Point of View

The Future of Media

'Dark Ages' or 'Wonderland'?

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Introduction

Until recently, the global media industry had been relatively stable, with a robust value chain and well-defined business models. Movie studios placed multimillion-dollar investments in new productions, and then distributed the finished products to theaters. Beyond that, content found its way to video on demand, DVD/Blu-ray, premium cable networks, broadcast networks, and basic cable networks. All of these predefined windows were optimized for monetizing the content.

Recently, however, multiple factors have torn at the fabric of these finely tuned business models: New players such as Netflix are offering low-cost, convenient delivery of content over the Internet; Amazon and Apple are selling digital movies for instant viewing; and high-speed broadband is accessible and affordable to a large segment of the population. Technology standards are also in flux. And macroeconomic conditions, such as the lingering effects of the 2007-2008 financial crisis and the ongoing international credit crisis, continue to reverberate through financial markets, undermining consumer and investor confidence.

Given these disruptions, critical questions arise: How will the media industry change over the next 10 years? What are the drivers behind this uncertainty? What are the potential outcomes for the future? How should players in the media industry prepare themselves for these uncertain outcomes?

Across the Value Chain, Analytics and Insight

To address these issues, the Cisco® Internet Business Solutions Group (IBSG) followed a traditional scenario-planning methodology. The main objective was not to "predict" the future, but rather to understand how some extreme but possible outcomes might look—and how various industry players could be affected. We also recommend the actions that should be taken to mitigate negative outcomes and to increase the probability of positive outcomes.

We began by exploring a set of consumer-behavior, macroeconomic, regulatory, and technological drivers that we believed would be highly impactful, but also extremely uncertain. As such, any of these drivers could swing future outcomes. Combining these drivers into logical groupings, we were able to define four scenarios—Dark Ages, Survival of the Fittest, Golden Age of Content, and Wonderland—that were consistent with each of the driver groupings.

We then analyzed the impact of each scenario across the value chain, including value shift; types of investments required from distributors and infrastructure providers; winners and losers given the circumstances of each scenario; and how each type of player would likely respond competitively to those circumstances.

Media-Industry Disruptions

To determine possible extreme-case scenarios, we considered many different drivers that impact the media industry:

- **Macroeconomic:** recession, macro-shock, balance of trade, protectionism, commodity pricing, and supply
- **Technology:** ultra-high-definition television, flexible and stretchable screens, holography, semantic analysis, power systems/battery technology, sensors and interfaces, ultra broadband, rendering techniques, and scene acquisition
- **Consumer behavior:** willingness to pay, content preferences, level of interactivity, scripted/unscripted, genre, privacy, collecting, and ownership
- **Regulatory:** privacy, net neutrality, antitrust enforcement, copyright enforcement, advertising, universal broadband, local-on-local, localization, local production requirements

Each of these areas can have a profound impact on the future structure and well-being of the entire value chain or its specific elements. For example, extremely strict privacy rules will favor content owners and aggregators, as their ownership of ad inventory will allow them to capture most of the advertising revenue. Greatly relaxed privacy requirements will empower distributors by improving their ability to monetize advertising inventory through complex yield management and better forecasting, while also allowing them to expand into additional roles.

On the other hand, significant advances in content search/recommendation/discovery might decrease the power of large studios, which have traditionally wielded large marketing budgets for costly “tent-pole” films. This could become a less decisive differentiator as independents gain similar market awareness by using metadata and relying on ratings and semantic engines.

