It is no coincidence that, just as legacy gTLDs remain popular among domain name registrants, they also remain popular among Internet users. According to Quantcast, which ranks websites based on monthly visitors from the United States, 95 out of the 100 most popular websites – all legacy gTLDs – were in “.com” and receive between 13 and 207 million US visitors per month. By contrast, as of August 2015, the most popular new gTLD website in the United States is the parenting blog www.beingamom.life, with only 960,733 monthly US visitors.

NEW GTLDS AND DOMAIN NAME INVESTORS

The fact that new gTLDs account for less than 2 percent of total registrations and fall well short of “.com” web traffic does



not mean they cannot be valuable assets. Recently, “autism.rocks” was sold for USD100,000. Industry commentators were quick to point out that this price is ten times higher than that paid by the same buyer for the “.com” variant of the domain name (“autismrocks.com”). While the prices in blockbuster “.com” sales dwarf those so far observed for new gTLDs (“IG.com” sold in 2013 for USD4.7 million, for example), domain names in new gTLDs can still trade as valuable commodities.

Top 10 publicly-reported new gTLD aftermarket sales

Domain name	Price (USD)
wine.club	140,000
autism.rocks	100,000
net.work	100,000
luxury.estate	50,000
pro.flowers	50,000
world.estate	35,000
commercial.property	25,000
baltic.cruises	25,000
english.club	17,500
star.casino	11,200

(source: August 2015 review of www.dnjournal.com).

NEW GTLDS AND BRAND OWNERS

While hundreds of brand owners have now applied for their own “.brand” TLD, many more brands chose to sit out the 2012 round because of uncertainty surrounding consumer adoption. For the same reason, most of the brands that did submit applications (34 percent of all applications) are in wait-and-see mode. A few early movers such as Barclays Bank have begun migrating their web presence; the “barclays.com” domain name now redirects to “home.barclays”, a highly restricted, secure new online space. For banks that missed the new gTLD application window, there is “.bank”, a verified and secure online location limited to registry-approved banks.

BRAND PROTECTION IN THE EXPANDED GTLD WORLD

Brand owners were understandably worried that ICANN’s New gTLD Program, if not executed with appropriate controls in place, would bring about a massive increase in trademark infringement and consumer fraud. To address these concerns, and to garner community consensus to launch its program, ICANN implemented a handful of new trademark protection tools. Their utility, however, remains in question.

New gTLD trademark protection tools

Trademark Clearing House (TMCH)	Preventative protection			Curative protection	
	Sunrise Period	Claims Notices	Trademark Owner Notices	URS	UDRP
<p>Centralized database of authenticated trademark information.</p> <p>Gateway to Sunrise and Claims tools.</p> <p>Nearly 38,000 marks submitted.</p>	<p>Gives trademark owners priority access to register domain names during new gTLD “sunrise” periods, before the general public, for a premium fee.</p>	<p>Notice sent to would-be domain name registrants that their desired name matches a TMCH-recorded trademark.</p> <p>Sent for the first 90 days of a new gTLD launch.</p>	<p>If, after receiving a Claims Notice, the registrant registers the domain name, the owner of the corresponding mark is informed.</p> <p>180,000 notices sent so far.</p>	<p>An ICANN-created expedited version of the UDRP to address more “clear-cut” instances of abuse.</p> <p>Remedy: suspension of domain name.</p> <p>Around 350 cases in total.</p>	<p>The WIPO-initiated mechanism for addressing trademark-abusive domain name registrations.</p> <p>Remedy: transfer (or cancellation) of domain name.</p> <p>Nearly 400 cases filed with WIPO alone.</p>

DISPUTE RESOLUTION

So far, the WIPO Arbitration and Mediation Center has administered nearly 400 cases involving new gTLDs under the WIPO initiated Uniform Domain Name Dispute Resolution Policy (UDRP). This represents a small but growing proportion of WIPO’s annual UDRP caseload. Brand-owner UDRP enforcement budgets, however, largely remain focused on legacy gTLDs (predominately “.com”).

In terms of new gTLD enforcement efforts, from the combined URS (Uniform Rapid Suspension) (see box) and UDRP experience, brand owners seem to be primarily monitoring new gTLDs with significant registration volumes, or those which reference their industry (e.g. “canyon.bike”, “coit.cleaning” or “clifford-chance.attorney”). Even when brand owners deviate from this more narrow approach, they are focusing enforcement efforts on domain names that exactly match their marks – declining for now to chase after domain names comprising infringing typos.

For brand owners wishing to forgo curative URS or UDRP proceedings, those with their marks in the TMCH (Trademark Clearinghouse) (see box) can preemptively acquire domain names matching their marks through registry Sunrise Periods. Of course this comes at a premium – often costing as much as ten times the ordinary registration fee. It seems

likely that because of the sheer volume of new gTLDs – not to mention increasing pressure on enforcement budgets – brand owners are circumspect even about using this preventative enforcement tool

THE JURY IS STILL OUT

Whether ICANN’s New gTLD Program will have the predicted transformative effect remains to be seen. Registration numbers and web traffic are modest even in the most popular new gTLDs, and “.brand” adoption remains in its infancy. It is still early days, however, and many of the most popular new gTLDs (which had to be auctioned off under ICANN’s rules) have yet to launch.

In addition, registries are counting on users seeking new gTLD alternatives to domain names held by “.com” speculators, and their preference for the simplicity of shorter, sleeker domain names available in new gTLDs. Beyond these incremental developments, however, more interesting effects of the DNS expansion may lie ahead. Trailblazers such as Amazon and Google (both applicants for many “.brand” and “keyword” strings) may start looking outside the confines of today’s business model of merely reselling domain names. Domain names may also find application beyond alphanumeric identifiers, for example, use in connection with the Internet of Things, or with other as-yet unforeseen and innovative endeavors.

Africa's innovators are open for business

By Catherine Jewell,
Communications Division, WIPO

"Africa is on the move," US President Barack Obama told the Global Entrepreneurship Summit in Kenya this summer. A new generation of tech-savvy entrepreneurs with a "can do" attitude is injecting dynamism into Africa's start-up scene which is skyrocketing. The continent is abuzz with innovation and entrepreneurial activity. Tech hubs, incubators and other initiatives are popping up across the continent, fueling a spirit of optimism and unprecedented opportunities for growth. One such initiative is the public-private partnership, DEMO Africa. Harry Hare, Executive Producer of DEMO Africa, shares his views about Africa's gathering technological revolution.

What is DEMO Africa?

DEMO Africa is a launchpad for new technology start-ups. It is a place where Africa's most innovative companies can launch their products and tell Africa and the world what they have developed. Each year, technology start-ups from across Africa apply for a chance to promote their innovations at the annual DEMO Africa conference. We identify 40 of the most innovative start-ups to participate in that event. These are businesses that are solving real-world problems with high potential to succeed.

