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Media Predictions

TMT Trends 2008

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About TMT

The Deloitte Touche Tohmatsu (DTT) Technology, Media & Telecommunications (TMT) Industry Group consists of the TMT practices organized in the various member firms of DTT and includes more than 6,000 member firm partners, directors and senior managers supported by thousands of other professionals dedicated to helping their clients evaluate complex issues, develop fresh approaches to problems and implement practical solutions. There are dedicated TMT member firm practices in 45 countries and centers of excellence in the Americas, EMEA and Asia Pacific. DTT's member firms serve nearly 90 percent of the TMT companies in the Fortune Global 500. Clients of Deloitte's member firms' TMT practices include some of the world's top software companies, computer manufacturers, wireless operators, satellite broadcasters, advertising agencies and semiconductor foundries – as well as leaders in publishing, telecommunications and peripheral equipment manufacturing.

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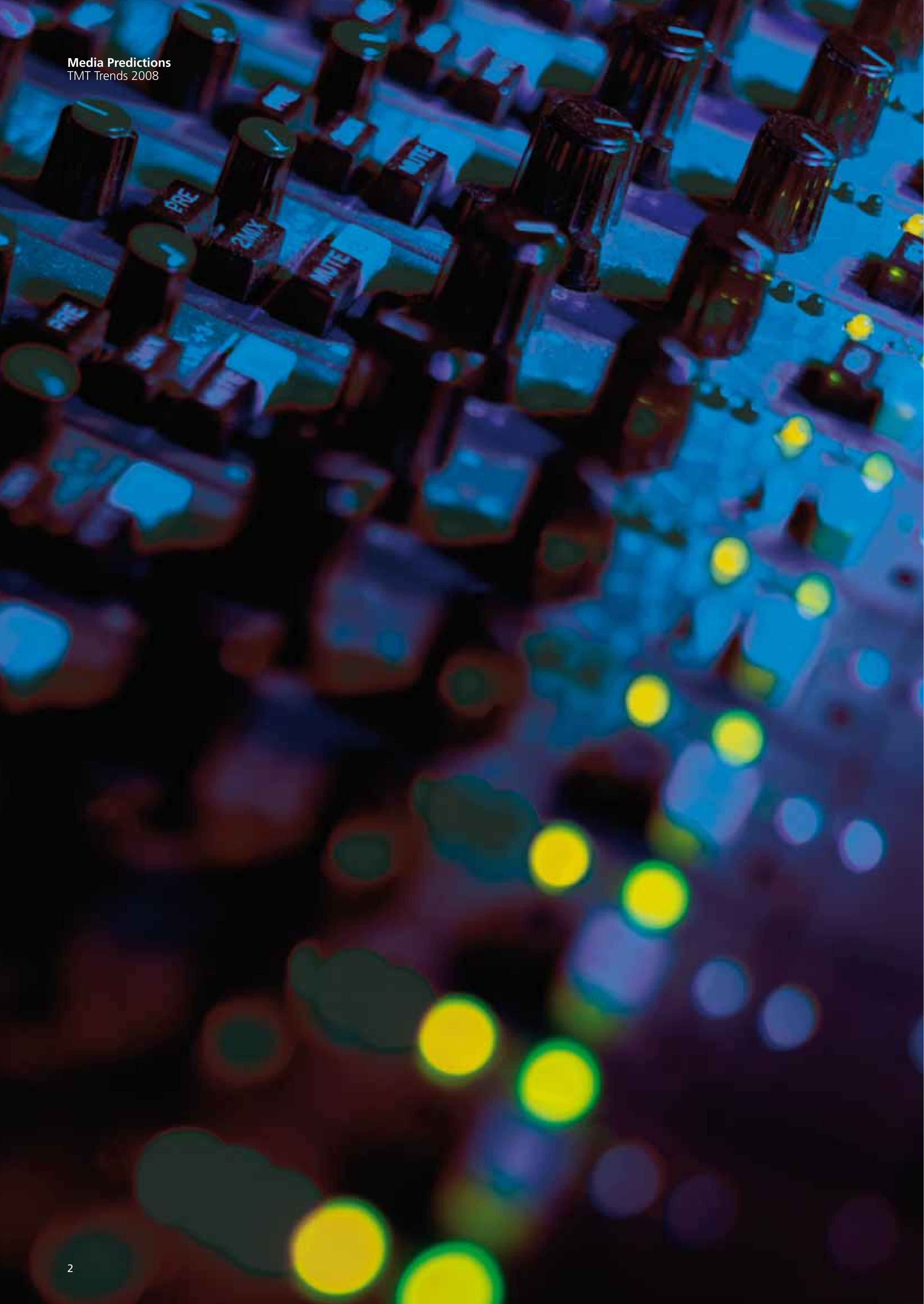
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Foreword

Welcome to the 2008 edition of the DTT Global TMT Industry Group's Media Predictions.

As predicted in last year's Media report, social networking has continued to gain in popularity, and our suggestion that concerns about privacy and user safety would grow proved correct. New media, too, have enjoyed a positive year, although their power relative to traditional media has been more openly debated, and the continued dominance of television, radio and print more widely acknowledged. Also, as suggested last year, the success of virtual worlds was put in perspective during 2007, as accurate usage data became available.

The so-called long tail remained tightly curled, with most consumers defaulting to populist content, rather than spending time seeking niche content. VoD grew, as expected, but from a low base and at a much slower pace than others suggested, largely because of limited available bandwidth, and its knock-on effect on quality. However, on the Internet, user-generated content continued to reign supreme, with the volume of uploads and downloads continuing to surprise, though not as much as the prices paid for companies in the sector. And as suggested, mainstream media companies started to use social networking sites as a means of promoting their content and schedules.

The use of one form of participation in television – competition television – has been affected by a number of inquiries into authenticity. The print media began to make more symbiotic use of the Internet, and record revenues were posted for online activities. And China, as predicted, remained a hard nut to crack.

The outlook for the media sector in 2008 is similarly varied. This year's Predictions cover potential obstacles ahead for online advertisement; a novel reinvention of the e-Book; the growing carbon footprint of the living room; the increasingly complementary relationship between Internet TV and its broadcast cousin; the decline of online piracy and the growth in counterfeiting; the diversification of movie theaters; the possible reinstatement of music as a tangible, as opposed to virtual, product; the legitimization of the Internet's newsmakers; the growth in offshoring in the media sector, and the continued travails of convergence between media and technology.

I am often asked how the DTT TMT Global Industry Group's Predictions differ from the many similarly titled reports produced by other organizations. I believe Predictions has a unique combination of objectives and methodology.

The Predictions series provides a diverse selection of views and thoughts that challenge, inform and engage industry leaders and executives. It neither aims, nor claims to be a comprehensive forecast of every anticipated event. Its aim is to provide a point of view, but by the very nature of predictions, the outcome may differ from original expectations.

The inherent unpredictability of the global media sector can be mitigated by having a robust methodology that synthesizes multiple sources of information and a wide body of opinions that require thorough peer reviews. The 2008 series of Predictions has drawn on internal and external inputs from conversations with member firm clients, contributions from DTT member firms' 6,000 partners and managers specializing in TMT, and discussions with industry analysts. As last year, Predictions for the media sector has been able to draw upon the insight gleaned from a series of 20 interviews with leading executives from around the world on the key industry theme of digitization. These interviews have been published in a book, Digital Dilemmas, available online (www.deloitte.com/tmt).

I hope the result of our endeavors provides you with plenty of food for thought for the year ahead. On behalf of DTT's Global TMT Industry Group, may I take this opportunity to wish you all the best for an enjoyable 2008.

Igal Brightman.

