MOBILE MAGIC – MOVING FORWARD

THE MANGA PHENOMENON

YIKEYBIKE: SPELLS URBAN FREEDOM
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Making movies has always been a complex, innovative and creative undertaking. From its beginnings in the late 19th century, the movie industry has morphed, adapted and grown in line with technological possibilities. Today, this multibillion dollar global industry and those who work in it face new challenges as the transition to digital progresses. Digital technologies are overturning established ways of producing creative content and of delivering it to audiences around the world. While this means we have greater choice in terms of when, where and how we view these creative works, it also presents risks and opportunities for those making movie magic.

In July 2011, WIPO invited Spanish film star Javier Bardem, Indian film producer and director Bobby Bedi, Egyptian movie icon and film producer Esaad Younis and British film producer Iain Smith, to share their views on the challenges facing what the German philosopher Hegel described as the “seventh art.”

Making movies

Moviemaking is a collective endeavor involving many brilliant creative talents: writers, directors and actors, cameramen, designers, choreographers, editors, makeup artists, hair stylists and illustrators, and the list goes on. It is a costly and risky undertaking. Economic success depends on “matching ideas with talent, obtaining relevant intellectual property (IP) rights and using them to attract finance from commercial film distributors” and, of course, capturing the imagination of audiences.

A producer's perspective:

“Movies are magic in people’s lives,” according to British film producer Iain Smith, “but it all costs money… it takes time, is risky and expensive.” Intellectual property, he said, is “the legal bedrock of everything we do in the film business.” He pointed out that “any system that brings together investors with creators has to somehow exploit intellectual property,” adding that “without a system that invests in “risk and innovation,” “scale and quality,” “movies will simply disappear.”

“We have to change the system that we have at the moment, holding on to the better qualities of it and move it towards something that will allow us to exploit digital technology in the fullest possible way,” he said. This is particularly important for “emerging economies, growing their own creative industries, and finding their own voice in the digital world,” he noted.

An actor’s perspective:

Spanish film star Javier Bardem made the case for strengthening the rights of actors whose unique skills and creativity breathe life into movie characters. Actors are a key element of any film, “no audiovisual work of fiction can be made without… a whole cast of actors… without whose contribution the collective project would not see the light of day,” he said. Speaking for the 90 percent of actors who struggle to make ends meet, he noted that “behind every actor there is an individual, a worker, a creator and a family with the same worries, problems, concerns and needs as any other citizen.” Beneath all the glamour, he noted, there is a great deal of work, effort, sacrifice and risk.

In spite of their “decisive” contribution to the production of works, actors are the only group of creators for whom an international treaty – specifically to protect rights in their audiovisual performances – has not yet been established. Mr. Bardem called on policymakers to strengthen actors’ rights and to ensure that they share in a film’s commercial success, both in cinemas and the online environment. The majority of the world’s actors “are making a very, very small living out of what they do so… it is...

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important to think about those thousands of families [who] really need that money to pay the bills.” An industry that “does not adequately protect its workers,” he affirmed, “is doomed to failure.”

Going digital: opportunities

Digital technology is responsible for a “cataclysmic change” in the film industry, Iain Smith observed. “Digital lets us play with new storytelling toys like CGI (computer generated graphics) and 3D; it also gives us digital projection, digital distribution, cloud technology, format shifting and digital cinemas – all good.” He noted that “for the first time (it) gives us and the consumers the possibility of expressing [our]selves using images in a way that [we] could never do before.”

“What we are looking at is a much, much more vibrant cross-cultural energy,” Mr. Smith explained. “The concern we have… is that we must make sure that in every aspect – industrial, legal, political – everything can be done to maximize the full benefit of digital technology, not just for the consumer but also for the creator, so that we are not just dealing with a kind of lowish level… type of activity but also the higher end.” “Digital technology,” he believes, “is more positive than negative.”

Indian film producer and director Bobby Bedi is even more optimistic about the digital future. “I think that digital technology is going to be the big thing for our industry,” he noted. “I think we are going to be able to survive, develop and grow both artistically and commercially because of this technology.”

He pointed to the massive environmental benefits digital technologies offered in facilitating production and operations. By enabling satellite transmission of films directly to cinemas, and rental and sale of film via cable and the Internet, it is possible to cut the costs of CD and DVD production, transportation and storage. These technologies also support “the creation of the art itself,” he said, making it possible to “take audiences into realms of fantasy defying time and space.”

The downside

While digital technology offers unprecedented opportunities in terms of creativity and access,
the downside is rampant criminal piracy and content theft.

The crux of the matter, WIPO Director General Francis Gurry explained, "is that the difference between the cost of production and the cost of reproduction is enormous. If you think of what goes into making a film," and that with digital technology, "all that can be reproduced with perfect fidelity... and at zero marginal cost, that's the drama."

In 2010, "the Hollywood dream became the Hollywood nightmare," Mr. Smith explained, with box-office hits like Avatar suffering 16.5 million illegal downloads. Such theft cost the American movie industry an estimated 25 billion dollars in lost revenue. "The business can't continue on that basis," he said. Piracy is "a huge threat" that "must be dealt with." It "happens because it can, but just because it can doesn't mean to say it should."

In the U.K., film piracy means fewer indigenous movies are being made; in Hollywood, studios are retreating "into fewer, safer, bigger, 'tent-pole' movies, into franchises, sequels, TV spinoffs and re-makes," and generally, cinema attendance is dropping, hitting a 16-year low in 2010.

"The only ways that actors, technicians or workers, producers, directors, all of us can get paid," Bobby Bedi observed, "is through the money that people pay for a ticket, a CD, a DVD or a download." While digital technology "makes things easier for us and makes us so much more creative, it does easily permit theft of our property at a very high quality and in a very easy way," he continued. "Now if our revenues come down then obviously actors will suffer, producers, directors, everyone suffers. Finally, creativity suffers."

Education, he contended, is an important part of the solution. "We need to disseminate hard and soft information about ethics, law, penalties, etc. over the Net. Dominant players need to be co-opted in this effort... to tell a person that, yes, there is a right and a wrong even in IP theft." While progress is being made in the area of legislation "there's not much point in having a law unless you enforce it," he observed. The digital world, he noted "is bereft of boundaries, so pirates just shift base," moving to a place where laws are more lenient.

"Educate, legislate and enforce" is his mantra for tackling the movie industry's IP challenges. "It's not rocket science," he said, "but I suspect it's easier to build rockets than to achieve this, but we must try."

The need to change perceptions

Egyptian movie icon Esaad Younis, CEO of one of Egypt's largest film production and distribution companies, Al Arabia Cinema, warned that piracy is threatening the world's cultural heritage. Ms. Younis underlined the need to educate young people about the risks of piracy. "We have to find another way to reach young people," she said, to make them understand that films cost money and that what they are doing is illegal. We need to bring these young people on side to "use their talents to improve the industry." Ms. Younis asserted that governments have a responsibility to raise awareness about the damage caused by piracy. "Each country should inform citizens that they are hurting their history...If they pirate movies, they are killing the industry, and their culture."

The consequences of piracy are clear for Javier Bardem, who said, "if an actor or a great director makes a movie and he cannot make any other[s] because his movies have been downloaded for free, then we are not going to have that director again. It's that simple." He added, "once again, it's not about that director, that actor, that producer; it's about the hundreds and hundreds... of people behind those movies," who without fair compensation will be unemployed.

"What I don't agree with," he said, "is the mentality of people [who think] piracy is fine," and the mindset that just because someone doesn't have the money for a movie ticket, it's alright to download [the film] free of charge. "What bothers me the most is that way of thinking." Far from being about what is "fair," "it's about stealing," he said.

The future

The transition to digital is an important turning point in the long and rich history of moviemaking. While digital technologies present risks, "the long-term benefits of an active, creative economy are massive, especially for emerging nations," Mr. Smith noted. The challenge is to move to a different paradigm and a new relationship with content, without losing the better qualities of the current system. By slowly adapting the movie industry’s business model to lower front-end pricing, day and date releasing, cross-format shifting and cloud technology, Mr. Smith said, “what could be achieved would be fantastic for all of us.” After all, he said, “creativity in all its forms is our most powerful asset as human beings. It’s far, far more powerful than our ability to destroy... and it is creativity that will bind us together as we move into this new century.”
REV is in the business of delivering "clean, efficient and affordable energy to Kenyans through innovative energy generation, distribution and financing solutions," Mr. Nganga explained.

The company works "closely with [its] clients to help reduce their current energy consumption, recommend alternative energy sources, identify technology partners and structure and source funding for the implementation" of alternative energy projects, ensuring "the right solution, for the right client at an attractive return on investment."¹

REV focuses on:

- distributing household-level energy solutions, such as solar-powered lanterns;
- working, as an independent power provider (IPP), on grid-tied renewable energy projects generating energy from wind and biogas for Kenya’s national grid. In 2008 Kenya passed a feeding tariff law allowing private companies to generate electricity for the grid;
- offering consultancy services, including to the World Bank.

Household energy solutions

Some 30 million Kenyans (around 77 percent² of the country’s population of 39 million) are without electricity, relying on kerosene for their lighting needs. Realizing that a sizeable segment of Kenya’s population "will not have access to the grid in their lifetime," REV launched its Solanterns Initiative. The company provides poor households in rural and peri-urban areas of Kenya with clean and affordable lighting by giving "access to solar lanterns" which, unlike kerosene lamps, don’t "cause indoor pollution and the consequent respiratory illnesses, are not a fire hazard, are relatively affordable and provide better illumination," Mr. Nganga explained.

Sun King™ solar lanterns

Under the initiative, REV partners with U.S. company Greenlight Planet, Inc. which designs and produces the Sun King™ solar lanterns. Mr. Nganga explained that, as the materials and manufacturing capacity to make the lanterns are not readily available in Kenya, it makes more economic sense to "access great quality finished products that can be used locally from abroad.”

