IBM Business Consulting Services

Retrieved May 3, 2004 from http://www-1.ibm.com/services/strategy/files2/G510-3569-00_media2010.pdf

Media and entertainment 2010

ibm.com/bcs

The IBM Institute for Business Value develops fact-based strategic insights for senior business executives around critical industry-specific and cross-industry issues. This paper is part of an ongoing commitment by IBM Business Consulting Services to provide forward-looking industry and business points of view, and to help companies and industries transform their futures. You may contact the authors or send an e-mail to iibv@us.ibm.com for more information.

Contents

1 About this paper

2 The open media company of the future: Executive summary

5 Scenario: "I want it my way…"

8 From vying for attention to pervasive media

18 The open media business of the future – open on the inside, open on the outside

29 What will it take to become an open media business?

37 The open media business of the future: Conclusion

38 About the author

38 About IBM Business Consulting Services

39 References

About this paper

This paper, a collaborative discussion by thought leaders from the IBM Media and Entertainment practice, will discuss why industry and market forces will propel media businesses to become more open to business partners, customers and consumers – opening content reserves and formatting, production processes, packaging and sales options – without opening the company to increased vulnerability.

The paper begins with an executive summary, followed by a future scenario of the media and entertainment business as we envision it circa 2010. The next section discusses the direction of media and entertainment industry trends, followed by a section analyzing the implications of those trends. The paper concludes with our strategic recommendations for becoming the open media business of the future.

The open media company of the future: Executive summary

Large trends affecting the media and entertainment industry will compel companies to open up access to content in more ways than ever. Successful companies will create leaner, more transparent organizations that cater to more platforms, more devices and more users wanting to edit, compile and share.

In the 2001 paper *Vying for Attention*, IBM media and entertainment strategists contended that because human attention is bombarded relentlessly with media and messaging, it has become an increasingly scarce and valuable resource. The battle to capture consumer attention has now become entrenched. For media and entertainment companies, the leading edge of success over the next several years will be cost-effectiveness in gaining and retaining attention.

We foresee a continuing onslaught of new kinds of content, media forms and devices. Successful media companies will vie for attention by allowing business partners, customers and consumers more freedom to manage their own media and entertainment experiences. They must also be able to negotiate rapid shifts in markets, economic climates and technology innovations. Key enablers of the media business we envision in 2010 are:

- Open standard information technology that enables virtually seamless interoperability with legacy and partner infrastructure
- Digital content management and distribution systems that open protected pathways deep in the media organization – to index, catalog, meta-tag, search, retrieve and track digital content usage based on access rights – around the clock, with little need for human intervention
- Advanced data analytics that create vital business intelligence, helping media firms develop value for business partners, customers and consumers
- Strategic deployment of an "attention loop" that will evolve in step with significant developments in consumer behaviors and media business models.

Between now and 2010, digital technologies will become more powerful and affordable at every user level, in digital networks and in product offerings. An increasing segment of consumers will be able to compile, program, edit, create and share content; as a result, they will gain more control and become more immersed in media experiences.

We foresee growing participation in media experiences well beyond traditional media, in three additional sectors we have labeled multi-media, "big" media and pervasive media. Successful companies, in transforming their business models to serve these four distinct channels and behaviors, will continue to reposition and restructure. They will focus on the core components that create value for their

customers and consumers, divest unneeded properties, improve the monetization of assets – and importantly, join with other players to achieve scale, lower costs and offer value-added products and services.

We call this business model the "open media company of the future" – a dynamic media business that:

- *Opens the media experience:* Leverages advances in technology to provide customers and consumers a more involved experience with the media firm
- *Opens content reserves*: Develops accessible, flexible digital content systems that can enable distribution to virtually any media context
- *Opens content creation and distribution:* Establishes digitized processes that monitor and incorporate input from customers and consumers to garner their attention
- *Opens content packaging, bundling and sales strategies:* Utilizes variable pricing models that enable partners to advertise and share profits, and enables consumers to access content through more compelling release schedules.

While, at present, digital technologies undermine the traditional economics of the media business, new digital technologies will support improved business intelligence, enabling the open media firm to identify higher-value business components and assets. In the foreseeable future's uncertain markets, companies will employ advanced data analytics to adapt and respond to changing conditions. Digital management capabilities will likely become a core competency and differentiator.

Consumers will continue to become more knowledgeable, shifting the burden to providers to know more about the media habits of individuals as well as larger segments. An "attention loop" will enable successful companies to determine the optimal match of digital content and access rights to consumer needs and demands – and to create reciprocal relationships with alliance partners, vendors and suppliers, customers and consumers.

Partnership strategies will enable companies to optimize cost, revenue and capital utilization – feeding shareholder value by driving economies of scale. Success will require executive foresight, the strategic integration of partner competencies and realtime technologies for managing cross-enterprise processes and workflows.

Recommendations: Our ten strategic guidelines for players evolving toward becoming the open media company of the future:

1. Get your digital house in order: Create or convert content to digital formats
2. Manage content for optimum flexibility and asset value
3. Be open for distribution, no matter where or when
4. Be open for delivery – in multiple packages, with variable pricing and always-on customer service
5. Open digital doors – to contribute, produce or author dynamic content
6. Create new product windows and business models
7. Manage openly and communicate in realtime through digital infrastructure
8. Leverage a new depth of business intelligence made possible by digital technology
9. Use partnership strategies that drive efficiency and optimize customer attention
10. Become an on demand business.

The open media company of the future will result from the confluence of new media technologies, changing customer and consumer behavior patterns driven by more digital capabilities at affordable prices, and new developments in business systems enabling digital content management, business intelligence and on demand response to customers and consumers. The past's closed and proprietary media and entertainment business models will give way to open media business strategies that will enable forward-looking companies to exploit significant opportunities for profitability within these trends.

The future will see more open, reciprocal relationships and more ways to interact and customize at every point of the media value loop – among brands, creators, suppliers, distributors, delivery systems, customers and "experiencers" of media content.

Scenario: "I want it my way…"

2010: Media pervade everything, everywhere. Technology just keeps getting better, smaller and cheaper – raising expectations and putting business models up for grabs with every new spike of popularity and innovation in media and entertainment. Brands and channels proliferate, as companies roll out new technology and new forms of content to high demand – and quickly see them transformed, as sophisticated users experiment, combining formats and platforms unpredictably. Markets are more fragmented than ever. The quest for customers' and consumers' attention – and ROI – is a moving target; but the opportunities for creative ventures keep media businesses continually repositioning, restructuring, partnering for scale and using advanced data analytics to locate hot new niches.

At every level, from the global distributor devouring satellite capacity to the everyday user with a small device that captures global content wirelessly wherever he goes in major metro areas, businesses and consumers in 2010 are unencumbered by wires and cables. Workers can access all personal computer files from many locations without lugging a laptop. Businesses and individuals are programming customized schedules and playback options for media, information and entertainment, taking full advantage of a variety of new software that helps combine multiple types of media effortlessly.

Wall-sized screens display gigabytes of digital information – offices and homes let users wallow in scores of programs, sales presentations or work files spread out at once, and theaters wrap audiences in dazzling imagery. Work groups, classrooms or individuals can use wireless remote controls and keyboards or voice technology to work with wall-high files or view broadcast content, films or zoomed-in book pages in ergonomic comfort. Media companies are providing user-friendly tools to manipulate multimedia personal files – video messaging, Webcast social events, virtual soirees or political gatherings – digital power is pervading every aspect of human communication.

Everyone has at least one small device that makes phone calls, serves as a voice-activated computer terminal and connects with public workstations and the wireless networks blanketing most metropolitan areas. Digital wearables and jewelry carry more bytes than the desktops of 1999. Digital text-to-speech, speech-to-text and "courteous" speech translators help keep the peace, but some people never learn – they talk to their devices as they would to their dogs. "Open checkbook! Sixty-two fifty to GasCo; six hundred seventy to Warehouse-O-Rama. Balance it!" is background noise in public or the household.

Now more content is available in more formats than ever, and everybody wants something different from every piece of content. A university professor has videotaped his analysis of a news event and wants to intercut it into a primetime news broadcast downloaded for his classroom. Fans flock to the neighborhood movie theater to see digital Webcasts of world championship tournaments or Broadway shows in realtime – it's almost like being there; these events pack several sections of the multiplex. Organized groups subscribe to an online service that provides profanity-free versions of top-selling music, books, films and other content. Other subscription groups want the same content in its original versions, but customized for a plethora of devices. With digital media, repurposing is cost effective, helps build more niches and gets more mileage from content assets. Online distribution and management systems track all rights and licensing by users, employing biometric identifiers tied to payment schemes (for large downloads) and subscription package fees (for less exclusive content).

Enthusiasts from around the globe spend hours together in realtime, playing interactive online games that feature characters from pop songs, books or movies. They joust from hundreds of types of platforms, devices and networks, all served by the standardization of digital formatting and realtime language translation. At any hour of the day and night, businesses and individual users are customizing media services from wireless computing modules, mobile devices, public kiosks and virtual reality stations. Media pervade everything; and media companies are doing business everywhere, anytime in 2010.

There are still powerful media brands, but even big conglomerates rely on outsource providers to handle just about everything that isn't directly brand-related – production, sales and distribution, marketing and customer service – whether physical or online. Each conglomerate relies on a tightly focused stable of specialized businesses linked online around the globe on a need-to-know basis. High-speed data services are used as utilities, like gas or electricity, replacing the need for servers and maintenance in-house.

Other companies have organized around their core media specialties, becoming best-in-class for a key service such as accounting and rights management, or a profitable creative activity like animation, production or publishing. With digital media and online links, specialist companies can serve clients in many locations. The traditional media centers of Hollywood and Manhattan still serve as business centers, but traditional production facilities are becoming more useful as theme parks and malls, as businesses strip away non-core activities and drive down real estate and labor costs.

Conglomerates, traditional studios and publishers are opening up their inventories, putting old and new digitized content online for variable fees. The same song costs more, or less, depending on complex variables such as age, sales tracking, promotional schemes or even the rarity of archival content. Data analysis helps companies determine the potential value of assets, and digital management systems perform search, retrieval, sales, rights management and customization functions in a nearly "touchless" system with little human intervention – and lower distribution costs. In 2010, some independent artists and producers are offering all their music, short videos and movies completely free, making money instead from tie-ins, product placements, Webcast concerts and events with pop stars and fan merchandise.

Customers can purchase and download the rights to a book and have it configured for one or more types of devices, or delivered in traditional hard or soft cover within 24 hours; they can order the film of the book, the soundtrack or only one song, the liner notes or a single quotation to use in a variety of formats, from a term paper to a wall poster. Online accounting systems automatically invoice the huge data feeds of digital content ordered by network and cable broadcasters from distributors – and streamline payments, as well. Those millions of micropayments aggregate to a sizeable revenue stream from the sale of new or archived digital content, much of which never has to travel to a theater, retail store or TV station – it's delivered online.

Media companies survive or fail in 2010 based not just on creative content, but on creative intelligence – about customers, markets and the value of digital assets. In an era of "pervasive media," users around the world are confidentially tracked for their opinions, preferences and tastes in media and entertainment; actively or passively, they help shape the content they experience, how and when they want it. "Open standards" system architecture, advanced data analytics and an open business strategy that monetizes rapid shifts in technologies and user demands help media businesses exploit rapidly developing niches, create new or aggregated revenue streams and customize open relationships with content creators, distributors, customers and consumers.

