The Digital Leadership Study Series from
Ernst & Young's Global Technology Center
and Global Media & Entertainment Center

Report No. 1

Digital agility now!

Creating a high-velocity media and entertainment organization in the age of transformative technology



Ernst & Young
Quality In Everything We Do

"Mobile-social-cloud and big data analytics technologies are game-changers for M&E companies. Together these technologies can help the M&E 'digital leaders' who broke ahead of the pack in the early stages of the digital era to extend their advantages. They also offer a new opportunity for those who fell behind to adapt quickly and catch up."

Pat Hyek
Global Technology Industry Leader
Ernst & Young

"Media & Entertainment companies no longer live in a world where everything lives in 'their' world. It's a connected eco-system with consumer technology leading the way."

John Nendick
Global Media & Entertainment Leader and
Americas Media & Entertainment Leader
Ernst & Young

rapidly evolving

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Who took the survey?

Ernst & Young, with the help of Oxford Economics, conducted a global survey of more than 550 M&E executives during the first quarter of 2013. Respondents came from a wide swath of M&E industry segments, including advertising, broadcast and cable, publishing and information services, filmed entertainment, interactive gaming, music and social media, as well as from the technology industry. Respondents were asked to report their primary segment, as well as their secondary segment, if any.

Figure 1: Respondents by industry segment

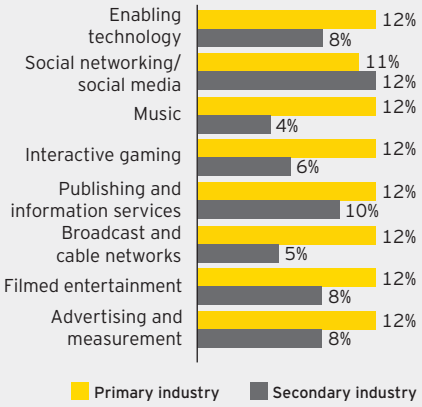
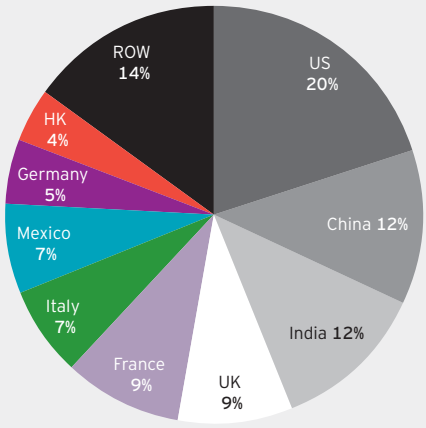


Figure 2: Respondents by country headquarters



ROW includes: Australia, Brazil, Canada, Finland, Indonesia, Israel, Japan, New Zealand, Russia, South Africa, South Korea, Spain, Sweden and Taiwan.

Percentages in Figure 2 do not total 100 due to rounding.

All dollar amounts are US dollars, unless otherwise indicated.

Overview of the Digital Leadership Study Series

Turbulence and disruptive change continue to define today's media and entertainment (M&E) world. Early leaders in M&E's digital transformation are challenged anew, as social media, widespread broadband availability, faster internet connections and the rapid spread of smartphones and tablets have changed the demands and expectations of media audiences and created an astounding variety of new digital products and services. New companies are crossing the divide between content providers and distributors; product life cycles are radically compressing; traditional business and distribution models continue to transform; and customer demands are shifting. Companies must pursue organizational agility, if they are to respond competitively.

To better understand the complex challenges M&E companies face as they seek to master mobile-social-cloud and big data analytics technologies, Ernst & Young enlisted Oxford Economics to survey executives from more than 550 M&E and technology companies across the globe. We combined the survey data with interviews of selected executives, secondary research and our own analysis. We're sharing the results in a series of five in-depth reports, of which this is the first. Here are a few top-line data points: more than 95% of all survey respondents are engaged in digital transformation; their top strategic priority is "creating a culture of innovation" (56%); and their top digital transformation challenge is "coping with new digital business models" (39%).

These new technologies do more than change customer expectations. They also offer M&E companies powerful tools to better understand and connect with their customers. Advances in smart mobility, social media, cloud computing and data analytics give M&E companies the potential to gain detailed insight into their customers' behaviors and preferences. By realizing that potential, M&E companies can offer the personalized, anywhere, always-on content that media consumers now demand.

Yet our research reveals gaps between current reality and the promise of these transformative technologies to build revenues, reanimate legacy offerings, develop new products and services and get to market more rapidly. One such gap, for example, is that 68% of M&E companies see the potential of smart mobility to drive revenue growth over the next 2–3 years, but only 21% have second-generation* mobile technology deployments for new product and service development – which, in the context of M&E, of course, means new content, software or intellectual property (IP).

Our study uncovered five key areas where M&E companies must actively rethink their strategies as they undergo their digital transformations (see Figure 3, page 5):

- **The complex challenges of the digital era will demand that M&E companies become more agile.** As technologies, platforms and distribution models change, M&E companies are rethinking the very structure of their organizations to improve agility – allowing them to anticipate and nimbly respond to rapid shifts in customer demand and quickly seize emerging opportunities. For example, some 42% of those M&E companies we identified as ahead of the technology adoption curve (see "Identifying digital leaders," page 5) cite the shortening life cycles of products and services as the key challenge faced in their digital transformations.

- **Managing digital growth, including properly pacing investment in legacy products and services as they "sunset" or evolve, requires M&E companies to accept greater and more diverse risks as they seek to expand their reach.** Whether it's using social networking to capture audiences or adapting digital

* Throughout this report, "second-generation" denotes technology deployments that incorporate lessons learned from initial deployments and go beyond to achieve more advanced functionality.

content to attract smartphone users, M&E companies will be forced to think about – and manage – more risk in new ways. Some 64% of all respondents say they are investing in digital staff faster than digital revenue is growing, and 50% say they can accept short-term revenue losses as they move up the digital learning curve. Of course, that means another 50% are reluctant to accept that trade-off, which suggests a different risk, that of falling behind others.

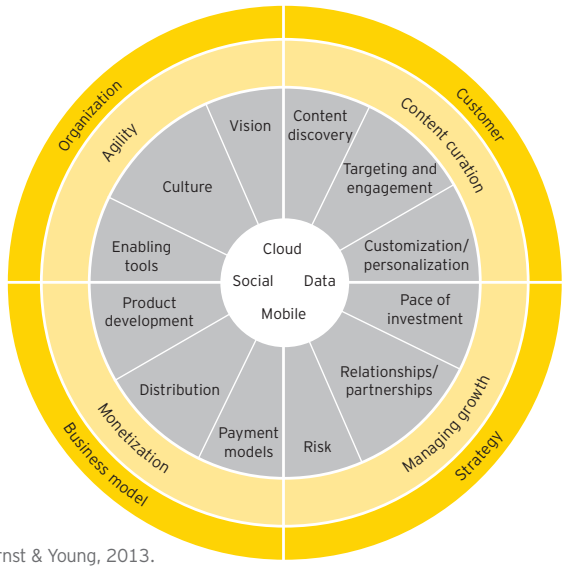
- **Transformative technologies such as smart mobility, social networking, cloud computing and big data analytics offer M&E companies unprecedented opportunities to meet their customers wherever they are.** Personalization is a key trend in the digital future. These new technologies can offer M&E far more granular and nuanced insights into the preferences and behavior of their audiences – insights that can be used to refine existing products and services, create new ones and effectively ensure that customers see your content (or access their content over your network). But only about 20% of all companies responding have gone beyond studying and piloting or initially deploying these technologies to second-generation deployments that build on their initial experiences.

- **M&E companies recognize that they must accelerate digital product and service development or face the possibility that digital-savvy leaders will get there first and usurp their markets.** Therefore, M&E companies must rapidly create new products and services, reanimate existing ones, and reimagine business models to offset declines in traditional revenue channels. In a world where so many customers expect their digital products and services to be free, a more complicated web of revenue-generating efforts has emerged, including micropayments and freemium content. All respondents indicate that "personalization" (64%), "anytime, anywhere access" (63%) and "creating unique content" (61%) will be the keys that ensure customers pay for digital products and services in the future.

- **Technology and M&E companies can partner more closely with one another to meet the digital challenges, but they need to better understand the "disconnects" that separate them.** While technology companies can help M&E companies climb the digital learning curve, especially in the areas of cloud computing and data analytics, many M&E companies are reluctant to seek partnerships with outside companies. For example, 64% of all respondents insist on in-house skills to process, collect and analyze data, but 41% say they are not yet obtaining any insights and 34% say that developing a data strategy to ensure the right people get the right data so they can act on it is a big obstacle to achieving their big data analytics goals.

This paper focuses on the first of the five key areas: how M&E companies are reorganizing to become more adaptive and responsive to shifting marketplace opportunities and risks.

Figure 3: Media and entertainment transformation framework



Source: Ernst & Young, 2013.

Identifying digital leaders

Among the more than 550 global respondents to our survey, we identified 69 companies and categorized as digital leaders based on certain criteria. In these companies:

- Digital revenue already exceeds 50% of their company revenue.
- Customer profile data is integrated across at least two channels.
- Second-generation or better solutions are in place in at least two of four key technologies (smart mobility, social media, big data analytics and cloud computing) to increase revenue or develop new products or services.

These digital leaders tend to have different characteristics than all other survey respondents. They are:

- **More likely to have been in business longer;** 62% of digital leaders have been in business more than 10 years, compared with 53% for other respondents.
- **Are more enthusiastic about the potential of smart mobility** to generate significant revenue over the next 2-3 years versus other respondents (83% versus 67%).
- **Not necessarily very large companies.** In fact, 41% of digital leaders have revenues between $500m and $1b.

Annual revenue	Digital leaders	All others
$25m-$499m	29%	34%
$500m-$999m	41%	32%
$1b-$5b	20%	25%
>$5b	10%	9%

Note: our review of the digital leaders' survey responses often yielded additional valuable insights. Therefore, throughout this report we will refer to three different types of responses, as appropriate:

- All survey respondents
- Digital leaders
- All others (all survey respondents minus the digital leaders)



Digital is rapidly transforming media and entertainment

"Every day we're playing three-dimensional chess."

So said an M&E executive with whom we discussed our research. He was commenting on the incredible speed with which digital technologies continue to change M&E content, marketing, distribution, business models, supporting infrastructure and organizational structure – even now, two decades into the age of digitization.

"Bring your own device has translated into BYO software, which has translated into BYO data. Consumer technology is transforming how M&E companies produce, distribute, track and monetize their content and IP."

Mark Borao
Global Media & Entertainment
Advisory Services Leader
Ernst & Young LLP

And the speed of that technology-enabled change is still accelerating, while average revenue of M&E companies is poised to cross the 50% mark from majority traditional to majority digital. Our research shows that revenue from digital is expected to average 47% of all respondents' revenue in 2013, and grow to 57% by 2015 – making digital the primary source of revenue for M&E companies.

Meanwhile, M&E consumers are continuously assimilating new smart mobility or social media technologies (think, for example, of the sudden initial rise of tablets and the subsequent rapid success of sub-8-inch tablets), with consequent changes in their media consumption behavior. Some even become do-it-yourself producers of their own news, music, videos and games. Meanwhile, unprecedented insights into customer tastes and behavior patterns are afforded to M&E companies by those same technologies, acting in concert with others such as cloud computing and big data analytics.