The DEMO Africa conference brings Africa's tech ecosystem together in one place. It's an opportunity for Africa's top start-ups to pitch their innovations to venture capitalists, investors, technology buyers and the media from across the region and beyond, and to secure investment and attract publicity for their inventions.

What makes the African technology sector so interesting?

Africa's tech space is fresh. Africa's new entrepreneurs are passionate about what they do. They are skilled and

ambitious and have a lot of energy. This is a potent mix which is generating a great deal of enthusiasm and belief in Africa's potential to join the global stage.

The continent has a diverse and talented pool of young people and now we are beginning to see a commitment on the part of governments to utilize this massive source of brainpower to bring about positive change, especially through technology. Africa has many problems, from education to health and infrastructure, and the technologies that are coming out of Africa are solving real problems – this is what people are seeing and are interested in.

How is the technology landscape in Africa changing?

Since 2012, when DEMO Africa launched, the start-up scene has really taken off. The quantity of these businesses is quite remarkable, as is their quality.

One thing that really excites me about Africa's technology landscape today is that for the first time in a long time, we are seeing technologies being built in Africa, by Africans, for Africans, but also usable anywhere in the world, and especially in other developing countries. Until now, Africa has been a net consumer of technology, but now we are seeing people developing and using home-grown technologies. We are also seeing African-built technologies being exported around the world. It is a very exciting time to be in Africa and to be working in the field of technology.

Africa faces two challenges which have become opportunities. The first is that we have a lot of problems. The second is that we are "under-wired." This has fueled the massive uptake of mobile phones across the continent which is creating huge opportunities for mobile-based



Photo: DEMO Africa

DEMO Africa 2014 featured the inaugural SWELL Innovation Award. As the Award winner, Saisai Wireless, a start-up from Zimbabwe, which provides free public WiFi access by using idle bandwidth from WiFi routers and hotspots, won an all-expenses paid trip to Silicon Valley to take part in the SWELL Innovation Tour. SWELL, a DEMO Africa partner, is a global innovation partnership and corporate innovation accelerator.

solutions. Start-ups have recognized that the widespread uptake of mobile technology in Africa means there is a huge and expanding market for their products. That explains why well over 50 percent of the applications launched through DEMO Africa are mobile based.

What are the main challenges for African start-ups?

The first is **access to capital**. Many find it difficult to attract the seed capital they need to establish proof of concept. Then, if they overcome that hurdle, they need capital to scale up their business.

A second challenge is **capacity**. Not technical capacity to develop the solutions, but the soft skills needed to get a product to market, to handle sales, marketing, human resources and so on. These skills are critical for building up and sustaining a business. Many of these start-ups were established by technical specialists who simply have never had an opportunity to learn the skills needed to run a business successfully.

A third challenge is **credibility**. Investors need to feel that start-ups are credible partners with solid technologies that offer viable business solutions. Creating that kind of credibility in the market is a big challenge. We are beginning to see changes in this, but it is happening very slowly.

The fourth challenge is **connectivity**. Today, business survival can hinge on having access to business or client networks, but many start-ups struggle because they do not have access to them. Most people still have a phobia of technology solutions coming from start-ups because they associate start-ups with uncertainty. But as big corporates start adopting technology solutions from start-ups and are increasingly willing to partner with them on their go-to-market strategies, there is some movement in this area also.

A fifth challenge relates to effective use of **intellectual property (IP)**. IP is fundamental to the success of these companies. They need to protect their innovative assets, but more needs to be done to change perceptions within

the start-up community and to drive home the message that IP is a friend of business and can enable them to advance their goals.

Start-ups know they need to protect their ideas and their businesses, and are generally unwilling to share information about their products before a non-disclosure agreement (NDA) has been signed. But the way they use NDAs is often counterproductive. Overly preoccupied with their own interests, they often present potential investors with a one-sided, hostile NDA which does little to build trust or cement a fruitful outcome.

Start-ups need a supportive ecosystem to thrive. Government has a key role to play by putting into place a robust regulatory framework and business-friendly policies. By its nature, investment is a risky business, but governments can do a lot to help de-risk it.

What is the key to ensuring the sustainability of Africa's technology sector?

Markets are the key to sustainability. Markets are created by producing real solutions to real problems. When people can buy a product or a service that solves a practical problem they face, the market for that product will grow.

Africa has many challenges, but each of these is actually an opportunity to develop practical solutions and applications. We don't need to copy what others have done, we simply need to look at all the problems we have, identify a need and develop an application to meet it. Basically, we need to do our own thing in Africa. This is starting to happen and it is very exciting.

Do you see any improvement in the investment climate?

We are seeing growing recognition within the investment community that Africa's growing tech scene offers significant investment opportunities. Investors have a key role to play because investment takes entrepreneurs from where they are to where they want to be and the success of any start-up depends on its ability to scale-up its operations.

But we do still have some way to go with respect to engaging local investors, who are still more comfortable investing in brick-and-mortar projects. Until the local investment community fully recognizes the value of investing in technology, it will be very difficult to have

sustainable investment in African start-ups. Many Silicon Valley and European investors don't really understand the local environment, and therefore tend to shy away from investing heavily in start-ups, so local investors play a key role. It is a journey and we are slowly but surely making progress.

We are working with our partners to organize Angel Investor Bootcamps to help mobilize early-stage investors and to highlight the huge potential of the African tech sector. As part of DEMO Africa 2014, we organized the first Annual Angel Investor Summit, which was a great success and resulted in the formation of the African Business Angels Network (ABAN). A similar event is being organized as part of DEMO Africa 2015 and will bring together a growing number of investors from across the continent and elsewhere.

What benefits do start-ups get from DEMO Africa?

DEMO Africa offers start-ups a launchpad for their products and an opportunity to attract much-needed investment and publicity. They benefit from business support and advice provided by a team of coaches and mentors at our boot camps. These intensive three-day entrepreneurship training courses cover all aspects of business development, including intellectual property. We groom them to make an effective pitch at the launch event, and follow them for around six months after that to help them with any unforeseen challenges. Start-ups also benefit from extensive media exposure and crucially, they are plugged into DEMO Africa's global network. If a start-up launches at DEMO Africa, it can also launch at other DEMO events elsewhere. If they decide to enter the US market, for example, they can launch at DEMO in Silicon Valley, or if they want to enter the Brazilian market they can go to DEMO Brazil.

What lies ahead?