From vying for attention to pervasive media

"I want what I want, when I want it" will be the bywords of 2010's "pervasive media" environment. Business technology will enable media companies to address rapid changes in the market, while consumer technology will provide users a richer media experience.

Between now and 2010, the increasing affordability, saturation, transmission speed and massive data storage capacity of emerging digital technologies will enable new formats and functionalities, multiplying and deepening the connectivity of users around the globe. Digital networks and devices will continue to load more megabytes per year at more affordable prices. Businesses will be able to offer new tools to customers and consumers, and will realize greater efficiencies by managing content, inventory, production and marketing on an "on demand" basis. Consumers will be able to compile, edit, produce, create and broadcast complex content and manipulate huge files from the comfort of their homes and personal budgets.

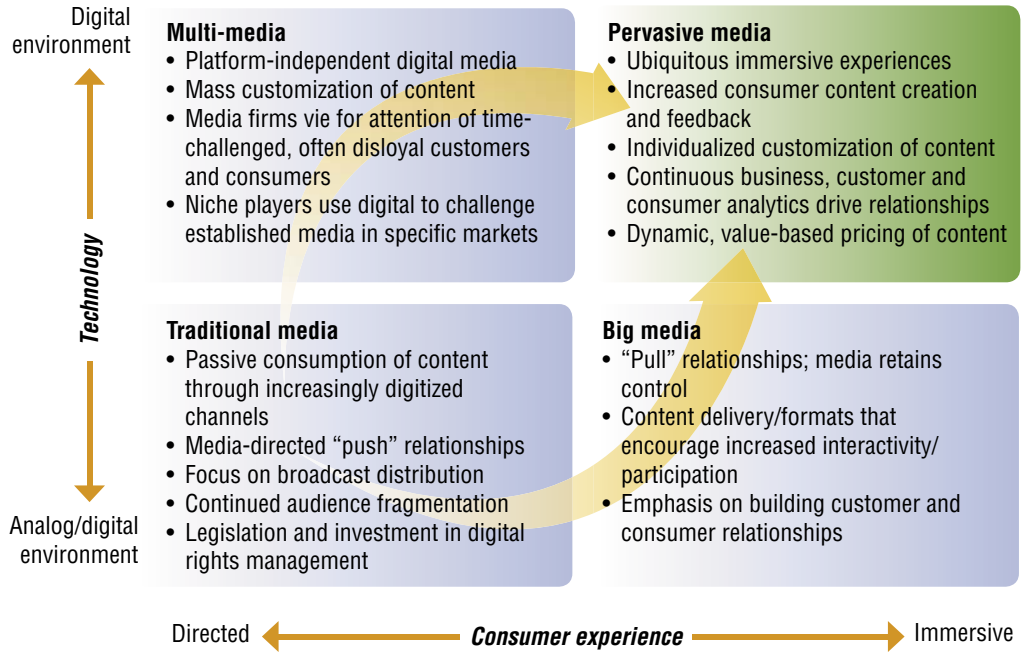
The battle for human attention will remain pitched: innovations will continue to cascade rapidly to market. The glut of choices, channels, brands, traditional media and archival content must now compete with customers' and consumers' new enthusiasms for interactive media, on demand scheduling and publishing, and steadily increasing thirst for the rich, interactive experiences digital technologies make possible.

As broadband access and digital media capabilities become not only more pervasive, but also more interactive, media companies will respond proactively to the threats of digital copying and margin erosion – by 2010, we anticipate that many of the legal lines in the sands of content ownership will have been redrawn and an assortment of new safeguards will have been developed. Unprecedented new digital management technologies will help owners sort, store, catalog, retrieve, distribute and track inventory and customer information and determine the value of assets and customers.

Patterns of media consumption will rapidly evolve. As new technologies continue to roll out and spark new interactivities, media firms will respond by developing sophisticated systems to manage content and rights, help safeguard access and customize the management of evolving customer and consumer relationships.

The matrix in Figure 1 illustrates the growth of new behaviors in media experiences and consumption to 2010, behaviors that we anticipate will shape markets – and demand responsive strategies from media firms.

Figure 1. All paths lead to the pervasive media environment of the future.



Source: IBM Business Consulting Services analysis; IBM Institute for Business Value analysis, 2004.

The vertical axis represents the growth of technology, from legacy analog systems to the increasingly digitized environment. Along this axis, content and formats once controlled by media broadcasters and distributors are moving toward an open market for delivery systems outside the control of the industry. Popular adoption of "killer apps" that permanently alter the environment defines the playing field – as the MP3 phenomenon demonstrated, a music production format created for a specific use inside the film industry was wildly adapted for peer-to-peer music sharing by a booming demographic group with adolescent scruples. The open market for technology development creates opportunities for new killer apps and content, but it demands flexible responsiveness from media businesses.

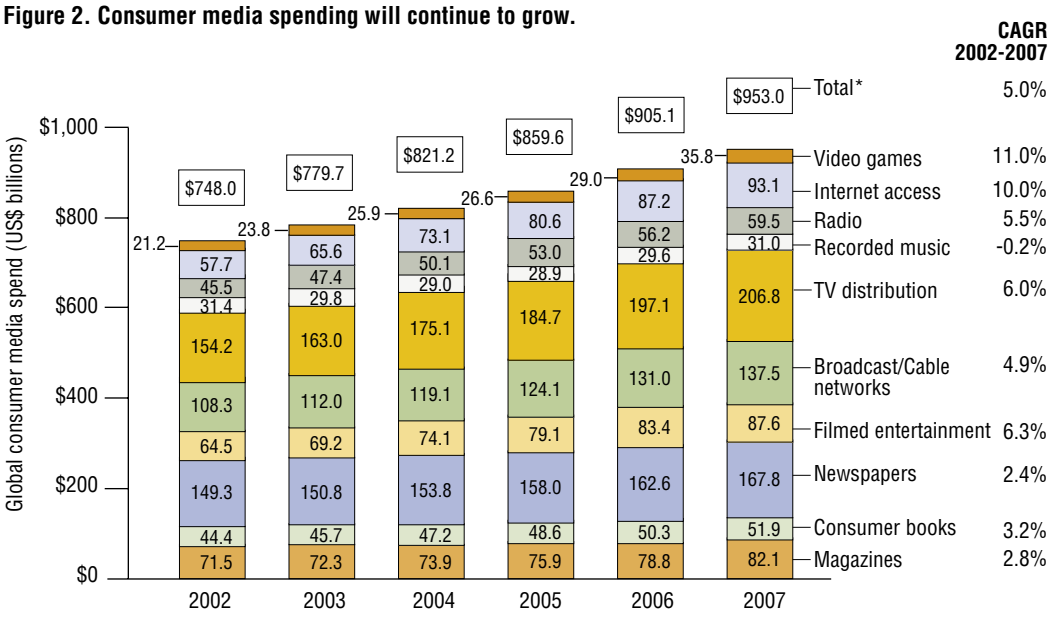
The horizontal axis shows trends in the experience of media consumption, moving from the traditional media-directed system to the open, immersive environment of the future. Media companies must interact with the "hot" new combinations of technology, devices and behaviors that will be unpredictably driven by open markets and a determined sense of user entitlement.

The *lower-left quadrant (Traditional media)* represents the traditional contract between providers and users. It is a "one-way street" – media companies create and push content in a limited number of formats controlled by the distribution media towards passive audiences. Media companies build mass markets and own distribution systems to push content.

The *upper-left quadrant (Multi-media)* finds an open field for technology dissolving these assumptions, introducing rapid, innovation-fueled growth in media and entertainment – multiplexes, DVD, Internet, cable, satellite and high-speed transmission, personal video recorders (PVRs), satellite radio – and correspondingly diminishing shares of human attention. The battle for human attention demands that providers aggregate ever-smaller slices of attention from a multiplicity of channels.

The *lower-right quadrant (Big media)* shows more interactivity between the media company and the consumer, such as channels and offerings within ISPs and Web portals, a wider range of content on DVDs versus videotapes, and data-gathering methods such as "cookies", opt-in marketing or customer relationship management (CRM). But the underlying business models remain lodged in the analog era.

Figure 2. Consumer media spending will continue to grow.



*Note: * Total spend may differ from sum of individual segments due to rounding.*
Source: PricewaterhouseCoopers, Entertainment & Media Outlook: 2003-2007, Global Overview, *May 2003; IBM Institute for Business Value analysis, 2004.*

The pervasive media environment is the future direction of media and entertainment

The upper-right quadrant (Pervasive media) represents the coming era – consumers and businesses are fully connected, immersed in media all the time. Businesses will be able to respond through online connectivity and deliver electronically at any hour around the clock. Many forms of media will be "parallel processed" – in use simultaneously – such as watching TV and e-mailing at the same time. Media companies will be able to multi-cast, deploying three or four channels in the same space as one analog channel, bringing even more content to market. Users will be inundated with choices. The pervasive media environment is erupting from the convergence of many factors, such as:

- *Demand:* increased overall consumption of media and entertainment
- *Power:* a greater number of megabytes of content will be carried by smaller, ever-shrinking physical formats and devices
- *Liquidity:* the easy portability, interoperability and "shareability" of digital media
- *Unpredictability:* relentless innovation in media technology, software and player devices
- *Ubiquity:* multiplying channels, bigger broadband "pipes" and spreading connectivity in globalizing markets.

Case study: IBM and digital radio technology enabling switchovers

Despite its enormous market potential, digital radio may be the best-kept secret in digital media. Classic FM, the first fully digital UK broadcaster, is at the forefront of this revolution in the UK with its installation of Jutel RadioMan, a comprehensive media asset management solution designed primarily for major broadcasters. It enables digital content to be created, scheduled, organized and broadcast simultaneously to multiple media channels, including radio, Internet and wireless systems. Integrated with IBM technology, Radioman's editorial and production toolkits add quality to the station's transmissions, allowing increased productivity and a variety of new services and conveniences for producers, journalists and presenters, including synchronous text, picture and HTML information flow and support for multiple languages. Its scalable system integrates and manages program planning, production, archiving and retrieval. With RadioMan, Classic FM aims to integrate its output across digital radio and new media platforms, providing its listeners with increased access to program data and a range of new facilities, adding value for the listener while increasing the commercial potential of the station. The merging of radio broadcasting via traditional, digital and Internet technologies is revolutionizing the industry.[1, 2]

Media consumers, to varying degrees, will be increasingly involved in the creative process

By 2010, the impacts of new technologies will have sidelined predictable market assumptions, fueling the "I want what I want, when I want it" behavior of the upper right quadrant. Although traditional passive consumption will continue to represent a large market share, digital media's capabilities will engender new forms of interaction, powerfully compelling media companies to become digitized and responsive, and enabling even traditional consumers to make content more individually meaningful:

Traditional passive consumers – will choose among media companies' predictable mass-market offerings, but will use several platforms or flexible viewing schedules with affordable devices. Using digital content management and delivery systems, content providers may make it simple enough for traditionalists to choose different edits of the same content for children or adults.

Contributors – will experiment with more options and more innovative platforms, providing feedback passively through purchase choices and data collection, and actively through suggestions, opt-ins or invitations to participate online.