Greenlight Planet’s CEO, Patrick Walsh, told WIPO Magazine that the inspiration for the Sun King™

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¹ www.africarenewables.com/
² According to the Lighting Africa Program of the World Bank and the International Finance Corporation (IFC)
solar lantern was the “quest to provide better lighting for rural households.” While working in India in 2005, he recognized a clear need for “a consumer product that people could buy to solve their problems.” Consumers, he said, are already solving lighting problems by purchasing candles and kerosene; “we are just providing a better technology and letting people decide if they want to buy it.”

The Sun King™ solar lantern marries LED, lithium ion battery and solar panel technologies. “We use off-the-shelf components that are put together in a clever way,” Mr. Walsh noted. “The design is what really matters,” Joseph Nganga commented, “the ability to put these three components together in a package that is cost-effective, durable, attractive and designed for a rural household.”

While Greenlight Planet Inc. holds design rights over the lantern and various trade secrets, Mr. Walsh noted that, in the context of a rural household in a developing country, “licensing the technology is not really going to work.” He said that the company’s emphasis was on delivering “quality technology through innovative distribution.” Getting solar lights “into the consumer’s hands requires an innovative and adaptable network,” he noted. The company specializes in “rural distribution and works closely with partners to create awareness and deliver products directly into the interior villages where they are needed most.” While the company has its own broad distribution network in India, it works with partners such as REV to leverage local networks in other countries.

Uptake

In a little under two years Joseph Nganga and his team have distributed over 5,000 solar lanterns to rural households in Kenya. Once consumers are comfortable with the lanterns, “they love them,” Mr. Nganga said. Using these lanterns, rural households can make significant savings of between US$110 and US$114 over a three-year period. “That’s a lot of money for a rural household,” Mr. Nganga noted. “The economics are very clear; you buy a lantern for 25 dollars, it works for 3 years, and there are no out-of-pocket expenses over that period compared to kerosene lamps,” he explained.

The environmental benefits of solar lanterns are also significant. Each lantern will reduce CO₂ emissions by 135 kilograms and save 52 liters of kerosene over its lifetime, enabling governments to both reduce their carbon footprint and make savings in government-funded kerosene subsidy programs.

While Mr. Nganga is optimistic about REV’s ability to scale-up the initiative – with an estimated 32 million kerosene lantern users to reach out to – uptake has been relatively slow. He attributes this to three factors:

- the income structure of rural households;
- low levels of consumer awareness; and
- quality assurance.

Income structure

Mr. Nganga explained that most rural households receive a daily income from which their daily kerosene ration, some 18 US cents, is drawn. As many of these households do not have savings or access to credit, an outlay of US$25 to buy a solar lantern is beyond their reach. To overcome this, the company has adopted “an innovative model that, in addition to making our lanterns accessible to the market, also provides jobs to the youth in the community,” Mr. Nganga explained.

REV engages microentrepreneurs to rent solar lanterns to families who would not otherwise be able to afford them. “We help a young person get a loan from a local microfinance institution to buy about 20 lanterns. They charge these up throughout the day by plugging them into a solar panel and then distribute them to different households charging the same amount that the household would spend on kerosene that night. The entrepreneur then collects the lamps the next morning for re-charging,” he explained. “This means that the consumer can still use their budget structure to pay for their lighting needs while accessing the benefits of solar energy. It’s a very, very simple solution but it works brilliantly,” Mr. Nganga said. REV anticipates that some 500 microenterprises will have been established by the end of 2012.
Building awareness

As solar lamps are a relatively new technology for rural households, “there needs to be a lot of work done on raising consumer awareness,” Mr. Nganga noted. He pointed out that “there’s a growing interest, but like everything it takes time to round that up.” To this end, REV is leveraging programs, such as the joint IFC and World Bank Lighting Africa initiative (particularly its public outreach components). The Lighting Africa program is “mobilizing the private sector to build sustainable markets to provide safe, affordable and modern off-grid lighting to 2.5 million people in Africa by 2012 and to 250 million people by 2030.”

Advantages of Sun King™ solar lanterns

No recurring costs
Three-year battery life
Provides 16 hours of light on a single day’s charge
Generates twice as much light as a kerosene lamp
Highly durable in tough environments
Safe, economical and easy to use

Quality

Delivering a high-quality product is a priority for both Greenlight Planet and REV. “There is a history of solar products that have not worked which has led to a very negative view of solar in general,” Mr. Nganga explained. Rural households are reluctant to invest their limited resources in a product and “then have it fail,” he said. “There is a lot of confusion about which are the quality offerings,” he noted, “many products are packaged in a similar way but are actually very different and often of poor quality.”

Making a difference

The ingenious design of the Sun King™ solar lanterns and the Solantern Initiative are already making a positive impact. A recent survey by REV showed significant improvements in air quality, health, economic situation, safety and educational performance in 500 rural and peri-urban households in Nairobi. With over 95 percent of respondents stating “they would buy [a solar lantern] when they have the money to afford it,” prospects are good.

The potential to scale-up the adoption of solar lanterns as a relatively cheap, clean and efficient alternative lighting source offers great promise to the millions of Kenyan households that still depend on kerosene for their lighting needs.

GRID-tied projects

In line with its mission to “develop and distribute clean, efficient and smart energy in Kenya,” REV is working on a number of projects using wind, biomass and biogas to generate electricity for Kenya’s national electricity grid. Using innovative technologies, biogas-to-energy projects, for example, offer agricultural producers an extremely “cost-efficient way to generate power while managing waste,” enabling them to transform a liability into an income-generating asset.

In an attempt to facilitate innovation in climate-related technologies, Mr. Nganga is working with the IFC and the World Bank’s infoDEV project to establish a global network of climate innovation centers (CIC). National CICs, established in 30 countries to date, provide a portfolio of services and financing to enterprises working on climate technology. The aim is to improve technical capacity, boost early stage funding for entrepreneurs operating in the renewable energy market, improve consumer awareness and facilitate access to information. These national centers form part of a global network that seeks to create opportunities for collaboration, technology transfer and access to export markets.

What role for intellectual property (IP) in this mix? Mr. Nganga notes that, while “people are thinking about how to make sure they retain ownership of their technology and how they can get the economics out of it,” they often don’t think of this in terms of IP, “which of course it is”, he said. He underlined the importance of raising awareness of IP among business and investment communities, noting that one of the key means of attracting investors and leveraging existing resources was to “show value, and one of the ways to show value is to have IP!”. This is one area, he submitted, in which “WIPO would be a key partner in ensuring that IP is front and center in discussions.”

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Solar lanterns are 20 times brighter than kerosene lamps and offer a safe and more stable source of light.

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Since the late 1980s, Japanese manga has taken the world by storm to become Japan’s most popular cultural export. In this article, the WIPO Japan Office traces the origins of this global cultural phenomenon and explores its economic significance.

The origins

Like most comics, *manga* (roughly translated as "whimsical pictures") is rooted in sequential art — a narrative made up of images and presented in sequence. The earliest examples of Japanese sequential art are thought to date from the 12th century *Chōjū Jinbutsu Giga* animal scrolls.

The term "manga" is believed to have been first used by the renowned 16th century woodblock print (*ukiyo-e*) artist, Katsushika Hokusai (1760-1849). Together *Chōjū Giga* and *ukiyo-e* influenced the production of the low-cost illustrated *kibyōshi* (yellow-backed) novels from the late 18th century, in which the beginnings of modern manga first appeared. Kitazawa Yasuji’s well-known early 20th century contributions to *Jiji Manga*, a weekly comic page in the daily *Jiji Shimpō* newspaper, did much to popularize the use of "manga" to describe this emerging art.

In the mid-1940s, low-cost *akabon* (red books) became very popular among adults. Osamu Tezuka, one of *akabon*’s most popular authors, came to be known as the grandfather of Japanese manga because of his work in implementing cinematic techniques, sound effects, long story arcs and deep character development across many different genres of manga. The appearance of more serious manga *gekiga* volumes in the 1950s fuelled the expansion of manga which, by the 1970s, had grown into an unparalleled mass media industry.

Manga’s economic and cultural significance

Manga is a major part of Japan’s publishing industry, accounting for over 25 percent of all printed materials in the country. They offer something for everyone and can be purchased from a wide range of retail and online stores. As Mr. Teiji Hayashi, former Director of the Public Diplomacy Planning Division, Public Diplomacy Department, Ministry of Foreign Affairs (MOFA) of Japan explains, "manga has a wide range of fans, from small children to senior citizens, because its storylines are clear and the characters are rich in humanity." This is why they are often "utilized not only for entertainment but also to provide simple explanations about difficult matters like history, natural science and social issues."

Popular manga have a far-reaching influence. Many become books, television shows, *anime*, collectable figures and video games. Nearly every aspect of Japanese popular cultural production can trace its roots to the industrial complex that is manga which has become a mainstay of the Japanese economy and culture.

A cultural pillar of Japan’s economy

Manga’s striking artistic and thematic styles have transcended cultural barriers, making an important and lasting impression on audiences across the globe. As a gateway to Japanese culture, it has attracted a global fan base and fuelled interest in Japanese culture. It remains one of the country’s most economically and socially profitable exports and has helped Japan become one of the world’s largest exporters of cultural products.

North America is one of manga’s largest foreign markets worth an estimated US$300 million in early 2011. Sizeable markets also exist in many European and Asian countries. The *Pokemon* series, launched in 1996, is perhaps one of the most profitable manga exports with earnings in excess of US$150 billion.
An industry under threat

Manga continues to enjoy a broad global appeal but the industry is suffering acutely from the scourge of piracy. Manga is at the heart of Japanese media, feeding nearly every aspect of it with new and innovative content. If manga is under threat, so too is practically every other form of media in Japan.

When it was first launched internationally, manga occupied a niche market in many countries. However, it soon captured the imagination of readers around the world, spawning an enthusiastic international fan base that became increasingly frustrated by the inability to access the same content as their Japanese counterparts. The need to translate manga from Japanese meant there were inevitable delays in their international release. Moreover, many titles were never released internationally because they were deemed inappropriate for specific markets, were unsuccessful in Japan, or were only published locally by independent publishers.