Igal Brightman
Global Managing Partner
Technology, Media & Telecommunications

Executive summary

Online advertising is 15 years old in 2008. Since the first banner advertisement was sold, online advertising has grown into a $42 billion industry. However, 2008 could see online advertising face a barrage of obstacles. One barrier may be growing antipathy to the online advertisement itself; another could be growing opposition to the tracking of online behaviour. And to cap it all, growth in broadband connections may slow in a number of key markets. The advertising sector should make its case in 2008. It should communicate the quid pro quo of Internet advertisements for end-users, for example in the form of free content. The industry should position online advertising as an element of the media mix within a campaign, not as a solitary platform with a mission to take on traditional media. The sector should monitor regulation carefully. The more successful online advertising gets, the more subject to regulatory scrutiny it may become. And the sector should be prepared in 2008 for rising competition from traditional media formats.

While the e-Book may fail to thrive in 2008, e-Reference may gain traction. One of the biggest obstacles to the mass adoption of the e-Book in 2008 and beyond may be the profound affection for the traditional, paper-based book. There is however proven value in digitizing the word. Many business and academic texts spanning a wide range of disciplines, sectors and subjects are already available, and most typically consumed, in digital format. Reference texts may therefore be best suited for digitization. The e-Book sector should consider which texts could become more valuable as a result of their conversion into electronic format. Suppliers should also consider all the ways in which digitization could add value, and hence further distinguish it from the traditional form of the book. Functionality such as connectivity, search or handwriting recognition would all serve this end.

Environmental concerns are likely to affect the media sector in 2008. The proliferation of technology in the living room is creating its own distinctive carbon footprint, and this is expected to grow in 2008 and beyond. One organization forecast that the total power consumption for all information, communication and entertainment devices could reach as much as 50 percent of a household in Northern Ireland's power consumption by 2020. The media and consumer electronics industries should consider how the carbon footprint of the living room could be reduced without the need to revert to antiquated technology. One approach would be to reduce unnecessary power consumption, for example by forcing devices into standby when not in use. Some manufacturers have brought out more efficient devices, but these greener products come with a higher price tag.

The imminent demise of television will be forecast in 2008. But the sector should remain in overall good health throughout the year. There is also a good chance that Internet television will have contributed to the fortunes of traditional television. This outcome may appear perverse, particularly when Internet television has been regarded by some influential commentators as a direct competitor to traditional television. But it appears that Internet television is another medium whose quality, content formats and audience differ largely from traditional television audiences. Traditional broadcasters should work out how online channels can complement or supplement broadcast content, rather than cannibalize it. Internet television may find it more profitable to serve as an additional route to market for traditional television than to try and rout the incumbents.

Steady growth in the number of broadband connections around the world has enabled online piracy to grow. The increasing speed of broadband connections has made movie, television and software piracy feasible. But during 2008, persuasion may start to win the battle against digital piracy. A two-pronged attack via education and punishment – in the form of denial of broadband access and fines – may start to take effect. However, even if digital piracy were to be completely defeated in some markets, the bigger battle against piracy – the sale of counterfeit media – would still not be won. Supply and demand for piracy should be managed on a coordinated basis. Controlling supply should involve a joint approach from the media industry, governments, professional bodies, ISPs and any major sources of bandwidth, from universities to enterprises. The media industry should also identify any sources of internal leakage of content. The threat of fines may dissuade casual pirates, but a more effective approach could be education. The evidence so far is that the battle to win over hearts and minds can be successful.

In recent years, the movie theater has enjoyed strong growth. Its robust state may make it the perfect time to consider how to re-invent a format which has seen relatively little innovation in the past 10 years. There are a number of growing threats on the horizon, including the potential for economic downturn and the growth of alternative sources of entertainment. In 2008, PC ownership, broadband connectivity and game console penetration are all expected to grow. The movie theater also faces competition from other entertainment venues, from sports stadiums to concert halls. Technological advance is another catalyst for the reinvention of the movie theater in 2008, with a key change being the growth in digital movie theaters. One of the major benefits of digital movie theaters is flexibility. It enables theaters to become local rather than homogenous, perhaps attracting a larger, more varied, more loyal audience as a result. But the biggest change the transition to digital could make for theaters may be the need for suitable equipment to enable the screening of events, ranging from sports fixtures to concerts. While planning for digital transition, theater owners should also consider the need for new skills. Digital movie theaters are more IT-centered than analog.

While music fans are happy to pay several hundred dollars for an MP3 player and a similar amount to see live music, the same fans spend an average of only around $20 on purchasing digital downloads for their MP3 players. The reluctance to spend money on digital downloads may be because it is hard for consumers to value intangible products. Customers may be happier to pay, and to pay more, for music if it came in a 'physical' package. Therefore, 2008 could be the year in which music becomes tangible again.
The industry could evolve from offering digital downloads for

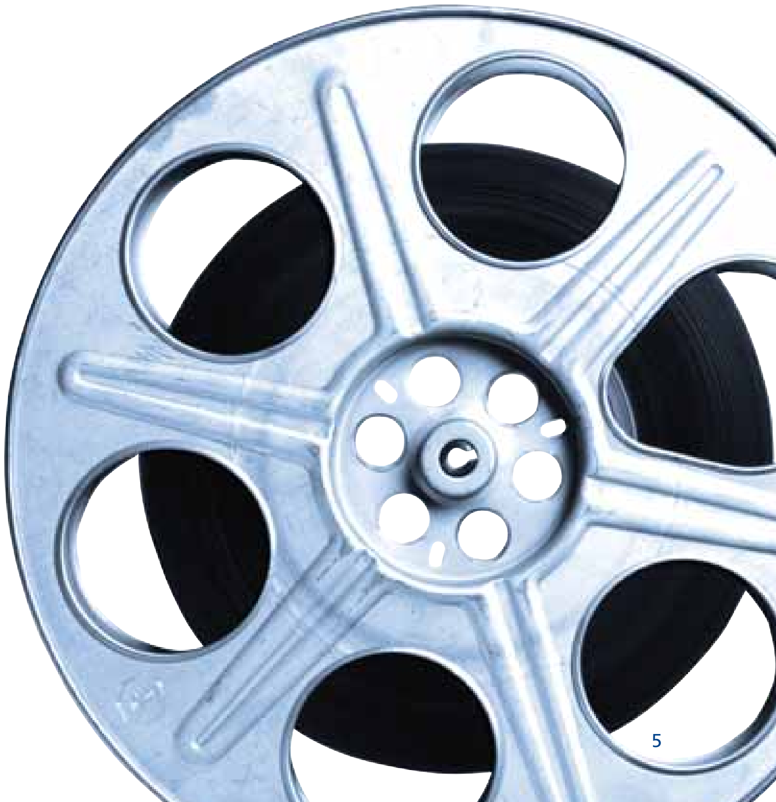
transfer to a device, to selling pre-recorded MP3 players, containing a single album or even an artist's entire back catalog. The industry should look at various ways of making music tangible, while still providing the flexibility of digital downloads. One solution would be to bundle a physical copy, or even an accompanying book or T-shirt, with the digital download.

Historically traditional media outlets have been loath to admit that they have based news stories on material that originated online. Blogs (written by authentic amateurs, not renamed columnists), podcasts, and wikis have simply not been considered legitimate, credible sources of information. But during 2008, it may become increasingly commonplace for traditional media not only to acknowledge the existence of the online world, but also to concede, albeit only occasionally, those stories have been 'broken' by citizen journalists. During 2008, traditional media are likely to move towards a more active and dynamic online presence, as they begin to phase out the historical, now seemingly arbitrary barriers between analog and digital versions. As existing media companies lose their disdain for and fear of the online world, they are likely to start to see the appeal of using the Web as a 'farm team' of up and coming talent. By looking at the online world as a source of content and talent, traditional media companies may be able to increase their relevance, especially for younger consumers and readers. Media companies should be flexible; they may have to raise their pay scales significantly to attract the right kind of talent. There may be legal challenges to permitting user interaction, editing or even comment on published news. In addition, unedited content may result in lawsuits for libel.

