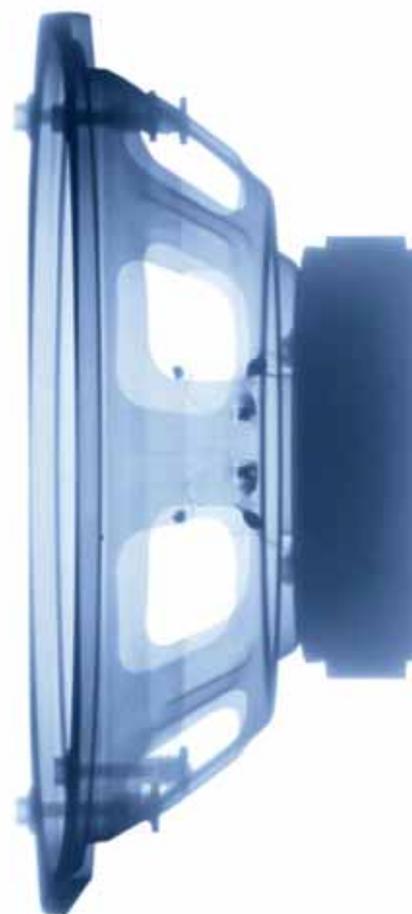


Media Predictions
TMT Trends 2009





About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu (DTT), a Swiss Verein, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/about for a detailed description of the legal structure of DTT and its member firms.

About TMT

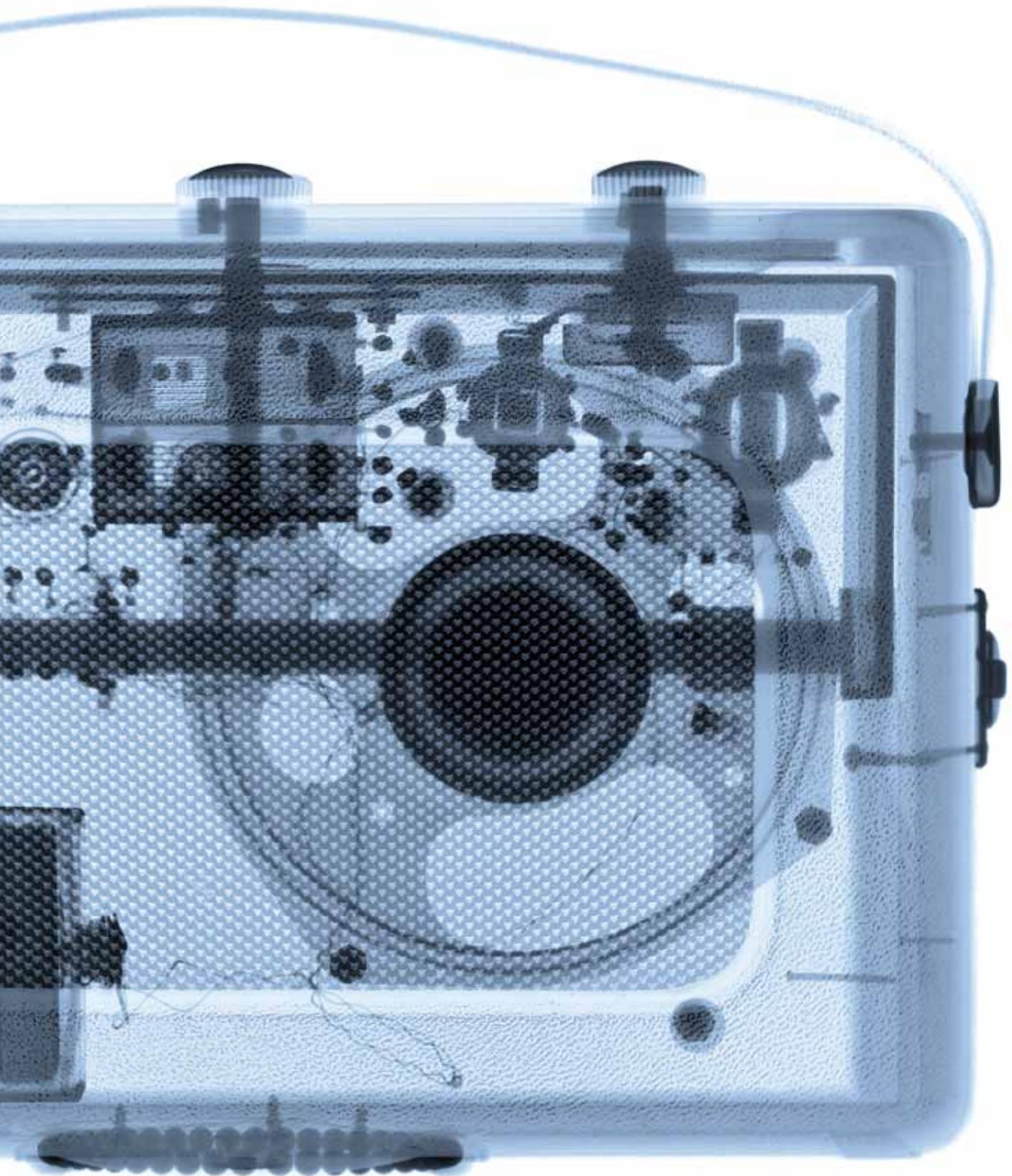
The Deloitte Touche Tohmatsu (DTT) Global Technology, Media & Telecommunications (TMT) Industry Group consists of the TMT practices organized in the various member firms of DTT. It includes more than 6,000 member firm partners, directors and senior managers supported by thousands of other professionals 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 nearly 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 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.

About the research

The 2009 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 practitioners specializing in TMT, discussions with financial and industry analysts, and conversations with trade bodies.

Contents

Foreword	3
Putting print out of peril may require stopping the presses	4
Television rediscovers its self-belief	6
3D becomes an obligation, not an option, at the movies	8
The growing cost of free online content	10
Rising stars take on the megastars	12
“Good morning, good afternoon and good evening listeners”: the dawn of WiFi radio	14
Mobile advertising finds its meaning	16
The markets get anti-social with social networks	18
Reinventing mobile television	20
The rise of malvertising and its threat to brands	22
Notes	24
Glossary of technical terms	28
Recent thought leadership	28
Contacts	29



Foreword

Welcome to the 2009 edition of Predictions for the media sector.

This is the eighth year in which the Deloitte Touche Tohmatsu Global TMT Industry Group has published its predictions for the year ahead. The volatility of the global economy in 2008 and the anticipated challenges ahead in 2009 have made this set of predictions particularly challenging, but also particularly important, to compose.

Some have questioned whether predictions are feasible amid such turbulence. Colleagues have asked how accurate they can be, given the uncertain outlook and many of the unprecedented conditions being experienced today.

Anticipating the course of the next 12 months is likely to be hard. But, in my view, that makes having a considered perspective more crucial than ever.

Predictions, by their nature, are not facts. But properly developed predictions should encompass a diverse array of views and inputs, which can kindle debate, inform possible directions and even identify necessary actions.

Every year, the methodology for Predictions is revisited, to assess how the approach could be made more robust. This year, our standard methodology has been bolstered through a program of in-depth interviews with 50 CXOs at some of the world's largest TMT companies. I am most grateful to all the respondents who offered up their insights and experience, at a time when their attention was particularly in demand.

2009 is likely to challenge all of us. But while the media sector is expected to be buffeted by grueling macroeconomic conditions in the year to come, we should not forget that the need for the media sector to inform and entertain us remains fundamental.

In short, while global growth may be cyclical, the need for media is and will remain constant.

I wish you all the best for 2009.



Igal Brightman
Global Managing Partner
Technology, Media & Telecommunications
Industry Group

Putting print out of peril may require stopping the presses

The newspaper and consumer magazine industry is set for continued challenges in 2009, with developed country markets likely to be most affected.

The developing world market should grow along with increasing literacy, improving distribution infrastructure and rising incomes, but the spread of the economic downturn into developing economies in 2009 could slow or reverse print's growth even in these markets.

The challenged state of the print industry in developed world markets does not signal the demise of the sector. Rather, 2009 is likely to mark the emergence of a range of new business models, including shared backroom infrastructure and online-only delivery.

The need for new business approaches has become increasingly apparent. While publishers have reacted, this has not always been at a sufficient pace. Given this context, up to one out of every ten print publications could be obliged either to reduce print frequency, cease physical printing or, in some cases, shut down entirely in 2009¹.

The impetus for a change to the underlying business model for publishing has been gathering pace for some time. The rise of online advertising and falling readership across most demographic groups had already weakened the newspaper and magazine industries in North America and Europe prior to the financial crises of 2008².

