Optimizing Data-Driven Video Advertising
How Analytics Can Help Media Companies Maximize Revenue in a Digital World
In the past decade, digital technologies have had a massive impact on both consumers and companies. The impact has been particularly significant in the media industry, as consumers have gravitated toward digital devices to access content and alternative digital experiences have emerged to challenge television’s dominance. These developments, in turn, have had a major ripple effect on media companies’ advertising business. Although digital devices and experiences have created new ad inventory for media companies, capitalizing on the related revenue opportunities requires media companies to deploy a complex data management environment and advanced analytics to better understand the audiences for all their properties (digital and television) as well as their inventory across these properties.

In this paper, we explore why analytics is the key to maximizing media companies’ video advertising business and how to build and sustain a robust analytics capability that makes it possible.
The Impact of Digital on Advertising

The growing importance and use of digital channels—including tablets, smartphones, the desktop, and over-the-top providers—are rapidly transforming the traditional broadcast media world.

Indeed, individuals’ television viewing habits are changing rapidly. The proliferation of high-speed networks, runaway popularity of mobile devices such as smartphones and tablets, increasing use of DVRs and video on demand, and explosion in digitized content have led to a "new version of TV": an ever-larger group of people consuming video content in new ways.

People now don't just watch shows just on television, but also on their laptops, tablets, phones, and game consoles. And they watch it whenever they want to, not by the network's schedule. In fact, Accenture research has found that TV is no longer the first screen to which viewers turn for entertainment, but rather only one of several options (Figure 1).

The impact of these shifts are evident in the ratings. For instance, broadcast and cable ratings in the US declined by double digits in February 2015 for the fifth consecutive month—with prime-time broadcast network ratings dropping by 12 percent and cable by 11 percent. "It's clear the downward spiral in TV ratings continues with no end in sight," noted media analyst Michael Nathanson.

An expansion in the use of digital channels also presents a huge measurement challenge for companies selling advertising as a growing portion of viewers become fragmented across digital experiences because these viewers are not included in the panel that’s measuring the audience for particular programs, and because

**Figure 1 – The Golden Age for Video Consumption**

Inflection point for video consumption (Established Trends)

Preferred device when accessing different types of digital content

<table>
<thead>
<tr>
<th>% Users selecting 1 or 2 preferred devices at each of the digital content</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV SHOWS/MOVIES</td>
</tr>
<tr>
<td>Computer-laptop</td>
</tr>
<tr>
<td>Smartphone</td>
</tr>
<tr>
<td>Tablet</td>
</tr>
<tr>
<td>TV screen</td>
</tr>
</tbody>
</table>

Viewing of long form video content (TV shows, movies and sport) on TV has declined in the past year with more viewing occurring on all other connected devices but particularly in computers/laptops.

TV is no longer the first screen to which viewers turn for entertainment, but rather just one of many options and short form video is here to stay.

Source: Accenture Digital Consumer Survey, 2015
there is no well-defined cross-channel measurement standard, companies struggle to understand the demographics, behavior, and intent of the people watching content on digital devices. That spells trouble for those whose job it is to deliver a specific audience based on a particular set of demographics. The difficulty in measuring overall interaction and conversion, in turn, challenges media companies to price advertising opportunities commensurate with their actual value.

Digital also further complicates how media companies manage, distribute and monitor usage of their content beyond their owned digital experiences. In the pre-digital world, networks only had one option for placing their content: those channels that they controlled. Today, with the expansion in, and audience preferences for, digital experiences, content delivery mechanisms are multiplying (with YouTube, Facebook, and Twitter among the most prominent). A media company now needs to determine the combination of owned and other channels that will get their content in front of the appropriate people at the appropriate time to command the highest ad prices. And that’s not easy to do. It requires integrated systems to operationalize content distribution; analytics to know where content is presented, how it’s performing, and what ad rates to assign to it; and people to manage this increasingly fragmented world.

There’s no question that media companies have taken significant steps to make their content available via the digital experiences consumers increasingly prefer. However, as digital becomes bigger part of traditional media companies’ business, they’re finding they lack the capabilities—in particular, the analytics capabilities—to effectively execute advertising campaigns across traditional and digital platforms at scale and to measure the effectiveness of their strategies. As a result, they are potentially not maximizing the value of their ad inventory.
Challenges in Becoming a Truly Digital Business

Media companies' struggles to fully capitalize on digital opportunities are rooted in the fact that optimizing digital viewing experiences still accounts for a very small slice of their business.