We are beginning to see world-class products and solutions coming out of Africa, and people outside the continent are taking note. We have also started seeing joint-venture projects between African entrepreneurs and their counterparts in other countries. But more importantly, we are seeing increased interest by venture capital firms from both within Africa and in Europe and the United States. All these factors point to a very fertile space where big-ticket solutions will start to emerge.



Photo: DEMO Africa



Photo: DEMO Africa

DEMO Africa is an opportunity for Africa's top start-ups to pitch their innovations to venture capitalists, investors, technology buyers and the media.

A new generation of tech-savvy "can do" entrepreneurs is injecting dynamism into Africa's start-up scene. DEMO Africa is a place where Africa's most innovative companies can launch their products.



Photo: DEMO Africa

Mining innovation

By **Fidel Báez Nuñez**, Head of Technology and Innovation, Codelco, Chile



Photo: Codelco



Photo: Codelco

Over the decades, technological innovation has enabled Codelco to increase productivity and reduce risk of injury. Today, innovation holds the key to achieving sustainability and securing the highest levels of mining performance.

Chile is a mining country *par excellence* with an abundance of valuable metals and minerals such as gold, molybdenum and lithium, but none more important than copper. Chile holds around 30 percent of the world's copper reserves and is responsible for around one-third of global copper production, making it the world's largest producer and exporter of the red metal.

GLOBAL MINING FACES TOUGH CHALLENGES

But Chile's mining industry and the global industry as whole are facing a number of tough challenges. Ore deposits are increasingly low grade, complex, and deeper in the ground, making mining operations more technically challenging and costly.

Production costs are soaring. According to a study by the Chilean Copper Commission (Cochilco), since 2005 the cost of producing copper has gone up every year by 10 percent on average. In 2005 the cost of producing a pound of copper was 90 cents but in 2014 these costs rose to 217 cents per pound.

The industry is also facing wage inflation, water shortages, increasingly stringent environmental regulation and rising energy costs associated with the need to haul rocks containing the ore longer distances and to treat and refine more complex, lower-grade deposits.

CODELCO: THE WORLD'S LARGEST MINING OPERATION

The state-owned mining company, Codelco, is the world's largest mining operation. We are Chile's main copper producer and its second largest producer of molybdenum, a metallic element used in steel alloys.

Codelco is in the business of exploring, developing, exploiting, processing and commercializing copper and its byproducts. We produce around 10 percent of the world's annual copper output and own nine percent of global copper reserves.

In 2014, Codelco produced over 1.84 million metric tons of fine copper. We currently employ over 18,000 workers and have operations in underground mining, open-pit mining, mineral processing, smelting, refinery and bio-hydrometallurgy. In our 44-year history, we have contributed over USD115 billion to the Chilean economy.



Photo: Codelco

Codelco's innovation strategy involves transferring and adapting existing technologies and developing new ones to address the challenges confronting each of their eight mining and processing operations.

However, amid rising production costs, a gloomy global copper market and degrading mineral resources, Codelco, like others in the sector, is struggling to remain competitive.

Reducing operating costs, expanding productivity and improving the safety and occupational health of employees are top priorities.

INNOVATION IS CRUCIAL

In our drive to achieve greater sustainability and the highest levels of mining performance, Codelco is investing heavily to expand the production capacity of our aging mines and to find new high-grade deposits. Innovation has a key role to play in achieving these goals. In past decades, technological innovation has enabled us to increase productivity and reduce the risk of injury, and today innovation holds the key to future performance.

Codelco's technological innovation and research policy is designed to enable the company to come up with innovative solutions to overcome the challenges thrown-up by our mining activities and for which no market solutions are available. Every year we invest around USD100 million to develop cutting-edge technologies and to ensure our mining operations are world class. Our aim is to be at the forefront of mining technology. This will enable us to boost productivity, enhance worker safety, safeguard the environment and remain competitive.

Global demand for minerals and metals continues to increase – a two percent annual growth in demand means that current production has to double every 38 years. In order to meet this demand, we need to find new, more effective ways to identify and exploit the Earth's reserves. As mines age, these reserves are becoming increasingly difficult to exploit, adding greater impetus to the innovation imperative that is driving the search for technological solutions.

SMART MINING TECHNOLOGIES: THE WAY FORWARD

Codelco's innovation strategy involves transferring and adapting existing technologies and developing new ones to address the challenges confronting each of the company's eight mining and processing operations (Andina, Chuquicamata, El Teniente, Gabriela Mistral, Ministro Hales, Radomiro Tomic, Salvador and Ventanas).

In recent years Codelco has been focusing on developing smart mining technologies for use at every stage of the production process, from extraction at the mine site to the production of cathodes used in a wide variety of electrical and electronic goods and systems.

These technologies are helping us to improve productivity and operational efficiency and to make significant cost savings. Tele-robotic mining, for example, using remote-controlled robotic machinery to extract minerals

is reducing the risks for miners. We are using robots at our Gabriela Mistral mine in Antofagasta to inspect equipment to improve the efficiency of our maintenance services. The haul trucks used there are also completely autonomous. New digital technologies are also allowing us to achieve higher levels of integration and automation of processing operations and to manage them remotely.

IP IS CENTRAL TO CODELCO'S INNOVATION STRATEGY

In tackling new mining and metallurgical challenges, the company has pioneered many new technologies which we protect with patents. Intellectual property (IP) is extremely relevant to Codelco's research and development activities.

The company's IP strategy is applied in three main areas.

First, it plays a role in developing prototype mining equipment. We establish agreements with commercial suppliers to build prototypes which, once validated, are incorporated into our production processes. Within the framework of these agreements we transfer our IP to our commercial partner to optimize product development.

Second, Codelco protects with patents the technologies that it develops. So far Codelco has submitted 250 national and international patent applications, of which 134 have been granted in Chile and 21 in other countries. The company is among the top Chilean mining companies in its use of the patent system.

Codelco's first patent, granted in 1978, was for the Teniente Converter, an energy-efficient furnace that is capable of melting and converting copper concentrate. Over the years we have significantly improved the converter's performance and it is now used by mining companies in Chile, Mexico, Peru, Thailand and Zambia. We also hold patents on many mining processes, including, for example, bioleaching – where micro-organisms are used for low-cost and efficient extraction of copper from low-grade sulfide minerals.

Third, IP plays an important role in the context of the network of alliances we are building with different companies, research centers and universities to develop innovative, high-performance solutions in line with our strategic goals. Ten such alliances have been established so far.

BOOSTING IP AWARENESS AMONG EMPLOYEES

In collaboration with the National Institute of Intellectual Property (INAPI) and the Institute for Innovation on Mining and Metallurgy (IM2), we are also initiating a plan to boost IP awareness across the corporation. The aim is to promote a deeper understanding of the impact that IP has on our activities and our bottom line, and why it is important to effectively protect and manage the company's own IP assets and to respect those of third parties. Within the context of this initiative, we are also establishing a specialized IP unit at IM2's office to offer IP-related advice and consultancy services.