We believe this landscape of fast-changing complexity is why all respondents' top strategic priority for digital transformation is "creating a culture of innovation." This was chosen by 64% of digital leaders and 54% of all others (see Figure 14, page 18). Only a true culture of innovation will yield the steady stream of new ideas for products and services, business models, distribution, etc., required by M&E's constant state of technology-induced change.

But a steady stream of brilliantly innovative ideas demands an extraordinarily agile organization to bring them to market.

So M&E companies are rethinking the very structure of their organizations to improve agility. They are embracing new and emerging technologies to support organizational structures that enable nimble response to rapid shifts in customer demand; that let them quickly seize emerging opportunities; that flatten hierarchies and eliminate silos; and that accept risk. These companies are also shifting from "make and sell" to "sense and respond" business models, as technology enables them to get closer than ever before to their customers.

Key characteristics of agile M&E companies include:

- Advanced social listening programs to keep on top of changing customer sentiment
- Leading-edge analytics that identify – in real-time – new customer-serving opportunities
- Rapid resource or new product deployment in response to those opportunities
- Cloud-based infrastructure (where appropriate) to enable lower-risk rapid deployment and scalability as conditions change.
- The ability to "fail forward," fast – i.e., learn from inevitable missteps, fix them rapidly and move on

Among all respondents

57% of top-line revenue

will be derived from digital channels by 2015 – up from 47% of revenue today.

68% of all respondents

say smart mobility will "moderately" or "substantially" drive revenue growth in the next 2–3 years.

In terms of the ability to "fail forward," fast, Netflix's acknowledged mid-2011 misstep – and agile response – is destined to become a textbook case study. Announcing a 60% price increase for a combined DVD rental and streaming video service (as a prelude to splitting the two into separate businesses) initially cost the company 800,000 subscribers and 83% of its share price. CEO Reed Hastings quickly apologized, on his blog; the company responded by electing not to separate the businesses, but it did keep the pricing. Subscriber and share price growth returned. As of its 2013 first quarter, Netflix's subscriber numbers matched HBO's, the most watched cable network in the US, and its share price had more than quadrupled from its 2012 low.[1,2]

Other M&E industry segments feel the pressure to adapt to rapidly changing customer demands just as profoundly. "It's no longer good enough to identify a problem at 9 a.m., and have it fixed at the end of the business day," says Nick Earl, Senior Vice President for games publisher Electronic Arts. "In the mobile world, if you discover the problem at 9:00, you need to fix the problem by 9:05 and have it ready to go into the field at 9:10. That's just how it works now."

"Only the most agile M&E organizations will be able to keep up with the extraordinary pace of technology change."

Guy Wanger
Deputy and Americas
Technology Industry Leader
Ernst & Young

The following sections of this report will explore insights from our research about the role of technology in enabling agile M&E organizations.

The sections are:

- Digital leaders forge the agility vision
- Creating agility and enabling a culture of innovation
- Competing for people and skills in a fast-changing environment
- Enabling technology tools for agile organizations
- An Outlook section that includes our Agility Index identifying those industry segments displaying the most, and least, agility (see Figure 23, page 32)



Opportunities for technology companies

In a turbulent marketplace where agility is critical, M&E companies must rapidly develop and roll out new technology tools to meet the increasingly changing dynamics of their audiences. What are the opportunities for technology companies to help M&E companies become more nimble?

Questions to consider:

- How well does your company understand the unique challenges facing M&E companies, and the nuances of each sector?
- Does your company have the capabilities to rapidly deploy offerings and assist M&E companies in a dynamic anytime, anywhere digital market?
- How well can your company help M&E companies integrate mobile-social-cloud and big data analytics technologies?
- Does your company offer cost-effective and flexible tools to help clients better understand customer interactions across all channels (digital and physical)?
- What assurances (e.g., privacy, security) can your company offer M&E companies that cloud-based alternatives for hosting content and big data can be sufficiently flexible and reliable, yet offer the control M&E companies demand?

Opportunities for M&E companies

M&E customers are taking ever-more control over their media habits, becoming their own "editors-in-chief." And they are getting more information with which to inform their choices, while media consumption devices proliferate in unprecedented numbers – both in-home and mobile. Thus, the imperative for a clear view of customers and the market has never been greater. New technologies are enabling M&E companies to rethink and retool, to be more agile and more responsive, and to allocate skills and resources accordingly.

Questions to consider:

- To what extent does your approach to investment in new technologies reflect business as usual versus the opportunity to make cultural and operational changes to your organization?
- Are your relationships with technology providers collaborative? Do you work together to better understand how mobile-social-cloud and big data analytics technologies can enable your business (versus procuring off-the-shelf solutions)?
- In what ways is your company using technology to capture information that helps you better understand your customers' wants? The competitive landscape?
- How have you used technology to break down traditional organizational silos, thereby ensuring you can deploy the best available resources when you identify an opportunity?

Digital leaders forge the agility vision

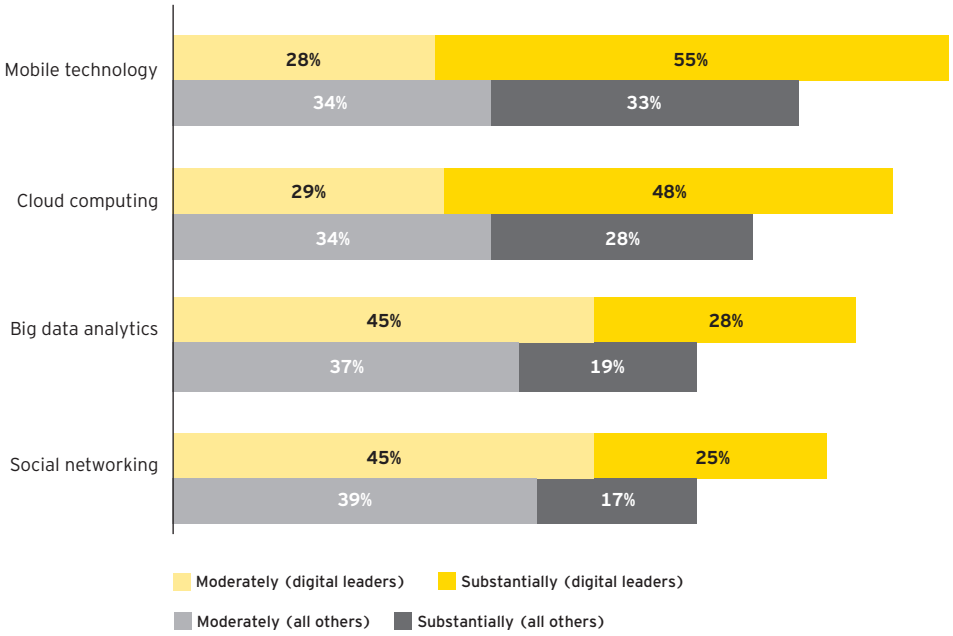
Because it is the leaders in an industry who define the winning vision, we looked closely at the survey results of our digital leaders.

We found a group with great conviction that smart mobile-social-cloud and big data analytics technologies would drive revenue growth (see Figure 4), as well as an increased emphasis on social and cloud technologies within and across their own organizations. We also discovered the leaders were much more focused on new product development than evolving existing products and services, and more concerned over ever-shortening product life cycles than everyone else (see Figure 5).

In other words, the digital leaders recognize that new technologies are altering customer behaviors and transforming market opportunities at warp speed. They realize they must build more agile, nimble organizations to meet the challenge of serving such a fast-moving market. And so they are looking for the most effective technologies to deploy within their companies to enable customer-driven course corrections that are both rapid and adaptive, and to support smarter – and much faster – management decisions.

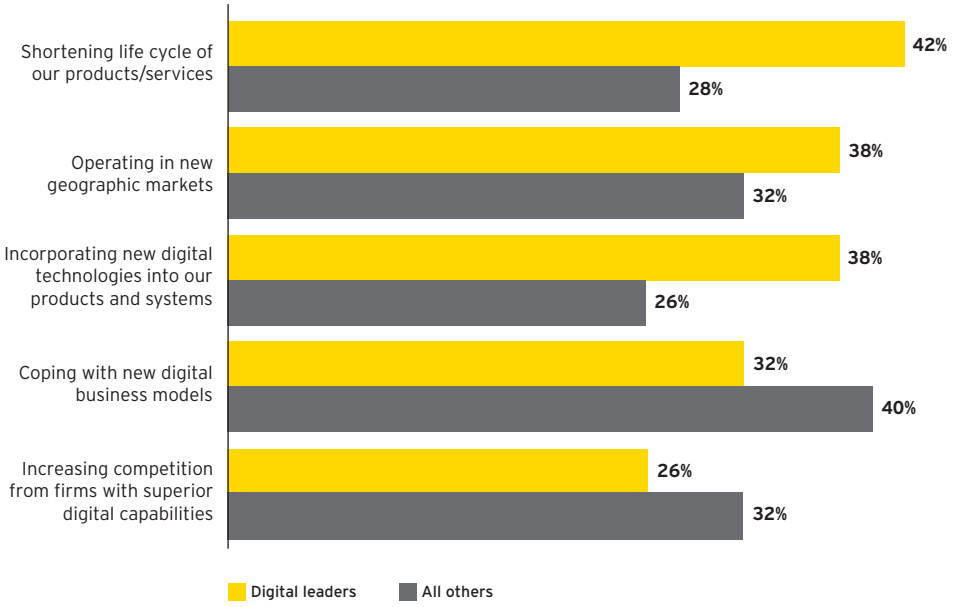
Implementing this vision of an agile organization constantly delivering new products and services to match the rapid evolution of customer tastes and habits is a tall order. Consequently, our research reveals gaps between the vision and its execution, even among the leaders and certainly among the rest.

Figure 4: How will digital technologies (mobile-social-cloud and big data analytics) affect your revenue over the next 2-3 years?*

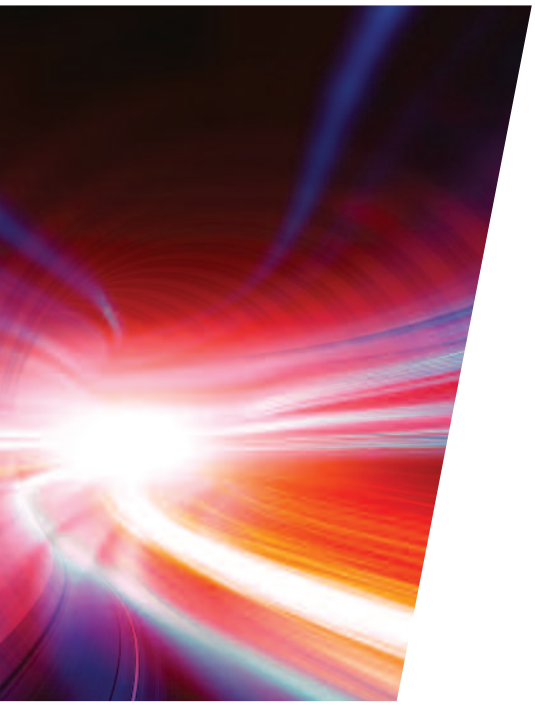


*Percentages shown represent respondents who chose "moderately increase" or "substantially increase."