Producers – will program content and devices that they purchase from multiple sources, making uniquely personalized digital play lists or collections for their own tastes. These tech-savvy users will port content files among a variety of devices, and compile chunks of content from many sources into their own playback formats.

Authors – will utilize Web tools to tailor content to business or personal interests, seeking self-expression or control. Media companies will provide affordable advanced tools to this growing slice of active users, such as special blog (Web log) sites, multiplayer online games, user-group "theaters" or conference centers and downloadable production components – music, cinema and TV samples, streaming video or digital photo illustrations.

Users who contribute or interact as producers of their own programming or authors of content will not cease to enjoy passive consumption; they will add new skills and redefine the amount of time they spend enjoying media passively.

FCC chairman manages attention: becomes producer of own programming schedule

TiVo, the personal digital TV recorder, has received a favorable review by FCC chairman Michael Powell. In an interview with the Sunday New York Times Magazine, Powell said that, as a result of TiVo, "I'm my own programmer, not NBC. I've got a system looking all around the 300 channels I have. And picking out the stuff I like, putting them together and letting me decide whether *24* is on at 9:00 p.m. or 9:45."[3]

Digital technologies present the opportunity, and the challenges of scale that go with innovation, to maintain or acquire an ever-larger inventory not only from traditional content producers, but also from digitally-equipped, sophisticated users who author some content that media companies may find profitable to acquire and manage.

Case study: Pathfire Digital Media Gateway (DMG) Networks

Pathfire, Inc. is an example of an open, flexible programming phenomenon at the business rather than the consumer level. A leading provider of multi-channel and multicast digital media distribution and management solutions, Pathfire provides satellite feeds from broadcasters to their affiliates. Pathfire enables major broadcast networks, station groups, cable companies, syndicators, advertising agencies, content providers, stock footage houses and other media companies to reduce the cost of migrating to a digital content model. Its automated digital platform is backwards compatible with legacy systems, eliminating the need to schedule and monitor content downloads in analog formats. Its broadband feed allows affiliates to receive and store vast amounts of content on a server, like the PVR technology for consumers – on a business-to-business scale. Affiliates can search, retrieve, select and program from broader choices those parts of the content they believe will drive the greatest value, including content from other affiliates. The Pathfire system operates digitally with little human interaction, slashing capital investment and labor costs and allowing automatic content management, delivery and back-end invoicing in a security-rich, always-available digital distribution environment.[4, 5]

Technological innovation: Expanded possibilities – squeezed media margins?

The rapid pace of technological innovation is a deep developmental trend driving the media and entertainment industry environment. Due to developers' large-scale aims to serve the global economy as a whole and exploit free-market opportunities, the force of technological development remains outside the control of media firms. Technology's prime imperative – that computing power will drive down labor, production and distribution costs by managing more and more of the transactions of a service-based economy – have been half a century in the planning and massive build-out (see sidebar, "Technological innovation"). With high-speed and digital technology now achieving acceptance and saturation – and providing the seemingly instantaneous responsiveness that at last keeps pace or exceeds users' speed of thinking, reacting, mousing or keyboarding, businesses preparing for the transformative future will realize the need to reengineer processes to reap the greatest efficiencies from technological innovations.

Technological innovation: The transition from analog to distributed digital platforms

Phase one: Digital formats (1996-2001): Continuously improving digital platforms, networks and software, such as MPEG formats, DVDs, CDs, PVRs, video game consoles, etc., affect media and entertainment distribution and value. Powerful market forces in overall economy drive innovation beyond control of media companies.

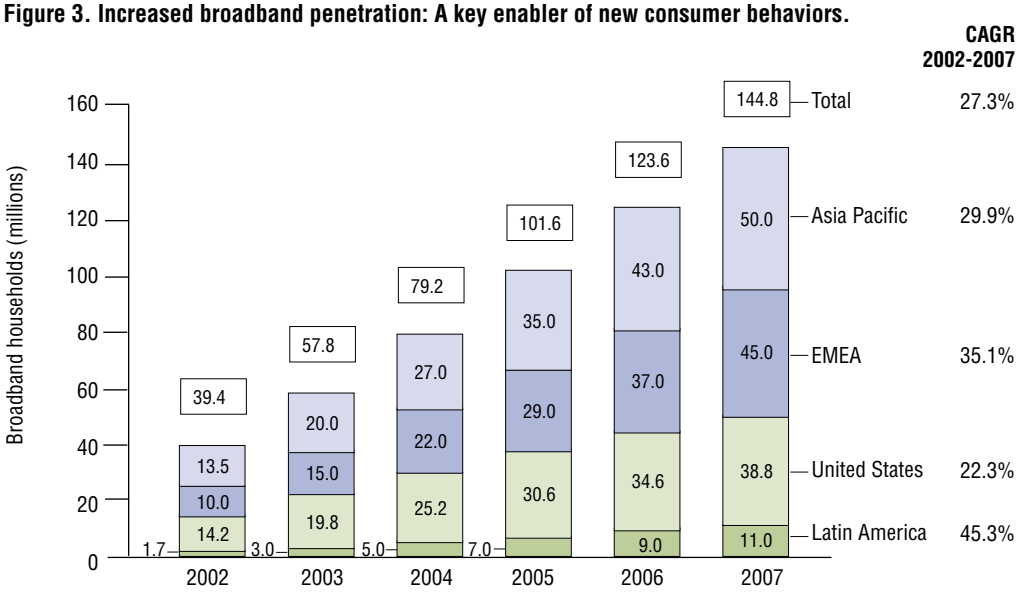
Phase two: Technology integration (2002-2006): Web services, grid computing, P2P/distributed computing and other improvements to identified needs from phase one. On demand strategies and middleware enable companies to respond more flexibly to customers and competitive shifts. Greater ROI from technology investments through enhanced standards, utilization and processes, more reliable autonomic (self-healing) systems, reduced network downtime and automating as many functions as possible.

Phase three: Transformation (2006-beyond): Exponentially more advanced and powerful systems transform value creation:

- Business intelligence – Improved data capture, analytics and knowledge management = better-informed business decisions
- Economies of scale – Reengineer scale and processes around new technology capabilities = reduced operating expense
- Partnerships – Digital ecosystems with other firms = shared costs, greater value.
- Increased productivity – on demand and utility computing; multiple support technologies working more seamlessly.

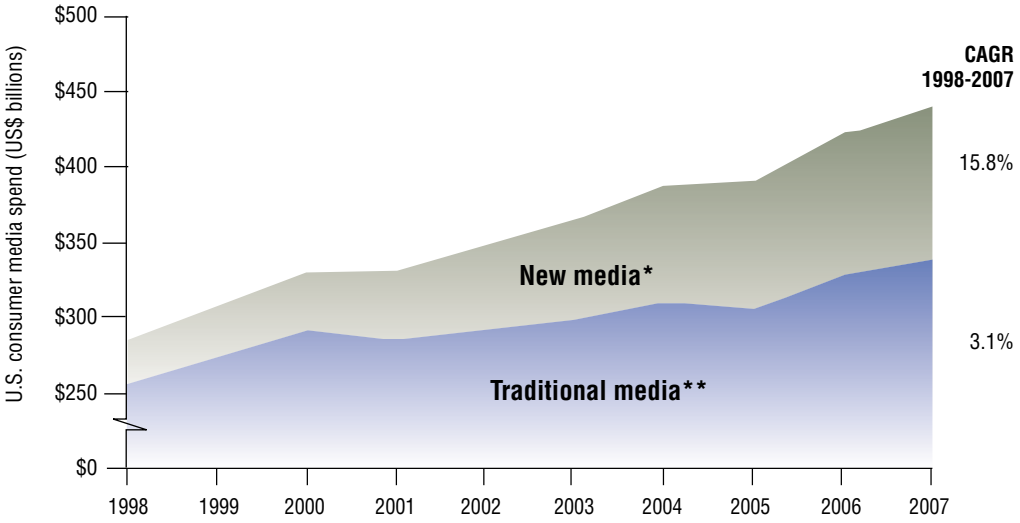
The relentless driver of technology development means that complexity will continue to characterize the M&E industry to 2010 and beyond. As more and better networks are deployed, new technologies and devices are rolled out, content and users become more sophisticated and broadband saturation is achieved between now and 2010 for most of the developed world, Moore's Law[6] will continue to help consumers at most socioeconomic levels to afford more technology – from home entertainment centers to tiny mobile devices capable of data streaming. Not only do we anticipate that the convergence of these trends will continue to burden human attention, but also that increased complexity in the marketplace can only feed consumer expectations that more, more and more should always be available, accessible and affordable.

Figure 3. Increased broadband penetration: A key enabler of new consumer behaviors.



Source: PricewaterhouseCoopers, Entertainment & Media Outlook: 2003-2007, Global Overview, *May 2003; IBM Institute for Business Value analysis, 2004.*

Figure 4. Consumer spending for new media will grow rapidly.



*Note: *New media are consumer media that were widely available only after November 1992 (i.e., the release of MPEG-1). New media includes CDs, DVDs, satellite TV, digital TV, digital music downloads, satellite radio, video game consoles (i.e., Sony Playstation, Microsoft® Xbox, and Nintendo GameCube), consumer ebooks and online newspapers.*
***Traditional media includes box office and VHS filmed entertainment, analog broadcast TV, cable and radio distribution, non-CD and VHS recorded music (including music videos), and printed consumer books, magazines and newspapers.*
Source: PricewaterhouseCoopers, Entertainment & Media Outlook: 2003-2007, Global Overview, *May 2003;* Veronis Suhler Stevenson Communications Industry Forecast & Report. *Seventeenth Edition/Twenty-first Edition, 2003; IBM Institute for Business Value analysis, 2004.*

When digital users can skip ads, can advertising survive?

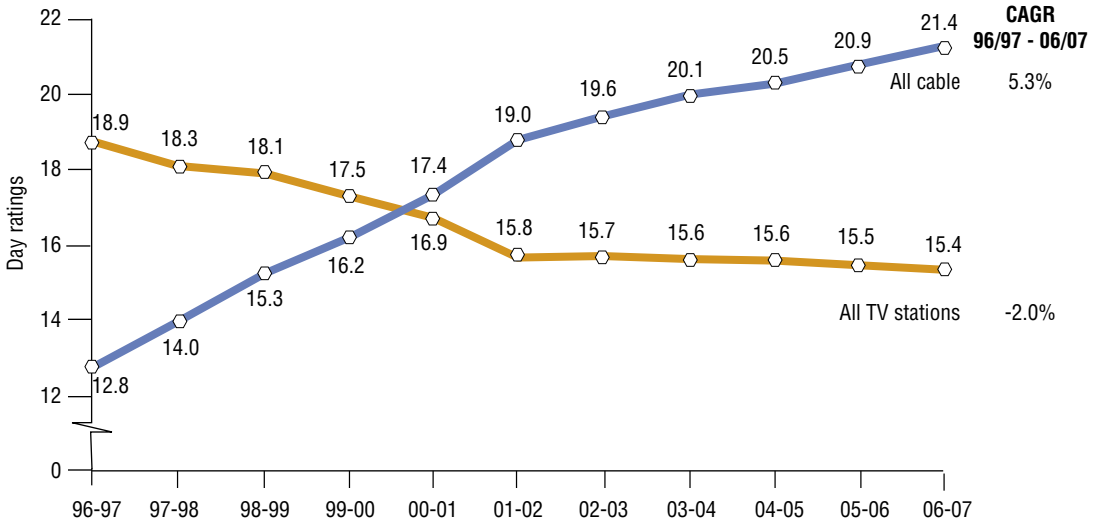
In a 2003 interview with Linda Wolf, chair and CEO of the Chicago advertising giant Leo Burnett Worldwide, The Wall Street Journal asked her "how worried" the industry should be about digital technologies that enable users to program their television viewing to skip the commercials. "[Ad-skipping] won't eliminate advertising," Wolf replied. "I believe it will raise the bar… Consumers are much more in control and it's incumbent on us as advertisers and marketers to reach them in a way that is entertaining and compelling. It's all about new creativity."[7]

Media companies are already under duress from an uncertain macro-economic environment, the fragmentation of markets and the multiplication of channels. Between now and 2010, they will also bear the brunt of resolving multiple turf wars – digital piracy, ad-skipping technologies, PVR recording, DVD duplication and other incursions that threaten traditional profit models. From the college student constructing megabyte-rich pranks, to the local cable network aiming to compete against larger fish, to the giant studio seeking to make Oscar history, all levels of users will be able to do more with digital. The media and entertainment business will be exponentially more challenging.