The media industry appears to have only dabbled with offshoring. However, 2008 may see further significant offshoring deals, following the agreement last year of a wide-ranging offshoring contract worth in excess of $1 billion. Growing faith in offshoring reflects both consistent quality of supply as well as an increasing ability for western companies and offshored teams to work together. While cost, particularly given the economic outlook, may remain the key motivation for offshoring in 2008, the year may also witness the start of a fundamental change in how offshoring is perceived by media companies. It may increasingly be seen as a means of adding value, not just cutting cost. The movie industry may increasingly look abroad for the creation as well as the production of films. The use of offshored teams to undertake more creative tasks may be encouraged by offshoring specialists setting up marketing and production locations onshore. The media sector should regard offshoring as a strategic imperative, best evaluated proactively. Offshoring has the potential to offer many benefits, but these can only be realized with good execution.

Companies need to consider how management may become more complex, how processes may need to be redesigned and which onshore staff would need to be retrained to be able to make full use of the advantages of offshoring. In 2008 many media companies may rush into offshoring as a means of cutting costs. The more forward-thinking media companies should already have identified which processes to offshore, which suppliers to use and where to base themselves, by the time the crowds arrive.

The media sector has particularly benefited from the transformational potential of technology in recent years. In 2008 the convergence of media and technology is highly likely to spawn a wide range of new products, services and even companies. Many of these initiatives should in time prove to be commercially successful, but some might fail for avoidable reasons. One common cause of failure may be because companies might focus overly on reaching the limits of what is technologically possible, as opposed to evaluating commercial realities. A further challenge could be legal. A company may develop a brand new service only to discover that it could face legal challenges in accessing its target audience. The convergence of technology and media could cause some products and services to fall in value. Some companies, while enjoying great success in building a user base, may find it far harder to monetize this base retrospectively. A number of factors have to be aligned for the combination of media and technology to be worth more than the sum of its parts. First, the technology needs to be robust, familiar and easy to use. In addition, the service has to comply with laws and regulations in every market where it is offered. Where digitization of analog content has occurred, the content should be more valuable as a result, and there also needs to be a realistic plan for generating revenues from end-users.



Obstacles ahead for the online advertisement

The first banner advertisement is claimed to have been sold to a legal firm – in 1993[1].

In the 15 years since, online advertising has enjoyed massive growth. In 2008, it is expected to generate $41.6 billion in revenue, a 23 percent increase on 2007 and more than the commercial radio sector[2].

Online advertising's largest single company, Google, was, at the end of 2007, one of the United States's five most valuable companies[3]. And Web advertising has also been a growth story for traditional media companies, even if online's growth has not always made up for declines in core product revenues. US newspaper groups generated $750 million from online revenues in the first quarter of 2007, a 22 percent increase on the same period in 2006[4].

In 2008, following a year in which over $10 billion was spent on acquiring specialist online advertising companies[5], both new and traditional media companies are hoping to increase earnings from Web advertising. The rate of growth in online advertising is projected to grow six times faster than traditional media through 2009[6]. By 2010, online is forecast to represent one-tenth of all advertising spending[7].

Two of the largest social networking sites, whose implied valuation could be upwards of $10 billion, are expected to generate the majority of their revenues from advertising[8]. One ISP plans to generate all its future revenues from advertising[9]. Online television services, such as Joost and Babelgum, aim to be solely advertising funded. The video games sector is looking to add to product sales and subscriptions through in-game advertising, which one analyst has forecast as being a $700 million market by 2010[10].

However, 2008 could see online advertising face a barrage of obstacles.

One barrier may be growing antipathy to the online advertisement itself. One 2007 survey of US consumers found that over three-quarters of respondents considered Internet advertisements more intrusive than those in print. Nearly two-thirds claimed that they paid more attention to print advertising than to that on the Web. Over a quarter stated that they would pay for advertisement-free online content[11].

The coming year may also see growing opposition to a key feature of online advertising: the tracking of online behaviour, whose main purpose is to enable the delivery of targeted advertising. In 2007, resistance was already being manifested in the form of organized lobbies and a 'do not track' campaign. Some websites decided to differentiate on the basis of privacy, with one search engine offering a non-tracking version[12]; another started offering consumers the option of blocking advertisements[13]. All such initiatives could dampen the efficacy of online advertising, a key advantage of which is superior metrics on consumer behaviour.

Confidence in online advertising could be further undermined if high profile industry figures continue to question publicly online advertising's revenues and valuations[14].

And to cap it all, a key underlying driver for the growth in online advertising, broadband connections, may slow in a number of key markets. Two of the largest markets for online advertisement, the United States and the United Kingdom, are expected to experience slowing growth in net broadband subscriber additions.

Bottom line

A key mission for the advertising sector in 2008 should be to fight back against its critics by demonstrating – without rhetoric – its capabilities.

This is likely to require testing various types of online advertisement with consumers. Copying and pasting existing advertising formats that have worked in other media, such as the equivalent of the 30-second spot from television, or the full-page color spread from magazines, is unlikely to work.

An Internet user, whether attending to email or interacting with a social network, is active and engaged, and may therefore find advertising intrusive. Online agencies and their clients should be prepared to experiment with radically new forms and formats, and should also be prepared to learn from inevitable failures. The advertising sector may also want to explain to end-users the quid pro quo of Internet advertisements, for example in the form of free content.

The advertising industry as a whole should increasingly consider online advertising not as a solitary platform with a mission to compete with traditional media, but rather as an element of the media mix within a campaign. For campaigns to be successful, media buyers need to have a comprehensive understanding of all media, and the strengths and weaknesses of each. The advertising industry should also ensure that advertisers, their customers and end-consumers become aware of the different formats of online advertising, from banners to viral advertisements. Media buyers in particular need to know which form of online advertisements to use, at what time and with which combination of traditional advertising media.

Online may never displace radio, print or television – it is more likely to complement and support. Recognizing that, and starting the process of understanding how online advertising adds value, would likely take the industry a substantial step forward.

The sector should also monitor regulation carefully. Much of the focus on controlling advertisements so far has been on traditional sectors. But the more successful online advertising gets the more subject to regulatory scrutiny it may become. While a watershed, a time before which certain content cannot be shown, exists for television and radio, this typically does not apply for the Internet. The online advertising industry should self-regulate and implement technology that would enable watersheds and restrict certain types of advertising, such as for alcoholic drinks.

Traditional media formats may be able to fight back in 2008. The television sector, which for many years has suffered falling revenues in industrialized countries, could be resurgent. One catalyst for this may be relaxation of regulations. For example, product placement is expected to become legal throughout the European Union's television sector. Product placement, worth $1.5 billion in the United States in 2006, generated only $31 million in Europe in the same period[15]. Additionally, as the process of digitization takes hold in the developed world, both radio and television could proliferate as never before. With more choice and generally better quality (of video and audio), advertisers may find that the sheer scale of traditional media is hard to beat.

Even if the growth of online advertising does slow in 2008, slower growth should be put in perspective. Online advertising is expected to generate tens of billions of dollars-worth of revenues in 2008 from a relatively small addressable market. At the start of 2008, less than 20 percent of the world's population was expected to be online[16] and there were only 330 million broadband enabled households[17]. This compares to an audience of 2.2 billion for radio,[18] an installed based of 1.4 billion television sets[19] and a global daily paid-for newspaper circulation of 515 million[20].

Forget the e-Book. Bring on e-Reference!

While the e-Book may fail to thrive in 2008, e-Reference may gain traction.