Figure 5: What are the key challenges your company faces in its digital transformation?* (*Select the top three*)



*Percentages shown represent respondents who ranked each choice first, second or third.



CEOs or CTOs "own" digital vision and strategy

It is a testament to the critical importance of digital transformation that companies' CEOs were named as responsible for the digital vision and strategy almost as often as chief technology officers (CTOs) – 23% versus 24% (see Figure 6). And among digital leaders, in fact, CEOs and CTOs were tied, at 26% each. Another 12% of digital leaders give the responsibility to a chief digital officer (CDO) and 11% to their chief information officer (CIO).

But it is the prevalence of CEOs taking direct responsibility for digital vision/strategy that is most notable. It correlates to the organization-wide cultural change that is required for success in digital transformation (discussed in the next section), because such widespread change typically is not possible unless it is led from, or vigorously supported by, the top.

CTOs (24%) and CEOs (23%)

have the most responsibility for digital vision and strategy.

Figure 6: Who is responsible for the digital technology vision and strategy within your company?* (All respondents)

Function	Total	Advertising	Film	Broadcast	Publishing and information services	Gaming	Music	Social media	Technology
CTO or VP Technology	24%	16%	30%	28%	28%	20%	17%	25%	28%
CEO, President, or VP	23%	23%	21%	19%	21%	35%	28%	22%	17%
CDO or VP Digital	12%	16%	10%	17%	11%	14%	6%	14%	6%
CIO or VP IT	11%	4%	10%	7%	11%	10%	20%	13%	17%
CFO or VP Finance	8%	16%	9%	7%	3%	3%	11%	6%	10%
CMO or VP Marketing	6%	11%	7%	1%	10%	0%	5%	6%	6%
COO or VP Operations	4%	10%	1%	3%	7%	3%	6%	2%	3%
CSO or Head of Business Strategy	4%	3%	4%	7%	6%	3%	2%	3%	4%

*Percentages sum to less than 100 because "other" and several very-low-scoring choices were not included.

New product and service development focus

When asked to rank the top three ways in which technology will drive growth for their organizations, 57% of all respondents chose developing new product and service offerings first, second or third, more than any other selection (see Figure 7). Evolving existing products and services was the second most popular choice, ranked by 50% of all respondents. Looking more closely at only top rankings, digital leaders show greater focus on new product development, with 30% ranking it number one versus 25% of all others (see Figure 8). Even more interesting is how little digital leaders care about evolving existing products and services – only 19% ranked it number one.

We believe digital leaders are recognizing their customers' embrace of new always-available digital products and services (whether broadcast, streamed or downloaded to the living room or to a smartphone or tablet that could be anywhere) and are more willing to let legacy products and services languish. They choose to leverage existing strengths in brand, IP, customer base, etc., in the support of these new products and services, which customers have embraced willingly. They are introducing new products and services iteratively, learning from each of their iterations. And they are iterating with increasing frequency, rather than waiting to do it once or twice a year. This correlates with their concern over shortening product life cycles seen in Figure 5, page 9.

Gaming companies are widely seen at the leading edge of iterative product development. Our data confirms this, with 66% of interactive gaming segment respondents citing new product development and only 39% focused on evolving products and services. Of note, the gaming respondents are even ahead of the digital leaders on this point, with 34% ranking new product development number one (compared with 30% of digital leaders).

"Smartphones, tablets and social media are all catalysts for accelerated change in the way people create, discover and consume content. And this is just the beginning."

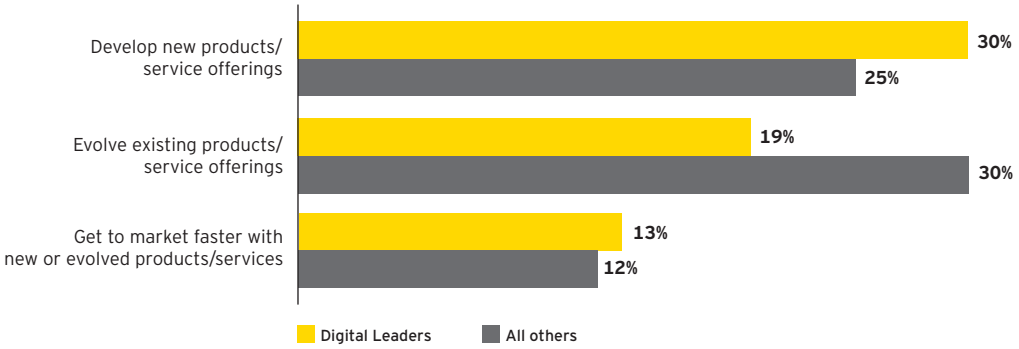
Howard Bass
Northeast Media & Entertainment Advisory Services Leader
Ernst & Young LLP

Figure 7: In what ways will technology drive growth for your organization?* (All respondents)
(Top three rankings)

Growth drivers	Total	Advertising	Film	Broadcast	Publishing and information services	Gaming	Music	Social media	Technology
Develop new products/service offerings	57%	54%	49%	60%	56%	66%	64%	49%	56%
Evolve existing products/service offerings	50%	69%	51%	49%	47%	39%	52%	43%	47%
Get to market faster with new or evolved products/services	40%	31%	42%	38%	32%	55%	34%	41%	41%

*Percentages shown represent all respondents who ranked each choice first, second or third.

Figure 8: In what ways will technology drive growth for your organization?*
(Top rank only)



*Percentages shown represent respondents who ranked each choice number one.



55%

of all respondents rate internal use of mobile technology "very" or "extremely" important.

Music segment respondents matched gaming's 34% number one ranking for new product development, and 64% ranked it first, second or third. Similarly, broadcasting companies' 60% first, second or third rankings was higher than the overall average. These segments are reacting to radical changes in the cycle time of their traditional products and services, as the rapid adoption of mobile phones, video streaming and tablets spurs demand for "always available" access. It's interesting to note that advertising, film and social media companies ranked new product development below the overall average.

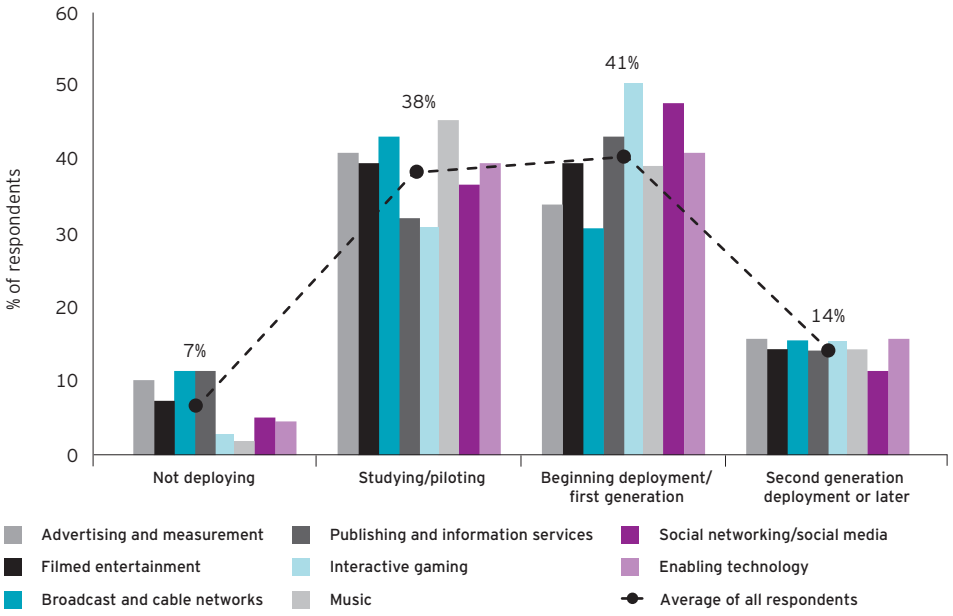
Technology deployments support M&E agility

If digital leaders are focused on new product development, technology is enabling them to create agile organizations to do this more efficiently and effectively. M&E companies are deploying the digital technologies of smart mobility, cloud computing, social networking and big data analytics to help them achieve their digital agility vision. Savvy adopters are continuously adjusting their marketing and product development plans based on continually updated knowledge and insight into their audiences. And they are able to make those adjustments faster than before because of technology that enhances organizational agility. Yet our analysis of how these technologies are being adopted shows that many companies have a long way to go before obtaining the full benefits.

Smart mobility

When asked how mobile-social-cloud and big data analytics technologies would affect their revenue in the next 2–3 years, respondents were most positive about smart mobility: 68% of all respondents and 83% of digital leaders said it would "moderately" or "substantially" increase their revenue (see Figure 4, page 9). Smart mobile technology supports M&E companies' ability to deliver the anytime, anywhere content access customers now expect. But looking further, M&E companies are using smart mobility internally as well as externally: providing employee access to corporate information was the top use, with 55% of all respondents rating it "very" or "extremely" important, while acting on customer location data analysis ranked second with 53%. It's worth noting that the digital leaders emphasize both sides of that equation: 71% rated employee access to information as very or extremely important and 74% gave that rating to enhancing customer offerings with location information.

Figure 9: In what stage of development is your company in deploying mobile technology to help achieve your distribution business goals? (All respondents)



Clearly, M&E companies understand that smart mobility offers new ways to deliver personalized content that is constantly refreshed and even "in the moment." Nonetheless, even some leading media companies were surprised by how rapidly their audience migrated to the smartphone and adopted it in a variety of innovative ways. Tim Westergren, Founder and Chief Strategy Officer of the music service Pandora, explains: "The smartphone was the biggest surprise for us. Once the smartphone came out, people began plugging it into things. So the home stereo system became a Pandora device, and your car became a Pandora device, etc. That triggered a domino effect across consumer electronics, and our engineering effort completely refocused on the device distribution."

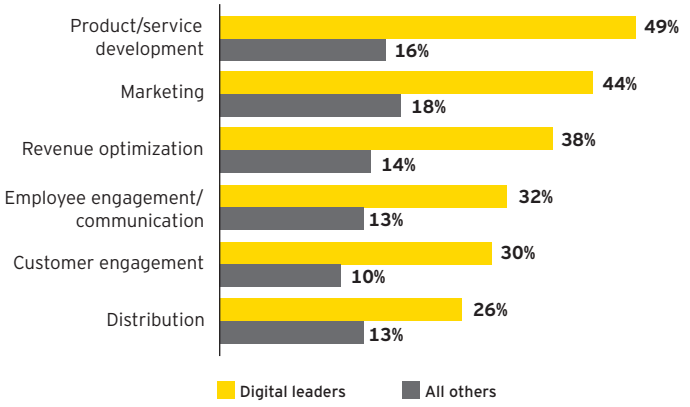
Figure 9 illuminates where M&E companies lie on the adoption curve for smart mobile technology. We find it surprising that the vast majority in every M&E segment are still studying and piloting or just beginning their first-generation deployments of mobile technology for product distribution. Only 14% have gone beyond these stages to second-generation deployments. We asked this same question for numerous functions, but the pattern remained the same and the percentage that has gone beyond first-generation deployments is consistent: for marketing and product and service development, 21%; for revenue optimization, 17%; for research, 16%; for employee engagement/communication, 15%; and for customer engagement, 12%.