The economic downturn of 2008 precipitated falls in advertising rates and volumes, as well a further decline in circulation, particularly among weaker titles and the local press. This exacerbated an already difficult industry outlook in developed countries³.

The outlook in 2009 for some print titles in developed markets is likely to be uncomfortable. Some analysts have forecast an advertising decline as steep as 20 percent⁴. Classified advertising, historically one of the most lucrative elements of a newspaper, could be particularly badly hit, with a 30 percent fall in revenue possible. Circulation could decline a further 10 percent⁵. And costs, including newsprint, may rise too, albeit temporarily⁶.

The publishing industry has been building an online presence to balance falling print revenues. But only a few online newspaper and magazine sites have managed to generate sufficient profit to offset declining margins from print versions.

Even in late 2008 the online contribution was at most a few percent of a title's revenues and most of these were tied to the print version in various ways⁷.

The drop in revenues and earnings could accelerate further in early 2009 if consumers retrench. Mid-market and free newspapers are all vulnerable, and entirely advertising-funded newspapers may be most exposed⁸. Even a few industry titans might have to take radical steps⁹, such as undertaking asset sales in order to meet debt payments¹⁰.

The global publishing sector is likely to have a painful 2009. But newspapers and magazines will retain their unique role in informing, entertaining and commemorating¹¹.

Bottom line

Print media companies need to accelerate steps to re-establish profitable business models again in 2009. The potentially parlous state of the global economy is likely to make change especially pressing.

While restructuring their business models, publishers should always remember that the public has a fundamental need for quality editorial, particularly during turbulent times¹². While *paper* may be getting tattered, the desire for *news* remains as strong as ever.

Publishers should be aware that single measures, such as staff cuts, may not alone deliver salvation. Titles that have already shed more than half their employees may still struggle¹³.

The array of money-saving approaches that publishing companies could consider ranges from reducing print frequency, to asking suppliers to reduce their costs. News titles could print half as often, only at weekends or even go online only¹⁴.

The many titles that have gone online, but whose Internet revenues are not balancing falls from print, should evaluate why this is the case¹⁵. Publishers should understand how print and online customers vary. In many cases the readership for each version will differ. The variety in online readership is also typically far greater than for print, ranging from casual readers, directed to a site via a search engine, to in-depth readers, absorbing the day's news and scouring the archives. Different monetization approaches may be required for each segment: publishers should be ready to be as bold at raising prices, as in cutting them.

The sales force's incentive structure is also worthy of review: does it actively encourage all salespeople to promote online, in conjunction with print? While the most recent tendency for publishers has been to favor advertising, not subscription, for online content, they may need to reconsider. The advertising supported model, in its current form, does not appear to be working.

If 'online only' cannot be made to work from a financial perspective, a paper's online presence may need to be reduced significantly to encourage people back to the physical product. Japan's newspapers have always restricted their online presence, and its titles have suffered a lower decline in readership and advertising than its North American and European peers^{16 17}. It could be several years, however, before readers are prepared to pay for content that was previously free – putting the genie back in the bottle could be a challenge.

Industry consolidation should be considered a possible solution but only a partial one. It is unlikely to restore historical levels of profitability. Shareholders and lenders will need to be educated about more reasonable return expectations. Publishers should not expect mergers and acquisitions (M&A) to be a major source of capital or liquidity in 2009, as credit is likely to remain constrained.

If local markets cannot be grown, diversification overseas could be a solution. Newspaper titles were still growing in number in mid 2008¹⁸.

Finally governments could be asked for support, for example in the form of more favorable regulatory regimes¹⁹. Unions may also offer greater flexibility and wage concessions to keep a title running.

Television rediscovers its self-belief



Recessions are rarely kind to advertising²⁰. A major part of television's revenues is from commercials. Although the prospects for television in 2009 do not look great, the year ahead could prove to be a year of renaissance for the small screen.

One of the boosts that television is likely to receive is in viewing hours, which tend to be counter-cyclical. Indeed, in the latter half of 2008, average viewing hours were already rising in some major markets as consumers increasingly entertained themselves at home²¹. Viewing hours may be boosted by digital switchover, one impact of which is to increase the number of channels available to consumers. Overall, in 2009, viewing is likely to rise by 30 minutes per week per viewer.

The status of television in 2009 may also be boosted by its pre-eminent role in two of the major global events of 2008: the Olympic Games and the US Presidential Election. Both events also saw heightened use of a range of other media, from online video to mobile Internet, to distribute news. But television appeared to take the dominant role, from the perspective of viewing figures and revenues²².

Both events demonstrated the unique attributes of television: its ability to inform and influence mass markets of viewers in ways no other medium can yet compete with.

While households in countries affected by recession are expected to pare down spending, premium television may prove resilient, and even enjoy growth²³. While a subscription of \$60 per month may appear to be a major outlay, it could still be rationalized as good value when compared to the cost of taking a family out to dinner at a mediocre restaurant. Television may offer a refuge from everyday challenges, in a similar way that the movies offered a temporary sanctuary from the Great Depression²⁴.

Counter to some recent forecasts, professionally produced content is reasserting its pre-eminence over user-generated content (UGC), both online as well as broadcast. This should provide a fillip to the television production sector, whose raison d'être had come under challenge from amateur film makers.

Indeed, it is UGC that may become fundamentally challenged in 2009, as a growing number of sites restrict or decline to host it, given the difficulty in selling advertising adjacent to amateur clips²⁵. For some online UGC, there was also the issue of viewing figures: some content, such as live streaming, is attracting only dozens of viewers – or scores on particularly good days²⁶.

Online sites that had specialized in hosting UGC may increasingly offer viewers regular television programming, as this seems to be more likely to attract advertising^{27, 28}.

Bottom line

While advertising is likely to be tough in all countries affected by the downturn in 2009, the television industry should view its situation in context and consider how other media are doing. It may well find that its performance is relatively good. It may be a good time to take advantage of that and the concomitant stronger cash flows to put some distance between itself and other media. Now could be a good time for the strongest players to invest in content, contracts and an updated infrastructure. The current deployment of HDTV by local broadcasters should be slowed as little as possible, as HD further enhances and differentiates the television experience for consumers.

The television sector may also want to push for more freedom on its methods for raising revenues. For example in some markets, product placement is banned, but only selectively. Films with product placement may have been allowed for years, but locally produced programs may not yet be able to use this approach. The underlying economics may provide the opportunity to make a compelling case for the relaxation of such rules in 2009.

The television sector should ensure that its advertising impact is always given credit. The industry should, for example, provide a means to track instances where a consumer has seen a television commercial, then gone to a website to make a purchase. At present, most measurement systems would give all credit for the sale to the website, and television's vital contribution could get overlooked. One simple, but not failsafe approach, could be for the television commercial to cite a unique URL for those guided to the website via the advertising spot.

Television, like all other media, has ceded revenues to online advertising. It may not have been as affected as other media, such as local newspapers, but it still appears to have lost revenues. Online has claimed it is more accountable than other media. But television should counter this claim, where possible. For example it is unusual for advertisements from another country to be broadcast to a television viewer, yet the Internet Protocol address for a PC may be for a different country to that of its user, making some of the statistics on advertisements served irrelevant.

3D becomes an obligation, not an option, at the movies

The moving image has historically performed well in downturns. In the United States, in the Great Depression, individuals scraped together their meager earnings for the chance to spend some time at the movies²⁹.

But as the world's economic outlook pales, the prospects for the film industry are not necessarily bright. While the cinema did do well in the 1930s downturn, its appeal was driven by two factors. First, sound had been a recent innovation that added allure to the movies. Second, televisions, let alone home theater systems boasting screens of ostentatious dimension, were few and far between³⁰.

In 2009, the cinema is likely to need a 'must-have' factor that convinces audiences to continue to visit. The answer to that need might well be 3D, a technology that pre-dates the Great Depression, with the first 3D movie premiered in the early twenties³¹.

In 2009, the 3D movie may have its first billion dollar year at the box office. A growing number of movie studios, in addition to Dreamworks, are likely to create all future outputs in 3D³². Some of the world's leading producers and directors, including James Cameron, Jeffrey Katzenberg and George Lucas are planning to premiere their first 3D movies³³. 3D technology is expected to be used in a growing range of genres: it will no longer focus on horror and space travel. The number of post-production facilities that are 3D-ready is likely to increase. A new industry dedicated to the creation of durable 3D-glasses might even emerge.

While the supply of 3D content should grow strongly in 2009, the number of venues at which 3D movies can be seen is still likely to be limited³⁴.