The Internet offered fans a wonderful solution. Many learned Japanese, acquired the original manga, then scanned, translated, edited and posted them on the Internet for free downloading. Alas, what began as a practice driven by enthusiastic fans has become a serious blight on the industry. So-called scanlation – the act of scanning, translating and posting manga on the Internet – is, in fact, striking at the heart of manga and threatening its very existence.

Unauthorized scans or “raws” are typically generated by individuals who scan books into electronic format, a practice known as jisui, which translates as “to cook for one’s self.” With the uptake of e-book readers and computer tablets, jisui has become a fully-fledged business with the emergence of popular scanlation aggregator websites hosting thousands of manga episodes and making them available free of charge. Those who do scanlation rake in profits through advertising on their own websites and also earn points which can be turned into cash for each download made from an aggregator website.

Scanlation groups, of which there are now well over a thousand, are perpetuating a highly corrosive form of piracy that is threatening the industry, causing global manga sales to plummet and forcing publishers to lay off staff. From 2007 to 2009, for example, U.S. manga sales fell by 30 percent forcing a leading publisher to lay off 40 percent of its workforce.

But major manga publishers are fighting back by reaching out to manga fans in new ways. This year, Kadokawa Group Publishing Co. Ltd. (Kadokawa) simultaneously released a large number of popular titles in key Asian markets. Companies like Tezuka Productions are making available legal, electronic English-language versions of popular manga for tablets computers and, earlier this year the Japan Book Publishers Association launched a series of initiatives to clamp down on unauthorized scanlation activities.

Killing the art

Rampant manga piracy is making it increasingly difficult for manga artists (mangaka) to earn a living from their work. Many rely on royalty payments to survive. These are modest at the best of times, especially for new artists, and are generally insufficient for most to make ends meet. Of Japan’s estimated 3,000 professional mangaka, only around 10 percent earn enough to be able to devote all of their time and energy to their art. The simple truth is that if manga artists cannot earn a living from their art, there will be no manga.
Given its global appeal, manga is an ideal vehicle for raising public awareness about intellectual property (IP) and why it is important to respect IP rights. Last summer, the WIPO Japan Office launched a “Real” Manga Competition. Sponsored by MOFA and the Japan Patent Office (JPO) and with the support of Kadokawa, the competition invited Japanese manga artists to create an original work highlighting the health and safety risks associated with purchasing counterfeit products.

Explaining the rationale for the manga competition, Mr. Ken-Ichiro Natsume, Director of the JPO’s Multilateral Policy Office said, “It is often the case that what you read in a textbook slips away from your mind, no matter how many times you read it. But information that is presented as a manga stays with you even if you have only read it very quickly. I am a firm believer that manga is one of the best tools for teaching people about the risks of counterfeit goods.”

Entrants were required to submit original artwork, a storyline and characters to explain the health and safety risks related to counterfeit products. Submissions were received from across the country, and after a rigorous selection process involving industry experts, Ms. Emiko Iwasaki’s manga was selected as the winning entry. Her manga, “Honmono – the Secret that Changes your Life,” tells the story of how a young shop employee witnesses first hand the menace of fake products, how easily customers are duped into buying them and the serious harm they can cause.

“Ms. Iwasaki…drew a fantastic manga,” Mr. Natsume observed. “I hope that by reading it, more people will have a better understanding of the dangers of purchasing fake goods and realize that they can make a difference and help reduce the harm these goods cause. I truly believe that this is possible with the power of manga.”

Ms. Iwasaki won a contract worth ¥1,200,000 (approximately US$15,000) and the chance to work with a professional manga editor to develop her entry into a full-length manga. Japanese and English versions are currently available. Arabic, Chinese, French, Spanish and Russian versions are foreseen in the coming months. The manga will be made available free of charge in print and electronic formats.

In March 2011, Koubo Guide, an established Japanese monthly reporting on competitions in Japan, awarded its 2010 Koubo Award for Best Outreach Activity to the WIPO “Real” Manga Competition. It hailed the contest as a “brilliant method to appeal to a wide range of people” to achieve the goal of increasing awareness about the risks of counterfeit products through manga.

Mr. Hayashi of MOFA said, “I am hopeful that readers will enjoy this manga work and that many more people will become familiar with IP rights.” He added, “the public’s general understanding of the importance of protecting IP rights will help build support for creative activities which will enrich all our lives.”
Ms. Emiko Iwasaki is both a manga artist and one of a very few successful female video game designers to break into Japan’s male-dominated video game industry.

How did you get involved in drawing?
As a child, I loved oil painting. When I found out that computers have enormous potential for creating art, I started using them in my work. Working in the video game industry also gave me an opportunity to develop my manga drawing skills.

What attracted you to the WIPO Manga Competition?
I wanted to create something that would help people and is easy to understand. Throughout my career, I have focused on developing my skills to create manga, video games and similar works, and recently I have felt driven to use my skills for something that could make a real difference in society. I wanted to use the power of manga to introduce people to socially important issues in a fun and easily understandable way. Just when I was looking for a way to do this, I learned about the competition. It was a perfect opportunity.

What was most challenging about the project?
Mainstream commercial manga and video games target an established market, and because consumers have certain expectations, we have to make sure that our creations match what people want to buy. In the WIPO competition, the main challenge was to convey the manga’s educational message in a way that was interesting, engaging and easy to understand. I wanted to create a manga that readers could relate to and that piqued their interest.

As the manga is aimed at an international audience, I had to get a better grasp of the issue and familiarize myself with the different perspectives young people in different parts of the world have about fake products. It wasn’t easy, but it was something I needed to do so I could write a story that means something to young people around the world.

How is creating a manga different from your other work?
When people read manga, watch anime or play video games, they often only remember specific high-impact scenes. These help catch a reader’s attention, so when I make a new video game or other work, I start with these scenes in mind and work out the rest of the story from there. I then think about the overall tempo of the manga and incorporate scenes that will leave a lasting impression on the reader.

With the manga I created for the WIPO competition, the process was a little different. I first had to understand the target audience and work out how to make the manga mean something to them. Because the subject matter is quite difficult and unfamiliar to many, I had to think about the story as a whole and then make it simple and easy to understand. Traditionally, super powers are a key feature of manga stories, so I had to think about how I could incorporate this into the storyline. I really wanted the manga to make people think more deeply about the harm caused by counterfeit products, so I had to create a manga that starts out slowly but builds to create a big impression on the reader.

What inspires you?
My travels abroad have been my biggest inspiration. This opened me up to many different people, places, cultures, viewpoints and artistic styles, and yes, I also came across a lot of counterfeits. This really helped me to make the manga a lot more relevant.

Have you been the victim of IP infringement?
Yes. In one of the video games I was working on, I created a character based on the likeness of my father, who had recently passed away. Unbeknown to me, another team in the company copied the character, changed it slightly and used it in their project. I think it is very sad when people steal something and use or sell it as their own. People should make their own creations instead of just copying something and selling it as their own work. The same is true for counterfeit products. I have seen many excellent copies, and if people have the ability to make such good copies, I think they should use that creativity to make their own products and brands. Wouldn't that be more interesting and cool?

What are your future plans and goals?
I would really like to expand the range of characters that appear in traditional manga and to write documentary-type manga stories, but there isn’t yet much demand for them. I also want to work on developing my talents as an artist in a broader range of media and to find a way to balance my personal interests with the economic imperatives and demands of a professional career.
Architecture is deeply woven into the fabric of human history and culture, and its influence cannot be underestimated. Born of the fundamental human need for shelter, the art of designing and constructing buildings has generated countless inspiring and commanding structures across the globe. From a humble cottage to iconic works such as the ancient pyramids of Egypt or the Sagrada Familia in Barcelona, Spain, architecture influences our daily lives and our environment. Winston Churchill once said that “we shape our buildings; thereafter they shape us.” It is no surprise, then, that architecture has provoked, and continues to provoke, interesting and often heated debate. In this article, Dr. Jorge Ortega, Professor of Civil Law at the Universidad Complutense Madrid, Spain, considers some of the controversies that have arisen, specifically in relation to the protection of architecture as a creative work and the rights of architects in their creations.

**The long road to protection**

Architecture is defined as the “art of designing and constructing buildings”. It is both a functional and an artistic endeavor. This explains why architecture has provoked so much controversy through the ages. While architecture provides a blueprint for the design of structures for human habitation, these structures are so much more than merely utilitarian or functional. Architecture conceptualizes space and ensures that a structure is both habitable and in harmony with the surrounding environment. At times these structures are genuine works of art, providing inspiration and conferring a sense of well-being. They have the power to shape our lives and change our perceptions. Architecture, however, has not always been recognized as worthy of protection under copyright law. The following discussion demonstrates that, in many jurisdictions, this remains a thorny issue.

**The legacy of the Pharaohs**

One issue that continues to fuel intense debate is whether it is legally possible to reproduce an architectural work located on a public site without the architect’s permission. Many national laws allow for the reproduction of such “publicly situated” works in the context of limitations to the right of reproduction which is one of the exclusive rights authors enjoy under copyright law.

A recent controversy involving one of humanity’s most ancient architectural complexes and artistic marvels, the pyramids of Egypt, shows that at times this limitation can lead to political complications and can be very difficult to apply. In 2008, Zahi Hawass, Secretary General of Egypt’s Supreme Council of Antiquities (SCA), made a case for establishing a copyright law that would allow claims for damages against authors of reproductions of the pyramids, the Sphinx and all other ancient monuments. This would mean, in practice, that Egyptian and foreign artists could only benefit financially from their drawings or illustrations of Egyptian and pharaonic monuments if the reproductions were not exact. But how would an exact reproduction be identified?