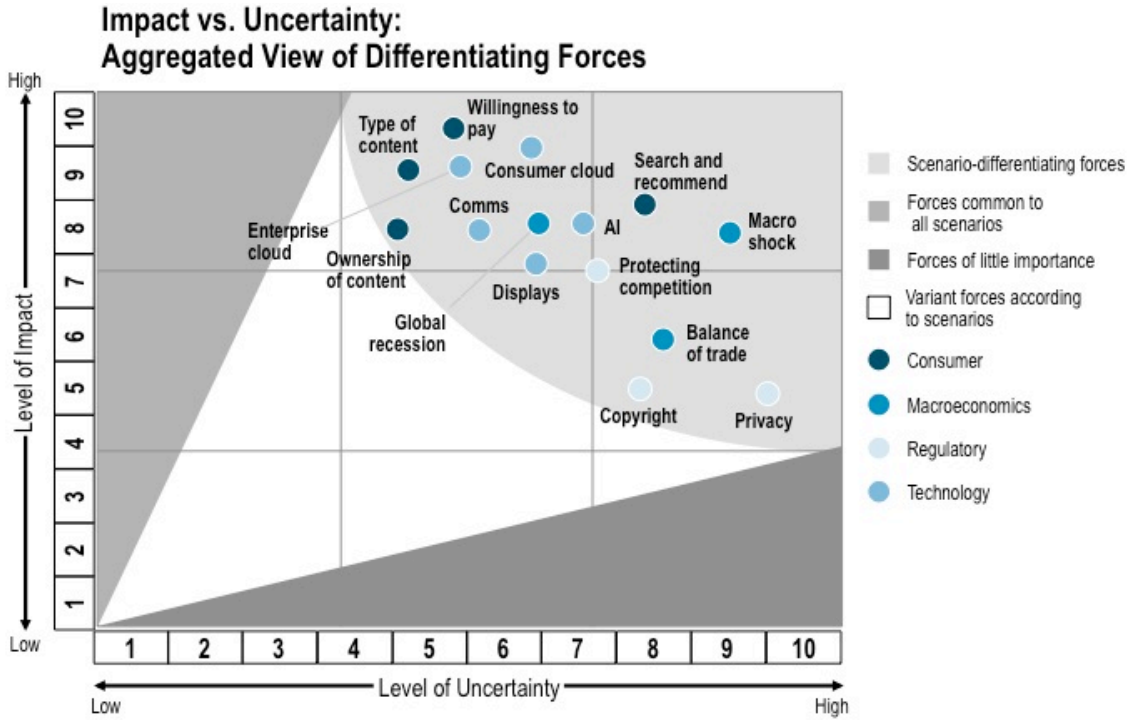
Other technical advances could also have a deep impact. Powerful graphics processing combined with 3D real-time scene modeling, for example, would enable use of multiple cameras to capture and model an entire football field. Producers and possibly consumers could then “create” their own virtual cameras at any angle or zoom level and focus on any detail they choose, from players to individual blades of grass. Overall, dramatic improvements in price and performance would bring sophisticated production capabilities into the hands of amateur producers, enhancing their ability to create professional-level content.

Consumer-behavior changes can also have a profound impact on business models: They can create industry power shifts and drive successful strategies. For example, as consumers gain access to a broad range of titles through on-demand services, they may have less need to own content. This could shift power to subscription-based distributors and greatly diminish the value of the sell-through market.

Macroeconomic conditions, while less predictable than other areas, can have a drastic impact. Lack of access to credit markets and to financial incentives would shift not only location of productions but also the type of films or shows being created. Decline in advertising budgets, for example, could shift production to reality shows, which promise lower production costs and are a boon to product placement. The growing importance of

direct marketing would favor distributors that offer interactivity and better addressability/targeting capabilities.

Figure 1. Impact Versus Uncertainty—Key Drivers.



Source: Cisco IBSG, 2013

The Impact of Key Media-Industry Scenarios on Future Outcomes

Once we identify and understand the key drivers that have the most impact, as well as their level of uncertainty, we can analyze correlation and how the drivers influence future outcomes.

There are multiple approaches and methodologies in grouping different drivers to build potential future scenarios. In order to assess the impact on the full value chain, we grouped the drivers by demand/supply impact and then built scenarios according to the corner cases of supply and demand evolution.

Figure 2. Impact of Demand and Supply on Industry Structure.

	DEMAND-Related	Lowest Industry Growth	Highest Industry Growth
■	Willingness to pay	Not willing, everything free, ads	Very willing
■	Type of content	High consumption of UGC	Professional formats only
▲	Global recession	Global impact	Worldwide boom
⬣	Communications	Limited availability of high bandwidth at high price, including mobility	Commoditization of high-speed broadband, everywhere and across all access modes
	STRUCTURE-Related	**Lowest Availability of Content**	**Highest Availability of Content**
◆	Protecting competition	Anything goes—wider deregulation	Highly regulated—regional / country focus
◆	Privacy	Much stronger privacy legislation enacted	Consumers not worried / relaxed privacy