Innovation is at the core of Codelco's plans for the future. Only by leveraging cutting-edge technologies and developing new ones will it be possible for the company to meet its strategic objectives with any success.



Photo: Codelco

Chile's Codelco is the largest mining operation in the world. Innovation is a strategic priority for the company. Every year it invests around USD100 million to develop cutting-edge technologies and to ensure its mining operations are world class.

Publishing in the UAE: an insider's perspective

By **Catherine Jewell**,
Communications Division, WIPO



Photo: Kalimat Publishing

“When I first ventured into publishing, I was optimistic about the future but could not have foreseen the phenomenal rate of expansion of the Arab publishing sector,” says Ms. Al-Qasimi (above).

Bodour bint Sultan Al-Qasimi is a driving force in the development of the United Arab Emirates' publishing industry and in promoting the development of Arabic children's literature and reading. She is Founder and CEO of Kalimat Publishing, Founder and Patron of the UAE Board on Books for Young People, Founder and Patron of the Emirates Publishers Association, and Director of Knowledge Without Borders. Ms. Al-Qasimi, who in 2014 became the first Arab woman to serve on the Executive Committee of the International Publishers Association, shares her views about the opportunities and challenges associated with the UAE's evolving publishing landscape.

How did you get involved in publishing?

My journey into publishing began with children's books in 2007. At the time there were very few good quality Arabic children's books – those that did exist were translations of foreign books and their print quality and illustrations were very poor. That is what prompted me to set up Kalimat Publishing, with the aim of producing high quality and enjoyable Arabic literature that would capture the imagination and interest of children.

How would you describe the UAE's publishing landscape today?

Publishing in the UAE is still in its infancy, but has significant potential to develop into a sector of strategic relevance domestically and across the region.

While there are no exact figures available, the estimated value of the UAE book market is around one billion AED (approx. USD272 million) and it is expected to experience further expansion with the rapid uptake of e-books.

With one of the most tech-savvy populations in the world – Internet and smartphone penetration at 92 percent and 72 percent respectively – the future of electronic publishing looks bright. I believe that while digital technology will enhance reading, there will continue to be a place for the printed book. Reading on paper will always remain enjoyable (and easier

on the eyes than reading electronically). That said, to remain relevant, publishers need to keep up with technological advances and create sufficient rich and interactive content to meet the ever-changing needs of consumers.

When I first ventured into publishing, I was optimistic about the future but could not have foreseen the phenomenal rate of expansion of the Arab publishing sector. Book publishing in the Arab world is an exciting and stimulating undertaking and, as a dynamic emerging market, the UAE is already serving as a hub for publishers and books from across the globe.

But if the industry is to continue to thrive we need to maximize skills development. Teaching a new generation of gifted and passionate publishers and writers, whose new ideas and solutions will encourage a new generation of readers, is central to ensuring the sector's future development.

What new initiatives are supporting the growth of publishing in the UAE?

The national drive to improve reading skills and levels of education among children is fueling interest in children's books. We are seeing the growing popularity of a wide range of festivals, workshops and programs to promote all types of reading.

A number of recent initiatives support the sector's growth and development. For example, the Etisalat Award for Arabic Literature is escalating interest in children's books, in particular. The Award seeks to ensure that every child has the chance to become a reader and to have access to good books.

Launched in 2009, the Award is organized by the UAE Board on Books for Young People (UAEBBY) with the support of Etisalat. It is the biggest prize for Arab literature, granting one million AED annually to the best children's publications in the region.

The Award also includes the very popular *Warsha* (Arabic for "workshop") initiative, which aims to foster talent in the Arabic children's and young adult book industry. Through a series of workshops on writing, illustration and book production, it seeks to boost the skills of a promising new generation of writers, illustrators and publishers.

The establishment of the Sharjah Book Authority, which is responsible for organizing cultural events such as the Sharjah International Book Fair and the Sharjah Children's Reading Festival, has also boosted interest in publishing.

Sharjah has also created the world's first free zone for publishing companies, to give a sharp boost to cultural activities and publications in the emirate and to create healthy competition for the creation of quality books.

What challenges is the sector facing?

Publishers everywhere need to walk the thin line between keeping up with technological developments, and maintaining a solid and secure business. Ultimately, publishers are economic entities and need to be financially successful in order to remain viable.

Beyond that, distribution of books in the region can be a logistical nightmare because each country has different laws and regulations. In this context, online distribution has a vital part to play and many publishers are already starting to adapt their rights agreements to automatically include digital rights. Other challenges include censorship, piracy, low purchasing power, political instability and illiteracy.

What impact is piracy having on the Arab book trade?

While the UAE's copyright legislation is in line with international standards, the absence of a standard approach to copyright across the region is a real challenge, making enforcement very difficult and piracy quite common.

In the UAE, the Arabian Anti-Piracy Alliance, in collaboration with the Ministry of Economy, is playing a key role in combating piracy. Its comprehensive anti-piracy program includes a range of public awareness activities, as well as aggressive lobbying and legal action against IP offenders.

Authorities across the region recognize the negative impact of piracy on creative industries and the economy. This is fueling a drive to raise IP awareness and to act against IP offenders.



Photo: Kalimat Publishing

The Sharjah International Book Fair organized by the Sharjah Book Authority, is one of a number of initiatives that are fueling interest in the UAE's publishing sector.

What prompted you to establish the UAE Board on Books for Young People?

UAEBBY was established to promote a reading culture among the children and young people of the UAE. Its mission, among other things, is to give children in the UAE, especially those in remote areas, access to books of high literary and artistic quality.

The Board encourages the publication and distribution of children's books in the UAE; provides aspiring and published authors, illustrators and publishing houses in the UAE with networking, exchange and capacity-building opportunities; and promotes international understanding through children's books.

And the Horouf Educational Publishing imprint?

Horouf Educational Publishing is part of the Kalimat Group. It aims to provide innovative learning solu-

tions to support teaching in the Arabic language to preschool and primary school students. In particular, it aims to improve children's Arabic language capabilities through the provision of specially designed educational materials in Arabic.

What is the goal of the Knowledge Without Borders initiative?

Knowledge Without Borders aims to increase knowledge among local communities, and to maintain an authentic Islamic and Arabic identity and language. It essentially supports the creation of a knowledge-based society by fostering a reading culture in the UAE. The initiative provides each emirati household in Sharjah with a library of 50 books. So far, over 20,000 households have benefited from the project.

Under the initiative, small libraries have also been established in government departments and institu-

tions, mobile libraries have been set up in hospitals, and a library bus visits different neighbourhoods and public areas in Sharjah.