Obtaining funds to convert analog venues to 3D digital (\$70,000) or digital venues to 3D (\$30,000), may be challenging, given the state of the economy³⁵. But the better 3D movies perform at cinemas that have been converted, the better the prospects for investment³⁶.



In 2008, some 3D movies earned more than conventional competitors on their opening weekends³⁷, despite being available in far fewer locations³⁸. In 2009, the industry's hope is that this feat gets repeated.

As 3D grows in popularity at the movies, interest in the technology from the television sector will grow³⁹. In 2009, a growing number of 3D television sets are likely to become available, adding to a small but growing installed base⁴⁰. An increasing number of DVDs offering 3D content may also become available, although domestic television sets capable of displaying these are likely to be few and far between.

Bottom line

The movie theater is likely to face some of the toughest trading conditions in years during 2009⁴¹. To keep the box office busy, theater owners may need a new reason to convince consumers to spend their hard-earned income with them⁴². 3D may well be that difference.

The momentum behind 3D may force the industry to decide whether to continue backing development of super high definition. Lack of liquidity, combined with a general air of risk aversion, may make it far harder to back both development paths, at least in the short term.

Super high definition offers a greater degree of reality, with resolution of up to 8,000 lines, that is, 64 times the detail of the current best quality of televisions and 16 times the detail of the best cinema screens⁴³. Prototypes of televisions and broadcast systems providing 8,000 line resolution and 22 channel sound were already being demonstrated in 2008⁴⁴.

The industry may have to decide if 3D or higher resolution is likely to have the bigger impact on the consumer.

The manufacturers developing 3D technology should also look at other applications, aside from entertainment, that could benefit from an added dimension. Medicine, teaching and peer-to-peer communications are all possible candidates.

The growing cost of free online content

The notion of free content has been central to the media sector for decades. Consumers have been willing to receive free content, via commercial radio and television broadcasts, in exchange for advertising.

The rise of the Internet in the 1990s was accompanied by a new debate on free content that was played out through experimentation with all forms of content, including business material that had previously been charged at thousands of dollars per document.

The continued, more vertiginous rise of the Internet this decade has also seen experimentation with free content models, but with one major change. As well as professionally produced material being offered free, the public has also been allowed, indeed encouraged, to make its content available to everyone.

Typically, amateurs who submitted their content have received little or no compensation. One online newspaper, *ohmynews*, which is based wholly on donated articles from the public, offers compensation in the form of tips donated by readers. A few tips have been significant, but the vast majority have been tiny⁴⁵.

While compensation has been meager, there has also been little or no charge for uploading content. As a result the world's data centers are now replete with exabytes of UGC that, in 2009, may become regarded a liability, rather than an asset⁴⁶.

The cost of storing an individual's video may be trivial. But the cost of storing millions of videos or billions of photographs is significant, as is the cost of their distribution. For the largest sites hosting UGC, the cost could be over \$100 million per year⁴⁷.

Prior to 2009, the volume of participation in sites hosting UGC appeared to matter most⁴⁸. A site with tens of millions of members, all submitting content, and viewing each others' digital offerings, was regarded as a good thing. During the coming year, that may well change, for the simple reason that while the absolute cost of creating the content may be tiny, the ability to realize any revenue from the content may be smaller still⁴⁹. The major challenge – probably the fundamental one in 2009 – is likely to be how to generate advertising from UGC⁵⁰.

Advertisers are generally reluctant to place their clients' brands next to any material that may damage their clients' reputations⁵¹. But classification of content to the degree required for advertisers may be impossible to realize. The sites hosting UGC are unlikely to be able to sift manually through each picture, video or status update submitted, due to the volume of work this would involve. It may be too difficult to trust users enough to classify their content or current activity to the extent that advertisers would feel comfortable advertising next to them. And technology that can automatically classify content, and also vet it for general suitability, does not appear to have been invented yet.

Thus in 2009, sites that had focused exclusively on UGC may well have to scale back some of their offerings, and offer content that is more professionally produced, which can generate some revenue. Revenues will have to rise, costs will have to fall⁵².

The rising cost of online content may mean that the public's opportunity for 15 minutes of online fame may be receding fast.

Bottom line

The approach to free content online is likely to have to change. Companies hosting UGC, particularly large format content such as video and high resolution photos, should evaluate how best to increase monetization of their offering.

One change would be simply to start charging consumers for the privilege of making their content available online. In recent years charging for video submissions has been abandoned in the pursuit of users. In 2009 users that refuse to pay may be dropped in the search for revenues. Individuals wanting to relay their status to their friends may have to start paying for this service, with fees possibly based on the number of friends each individual has.

Online content companies should be realistic about charging: customers are generally aware that free lunches cannot be sustained, and in most other markets, from energy to food, accept that quantity and quality are directly correlated to price. Those that really want to put their content online are likely to pay, and pay more for premium services⁵³.

Companies that invite readers' comments online should also weigh up the benefits and drawbacks in doing so. It does increase interaction and the additional storage requirement is relatively small. But the risk of the occasional unacceptable comment posted within an unmoderated forum may not justify the increased advertising or subscription revenue that this form of user participation delivers⁵⁴.



Rising stars take on the megastars

Live entertainment has enjoyed many years of sustained revenue growth. But it has been the major acts, the biggest teams, and the blockbuster shows that appear to have enjoyed the bulk of the growth.

The public has lavished its attention and its spending on the biggest brands in live entertainment⁵⁵. In the United States, the top 1 percent of artists' share of live revenues rose from 26 percent to 56 percent between 1982 and 2003⁵⁶.

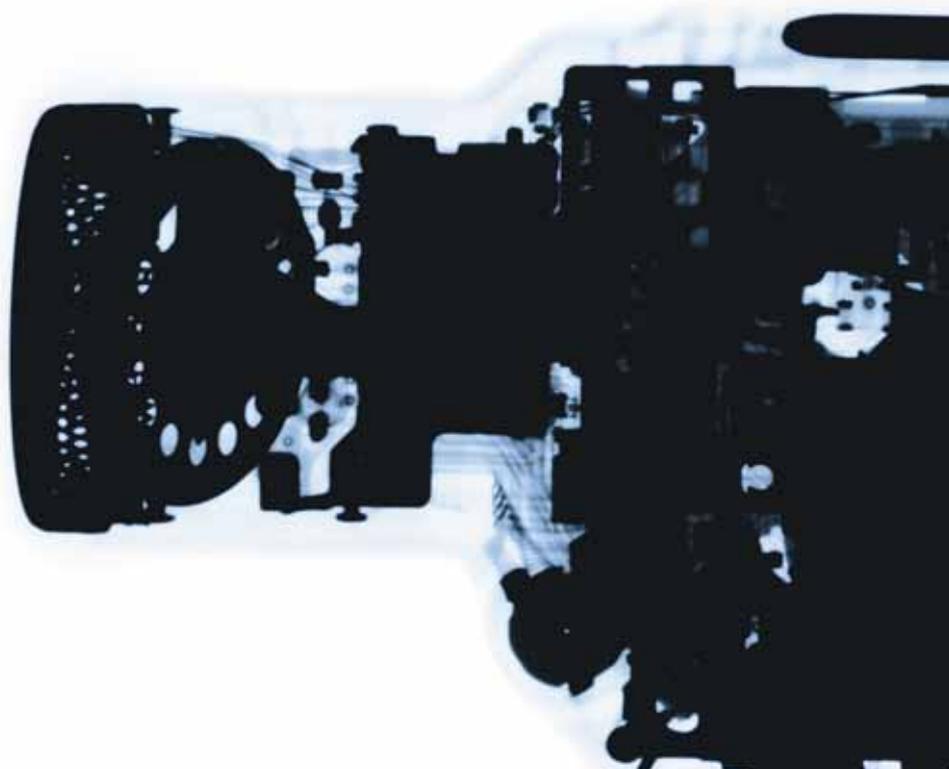
Match day revenues for the English Premier League football clubs rose to £41 per attendee in 2006/2007, more than double the levels of a decade before and the average crowd for a home league match at Manchester United was 75,826, making it the best attended club in that season⁵⁷. Overall revenues for the top 20 European soccer teams rose threefold between the 1996/1997 and 2006/2007 seasons⁵⁸.

But the combination of falling real income, inflation, rising unemployment and falling consumer confidence may change this dynamic. The public is still likely to want live entertainment, but in many developed countries, may not be able to afford the prices paid in recent years⁵⁹. As consumers focus on value, the 'premium' paid for the biggest stars, seen in the best locations, may well erode⁶⁰.

Sponsorship revenues may also dip, with a resultant impact on live entertainment⁶¹. In sports, lower revenues for everything from naming rights at stadiums to logos on shirts, may slow the building of new, large venues, and the growth in match-day and commercial revenues.