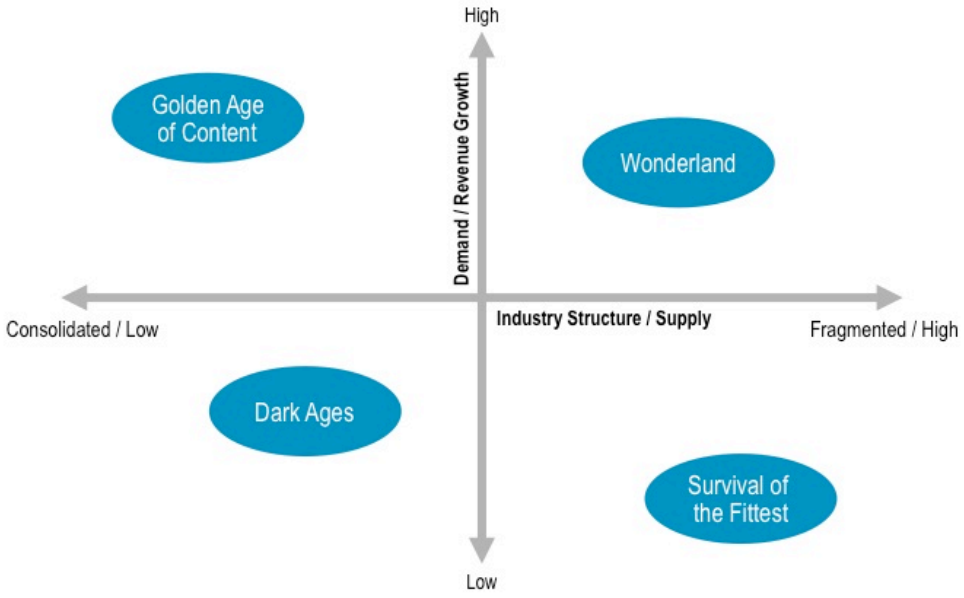
◆ Regulation ▲ Business Environment ⬣ Technology ■ Consumer Behavior

Source: Cisco IBSG, 2013

The Shape of Things to Come: Four Scenarios

Based on the drivers, we defined the four scenarios found in Figure 2: Dark Ages, Survival of the Fittest, Golden Age of Content, and Wonderland.

Figure 3. Four Future Scenarios.



Source: Cisco IBSG, 2013

Dark Ages: Low Demand, Consolidated Industry, and Relatively Low Supply

In the Dark Ages scenario, consumer demand for content and the supply of content services are both extremely low, for a variety of reasons.

First, a poor macroeconomic environment results in a shrinking market, due to restricted investment and consumers' unwillingness to spend. In addition to the macroeconomic slump, competition regulation is relaxed in this scenario, which, in turn, drives market consolidation. Large players survive, while smaller players drop out of the marketplace, either by failing completely or by getting acquired. Studios find it difficult to attract investment in big-budget productions, and, consequently, almost the entire output shifts to lower-budget productions. Consumers increasingly seek out pirated content, limiting industry revenue and driving studios and the industry as a whole to invest more in copy protection and rights management. User-generated content (UGC) sees considerable growth, but Pay TV spending drops precipitously (except for sports, which is the least impacted) as consumers flock to the lowest-cost alternatives, such as free-to-air (FTA) broadcast TV. Indeed, FTA broadcasters enjoy a renaissance.

In response to this trend, Pay TV providers target ads more aggressively and attempt to optimize ad yields. However, their efforts are limited due to privacy restrictions. Content purchases fall, while rentals become the dominant distribution model. This, in turn, drives up cloud usage, serving as a boon to cloud service providers, but at the expense of download-to-own video content and physical retail.

Due to high consolidation of the industry, content owners prevent a complete collapse of the advertising market. They leverage a shortage of content stemming from exclusive sports deals and long-term exclusive controls over selected distribution channels and talent. Similarly, they take advantage of consolidation: their control of content pricing allows them to soften the market revenue drop.

The economic downturn also slows high-speed broadband availability, which somewhat restricts the growth of over-the-top and multiscreen content. Leading transport and access players might be able to differentiate through CapEx investment, leading to OpEx savings. The stagnation is buttressed by limited device innovation from consumer-electronics manufacturers. As a result, large players/platforms in that segment survive at the expense of smaller players.

In an extreme version of this scenario, the entire value-chain landscape is reshaped as major cable and satellite TV providers become mainly broadband providers, as opposed to video distributors.

Recommendations

SPs: Achieve scale through consolidation; focus on cloud services.

Content aggregators: Refocus on ad revenues, rentals, and premium sports; take advantage of somewhat relaxed privacy regulations to provide better yield management and to sell data-focused services to other players.

Content owners: Increase focus on combating piracy and reducing production costs; maintain tight pricing controls by taking advantage of exclusive distribution deals.

Survival of the Fittest: Low Demand, Fragmented Industry, and High Supply

The Survival of the Fittest scenario is characterized by a combination of low demand for content and high supply as a result of alternative funding sources, better and less expensive video production and postproduction, and consumerized, high-end automated creative tools. Consequently, this scenario sees significant growth of high-quality semipro and user-generated content.