Would the Luxor Hotel in Las Vegas, U.S., be considered an exact reproduction? The hotel’s web page describes it as “the only building in the shape of a pyramid in the world”. In the context of the proposed new law, this led some commentators to claim that the American hotel complex should share a proportion of its profits with the Egyptian city of
Luxor, the site of the legendary Valley of the Kings. When journalists asked Mr. Hawass about this, he replied that, in his opinion, it was not an “exact copy of the pharaonic monuments, despite its shape”, stressing that its interior was significantly different from that of the pyramids. This would suggest that an identical reproduction of a structure’s exterior is permitted as long as the inside is different, and vice versa. Given the sensitivity of the question and its potential fallout the law is yet to be adopted.

Image rights and brands - the Auditorio de Tenerife

While the idea of paying to reproduce pharaonic works may seem unpalatable to many, other owners of landmark buildings have adopted a modified approach. For example, while there are no restrictions for tourists wishing to photograph the Auditorio de Tenerife in Spain, the owners have clearly set out the terms of use of the building’s image for commercial operators.

In 2003, the image of the Auditorio was registered as a trademark, and its use, “whether photographic or illustrated, of all or any part, and the use of the logo or any element that defines the same, is regulated within the legislation in force” which covers the use and enjoyment of any registered trademark. The Auditorio charges commercial operators for using its external space for film and photography and requires that the final product be cleared with the relevant department of the Auditorio prior to publication. A deposit is also required to guarantee proper use of the images.

Competing rights – striking a balance

Under certain national copyright laws, the moral rights of creators are not limited in time; they are perpetual. This can create difficulties for those who own buildings and subsequently seek to renovate or modify them. Colombia is one of the few countries in the world to have an established copyright law that seeks to balance the moral rights of architects and the rights of building owners. Article 43 of Law 23 of 1982 on Copyright essentially states that if the owner of an architectural work wishes to modify it, the architect of that work has no legal grounds on which to stop this. It does, however, add that the architect “may prohibit his name from being associated with the modified work”.

Some commentators believed that this was unconstitutional and moved to have the article repealed. The Constitutional Court of Colombia, however, did not agree and, in its judgment of November 4, 2010, ruled that Article 43 was in fact constitutional in that it “does not breach the normal exploitation” of an architect’s rights in his work, and that “the damage caused is justified” and in line with constitutional interests.

This practice is uncommon in Europe where the right to the integrity of a work includes protecting it against any unauthorized material modification or against damage to the author’s reputation. European laws governing the protection of architectural works do not favor building owners. However, under certain circumstances, for example, when health and safety issues arise, a building owner may be authorized to modify a building. In these instances, most national laws accord architects the right to choose not to appear as the author of the modified work.

The right to the integrity of a work

The United States Copyright Act offers an interesting precedent. It provides a detailed system for resolving conflicts that arise when the architect’s interests, in terms of maintaining the integrity of a work, collide with those of the building owner who wishes to restore or modify the building, not to maintain its material structure but to boost its economic value or improve its appearance.

Article 113 of the Copyright Act distinguishes between “a work of visual art [that] has been incorporated in or made part of a building in such a way that removing the work from the building” will cause “destruction, deformation, mutilation or other modification to the work”, and those which can be removed from buildings without substantially modifying the original design.
If an artist (or an architect) agrees in writing to one of their works being installed in a building, acknowledging that it may be subject to “destruction, distortion, mutilation, or other modification, by reason of its removal,” the building owner can proceed with its removal without the artist’s authorization and is under no obligation to inform the artist about the work being carried out.

However, where a building owner wishes to remove a work of visual art that is part of the building and that can be removed without its being destroyed, distorted, mutilated, etc., the owner must make a “diligent, good faith attempt” to inform the artist, who then has the opportunity to collect the work at the artist’s own expense within 90 days.

Classic infringement of moral rights

A classic case of the infringement of an architect’s moral rights arose in Australia in relation to Sydney’s landmark Opera House. In 1959, Danish architect Jørn Utzon won an international competition to design a performing arts complex. After various delays in the building’s construction, a team of Australian architects took over the project and modified the internal layout of the building. In so doing, they considerably limited its original configuration as a multipurpose hall.

At that time, architects in Australia did not have moral rights in their architectural works, so Mr. Utzon was unable to contest the new design in the courts. Only in 2000, with the approval of the Copyright Amendment (Moral Rights) Act, did architects acquire the right to be identified as the author of a work, or the right to be consulted with respect to any changes planned to buildings they had designed.

Inspiration or plagiarism?

The challenge of drawing a line between inspiration and plagiarism is another source of tension among architects. In April 2010, just a few hours before the opening of World Expo 2010 in Shanghai, a heated debate flared up about the originality of the Crown of the East, the name of the Chinese Pavilion. Various Chinese architects leapt to the defense of this 60-meter high inverted pyramid which dominated the Expo site. Others claimed that it bore a marked similarity to the structure of the Japanese Pavilion at Expo 1992 in Seville, Spain, designed by Japanese architect Tadao Ando. Still others compared it to the Canadian Pavilion at Expo 1967 in Montreal, Canada. While the similarities were striking, the Japanese construction was the centerpiece of a more decorative ensemble, whereas the proportions of the Chinese Pavilion were quite different.

Ni Yang, the assistant designer of the Chinese Pavilion, refuted accusations of plagiarism, claiming “there are differences between his work and mine. His work had a decorative purpose; mine is a building. Pavilion style is widely used in architectural design, so it cannot be said that it is the creation of Tadao Ando.”

What is certain is that infringement can occur at any stage of an architectural work – from plan to plan, plan to building, building to plan and building to building. As the famous Spanish architect Gaudí said “my ideas have an unquestionable logic; what I can’t understand is why they have not been applied before,” underlining the fact that sometimes it is impossible for architects to know whether their ideas are truly novel or whether they have been conceptualized before.

The future

Today architecture faces many challenges. While the IP rights of architects are sure to continue to spark heated legal battles, the practice of architecture will have to become more people-focused, particularly in light of recent natural disasters. Reconstruction will be one of the key themes of the 24th Congress of the International Union of Architects (IUA) to be held in Tokyo in the autumn of 2011. A move towards a more transparent, coherent global practice in architecture, which enables architects to be more closely connected and more aware of the work of their counterparts elsewhere, would certainly help reduce the number of IP-related lawsuits.
When and why did you decide to become an architect?

My father was a well-known architect in Germany. You could say architecture was in the family – my sister and two cousins are also architects, so everybody expected me to follow suit. I resisted this at first and studied philosophy and economics instead, but I soon came to realize that not studying architecture was as illogical as doing so, so I went on to study it in Karlsruhe, Germany.

What inspires you when you set about designing a new building?

When we embark on a project, we first try to understand what the purpose of the building will be and its geographical, environmental and cultural contexts. The client and the project context are, I would say, our greatest inspiration. By understanding these key elements we can find the best possible solution. The actual process of designing a new building is a collaborative effort involving one or several partners and the young architects that work with us in our office.

What does architecture mean to you and what is its role in society?

Architecture makes a key contribution to human heritage. It identifies culture, space and time and creates the environment in which we spend a good part of our lives. In addition to its technical aspects, architecture can reveal many things about a culture, its sensitivities and social and political structures. Architecture provides a record of the technical state-of-the-art and of our cultural history – showing where we came from, and to some extent, where we want to go.

For me, architecture is a tool, a cultural asset and an art, but it is also a very functional element of our daily lives.

What inspires you?

I am inspired by many things – by people, the developments we see in our societies, music, a beautiful building. Nature is a great inspiration. I like to look at the architecture of our ancestors, from the early Greek and Roman periods through to the last century. I also like looking at what my contemporaries are doing. This can sometimes be an inspiration or even a useful warning about what not to do, helping me avoid mistakes in my own work.

Which projects appeal to you most?

While I find all new projects interesting, I am particularly drawn to those where people live, work or gather, such as a concert hall, a conference center or a place of learning. I like creating spaces where people can work and live together; where they can communicate, interact and work in an interdisciplinary way. Such buildings have a great impact on our society, and designing them is a great honor.

What are the major factors that influence a building’s design?

Many factors influence architecture. While we have mastered some of the techniques that challenged our ancestors, such as structure and the physics of building, new challenges emerge every day. Today we cope with those associated with the excessive energy use of buildings. These new factors greatly influence the design of new buildings.

Whenever a new factor emerges, such as the structural change that characterizes the Eiffel tower, it tends to dominate the visual appearance of a structure until the technique has been mastered. At that point it becomes just another instrument in the symphony of architecture.
**WIPO’s new building**

**Basic facts**

- Architect: Behnisch Architekten, Stuttgart, Germany
- General contractor: Implenia Entreprise Générale, S.A., Geneva, Switzerland
- Pilot: Burckhardt & Partner, S.A., Geneva, Switzerland

Total of ten floors: six above ground and four below ground
Total surface area: 47,000 square meters
Total volume: 190,000 cubic meters
Ground floor lobby area with 3 meeting rooms
A cafeteria seating 320
An international intellectual property library – open to the public
Some 500 work places on 5 floors
Four basement levels (including delivery area, storage area and underground car parking for 280 vehicles and 230 parking spaces for delegates)
Service areas
Tunnel linking the new building with the WIPO tower
What are the main challenges an architect faces?

The challenges we face change with each new project and its geographical and cultural context. Sometimes they are of a legal nature, such as when building legislation leaves us very little wriggle room. Some are of a technical nature, for example creating a sustainably built environment. But, perhaps the greatest challenges are associated with communication. If you want to create the best possible building for a client, you have to understand the users, what is going to happen in the building, how people will live and work there and how the building will be managed. Obtaining this information is not always easy, but only when we have it can we effectively translate the client’s wishes, ideas, ideals, and needs into a satisfactory architectural work.

Why is intellectual property important to you as an architect?

Architecture – along with theatre, sculpture and painting – has long been considered one of the master arts. An architectural work is an interdisciplinary and highly communicative process brought about by architects together with engineers and clients. Architects, like writers, software engineers, artists, musicians and inventors, want to be recognized for their ideas and their creativity. As creativity is a risky business that often requires high upfront investment, we can only do it if we are sure our work is protected.

Architecture is a highly creative and innovative process, and the recognition that copyright protection offers us is very important. As the copyright owner of an architectural blueprint, we are able to grant a license to clients for our buildings to be constructed, and are sure to be recognized as the author of those works.