Lower sponsorship revenue could also affect concerts. With less sponsorship around to bankroll major concert tours, there may be less appetite for larger, riskier, more extravagantly staged tours⁶².

Falling merchandising revenue may affect the ability of smaller venues to host major acts in 2009. Smaller arenas normally provide a large share of the box office to major artists and aim to make profit from merchandising sales. But if consumers become reluctant to purchase souvenirs as well as tickets, megastars may become less attractive to small venues⁶³.



The best brands in the business may prefer to reduce capacity rather than cut prices⁶⁴. Multiple dates at a stadium may be reduced to a single night, or else an arena might replace a stadium.

Those not able or willing to pay premium prices may divert their interest in lesser known talent, from theater currently on the fringes, to upcoming bands.

Bottom line

Managers of live stars should be ready to vary their offerings to meet changing demand. Megastars may have to play arenas, not stadiums, to retain their reputations as premium products. The highest paid stars may have to be part of a longer bill, playing longer sets, or offering additional acts, to provide better value for money.

Managers of the best talent should also be willing to try and defy expectations: good product, allied to strong marketing, could convince some consumers to drop everything else but premier live entertainment⁶⁵.

Record companies should use this opportunity to familiarize audiences with scores of new acts. Labels have tended to focus on big stars in recent years, but in a downturn, creating a deep pool of indie bands may be the new road to riches. However, this strategy may require a different artists and repertoire (A&R) set of skills.

Consumers may now be more willing to attend relayed versions of concerts, transmitted to smaller, cheaper, local venues. The trend towards greater emphasis on 'armchair' sports fans may also continue. And they may also seek out other less expensive live entertainment experiences that provide the same 'bang for the buck'. Live theater, emerging bands and folk music festivals may all benefit.



“Good morning, good afternoon and good evening listeners”: the dawn of WiFi radio

Analog radio makes a tough competitor. Most media is steadily going digital. But radio has remained resolutely analog.

There are 2.5 billion analog radio sets in circulation worldwide⁶⁶. The majority of radios produced are still analog. The majority of the world's 44,000 radio stations broadcast predominantly in analog⁶⁷. Most new cars built in 2009 are likely to incorporate analog radios.

Radio has tried going digital. Digital terrestrial and satellite radio services exist in various countries around the world, although they remain the poor relation to analog in terms of listeners⁶⁸.

Radio has also gone digital online. Indeed, radio broadcasts have been available online since the early days of the Internet. Audio and the Web are a good fit, as audio requires little bandwidth. However, while there are more than 10,000 online radio stations⁶⁹, demand is niche compared to traditional radio.

But in 2009, Internet radio, particularly in the form of WiFi-based, portable sets, could take off, in terms of audience and revenues.

Internet radio's addressable market could increase 20 percent in 2009, drawing from a base of almost 1.5 billion Internet users worldwide, of which two-thirds have broadband access^{70 71}. Furthermore, people listening at work represent a growing audience for Internet radio⁷².

The dedicated Internet radio set should also fall further in price, with portable WiFi radios already available for under \$100 at year-end 2008⁷³. More significant could be the growing installed base of smart phones, equipped with WiFi, that are able to act as radio Internet radio sets⁷⁴.

Retailers may push WiFi radios in 2009 as service is mostly subscription free, making it easier to sell than a device requiring a subscription⁷⁵.

But the largest factor driving the adoption of Internet radio may be the integration of the three axes of audio offered by the format. It spans geographies, through enabling access to stations around the world; it spans time, by providing access to archived audio around the world; it affords continuity, through allowing listeners to remain tuned into local radio stations.

The biggest impetus for Internet radio in 2009 may be the combination of all three dimensions in a portable, easy-to-use unit that resembles a typical household radio set, but which offers far more choice.

In 2009, Internet radio may not just reinvigorate the medium of radio. It may reinvent it.

Bottom line

Broadcasters should determine whether Internet radio is a strategic imperative for them and if so, which content, schedules and functionality can exploit its power. A station's online version should not be a carbon copy of the existing channel.

Broadcasters should ensure that channels are widely available via aggregators, and are appropriately formatted for the various devices that may relay content, for example PCs, standalone Internet radio sets or even smart phones.

They may also want to consider offering spoken word content via Internet radio. Talk shows are already a popular Internet radio format⁷⁶ and they do not expose broadcasters to possible variation in the royalty fee⁷⁷.

The industry needs to make the growing volume of stations easy to search and select. A combination of an electronic program guide and a recommendation engine could be required to make sense of the vast choice of stations.

Internet radio manufacturers could consider how user information, in aggregate or individually, could be useful for advertisers. Internet radios have the potential to allow accurate monitoring of what, when and how often consumers listen to different forms of content. The listener's location, suggested by the IP address, would be required to serve local advertising.

Advertisers may benefit from monitoring the growth of Internet radio closely. Radio's advertising spend has fallen in recent years, but online spending has risen. As radio becomes a more established medium online, it could become a powerful platform⁷⁸.



Mobile advertising finds its meaning



Mobile advertising has so far been a disappointment – to advertisers, advertising agencies, cellular carriers and especially industry pundits who have been touting it as ‘the next big thing’ for the last five years.

But in a global advertising environment characterized by double-digit decreases, mobile advertising may be one of the few growth areas in 2009. Its market share may more than double, albeit from a small base, and there are likely to be thousands of large advertising campaigns, costing over \$2 billion⁷⁹.

Its lack of impact, compared with traditional and online advertising, has been deeply frustrating for the industry, and with reason. The mobile phone is one of the most ubiquitous devices in the world. Only radio and television could claim to have equivalent reach.

But unlike radio or television, mobile phones boast several key attributes. They are personal devices. They offer two-way communications. The mobile network typically knows where its subscribers are.

Yet, despite its initial promise, at the end of 2008, the potential of mobile advertising remained unfulfilled, with global spending at only \$1 billion⁸⁰, or 0.4 percent of global advertising revenues⁸¹.

Mobile advertising campaigns so far have fallen mostly within the experimentation category. And unproven and possibly unprofitable ‘experiments’ seem unlikely to attract significant investment in 2009, in an advertising industry that is expecting to be hard hit by the downturn.

But in 2009, the need and therefore the potential for mobile as an advertising medium is likely to be stronger than ever, and some of the most powerful advertising campaigns are likely to be via mobile media. There may be only a few, but in the long term, they could have significant impact.

Several developments enable mobile advertising. First, the technology is now more able than ever before to carry advertising. Second, mobile phones are ubiquitous. And third, and most important, the understanding of what mobile can and cannot do to deliver advertising will be at its most mature.

The essence of advertising is to get a message across. The message can be rich, as with film and television, and as online aspires to be. But a message does not necessarily have to be based on HD video to be effective. A few words may have the required impact.

In 2009 a growing number of campaigns will use the minimalism of mobile – compared with other media – to powerful effect. These initiatives will take direction from the use of the text message⁸², mobile's simplest form of information, as a rudimentary but potentially highly effective tool in one of 2008's largest campaigns – the US Presidential Election⁸³.

Minimalism is likely to be a prerequisite in mobile advertisements. But the smart phone's growing market share, as well as the improving specification of standard phones, and the rising ability of mobile browsers should allow advertisers to run mobile campaigns that boast better graphics, use of presence information and, for the smartest of the smart phones, video.

Bottom line

The mobile phone, given its status as the most ubiquitous two-way personal communications device, has tremendous potential. But its real capability has been compromised by a tendency to try to jam 'round peg' PC online campaigns into 'square hole' mobile phone screens, processors, operating systems and lower connection speeds.

The potential of mobile as an advertising medium can only be realized once the industry becomes aware of its strengths and accepts its limitations. Mobile advertising cannot succeed, for example, if it requires users to download large video files that may cost a couple of dollars in data usage charges. Nor can it work if there is little to offer the consumer, such as money off vouchers that require users to know how to switch on Bluetooth functionality.

Advertisers should work harder to create campaigns that are targeted for mobile and work within its limitations, typically as part of an integrated campaign that also uses broadcast and online.

Carriers should help out – successful advertisement campaigns will drive traffic, enhance the mobile experience and potentially even allow carriers to participate in revenue sharing. Carriers should be also aware of the need for standardized platforms and operating system support – one of the current barriers to rich mobile campaigns is the need to customize the content for each carrier.

And if carriers may need to help more, handset manufacturers need to double their efforts. The current profusion of screen resolutions, CPUs, operating systems, and so on requires advertisers to spend more time translating for the cellular 'tower of Babel' than they do in producing the advertisement in the first place. Mobile advertising will really take off when advertisements can be published to the entire mobile community with a single click.