At the beginning of 2008 there were few media formats left to digitize. Digital versions of television, newspapers, radio and classified advertising were all being consumed by millions of people around the world.

One of the last untouched formats was the book. By the end of 2008, the book is likely to remain predominantly paper-based. This will particularly be the case for books read for leisure, rather than for study or for work. It is also unlikely that the e-Book – a device designed to hold and display the contents of tens of thousands of books – will have attained anything like mass market status by year-end.

There are many and varied obstacles to making the e-Book commercially viable. Price is a major challenge[21]. A standard paperback book can cost just a few dollars. e-Books that have been launched in the last couple of years were priced at a few hundred dollars. Then there is the cost of the content or a subscription on top of that[22].

Technology is another issue. The technology going into e-Books is improving fast. The latest e-Books feature high-resolution screens that deliver a clarity almost emulating that of ink[23]. Digital memory has advanced so much that an e-Book can carry an entire library, or even several entire libraries[24], much in the same way that MP3 players allow entire music collections to be taken anywhere. Devices can be made shock resistant, even impermeable.

But competing against paper is hard and competing against paper in a book format is even more difficult. Paper is particularly fit for a book's purpose. It enables the book, particularly the paperback, to be more portable, compact, durable and disposable than any electronic equivalent so far[25].

But one of the biggest obstacles to the mass adoption of the e-Book in 2008 and for some years to come may be the profound affection for the conventional, paper-based book, which is deeply embedded in our culture.

Technology, no matter how good or how cheap, may never be able to compete with our sentimental attachment to books. After all, people read them from an early age. Books, unlike television and newspapers, are rarely bypassed by younger generations. Most people may prefer to display their libraries rather than confine them in 'digital dungeons'. While a shuffle function makes sense for a music collection, it would be absurd for books. Digital functionality such as search may be little used.

Indeed, it would seem that some media are going to stay paper-based for some time, and the book, the consumer magazine and the commuter newspaper are examples of media that should endure in their existing formats.

While it simply may not be worth it for digital technologies to compete with the book, there is undoubted, proven value in digitizing the word. After all, at the start of 2008, many business and academic texts spanning a wide range of disciplines, sectors and subjects were available, and most typically consumed, in digital format. But there is a critical difference between business or academic texts, and what someone would typically think of as a book. Mention the latter and most people would think of the likes of novels, biographies and anthologies, most typically read from cover to cover. The former are functional, often references, rarely consumed in a linear fashion. Rather they are consulted when specific information is required[26].

Reference texts may therefore be best suited for digitization. Providing a doctor on call with the ability to search through tens of thousands of medical records[27]; a lawyer in court with the facility to reference several years of cases, or a scientist in a laboratory with access to all relevant research could all deliver value. Enabling a room full of text to become more valuable through making it portable and searchable could deliver considerable value.

Bottom line

While there is significant benefit from digitizing the word, not all texts become more useful or more valuable when digitized. Companies in, or thinking about entering, the e-Book market should firstly consider which texts could become more valuable, rather than having to be sold for less, as a result of being digitized.

The name of an electronic text-displaying device is also important. The depth of emotional attachment to the book in paper format may make it better to think of another name to describe its electronic equivalent. Since the texts that would most benefit from digitization would be reference works, e-Reference may be a more apt name.

Suppliers should also consider all the ways in which digitization could add value, and hence further distinguish it from traditional book form. Functionality such as connectivity, search or handwriting recognition would all serve this end. But these should only be implemented if they are likely to be used, for example if a WiFi connection is required to keep an e-Reference containing medical cases or legal precedents up-to-date. Adding functionality, from Web browsers to email, just because it is available runs the risk of creating a product indistinguishable in form, price or reliability, from a notebook computer.

Focusing on vertical markets may require sector-specific device customization. Medical professionals might need a sealed and wipe-clean device. Engineers and architects may prefer a toughened and damage-proof version.

The e-Reference sector should also pay particular attention to the issue of piracy. For many decades, books have attracted scant interest from counterfeiters because of the high cost of printing and the low margins available even in the legitimate book market. But digital books may represent an altogether easier target, particularly for high-value content.

The living room moves closer to being Public Enemy Number One

These days, it's hard not to feel guilty about our impact on the environment.

Travel appears to be a particularly gluttonous hazard – in almost any form. An analysis published in 2007 showed that walking to the mall creates four times more greenhouse gas than driving there[28]. At least this is the case for carnivores who eat intensively farmed, greenhouse-gas-producing cows. Going organic is even worse; cattle reared to organic standards emit even more methane[29].

So in 2008 it may feel more responsible to stay at home and indulge in the innocent pleasure of watching television, listening to music, or perhaps even playing a video game, albeit one not requiring too much physical movement.

But the proliferation of technology in the living room is creating its own distinctive carbon footprint, and this is expected to grow in 2008 and beyond. The Energy Saving Trust has predicted that total power consumption for all information, communication and entertainment devices could reach as much as 50 percent of a household's total power consumption by 2020[30]. In the United States, consumer electronics' share of household electricity usage tripled from 5 percent in 1980 to 15 percent in 2005[31].

It would appear that device proliferation has been a key outcome of the convergence of technology, media and telecommunications in the living room. And with it, power consumption has leapt.

How has this happened? Let's take a look at the television.

A television was once a simple, solitary device, combining a receiver, a convex screen and a meager speaker. Today the domestic television's set-up can include multiple, individually powered speakers, video and sound processors, twin receivers, a DVD player, a hard-disk recorder, a satellite set-top box, a digital terrestrial set-top box, at least one games console, and a collection of remote controls. Three years ago, televisions already accounted for 4 percent of residential power consumption in the United States, equivalent to the total amount of energy used in every household in the state of New York[32].

Televisions are getting bigger and more power-hungry. And, based on the flat-panel factories being built now, they are going to get more so[33]. Keeping up with your peers may soon require a much larger room in which to mount your 100-inch screen.

A typical plasma screen generates about 400 kilograms of carbon dioxide per year[34]. On average, plasma screens consume more power than CRT screens – 9.4 watts per square inch versus 3.4 watts per square inch respectively. The larger the screen, the greater the power consumption and the greater the heat generated. Above a certain size, cooling may be required to prevent the entire room becoming too warm.

Peripherals are also power hungry. A DVD recorder with a hard drive consumes up to 60 watts when in use and five watts when on standby. In other words, over a day it consumes more power while not in use[35]. A high-end PC, optimized for video games, may incorporate as many as four processors. Upgrading to a third generation games console may also mean increasing power demand to as much as 200 watts. Second generation consoles consume as little as 50 watts[36].

Digital switchover, underway in many countries around the world, implies increased power consumption. Additional peak power consumption in the United Kingdom, a country with 61 million people, is estimated to be about 31 million watt hours per day. In terms of cost, upgrading to a digital terrestrial receiver can add up to 3 percent of the energy consumption of a typical home[37].

As a result, going to the living room to relax and switch off may take on an entirely new connotation.

Bottom line
The media and consumer electronics industries should consider how the carbon footprint of the living room could be reduced without the need to revert to antiquated technology, such as CRT tubes and analog transmission.

One approach would be to reduce unnecessary power consumption, for example by forcing devices into standby when not in use[38]. The United Kingdom's leading satellite provider, BSkyB, is rolling out this facility to all its customers' set-top boxes over 2007 and 2008[39]. BSkyB has estimated that the saving from this type of power management of its customers with HD and Sky+ boxes would reduce the United Kingdom's carbon dioxide emissions by 32,000 tonnes a year: roughly equivalent to the power required to operate all the washing machines in the city of Liverpool for a year.