As choices continue to expand and time remains limited, attention will become an even scarcer resource

The glut of overchoice and competition will become even more intense; media companies must continue to vie for the customer's attention. Even as new generations mature who have been computing all their lives, the sheer volume, complexity, global connectedness and ever-expanding fabric of computing technology will present extraordinary demands for strategic filtering, from the individual managing his e-mail and personal portal to the media conglomerate attempting to achieve scale and profitability. Customers crave trusted brands to filter the glut of choices, but they will rapidly abandon brand loyalty if their needs are not met, or just to try the next big thing – leaving media companies vulnerable.

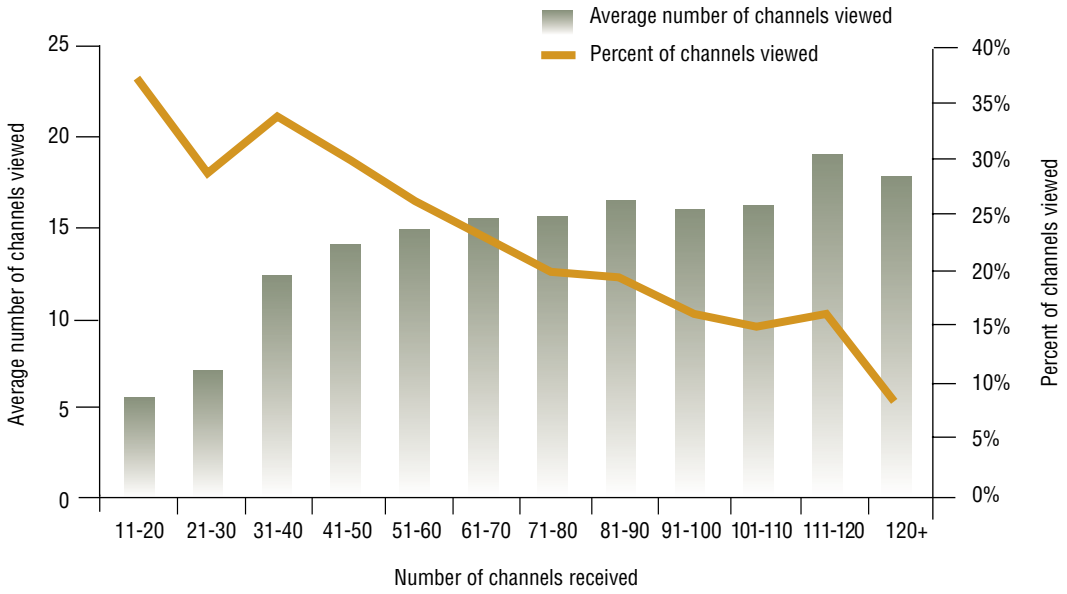
Figure 5. Attention will continue to shift from TV stations to cable.



Note: Ratings are for Monday-Sunday, 24 hours per day, September-August.
Source: Veronis Suhler Stevenson Communications Industry Forecast & Report. *Seventeenth Edition/Twenty-first Edition, 2003.*

In the pervasive media environment of 2010, customers will have more influence in the media company value chain; companies will form an attention loop to gather continuous feedback and optimize value. A significant portion of content will be packaged and delivered based on customer demand, device and delivery requirements, making customer responsiveness the killer app of 2010. Digital content that can travel across platforms will no longer be welded to the distribution medium (fans may not have to miss their favorite television show while waiting in an airport when they are able to watch it wirelessly over their PDA).

Figure 6. As the number of channels multiply, audiences – and attention – fragment.



Source: Veronis Suhler Stevenson Communications Industry Forecast & Report. *Seventeenth Edition/Twenty-first Edition, 2003.*

Media providers themselves will also need to filter processes, networks and resources, acquiring new ones or relinquishing traditional ones to remain lean, focused and responsive in the pervasive media environment. How will companies profit, given the demand for this level of responsiveness?

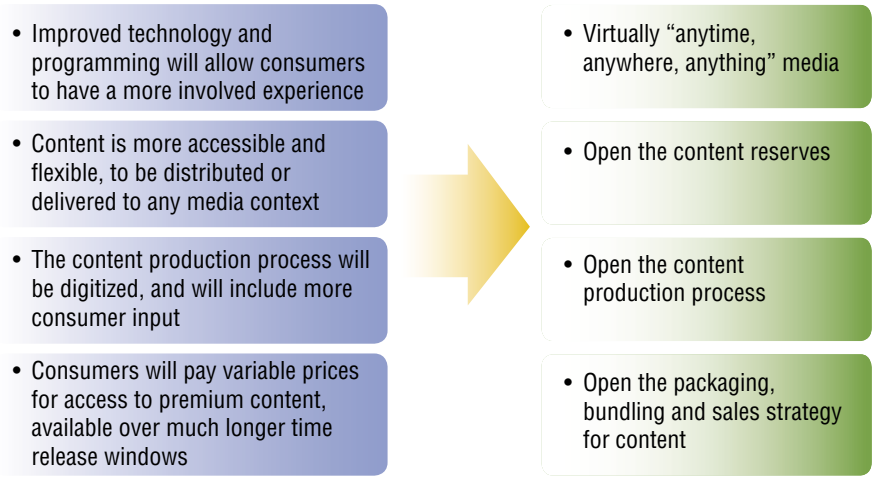
The media business will shift definitively from a product-line focus to a customer focus. The next section will examine some of the implications of these trends.

The open media business of the future – open on the inside, open on the outside

The impact of interactive, immersive media experiences – and users at many levels affordably equipped to participate, customize, create and distribute content – will rock markets and business models between now and 2010. Successful companies will respond by forming open relationships along the media creation and distribution chain as well as with audiences.

2010: there will be more tools in the hands of more creators, more digital content and easier transportability, bigger broadband pipes – and more competition for scarce consumer attention. Successful companies will resist the instinct to circle the wagons; instead they will open up the way they create content. They will open new ways to manage, store, catalog and break down content into product units. They will open up the distribution of content, the delivery and packaging and availability of content elements. They will build scale and reduce costs. And they will create open, reciprocal relationships with suppliers and customers, allowing more freedom in the ways they combine content and delivery.

Figure 7. Each of these characteristics will contribute to the "open" media firm of the future.



Source: IBM Business Consulting Services analysis; IBM Institute for Business Value analysis, 2004.

Total spend on filmed entertainment, including box office, home video and broadcast, is one of the fastest-growing media and entertainment revenue streams. U.S. spending of US$45 billion in 1997 is projected to more than double, to US$98.2 billion, by 2007.[9]

Back when video rental became popular, studio owners feared that home video rental would destroy their businesses. Ultimately, the new stimulus of home viewing resulted in increased overall consumption of filmed entertainment.[8] In the same way, we expect a rush of revitalizing interest along the entire media and entertainment product/service chain to result from greater reciprocity between media companies and the users who will be experiencing high-speed digital tools for creating and sharing. Avid participation by consumers, online interactivity and open systems among business alliances, and the novelty of new tools and capabilities will ultimately produce new forms of consumption, delivery and creative competition.

Figure 8 compares the implications of these trends in four major areas: consumer sophistication, digital technology, partner strategy and business models.

Figure 8. Overview: Trends in media and entertainment, 2004 - 2010.

Consumer sophistication
- Consumers have more freedom and more control of content consumption
- The consumer base becomes increasingly knowledgeable
- Consumer usage is key to consumer intelligence
- Rights management influences consumer access and behaviors

Digital technology
- New methods of creating and distributing content
- Content standards and networks mature
- Technology leveraged to drive scale and scope
- Home and portable electronics give more control to consumers
- Content management is a critical differentiator

Business models
- Business models adapt to the new environment
- Economics of the media business change
- Advantage arises from business intelligence
- Business models adapt and respond more flexibly to new usage patterns
- Scale is achieved by asset aggregation
- Business focuses on sustainable, differentiating value

Partner strategy
- Service providers and intermediaries emerge and evolve to better serve customers
- Partner management becomes the basis for new cost structures and revenue generation
- Business partners interconnect and collaborate to drive scale and increase value of offerings
- Businesses integrate to manage cross-firm processes and workflows

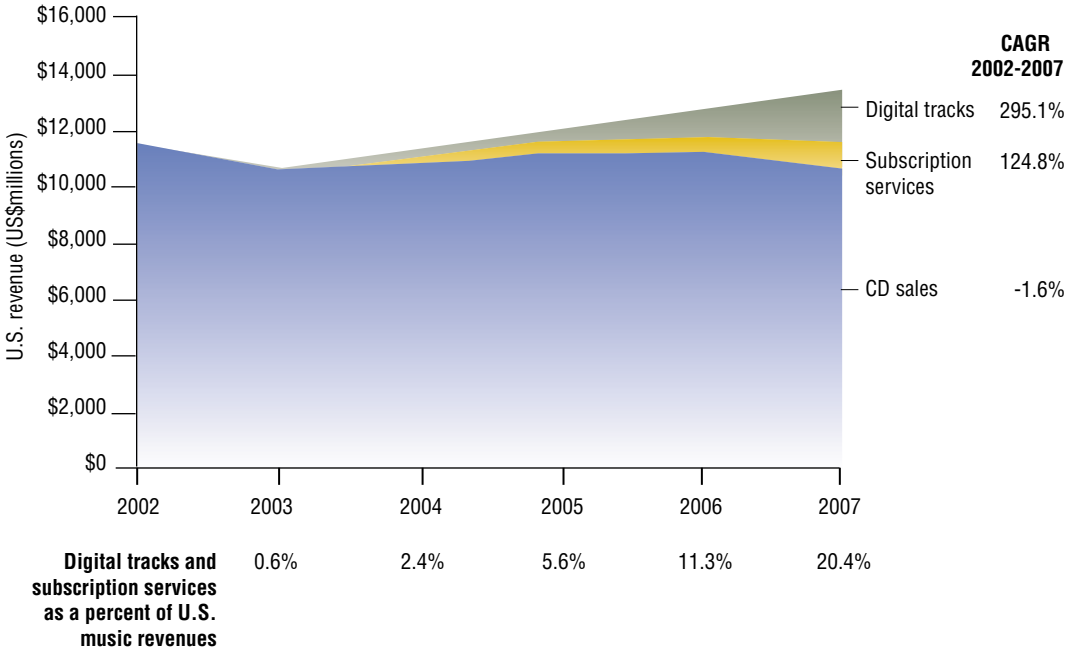
Source: IBM Business Consulting Services analysis; IBM Institute for Business Value analysis, 2004.