Digital leaders appear to have accurately anticipated the rapid transition to mobile-enabled content and are prepared to respond rapidly (see Figure 10). For example, 49% have second-generation or later deployments for product and service development, 44% for marketing, 38% for revenue optimization and 30% for customer engagement. Nonetheless, this indicates a real gap between the demands of the M&E agility vision and where the majority of M&E companies stand in terms of deploying needed mobile technology to achieve that vision. After all, smart mobility enables an entirely new platform of M&E possibilities that are location-based, context aware and physically aware, and that can monitor customer behavior and allow them to provide instantaneous feedback. This will be explored further in future reports of this series.

"Today's workforce is also today's digital consumer – their media experience is across multiple devices – it's social. They expect their organization to mirror this – and quickly."

Martyn Whistler
Media & Entertainment
Lead Analyst
Ernst & Young LLP

Figure 10: Respondents employing second-generation or later mobile solutions to help achieve the following business goals



49%

of digital leaders say they are using second-generation mobile technology to develop products and services.



Big data analytics

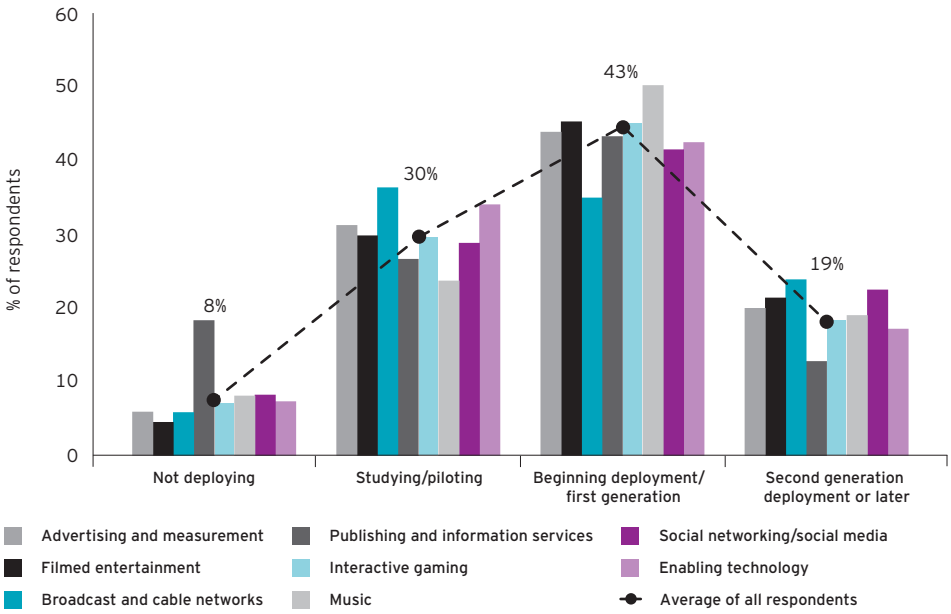
Big data analytics technology has been adopted even less by M&E companies than smart mobile, which makes sense because its importance was amplified after smart mobile devices achieved critical mass. So while digital leaders are three times more likely than other respondents to use second-generation big data analytics techniques to improve customer engagement (26% versus 9%), there is enormous potential for all companies to do more. Only one-third of digital leaders use second-generation techniques to improve their marketing, and major opportunities exist for companies to employ more sophisticated analytics to boost revenues. Considering all respondents, Figure 11 shows the same pattern seen in Figure 9 on page 12, with an average of just 19% having gone beyond the first-generation stage.

Yet it is clear that big data analytics offers media companies enormous opportunity to segment their customers, understand their preferences and buying habits and develop relationships that deepen over time and across multiple platforms.

Only 19%

of all respondents have deployed second-generation big data analytics solutions in generating revenue.

Figure 11: In what stage of development is your company in deploying big data to help achieve your revenue generating business goals? (All respondents)



Social networking

Figure 12 repeats the pattern we've seen, this time for social networking, where on average just 15% of respondents are beyond the first-generation stage for customer engagement. We expect this to change rapidly, however, as digital leaders are more than twice as likely as all others (29% versus 13%) to use second-generation social media to boost customer engagement. After all, storytelling (M&E's core) and collaborating to create unique content (a key element of M&E's future) are inherently "social."

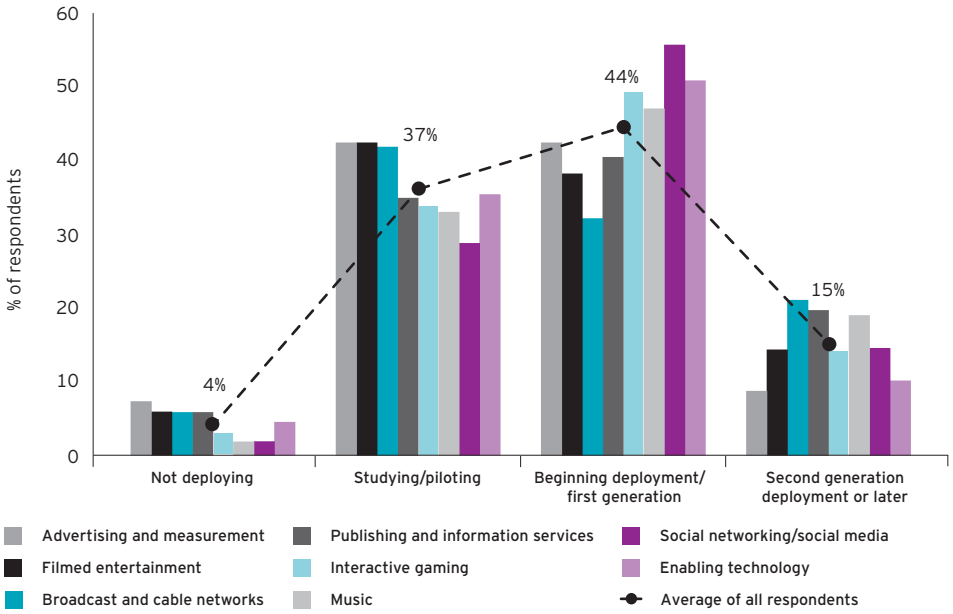
Further, slightly more than 50% of all respondents are at least using social networks for product and service development and distribution, or are actively monitoring sentiment in social networks. But just 45% say it is "very" or "extremely" important to use social networking techniques for internal communication, even though the kind of rapid collaboration that occurs in social networks is a characteristic of an agile organization, where silos are broken down by the ready flow of information and collaboration. Here again, digital leaders are, well, leading: 67% consider the use of social networking for internal communication and 70% say the same about actively monitoring external social networks.

Digital leaders are more than twice as likely as others

(29% versus 13%)

to use second-generation social media to boost customer engagement.

Figure 12: In what stage of development is your company in deploying social networking to achieve your customer engagement business goals? (All respondents)



74%

of digital leaders say it's important to host business tools in the cloud.

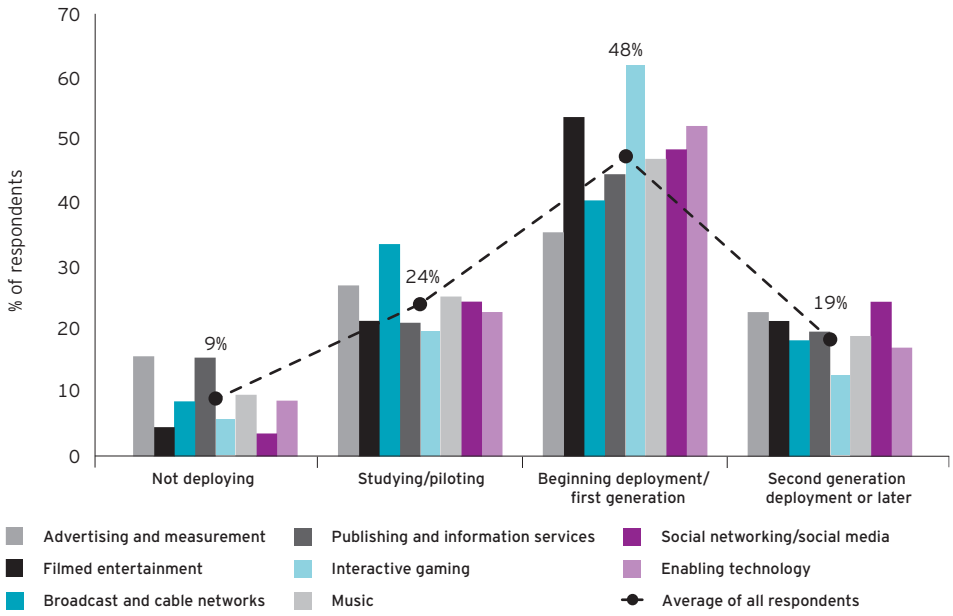
Cloud computing

Figure 13 shows the now-familiar pattern of low adoption beyond the first-generation stage for cloud computing: less than one in five companies are deploying advanced cloud computing for revenue optimization. This is the case even though cloud services support the kind of infrastructure flexibility M&E companies require to be constantly iterating products and services, and upgrading software and services. Yet despite the significant opportunities cloud computing offers to support mobile strategies, transform content distribution channels and make internal infrastructure more scalable, adoption remains slow.

Reluctance to hand over control to a third party (40%), lack of an understanding of the cloud's benefits (37%) and a lack of internal cloud skills (36%) were the top-cited inhibitors to widespread cloud computing implementation across M&E companies. Digital leaders, though, are ahead of the curve: 74% say it's important to host business tools in the cloud, compared with 49% of all others.

While M&E companies clearly understand the role of technology in their vision to become agile organizations, continuously iterating new products and services to match the rapid evolution of customer behavior, they have some distance to go to fully incorporate it. Properly deployed, M&E companies' integration of big data analytics, social and mobile technologies, enabled by cloud computing, will allow them to develop a virtuous cycle of contact, content, personalization and rapid iteration that grows the business and increases the value of the relationship with customers, all in "real time."

Figure 13: In what stage of development is your company in deploying cloud computing to achieve your revenue optimization business goals? (All respondents)



Opportunities for technology companies

As M&E companies adapt to a digital world, they must appreciate how mobile-social-cloud and big data analytics technologies impact and shape their products and services, organizational structure and long-term goals. But M&E companies are generally reluctant to partner with technology companies, preferring to develop internal solutions.

Questions to consider:

- In what ways can your company help M&E companies develop a technology road map to implement their digital vision?
- How can your products and services help accelerate M&E product development and time to market?
- In what ways can you help M&E companies turn information into insight to enable them to better react to changing customer demand and real time expectations?
- Can you communicate the business benefits of mobile-social-cloud and big data analytics to M&E customers?
- How many ways can your technology be used to help reanimate M&E clients' existing products and services — or create new products altogether?

Opportunities for M&E companies

Enabling technologies have created an opportunity for M&E companies to rethink how they ingest information, share it around their organization and translate it into products and services and distribution. But technology alone is not enough; a clear organizational vision is required to use it effectively.