As in the Dark Ages, a challenging macroeconomic environment shrinks the market as consumers develop a reluctance to spend. However, there is a willingness to invest on the supply side. Protectionism of the media sector is very strong, with the potential to increase to epic proportions in individual countries. Content production emphasizes efficiency to attract investment, including moves to low-cost centers. Control of costs is also facilitated through increasingly automated workflow, partially driven by comprehensive production-metadata standardization. Investments in new and advanced technologies, such as much higher resolutions and content interactivity, take a back seat to high-volume production.

Consumers increasingly expect content to be low-cost, or even free. Their demand for lower-cost content, including high-quality UGC and semipro content, soars. Content aggregators attempt to drive consumption and revenue through better segmentation and distribution, and by improving monetization through targeted advertising. Relaxation of privacy regulation allows advanced advertising to take off and provides an opportunity to offer much better content recommendations. Increased supply of content limits control over advertising inventory, which drives down pricing. Higher-quality UGC and semipro content, combined with improved ad targeting, drives advertising pricing down further, leading to low margins and revenue for content owners. Additionally, this shifts power to aggregators.

In turn, these moves fuel a tug of war between broadcasters and aggregators over advertising revenues. Collection and control of consumption and consumer data by aggregators/distributors dramatically increases their market power. Cloud distribution of basic content grows significantly, but less so for early-window premium content, due to piracy fears. Stronger net neutrality legislation is enacted, which reduces partnering incentives between SPs and content owners.

In an extreme version of this scenario, aggregators gain control and even take over many content companies, while agile companies that focus on Big Data analytics become powerhouses.

Recommendations

SPs: Focus on data collection and monetization, cloud distribution of content; implement agile operational model.

Content aggregators: Focus on data collection and targeted ads; leverage semipro content.

Content owners: Invest in lower-cost content production, including offshore locations. Increase automated production/workflow and use of “platform release” to optimize marketing and distribution costs. Rationalize movie slate to control costs and supply more effectively. Rely on large franchises.

Golden Age of Content: High Demand, Consolidated Industry, and Controlled Supply

The Golden Age of Content scenario is characterized by high consumer demand for content, but also by a puzzling, relatively short supply, due to strong market consolidation and control of output.

Here, improving macroeconomic conditions mean that consumers have a greater appetite for media, personal communications devices, solutions, and services. Large content players succeed as a result of regulatory relaxation, which drives large-scale horizontal consolidation. Buttressed by their healthy investment budgets, larger players enjoy substantial revenue growth and reap sizable margins. In a bid to meet growing and diverse customer demand, large movie studios focus on growth while taking their eye off production efficiency. Independent studios see growth as a new opportunity, and simpler distribution channels allow them to capture growing consumer demand.

More emphasis is placed on early windows, effective distribution, high-budget production, and electronic sell-through. Advancements in tools and the commoditization of production technology, such as HD cameras and editing software, dramatically increase the quality of UGC. Crowdsourcing further supports independents. Given that premium-content supply is limited, consumers increasingly flock to UGC and semiprofessional content. There is limited funding for films outside the major studios, so big-budget films are channeled only through carefully managed outputs of the majors.

The value of high-quality content significantly increases in all distribution windows as advertisers clamor to be associated with that content. By controlling the inventory of high-value advertising content, content owners prevent aggregators and distributors from extracting value from their content through yield management and targeting.

In parallel with this trend, content owners prefer to go direct to end users, disintermediating traditional aggregators by taking advantage of content-delivery networks (CDNs), cloud hosting and storage, and ubiquitous broadband access. Due to privacy regulations, targeted advertising does not take off, although mass-market advertising soars. Device manufacturers exploit the commoditization of cloud and broadband access to battle with content owners for the aggregation role, as consumers come to expect access to their content anytime, anyplace, and on any device. From an access/transport perspective, SPs with scale and multiple access capabilities stand the best chance of success. In particular, large international players will consolidate and dominate by delivering on high broadband growth, increased quality of service, and bundled access/devices/content.

In an extreme version of this scenario, “Fat Cats” get fatter and technical innovation in media is limited to creating new production values.

Recommendations

SPs: Build geographic scale across all access modes; develop low-cost distribution model; create attractive service bundles.

Content aggregators: Fight disintermediation by content owners and device manufacturers; differentiate through user convenience in search/recommendation.

Content owners: Increase scale and leverage all distribution models; new focus on democratized production.

Wonderland: High Demand, Fragmented Industry, and High Supply

In the Wonderland scenario, content aggregators and device manufacturers dominate. Here, there is both high demand and a large supply of content.