But campaigns based on mobile's lowest common denominator, text messaging, can be highly effective even now. Campaigns do not require an implicit marketing message: the provision of timely information can be as effective an advertisement for a company as a good experience with a call center, or a memorable meal at a restaurant.

The markets get anti-social with social networks

Social networks have for several years been the toast of new media. Their principal strength has been an ability to gather tens of millions of unique users⁸⁴. Their main shortcoming, however, has been the inability of several social networks to monetize their volumes of signed-up users.

Average revenue per user for some of the largest new media sites is measured in just cents per month, not dollars⁸⁵. This compares with a typical average revenue per user of tens of dollars for a cable subscriber, a regular newspaper reader or a movie-goer. Social networks may need more than 100 users to generate the equivalent revenue of every traditional media customer.

Social networks have so far been afforded the benefit of the doubt, with monetization being regarded as a long-term objective⁸⁶. The focus has very much been on growing the subscriber base, which is where investors perceive the value to be⁸⁷.

This ethos has been accepted, even encouraged, through 2008. However, a fundamentally harsher financial outlook in 2009 and beyond, combined with an expected contraction in online advertising, is likely to make the managers of social networks and their investors pause for thought. The likely response is that social networks will focus more on monetizing their subscriber bases, than maximizing their size⁸⁸.

Social networks are therefore likely to be under increased financial scrutiny in 2009, particularly for sites offering video hosting and streaming, which may require significant operational expenditure⁸⁹.

Social networks whose future looks uncertain may suffer a debilitating outflow of senior management. The book value of some social networks may be written down. Some companies may fail altogether, if funding dries up.

The challenges of social networks may also be exacerbated by litigation. Owners of some of the content hosted by social networks may pursue payment for use of their material more rigorously as media creators look for additional sources of revenue⁹⁰.

Some attempts at differentiation, for example by formerly consumer-oriented social networks seeking business customers, may prove to be too little, too late⁹¹.

Bottom line

Social networks need to consider how to transform themselves in 2009. They should articulate and deliver on a clear, credible route to revenues. Management at social networks must be able to demonstrate a desire and an ability to monetize subscribers. It should also effect a change of culture within the workforce so that it focuses on revenues, not just subscribers. Management should also be able to motivate staff in an environment in which workers are being laid off, perks cancelled, and where share options are heading underwater⁹².

Social networks that are profitable should ensure that they differentiate themselves from their less well-placed equivalents. As with the dot com bust earlier this decade, investors may swing from exuberance to pessimism within a few quarters⁹³.

Investors should take a hard line, but be radical in their thinking on the monetization issue. Monetizing social interaction, particularly when it used to be free, is hard. But if members are hard to monetize, the focus may need to shift to generating revenues from the aggregated value of their actions and behavior⁹⁴.

Further, social networks should consider how elements of their technology could be applied in an enterprise context⁹⁵. Social networks have developed information-sharing functionality across PC and mobile platforms that could be deployed to help teams within companies work together better, or encourage knowledge management. Social networks should hire individuals with strong experience of the business sector, who could identify which functionality would assist in each core business process.

Social networks should move carefully. Those currently reliant solely on advertising for funding may find that advertisers sharply reduce the amount they spend with them in 2009^{96 97}. Some advertising may have been boosted by guaranteed deals and experimentation by advertisers⁹⁸. Usage and users may also fall as the economic outlook encourages workers to reduce time spent – and often time tracked – on social network sites⁹⁹.

Social networks may need more than 100 users to generate the equivalent revenues of every traditional media customer.

Reinventing mobile television

Mobile television seems to have been perennially 'about to take off'. For several years, analysts and commentators have forecast huge imminent growth. So far, their projections have proved to be overly optimistic. Consumers have failed to tune in, but the medium has been given the benefit of the doubt.

However the economic outlook for 2009 may require media companies to take a firm decision on mobile television. Many mobile television initiatives may therefore be shelved.

Mobile television's momentum in 2009 is likely to be dragged down by disappointing performance in 2008. Major sporting events, which can be a catalyst for adoption of new media formats, largely failed to affect mobile television. While two-thirds of the world's population watched the Beijing Olympics on television¹⁰⁰, there was scant demand for the event via mobile television^{101 102}.

The creation of mobile-specific content also failed to make an impression, aside from a hit to the bottom line¹⁰³. Customized content in some cases attracted audiences measured in their hundreds¹⁰⁴ in markets where conventional television attracts millions.

Even services in Asia Pacific, which are often cited as mobile television success stories, struggled. In Japan, a mobile television service provider closed down after attracting only 100,000 subscribers since its launch in 2004¹⁰⁵; in neighboring South Korea mobile television services suffered mounting losses¹⁰⁶, and in Germany, a new mobile television broadcaster closed down before service was initiated¹⁰⁷.

During 2009, lower liquidity and a focus on cash generation may make investment in broadcast systems such as DVB-H, and even systems based on existing 3G infrastructure, less likely¹⁰⁸. The desire – or in some cases need – of operators to lower handset subsidies may mean a slowdown in adoption of high-end phones capable of supporting mobile television¹⁰⁹. Depressed consumer confidence is likely to make the public less likely to buy add-on services to their mobile subscriptions¹¹⁰.

Media companies may want to focus on traditional platforms that offer known returns. Advertisers, who have tended to regard mobile largely as an experimental format, may also rein in advertising for non-core formats¹¹¹.

In 2009, it is five times more likely that mobile television services will be closed than launched¹¹². Subscriber numbers may fail to reach even the bottom range of analysts' forecasts: mobile television's total global audience may fall short of 30 million¹¹³.

Bottom line

Content companies should adopt a wider view of the mobile phone.

While television pictures may one day become ubiquitous on phones, it is unlikely to occur in 2009 or 2010.

In the nearer term however, there are many valuable roles that mobile devices and services could play in the wider television market. Mobile telephony can be used to help consumers control television, as well as enhancing their loyalty to and enjoyment of the medium.

The mobile phone could be used more extensively to enable consumers to program DVRs remotely¹⁴. Suggested programs could be sent in the form of messages to phones – and then a single click could be used to record the program.

The mobile phone could also be used as a back channel. It could be used to order and pay for on-demand programming. The phone could also be used to provide customer relationship management (CRM). Broadcasters and content providers could use basic text messaging – available to most people with a mobile phone – to distribute reminders and trailers for upcoming programs, or to alert customers to the imminent arrival of a new series of a favorite show. Mini-trailers could be sent to owners of smart phones.

Mobile could also enable a new approach to the measurement of television viewing. Integrating or adding mobile capability into set-top boxes and televisions would allow information on television viewing to be relayed automatically to measurement bureaus.

The mobile phone may yet still end up as the broadcasters' best friend.

The rise of malvertising and its threat to brands

Most Internet users now know better than to open emails from unknown senders or to download software from untrusted sites. Many count on software filters to catch the really harmful stuff, whether email or browser borne.

But a new breed of carrier for malicious software dubbed 'malvertising' is spreading. Malvertising uses online advertisements, typically placed in reputable online publications, to distribute malicious software. In 2008 one piece of malvertising reached 2 percent of all US Internet users¹¹⁵.

During 2009, malvertising may infect hundreds of reputable sites and be seen by millions of users, many of whose computers are likely to end up infected. Users who have suffered damage from malicious advertisements may even sue the owners of websites where the malware appeared.

These false advertisements are typically placed on trusted, reputable, well-trafficked sites. When clicked on, they immediately take the user to a harmful site. In some cases, without any further action, users' data can be stolen from their clipboards or browsers¹¹⁶.

Other examples falsely inform users that they have a malware infection to encourage them to install fraudulent software¹¹⁷. Others use flash software to infect the PC with spyware or viruses.

Malvertisements are likely to be found not just in the bad neighborhoods of the Internet, but also among prime Web real-estate. In 2008 some of the Web's most popular sites were inadvertently bearers of malvertising¹¹⁸. It has usually been discovered quickly and removed, but can be a significant risk to companies, whose brands may be compromised through unwittingly serving untrustworthy or dangerous advertisements.

Advertising is integral to the Internet. Automation helps keeps costs low. And advertising networks are a growing part of that system. For well-organized, well-funded criminals, this process has become an easy target.

By taking advantage of poor quality control mechanisms for some advertising networks and placing advertisements on trusted sites, the incidence of malvertising is likely to increase in 2009.

Bottom line

Anything that makes large numbers of Internet users decide that clicking on online advertisements could be a bad or dangerous thing threatens the current business model of almost every company that does business online.

Website publishers should ensure that all relevant employees are aware of the malvertising threat. Better detection and remedies are imperative. Otherwise publishers may not know about the malign nature of advertisements until the first complaints come in, by which time their reputations may already have been damaged.