Questions to consider:

- In what ways will your organizational model evolve over the next 2–3 years? Have you outlined the role technology will play in realizing your vision?
- Have you prioritized areas for technology investment over the next 2–3 years?
- As content consumption volumes increase and consumer choices proliferate, to what extent have you challenged your business to use technology to absorb information, generate insights and act on them?



Creating agility and enabling a culture of innovation

As their businesses undergo digital transformation, the top priority for 64% of digital leaders is "creating a culture of innovation (with collaboration tools, innovation labs, etc.)." It also was chosen by 54% of all other respondents (see Figure 14).

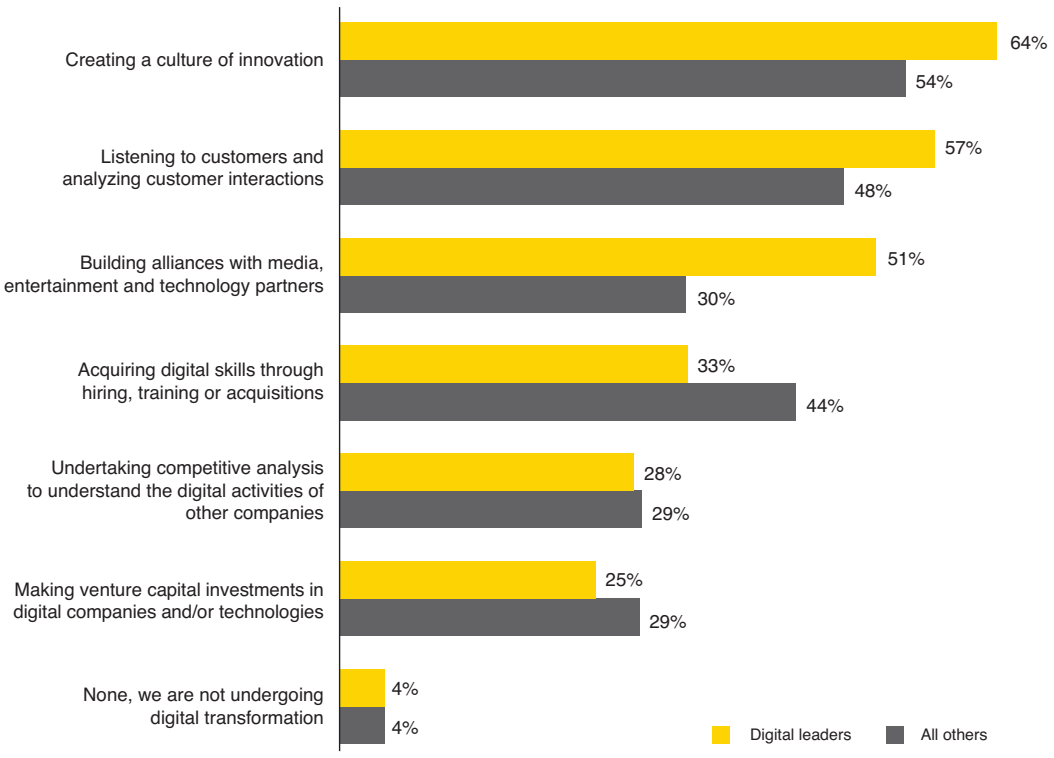
64%

of digital leaders cite "creating a culture of innovation" as a top strategic priority for digital transformation.

M&E companies recognize that to achieve the culture of innovation they desire, they must structure their organizations for agility. M&E companies' vision of meeting high-velocity, continuous change with a steady stream of innovative product, service, distribution, marketing and business model ideas can only be achieved through organizational agility. Our research indicates that M&E companies expect to use technology to enable agility and a culture of innovation. Their goal is to break down organizational silos so the business can work synergistically – and rapidly – to deliver products and services that are highly integrated and meet customer expectations.

For example, borrowing the phrase "loosely coupled" from software architecture, Netflix labels its own organizational approach "highly aligned, loosely coupled." That means strategy and goals are clear, and management works hard to ensure they are well articulated and broadly understood. But tactics are executed with minimal cross-functional discussion or approvals, replaced by trust among groups, and leaders who reach out proactively for ad hoc coordination as appropriate.[3] This attracts top-flight talent and affords significant power to solve problems without extensive chains of command that slow decision-making.

Figure 14: What are your strategic priorities as you digitally transform your organization? *(Select top three)*



M&E companies explore different structural approaches

As companies transform their organizational structures for agility and digital innovation, they are trying out different approaches depending on the needs of their specific segment or even their own unique culture. We found no one-size-fits-all approach but rather different distributions depending on segment, company size and region (see Figure 15).

- Overall, the largest plurality (32%) favored driving digital transformation using a central visionary/team or digital center of excellence.
- 28% favored individual leaders in central roles, which was the top choice for the advertising, broadcasting and technology segments, and tied for top among publishing respondents (with the central visionary/team approach).
- 34% of smaller companies ($25m–$499m) chose individual leaders in central roles.
- 41% of companies from $500m-$999m chose central visionary/team or digital center of excellence.
- While larger companies (above $1b) also rated the central visionary/team approach on top, their ratings were distributed among all the choices seen in Figure 15.
- Asia-Pacific companies weighed heavily toward the central visionary/team approach (41%), EMEA companies chose it but less than the average (30%) and Americas companies rated individual leaders in central roles on top (31%).

Mobile-social-cloud technologies seen as critical to collaboration and accelerated decision-making

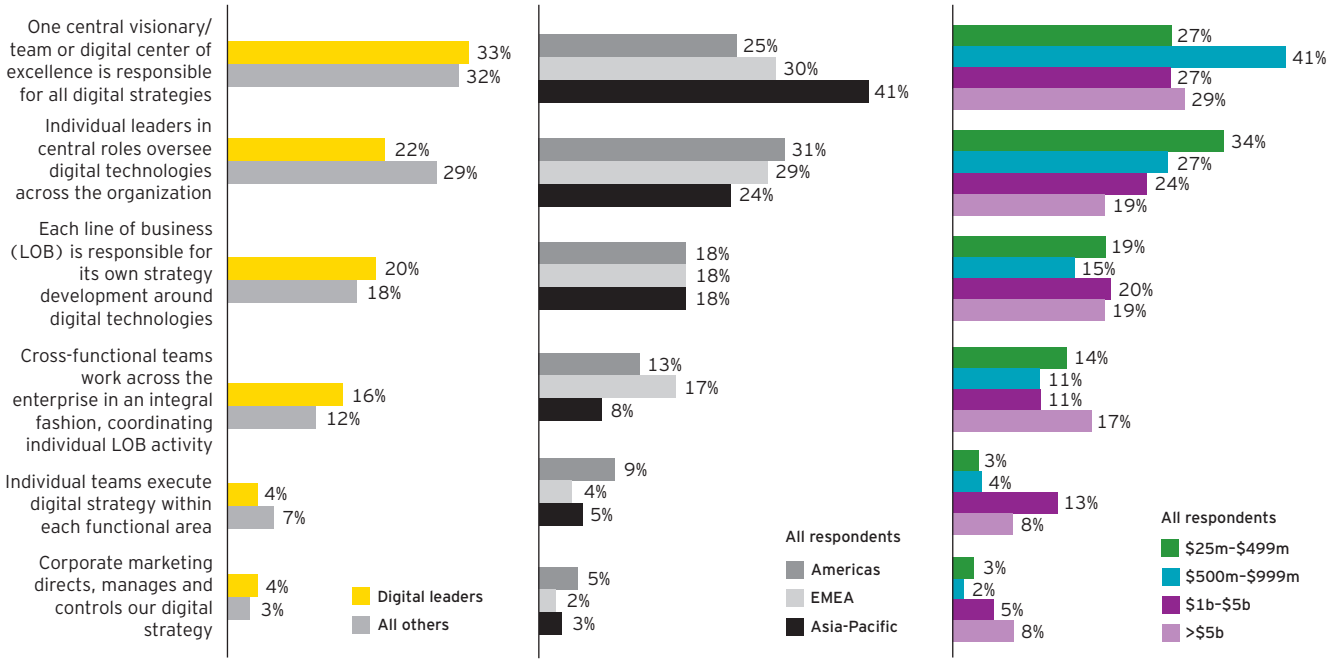
Among all respondents, 56% say it is "very" or "extremely" important to "use cloud computing for collaboration to enable staff to work together with external partners on the same products and services." Among digital leaders, it was chosen as "very" or "extremely" important by 71% (see Figure 16, page 20). Fifty-two percent of all respondents say it is important to use cloud technology to enable geographically dispersed staff to collaborate, as do 68% of the digital leaders. Two-thirds of digital leaders (67%) say using social networking techniques for internal communication among employees is "very" or "extremely" important, compared with 42% of all others. And some 32% of leaders use second-generation or later techniques in mobility to enhance employee engagement and communication, versus only 13% of all others.

Among digital leaders,

71%

say it is "very" or "extremely" important to use cloud computing to collaborate with external partners.

Figure 15: Which best describes how your company drives digital transformation (mobile-social-cloud and big data) throughout the organization?



"There's a lot of discussion among M&E executives about disruptive technology but ultimately they must realize the value of technology is the role it plays in helping them to better serve their customers."

Farokh Balsara
EMEIA Media & Entertainment Leader
Ernst & Young LLP

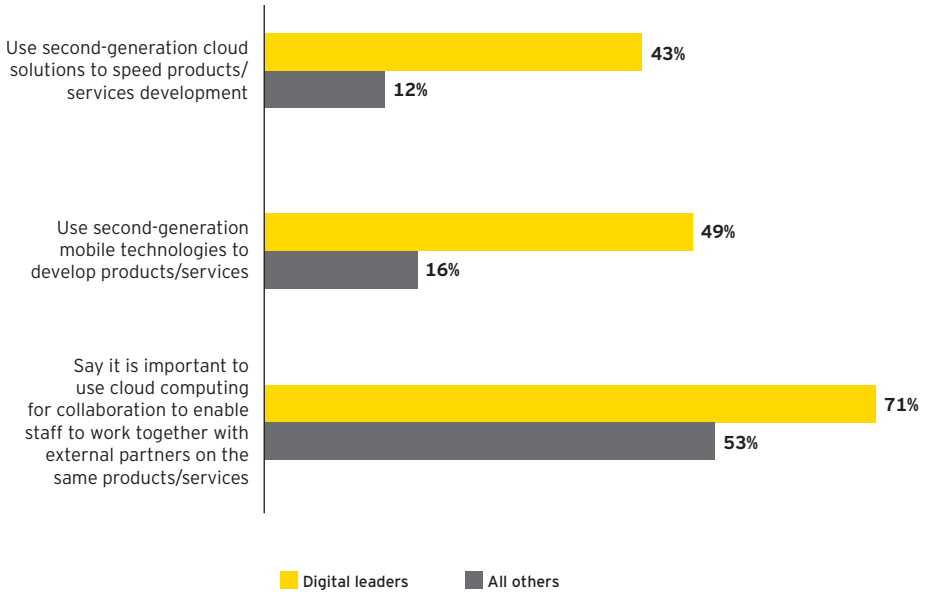
Such collaborative mobile-social-cloud technologies help create an inclusive, flexible environment and allow ideas to flow across the organization. They help executive leaders widen lines of communication and make them more transparent, thus flattening organizational hierarchies and accelerating decision-making. For these reasons, it is likely that more companies will embrace these sorts of rapid, conversational approaches to deeper, higher-value communication as they seek to create "sense-and-respond" organizations that can deliver continuous innovation.