Traditional television advertising remains the most effective avenue to reach most audience demographics. While the growth rate is slowing, "Research shows that network television is the most powerful medium in building both brand awareness and equity for marketers," CBS's chief research officer David Poltrack said in the company's statement to the press.

Understandably, the capabilities many companies have built to support digital experiences, and the amount of energy and time they spent actually working with it, are not at the same scale as for traditional media. In many companies, digital remains a specialized, siloed part of the business.

But digital is no longer a side business generating merely incremental revenue. It's growing much faster, starting to achieve genuine scale, and accounts for a much larger piece of a media company's business. For example, ESPN's digital business now involves more than 50 million devices streaming nearly 3 billion minutes of content, according to Sean Bratches, the network's executive vice president of sales and marketing.

Because the digital side of the business is now larger and more complex than ever, companies need more advanced analytics capabilities to understand in real time who's watching what, and with which device, and how these viewers have responded to specific ads across both digital and traditional experiences. Using analytics in this way requires the digital and core businesses to be fully integrated.

Integrating the two sides of the business is vital because today's marketers want to execute campaigns across all the channels—something that is difficult for most media companies to do today. Some companies do execute cross-channel campaigns to a limited extent. But it's often a manual (largely based on Excel spreadsheets) and very time-consuming and expensive process, and one that can't be done at the scale to accommodate marketers' requirements.
Media companies can no longer ignore the problem because the opportunities are simply too great. In fact, exploiting the big data generated by digital experiences can convey benefits beyond advertising and across the digital enterprise. Consider that the traditional one-to-many broadcast television model provides limited opportunity to analyze anonymous viewer behaviors because there is no direct interaction with the media itself. Online content, however, provides multiple opportunities to engage the user in true interaction, and the use of technologies to gather insights about user behavior, demographics, and intent allows even more useful information to be associated with that user during his next contextual digital experience.

In other words, the shift to digital moves the analytics opportunity from a pool of largely unknown users (beyond what can be gleaned from the ratings services) to users whose interactions with digital content could provide a wealth of information on them. In this new world, customer engagement, customized content, content offering/recommendations, and digital marketing are just the beginning. A fully integrated digital advertising business can become more like agencies for marketers, providing a whole range of value-added, revenue-generating services enabled by data and analytics.

One of the important benefits of analytics is its ability to significantly enhance a company’s knowledge and understanding of its audiences—their size, demographic composition, engagement, and behavioral trends. This is an area in which some of the leading measurement companies are making progress. For example, Nielsen and Adobe have collaborated on a new offering, Digital Content Ratings, that enables broadcasters and cable networks to measure audience and viewing behavior across desktop, smartphone, tablet, game-console and over-the-top devices. Sony and Turner Broadcasting were among the early beta testers.5 Howard Shimmel, Turner’s chief research officer, hopes the new offering will support “stronger digital and cross-platforms measurement to accurately track consumers and better monetize cross-screen audiences.6

Analytics also can help media companies gain a greater understanding, and increase the value, of their advertising inventory: what’s truly available to sell (including layers of targeting, audience extension, and audience acquisition), how much of it, and at what price. By getting an accurate account of available inventory across all its platforms and properties, a company can avoid being undersold or oversold, as well as optimally price slots based on demand and supply.

With an accurate understanding of inventory and audiences, a company can help marketers create more effective and efficient campaigns—for example, by tailoring ads to specific audiences, doing dynamic ad insertion into a live or on-demand stream, or altering ad placement across traditional and digital platforms to better satisfy a campaign’s requirements.