Some television manufacturers have brought out more efficient sets. Sanyo has announced plans to sell greener televisions, offering 20 percent lower power consumption – albeit at a 25 percent price premium[40]. Philips is currently holder of the European Green Television of the Year award, with its prize-winning model rated at 210 watts for a 42-inch screen[41]. However a typical 28-inch CRT television consumed just 87 watts.

One promising approach is to make wider use of a technology called OEL, currently employed in small screens such as those in music players and mobile phones. The benefit of OEL is that no backlight is required; the self-luminescent properties of the organic materials used in the screen mean that it emits light even when no power is supplied. Power is required only to change the image[42]. This technology could reduce television power consumption considerably[43].

If all else fails, there is one argument that couch potatoes could use to demonstrate their green credentials. Watching television or playing video games means staying in – and thus not inflicting the car on the environment. And of course, the bigger the car in the driveway, the more virtuous the viewing may be.

Long live traditional television, thanks to Internet television

The imminent demise of television is forecast perennially and it is highly likely that this call will again be made in 2008. The global traditional television sector, despite the occasional shock, should remain in good health throughout the year[44]. There is also a good chance that Internet television will have contributed to traditional television's fortunes.

This outcome may appear perverse, particularly when Internet television – the delivery of television to computers over the Internet – has been regarded by some influential commentators as more of a dark knight than a fairy godmother[45].

But Internet television is unlikely to kill off traditional television in 2008 largely because Internet television, certainly in its current manifestation, is not traditional television. It is another medium whose quality, content formats and audience differs largely from traditional television audiences.

At the start of 2008, Internet television was characterized by streamed shorter clips rather than downloaded feature films[46]. The preference for shorter clips may be due to the typical quality of Internet television. Streamed television content is often displayed as half screen because many broadband households do not enjoy the consistent connection of 2 Mbit/s that would make full screen worthwhile[47]. Downloading a program can take longer than watching it[48].

For the majority of broadband households not blessed with fiber or very fast broadband connections in 2008, there is still likely to be a marked difference between watching television on a computer and watching the same content on a television. While the average size of monitor supplied with a computer appears to be growing, the average size of the television purchased for the living room has grown faster still, as has its sonic boom.

In 2008, the quality and volume of content available via Internet television should improve. The number of traditional television companies that are expected to make content they have created or licensed available to an Internet audience is growing. Independent production companies may also use the Internet to reach a wider audience without having to negotiate with broadcasters in each country they want to reach.

Viewers may take advantage of the growth of quality content over the Internet to see programs they have missed. People could use it to keep up with a series, or to follow sports, when they are away from home and do not have access to a television. However, in 2008 it is unlikely that consumers of mainstream television content would regard the arrival of their favorite programs on the Internet from a legitimate source as cause for discarding their televisions.

The quantity of Internet television consumed in 2008 may appear impressive[49]. At the start of 2008, a single video clip was already able to attract 10 million views within roughly two weeks, equivalent to the audience of a prime-time show in the United States[50]. In a single month in 2007, US consumers viewed more than nine billion videos[51]. But this seemingly vast volume equates to just three hours per viewer, per month. By contrast, Americans dedicate on average 4.5 hours each day to television[52]. Worldwide, despite a steady growth in entertainment choices, including Internet television, the incumbent, sedentary traditional form of television is likely to remain as popular as ever in 2008[53].

Bottom line
Working out where Internet television fits in consumers' growing range of entertainment options should be a key objective for both traditional and Internet television companies during 2008.

This is particularly important for traditional broadcasters, who should work out how online channels can complement or supplement broadcast content, rather than cannibalize it.

Internet television pure-plays should do the same. They may find it more profitable to serve as an additional route to market for traditional television, than to try and rout the incumbent providers. Pure-plays could be a vehicle to try out and trail content, with the ultimate aim of dragging people back to the television set. The pure-plays, many of which are global, could even use television broadcasters as agents for selling localized advertising.

By serving as a platform for inexpensive, possibly advertising-funded television, Internet television could even help to suppress copyright theft. One possibility for Internet television could be low-cost, legitimate programming on demand. For example, the ability to watch a lower quality download, for a small fee, might appeal to people who are either unwilling or unable to purchase a DVD box set of a television series or a premium television subscription.

Expatriates and frequent travelers may value the ability to tune in to their home country's television stations from wherever they are. Such customers could represent an attractive market for advertisers.

Overall, traditional and Internet television would appear to have more to gain from helping rather than hindering each other.

...Internet television is unlikely to kill off traditional television in 2008 largely because Internet television, certainly in its current manifestation, is not traditional television.

Overcoming online piracy may not mean the end of counterfeit content

The advent of widespread consumer broadband at the end of the 20th Century was like the advent of transoceanic commerce in the 16th Century – they both changed the nature of piracy. While individuals have for many years recorded copies of music to give away to friends, broadband has enabled music and video sharing with a much broader group of people.

Steady growth in the number of broadband connections around the world has allowed online piracy to spread[54] and the increasing speed of broadband connections has made movie, television and software piracy feasible. Online copyright theft, therefore, is no longer confined to the music industry. And digital piracy has remained rife in spite of thousands of individuals around the world being prosecuted for personal piracy.

But during 2008, the battle against digital piracy may start favoring the industry, as a two-pronged attack of persuasion, through education, and punishment, in the form of denial of broadband access as well as fines, starts to bite. The number of casual pirates, many of whom were not entirely sure that their actions were illegal, could decline[55].

Regulators, industry bodies and ISPs are increasingly expected to work closer together to identify users whose traffic patterns suggest they are downloading content that infringes copyright. At the end of 2007, the French Government announced proposals aimed at dissuading casual piracy by confiscating persistent offenders' broadband connections[56]. The UK Government has signaled that it may introduce new laws that would involve ISPs in identifying illegal downloading of content [57]. In the United States, a judge ordered one website that had been accused of enabling copyright infringement to begin logging user activity and to pass this data on to the plaintiff[58].

Whereas some ISPs were accused of turning a blind eye to piracy in the early days of broadband[59], the highly competitive nature of the sector in 2008 may cause some ISPs to identify and remove consumer pirates. Illegal file-sharers typically consume a huge amount of bandwidth, which can dampen network performance and reduce overall profitability. ISPs typically charge a fixed retail rate to customers, but their costs are variable. So a customer downloading a movie from the United States to the United Kingdom may incur significant marginal costs for the ISP.

Technology, such as deep packet inspection, which enables ISPs to monitor what content is being downloaded, is likely to become more effective and more frequently used. This is also likely to help accelerate the process of identifying pirates, and may lead to swifter disconnection, or prosecution.

However, even if digital piracy were to be completely defeated in some markets, the industry must be clear in its message that a key battle against piracy would still not be won. Physical piracy – where consumers purchase physical copies of DVDs and, to a lesser extent CDs – is likely to remain significant in 2008. In 2008, the vast majority of pirate DVDs in some key markets are still likely to be based on copies made by individuals using a camcorder in a movie theater[60].

The cost of entry to carry out online piracy – a broadband connection and a PC – has fallen steadily over the years. The industry should bear in mind that the cost of making illegal DVD and CD copies has fallen too. At the beginning of 2008, the retail price of an 18x speed DVD burner was less than £20 ($41[i]). A high definition camcorder could be obtained for well under $1,000[61].

In 2008, while one battle against piracy may start going the industry's way, the overall war on piracy is most likely to continue to rage.

Bottom line

While 2008 may be the year in which the media industry manages to start to control one form of piracy – the overall campaign against piracy needs to be sustained. If digital piracy does start to be controlled in some markets, the industry should ensure that complacency does not follow.

Supply and demand for piracy need to be managed on a coordinated basis. Controlling supply should involve a joint approach from the media industry, governments, professional bodies, ISPs and any major sources of bandwidth, from universities to enterprises. The media industry should also identify any sources of internal content leakage because much of the material available on file sharing sites is pre-release content stolen by employees of media companies themselves[62].