Of course, it is the technology-induced, rapid evolution of customer behavior to which increasingly agile M&E organizations must respond. Our research shows that social networking technology has an important role to play on the "sense" side of the sense-and-respond model. For example, 52% of all respondents say it is "very" or "extremely" important to actively monitor social networks to understand customer sentiment, including 70% of digital leaders. Across the segments, gaming (61%) emphasized it the most and advertising (38%) the least. Fifty-four percent say they use social network interaction as part of product development, including 68% of digital leaders. This time, the gaming segment's emphasis (66%) was second to that of social media companies themselves (70%) and advertising's, again, was lowest, at 42%.

Being open to feedback from social networking channels helps M&E companies grow closer to their customers, which can help them collapse the cycle time between products and services, or allow them to change on the fly when they realize a product offering needs to be revised or refreshed.

While marrying big data analytics to the large volume of data generated by social networks seems a clear opportunity to gain customer insight that leads to competitive advantage, M&E companies appear behind in this regard. Only 15% of respondents have gone beyond first-generation use of big data analytics for product and service development. However, that includes 41% of the digital leaders. This suggests increasing future adoption of big data analytics by M&E companies to help provide the insights they need to drive innovation with more certainty, and less risk.

Figure 16: Digital leaders leverage technology to support an innovative culture



Case studies: developing agile organizations

Foursquare's start-up culture

More than 35 million people use Foursquare worldwide, the mobile location-sharing-and-discovery application, to learn about areas they are visiting, "check in" with friends or find deals from merchants or restaurants in their vicinity. Its CEO, Dennis Crowley, believes the company is perfectly positioned to become the location-data platform of choice for the internet.

The mobile world changes rapidly, however, and Crowley is determined to keep Foursquare's start-up feel, even as the head count has grown from just a handful of employees to more than 160. His executive management committee consists of just five people.

"A lot of the work we do is consensus-driven," he explains. "We'll take the 10 smartest people on mobile and ask, 'Should we do this or not?'" If a key decision requires a tie-breaker, then an in-person meeting takes place. "There is no CTO that is making the call," Crowley says. "A lot of times these guys will duke it out, and if the argument goes on longer than a couple of days, then I'll step in and make the decision."

His company, he says, doesn't have time for formal committee meetings. "Everyone is weighing in on these critical decisions all the time," he says, "because we're making 25 of them every single day."

He also believes small, innovative companies like his need to rely on their own "gut instincts" in order to maintain their momentum. Building a technology infrastructure is the "easy part, and assembling the user base and getting something that people are passionate about and really feel strongly about, that's the part that is really difficult."

The shared goal is to make each individual customer experience a unique and personal one and to maintain a strong bond with each customer.

Netflix's flexible approach

Netflix, the video streaming service, says its goal is to be "big, fast and flexible." Indeed, in the first quarter of 2013, its viewership exceeded that of many conventional cable TV channels when subscribers streamed some 4 billion hours of content,[4] a remarkable turnaround from a very public 2011 misstep when it quickly lost 800,000 customers after a poorly communicated attempt to separate video streaming from DVD rental services.

Most small companies inevitably become bureaucratic and hierarchical as they grow larger. Netflix, by contrast, aspires to grow fast without becoming complex or chaotic, according to company executives. In fact, the company's recruitment materials note that it doesn't want to hire "jerks" but high-performing individuals who don't "wait to be told what to do," and will also "pick up the trash lying on the floor."

Instead of creating lots of rules and hierarchy, it believes in trusting its people to make their own decisions. "We have a very non-hierarchical approach that stresses freedom and responsibility," explains Jonathan Friedland, Chief Communications Officer and a member of the Netflix executive committee. Executives spend a lot of time "making sure everybody has the right context to forge ahead with what they're doing" by laying out specific strategic goals and timetables, but without micro-managing or asserting control. In essence, the company tells its staff that over the long run, flexibility is key.

What does that mean in practice? There are no limits on vacation or sick days at Netflix. No one tells workers when to come and go, or clocks when they do. But doing B-level work will likely earn you a severance package. (Indeed the annual attrition is a chilling 20%.) A-level work results in more money and responsibility.

The company calls this strategy "Highly Aligned, Loosely Coupled. Each of us is responsible for our own particular areas," Friedland explained. "If we do a good job on it, we keep our jobs. If we don't, we get fired."

Spotify's squads and tribes

"Think it, build it, ship it, tweak it." That mantra, together with its agility-focused organizational structure, has helped build music-streaming service Spotify to more than 6 million subscribers in 20 countries.

Spotify rapidly releases software solutions it improves iteratively thereafter. Its focus on rapid-fire development influences not only how it designs and releases products, but also how it organizes its workforce. The basic work unit at Spotify is the "squad" – a self-organizing team whose members have autonomy to design, develop, test and release products. Members of a squad sit in the same office, and jointly decide how they will fulfill their specific mission. A squad doesn't have a formally appointed leader. It does have a product owner who is responsible for prioritizing the work – but not how the work is done.

To help identify impediments and improve their development methods, squads also meet regularly with an "agility coach." "Autonomy is one of our guiding principles," explains Henrik Kniberg, an agility coach at Spotify. "We aim for independent squads that can build and release products on their own without having to be tightly coordinated." Quarterly audits of its teams identify which squads are working well, and which might require additional support.

To coordinate within the company, squads are aligned into "tribes" that meet to share information and identify development roadblocks. The number of workers belonging to a tribe is held at about 100. In addition, Spotify organizes its employees into "guilds" and "chapters" to support cross-tribe knowledge sharing.

Squads are told to release products "early and often." Rather than distribute "perfect" upgrades or new services, Spotify focuses instead on achieving simple results that can be subsequently perfected. Leaders establish a "minimum viable product" for each product or upgrade being released then gather customer feedback to iteratively improve it. By testing, tweaking and releasing constant upgrades, Spotify expects to remain agile and continuously improve the customer experience.[5]

Opportunities for technology companies

As M&E companies drive to create a culture of innovation, they must embrace collaborative technologies, accelerate internal decision-making and speed deployment of digital content.

Questions to consider:

- Is your company positioned as an industry innovator?
- How can your solutions offer M&E companies the speed and flexibility they will demand to rapidly innovate their organizations?
- In what ways does your company support the numerous approaches to digital innovation found across the M&E sector?
- How do your offerings help M&E companies to ensure their internal processes are adaptive?

Opportunities for M&E companies

Creating an innovative culture requires balancing core decision-making with empowerment of individuals, teams and communities within an organization. It necessitates a move away from traditional silos to communities of interest based around specific products and services or customer groups that come together to achieve shared goals.

Questions to consider:

- Who creates your digital vision, who "owns" it and how is it shared around the company? To what extent does it balance centralized decision-making with unit- or team-based entrepreneurialism?
- How effectively does your company utilize technology to collaborate? Is technology in place to enable easy information sharing and rapid convening of groups, particularly across team and silo boundaries?
- How do you attempt to future proof your digital strategy and investments in technology so that they can evolve and adapt as your company responds to the customer and market?

Competing for people and skills in a fast-changing environment

When it comes to the people and skills challenge facing M&E companies, our survey data is clear: there's a sizable gap between the level of technology skills companies require and those they possess. But this is not big news. After all, 43% of all survey respondents ranked "acquiring digital skills" as a top strategic priority; the only strategies that surpassed it were "creating a culture of innovation" and "listening to customers."

However, widespread recognition of this challenge does not diminish it. We believe many M&E business opportunities will be won or lost based on companies' ability to hire the right talent and – just as critically – to put it to work in the right environment. In both cases, the keyword for M&E companies is change. They must realign the skills profiles of their people, they must re-imagine their organizational structure and culture (as discussed in the section on culture of innovation, page 18) and they must re-think their hiring and retention strategies to adjust for more intensive competition.

Of note, the competition for talent is likely to worsen in the short term, as more companies vie for the same people and the lines between M&E and technology companies continue to blur. At Pandora, Founder and CSO Westergren agrees that recruiting new talent for key technical jobs "is one of the biggest challenges right now," especially as his company, headquartered near Silicon Valley, must regularly compete for talent with high-profile technology companies and the plethora of start-ups continuously emerging there. Companies must weigh the advantages and disadvantages that come from locating near a talent hub such as Silicon Valley.

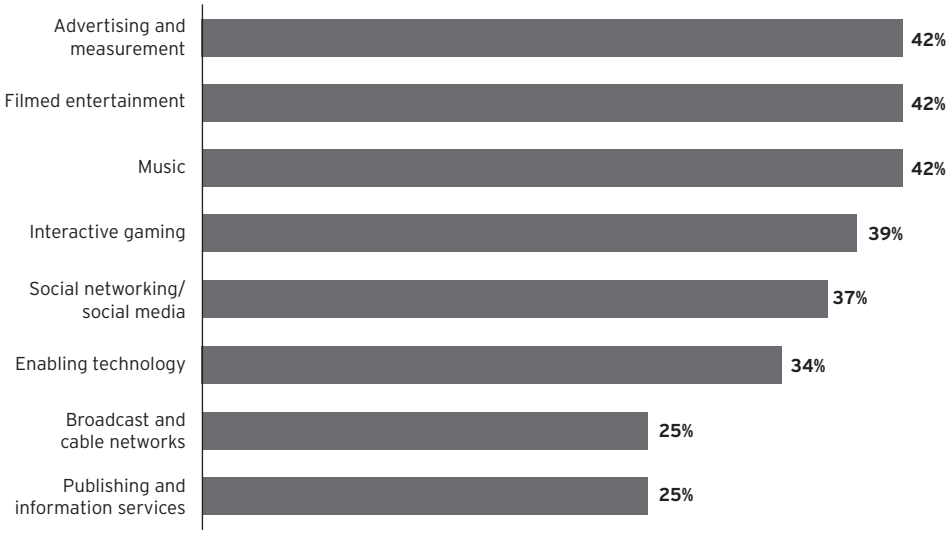
"Digital leaders are fully exploiting the flexibility, speed and cost benefits of cloud computing to create real agility advantages for their M&E companies."

Alex Bender
West Region Technology Industry Leader
Ernst & Young LLP

43%

of all respondents cite "acquiring digital skills" as a top strategic priority for digital transformation.

Figure 17: Percent of each industry segment expressing "lack of skills" as a key obstacle to "build/maintain" cloud computing systems.* (All respondents)



*Percentages shown are of all respondents in each industry segment who chose "Lack of skills to build/maintain cloud-computing systems" as their first, second or third top obstacle.



64%

of all respondents rely on in-house skills to analyze data.

yet, **41%**

of all respondents have yet to gain customer insight from their data analysis.