For example, research from ESPN Lab found that combining TV commercials with digital video ads can increase both awareness and purchase intent. According to the research, “a combination of TV commercials, short-form videos and ads on the channel’s app WatchESPN led to a 160 percent increase in purchase intent than if the marketer only ran a TV ad. Awareness increased 36 percent and word of mouth rose 67 percent.”7 Beyond ad campaigns, analytics gives media companies the power to adapt their content to promote stronger audience engagement. For example, analytics can give a company a deeper understanding of how well its products and services are being used, and by whom. Editorial teams, in turn, can use these detailed insights about their audience to commission and tailor content accordingly, as well as produce content or select topics based on real-time customer data insights. These insights can further help a company to provide tailored content to consumers where, when and how they want it, across all relevant touch points. Based on a customer’s context and usage trends across the day, a company can update the content mix as needed. These stronger audience engagement analytics can also inform a more compelling advertising sales monetization strategy and drive greater personalization.

Another content-related advantage: finding an entirely new audience for existing content, which is what NBC discovered when it dug deeper into what its audiences were doing online. “We’ve learned that a third of people viewing our programming online are viewing it for the first time,” explained Nick Johnson, vice president of digital media sales for NBC. “So while there’s a lot of discussion about rating points maybe eroding in broadcast, what we are seeing is a lot of those users are coming to our sites and experiencing shows like “Heroes” and “30 Rock” for the first time online. We’re actually keeping audiences through NBC.com.”8
Two Key Elements of a Powerful Analytics Capability

How do media companies capitalize on analytics’ potential to transform digital advertising? They need to start by creating a robust analytics capability—the two most critical elements of which are technologies and skills.

Technologies
At the most basic level, a company needs the appropriate technology to support advanced analytics. This includes two categories of tools, the first of which is the analytics software itself. Sophisticated analytics tools harness the most current methods in computer science, statistics, and mathematics to identify meaningful patterns or trends in large amounts of data, and use this insight to drive better business decisions.

The second category of tools includes the additional level of technology architecture and integration needed to bring relevant data together from myriad sources (both internal and external), and cleanse and prepare it for analysis. Such sources include ad servers, data management platforms (DMPs), CRM systems, third-party measurement companies (such as Nielsen), and social media. Getting that data into one database so it’s in the same format, is clean, and is up to date is huge upfront and ongoing challenge because it involves many different data models, ways and times of data collection, and level of data granularity (Figure 2).

Skills
Yet even with a robust set of tools, advanced analytics is impossible without the right skills. Three types of talent are especially important.

The most critical are statisticians or data scientists, whose job it is to create the appropriate analytic models and algorithms to uncover the answers to specific problems the business wants to solve. Data scientists’ skills include advanced analytics, data integration, software development, creativity, good communications skills and business acumen.

Companies also need functional and business advisors for analytics to be effective. These include people with the appropriate knowledge to define the problems they want to solve with analytics, as well as those with deep market and industry knowledge to translate and apply the output of analytics to improve business performance. In the case of digital advertising, an understanding of the specifics of both the digital and linear sides of the business, as well as the needs of the buyers of advertising in each, is vital to effectively using analytics to support cross-platform campaigns.

Finally, technology people who understand the data and how to put it together are required to confirm the analytics technology is integrated with the appropriate enterprise systems and other data sources.

The maturity of these skills in media companies tends to vary based on how important the company views analytics. In our experience, media companies’ skills are not consistently strong across all three categories. In particular, while they may have some analytical skills in house, these typically are not at the data scientist or statistician level necessary to do truly advanced analytics—primarily because, to this point, the small amount of true analytics being done didn’t justify having them.

Figure 2 – Typical Rich Data Sources from Online and Offline
Important Organizational and Cultural Considerations

Beyond the technologies and skills, three organizational and cultural factors are important for companies to consider when adopting analytics.

Where the analytics capability resides in the organization
Having a proper “home” for an analytics capability—one that provides the appropriate guidance, governance, and management oversight—is important to its effectiveness. In some companies, for instance, analytics is part of a broader center of excellence that supports multiple functions, while in others it’s owned or used only by a specific part of the business (e.g., finance or supply chain).

In many media companies, a new role of “chief data officer” is emerging, and that person could be the logical owner of an analytics capability. However, this raises an important question about that role’s relationship with the longstanding research group, whose charge has always been understanding data and audiences. How this research group is integrated with a role that delivers analytics that support ad positioning, inventory management, and pricing is an issue media companies will need to think through carefully.