Knowledge Without Borders has also recently initiated a drive to have libraries of Arabic books placed on Air Arabia flights. This is a first in the Arab world!

Why was it important to establish the Emirates Publishers Association?

Establishing the Emirates Publishers Association (EPA) was essential, not only to present a unified front for UAE publishers at regional and international events and exhibitions, but also to improve the publishing industry in the UAE.

One of the EPA's core principles is to protect the intellectual property (IP) rights of publishers, authors and illustrators, and to help prevent losses from IP infringement. To this end, the EPA has launched several public IP awareness campaigns and is also working to establish a Reproduction Rights Organization (RRO) and a writers' association to help protect the rights of all creators and reduce piracy.

The EPA serves its members by providing training and support, and by improving publishing-related conditions and laws. For example, it offers new publishers a one-year mentoring program to boost their professional skills and expand their experience. One of its core functions is to promote and support translations from and into Arabic.

This year, the EPA is also jointly hosting the 3rd Arab Publishers Conference (APAC 2015), which is a great achievement and underscores the leading role the EPA is taking in the region.

How would you like to see the regulatory framework evolve in the UAE?

The UAE has a comprehensive and fair regulatory framework, and the rights of authors, illustrators and other creators are respected. After all, the industry plays a key role in promoting culture and the flow of knowledge and information. But in an ever-changing publishing landscape, more can always be done to ensure that copyright and IP rights are protected. With digital publishing, borders are all but disappearing.



Photo: Kallimat Publishing

The national drive to improve reading skills and levels of education among children is fueling interest in children's books.

In this context, international collaboration will be very important in establishing, adopting and upholding standards and policies that apply across the publishing landscape.

And how would you like to see the UAE's publishing sector evolve?

While no one can predict the future, the global publishing landscape is changing radically. For the foreseeable future, the emergence of digital technologies, threats to copyright and IP, the need to establish new distribution channels and changing consumer behavior will all continue to preoccupy publishers and force them to rethink their business structures and strategies.

I would like to see the continued expansion of opportunities for new authors and illustrators to create high-quality original works, and for publishers to produce quality books in Arabic and even to translate them into other languages.

Last but not least, what are you reading at the moment?

The Blue Between Sky and Water by Susan Abulhawa, which is a beautiful and very powerful tale of heartache, endurance, humanity, kinship, and love.

Blurred Lines: The difference between inspiration and appropriation

By **Ben Challis**, Legal Counsel,
Glastonbury Festivals Limited,
United Kingdom

If songwriters were unclear about the line between taking “inspiration” from someone else’s work and actually copying it, they may be even more confused following a US federal jury’s decision in the “Blurred Lines” case, especially in the era of hip hop and rap, where sampling and referencing are commonplace.

Robin Thicke’s massive 2013 hit *Blurred Lines* will be one of the most talked-about tracks of this decade. Already under a cloud of controversy because of the nature of its lyrics and promotional video, the track triggered a second round of press commentary in February and March 2015 when the family of soul legend Marvin Gaye won a legal victory after a federal jury ruled that the song copied Gaye’s 1977 chart topper *Got To Give It Up*. The jury decided that Robin Thicke and co-writer Pharrell Williams should pay nearly USD7.4 million in damages.

THE CASE

The *Blurred Lines* case (*Williams v. Bridgeport Music, Inc.* (No. 13-06004) (C.D. Cal. November 19, 2013)) began when Thicke, Williams and rapper TI (Clifford Harris Jr.), who performed the track, responded to concerns about the similarities between the two recordings and sought a declaratory judgment that there was no infringement.

Pre trial, US District Judge John Kronstadt made a ruling to prevent the Gayes’ attorney, Richard S. Busch, from playing the two recordings side-by-side, noting that it was the composition represented by the sheet music, and not the sound recording, that was at the heart of the case. Personally, I find it hard to agree with the jury’s decision that there is any substantial similarity between the two songs.

It was interesting that the decision came just two weeks after the *Stay With Me* settlement, where Tom Petty and Jeff Lynne were given a 25 percent share in that song, performed and co-written by Sam Smith, which allegedly plagiarised Petty’s 1989 hit *I Won’t Back Down*.

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The difference between “inspiration” and “appropriation” has always been blurred. It transpired from the evidence given in court (not least by Thicke himself) that although credited as a writer, Thicke had contributed little to the song. But he did at least entertain the jury, singing along to a short mix of tunes that included U2’s *With or Without You*, Alphaville’s *Forever Young*, Bob Marley’s *No Woman, No Cry*, Michael Jackson’s *Man In The Mirror* and The Beatles’ *Let it Be* to demonstrate that songs with little in common can be seamlessly stitched together and that tracks often contain commonplace musical elements.

As lead writer and producer, Pharrell Williams gave evidence that Marvin Gaye and 70s soul were part of the musical milieu that he grew up in. But he claimed he would never seek to “take something of someone else’s when you love him”.

Following the song’s release, Williams said he saw similarities with Gaye’s work but said that was not a conscious part of his creative process. Richard S. Busch, representing the Gaye family, asked Williams whether he felt *Blurred Lines* captured the feel of the era in which Gaye recorded.

“Feel,” Williams responded, “not infringed.”

ANALYSIS

The law regarding sampling sound recordings in the United States seemed fairly clear after the decision in *Bridgeport Music, Inc. v. Dimension Films* (410 F.3d 792 (6th Cir. 2005)) where, in another case led by Richard S. Busch, the Sixth Circuit Court of Appeals said “get a license or do not sample.” While a recent decision involving Jay-Z may cast some doubt on the rigidity of this approach, songs are always going to be a “grey” area, and courts have traditionally had great difficulty drawing the line between inspiration and appropriation.