"Experiencers" of media will want more interaction with content and delivery systems

The convergence of new technologies will give businesses and consumers an unprecedented ability to control, manipulate and configure content on large and small screens. From professionally produced content to elaborate multimedia productions in the workplace to virtual scrapbooks for personal expression, more experiencers than ever will find it affordable to use sophisticated digital equipment. They will configure content, such as film or television comedy scenes or music selections, to make play lists or anthologies, or combine with their own content, such as intercutting an episode of a popular sitcom with personal digital footage.

Interacting with other users and with the companies that produce content will become easier than ever through the high-volume, always-on broadband capability. Consumers will have improved control, choice and freedom for every dollar spent on media. DVD is a good example – for the same price as owning a VCR, the owner of a DVD player receives much more functionality. Avid demand for digital music is also evidence that when increased benefit is available, users will quickly adopt it. These new technologies will give customers and consumers greater access to influence what is produced, how it is produced and what formats they prefer.

Figure 9. Non-traditional music distribution channels will boom, at the expense of music retail stores.



Source: Bernoff, Josh. From Discs to Downloads, *Forrester TechStrategy Research, August 2003.*

The recent history of music downloading has been a test case of what can happen when filmed, animated or taped entertainment is widely digitized. Feature films require huge files, but greater market saturation by the larger pipes of broadband adds to film producers' legitimate concerns that their work in digital formats could be easily copied and disseminated or substantially altered.

Music piracy: Consumers shrug.

"What is it about digital media that makes people think the work is free?" asked one indignant letter to the editors of U.S. News and World Report in response to a July 14, 2003 article about illegal file sharing – but the rest of the published responses were less sympathetic to traditional distribution business models:

"…I play in a band… that has recently released an album that we are encouraging fans to download from our Web site. This is the future plain and simple. Many consumers think the recording industry has overcharged them far too long…"

"…the entertainment industry, ignoring for years the pleas of concerned parents about explicit material peddled to their children, is now crying for moral behavior…"

"…The problem with the record industry is not the Internet and file sharing; it is that the industry's paradigm is as dated as the horse and buggy. There are a lot of people willing to pay a dollar or two to download a song they really want but not willing to drive to a record store to pay $18 to buy a song on a CD with eight or 10 other songs they have never heard…"[10]

When music companies were challenged by digital copying, they reacted first with legal actions to protect copyrights; but they are now responding as well to consumers' desires for greater interaction with their product by creating easy ways to pay for downloads and gain access to rare archives. It took a technology company like Apple Computer, through its iPod player and iTunes service, to show the traditional music industry how to create differentiated value that customers would pay for.

In the copyright infringement arena regarding film, we have already seen a legal claim against a video store that removed controversial language or scenes from popular films and retaped them, for rental to conservative families with teen children.[11, 12] Although film directors justifiably want to protect the integrity of their work, an open philosophy and digitized content will permit them the win-win solution of making their own judicious edits to give various types of viewers more choices, thereby retaining more slices of the market. Some types of content will be customizable in more ways than others. Lighter-weight entertainment may be issued in several storylines to suit various demographic groups – when the delivery system is digital, production is simplified.

How should your company approach monetizing the new consumer capabilities and demands? Strategic choices and business models will revolve around identifying your business' core competencies, prioritizing the asset value of your inventory and transforming business models, release windows and variable pricing strategies for the digital market.

We foresee that wireless networks will emerge as important media for content distribution. In addition to cable and satellite high-speed broadband packages for homes and data streaming to portable devices, we anticipate widespread deployment of wireless networks for telephone and Internet devices by 2010. Cometa, a shared venture of AT&T, Intel and IBM, has already announced plans to install wireless antennae "within five minutes of anyone in the top 50 U.S. metropolitan areas."[13] Retailers will experiment with whether to provide free wireless services as an incentive to patrons. "When I first went to London to study," says a university student, "the big-name coffee shops along the Fleet Street financial district were offering free Internet; but by spring term 2003, they had started to charge as much as £5 for access."[14] Hotel chains are now scrambling to offer wireless access in guest rooms – about a fifth of laptop computers sold in 2002 were equipped for Wi-Fi communications; that share is expected to reach 91 percent by 2005, according to the market research firm International Data Corp (IDC).[15] By 2010, newer generations of wireless transmission such as Wi-Max (802.16) or IEEE 802.20, another standard currently in development, are projected to be able to blanket geographic areas up to 30 miles per tower. Such increased saturation and coverage would not only compete with existing networks in dense urban areas; they would also be able to compete for the "last mile" extension of cable modem or DSL networks.[16] Broader coverage and availability will permit easier entry into the media and entertainment sphere by non-traditional players vying for attention.[17]

Consumers will want to transport many types of digital content flexibly between devices, such as being able to use a music selection in an earphone player, in the car stereo, on the home entertainment system and on the computer to insert into e-mail. They can already port televised instructions for practical outdoor tasks to a wireless device set up in the driveway. They can use blogs to contribute to breaking news, set forth ideas and opinion or create a following for the written word. They can enter multi-player "gamespheres" via computer or iTV, and create characters with which to interact with strangers around the globe in a shared virtual community. As traditional cinema houses morph into digital transmission centers, new revenue streams can be developed from renting their high-resolution screens for special events like concerts, plays, sporting events and synchronized business meetings for employees around the globe.

Between now and 2010, we anticipate that media providers will have made progress in resolving the licensing situations users present. Digital analytics and advanced customer relationship technologies will help media firms to connect content usage patterns with specific individuals and groups, finding new ways to monetize digital content usage and still remain profitable.

The future's higher production capacities at more affordable price points will enable smaller businesses to produce more content that can be gathered to serve more niches. Skilled editors/content managers can deploy digital multimedia devices to serve niche markets, such as language- and interest-group subcultures. Content will be able to flow more easily upward from the grass roots as well as downward from the media elites, opening doors to fresh creative approaches.

Technology will promote interactivity and responsiveness to ever-smaller niches

Advances in electronic media management systems will be able to help protect digitized assets – whether they are books, video games, music, streaming audio or video, filmed entertainment, software or other formats – through their entire lifecycle, for business-to-business, business-to-employee or business-to-consumer commerce. Distribution designed to prevent unauthorized access can also be used to protect sensitive business records within and beyond an organization. Digital storage facilities will support relationships with outsource providers such as online order fulfillment companies, so that the core brand can remain lean and the assets are protected when handled for downloading, streaming and transfer through wireless networks to target devices and on demand media production. Other technologies that will safeguard digital transactions include content mastering, clearinghouse and content hosting software.

These advanced capabilities will enable the streamlining of the core business, so that content ultimately can penetrate more niches and more user levels than before. While technology will give smaller businesses the chance to compete with graphic interface qualities formerly reserved for larger organizations, excellent players will be purchased by larger brands to serve in tightly focused alliances as outsource partners, sharing costs and risks. Successful companies will build not just niches, but interactive services allowing access, customization and many ways to package the content – aggregating share by increasing the number of channels and offering content over more channels.

Animation case study: Digital technology opens up the playing field

Innovation in the jaw-dropping special effects and animation that theater-goers have come to expect, long inhibited by the dominance of proprietary production methods, will yield decisively to the growing challenge of "open standard" digital animation technology and free market labor. Threshold Digital Research Labs is producing cutting-edge feature films, television animation and live action visual effects for theme parks and location-based events, major studios, networks and advertisers. Through collaborative solutions developed with IBM, increased computing power delivers Linux- and Windows-based variable processing and a shared service model for render cycles. Threshold's business model retains IP ownership of the visual objects, but establishes quality standards for outsourcing digital animation production to the lowest-cost bidder from anywhere around the world, reducing production costs and creating dramatic discontinuity in the economics of the traditional business.[18, 19]

Digital technology will enable media companies to create content of extraordinary quality, stability, storability and revolutionized production; but these areas will require substantial costs for massive undertakings such as feature-length films as well as for converting archives – any potential savings on the creative end must accrue over the long term. However, lower costs through digital technology will take place in the realms of inventory, supply chain, distribution, back-office and security processes, where strategic innovations can increase efficiencies and productivity.

The digitization of content, networks and devices will drive demand for intraplatform compatibility, so that users can access content on a variety of devices wherever they may be, and combine content acquired through a variety of packages and delivery methods. A researcher, for instance, may belong to a dozen newsgroups through work and home, or a music fan to a variety of digital music clubs with differing archives, but each may want to make compilations that suit personal usage goals, combining content from many sources. The good news is that complex software fronted by sophisticated, yet simple user interfaces are in development that will support a flourishing repertoire of user capabilities.

BBC digitizes its archives

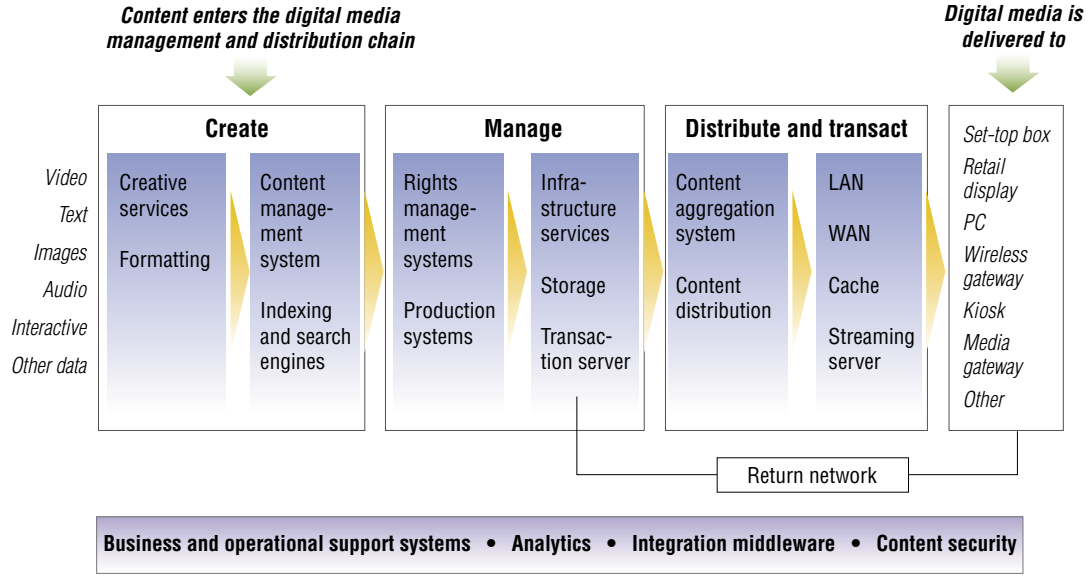
The British Broadcasting Corp. plans to permit free downloading of select material from its archival properties for private use in the United Kingdom. Using home- or library-based broadband connections, users could access the planned BBC Creative Archive to help with schoolwork or augment their own multimedia presentations. The United Kingdom's largest broadcaster, BBC operates a vast portfolio of public TV stations, cable channels, an Internet news service and national radio networks as well as international television stations. In announcing the plan, a BBC spokesperson called it a "second phase of the digital revolution," in which government, public institutions and corporations help create public as well as commercial value in their holdings.[20,21] Writing in *Wired*, Danny O'Brien said some BBC execs are exploring the idea that BBC can avoid many of the costs of hardware and "fat pipes" by using P2P networks where its most popular files can be shared by users, who will create their own DVDs to match demand. Open licenses for non-BBC-owned popular content would be key to making the archive possible going forward. Obtaining permissions would go more easily, he noted, if BBC will "start fresh [with] a new model – a modified Creative Commons license, a blanket deal with rights holders" that would allow unlimited sharing without loss of intellectual property rights or resale of the asset. According to O'Brien, the "treasure trove" of BBC archival content will excite innovations from the growing open source coding community, who will be eager to mine "long-forgotten documentaries, science programs, and investigative reports [that will] suddenly be searchable, scene by scene, word by word."[22]

Users will continue to push in the direction of unlimited access, and are unlikely to reduce the sheer volume of attempts to get around the "honor system." We anticipate that new combinations of media and delivery systems with the express intention of getting around stated limitations of content transportability will continue to surface. The industry will continue countering with lawsuits and tracking methods, such as a 2003 legal victory allowing copyright owners to require that Internet service providers divulge the names of file-sharing offenders.[23] But such after-the-fact mechanical enforcement efforts point to a need for solutions embedded within technology that will keep both sides happy.