How have computer and digital technologies modified the design process?

Digital technologies can enable us to create forms that we could not previously have designed but, generally speaking, they are just another set of tools. When a building is completed, it matters little whether the creative ideas were drawn by hand, or digitally. What really matters is the result. That said, digital technology does facilitate and enhance the process of communication and interaction within the design team.

How do you ensure that your architecture keeps pace with a rapidly changing world?

Perhaps the best we can do is to continue working with young architects, and those who have a vision for the future and are open to new developments in this rapidly changing world. The hardest part is judging which developments make sense, which ones enhance our well-being, our architecture and the way we work and live together, and which ones make no sense at all.
**What does sustainability mean to you?**

Sustainability is not only about energy saving or minimizing the energy footprint of buildings. It is also about well-being. The most sustainable building is not necessarily the one that uses the least energy. It is the one that makes the best use of energy. Since every building we construct interferes with our environment, it must have been worth the effort. It must enhance the well-being of the people who work and live in it, and it must enrich our culture. To create a truly sustainable building, you have to consider the project’s context (cultural, geopolitical, geographical, climatic, topographical, etc.). In the last century, we believed every building in every corner of the world could be built in the same way. This resulted in huge energy inefficiencies. We cannot afford this anymore. We have to develop and adapt architecture to specific situations.

**How do you think the buildings of the future will be designed?**

A major task for architects in the future will be to enhance existing buildings. If we want to reach our goals in terms of sustainability and energy use, we have to redo most of the buildings constructed in the second half of the 20th century.

Generally, in the future we will be guided by the need to achieve sustainability and responsible use of materials. The number of different materials and trades used in buildings will become ever smaller. In the past 30 years, for example, suspended ceilings and many plastic materials were used. Today, we avoid these to achieve improved climate in buildings and to promote more responsible use of materials.

Facade will become increasingly complex and will include shading devices, light enhancement systems and decentralized air-conditioning systems. More importantly, they will become an energy source for the building, acting as photovoltaic and thermal solar collectors.

As concrete used in buildings is responsible for a significant amount of CO₂ emissions, I feel sure that building materials will change and that greater emphasis will be placed on the use of wooden structures which are far more benign ecologically. This is one of the reasons we decided, together with WIPO, on a wooden structure using wood from sustainably managed forests for its new conference center. This is a far-sighted move and a big step towards a sustainably built environment.

**What is the next big thing in architecture?**

If I only knew. The goal to create a more sustainably built environment will influence architecture greatly in the coming years. This is changing architecture from a purely “form”-driven exercise, to a more “content”-driven endeavor.

**Which architect has most influenced your work and which is your favorite building?**

My architecture has been influenced, naturally, by my father. We shared the same humanistic ideals. Our architecture is aligned with that of Scharoun and has an expressionistic nature, but American architects like Lautner, Eames and Schindler have also influenced our work.

**How would you describe WIPO’s new building and what, in your view, are its most important features?**

From the outset, our aim was to ensure that the WIPO office building is a communicative structure, where people can meet, communicate and interact. It is designed to be a friendly and open building that gives emphasis to natural lighting, easy visibility and openness. While it has many small offices, we have created interesting corridors that open, on the left and the right, on to winter gardens, meeting areas and spacious atria.

An important feature of the building is its heating system. It is cooled and heated using water from Geneva’s Lake Léman. Energy-wise, it has been responsibly built, and we hope that it will create a new, interesting and highly communicative home for the community of people working at WIPO.
Basic bicycle design has remained relatively unchanged for the past 125 years. The mini-farthing, commercialized as the YikeBike, has a radically different riding position and steering and wheel configuration. The result of five years of research and development, the YikeBike is light and extremely small when folded, making it easy to carry and store and eliminating parking problems and the risk of theft. The mini-farthing is made from ultra-light carbon fiber and encompasses state-of-the-art technology, engineering and industrial design to create a new class of bicycle, like a mountain, road or racing bike.

Inspired by Dean Kamen’s revolutionary transport device, the Segway (see box), Grant Ryan, inventor of the mini-farthing and co-founder of YikeBike which markets the device, told WIPO Magazine the project’s goal “was to design something that could become the most common transport device in the world.” This, he said, was “so bold as to be literally crazy”, because the traditional bicycle is still the most commonly owned form of transport in the world, with over 120 million sold each year.

The original team of three, however, remained undeterred, recognizing the need for an effective urban transport alternative to the gridlock facing city commuters around the world. “We thought if you could take a bike and make it fundamentally smaller so that you didn’t need to leave it outside, and if you had something that could go as fast as cars in a congested city – the average speed is already down to around 15 km/h – that would be a great solution,” Mr. Ryan explained, “the great thing about it is that you don’t have to change a city or install charge stations all over the place; you can use the billion or so charge ports that are already installed around the world, and it only takes around 8 cents worth of electricity to charge.” It allows riders to see and be seen, is highly portable and can link up with any other form of transport.

Amid growing concern about climate change and urban congestion, electric bicycles or e-bikes, once a curiosity, are becoming an increasingly popular urban transport choice. In just a decade, the e-bike business has become a US$11 billion global industry with enormous potential for further growth. While many e-bikes are similar to a standard bicycle with pedals, a group of engineers from New Zealand have come up with a radically different design that is turning heads and capturing the imagination of urban travelers. Featured in TIME Magazine as one of the world’s top inventions in 2009 and winner of countless design awards, the mini-farthing, a zippy and versatile new urban transport solution, features in Guinness World Records as the most compact electric bike in the world. The mini-farthing promises to transform the urban transport experience, offering city dwellers a fast, safe and easy way to navigate the urban environment.
Acting on a hunch

From a young age, Grant Ryan wanted to be an inventor. He said, “I spent a lot of time thinking I needed to be creative and tried lots of different things. Lying on the couch works for me,” he confessed; “people might think that’s lazy, but today everyone is so busy they don’t give themselves time to relax and think.” He said that he no longer “talks about good ideas any more… because, as an inventor, you don’t really come up with an idea; you have a hunch and then there’s a process of rapid prototyping – trying lots of things is really the only way you can come up with something.”

“We are strong believers in rapid prototyping and designed our early models so that we could rapidly test lots of configurations,” Mr. Ryan explained. “We knew we needed to have a decent-sized front wheel to start to manage the bumps” he noted, “and then we just wanted to make everything else as small as possible.” At first, he said, “we didn’t know how we were going to steer the bike – if it was going to be up and down or a joystick.”

Through a process of trial and error the team made steady progress. “We would try something, tweak it, try it again, change it and try it again. Now we cringe at some of the developments, but that’s the nature of process – it really is a good development process,” he said. “We were not sure that there was another configuration as stable and easy to ride as the modern bicycle, but after years of applying basic principles of engineering and trial and error we have discovered a new and dramatically smaller one.”

“The reason we went electric,” Mr. Ryan explained, “was because, ultimately, it allowed us to make the bike smaller, lighter and more efficient.” The bike comes with a whole range of safety features, including lights, and “is the first bike in the world with electronic anti-skid brakes.” It is designed to go anywhere a standard bike goes, can handle potholes with ease and allows riders to see traffic and be seen.

One of the challenges the company faced in bringing the YikeBike to market was overcoming the deep-rooted perception that there is something inherently natural about leaning forward onto handlebars when riding a standard bike. At first, rid-

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**Specifications**

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Photos: © 2011 YikeBike Limited
ers found the YikeBike’s upright position “undignified,” “inefficient,” “complicated” – in sum, “a bit too weird,” but then they really liked it. New Zealand business commentator Rod Oram, one of YikeBike’s first customers, said that it gives “a wonderful sense of freedom and it is very maneuverable and looks gorgeous. The ultra-light electric bike is not only genius for speeding between meetings, but folds up in a shoulder bag in just under 20 seconds. It is amazingly light and foldable and therefore very easy to transport,” he said.

Grant Ryan has no doubt that the inventors of the original bicycle encountered a similar reaction when they came up with its design. He said, “One of the things we have observed is that new things are always really weird for people.” This, he said was where early technology adopters, whom he considered “unappreciated economic superheroes”, played a key role.

Early adopters take a chance on something new and, for Grant Ryan, “the only way that small companies can get cracking in creating new innovative products is if there are enough early adopters to give it a go.” This, he explains, “allows companies to raise the capital and to produce a new product at low cost so that everyone can have it.” By way of illustration, he pointed to the early adopters of the first “brick-like” cell phones. “But for early adopters, we would not have benefitted from these technologies,” he contended.

Grant Ryan and his team are keenly aware of the importance of intellectual property (IP) and began thinking about protecting their innovation in the early stages of its development. Mr. Ryan is “strongly focused” on IP and believes it is “very, very important.” He notes that, as an inventor, he holds a number of other patents and that “the patent people I work with loved the idea [of the YikeBike] so much they became shareholders.” He has recently sought international protection for this ground-breaking innovation via WIPO’s Patent Cooperation Treaty (PCT) (WO/2010/007516). “I am a huge fan of the PCT system. It’s a fantastic development that helps stimulate investments that move technology forward,” he said.

The company believes the YikeBike offers a “unique combination of stable and safe riding, compact size and light weight.” Having acquired a robust portfolio of patents, the company is now seeking to license its technology to other creative manufacturing companies. It offers “time-limited exclusive licenses for particular markets and types of implementation” to allow other companies to establish brand leadership in a given market. “It makes little sense that we are the sole producers of the YikeBike when others can also build a successful business around it,” Mr. Ryan mused.

When we asked him what new projects he was working on, he commented, “they are too secret to say – having fun with the YikeBike at present – there will be more though.”
Caribbean singer-songwriter Shontelle Layne, known to her fans as “Shontelle” entered the global music scene in 2007 when the team that discovered successful R&B artist Rihanna offered her a deal she could not refuse. Shontelle’s success as a singer-songwriter comes from her ability to put a story to lyrics in a way that resonates with her fans. She pens her own music and also writes for other artists, including Rihanna. Shontelle understood from the outset the importance of managing her music, her intellectual property (IP), as a business asset. She recently talked to the WIPO Magazine about the challenges she has faced as a songwriter, the lessons learned, and her hopes for the future.