Ninety-nine years ago in *Haas v. Leo Feist, Inc.* (234 F. 105 (S.D.N.Y. 1916)), Judge Learned Hand had to compare two works to determine if there had been copying. Despite denigrating the originality of *both* works, the Judge noted the identical pitches occurring at the same points in the two tunes. A few years earlier, in his opinion in *Hein v. Harris* (1910), the Judge had used a similar “comparative method” and found for the plaintiff because 13 out of 17 bars of the works were “substantially the same.” In *Haas* he also favored the plaintiff because of “parallelism which seemed to [his] ear to pass the bounds of mere accident.” In 1930, Judge Hand again revisited the line between ideas and their expression. In *Nichols v. Universal Pictures Corp.* (45 F.2d 119, 121 (2d Cir. 1930)), the Judge pointed out that the line between the idea and its expression is inherently arbitrary, saying somewhat tellingly,

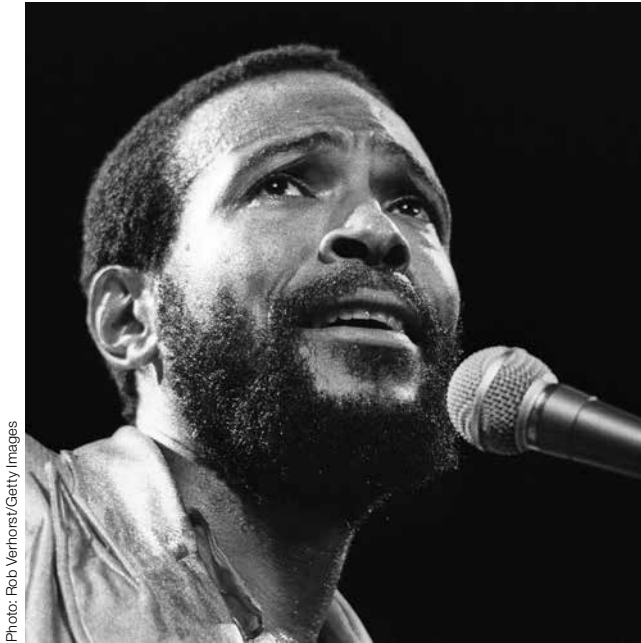


Photo: Rob Verhoren/Getty Images



Photo: Kevin Mazur/Fox/Getty Images

Left: Marvin Gaye; Right: Robin Thicke

The family of the late soul legend Marvin Gaye won a recent legal victory when a US federal court ruled that the song *Blurred Lines* by Robin Thicke and Pharrell Williams copied Marvin Gaye's 1977 chart topper *Got To Give It Up*. The case demonstrates the difficulties courts face in drawing a line between inspiration and appropriation.

"nobody has ever been able to fix that boundary, and nobody ever can." Many people reading about the *Blurred Lines* case might have thought the same.

Readers may remember the complicated 1976 US case of *Bright Tunes Music v. Harrisongs Music et al.* (420 F. Supp 177 (1976)), where former Beatle George Harrison was ultimately ordered to pay USD587,000 for "subconsciously" copying parts of The Chiffons' *He's So Fine* into his song *My Sweet Lord*.

One commentator said that a comparison of the songs "makes it hard to feel bad for the old Beatle." Well, that's his opinion. At the time, I remember thinking the songs (or the recordings I had heard) were quite different. But District Judge Richard Owen thought otherwise. "Did Harrison deliberately use the music of *He's So Fine*? I do not believe he did so deliberately. Nevertheless, it is clear that *My Sweet Lord* is the very same song as *He's So Fine* with different words, and Harrison had access to *He's So Fine*. This is, under the law, infringement of copyright, and is no less so even though subconsciously accomplished," he ruled.

In the *Blurred Lines* case, the Gayes' expert musicologist had studied the sheet music and sound recordings of the two works and identified eight "substantially

similar" features which "surpass the realm of generic coincidence." The Gayes argued that it was improbable that a third-party work would contain all of these features in a "similar constellation."

I prefer the pre-trial analysis of the independent musicologist Professor Joe Bennett (<http://joebennett.net/2014/02/01/did-robin-thicke-steal-a-song-from-marvin-gaye>). Looking at the basslines, Professor Bennett said: "When compared note for note like this, the dissimilarity is obvious. These basslines use different notes, rhythms and phrasing from each other. They're even taken from different musical scales. Thicke's bass notes are all taken from the mixolydian mode; the Gaye baseline is based around the pentatonic minor scale."

In response to the claim that *Blurred Lines* copies the Gaye bassline, Professor Bennett says: "If this is true, and Thicke's team actually "copied the bassline," then they changed most of the pitches, moved lots of notes around, and deleted some notes. Or put another way, they wrote an original bassline." When it comes to the use of cowbells, Professor Bennett suggests: "Thicke's cowbells (actually a cowbell and another percussion instrument that sounds more like an electronic clave) syncopate on the 16th notes

(a semiquaver groove); Gaye's song is very clearly an 8 groove. The only similarity is that each riff plays the first three 8th notes (quavers) of the bar."

PRACTICAL SIGNIFICANCE

Most comments post trial were negative, pointing out that all music is inspired in some way and that genres, feels and grooves should not be copyright protected.

As *Time Magazine* put it, the decision would have a "chilling effect" on future song writing. Some went further, arguing that sampling should be recognized as an integral part of modern music creation, and that the case showed that copyright law was out of touch with current methods of music production. There are only a limited number of notes on the standard musical scale and surely it was now generally accepted that certain expressions cannot be subject to copyright, they said. Others argued that one of the purposes of copyright is to encourage creativity, not stifle it – hence the position that copyright only protects the expression of ideas, not ideas themselves. And yet others contended that transformative use can, at least in the United States, be protected as fair use. The general feeling seemed to be: "some protection is good – too much protection is not good". As ever, it's all down to where you draw the line.

TI joined Williams and Thicke in a statement saying the ruling "sets a horrible precedent for music and creativity going forward." Their attorney, Howard King, said the verdict "affects the creativity of young musicians who hope to stand on the shoulders of other musicians."

I suspect a British court, even noting "casual connection," may have decided the matter differently – although that decision would be down to one judge's opinion as to whether the song was copied, not that of the eight-person civil jury. And judges do come to different conclusions. *Francis Day & Hunter v. Bron* ((1963) Ch. 587) is a good illustration of how judges in the same case can approach the same facts somewhat differently, meaning any decision in this grey area is something of a lottery.

Unsurprisingly, an appeal in the *Blurred Lines* case has already been formally announced. "We owe it to songwriters around the world to make sure this verdict doesn't stand," Howard King told reporters. "My clients know that they wrote the song *Blurred Lines* from their hearts and souls and no other source. We are going to exercise every post-trial remedy we have to make sure this verdict does not stand. We look at it as being in the seventh innings of a game that could go into extra innings," he told Fox News. The appellate court could set an important precedent here.

In July Judge Kronstadt revised the damages awarded by the jury against Thicke and Williams down to USD5.3 million, and added UMG Recordings, Interscope and Star Trak Entertainment as well as rapper TI as defendants. He refused the Gaye family's request for an injunction, but awarded an ongoing royalty of 50 percent of the music publishing revenues from *Blurred Lines* to the Gayes.

How cities benefit from helping the music industry grow

By **Amy Terrill** Vice President of Public Affairs, Music Canada, Toronto, Canada, and **Alex Jacob**, Spokesperson, IFPI, London, United Kingdom

Music is a powerful means of connecting people. It bridges linguistic and cultural divides, and is a vehicle for identity and expression like no other. Collectively, the music ecosystem generates rich social, cultural and economic benefits. A recent report, *The Mastering of a Music City*, by the global music industry body, IFPI, and its affiliate Music Canada, seeks to inspire cities around the world to cultivate a vibrant music economy within their community and become true Music Cities.