Website administrators should have better control of their third-party suppliers – especially those who supply advertising inventory. They should have legal agreements with their advertising networks that cover and prohibit malvertising, and define appropriate coding practices and disclosure of destinations for click-through advertisements. It may even become necessary to have a full code review of all advertisements, especially as malvertising becomes more common and more dangerous.

Another possible solution may be to stop using some advertising networks entirely, as certain large websites have already done¹¹⁹.

Software suppliers should develop tools to automate the process of screening third-party advertisements so that trusted sites do not need to do it manually¹²⁰. Software that rapidly identifies malvertising when it does make it onto the Web should also be developed.

The Internet advertising community should work together and create a system or a standard that would prevent malvertising – it is in their interests to keep the current advertising-funded Internet model viable¹²¹.

During 2009, malvertising may infect hundreds of reputable sites and be seen by millions of users, many of whose computers are likely to end up infected.

Notes

- 1 For example see: Christian Science Monitor to publish online only, The Guardian, 29 October 2008.
- 2 Shrinking ad revenue realigns US newspaper industry, International Herald Tribune, 7 February 2008; Crisis kills local papers after advertising plunges, The Times, 14 November 2008.
- 3 Newspapers' debt dilemma, San Diego Reader, 2 July 2008.
- 4 Steep drop in newspaper ad revenue expected in 2009, YLE, 8 November 2008. See: <http://yle.fi/news/id106976.html>
- 5 Newspaper seeks comeback formula, Freep, 2 November 2008. See: <http://www.freep.com/article/20081102/BUSINESS07/811020453>
- 6 Holmen sees 2009 newsprint prices up sharply, Reuters, 21 August 2008.
- 7 For example, see the weblog debate on online profitability at: http://www.brasstacksdesign.com/buffett_knocksout_newspapers.htm
- 8 Free newspapers feel the pressure, Mad.co.uk, 23 October 2008.
- 9 NY Times publisher: Our goal is to manage the transition from print to internet, Haaretz.com, 8 February 2008.
- 10 Cash crunch at The New York Times: \$400 million due in May, Silicon Alley Insider, 8 November 2008.
- 11 Old media won't die. It will simply evolve, Business Pundit, 30 October 2008.
- 12 Rupert Murdoch: the Internet won't destroy newspapers, The Guardian, 17 November 2008.
- 13 For example see: <http://www.iht.com/articles/ap/2008/03/07/america/Newspaper-Layoffs.php>; http://www.mercurynews.com/business/ci_10808154
- 14 Arizona paper tries new approach in changing market, Business Week, 7 November 2008.
- 15 Buttry: don't bail out the watchdog, GazetteOnline, 15 November 2008.
- 16 Japan's papers: doomed, but going strong, Washington Post, 25 October 2008.
- 17 Japan: Newspaper industry "relatively recession-proof" but dying, The Editors Weblog, 27 October 2008.
- 18 As markets emerge, newspapers find growth, International Herald Tribune, 11 May 2008.
- 19 France looks to save its newspapers, International Herald Tribune, 19 October 2008.
- 20 For examples see: http://www.forbes.com/markets/2008/11/12/dentsu-earnings-advertising-markets-cx_twdd_1112markets03.html;
<http://www.reuters.com/article/marketsNews/idUSL521209320081028>; http://www.livenews.com.au/Articles/2008/11/11/Media_Sector_Slashed_Again;
<http://blogs.reuters.com/mediafile/2008/11/11/how-bad-is-advertising-think-1950s/>; <http://www.alleyinsider.com/2008/11/nick-denton-why-ad-spending-will-collapse/>.
- 21 In the United Kingdom, total television broadcast viewing rose year on year by 2.4 percent in September 2008, based on data from the Broadcasters' Audience Research Board. On average, each viewer watched 3 hours 31 minutes of broadcast television a day, up 42 minutes a week from a year back. See: Monthly TV Report – September 2008, Thinkbox, 24 October 2008: <http://www.thinkbox.tv/server/show/nav.1041>
- 22 Overall, 4.7 billion people watched the Beijing Olympic Games on television. Source: The Straits Times, 22 October, 2008. Source: http://www.straitstimes.com/Breaking%2BNews/World/Story/STIStory_293463.html In the first week of the Olympic Games, NBC reached 180 million US viewers via television coverage. Over this period, 25 million online video streams were delivered. Less than half a million users a day were using the mobile service. Television video on demand had a 0.1 percent reach. Source: NBC Olympics record viewing for prime time coverage, informitv, 16 August 2008, <http://informitv.com/articles/2008/08/16/nbcolympicsrecord/>.
- 23 For example, see: <http://www.guardian.co.uk/media/2008/nov/01/bskyb-television-sky-murdoch-satellite>
- 24 How the Great Depression inspired Hollywood's Golden Age, The Independent, 4 October 2008.
- 25 For background on the cessation of some live hosting video sites, see: <http://www.washingtonpost.com/wp-dyn/content/article/2008/11/03/AR2008110302428.html>
- 26 At the time of viewing one live streaming site in mid-November 2008, there were 1,704 people watching 47 live channels.
- 27 See: YouTube goes legit, begins streaming approved CBS content, Wired, 10 October 2008.
- 28 Feature films coming to YouTube, CNET News, 6 November 2008.
- 29 How the Great Depression inspired Hollywood's Golden Age, The Independent, 4 October 2008.
- 30 Ibid.
- 31 The first 3D movie to be shown to a paying audience, The Power of Love, was premiered in 1922. See: <http://www.imdb.com/title/tt0013506/>.
- 32 Movie industry doubles down on 3D, Wired, 41 April 2008.
- 33 Hollywood sees its future in 3D revival, Financial Times, 25 March 2007; Depth of a salesman, Business Week, 10 September 2007.
- 34 Dolby 3D digital cinema expands worldwide as demand grows for digital 3D, Reuters, 8 September 2008.
- 35 3D film technology 'could kill off 300 British cinemas', The Daily Telegraph, 20 October 2008; Depth of a salesman, Business Week, 10 September 2007.
- 36 Katzenberg says there will be 12-to-18 full 3D movies by 2010, First Showing, 17 October 2007.
- 37 3D movies are coming to your home, but should they?, Venture Beat, 25 June 2008.
- 38 For example, Journey to the Center of the Earth grossed \$21 million during its opening weekend in the United States. It was screened on 2,811 cinemas, of which 854 were 3D. The first weekend for the 3D movie Hannah Montana and Miley Cyrus: Best of Both Worlds, generated \$29 million from 683 venues, or \$42,360 per screen. The second-placed movie generated \$13 million from 2,436 screens. Revenues from 3D screenings represented 70 percent of the total. Sources: Weekend Box Office (July 11 – 13, 2008), Box Office Guru, 14 July 2008; 3D "Hannah Montana" film rules box office, Billboard, 3 February 2008; Hannah Montana tops US Box Office, BBC News, 4 February 2008.
- 39 Why stereo TV is television's destiny, Broadcast, 6 June 2008; IBC to show Katzenberg interview in live 3D transmission, Broadcast, 22 August 2008.
- 40 3D movies are coming to your home, but should they?, Venture Beat, 25 June 2008. 3D TV set to boom, Smarthouse, 10 November 2008.
- 41 Hollywood may not be recession-proof this time, Los Angeles Times, 29 October 2008.
- 42 For examples of tightening consumer spending, see: Decline in consumer spending continues, Washington Times, 31 October 2008; Consumer spending in sharp decline, The Daily Telegraph, 26 November 2008.
- 43 Sony leads push for higher clarity at 4K, Hollywood Reporter, 8 October 2008.
- 44 The TV format to replace HD, BBC News, 15 September 2008.
- 45 Korean online newspaper enlists army of 'citizen reporters', San Francisco Chronicle, 18 September 2005. Also see: *ohmynews* founder says citizen journalism can work everywhere, Press Gazette, 2 June 2006.
- 46 For information on the size of social networks' digital storage, see: MySpace tackles extraordinary data storage requirements, searchstorage.com, 29 November 2006.
- 47 YouTube looks for the money clip, Fortune, 25 March 2008. See: <http://techland.blogs.fortune.cnn.com/2008/03/25/youtube-looks-for-the-money-clip/>.

48 Twitter's business model? Well, umm, Wired, 4 August 2008; Twitter microblogs to success, BBC News, 3 August 2007; Twitter turns drivel to cash, Information Week, 31 July 2007; Murdoch questions YouTube business model, World Screen News, 9 February 2007; the Web according to Balmer, BusinessWeek, October, 2006.