By forming a leaner, more focused organization, brand and content owners will be able to achieve new value through organizing around the core business and establishing securitized online links to back-office providers, rather than supporting multiple functions in-house or across many locations. Support players can achieve scale through specialization in one or two functions; advanced technology can enable the necessary encryption, security features, rights management and accounting procedures.

Figure 10 contains an end-to-end view of a fully developed digital media system for the creation, management and distribution of content in a virtually "touchless" online environment – requiring little human interaction – that is always open for business.

Figure 10. Open media businesses of 2010 will develop a strategic blueprint for digital business technology.



Source: IBM Research, Digital Media Factory, *2002: IBM Business Consulting Services analysis; IBM Institute for Business Value analysis, 2004.*

This model is a vision of capabilities that we anticipate will be fully developed for strategic integration with legacy systems by major players in 2010. Digital platform-universal standards will allow content traveling online to be managed and tracked throughout all enterprise processes, from creative to order fulfillment. Content enters the system or is created in digital form (or converted from analog archives), where it may be digitally repurposed to serve a variety of platform or network requirements. Content is indexed, meta-tagged (digitally labeled), catalogued and stored for online accessibility to both individuals and retailers so that the provider can respond on demand, formatting content to meet customer needs, applying variable pricing strategies built into the system, and transacting and distributing content for the customer.

Digital media management can help perform massive bookkeeping and distribution tasks nearly seamlessly. A digital spine contains back-end business analytics with realtime updates, rights management, accounting and CRM, as well as access and restriction functions that will help protect digital content end-to-end.

Strategic focus on attention will be key to profitability in an "open" environment

In the pervasive media environment, the fickle consumer must be courted, understood and catered to. Media companies must seek to understand the user experience, from consumers to outsource partners, and undertake ongoing feedback, R&D and increasing use of interactive forms of content. Attention may be managed by means of advanced data analysis. New capabilities can store and analyze all known transactions of your customers, public information such as opt-ins, preferences, available marketing data or permissions granted through credit-card tie-ins. Fans and audiences of your content can be cultivated and targeted more successfully; deep analysis and knowledge management will permit your company to assess and deploy both new and archival content with a clearer view of actual market potential.

An "open" strategy will truly revolutionize the way companies think about content. As movie producers eventually found after the introduction of video, deploying samples of content widely is likely to stimulate, not erode sales – if the digital means are in place to manage the deployment, tracking and invoicing of content in a variety of units, such as a few bars of a song or the karaoke mix of the song or the Japanese cover of the European version. Other on demand packaging might include an anthology of all of a given artist's work of the past decade; in publishing, licensing

would revolve around what devices it will be read or played on and which famous voice will read the book or article – the same content can be rendered into a variety of voices with digital voice technology in much the same way that we change the "boink" sound of our computer today from a pull-down menu.

By 2010, digital management and distribution systems will be able to make on demand content formulations affordable for a broader spectrum of audiences. Telcos and music providers already offer brief song samples as ring tones; such offers may soon extend across a wider array of content (TV soundtracks, movie dialog or a novelist reading a famous line) and a wider array of platforms – a signature on voice mail, a distinctive telephone signal, an identifier on e-mail, a password confirmation on voice recognition systems at the garage or front door. Can there be any better advertising? Fans can pay to download a full version of a song or acquire a movie or novel after being seduced by brief samplings of friends' and coworkers' theme content. When companies interact successfully with fans instead of making them the enemy, digital management technology could enable the increased interest in the medium and resulting volume of sales we witnessed through the video rental phenomenon.

Case studies: Championship sporting events leverage on demand infrastructure

Half a million attend the famed lawn tennis championship games at Wimbledon, and millions more tune in through the press, radio, television and Internet. The tournament lasts two weeks, or for as long as it must to complete all events, so its year-round Web site must withstand a massive 250 percent spike in user traffic during the tourney, when 24/7 demand for accurate, realtime information must transverse diverse platforms and devices and integrate multiple disparate systems across global time zones. IBM built and manages e-business on demand™ infrastructure not only to serve up scores, statistics, Real-Time Scoreboards and a wealth of other content to avid fans, but also detailed, online Order of Play and a constantly refreshing array of historical and up-to-the-moment statistical analysis and player information to broadcast commentators.[24]

The 120 events of the three U.S. PGA Tours, as well as events of the International Federation of PGA Tours and World Golf Championships, leverage on demand systems to manage peaks and valleys of demand for online tournament information, such as scoring and shot data, tour news, statistics and Webcasts. IBM developed and hosts Linux-based "virtual servers" to deliver utility computing capacity as needed at variable pricing to accommodate heavy traffic periods and scale back during the remainder of the year.[25]

The revolutionary advantage to digital content management is its ability to manage inventory and distribution on demand. The digital back-end system should be designed to retrieve, prepare, deliver and invoice the content on demand in a security-rich IT environment as an order is received online from a customer or consumer. An open media company provides a wide array of purchasing choices online (from samples of content to notes or packaging to full physical or electronic formats), electronically repurposes digital content for a wide range of user devices and automatically adjusts the pricing and delivery methods.

Set-top boxes may provide ratings info

Gemstar-TV Guide is working with Nielsen Media Research on a system that could deliver information from digital set-top receivers to produce ratings information on programs and commercials. An executive of the company said that an upcoming trial, to be conducted in ten of Nielsen's top 50 markets, would gather information from 550 boxes installed in at least 300 homes.[26]

Since digital technology can lower the cost of producing copies, the price of the content can be determined according to analytics that vary in a number of ways to optimize profitability. Variable pricing strategies, managed electronically in a content management model that includes business analytics to continually track sales and demand in realtime, can assess value in finely tuned increments. In today's payment schemes, the newest content generally costs the most, older content less. In the digital management era ahead, older content may be worth more to avid fans responding to market conditions, publicity or the scarcity of various content for which a fan may be willing to pay a premium to round out a personal collection.

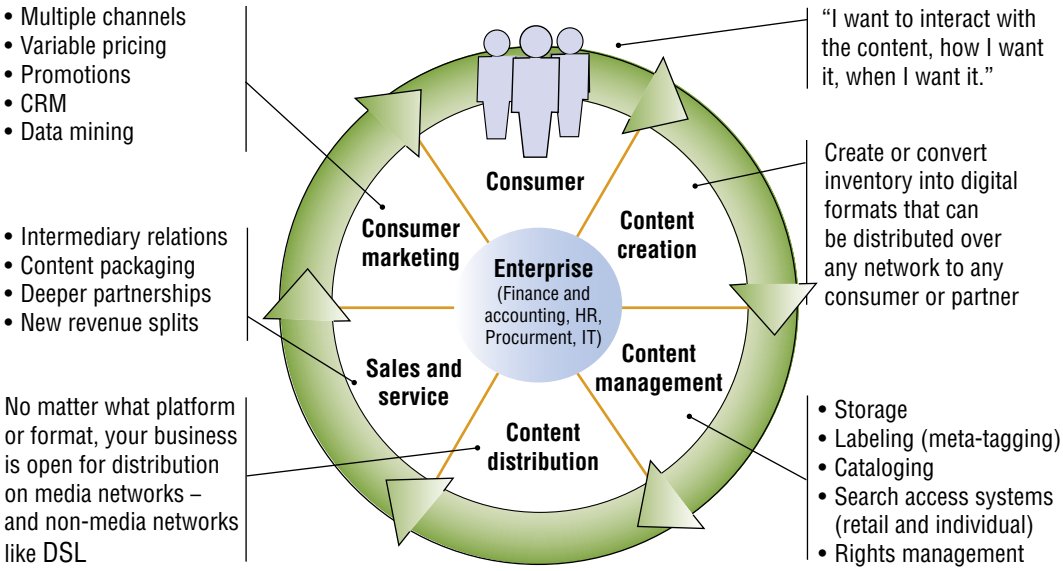
Behind the scenes of managing the attention of customers and targets and paying closer attention to their requests, market behavior and trend indicators is the computing power to manage billions of bytes per millisecond. Through *open standards* infrastructure that allows legacy business systems to interoperate with those of alliance partners and outsource businesses, media firms will be able to take advantage of technology innovations developing outside the media industry. For example, services like grid computing or utility computing allow businesses to access giant servers on demand, without having to maintain vast computing power in-house. Plugging into a utility computing system is much the same as using an external utility for gas or electricity – costs fluctuate with actual usage, on demand, improving a firm's ability to create value for customers and shareholders.

What will it take to become an open media business?

How will media businesses thrive, as users and customers demand more content-rich, high-bandwidth interactive experiences? This section explores our strategic recommendations for becoming an open media business.

Pervasive availability of digital technology will change the behavior of media experiencers – and their relationship to content providers. Although traditional passive media will not die, more technology in the hands of more avid users will push the traditional business model toward extinction. Survival and profitability will revolve more than ever around high-quality, interactive relationships among content creators, media businesses and individuals – inside and outside the company – supported by comprehensive digital media management to provide protection, manage rights and optimize profitability. Our recommendations will discuss each aspect of the media value chain pictured in Figure 11.

Figure 11. The open media company will embrace the "attention loop."



Source: IBM Business Consulting Services analysis; IBM Institute for Business Value analysis, 2004.

1. Get your digital house in order: Create or convert content to digital formats

Media developers should exploit the future's data-rich, pervasive media environment by creating content in (or converting archives to) platform-universal digital formats that can be played on a wide range of user devices. Digitization will help companies reap wider distribution of more bytes of content in multiple formats; one user may want an entire book or film, but only for a small-screen handheld device; another may want a quotation or a 30-second clip; another, full resolution for high-definition TV. Each of these formats can be managed on demand, with variable pricing structured into a digital management system.

The conversion of analog content to digital management is an investment. Media firms need to develop a comprehensive strategy for prioritizing the conversion to digital management – content with the highest ROI or the shortest payback time should be converted first. Companies making incremental investments will be able to lower the costs of indexing, cataloging and meta-tagging processes to optimize the value of the content that they digitize. These two processes are prerequisites of a progressive conversion that will include access rights, rights management, asset valuation and variable pricing strategies.