**Key accomplishments so far:**
- Shontelle’s recording of “Impossible,” released in early 2010, peaked at number 13 in the Billboard Hot 100, and its YouTube video clip has had over 30 million viewings.
- Her single “T-Shirt” went platinum in the United States.
- The Obama presidential campaign invited Shontelle to feature her song “Battle Cry” (released in 2008) on their Yes We Can: Voice of Grassroots Movement compilation CD; she also shot a tribute video in honor of Barack Obama.
- She performed as an opening act on tour with R&B singer Beyoncé Knowles.
- Her songs feature in various television series and films.
- Shontelle has received 11 Barbados Music Awards.
- She was the winner of the 2011 Award of Excellence from the Copyright Society of Composers, Authors and Publishers (COSCAP) Foundation, Inc. in April 2011.

**Singer or songwriter – which do you prefer?**

That’s always a hard question but I think the role of the songwriter is very important. Without the songwriter there is no song. I really enjoy being able to make others experience something through my words and my music. I can also continue to write songs when I stop performing. As long as my brain functions, I will always be able to write songs and create music. Songs never die.

**When your name appeared on the credits of Rihanna’s LOUD album, how did you feel?**

There are no words to express it. It’s not just the excitement of being associated with an artist of that caliber, but that Bajan [Barbadian] girls are doing this together and we’re shining a bright light on our country. I’m very proud of this accomplishment.

**How does a songwriter earn a living?**

It is not that complicated. It’s really just a matter of managing your IP. A team of writers, musicians and producers or a combination of these writes a song. They then decide on the percentage of the royalties, “the split”, that each writer will receive. Royalties are usually a percentage of the revenues derived from the use of the music or of the fixed price per unit sold. These are paid to a collecting society, which then distributes them to the copyright owners.

Songwriters often work with publishers, giving them permission to license and synchronize music to different platforms (e.g. film, television) in exchange for a percentage of the royalties. A good deal with a powerful and creative publisher can really boost revenues. Once everyone, including the record label, is happy with the audio files they are pressed into CDs or put online.

However, before you can benefit from your IP as a songwriter, you have to sign up and register your work with a collecting society. They calculate the royalty payments due for the use of your material, collect the money, and make sure you are paid.

Thanks to the sound advice of my manager, Sonia Mullins, who was adamant that I join COSCAP right away, I have been able to collect on every-
thing that I have written. I learned from the outset that anything you create has value. If you have created something that others want to use, you have the right to earn something from it, but if you don’t register your work with a collecting agency, you can’t collect on it.

I asked lots of questions and visited the websites of collecting societies all over the world because I wanted to know how they work. It seemed unlikely that one collection agency could track my music everywhere in the world. I learned that many of them are affiliated and collect on each other’s behalf and that to become a member I had to pay a percentage of my royalty earnings. When you understand the deal and what you can potentially make, that’s when you start handling your business correctly.

My lyrics and music are my IP. I work really hard and if anyone benefits from it, it should be me.

You have to surround yourself with trustworthy advisers and must never underestimate the power of knowledge. I believed that the best way to build business value from the success of my music was to set up my own publishing company. This means that in the future I will be able to sign on other writers and help them in their careers.

Are writers paid an upfront fee or royalties only?

It depends. A recording artist may want me to write a song and may offer an upfront fee. Sometimes, I agree to write something for no upfront fee but make sure that I receive a percentage of the royalties. Either way, you have to be sure that you benefit from the arrangement. The best way for a songwriter to protect his or her interests is to have a contract drafted and signed. This allows you to collect your rightful share. There are a lot of people out there who don’t fulfill their promises so contracts are very important.

I have had my music released without my permission and without a royalty split agreement. Now, I never do sessions without contracts and split sheets to be sure this doesn’t ever happen again.

How does a writer negotiate royalty splits?

When writers work together on a song, they usually split the royalties evenly. But sometimes a song might be almost finished and the recording artist or the producer might say “I think this needs a touch of Shontelle” and they’ll call me to write one more verse. In these instances, I might choose to take a small percentage and finish the song. It really just comes down to what you agree on but it’s very important that you set it out on paper. Once it’s legal, you register the song and collect the royalties.

“I think the key to ending piracy is to make sure that buying music is easier than stealing it.”

If you are just starting out and have an opportunity to write for a well-known recording artist, their contract with their record label might specify that they are entitled to a percentage of the song’s publishing revenues. Some recording artists are big enough to do this. You say to yourself, “If I don’t agree, then I lose this shot and they won’t sing my song and my name won’t get out there”. I’ve been there. I wish there was a way to stop this but at present there is nothing emerging songwriters or musicians can do about it. That’s why it’s so critical to be well informed. You need to know what you’re
up against and to be smart about how you deal with it. Every business decision is an investment in your future.

**Is an artist’s brand as important as their music?**

Absolutely. Branding is a very important part of the music business. I began developing a brand strategy early on in my career. It’s a good idea to protect anything that defines you; your catch phrases, for example, are part of your brand. These things make you the name and the artist you are. Trademarks and the deals they underpin are a valuable source of revenue.

I work with two public relations companies to strengthen my brand and make sure it’s fully leveraged. Sometimes companies approach us, sometimes we approach them. We are currently working with other brands like CAT, Chrissy L., Cynthia Steffe, Guess and Blackberry, and have worked with VEET and Hanes.

Why would a popular brand want to work with a rapper or a pop artist? Well, companies recognize that if someone is popular then people want to emulate them. If a pop star wears these brands, their fans will probably want to wear them too.

Touring is also one of the best ways to boost my brand as a musician. It enables me to get my face out there and be heard so that people connect with my music.

**What are your views on music piracy?**

Piracy is theft. People who take your music, sell it and make money from it are stealing something you have spent a lot of time and money creating. It’s a criminal activity and, while it’s unlikely we’ll ever be able to abolish it completely, we can try to create an environment where people are less inclined to steal.

One of the big problems with piracy is that it is difficult to catch the thieves and make them pay. Today, people are becoming less tolerant of it given its negative impact on the industry and individual artists. I think the key to ending piracy is to make sure that buying music is easier than stealing it.

**What advice do you have for aspiring musicians?**

It wasn’t so long ago that I didn’t have a record deal. I looked around for opportunities and took advantage of what was out there: MySpace, Facebook, YouTube, and gigs to showcase my talent and gain exposure. I believed that one day the right person would hear me. The fact is, music is a business like any other, so it’s very important to study your art, research your fan base and acquire as much knowledge as you can about the industry. The more you understand it, the more leverage you will have. A keen eye and a trustworthy and reliable team are essential for your business to develop and thrive. But you have to get out there and make it happen.

**What’s the future of music in the Caribbean?**

The Caribbean is a gold mine of talent. We have, for example, Hal Linton, Damien Marley, Livvi Franc, Aaron Fresh, Sean Paul, Vita Chambers, Rihanna, Shaggy, and bands like Cover Drive. These have all been signed up to major labels.

Music has value and we should never forget that. In the Caribbean region, there is a lot that we can do to improve the music business, by focusing on developing the wealth of local content for example. People really underestimate IP and the value that it has.
Thinking out of the box

In much of the world, IP education has focused almost exclusively on IP law. Graduate programs in IP are predominantly Master of Laws (LLM) courses targeting lawyers, reflecting the word of the day: “protection”. Placing primary emphasis on IP protection, however, has sparked much debate around the world, fuelling diverging North-South perspectives. A more holistic emphasis that encompasses the business aspects of IP underlining the opportunities it offers in terms of new jobs, wealth creation and economic growth, promises a more constructive and fruitful way forward. After all, IP rights are tools to enable the entrepreneurship of ideas.

There is nothing inherently wrong with designing a purely IP-focused curriculum centered on the protection of valuable intangible assets which, because of their economic nature (as non-rival and non-excludable goods), require a legal shield against free-riding to ensure there are incentives to create and innovate. We need the protection that IP rights afford in order for businesses to thrive. But IP is about more than simply acquiring legal monopolies; it is also about harnessing innovation and creativity to create wealth. Successful, IP-based companies make profits, create jobs, pay taxes and fuel regional economic development. If we are to exploit the commercial potential of IP and to nurture a growing number of successful IP-based companies, we need economics-literate lawyers and IP-conscious managers.

In today’s knowledge economy, no business can afford to go without an effective IP strategy. All too often, companies in Latin America and beyond are unaware of how best to take advantage of their IP, and fail to leverage their full market potential. How, then, can this be turned around? IP education is crucial. Just as lawyers need to be exposed to business concepts, entrepreneurs need to understand the benefits of IP. The time is ripe to move away from primarily emphasizing IP law and instead to incorporate a law and economics dimension into IP education, focusing on the business side of IP, particularly IP management, finance and monetization.

Teaching lawyers in Latin America

Argentina offers would-be IP lawyers a myriad of undergraduate and graduate IP programs in a large number of private and public universities throughout the country. Buenos Aires, the nation’s capital, boasts a number of high-quality educational institutions with excellent faculty members and has a long and prestigious tradition in IP legal education. The pioneering academic, Professor Pascual Di Guglielmo, taught the first program on industrial property rights (including copyright at a later stage) at the School of Law and Social Sciences of the University of Buenos Aires, from 1949 to 1955.

Today, a wide range of first-rate IP programs and legal research activities are available to legal scholars in Buenos Aires. These include:

- two LLM programs in IP – one at the Latin American School of Social Sciences (Facultad Latinoamericana de Ciencias Sociales, FLACSO) and the other at Austral University – which attract students from across Latin America;
- a number of intensive graduate programs offered by the University of Buenos Aires – one on copyright and related rights directed by Delia Lipszyc, and one on industrial property rights directed by Carlos Correa, both scholars of international renown; and

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1. Facultad Latinoamericana de Ciencias Sociales (FLACSO)
specialized IP research centers at FLACSO (Program on Law and Public Goods), the University of Buenos Aires (Interdisciplinary Center in Industrial and Economic Law) and Austral University (Intellectual Property Center).