49 YouTube's popularity fails to sway advertisers, Financial Times, 16 November 2008.

50 A coming of age for YouTube, CNET News, 17 November 2008; Rival forecast to catch YouTube, Financial Times, 16 November 2008.

51 Analyst says Hulu to match YouTube's US revenue, Washington Post, 17 November 2008.

52 Monetization potential for YouTube: Building out a model, Paid Content, 6 March 2008.

53 Rising from the dead: the paid for online content model, CNET News, 17 November 2008.

54 Readers' comments bigger legal risk than forums, The Register, 26 August 2008.

55 A minority of acts have been able to generate tens, and in some cases, hundreds of millions of dollars on tours. For example, the Van Halen tour which concluded in 2008 generated \$112 million and reached one million fans. Source: AEG Live tops music industry trade publications midyear touring charts, AEG, 30 July 2008. The Spice Girls' 2008 tour grossed \$71 million. Source: AEG Live tops music industry trade publications midyear touring charts, AEG, 30 July 2008.

56 Rockonomics, the economics of popular music, Alan Krueger, Princeton University and NBER, March 2005. See: <http://www.irs.princeton.edu/pubs/pdfs/499.pdf>; StubHub's annual report on the concert economy, CNBC, 12 December 2008.

57 Football money league: Gate receipts, Deloitte, February 2008: http://www.deloitte.com/dtt/cda/doc/content/UK_SBG_FML08.pdf

58 Ibid.

59 Several analysts have downgraded stocks focused on live entertainment in light of the impact of low consumer confidence on entertainment: Ticket industry stock prices continue to decline as recession fears grip Wall St., Ticket News, 13 November 2008.

60 At the end of 2008, several Broadway shows (Spamalot, Spring Awakening, Hairspray) announced they would close in January 2009, due to softer demand. See: Recession to finally kill Broadway theater, Business Week, 24 October 2008.

61 As the economy worsens, is there money for play? The New York Times, 15 November 2008. See: http://www.nytimes.com/2008/11/16/sports/16sponsor.html?_r=1&ref=sports&oref=slogin

62 Madonna's "Sticky and Sweet" tour required 27 tractor trailers to carry equipment, when visiting Michigan. Welcome home Madge, what took you so long?, Detroit Free Press, 16 November 2008.

63 Concert souvenir sales vulnerable in recession, Reuters, 11 November 2008.

64 For example see: <http://www.bloomberg.com/apps/news?pid=20601103&sid=a5xWDHy0B5h0&refer=us>

65 At year-end 2008, some shows in London's West End were enjoying better box office revenues than in 2007. See: Crisis? What crisis?' ask defiant West End theatre producers, The Stage, 30 October 2008.

66 Radio is going digital, MSNBC, 12 March 2008.

67 Number of radio stations available from CIA Factbook, 20 November 2008: <https://www.cia.gov/library/publications/the-world-factbook/fields/2013.html>

68 For more background on adoption of digital audio broadcasting services in the United Kingdom, see: Communications Market Report, Ofcom, 14 August 2008.

69 10,000 stations at your fingertips, Kold, 28 October 2008.

70 See: <http://www.internetworldstats.com/stats.htm>

71 Strategy Analytics: worldwide broadband subscriptions top 400 million, Lightwave, 29 May 2008.

72 A desirable audience, Targetspot, 23 July 2008.

73 Based on data from Amazon.com, 17 November 2008.

74 iRadio makes Internet radio possible on the iPhone, WiFi radio review, 27 November 2007; Music royalty fees like static for Internet radio, The Florida Times Union, 15 November 2008.

75 Sanyo launches subscription free Internet radio, Sync, 17 November 2008.

76 Arbitron's October PPM Survey Offers Insight on Internet Radio Audience, Targetspot, 12 November 2008.

77 The Internet radio death watch, PC Magazine, 21 August 2008.

78 For example, see: Deal creates largest ad network for Internet radio, The New York Times, 15 October 2008.

79 Is your brand ready for mobile advertising? Corporate Eye, 1 September 2008.

80 Ibid.

81 Total global advertising expenditure during 2008 is estimated at \$462 billion dollars. See: 2008 magazine ad spending growth forecast, Magazine Publishers of Australia, 17 January 2008.

82 Is your brand ready for mobile advertising? Corporate Eye, 1 September 2008.

83 Obama chooses Biden as running mate, The New York Times, 24 August 2008; Barack Obama to text supporters on choice of running mate, The Guardian, 12 August 2008.

84 One of every 50 people on earth now belong to Facebook, Dallas News, 3 November 2008. See: <http://techblog.dallasnews.com/archives/2008/11/1-of-every-50-people-on-earth.html>

85 Revenues for some of the largest social networks are available at: Facebook now worth about \$4 billion, revenue light, Silicon Alley Insider, 11 November 2008; Facebook tries to woo marketers, Wall Street Journal, 10 November 2008; A coming of age for YouTube, CNET news, 17 November 2008; Murdoch's Internet wing to miss ambitious revenue goal, CNET News, 7 May 2008.

86 Facebook CEO Mark Zuckerberg: Our focus is growth, not revenue, Frankfurter Allgemeine, 8 October 2008. See: <http://faz-community.faz.net/blogs/netzkonom/archiv/2008/10/08/mark-zuckerberg.aspx>

87 For example see: The Battle for Facebook, The Independent, 26 September 2007; MySpace Joins Google alliance to counter Facebook, The New York Times, 2 November 2007; Social networking's gold rush, Business Week, 19 April 2006; Finding profit in social networking websites, International Herald Tribune, 13 May 2005.

88 Facebook's roar becomes a meow, Newsweek, 10 October 2008.

89 YouTube looks for the money clip, Fortune, 25 March 2008. See: <http://techland.blogs.fortune.cnn.com/2008/03/25/youtube-looks-for-the-money-clip/>; Yahoo kills live streaming service, Silicon Alley Insider, 3 November 2008. See: <http://www.alleyinsider.com/2008/11/yahoo-kills-live-streaming-service-yahoo-> <http://www.techcrunch.com/2008/10/31/facebooks-growing-problem/>.

90 Is MySpace Music an antitrust lawsuit waiting to happen? Tech Crunch, 20 September 2008; Mediaset sues Google, YouTube: seeks \$780 million, Reuters, 30 July 2008.

91 Second life needs a bailout, Tech Central, The Times, 31 October 2008.

92 Everybody's underwater in Silicon Valley, Silicon Valley Insider, 10 November 2008.

- 93 Pessimism from Venture Capitalists, *The New York Times*, 24 July 2008.
- 94 Here's a billion dollar business for Facebook, *Silicon Valley Insider*, 13 November 2008.
- 95 Also see: Social networks in the enterprise, *Technology Predictions – Trends 2009*, Deloitte Touche Tohmatsu, 2009.
- 96 Advertisers' preferred social media spend: none, *Silicon Alley Insider*, 10 November 2008.
- 97 For background on the outlook for advertising, see: More bad news in advertising outlook, Reuters, 28 October 2008.
- 98 For example, Google and Microsoft promised a number of social networking sites a guaranteed minimum amount of advertising revenue in exchange for the exclusive right to place ads. For further information, see: Generation MySpace is getting fed up, *Business Week*, 7 February 2008.
- 99 Ibid.
- 100 Beijing Olympics draws 4.7 billion television viewers, *Deutsche Presse-Agentur*, 5 September 2008.
- 101 In the United States, NBC's coverage of the Olympics peaked at 113 million viewers per day in the period 8–14 August 2008. Mobile coverage peaked at 507,000, or less than 1 percent of the total audience: Measuring total exposure to Olympics experience, <http://tvbythenumbers.com/2008/08/15/nbc-tami-beijing-olympics-numbers-through-august-14-2008/4698>
- 102 The great white hope of mobile TV, *Schwartz Communications*, 23 September 2008.
- 103 Mobile TV still one to watch, *Telecom.com*, 25 November 2008.
- 104 BBC's mobile TV trial peaks at 580 viewers a day, *New Media Age*, 28 July 2008.
- 105 Toshiba to shut down mobile broadcast TV service, *BetaNews*, 30 July 2008.
- 106 The great white hope of mobile TV, *Schwartz Communications*, 23 September 2008.
- 107 German Mobile 3.0 service to close down, *Broadband TV News*, 31 July 2008.
- 108 Mobile TV is not easy, *EE Times India*, 11 September 2008.
- 109 Orange keen to follow O₂'s subsidy cuts, *Mobile Today*, 7 August 2008.
- 110 Recession threatens to stall mobile TV, *Broadcasting Cable*, 17 November 2008.
- 111 Pre-roll solutions, *New Media Age*, 23 October 2008.
- 112 Also see: Ongoing fall in viewer retention overshadows 36% mobile TV growth, *Tellabs*, 12 February 2008.
- 113 Based on: An EU Strategy for Mobile TV, *Europa*, 18 July 2008.
- 114 For example, see: <http://anytime.sky.com7mobile.aspx>
- 115 See: <http://www.quantcast.com/xponlinescanner.com>
- 116 Online advertising's dirty secret: Malvertising, Lies, Damned Lies..., 6 July 2008.
- 117 Ibid.
- 118 In 2008, *Foxnews.com*, *newsweek.com*, *washingtonpost.com*, *facebook.com*, *digg.com* and *MSNBC.com* have all been afflicted by some form of malicious advertising. See: <http://timhowgego.com/infecting-the-ad-pool.html>; <http://msmvps.com/blogs/spywaresucks/>; <http://www.liesdamnedlies.com/2008/07/online-adverts.html>
- 119 ESPN turns off ad nets, *Media Week*, 24 March 2008.
- 120 For example, see: <http://www.adopstools.com/index.asp?page=richmedia§ion=clickchecker>
- 121 Online advertising's dirty secret: Malvertising, Lies, Damned Lies..., 6 July 2008.