The report provides a comprehensive framework of strategies and best practices to help cities – local authorities, businesses, community groups and the creative sector – tap into the power of music. It is a roadmap for municipalities of all sizes to reach their Music City goals, offering useful insights about how to build a stronger and more lively music community.

Once exclusively associated with Nashville, Tennessee (USA), the term “Music City” now describes communities that have – or are encouraging – the development of a vibrant music economy. Music Cities can deliver significant economic and employment paybacks beyond their long-acknowledged cultural and social benefits.

The report draws on the experiences of 22 cities on all continents and 40 in-depth interviews as well as two focus groups to identify the opportunities and challenges associated with implementing a Music City strategy. Among the interviewees were music association leaders,

music entrepreneurs including publishers, promoters and artists, municipal employees, and experts in tourism investment and economic development.

The study identifies five essential components of a successful Music City:

- the presence of artists and musicians;
- a thriving music scene;
- available spaces and places for music;
- a receptive and engaged audience;
- and record labels and other music-related businesses.

Music Cities also benefit from multi-level government support for music, including a broader city infrastructure conducive to the sector’s development and the availability of effective music education programs.

MUSIC DRIVES ECONOMIC VALUE

A vibrant music economy drives value for cities in several important ways. It fuels job creation, economic growth, tourism development and artistic growth, and strengthens a city’s brand. A strong music community also attracts highly skilled young workers in all sectors for whom quality of life is a priority. This in turn attracts business investment.

Many have quantified the value of music to local economies. The 2013 Nashville Music Industry report found

Photo: Nashville Convention & Visitors Corp.



A vibrant music economy fuels job creation, economic growth, tourism development and strengthens a city's brand.

that the music industry helped create and sustain more than 56,000 local jobs and contributed USD5.5 billion to the local economy. In Melbourne, Australia, the 2012 census found that the live music sector alone generated over AUD1 billion in spending and supported the equivalent of 116,000 annual full-time jobs. Similarly, UK Music estimated that in 2013 music directly contributed GBP3.8 billion to the UK economy and directly employed 111,000 people.

KEY STRATEGIES TO BECOME A MUSIC CITY

The report sets out seven key strategies to become successful Music Cities.

1. Creating music-friendly and musician-friendly policies

While it may be impossible to manufacture the secret something that causes artists and musicians to gather in a city, it is possible to create an environment that enables musicians to do what they do best: make music. Access to training and education programs, mentoring, music hubs or incubators as well as affordable housing can help attract and retain musicians, many of whom are on limited incomes.

Earning a living as an artist has never been easy. "It has never been easier to distribute a creative work. At the same time, it's never been harder to get paid for it," notes Robert Levine, past executive editor of *Billboard*. Professional development services for musicians not only help artists develop the skills they need to run their business and careers, they also make a municipality more music-friendly. In Bogotá (Colombia) the Chamber of Commerce is developing 30 different services to help artists and musicians monetize their work and build their businesses.

Land-use planning is perhaps the most complex area of municipal policy affecting the development of local music economies. Urban growth and competing demands for space mean many historic music venues, such as the 12 Bar in London (UK), RCA Studio A in Nashville, the Silver Dollar Room in Toronto (Canada) and the Palace Theatre in Melbourne, are under threat. Some have been saved, others have not.

Some cities have opted to designate individual buildings as heritage landmarks to protect them from developers. Others have gone further. For example, Montreal (Canada) has saved its *Quartier des Spectacles* from the bulldozers by designating it as an entertainment area. The one square kilometer area boasts 30 venues and hosts over 40 festivals, and is actively promoted as *the* nightlife destination.

Other cities, like Melbourne, are employing the "agent of change" principle to resolve problems arising when residential developments encroach on areas with established music venues and noise becomes a nuisance. If the "agent of change" is a new residential development near a pre-existing music venue, the developer is responsible for the costs of sound attenuation. But if the "agent of change" is the music venue then it is responsible for these costs. This principle works well where a cluster of established music venues is threatened by encroaching residential developments.

2. Establishing a music officer or office

Navigating music-related government policies and regulations can be a significant challenge. Some cities have established a music office or officer to act as a single point of contact between municipal authorities and the music community. For example, the Seattle *Office of Film + Music* in the USA serves as a one-stop shop for promoters and producers of live events, facilitating contacts with city departments (e.g. fire and police). These offices can also help mediate any potential areas of conflict.

3. Appointing a music advisory board

Music advisory boards are an invaluable link between the music community and City Hall. Generally composed of representatives from across the music community as well as tourism and economic development specialists, they offer advice and can play an important role in developing a consensus on legislative and regulatory issues. Music advisory boards make it possible to road test proposals with key stakeholders before approval by City Hall, thereby avoiding any unforeseen backlash. Some boards, such as the Memphis Music Commission

(USA) which provides a legal clinic and pre-paid health care plans for musicians, also participate in the delivery of programs to the music community.

4. Engaging the support of the broader music community

Engaging those most affected by music strategies is critical to the success of any music city but can be challenging when it involves working with multiple small and medium-sized businesses, each playing a different role and often only working part-time in music.

The close cooperation of all stakeholders significantly improves the chances of developing effective regulatory and business environments that allow the music economy to thrive in the city. The Paris Music Council, for example, is seeking to find ways for the public and private sectors to work together to support artists and venues to ensure that Paris' music offerings are rich, diverse and affordable.

5. Ensuring access to spaces and places

Music needs a home. In fact it needs many homes. From education to rehearsal to recording to performance, a successful Music City needs a variety of quality spaces and places. Supporting a community where artists can get started, develop their talent and shoot for the stars, requires a venue ladder – a full range of live venues, from tiny clubs to large stadiums, and everything in between. This does not always involve new builds. Many communities have found innovative ways to renovate and repurpose abandoned movie theatres, churches and other buildings.

In some cities, the public and private sectors are working – sometimes together, sometimes separately – to build new spaces, such as music hubs or accelerators for artists and music businesses. For example, in Toronto, major record labels provide office space for a number of the independent labels with which they work. This is an ideal way to share know-how.

6. Supporting audience development

Any successful Music City needs a receptive and engaged audience. In addition to good transportation links and effective promotion of live music events, demographics also play an important role in audience

development. Many Music Cities see large student populations as advantageous.

Tomorrow's music fans are developing their entertainment tastes today. Events for all age groups help engage younger audiences, ensuring they develop a lifelong love of music.