The threat of fines may cause many casual pirates to think twice about whether downloading illegal content justifies the risk of a criminal record. But a more effective approach could be education. The media industry should provide unambiguous guidance on what constitutes piracy[63]. A second message is to tell consumers and casual pirates what organized piracy may be funding. Some consumers may consider professional media pirates as lovable rogues. The realization that media piracy may be funding the drugs trade or even terrorism may shock some casual pirates sufficiently to change their behaviour[64].

The evidence so far is that winning over hearts and minds can be successful. Two US industry groups have found that piracy is less common on university campuses that have educated students on network use and enforcement polices[65]. Another scheme in the United States provides education on copyright to five-year-olds[66].

Demand could also be addressed by providing legal alternatives, from cheaper, basic versions of physical content to online media stores. The latter may involve creating everything from lower-quality streams through to online rental models.

Finally, the media industry could look at ways to make the alternatives to the pirated version far more competitive. For example, making the movie-going experience, which cannot easily be pirated, far more compelling may encourage people to go to a movie theater, rather than watch a pirated DVD in their living room.

[i] Currency conversion correct on 10 December 2007 at: www.xe.com

The movie theater becomes about more than just the movies

The movie theater – also known as the cinema in some countries – has enjoyed strong growth in recent years. Revenues, measured by box office sales, grew year-on-year from the mid-1990s to 2006, a year in which sales totaled $25 billion[67]. The outlook looks bright, with double-digit growth forecast[68].

The robust state of the movie theater may make it the perfect time to consider how to re-invent a format which has seen relatively little innovation in the past 10 years.

There are a number of growing threats on the horizon. One is the potential for economic downturn. While in the last recession US movie theaters actually experienced growing sales[69], the sector may not be able to bank on a repeat performance.

Another, arguably more ominous threat, is the growth of alternative sources of entertainment. In 2008, levels of PC ownership, broadband connectivity and game console penetration are all expected to increase. Additionally, large format, flat-panel television ownership is also likely to grow rapidly, as is the popularity of home-cinema surround sound. And the price of DVDs may well continue its steady decline. Even by the end of 2007, for the price of two movie tickets, a film buff could buy two movies on DVD – or the DVD player to play them on[70].

The movie theater also faces competition from other entertainment venues, from sports stadiums to concert halls, all of which have received significant investment, and to some extent rising revenues, in recent years[71]. In the 2005 to 2006 season, soccer clubs in England alone invested £233 million ($476.5 million[ii]) in their stadiums[72].

Technological advance is another catalyst for the reinvention of the movie theater in 2008, with the biggest change being the advent of digital film. This confers several advantages. Lower cost is one. Digital prints, stored on encrypted hard drives are cheaper to produce than the traditional film reel, which can cost up to £1,500[73] ($3068[iii]), and don't need to be returned. Currently movie studios spend over $800 million a year in printing and distributing film reels to movie theaters[74].

A more significant benefit of the digital movie theater may be in terms of flexibility. It may enable movie theaters to lose some of their homogeneity, attracting a larger and more varied, more loyal audience as a result. A single digital copy could contain various cuts of a film, each suitable for different customer type. The same digital file could contain a director's cut for movie buffs, a sub-titled version for the hard of hearing, an edit suitable for children or even a version with an intermission built in[75]. As digital copies, whether server based or hard-drive based, would take up less space than reels, individual theaters could build up their own secure libraries of films.

But the biggest change the transition to digital could make for movie theaters may have little to do with movie studios. In 2008, digitally equipped movie theaters could start screening events, ranging from sports fixtures to concerts. Historically major sports events and concerts took audiences away from the theater[76]. Live relays could allow customers to flow back to the movie theater[77]. Digital movie theaters could become supplementary venues for events ranging from the Olympics to the opera[78]. Digital movie theaters may offer an experience as good as, or even better than actually being there. Hence, punters may be prepared to pay a premium to enjoy the Super Bowl in their home town, or Wimbledon without the rain.

The offer of different content may also require a redesign of a movie theater's ancillary facilities, such as catering. Opera fans may not care for hot dogs, but may be prepared to pay a premium for high-end cuisine. Merchandising, from clothing to a DVD copy of the event just watched, may become a lucrative source of additional revenues.

With over seven billion tickets sold each year[79], demand for the movies remains buoyant. But a move to digital may allow theaters to enjoy greater success by becoming more than just a venue to screen movies.

Bottom line

The movie theater's run of strong performance provides the ideal backdrop for change. The move to digital implies considerable capital investment, which is likely best accommodated while revenues are still strong. And digital cinema technology may now be sufficiently robust to be ready for mass market roll out[80]. Yet as of 2007, less than 5 percent of movie theaters around the world were digital[81].

While planning for digital transition, theater owners should consider the need to invest in new skills. A digital movie theater is, for obvious reasons, more IT-centered than analog, and as migration accelerates, there may well be a scramble amongst competing firms to hire suitably skilled staff, including those with a good understanding of digital security. Companies should therefore make understanding the staffing requirements associated with digital a priority, and should start recruiting as soon as is practical.

Movie-theater owners may well need to work very closely together in order to start addressing new markets. Individual theaters, and even large chains, may lack the scale required to persuade sporting or music rights owners that big screen opportunity is substantial. But speaking with one voice, the world's 100,000 movie theaters[82] may well be able make a persuasive case.

...by the end of 2007, for the price of two movie tickets, a film buff could buy two movies on DVD – or the DVD player to play them on.

[ii & iii] Currency conversions correct on 10 December 2007 at: www.xe.com

Time for music to get tangible again

Over the past 20 years the price of concert tickets has climbed steadily[83]. During the same period, however, the price of recorded music has fallen.

When the compact disc was first launched 26 years ago, it was initially priced at $30 in the United States[84]. In 2008, in the same market, newly released CDs on e-commerce sites will often be sold for under $15. Digital downloads of albums are likely to cost even less, priced just under $12[85]. Yet in 2008, dozens of artists and groups are likely to charge over $100 for their best seats. Several acts may gross over $100 million for their tours, following precedents set by a handful of artists and groups in 2006 and 2007[86].

Historically concert tours were designed to promote sales of albums. Now a single concert ticket can cost as much as, if not much more than, the act's entire CD back catalog.

Another trend, perhaps a corollary, to the declining price of the compact disc and the steadily dwindling revenues of the global recorded music business, has been the rise of the MP3 and the MP3 player.

The MP3 player has become particularly successful in recent years, selling well over 100 million units so far this decade[87]. However, its appeal may be greater than the average consumer's interest in digital music files. So while music fans have been happy to pay several hundred dollars for an MP3 player and a similar amount to see live music, the same fans have tended to spend relatively little – an average of some $20 – on purchasing digital downloads[88]. Indeed so far sales of digital music do not appear to be making up for the decline in traditional music sales[89]. This is in spite of the fact that the price of a new release album sold in the form of a digital download is generally lower than for the equivalent compact disc.

The reluctance to spend money on digital downloads may be because it is hard for consumers to value intangible products. Furthermore, customers have become used to the concept of free digital content from their experience of the Internet, which offers an array of free media, from news to music clips. The sole evidence of purchasing an MP3 may be just a solitary line of data on an MP3 player describing a song's vital statistics. In 2008 it is likely to remain as hard as ever to gift wrap an MP3 track.

It may be far easier for customers to value a song, and to pay more money for it, if it were physically 'wrapped', with the bigger the packaging, the greater the perceived value. Readers over the age of 30 will likely still remember the fragile but visually appealing music album. The benefit of cover art was, and still could be, that fans might be swayed to purchase a single or an album by the way it looks, as much as by how it sounds. In some cases the cover art could be more memorable, and some might argue, of more value to the customer, than the music contained inside.