Importantly, digital formats can help companies create flexible choices for customers and consumers, as well as variable pricing tied to demand to drive optimum profitability from archives and new content. Rights will be tied to the person, not the device, so that portability and transfer of the content from one device to another becomes easier with the development of universal digital standards.

2. Manage content for optimum flexibility and asset value

In the pervasive, digital environment, an open approach will enable owners to reap more aggregate ROI from content that is flexibly managed so that it can be sold in long form or in parts, for multiple types of distribution online.

The attitudes of a significant number of users toward file sharing will likely carry over to other forms of digital content, but with digital media management, owners can use built-in defensive strategies that go beyond today's packaged approaches.

Take a deeper look at price points. Price calibration influences perceived levels of quality, but some content, even of recent releases, should be offered at a lower price because it will never produce much profit; conversely, the "sleeper" that performs beyond expectations could contain greater ultimate value. For example, the critically acclaimed film, "O Brother, Where Art Thou" was rated 59th most popular by Variety in 2001,[27] but its soundtrack was judged independently by the public, garnering triple-Platinum RIAA certification[28] and winning five Grammys[29] and multiple top awards, including Album of the Year from both the Country Music Association and the International Bluegrass Music Association.[30] Work with strategic technology partners to develop not just variable price strategies, but also the deeper analytics to identify demand indicators that are independent of traditional measurements. Recommendation 8, below, discusses advanced data analytics.

3. Be open for distribution, no matter where or when

In the open media business of the future, platform-universal digital management will help your business cut costs by moving bytes through an online configuration and distribution system that can respond to broadcasters and customers with ordering and fulfillment processes available around the clock, every day of the year. Your business strategy and distribution system should enable the configuration of content for multiple types of media networks, including cable, satellite, DSL and other significant systems as they emerge. Successful media producers of 2010 will undertake ongoing research and development to support more delivery devices and systems, with an eye to the anticipated increased penetration of home networks and home theaters.

A digital media management strategy will include rapid, multiple sorting capabilities to optimize the access and search functions, cross-referenced with CRM, digital memory of customers, realtime data analysis, rights management, dynamic pricing and inventory reporting. To reap the rewards of a 24/7 distribution business online, open standards technologies allow outsource partners, customers and consumers to make transactions virtually anytime, anywhere.

4. Be open for delivery – in multiple packages, with variable pricing and always-on customer service

Customers to providers: "I want what I want, how I want it, when I want it."

Although mass media will not die, exploiting more channels and more niches will enable the same content to be deployed in more ways simultaneously. Advanced data analytics are one of the features of digital media management that will help your business deliver to the proliferation of niches in a fragmented market. Realtime data analysis can help your business to:

- Determine an optimum channel mix
- Offer multiple ways to package digital content for a variety of formats, platforms and devices
- Utilize variable pricing – the same content may be worth more to a user at different stages of the product or customer lifecycles
- Use CRM more effectively, with more information available online and collected through multiple touchpoints.

5. Open digital doors – to contribute, produce or author dynamic content
As technology continues to put devices, megabytes and digital capabilities in the hands of consumers, digital media analytics can help the traditional forms of new device and product development and even talent scouting. The largest investments in content are in the creation, marketing and distribution of physical media, but costs can be slashed in the digital distribution of online media and in aftermarkets for headline releases.

Since online distribution costs significantly less than the traditional physical development and distribution cycles, build ways to take advantage of grassroots digital experiments and contributions. Establish simple online production and promotion resources with virtually seamless, online digital media management. Encourage independent publishing initiatives – comedy blogs, online game characters, short feature films, new music – as a way to develop markets.

Digital tools in the hands of consumers will enable media companies to identify content or devices that might stand up to mass marketing before making the significant investments in scripting or advertising to mass-media standards. If your company owns significant digital content resources, offer pathways to aggregate small fees, such as online workshops for compilers, digital scrapbookers and anthologists, and promote their "albums" online.

6. Create new product windows and business models
With routine functions out of the core, focus on your main concerns: content and strategy. Use data mining to assess the value of inventory, to evaluate markets, to improve processes and performance, to target consumers and to edit consumer profiles.

Evolve strategies around the timing of release windows, balancing the features of various delivery systems with the nature of content. Monetize content by compressing cycles and windows, since digital pilfering – and a shortened premium profit window – must be counted as part of the cost of doing business. Give your fans choices, to buy pieces of content, buy the entire work or buy extra content. Some music distributors and others are experimenting with creating new windows – offering prerelease digital singles, or selling only albums initially and individual tracks later.

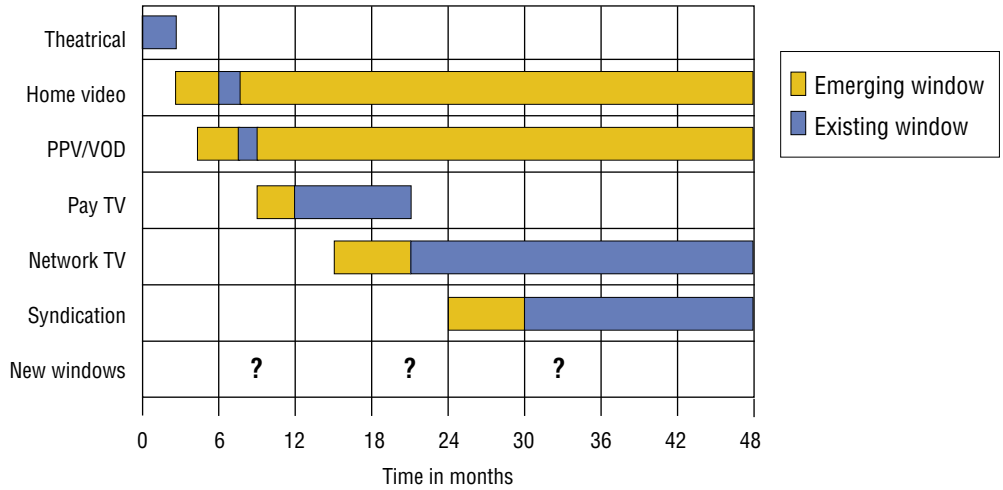
We anticipate that start windows for the release of various media products will creep earlier and end later – with the availability of some highly popular content extending indefinitely. The goal is to optimize each content asset's total value through a combination of price points times release windows strategies.

"Day-and-date" release builds anticipation, forestalls piracy

Warner Bros.' third "Matrix" picture was released at the same time worldwide in 80 countries and 107 territories, utilizing more than 8,000 prints for the U.S. market and more than 10,000 internationally. Counting on the proven success of the first two episodes to appeal to its predominantly young, male fans, who would flock to see the "Revolutions" installment no matter the hour, the opening took place at 6 a.m. in L.A., 9 a.m. in New York, 2 p.m. in London, 5 p.m. in Moscow, 10 p.m. in Beijing and 11 p.m. in Tokyo. The picture was released in 43 unique languages, only 14 of which were dubbed. Although Warner's executives indicated the approach would not work for all films, the anti-piracy climate and the lowering of international trade barriers may entice other studios to follow their lead.[31]

Filmed entertainment release windows continue to compress, with theatrical day-and-date releases increasingly common, home entertainment windows starting earlier and earlier, and new windows appearing.

Figure 12. Film windows will launch earlier, and remain available longer.



Source: IBM Business Consulting Services analysis; Vogel, Harold L. Entertainment Industry Economics: A Guide for Financial Analysis, *Fifth Edition. Cambridge University Press, 2001; Villa, Joan.* Theatrical-to-video windows shrinking. *Video Store Magazine, March 16, 2003; Villa, Joan.* Theater owners squawk about DVD. *Video Store Magazine, June 1, 2003; Indvik, Kurt.* A Window Closing on PPV/VOD? *Video Store Magazine, July 6, 2003.*

We anticipate that media businesses will reposition and restructure as they adapt to the new environment and focus on their core activities. Winning companies will divest unneeded assets and join with other alliance businesses to create economies of scale and make new business models work. We expect an era of continued deals and realignments with specialists, as mass players search for their competitive advantages.

7. Manage openly and communicate in realtime through digital infrastructure
Content is the heart of your business, surrounded by a focused strategy and a deep relationship with your identified market. Put a digital backbone in place, so you can focus on core M&E research and development. Having a digital business infrastructure based on open standards technology gives your company options that were unworkable in traditional business models.

Open standards give your business systems the ability to interconnect regardless of platform with legacy systems, business partners and customers, and to utilize Web services to communicate globally in realtime.

Use digital management systems to remove or outsource routine functions and production. A digital spine integrated both horizontally across operations and vertically with customers and consumers can significantly reduce investments in labor-intensive, back-office tasks such as order fulfillment, accounting, human resources, customer relationship management and information technology. New technologies can keep outsource providers close and transparent even though they may be centralized in one or two low-cost labor environments rather than spread throughout your operations. And utility computing, using an outsource provider for network operations and maintenance, can enable your company to negotiate fixed costs for services.

Since infrastructure investments can be undertaken incrementally, key strategic considerations revolve around your company's priorities. Successful companies will determine what business components create the most value in the short term, and what components to add next. The effect of adding new digital capabilities can be exponential. Winning companies will develop an infrastructure strategy to prioritize which new components, when added to existing ones, will most likely aggregate value.

8. Leverage a new depth of business intelligence made possible by digital technology
As your company begins to add more digital infrastructure and services to gain and hold customer attention, business intelligence can be key to creating greater efficiency. Business intelligence can be gleaned system-wide, once your company begins to utilize more digital systems through open standards and middleware technologies, content development and management, online security features, front- and back-office systems, customer relationship and alliance partner management systems. With routine functions out of the core, focus on your main concerns: content and strategy.

Relevant, up-to-the-minute data can be selectively restricted or made accessible online to those who need to know, globally throughout your enterprise. Connections with alliance partners can also provide market and customer intelligence. The exponential effect of shared intelligence can be honed to help your company focus on strategic initiatives, satisfy customers by appealing closely to their interests and make ongoing determinations of the value of assets, partnerships and customers.

Pay attention to your customers and consumers. Gather ongoing feedback, both passive and active, to understand what they want and get their attention. Use more interactive forms of content. Understand the value of adding "entertainment" value to more and more forms of content. Be open to cataloging some forms of content that are created by non-media firms, such as reality-based or consumer-authored content. Find the "virtual Hollywood and Vine" – monitor new media behaviors to discover the front edge in content and consumption.

9. Use partnership strategies that drive efficiency and optimize customer attention

As your company focuses on its core competencies and divests unnecessary capital investments, develop partnership and alliance strategies to drive efficiencies and scale and add value to your offerings. An alliance should be undertaken to create an asset value or to drive an economy of scale that cannot be accomplished in-house. If an outsource specialist provider can offer order fulfillment or back-office processes more efficiently and at lower cost than doing it inside, this alliance can help drive efficiency. Another company may have a recognized brand in a new segment or channel that your company would like to exploit; this relationship can help drive value.

We foresee the emergence of more boutique companies that will provide specialized functions cost-effectively in partnership with giant brands, as well as the breakup of overextended conglomerates lacking a tightly focused strategy. Your company should focus in-house on the products or services that differentiate it sharply from competitors. Business intelligence will help determine where your partnership efficiencies may lie; and digital systems can help you communicate seamlessly and continuously monitor access, rights and security.