Whether to build or buy it
Building an enterprise-scale analytics capability is neither cheap nor easy, and it’s not simple to maintain. Creating and integrating the analytics architecture can be expensive, and the effort required to gather, cleanse and prepare data for analytics can be massive. Another significant challenge is a shortage of available analytics talent. Given the explosion of interest in analytics in recent years, such skills can be expensive and scarce. Thus, finding, attracting and retaining them can be very difficult. And, analytical tools are continually and rapidly evolving—and vendors are emerging and disappearing equally quickly—which makes keeping current in technology a major (and often costly) challenge.

For these reasons, it may make sense for a media company to consider outsourced analytics capabilities as an alternative to building them in house. Outsourced analytics providers have staffs of highly skilled analysts, with the requisite industry experience. They also pre-integrate the best-of-breed analytics technologies—providing media companies with access to a ready-made solution they don’t have to buy and maintain—and they continuously evaluate analytics technology companies and their offerings to confirm they are using the preferred tools available while guarding against any vendor’s demise. And they have the horsepower to cleanse and integrate massive amounts of data so it can be effectively analyzed.

By taking advantage of such capabilities, a media company can start up or enhance its analytics capabilities much more quickly and cost-effectively while “test-driving” various technologies before committing to purchasing and deploying them in-house.

How the company culture must change to embrace it
As mentioned earlier, cultural inertia has been partly responsible for the limited growth (until recently) of the digital side of most media companies. That same mindset of focusing on the traditional business, on developing content and offering it through established channels, could stymie acceptance of advanced analytics. The attitude and general culture prevalent in the digital side of the business needs to become much more ingrained in the broader enterprise for analytics to flourish and have a greater impact on business performance.

That evolution, of course will take time. Comfort with the way things always have been done won’t disappear overnight. We suspect in the not-too-distant future, media companies likely will have change thrust upon them by external forces. Whether such forces involve a new disruptive technology or business model, unexpected changes in consumer demands, a massive shift in the industry’s hierarchy, or some other unforeseen development, they will force media companies to choose rather quickly whether they move forward to where the market is taking them or cling to the past and be left behind.
Conclusion

Research and current trends leave little doubt that the future of media is digital, as consumers increasingly demand access to content how, when, and where they want it.

Competing and winning in that future will require a new approach to how the modern media company operates. Today’s leaders are already thinking along those lines—much like Star India (see box) and ESPN, the latter of which has consistently been ahead of the curve in experimenting with and embracing digital. “We innovate with the consumer in mind and with the philosophical default that we are going to adopt new things,” noted John Skipper, ESPN’s president. “We are not going to resist.”

For most media companies, “adopting new things” will have to include new approaches to digital advertising that are underpinned by a robust analytics capability that helps them to gain a deeper understanding of their audiences and advertising inventory. By combining these valuable insights, media companies can help marketers create far more effective campaigns, and they can increase the value of their inventory while dramatically boosting their overall advertising revenue.

In short, analytics can help media companies position themselves to capitalize on, not become victims of, the digital transformation that’s sweeping the world.
Star India Makes a Strong Push for Digital

Intending to spark a billion imaginations, Star India, one of India’s leading entertainment broadcasters, recently launched hotstar, providing over-the-air programming to India’s online, digitally-enabled consumers on almost any mobile device.

The innovative hotstar service, built on the Accenture Video Solution (AVS) software platform, will be funded primarily through advertising, using the AVS’s digital advertising functions. Taking advantage of a fully cloud-based infrastructure, hotstar will be able to serve the entire country with a catalogue of more than 45,000 movies and television series.

Leveraging AVS, Star can deliver broadcast-quality content to consumers on a wide variety of devices over Wi-Fi, 4G, 3G and 2G networks, including those with limited bandwidth resources such as 2G feature phones. Hotstar provides consumers access to a rich catalogue of content delivered online with interactive advertising formats that provide multiple opportunities for content monetization by Star’s advertisers.

“With hotstar, our ambition is nothing less than the establishment of a whole new model for on demand video consumption in the world,” said Sanjay Gupta, Star India COO. “We will drive dramatic innovation on this platform with benefits for both users and advertisers.”

On Feb. 15, 2015, hotstar, along with starsports, its digital platform counterpart, served more than 25 million video views during an Indian-Pakistan cricket match to make it the most watched sports event online of all time.
References

1. 2015 Accenture Digital Consumer Survey, Copyright © 2015 Accenture


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