2008 could be the year, however, in which music becomes tangible again. One trend that could allow this is the steadily falling price of digital memory, which could enable the commoditization of the MP3 player. The industry could evolve from offering digital downloads for transfer to a device, to selling pre-recorded MP3 players, containing a single album or even an artist's entire back catalog. Having a single MP3 player dedicated to an album or an artist would enable collectors to engage a human trait – to collect and display their purchases.

The falling price of digital memory, in its various formats, such as SD and Compact Flash, could also be used to sell pre-recorded music. The more substantial the packaging used to house the memory card, the more customers may be prepared to pay for the music.

In 2007, one band offered a digital download of an album for any price – ranging from free upward. In the first month, three of every five downloaders opted to pay nothing[90]. While the band left it up to fans to determine what to pay for the intangible download, it felt able to charge over $80 for the physical version of the album, available as a boxed set comprising vinyl records, CDs, lyric booklets and a hard-cover case[91].

When the compact disc was first launched 26 years ago, it was initially priced at $30 in the United States. In 2008, in the same market, newly released CDs on e-commerce sites will often be sold for under $15.

Bottom line

Putting a value on something abstract has proven difficult in many markets. Take away the physical elements of books, videos and music, and all too often, what is left is perceived to be less valuable than the original. Downloaded versions of books[92], video[93] and music[94] often cost less than their traditional equivalents.

For the music industry, one solution to this problem may lie with packaging. The industry should look at various ways of making music more 'physical', while still providing the flexibility of digital downloads.

Another option would be to bundle a physical copy with the digital download. The digital version could be uploaded immediately onto an MP3 player, saving the trouble of copying it. The physical version, destined for the display cabinet, would most likely be a compact disc. But it could possibly be a memory card, which could be used in a range of players, from a mobile phone to a digital radio, or, for sales of entire back catalogs, a dedicated MP3 player, sold in a commemorative box[95].

In some cases, the physical format could be vinyl. While this may not appeal to younger music fans, it may nurture nostalgia among older, wealthier music fans – the same group that would consider paying over $100 per ticket to see their favorite childhood singer or group perform at a comeback tour. One band has bundled a book along with one recent commemorative release[96]. Another included a cassette tape[97]. If memory-card releases grow in popularity, packaging should be of the same dimensions as a CD or DVD to ensure that the product remains tangible.

Physical representations do not necessarily have to be in the form of recorded music. Licensing lyrics to adorn a pair of jeans, for example, is just one of many ways that the value of music can be realized in a physical format[98].

Overall, the industry should ensure it manages the balance between exploiting emerging music formats and reinvigorating existing ones. For example the capability to purchase music on the move has been facilitated by the launch of high-speed mobile networks, but demand so far has been relatively weak, except in a few markets[99]. While technological advance should always be monitored, any new channels to market should factor in the conservatism of some customers, as well as the age-old desire of people to display their possessions, and most of all the highly visual nature of music.

Stop the presses! Online is moving (slowly) to the front page

Traditional media outlets have been loath to admit that they have based a news story on material that originated online. Blogs (written by authentic amateurs, not renamed columnists), podcasts, wikis – any user-generated content at all – have simply not been considered legitimate, credible sources of information.

But during 2008, it may become increasingly commonplace for traditional media not only to acknowledge the existence of the online world, but also to concede, albeit only occasionally, that those stories have been 'broken' by citizen journalists.

During the year, traditional media companies are likely to move towards a more active and dynamic online presence, as they begin to phase out the historical, now seemingly arbitrary barriers between analog and digital versions[100].

As a result, it seems likely that traditional media companies will reach ever further into the online world and start sourcing more content from the Web, using the online world as a pool of potential talent, and opening up their own brands to more user-generated input, feedback, or even editing and creation.

The first evidence of this shift emerged when traditional media companies started hiring content creators and news staff who were programmers first and journalists second[101]. As this trend continues, new online features like crime mashups, interactive maps and searchable databases are expected to become important differentiating features for websites. Traditional reporters are unlikely to have the skill sets to create and maintain this kind of content.

As existing media companies lose their disdain – and fear – of the online world, they are likely to start to see the appeal of using the Web as a 'farm team' of up-and-coming talent.

The traditional path of creating a columnist is a major investment that may not always pay off. Hiring journalism school graduates, training them for years, having them cover a beat, and then giving them a column is not a guaranteed route to attracting a healthy readership. On the other hand, there is a growing number of bloggers and podcasters who have already attracted a loyal audience of hundreds of thousands of people, with whom they have an ongoing comment-based dialog. A columnist with a devoted following would be an asset to most traditional media outlets, and hiring someone from the Web is likely to be much less expensive than poaching successful staff from a competitor.

Large media companies have already hired writers hitherto best known for their blogs as columnists[102]. In 2008 and beyond, more pure-play bloggers are likely to graduate to traditional media companies.

A more wide-reaching transition may be more difficult: citizen journalism, a semi-moderated wiki process, via which amateur contributors submit stories that are edited by professional staff, is unlikely to gain much favor among professionals. While citizen journalism will likely continue to grow in 2008, the financial viability and size of audience will probably fail to achieve earlier predictions of success. Some existing media companies believe that the corollary to publishing 'all the news that's fit to print' is that if they don't publish it, it's not news. At one time this attitude was a necessary defense against shoddy journalism, but younger readers may have a more democratic or comprehensive view of what constitutes news[103].

The largest and arguably most successful wiki newspaper is South Korea's OhmyNews. It is a hybrid operation, with around 65 full-time journalists and 40,000 citizen contributors. It has recently introduced an online course for wannabe citizen journalists. OhmyNews was widely credited with having influenced the 2002 South Korean presidential election and has both Korean and English editions[104].

Media institutions often have hundreds of years of experience, enormous credibility and broad international presence. As such, the emergence of a growing band of amateurs and enthusiasts is unlikely to cause their status to crumble, in 2008 or perhaps ever. But 2008 may well see amateurs and semi-professionals add eyes and ears to the traditional media to help deliver an enriched, global perspective.

Bottom line

Traditional media companies are fighting market-share erosion and pressure on advertisers' spending. By looking at the online world as a source of content and talent, they may be able to increase their relevance, especially for younger consumers and readers. They may also be able to reduce their content production and acquisition costs. But is cost-reduction the only driver? Quality and consistency of content are the most important competitive levers any media company has, and opening up the gates to the masses threatens that advantage. On the other hand, as Wikipedia has shown, user-generated and -edited content has the capability of significantly competing against established brands with reputations for quality.

Media companies will need to be flexible. Although the online and programming communities are potentially fertile sources of talent and skills, companies may have to raise their pay levels significantly to attract the right kind of talent. Computer programmers traditionally get paid more than equally experienced journalists. Someone happy to write blogs while sitting at home in a bathrobe may not be comfortable in the corporate environment of a traditional news organization.

There are also substantial challenges to permitting user interaction, editing or even comment on published news. Unedited content may result in a lawsuit for libel. In 2007, one prominent citizen journalism site was sued, not for authoring an allegedly libelous comment, but merely for failing to remove it[105].

Media companies are still likely to have to strike a balance between being sufficiently open and closed with their readers. They are not likely to want the aphorism "publish and be damned" to take on an altogether new connotation and dimension in 2008.

Offshoring gets bigger and more creative in the media sector

Offshoring, the use of labor in countries where it costs less, is most commonly associated with the financial services and technology sectors. Historically, the media industry appears to have only dabbled in offshoring, with the finance and IT functions typically the first to be moved overseas.