The challenges of teaching IP in Latin America

In spite of its long tradition in IP education and highly talented faculty members, teaching IP in Argentina is no easy task. Without an independent or alternative source of income, it is all but impossible. It is rare to find a full-time professor of IP in Argentina (or, for that matter, in Latin America). Most professors of IP also work as lawyers and, in many cases, they subsidize public education with their own law practice. The positive side is that this gives teaching a strong practical orientation. The downside, however, is that professors lack the time for research and other scholarly work.

While it is desirable to have a combination of legal practitioners and full-time legal scholars in any law faculty, the current shortage of full-time professors of IP law in Latin America is a matter of growing concern. Without full-time scholars, it is not possible to develop fresh theories and undertake research tailored to the needs of the region. Without adequate investment in IP education, the region’s IP laws and legal scholarship will continue to be transplanted from theory-producing countries, with Latin American countries being mere recipients of others’ systems.

Rethinking content & methodology

IP legal education in Latin America typically takes place in isolation from the social sciences, perpetuating the 19th century claim of the scientific autonomy of legal science (scientia iuris, science juridique, rechtswissenschaft). Irrespective of whether the field of law is considered a science or an art, there is no doubt that it is impossible to fully grasp the significance of IP without an understanding of economics.

Judge Oliver Wendell Holmes, Jr. wrote more than a century ago that: “for the rational study of the law, the black letter man may be the man of the present, but the man of the future is the man of statistics and the master of economics.” This still holds true today. The dominant paradigm within legal academia in the United States, Europe and many parts of Asia is law and economics. In Latin America, however, there is still a great deal to be done to integrate economics with law in the teaching of IP.

Whether for lawmakers designing optimal public policies or for company managers seeking to maximize returns on IP portfolios, economic analysis is a valuable tool for rationalizing decision-making processes. It is particularly relevant in a field like IP where it is necessary to evaluate well in advance the costs, benefits, trade-offs and possible alternative courses of action. Intangible assets are valuable business resources and they require careful management.

The interface between IP law and economics is fertile ground for further study. Many useful insights have already enriched purely traditional legal debates. An economic perspective offers another way of understanding a complex reality. When coupled with sound legal reasoning, it provides a powerful tool with which to develop effective corporate IP strategies and public IP policies.

WIPO’s decision to appoint a Chief Economist and to establish an Economics and Statistics Division is a timely step in integrating economic thought into contemporary global IP debates. A similar objective is behind the recent decision by the Max Planck Institute for Intellectual Property and Competition.
Law, a world-class research hub in Munich, to create a Campus for Legal and Economic Research. Corporate giants need economic advice too. Google appointed Hal Varian (Emeritus Professor at the University of California, Berkeley and author of the bestselling textbooks *Intermediate Microeconomics* and *Microeconomic Analysis*) as Chief Economist to advise the company on the economic aspects of its activities, including its IP strategy. Indeed, many fields now recognize the need to consider the interface between IP and economics.

**Teaching the business community?**

Across the globe, graduate education in IP has centered on teaching lawyers. When IP was a little known, arcane branch of law, this was understandable. Today, however, IP protection is a prerequisite for creating the incentives necessary for business growth. The time is, therefore, ripe to ensure that IP education delivers the kind of knowledge and training that companies need in order to manage IP assets strategically and effectively. This calls for greater emphasis on developing graduate programs that focus not just on IP acquisition but also on IP management and commercialization. And why not dream of a multidisciplinary, global MBA in IP to take IP education to a whole new level in the future?

IP education goes beyond the protection of valuable intangible assets. Protection for the sake of protection makes no business sense. We protect IP in order to exploit and profit from our creative efforts. Latin American companies, *multilatinas*, with a global reach as well as small and medium-sized enterprises have an urgent need for specialized IP management know-how. Within Latin America there is a golden opportunity to educate business executives, engineers and technology specialists in how best to manage IP portfolios for optimal economic return. Universities, public research institutions, professors and scientists also need to learn how to value and successfully manage and transfer their IP assets. This promises benefits both for the custodians of this knowledge as well as the economic well-being of the region as a whole.

**Sparking innovation**

IP education is crucial to the effective exploitation of IP and its strategic use. From the perspective of a Latin American professor of IP and lawyer, it is clear that, on the one hand, we need to develop more advanced programs to train lawyers to be economically-minded and, on the other hand, to provide the drivers of innovation and economic growth – entrepreneurs, business executives, engineers and scientists – with specific skills in effective IP management.

WIPO has a key role to play in advancing IP education globally, including in Latin America. A program sponsored by the WIPO Academy in cooperation with regional IP specialists and institutions on IP and business management would be a welcome step in promoting more effective use and management of IP assets in Latin America.

IP is at the heart of the knowledge economy and, with relevant business-oriented IP education programs that target lawyers in private practice, government as well as the business community, there is great scope for sustained, long-term economic growth and development, in both Latin America and beyond. For anyone who doubts the importance of education as a catalyst for growth, it is worth recalling the words of Anglo-Irish poet William Butler Yeats, “Education is not the filling of a pail, but the lighting of a fire.” Integrating a stronger focus on the economic and business aspects of IP management could do much to spark innovation and fuel economic growth.
What inspired you to write?

My father was a writer and, as a child, writing was my only dream. My father told me that it would be impossible to make a living in Egypt as a writer of fiction and that I needed another profession. Even the Nobel laureate, Naguib Mahfouz had to work for the government until he retired. That’s why I became a dentist, to have another source of income.

How has being a dentist influenced your writing?

There is a very strong link between medicine and literature. They both deal with human beings. Medicine tries to cure them, while literature seeks to understand and explain human behavior through fiction. So when I work as a dentist or when I write, I don’t really feel that I am moving from one world to another. It’s the same circuit.

It is very useful being a dentist. First, it enables me to be an independent writer, and this is very important in Egypt. As I earned my money from dentistry, I have always been free to say and write what I wanted. Secondly, as a dentist I am close to ordinary people. I’m a different kind of dentist; I give my patients all the time they need. They become friends, we drink coffee together. If when they come to the clinic they don’t feel like having treatment, we just talk. Human contact is very important and also very useful for me as a novelist.

What makes a novel successful?

There is no single formula for writing fiction. Every writer has to find their own way. I keep a file with details of every character – if she is a lady, how she looks or is dressed; if she smokes, the brand of cigarettes she buys, etc. This helps me breathe life into the characters of my imagination. At some point they begin to take on a life of their own. This is when I begin writing. It’s a bit like taking good friends by the hand on a trip. It’s a very mysterious thing, but my characters become independent and, instead of me directing them on the screen of my imagination, they decide what to do and I write what I see them doing. This gives me unbelievable pleasure. It’s an unbelievable feeling to no longer be in control of your characters.

It usually takes me two to three years to write a novel, but the files of characters for three or four other novels are open at the same time. Why? Because I wait for the “click”. When the file “clicks” into place, I begin writing.

Dentistry is much easier than writing. At least in dentistry you know the rules. In writing you discover the rules as you write. You really need to love writing to be a writer, because you spend hours alone improving your technique and developing your own style. Then there is the challenge of getting your material published.
What is the importance of a publisher?

The publisher is your window. Without a publisher, readers will never get to see what you have written. That was part of my problem in Egypt during the 1990s, because I had to get published through the government and, for various reasons, they refused to publish my work on three occasions – in 1990, 1984 and 1998. Each time I paid to have 500 copies published. My work got very good reviews, but I was a known writer without readers, because people couldn’t find my work. Publishers are very important in linking authors with readers.

The third time my work was refused, I was really desperate. I even decided to quit writing and to emigrate. That was a very bad day in my life, and I was really frustrated. But as I had already started a new novel, I decided to finish it. I would print the usual 500 copies for my friends, and then leave. That novel was *The Yacoubian Building*… and the rest, as they say, is history. From the very first week it was a phenomenon. It sold everywhere. It changed my life.

It’s ironic really. I had been fighting to get 3,000 copies published by the government and would have been very happy with that. Today, I am celebrating the sale of one million copies of my work. But it was not easy. I really had to keep fighting. I really fought for writing, much more than for anything else. Writing is like wooing a princess in a castle. You really have to prove your love, and in the end she opens the door.

Generally there are two elements in any fictional work. There’s the “local” element where the novelist addresses everyday social and political problems. Then there is the most important element, the human element. The challenge is to produce characters with human feelings that people can relate to. I was really very proud when I went to Norway to present my novel, *Chicago*, and female Norwegian readers told me they really understood the suffering of my female character, a veiled rural Egyptian woman. I think this is a very powerful aspect of literature, because it’s a really human one and this is what counts.

What makes a good author?

A novelist should know about life. Everything, every detail, is very useful to me. I read newspapers, magazines, everything, very carefully, from the women’s section – I know a lot about makeup – to the crime section. I read everything because at some point I will be writing about a female character that uses makeup and is in love. I go everywhere, to the poorest areas of Cairo, even to seedy bars. I go because I must learn about life. I deal with life, you see, so I must learn about it so that I can write about it.

In my experience, the novelist should never think about the reaction of readers when writing. If you do this, something very honest is lost. I always imagine myself writing for an invisible and powerless reader. This helps me to write what I want to write. It was hard after the big success of *The Yacoubian Building*. I quit writing for a whole year, because every time I sat down to write I had this success in mind.

To me a novelist is like a soldier. I wake up at 6 a.m. six days a week and am at my desk, writing, by 6.30. I write for four to six hours each day – fiction for five days, a weekly article one day a week and one day off. I write every day, adding a little each day and, in the end, I have a novel.
How important is copyright to an author?

Copyright is very, very important for any writer. If we had had a more effective copyright protection system in Egypt we would have had many, many more independent writers. Thankfully, because I had another profession, I had an independent source of income, but many professional writers who absolutely have the right to live from their writing were unable to do so because of a lack of strong copyright protection.