7. Establishing a music tourism program

Music tourism generates billions of dollars for cities every year. Tourism assets include a city's year-round live music scene, festivals and historical music landmarks. Major music festivals draw large numbers of tourists. For example, in 2014, 87 bands performed at Bogotá's *Rock al Parque* (Rock in the Park), attracting some 400,000 people and making it one of the world's largest music festivals.

Some cities have comprehensive music tourism strategies that involve music-based branding, promotional campaigns, social media strategies, music infrastructure investment, signage and programming.

Nashville, for example, puts music at the core of its brand. Its approach is paying off handsomely. In 2014, the city welcomed over 13 million visitors who contributed more than USD5 billion in revenues and supported 50,000 jobs. The city's music note logo appears on buildings, souvenirs and promotional materials, and its tourist website, visitmusiccity.com, features a radio station with local artists and a wayfinding app for the public to connect with the live music scene.

Boosting a city's music economy brings multiple dividends: it advances artistic and cultural growth, strengthens a community's social fabric, creates jobs, and boosts economic activity and tourism spending. A vibrant music economy creates a "cool" factor and the quality of life that makes people want to live and work there, giving it an edge in attracting and retaining talent in all fields, businesses and investment. The guidelines proposed in *The Mastering of a Music City* encourage municipalities of all sizes around the world to tap into the power of their music to create more cohesive, vibrant and wealthy communities.



Photo: DustinRabin.com

Music tourism generates billions of dollars for cities every year.

Air Canada Center, Toronto, Canada.

Photo: Jackie Lee Young



Photo: Recording Industry Association of Malaysia (RIM)

Closing performance of AIM 21, Malaysia's equivalent of the Grammy Awards.

The music ecosystem generates rich social, cultural and economic benefits. *The Mastering of a Music City* report seeks to inspire cities to cultivate a vibrant music economy within their community and to become true Music Cities.

Fun Fun Fun Fest, Austin, Texas, USA.

Delivering online IP services in Moldova

By Ms. Lilia Bolocan, Director General and Mr. Vitale Rusanovschi, Specialist Coordinator of the IT and e-Transformation Division, State Agency on Intellectual Property of the Republic of Moldova (AGEPI)

The availability of increasingly powerful digital tools continues to transform business operations. Moldova's State Agency on Intellectual Property (AGEPI) is no exception. In line with Moldova's "Digital Moldova 2020" strategy, adopted in 2013, AGEPI is making significant progress in digitizing its operations and ensuring users benefit from more user-friendly and efficient services.

A NATIONAL STRATEGY FOR THE INFORMATION AGE

Development of Moldova's information society is now well underway. In terms of Internet access speed, the country ranks among the world's top 20. Every second citizen is an Internet user, and over 50 percent of households benefit from broadband Internet access. The contribution of information and communication technologies (ICTs) to economic growth is between 8 to 10 percent.

In 2010, the government established an e-Government Center to promote and support the modernization and e-transformation of public institutions for a more efficient, transparent and connected government. In this context, and following the lead of WIPO, AGEPI is implementing new IT-based systems to facilitate the registration and management of intellectual property (IP) rights.

At the beginning of 2014, we launched our new electronic service for filing IP applications on line. Our so-called e-AGEPI service provides applicants, rights holders, their representatives and other interested parties, with access to a modern, efficient and cost-effective means of filing their patent, trademark and design applications. With a user-friendly web interface, e-AGEPI supports a range of key tasks associated with filing an application, from drafting and verification through to electronic filing and payment of fees.



With its new electronic filing service in place, Moldova's State Agency on Intellectual Property (AGEPI) is raising its service provision to a whole new level.

Photo: Tatiana Nasirov, AGEPI

AGEPI'S NEW USER-FRIENDLY ONLINE SERVICE

At the heart of AGEPI's new software is a secure user interface, the Personal Desktop, which applicants can access by creating an account via the AGEPI website (<https://e-servicii.agepi.gov.md/>).

The system is designed to provide a high level of information security and to minimize the time it takes to file an application and related documents.

To register their intellectual property, an applicant starts by completing the standard form for the relevant category of IP. The form is populated automatically with their personal data, which is saved within the system when they create their account. They are then prompted to enter all the other required information, and the system verifies that all fields have been completed with valid entries before the application is submitted. Guidelines are available in three languages – Romanian, Russian and English.

Once all data has been entered correctly, the application is signed with an e-AGEPI digital, mobile or electronic signature and submitted to AGEPI, where

In line with Moldova's "Digital Moldova 2020" strategy, adopted in 2013, Moldova's State Agency on Intellectual Property (AGEPI) is making significant progress in digitizing its operations and ensuring users benefit from more user-friendly and efficient services.



Photo: Victoria Moccanu, AGEPI

it is automatically logged and attributed a number. At this point the applicant is sent a notification via his or her Personal Desktop and e-mail confirming receipt of the application, its number and the date of filing. All subsequent communications relating to the application are also sent via the Personal Desktop and copied to their email.

The system is also connected to Moldova's governmental service for electronic payments, Mpay, meaning applicants can pay securely online by credit card, Internet banking or even in cash via a payment terminal or bank counter.

BENEFITS FOR APPLICANTS – AND AGEPI

The new system offers many advantages to our service users. It provides them with a secure system for filing their applications; a rapid channel for communication with us; round-the-clock access to up-to-date information about the status of their IP registrations; prompt notification of any developments; and the ability to pay all their fees online at no extra charge.

Applicants are already embracing these advantages. 17.5 percent of the 3,491 trademark applications filed between January 1, 2014, and May 31, 2015, were submitted online, along with around 400 related documents.

This digital transformation also offers AGEPI many benefits. With information stored electronically, we can automate and optimize our processes and thereby improve service delivery. Procedural terms can be

tracked by the system, and alerts triggered as deadlines approach; correspondence and documents can be managed efficiently; and user accounts and payments can be monitored and controlled.

To realize these benefits, in 2015 we began a new project to digitize our information flow. Hard-copy documents are being scanned and uploaded to create a fully searchable electronic archive. With this in place, it will also be possible to improve the management of procedures for examination of the applications filed. Our aim is to create a completely paperless internal operation.

SECURING THE DIGITAL FUTURE

In all of this, security is paramount. IP registration and management involves a lot of sensitive information, and AGEPI has invested heavily to ensure that it is only accessible to those who are entitled to see it. Our state-of-the-art unified threat management solution includes a next-generation firewall and intrusion prevention system to protect against viruses, spam and other external threats.

We also carry out incremental data backups on a daily basis, plus a full back-up every month. Quarterly backups to magnetic tape using the linear tape-open (LTO) format ensure that there is a durable copy of recent data.

For AGEPI, the information age means changing our economic, financial and managerial processes, not just our technology. But by making ICT a priority, we are raising our service provision to a whole new level.



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