In 2007, one of the first media offshoring contracts was agreed, worth in excess of $1 billion. It covered 'end-to-end' full services that included IT, operations, finance and accounting, HR and research[106]. Growing faith in offshoring reflects both consistent quality of supply as well as an increasing ability for western companies and offshored teams to work together. As a result, 2008 may see further significant deals of this scale.

The movie industry has also gone offshore, by using lower cost, lower tax countries to shoot their films[107]. For Hollywood studios, filming in Canada can reduce total production costs by 25 percent[108]. However the principal creative tasks, from script writing to set design, are rarely undertaken offshore.

Studios also use post-production specialists in emerging markets to undertake a range of functions, from editing to special effects[109]. Animated films and television series have also used offshore teams around the world. Offshoring can reduce wage costs by up to two-thirds with little impact on quality[110]. But again, offshored teams tend largely to work under instruction from staff onshore who retain control of the creative process.

Newspapers and magazines have also used offshoring selectively, focusing on more administrative tasks, such as finance and IT. Use of offshore labor for creative tasks has been limited, for example, to the production of advertisements[111]. Attempts to offshore editorial staff have tended to face major challenges, particularly when overseas journalists have to make judgment calls on what is newsworthy, on the other side of the world[112].

However, 2008 could see growth in the use of offshored staff to undertake creative tasks, as well as functional roles. While cost may remain the key motivation for offshoring, there may be the start of a fundamental change in how offshoring is perceived by media companies. It may increasingly be seen as a means of adding value, not just cutting cost.

The movie industry may increasingly look abroad for the creation as well as the production of films[113]. One incentive for this has been the growing success of non-Hollywood movies, which major studios might look to tap into. In 2005 there were just four non-US films on Variety's top 100 grossers chart. In 2006, there were 10. A movie conceived and made abroad may gross less than a Hollywood blockbuster, but it may also cost far less. "Kung Fu Hustle", a 2004 production, grossed $101 million worldwide, but cost just $10 million to make[114].

The use of offshored teams to undertake more creative tasks may also be catalyzed by the growth in offshoring specialists setting up marketing and production locations onshore. Prime Focus, a post-production company headquartered in India, purchased VTR, a London-based digital post-production house. Prime Focus's objective in acquiring VTR was to be able to pitch for higher-end jobs by buying in expertise, therefore differentiating on quality and creativity, not just price[115].

Confidence in offshoring may also be boosted by a growth in specialist firms, focused on different parts of the value chain. As of the beginning of 2008, there were video games specialists in Romania, animation specialists in South Korea and advertising production experts in India[116].

Bottom line

The media sector should regard offshoring as a strategic imperative that would best be evaluated proactively. Offshoring has the potential to offer many benefits, but these can only be realized with good execution.

Companies need to consider how offshoring may make management decisions more complex. For example, some processes may need to be redesigned and onshore staff retrained to be able to make full use of the advantages of offshoring. The strategic nature of offshoring often requires board-level sponsorship as well as a thorough, detailed explanation to every member of staff on why a company is offshoring. In addition, the largest offshoring projects may require external project management.

Offshoring should be considered as more than just access to lower cost labor. It should also be recognized as a means of access to new talent, offering a gateway to new markets, and allowing work to be distributed over several time zones.

However, offshoring should not be considered a panacea. It is one of the many options to lower costs and improve quality. Onshore approaches to reducing costs and raising quality standards should be evaluated in parallel with offshoring. And since the media industry trails other sectors in its use of offshoring, it can draw upon a wealth of experience and accumulated best practice.

If economic conditions in 2008 decline, many media companies may rush into offshoring as a means of cutting costs. The more forward-thinking media companies should already have identified which processes to offshore, which suppliers to use and where to base them by the time the crowds arrive.

Converging technology and media: don't forget the business plan!

The media sector has particularly benefited from the transformational potential of technology in recent years.

Technology, by delivering digitization, has enabled a string of new media products that have had mass-market appeal, such as the MP3 download, the ringtone and the blog. It has also enabled the creation of whole new categories, such as online advertising, the MMORPG and social networks. Technology has also enabled copious amounts of reinvention. The accelerometer, which allows a user's movement to be tracked, has been incorporated into two manufacturers' video games controllers. Nanotechnology has enabled the miniature hard disks that make the portable media player possible, earning its pioneers a Nobel Prize in the process[117].

In 2008 the convergence of media and technology is likely to spawn a wide range of new products, services and even companies. In some cases convergence may be based on mergers and acquisitions between companies with complementary media properties and technology. Many of these initiatives should in time prove to be commercially successful, but some could fail for reasons that could have been avoided.

One common cause of failure may be that companies put too much emphasis on reaching the limits of what is technically possible, instead of evaluating commercial realities. For example, there are many ways of delivering a television signal, but not all of them may be economically viable. Delivering broadcast television via a fixed-line telecommunications network is technically feasible, but some analysts have questioned whether this can provide a return on investment in all markets[118]. Delivering broadcast television to a mobile telephone, while technically possible, may not make financial sense for all players[119].

There could also be legal obstacles. For example, a company may develop a brand new service only to discover that it faces some legal challenges in accessing its target audience[120]. Requiring customers to be within a specific age group to use a service may be illegal in some markets on the grounds of age discrimination[121]. Using peer-to-peer technology as a means of distributing content to customers may be problematic if host networks – their employers or their university – have banned this distribution method[122].

The convergence of technology and media could cause some products and services to fall in value. A music album in digital download format typically costs less than its physical equivalent. A newspaper's Web version is increasingly offered free, funded by advertising, while the paper version is paid for[123].

Some companies, while enjoying great success in building a user base, may find it far harder to monetize this base. Social networks, some of which have attracted tens of millions of customers, may find it challenging to convince users to accept advertising at a later stage[124].

Bottom line

The convergence of media and technology can be very powerful. But for the combination of media and technology to be worth more than the sum of its parts, a number of factors have to be aligned. The technology needs to be robust and easy to use, and the service has to comply with laws and regulations in every market where it is offered. Where digitization of analog content has occurred, that content should be more valuable as a result, and there needs to be a realistic plan for generating revenues from end-users. A lack of focus in any one of these areas could prevent the new product or service from attaining its full potential.

Any company using convergence to diversify into another sector, whether it is a technology company entering the media sector, or a telecommunications company looking to generate revenues from media, expertise in the new field is vital. One of the best examples of convergence, iMode in Japan, was based on deep collaboration between telecommunications, technology and media companies.

Diversification via convergence should not distract a company from its core business. A television company with a solid business in broadcast and production, but which is considering alternative forms of distribution, such as content on demand, should execute with rigorous attention to detail. It should ensure that management's focus on diversification, the sole aim of which may be to increase sales by say just 10 percent, does not jeopardize the mainstream broadcast and production business which generates the majority of sales.

Companies should also be careful not be to be misled by numbers. A large user base is great if it is actively contributing to revenues. Otherwise, the cost of maintaining such a base may rapidly become a liability. Furthermore, companies should be diligent in comparing like with like. They should ensure that an advertising-funded unique user is not necessarily considered equivalent to a magazine's subscriber. Deeper analysis may reveal a wholly different picture.

In 2008 the convergence of media and technology is highly likely to spawn a wide range of new products, services and even companies. In some cases convergence may be based on mergers and acquisitions between companies with complementary media properties and technology.

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Glossary of technical terms

CD	Compact Disc
CRT	Cathode Ray Tube
DVD	Digital Versatile Disc
DVR	Digital Video Recorder
HD	High Definition
IPTV	Internet Protocol Television
ISP	Internet Service Provider
MMORPG	Massive Multiplayer Online Role-play Games
OEL	Organic Electro Luminescence
SD	Secure Digital
TMT	Technology, Media & Telecommunications
VoD	Video-on-Demand

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