10. Become an on-demand business

The emerging media and entertainment environment will be characterized by rapid and continuous discontinuities, posing several challenges for media companies. It is a demanding revenue environment, with intensive and specialized competition. There are continuing pressures on costs and returns, a significant amount of unpredictable demand and high business risk. Successful organizations will accelerate value creation by becoming on demand businesses. The on demand business model provides a new way of organizing and managing the enterprise, with each business component serving a unique purpose, collaborating with other components based on agreed cost and service levels. Each component will be focused, responsive, variable and resilient.

For a media and entertainment company, on demand offers some specific opportunities. We have grouped these on demand opportunities into five core capabilities that media and entertainment executives should execute to drive shareholder value:

- *Consolidate overhead.* Consolidating overhead through shared standards and processes allows companies to focus on core businesses
- *Integrate operations.* Tightly integrating operations strategies should garner increased operational efficiencies and improved asset utilization
- *Optimize business customer and partner offerings*. By optimizing business customer offerings, companies should see increased revenues and new cost savings
- *Drive direct-to-consumer relationships.* Direct-to-consumer relationships built through mass-customized offerings should help to increase loyalty
- *Prepare for integrated media.* Create integrated and flexible operating environments designed to deliver near-term efficiencies while hedging future margins.

We believe that these on demand approaches offer a comprehensive roadmap for driving value in the coming marketplace, and that they address managers' and shareholders' high expectations of new initiatives. "Open" methods of managing media and entertainment companies place these approaches in an even broader context, including transactions and partnerships outside the core media and entertainment industry – such as relationships with retailers, telcos or technology providers, for example. In this context, an on demand business is an enterprise in which business processes – integrated end-to-end across the company and with key partners, suppliers and customers – can respond with flexibility and speed to any customer demand, market opportunity or external threat.

The open media business of the future: Conclusion

In an environment of uncertain economic growth, narrowing margins, rapid digitization and the threat of piracy, successful companies will adapt to an era of continued repositioning and restructuring among mass players and specialists, as companies focus on their core strengths. Winning companies will divest unneeded assets, join with other players to achieve scale and make new business models work based on competitive advantage.

Technology's growing pervasiveness, user-friendliness and affordable power, and consumers' growing desires to interact more with digital technology, will continue to make human attention a scarce resource for the foreseeable future. The combination of new technologies and increased consumer appetites will drive continual change and large-scale investments.

Media companies will open up new ways to create, manage and distribute content. They will open new ways to store, catalog and break down content into multiple product units, as well as the delivery, packaging and availability of content elements. They will integrate, manage and protect content, services and business models through open-standards digital technology. And they will create open, reciprocal relationships with suppliers and customers, allowing more access and granting more freedom in available ways to combine content and delivery.

The open media company of the future is a right-sized, brand-owning business with a deeply strategic approach to alliances and an essential mix of elements for the core business. The on demand model will grow in influence and power between now and 2010 – a responsive, resilient business that can refine, outsource or change components and providers flexibly and identify, analyze continuously in realtime and react readily to market changes.

To remain profitable, media and entertainment companies must respond to the convergence of technological innovation with the consumer's imagination and sense of entitlement, as these key trends evolve to meet the open environment made possible by digital technology. The open media company's information architecture should be designed to integrate people, processes and technologies, in every location – both inside and outside the company – including providers, suppliers and customers.

For more information

To learn more about IBM Business Consulting Services, contact your IBM sales representative or visit:

ibm.com/bcs

To learn more about our global media and entertainment practice, please visit: http://www.ibm.com/services/strategy/industries/media.html

About the author

Saul J. Berman is Partner and Global Executive, Strategy and Change, Media and Entertainment Practice, IBM Business Consulting Services. You can reach Saul at *saul.berman@us.ibm.com.*

Contributors

Neil Parker, Partner, Strategy and Change, Media and Entertainment Practice, IBM Business Consulting Services

Edward Hanapole, Director Digital Media, Media and Entertainment Practice, IBM Business Consulting Services

Eric G. Mark, Managing Consultant, Strategy and Change, Media and Entertainment Practice, IBM Business Consulting Services

Darryl Sterling, Managing Consultant, Communications Sector, IBM Institute for Business Value

Juliet L. Robinson, Consultant, Strategy and Change, Media and Entertainment Practice, IBM Business Consulting Services

Dana Williams, Contributing Editor, Dana Williams Strategic Communications

About IBM Business Consulting Services

With consultants and professional staff in more than 160 countries globally, IBM Business Consulting Services is the world's largest consulting services organization. IBM Business Consulting Services provides clients with business process and industry expertise, a deep understanding of technology solutions that address specific industry issues, and the ability to design, build and run those solutions in a way that delivers bottom-line business value.

References

[1] "National British Radio Classic FM selects RadioMan." RadioMania, Vol. 2, May 2001, http://www.radioman.fi/downloads/Radiomania2_2001.pdf (accessed January 20, 2004).

[2] IBM Corporation. "National British Radio station, Classic FM, selects Radioman® for digital upgrade." Press release, April 22, 2001, http://www-1.ibm.com/press/PressServletForm.wss?MenuChoice=pressreleases&TemplateName=ShowPressReleaseTemplate&SelectString=t1.docunid=1302&TableName=DataheadApplicationClass&SESSIONKEY=any&WindowTitle=Press+Release&STATUS=publish (accessed January 20, 2004).

[3] Scheiber, Noam. "The way we live now: Questions for Michael Powell." The New York Times, Late Edition - Final, Section 6, Page 17, September 21, 2003.

[4] Pathfire company overview. http://www.pathfire.com/about/company-overview.shtml (accessed January 15, 2004).

[5] Pathfire product literature. http://www.pathfire.com/about/literature-index.shtml (accessed January 20, 2004).

[6] Stokes, Jon. "Understanding Moore's Law." Ars Technica, 2003, http://www.arstechnica.com/paedia/m/moore/moore-1.html (accessed November 25, 2003).

[7] Steinberg, Brian and Suzanne Vranica. "Chief seeks to help Leo Burnett get its groove back." Wall Street Journal, October 15, 2003, B2F.

[8] *Veronis Suhler Stevenson Communications Industry Forecast & Report.* Seventeenth Edition/Twenty-first Edition, 2003.

[9] *Veronis Suhler Stevenson*, 2003.

[10] Letters to the Editor, U.S. News and World Report, September 8, 2003.

[11] Buckman, Rebecca. "Film directors take aim at firms engaged in unauthorized editing." Wall Street Journal, September 23, 2002, B6.

[12] Buckman, Rebecca. "A cottage Industry in Utah cleans up Hollywood's act." Wall Street Journal, September 19, 2002, A1.

[13] Wingfield, Nick and Shawn Young. "Venture bets on Wi-Fi in public places." Wall Street Journal, December 6, 2002.

[14] Williams, Thomas M., Walsh School of Foreign Service, Georgetown University, Washington, DC. Personal communication, September 1, 2003.

[15] Binkley, Christina and Don Clark. "Wi-Fi is now a must for big hotels." Wall Street Journal, February 27, 2003, D3.

[16] ABI Research. "For last-mile wireless, fate of WiMax in carriers' hands, says ABI," citing Allied Business Intelligence Inc, "WiMAX/802.16 and 802.20 equipment revenue world market, moderate forecast: 2003 to 2008," October 16, 2003, http://www.abiresearch.com/abiprdisplay2.jsp?pressid=196 (accessed November 20, 2003).

[17] Wireless Watch. "WiMax: weapon or threat as wired carriers lose to wireless?" The Register, September 26, 2003, http://www.theregister.co.uk/content/59/33073.html (accessed November 20, 2003).

[18] IBM Corporation. "Threshold Digital Research Labs: Animating on demand with IBM." January 2004, http://www-306.ibm.com/software/success/cssdb.nsf/CS/MCAG-5Q6FUU (accessed January 14, 2004).

[19] IBM Corporation. "IBM picks 'FOODFIGHT' with Threshold Digital Labs to shape future of animated movies: IBM & Threshold collaborate on next-generation solutions for the animation and visual effects industry." Press release, August 4, 2003, http://www-306.ibm.com/software/success/cssdb.nsf/CS/MCAG-5Q6FLB (accessed January 20, 2004).

[20] Olsen, Stefanie. "The BBC's digitally televised revolution." CNET News.com, August 25, 2003, http://news.com.com/2100-1025-5067729.html (accessed November 12, 2003).

[21] "Dyke to open up BBC archive: Greg Dyke, director general of the BBC, has announced plans to give the public full access to all the corporation's programme archives." BBC News, UK Edition, August 24, 2003, http://news.bbc.co.uk/1/hi/entertainment/tv_and_radio/3177479.stm (accessed November 12, 2003).

[22] O'Brien, Danny. "Something completely different: The BBC is putting its vast archives online for free. Call it the next media model." Wired Magazine, Issue 11.11, November 2003, http://www.wired.com/wired/archive/11.11/start.html?pg=1 (accessed January 14, 2004).

[23] Graham, Jefferson. "Consumers are next target in Net copyright fray." USA Today, April 29, 2003, P. 1.

[24] IBM Corporation. "The IBM Wimbledon 2003 case study," May 2003, http://www-5.ibm.com/e-business/uk/wimbledon/ (accessed January 20, 2004).

[25] IBM Corporation. "The PGA TOUR sees green with on demand, realtime scoring solution." October 2003, http://www-306.ibm.com/software/success/cssdb.nsf/CS/TKNC-5ST2LQ?OpenDocument&Site=default (accessed January 20, 2004).

[26] Gough, Paul J. "Gemstar, Nielsen set-top plan to yield IGP audience, ad data." MediaPost's MediaDailyNews, September 24, 2003, http://www.mediapost.com/dtls_dsp_News.cfm?newsID=219853&Search=settops%20nielsen&FuseAction=Article&Pn=1 (accessed October 1, 2003).

[27] Variety, Box Office 2001. http://www.variety.com/index.asp?layout=chart_top_250&dept=Film&year=2001&x=20&y=13 (accessed December 15, 2003).

[28] O Brother soundtrack Web site. "Soundtrack to 'O Brother, Where Art Thou?' certified triple platinum," http://www.obrothersoundtrack.com/reviews/3xplatinum.htm (accessed December 16, 2003).

[29] O Brother soundtrack Web site. "5 Grammy award wins!" http://www.obrothersoundtrack.com/news.html (accessed December 16, 2003).

[30] downfromthemountain.com, "O Brother, Where Art Thou? wins big at IBMA awards," http://www.downfromthemountain.com/press/ibma.htm (accessed December 16, 2003).

[31] Bing, Jonathan and Cathy Dunkley. "'Matrix' muscle: Warners pic going global on grand scale." Variety, November 3, 2003, http://www.variety.com/index.asp?layout=print_story&articleid=VR1117895056&categoryid=1236 (accessed December 11, 2003).

© Copyright IBM Corporation 2004

IBM Global Services
Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
02-04
All Rights Reserved

IBM, the IBM logo and e-business on demand are registered trademarks of International Business Machines Corporation in the United States, other countries, or both.

Microsoft is a registered trademark of Microsoft Corporation in the United States, other countries, or both.

Other company, product and service names may be trademarks or service marks of others.

References in this publication to IBM products and services do not imply that IBM intends to make them available in all countries in which IBM operates.

G510-3569-01