A positive macroeconomic situation leads to strong levels of investment across the value chain, along with an explosion of niche players, all vying for customer demand. A significant investment in production forces studios to innovate better production values. New, niche content players compete with large movie studios, shortening distribution windows and even creating new windows. The ability to monetize library content becomes critical for traditional content owners. Big increases are seen in on-demand content, along with a corresponding reduction in live content (not including sports, news, and reality TV). Aggregators take advantage of consumers' appetite for content and relaxed privacy legislation to strengthen their position, gathering huge volumes of data about customer behaviors and needs. Ultimately, they become gatekeepers of this valued information. Some leverage this position by moving directly into content production.

Privacy relaxation also results in an explosion of targeted, overlay, and embedded advertising, as well as product placement. Content owners, broadcasters, and other aggregators increase OTT distribution, taking advantage of broadband quality and ubiquity. Cloud capabilities become popular, as they help content owners/aggregators distribute content in a growing number of formats to a vast array of devices. As traffic volumes significantly increase, SPs monetize the traffic with tiered data tariffs. But with net neutrality in place, they find it difficult to monetize value-added services such as quality-of-video delivery. SPs are profitable, but to grow, they need to jump into other areas of the value chain, such as content aggregation. Some are successful, but for others, this goal proves elusive. The device market is also highly competitive. Large players and ecosystems win out, but there is still room for commodity offerings.

In an extreme version of this scenario, SPs revert to being bit transport providers and, ultimately, comfortable utilities providing "dumb pipes" to carry content.

Recommendations

SPs: Concentrate on monetizing data-traffic growth and providing cloud distribution; differentiate further by expanding to aggregation.

Content aggregators: Focus on leveraging customer data to exploit the competitive content market and extensive distribution to deliver differentiated solutions.

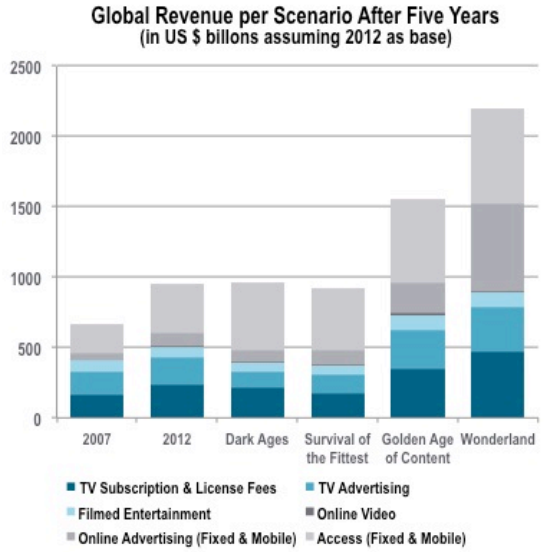
Content owners: Create new windows for delivering popular content; repackage library content; drive greater brand value to aid differentiation.

Conclusion

It is worth remembering that scenario planning never completely reflects future realities; the main purpose is to understand possible directions in which the industry might move under various conditions. This allows for better planning of investments and better understanding of specific implications of each market change.

Each of these scenarios has profound implications on market size, margins, and success of various players within the value chain (see Figure 4).

Figure 4. Different Segments Benefit from Different Scenarios, and Their Risk Levels Vary Greatly.



Growth Rates by Segment

	Low	High
Access (Fixed + Mobile)	26%	91%
TV Advertising	-39%	65%
Filmed Entertainment	-19%	26%
Online Video	-23%	126%
Online Advertising	-13%	576%
TV Subscription & License Fees	-24%	102%

Source: Cisco IBSG, 2013

In each of these scenarios, with the exception of Dark Ages, broadband investments provide the safest source of growth for SPs. Similarly, investment in data collection and in analytical tools for yield management, content recommendation, and, potentially, ad targeting provides competitive advantage in most scenarios.

Content providers can improve flexibility and lower their costs through better access to consumer data, improved production and post-production tools, automation, production-metadata creation, and better digital asset management. This will enable them to focus their output on high-budget, high-grossing productions, or to shift easily to an approach based on lower-cost outputs (with only limited high-budget productions).

This paper discusses only a limited subset of many findings related to our scenario-planning work, and doesn't address areas such as signposts, differences across geographies, or many other investment areas that were considered. Upcoming Cisco IBSG thought leadership will further explore these topics.

We don't know the future. Nevertheless, these scenarios and their implications offer valuable insights into upcoming opportunities and risks, encouraging players to create breakthrough strategies.

The ultimate result will be an even more exciting future.

More Information

Cisco IBSG (Internet Business Solutions Group) drives market value creation for our customers by delivering industry-shaping thought leadership, CXO-level consulting services, and innovative solution design and incubation. By connecting strategy, process, and technology, Cisco IBSG acts as a trusted adviser to help customers make transformative decisions that turn great ideas into value realized.

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