How would you like to see copyright evolve in Egypt?

I would like to see a very efficient system of copyright protection in Egypt, one that would change the whole cultural scene. In Egypt, we have problems not only in the field of literature but also in the movie sector. Egypt has the most important movie industry in the Arab world, but suffers from a lack of copyright protection and rampant online piracy. Similarly, music producers have stopped producing albums, because they are available online within hours of their release.

The situation is terrible and is a real threat to all those who seek to create something for humanity. You cannot blame them for leaving the industry; it doesn’t make sense to spend a lot of money on creating something and then have everybody copy your work without paying for it.

I see the issue very clearly. For poor students who need something which is not expensive, no problem. You make special allowances for them. I have given the rights to my books free of charge to all students at the Cinema Institute in Egypt. For any student who asks me, I will freely sign over the right to use one of my short stories in a study project. But I must have the authority to accept or to refuse to sign these rights over.

You cannot tell people that, because they are poor, they can take whatever they want. This is very harmful to our society. With an efficient copyright system, many more independent writers will feel secure enough to stand up for their principles. This will revolutionize Egyptian cinema and Egyptian music production. It is a must.

Has your exposure to different cultures been useful to you as a creator?

People are the most important part of my life. I really love people, and I try to understand them and not to judge them. This is very important, and it makes us much better human beings.

I went to a French school and learned French and Arabic at the same time. I also studied dentistry in the United States. I don’t believe in the clash of cultures. People are people, and we are basically all human beings with similar feelings. A mother loves her child in the same way everywhere; two young lovers have the same feelings wherever they are in the world. Everybody wants to work and raise their children and have a good family. This is very human, and I believe in that.

Who is your favorite author?

I have many but, for me, the greatest novelist in history is Fyodor Dostoyevsky; he’s a master with a very piercing, deep vision of humanity.

What advice do you have for an aspiring writer?

Stay honest. Che Guevara once said: “honor means that you always say what you think and you always do what you say.”
The successful development and commercialization of technology requires effective cooperation between lawyers, technology transfer professionals and scientists. A carefully integrated dispute resolution strategy is a key factor in securing the value of technologies and associated intellectual property (IP) rights developed in research and development (R&D) collaborations and their subsequent commercialization. In this article Alicia Blaya of the TransKnowlia Project at the University of Alicante, Spain, and Ignacio de Castro and Judith Schallnau of the WIPO Arbitration and Mediation Center explore the advantages of mediation and arbitration in managing IP and minimizing risks in an R&D context.

**Interests in R&D collaboration**

The decision to collaborate in R&D projects is often driven by an interest in sharing knowledge and an endeavor to reduce financial risks through the joint development of products or processes. In some cases, joint development is the only way to generate new technology or to further improve existing products or processes particularly when one partner does not have the technical expertise, financial or human resources or when existing patents block independent development activities.

Alternatively, companies award R&D contracts to other companies, research organizations or universities to develop a product or component against remuneration. Here, the principal party exercises quality control by determining who develops and delivers which products or components for its business; the developer, in turn, is remunerated for the work undertaken and as a consequence is able to finance further activities, including other research. A developer may also seek to obtain rights in the technologies developed, if it is interested in using these in the future.

In publicly funded research, parties invest considerable time, human and financial resources in preparing bids to obtain financial contributions. Their success in attracting these funds often determines their ability to undertake R&D activities. These resources are often limited in scope and duration and often carry stringent compliance conditions. Fund recipients are therefore keen to ensure the efficient application and use of these resources and to avoid any negative impact on their ability to commercialize their research results.

**IP issues and when to think about a dispute resolution strategy**

Disruptions — such as disputes arising in relation to IP assets as critical elements of economic value — can cause serious damage. A strategy to manage such risks and to resolve any potential disputes rapidly and cost-effectively, therefore, is vitally important.

The IP created with contractual partners during the R&D phase usually underpins subsequent commercial agreements, including those outlined here.

**Contractual Stages for R&D and Commercialization**

While parties may have conflicting views on a wide variety of IP issues, they need to agree on, in particular, the issues of (joint) ownership of IP and the allocation of rights for commercial purposes.

Decisions relating to IP ownership and use of research results in both the R&D and the subsequent commercialization phases need to be taken at an early stage. Option contracts, R&D contracts or consortium agreements, should, for example, include provisions regarding the possible use of IP rights for commercial activities after the research has been

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conducted, including the production and sales of resulting goods, use of processes for further development of products, or licensing out of technologies to third parties. They may also define responsibility for filing, prosecution, opposition, maintenance, and enforcement of foreground patents where patentable technology has been created in a R&D project, and who bears the associated costs. Such an approach significantly reduces the scope for disputes and facilitates their resolution should they arise.

Companies and R&D entities are increasingly turning to alternative dispute resolution (ADR) mechanisms to resolve issues that were previously directed to the courts. ADR mechanisms include several procedures that allow parties to resolve their disputes out of court in a private forum, with the assistance of a qualified neutral intermediary of their choice.

WIPO’s Arbitration and Mediation Center (WIPO Center) is an international not-for-profit provider of a range of services to facilitate the resolution of IP and related disputes. These include:

- **Mediation**: A non-binding procedure where a neutral intermediary (the mediator) helps the parties settle their dispute.
- **Arbitration**: A procedure where parties submit a dispute to a tribunal of one or three arbitrators, who issue an internationally enforceable binding decision.
- **Expedited arbitration**: An arbitration carried out in a shortened time and at reduced cost.
- **Expert Determination**: A procedure used to determine issues of a scientific or technical nature.

**Advantages of ADR in an R&D context**

The advantages of ADR and its use in an R&D context are now widely recognized. They include:

- **Neutrality**: ADR is neutral to the law, language, and institutional culture of the parties. This is particularly significant in cases involving research partners from large companies, small and medium-sized enterprises (SMEs), universities and research organizations with different institutional cultures, economic expectations and operating in different jurisdictions. For example, a minimum condition for funding under the Seventh Framework Programme (FP7) of the European Union is that at least three participants from at least three different countries (including entities outside the European Union) participate in a collaborative project to obtain funding.

- **A single procedure**: Parties can resolve IP disputes covering technology protected in several jurisdictions in a single proceeding making it possible to avoid the expense of multi-jurisdictional litigation and eliminating the risk of inconsistent results across national borders. Such cost savings are important for all R&D collaborations.

- **Party autonomy**: Parties can select a mediator, arbitrator or expert who is a specialist in the
A WIPO arbitration of a biotech/pharma dispute

A French biotech company, holder of several process patents for the extraction and purification of a compound with medical uses, entered into a licensing and development agreement with a large pharmaceutical company. The latter had considerable expertise in the medical application of the substance related to the patents held by the biotech company. The parties included in their contract a clause stating that all disputes arising out of their agreement would be resolved by a sole arbitrator under the WIPO Arbitration Rules.

Several years after the signing of the agreement, the biotech company terminated it, alleging that the pharmaceutical company had deliberately delayed the development of the biotech compound. The biotech company filed a request for arbitration claiming substantial damages.

The Center proposed a number of candidates with considerable expertise of biotech/pharma disputes. One of these was chosen by the parties. Having received the parties’ written submissions, the arbitrator held a three-day hearing for the examination of witnesses. This not only served for the presentation of evidence but also allowed the parties to re-establish a dialogue. In the course of the hearing, the arbitrator developed the view that the biotech company had not been entitled to terminate the contract and that it would be in the interest of the parties to continue to cooperate towards the development of the biotech compound.

On the last day of the hearing, the parties accepted the arbitrator’s suggestion that they should hold a private meeting in the course of which they agreed to settle their dispute and continued to cooperate towards the development and commercialization of the biotech compound.

Confidentiality: Under the WIPO Rules the arbitration, mediation and expert determination proceedings and their results are confidential. This confidentiality allows parties to focus on the dispute, frees them from concerns about its negative publicity, and by encouraging good-faith negotiations often facilitates settlement. This is particularly important in highly sensitive research activities where scientific results must be kept confidential. In facilitating mutual trust, ADR procedures contribute to longstanding, fruitful collaboration.

ADR clauses in R&D contracts

Parties involved in R&D collaboration often use model agreements as a basis for drafting and negotiating their research contracts. Such model agreements usually contain dispute resolution options. For example, a large number of companies, research organizations, universities and individuals involved in FP7 projects use the DESCA model consortium agreement which has been developed for such multi-party collaborations.

The DESCA model agreement now includes an option for WIPO Mediation followed by WIPO Expedited Arbitration. The following case examples administered by the WIPO Center illustrate the efficiency of these procedures.

Consistent dispute resolution clauses in related agreements

To fully benefit from these advantages, parties to R&D agreements also need to consider the dispute resolution clauses in their commercialization agreements. Figure 1 illustrates the close relationship between the different agreements concluded in the R&D and commercialization stages. It is advisable to ensure that these agreements are consistent in terms of outlining how disputes are to be resolved. For example, if the parties to one of the initial agreements choose to resolve potential disputes through mediation followed by expedited arbitration, they will want to use the same dispute resolution clause for any subsequent disputes relating to similar subject matters. This should allow for the consolidation of such disputes based on the parties’ advance consent to treat related disputes together. More specifically, in each of the related contracts, arbitration clauses should provide for the possibility to appoint the same arbitrator, with potential jurisdiction to deal with all related disputes. This could be, for example, the arbitrator in the arbitration first filed.

4 DESCA stands for “Development of a Simplified Consortium Agreement.” For more information about DESCA see: www.desca-fp7.eu/

5 For example: letters of intent, non-disclosure agreements, options, consortium agreements, R&D contracts, joint venture agreements, material transfer agreements, sub-contracts, licensing agreements and purchase contracts.
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WIPO
Outreach Services Section
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P.O. Box 18
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Switzerland
Fax: +4122 740 18 12
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For comments or questions, contact:
The Editor, WIPOMagazine
WipoMagazine@wipo.int

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