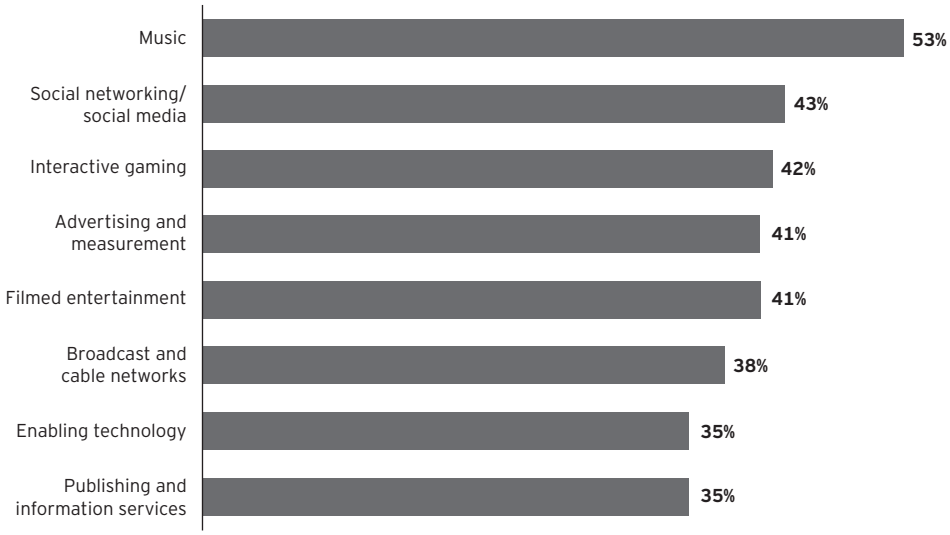
Exacerbating the issue, certain technology companies are driving technology-enabled transformation. Several technology companies, for example, are developing original content of their own or fostering content development from third parties, putting them into competition for creative, as well as technical, talent.

Overall, M&E executives must identify skill deficits and determine how best to move resources into the right areas in a way that is timely and efficient. Among the gaps indicated by all survey respondents is one in big data analytics. For example, 64% say they rely on in-house skills to analyze data but a surprisingly high 41% also say they have not yet obtained insight from the analysis of customer data. For music companies, the figure rises to 53% (see Figure 18). Among the many possible conclusions to draw from this juxtaposition of responses is that the staff of many M&E companies simply don't know how to distill insight from the data they're getting.

Similarly, some 36% of all respondents say they lack the skills to build or maintain cloud-based computing systems. As Figure 17 (see page 23) shows, this percentage is even higher for advertising, music, film and gaming companies, whose digital transformations often require cloud technology to improve agility and respond more rapidly to changes in customer behavior.

Clearly understanding the opportunities specific technologies offer and how they can be used most effectively is imperative as M&E companies generate a road map for determining which skills need to be brought into the organization and in what priority.

Figure 18: Percent of each industry segment stating they are not yet obtaining insight from the analysis of customer data.* (All respondents)



*Percentages shown are of all respondents in each industry segment who chose "agree" or "strongly agree" when asked to rate their agreement with this statement on a 1–5 scale.

Opportunities for technology companies

M&E companies need to acquire new technology skills as well as "new media" skills. Technology companies often focus on developing the most advanced and sophisticated tools to solve emerging issues but may not match the solutions they're offering to the skills and capabilities of their M&E clients.

Questions to consider:

- Does your company have the right balance of technical skill and industry understanding to effectively implement or integrate digital technologies for M&E clients?
- In what ways can your company help identify technical skills gaps for M&E clients and offer the right level of complementary expertise?
- Does your company understand the skills obstacles M&E companies must address to take advantage of the latest technologies and tools? What roles can you play to mitigate these and bridge the gaps?
- Does your company offer M&E companies enough guidance and training so they can achieve the best performance from the tools and systems delivered to them?

Opportunities for M&E companies

Many of the creative skills required in M&E remain unchanged – but the impact of technology cannot be underestimated. Technology-enabled innovation has changed the M&E business system, from understanding the customer to creating, curating and distributing content. By necessity, the skills profile within M&E companies is evolving.

Questions to consider:

- How do you balance the creative needs of your M&E company with the technical skills required to master new technologies? How do you identify skills gaps and then build capabilities or evolve the skills profile?
- An increasing proportion of your workforce (just like your customers) is tech savvy – well versed in social, mobile, search and other technologies. How does your organization and its technology strategy cater to and take advantage of this growing resource?



Enabling technology tools for agile organizations

As companies rapidly rethink their organizational structure to become more agile, they must also re-imagine their company's underlying technology infrastructure to support greater speed and flexibility.

"Agile M&E companies are using mobile-social-cloud and big data analytics technologies to serve customers in new ways and to pull away from competitors that respond slowly."

David Nichols
Americas IT
Transformation Practice Leader
Ernst & Young LLP

M&E companies are concerned with three types of technology infrastructure: front office, back end and back office. Front-office systems support the full range of interactive customer touch points and will be explored in a future report in this series. Back-end systems enable products and services and include technology such as software development tools, content management systems and digital rights management. Back-office systems enable company operations and include enterprise resource planning (ERP), supply chain management (SCM) and customer relationship management (CRM). Mobile-social-cloud and big data analytics technologies have roles to play for both back-end and back-office systems.

Back-end technology systems

As already discussed, for example, leading M&E companies are using all of these technologies to help them rapidly "sense and respond" to changing audience preferences and behavior patterns. The cloud, for instance, has become a proven solution for managing the launch of new content offerings — making it easier and more efficient to manage demand.

Electronic Arts (EA) learned this the hard way, when its March 2013 release of the highly anticipated online version of "SimCity" resulted in multiple crashed servers and thousands of angry customers. EA underestimated the infrastructure that would be needed to support the game's immediate rush of fans. More embarrassing was that the incident took place less than a year after the similarly unfortunate roll-out of a free mobile game, "The Simpson's: Tapped Out," which crashed the company's servers and caused users' data and game progress to be erased.

"Why, after we went through the 'Simpsons,' did we go through the same problems with 'SimCity?'" asks EA's Nick Earl, rhetorically. The problems, he says, reflected specific but distinct infrastructure issues around putting games online for either PC or mobile platforms. As a result, he says, EA has "changed the state of readiness" it demands of its back-end servers when it launches new, live games.

Foursquare, meanwhile, decided to launch its service on a cloud-based back end, as do many start-ups. The launch used Amazon Web Services, but eventually the company built its own data center. "Everyone builds their stuff on Amazon at the beginning," says Foursquare's Crowley. "Because if you need to scale it up really quickly, you just throw some more money at them every month and suddenly you have it." Once the company reaches a certain size, however, "it's cheaper to build out your own data centers."

While Crowley may be right in saying that every new start-up uses the cloud for back-end systems, our research shows that established M&E companies are not universally convinced. For example, 24% of survey respondents are still studying and piloting their use of cloud for product and service development, 54% are in the process of their first deployments and just 16% have gone on to second-generation deployments. Further, 5% aren't considering it (see Figure 19, page 27).

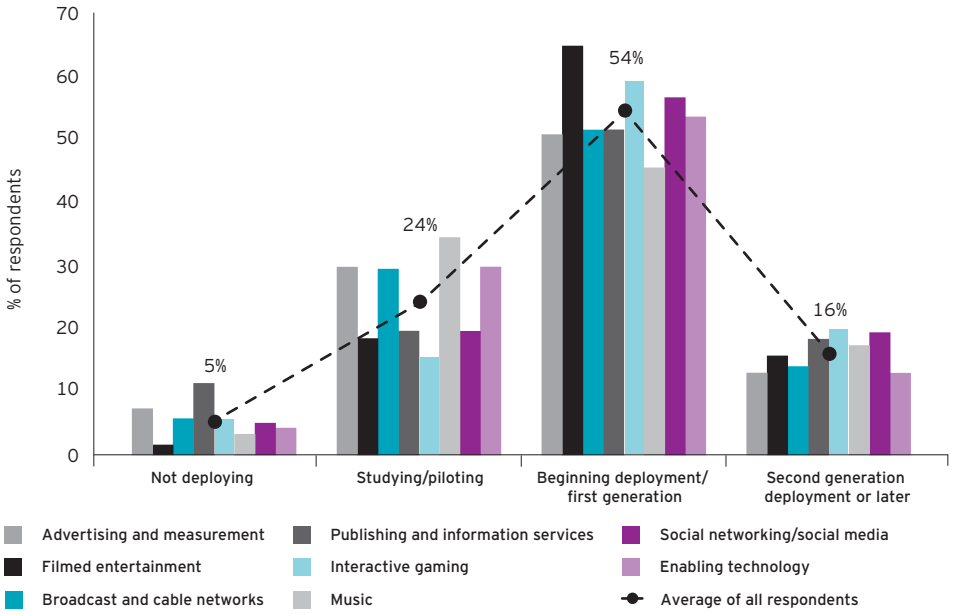
Responses to the similar question about using big data analytics for product and service development are comparable, but skewed toward even less usage: 7% are not considering it, 33% are still studying and piloting, 45% are in the process of initial deployments and only 15% have moved on to second-generation deployment. The obstacles respondents cite are basic ones: topping the list was ensuring data accuracy and reliability (40%), followed by delivering the right data to the right people at the right time (34%), determining ROI (31%) and lacking data analysis skills and tools (26%). This highlights the challenges M&E companies are experiencing as they try to gain insight from the increasing volume, velocity and variety of data they now have at their fingertips.

Certain M&E companies, however, have built their business model on big data analytics. Zynga, which offers free games through its own website and Facebook, Inc.'s social network, studies data on audience behavior patterns to determine how to lengthen user playing times, encourage recommendations to friends and increase sales of virtual goods. As one executive told *The Wall Street Journal*, "We're an analytics company masquerading as a games company."[6]

"Today's digital consumer looks for the content they want, when they want it and on whatever device is most convenient. A digital organization must not only respond to such shifts in behavior and demand, it must anticipate them."

Kevin Price
Global Technology Industry Advisory Services Leader
Ernst & Young

Figure 19: In what stage of development is your company in deploying cloud computing to achieve your product and service development business goals? (All respondents)



Note: percentages do not total 100 due to rounding.

40%

of all respondents cite data accuracy and reliability as the biggest obstacle to their big data analytics goals.

40%

of all respondents say unwillingness to relinquish IT control is an obstacle to cloud use.