While the global media sector is expected to be buffeted by grueling macroeconomic conditions in the year to come, we should not forget that the need for the media sector to inform and entertain us remains fundamental.

Glossary of technical terms

3D	Three dimensional
3G	Third generation mobile network
CPU	Central processing unit
DVB-H	Digital video broadcasting – handheld
DVR	Digital video recorder
EBITDA	Earnings before interest, taxes, depreciation and amortization
HD(TV)	High-definition (television)
UGC	User-generated content
URL	Uniform resource locator
WiFi	Wireless fidelity

Recent thought leadership

Media Democracy Survey, Deloitte LLP, December 2008

Deloitte Digital Index, Deloitte LLP, October 2008,
July 2008, April 2008

Lighting the way, Technology Fast 500 EMEA ranking
and CEO Survey, Deloitte Touche Tohmatsu, 2008

The elements of value network alliances – strategies for
building alliance partnerships, Deloitte Touche
Tohmatsu, 2008

Loves me, loves me not... perspectives on the UK
television sector, Deloitte LLP, 2008

Previous years' predictions are available from
www.deloitte.com/predictions

Contacts at Deloitte Touche Tohmatsu (DTT) and its member firms

Igal Brightman
Global Managing Partner
Technology, Media &
Telecommunications
Industry Group
+972 3 608 55 00
ibright@deloitte.com

Americas

Alberto Lopez Carnabucci
Argentina
+54 11 4320 2735
alopezcarnabucci@deloitte.com

Marco Antonio Brandao Simurro
Brazil
+55 11 5186 1232
mbrandao@deloitte.com.br

John Ruffolo
Canada
+1 416 601 6684
jruffolo@deloitte.ca

Duncan Stewart
Canada
+1 416 874 3536
dunstewart@deloitte.ca

Fernando Gaziano
Chile
+56 2 729 8783
fpgaziano@deloitte.com

Elsa Victoria Mena Cardona
Colombia
+571 546 1810
emenacardona@deloitte.com

Carlos Gallegos Echeverria
Costa Rica
+506 2246 5225
cagallegos@deloitte.com

Ernesto Graber
Ecuador
+593 4 245 2770 ext 163
egraber@deloitte.com

Francisco Silva
Mexico
+52 55 5080 6310
fsilva@deloittemx.com

Cesar Chong
Panama
+507 303 4110
cechong@deloitte.com

Gustavo Lopez Ameri
Peru
+51 1 211 8533
glopezameri@deloitte.com

Phillip Asmundson
United States, Deloitte LLP
+1 203 708 4860
pasmundson@deloitte.com

Juan José Cabrera
Uruguay
+598 291 6756 ext 161
jucabrera@deloitte.com

Erwin Miyasaka
Venezuela
+58 212 206 8534
emiyasaka@deloitte.com

Europe, Middle East, and Africa

Georg Krause
Austria
+43 1 537 00 4810
gkrause@deloitte.com

Andre Claes
Belgium
+32 2 600 6670
aclaes@deloitte.com

Dariusz Nachyla
Central Europe
+48 22 511 0631
dnachyla@deloittece.com

Olga Tabakova
CIS and its Russian office
+7 495 787 0600 x 2326
otabakova@deloitte.ru

Kim Gerner
Denmark
+45 3610 3281
kgerner@deloitte.dk

Jussi Sairanen
Finland
+358 40 752 0082
jussi.sairanen@deloitte.fi

Etienne Jacquemin
France
+33 1 5561 2170
ejacquemin@deloitte.fr

Dieter Schlereth
Germany
+49 211 8772 2638
dschlereth@deloitte.de

Cormac Hughes
Ireland
+353 1 4172592
cohughes@deloitte.ie

Asher Mechlovich
Israel
+972 3 608 5524
amechlovich@deloitte.co.il

Alberto Donato
Italy
+39 064 780 5595
aldonato@deloitte.com

Dan Arendt
Luxembourg
+352 451 452 621
darendt@deloitte.lu

Saba Sindaha
Middle East
+971 (50) 666 7148
ssindaha@deloitte.com

Piet Hein Meeter
Netherlands
+31 20 582 4351
pmeeter@deloitte.nl

Muraino Ogunsanya
Nigeria
+234 1 2717815
mogunsanya@deloitte.com

Halvor Moen
Norway
+47 23 27 97 85
hmoen@deloitte.no

Joao Luis Silva
Portugal
+351 210 427 635
joaolsilva@deloitte.pt

Mark Casey
South Africa
+27 11 806 5205
mcasey@deloitte.co.za

Eduardo Sanz
Spain
+34 91 514 5000 ext 2060
edsanz@deloitte.es

Tommy Martensson
Sweden
+46 8 506 711 30
tommy.martensson@deloitte.se

Sait Gozum
Turkey
+90 212 366 6056
sgozum@deloitte.com

Jolyon Barker
United Kingdom
+44 20 7007 1818
jrbarker@deloitte.co.uk

Paul Lee
United Kingdom
+44 20 7303 0197
paullee@deloitte.co.uk

Asia Pacific

Damien Tampling
Australia
+61 2 9322 5890
dtampling@deloitte.com.au

William Chou
China
+86 10 8520 7102
wilchou@deloitte.com.cn

V. Sri Kumar
India
+91 80 6627 6107
vsrikumar@deloitte.com

Yoshitaka Asaeda
Japan
+81 3 6213 3488
yoshitaka.asaeda@tohmatsu.co.jp

Jum Pyo Kim
Korea
82-2-6676-3130
jumkim@deloitte.com

Robert Tan
Malaysia
+60 3 7723 6598
rtan@deloitte.com

John Bell
New Zealand
+64 9 303 0853
jobell@deloitte.co.nz

Shariq Barmaky
Singapore
+65 6530 5508
shbarmaky@deloitte.com

Clark C. Chen
Taiwan
+886 2 2545 9988 x3065
clarkcchen@deloitte.com.tw

Marasri Kanjanataweewat
Thailand
+662 676 5700 ext 6067
mkanjanataweewat@deloitte.com

For more information please contact:

Amanda Goldstein

Director of DTT TMT
Marketing
+1 212 436 5203
agoldstein@deloitte.com

Yvonne Dow

Director of Asia Pacific
DTT TMT Marketing
+852 2852 6611
ydow@deloitte.com

Jared Frost

Director of EMEA DTT
TMT Marketing
+44 20 7303 8884
jfrost@deloitte.co.uk

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu, a Swiss Verein, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu and its member firms.

Deloitte Global Profile

Deloitte provides audit, tax, consulting, and financial advisory services to public and private clients spanning multiple industries. With a globally connected network of member firms in 140 countries, Deloitte brings world-class capabilities and deep local expertise to help clients succeed wherever they operate. Deloitte's 165,000 professionals are committed to becoming the standard of excellence.

Deloitte's professionals are unified by a collaborative culture that fosters integrity, outstanding value to markets and clients, commitment to each other, and strength from cultural diversity. They enjoy an environment of continuous learning, challenging experiences, and enriching career opportunities. Deloitte's professionals are dedicated to strengthening corporate responsibility, building public trust, and making a positive impact in their communities.

Disclaimer

This publication contains general information only, and none of Deloitte Touche Tohmatsu, its member firms, or its and their affiliates are, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your finances or your business. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser.

None of Deloitte Touche Tohmatsu, its member firms, or its and their respective affiliates shall be responsible for any loss whatsoever sustained by any person who relies on this publication.