Technology in the back office

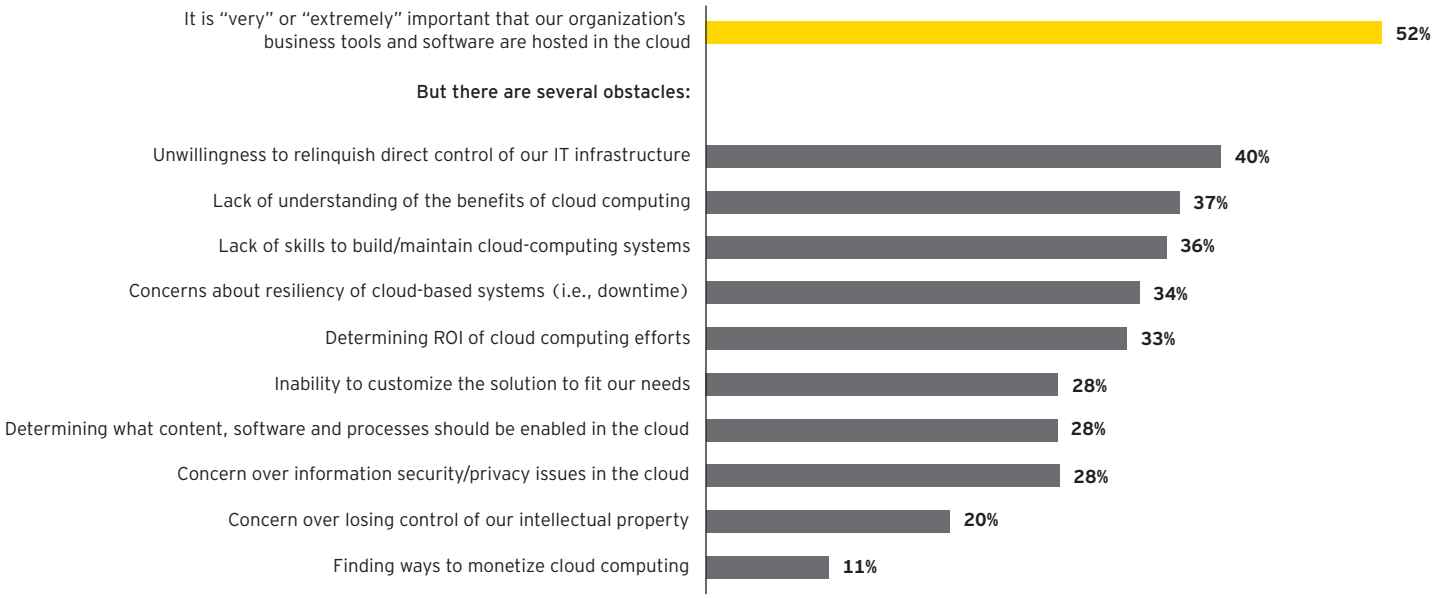
Meanwhile, back-office systems such as ERP, SCM and CRM must also become more flexible to support agile M&E organizations. Our survey indicates that M&E companies currently place a high value on owning and controlling their technology infrastructure – yet they might achieve their goals more rapidly if they partnered with trusted technology providers.

For example, 52% of all respondents say it is "very" or "extremely" important that their business tools and software are hosted in the cloud – leaving 48% that are not (see Figure 20). The top obstacle, cited by 40% of respondents, was unwillingness to relinquish control of IT infrastructure. But 37% also said they don't even understand the benefits cloud technology can offer, 36% lack cloud skills, and others are concerned with an inability to customize cloud services (28%) or figure out what software to host in the cloud (28%), among other concerns. This suggests that M&E executives may want to further explore how making back-office systems accessible through the cloud could help enable greater flexibility.

Similarly, 55% say they provide employees access to systems, applications and networks over mobile devices, leaving 45% that are not yet using mobility as an effective internal tool. Gaming and music companies are ahead of the curve here, along with publishing companies (see Figure 21, page 29).

In terms of social media, just 45% of respondents say it is "very" or "extremely" important to use the technology for internal collaboration and sharing, leaving 55% that do not. Naturally, social networking companies (67%) are ahead of the curve here, as are gaming companies (52%); while film (39%) and the advertising industry (28%) lag. Asian companies have proven themselves to be quicker adapters, however, as 51% of Asia-Pacific firms use social networking, compared with 37% of companies in EMEA and 46% in the Americas. Social networking may prove to be a particularly valuable internal technology for advancing M&E companies' organizational agility, as it enables "communities of interest" to form around important conversations, cutting across geographies and corporate silos.

Figure 20: What are the biggest obstacles to achieving your cloud computing goals?* (All respondents) *(Rank the top three)*



Percentages shown for cloud hosting represent all respondents who chose "very" or "extremely" important; percentages shown for obstacles represent respondents who ranked each choice first, second or third.

For every technology we asked about, the most preferred approach that M&E companies use to access the technology was to build it themselves. However, not all such systems provide the kind of differentiating value that merits such a customized, proprietary development effort (as opposed to a standardized cloud-based solution, for example). And, given the newness of certain technologies and their current state of rapid evolution, M&E companies may create more value by partnering with technology companies to leverage those companies' knowledge and skills. In fact, if you look back to Figure 14 on page 18, you'll see that's what digital leaders do: 51% have it as a strategic priority to build alliances with technology (and other M&E) partners, compared with 30% of all others.

Otherwise, given the skills issue previously discussed, M&E companies could find themselves building second-rate solutions; or, as business requirements evolve rapidly, companies may be stuck with proprietary legacy systems that cannot meet today's needs. Although actual needs will vary significantly by segment and place in the value chain, in general, reducing resistance to technology alliances may well be a necessary step many M&E companies must take in order to become agile organizations (see Figure 22).

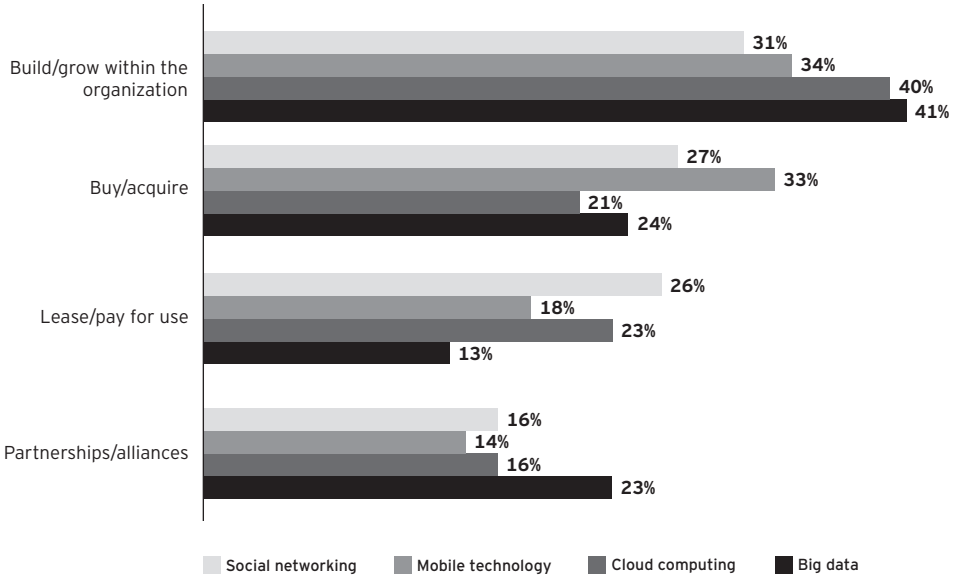
Figure 21: We provide access to company networks or information (beyond email) via mobile devices to enhance our employees' ability to do their jobs.* (All respondents)



*Percentages shown are of respondents in each industry segment who chose "very" or "extremely" important when asked to rate the importance of this statement to their organization on a 1–5 scale.

Figure 22: What is your company's preferred approach for gaining access to the following digital technologies?* (All respondents)

(Select one approach for each technology)



*Percentages shown are for all respondents; total for each technology may not sum to 100 due to rounding.

Opportunities for technology companies

When it comes to technology infrastructure, M&E companies still largely prefer a "command and control" philosophy. But our data suggests most M&E companies don't have the skills necessary to manage all of the technology required to enable their agility.

Questions to consider:

- In what ways can your company help M&E companies integrate customer-facing applications with back-end systems to increase organizational agility?
- How can you help M&E companies develop and execute a comprehensive big data analytics strategy?
- Is your company able to communicate the business benefits of sourcing M&E companies' data and back-office technologies?
- How can you help M&E clients understand the benefits of partnering — and build the necessary trust?
- What are the best ways your technology can help M&E companies improve internal collaboration?

Opportunities for M&E companies

The maturity and scale of M&E companies help shape their technology strategy. When to invest and who to partner with are critical questions.

Questions to consider:

- Is ownership the right option? What factors are influencing your decision to own versus outsource, and how do you think about this at different stages in your company's evolution and for different parts of your company's technology infrastructure?
- Is there an effective balance among the investments being made in technology for the front office, back office and the back end, and how do you think about these differently?
- To what extent do you work with your technology partners to better understand opportunities and risks? Do you feel sufficiently informed about the technology choices available in the market and their impact on your business?
- To what extent do you consider where technology-based differentiation can have the highest impact on your business? Will suggesting standardized solutions suffice, where little differentiation is possible?

Outlook

Insights from our Agility Index

If we take the long view, media has always evolved in partnership with the leading edge of technology. And their partnership has always changed society. Think 1440 and the printing press; think about the advent of television in the middle of the last century and the subsequent rise of popular culture.

What's new and profound today is an extraordinarily fast pace of change enabled by two characteristics of modern broadband networks: they connect us all at the speed of light (no matter where we go) and they are interactive. The former leads to the "anytime, anywhere" requirement for content ubiquity and content curation, to ensure the right content meets the right audiences, when and where they wish it. The latter empowers the audiences that comprise popular culture to talk back to their media providers, both explicitly in, for example, social media and implicitly through the big data "exhaust" generated by all their digital interactions.

From these simple initial conditions, mobile-social-cloud and big data analytics technologies are spinning out new digital M&E possibilities that are changing media consumers' habits, preferences and, ultimately, demands at a dizzying pace. This report makes the case that in order to anticipate new directions in this accelerating M&E evolution, and get out in front of changing customer behavior, M&E companies must become extremely agile organizations, enabled by the right technologies, structure and systems, people and processes. The future belongs to the nimble. Winning M&E companies will be those that best leverage audience analytics across channels, anticipate emerging trends, identify synergies across lines of business and quickly deploy the most effective responses.

To better understand which companies and sectors meet that agility test, we re-analyzed our survey data to develop an Agility Index. It's based on a subset of survey questions that bear on a company's agility, and is weighted in favor of answers that demonstrate agile behaviors. For example, answers such as "creating a culture of innovation," "analyzing customer interactions" or "building alliances" with M&E and technology partners were heavily weighted. "Getting to market faster with new or evolved products and services was weighted" as a key growth driver. In all, we factored together answers to 16 questions. For clarity, we indexed the average score of all respondents to 100. Therefore, a score of 110, for example, denotes performance 10% above average; 90 is 10% below average; and so on.

Our Agility Index ranks the relative organizational agility of different M&E segments as well as enabling technology and digital leaders. The average score of all respondents is indexed to 100. For example, a score of 110 denotes performance 10% above average; 90 is 10% below average.

Where does your company score on the Agility Index?

(see Figure 23)

Are you prepared to be a digital leader?

- What is your agility vision?
- How do you plan to implement and continuously refresh that vision throughout your organization?
- How prepared are you to identify and compete for the people and skill sets you need to excel in a digital environment?
- Have you invested in enabling technology tools that allow you to anticipate and respond to customer and market changes quickly and confidently?

The 69 digital leaders ranked

29%

more agile than the study average.

Applying our methodology to the eight industry segments surveyed, we found that:

- Interactive gaming (117) and social networking (109) segments indexed as most agile.
- Advertising and measurement (83) and publishing and information services (94) were least agile.

This finding is consistent with the major dislocations affecting media industries. Gaming companies, for instance, have been forced to move rapidly to embrace the rising popularity of first social, then mobile games, which represent major distribution and business models shifts.

In addition, we found:

- Asia-Pacific (109) companies indexed higher than those in North America (97) or EMEA (94).
- Mid-size companies ($500m–$999m) indexed higher, at 109, than small (93) or big (99) companies.
- And digital leaders indexed highest of all: this 69-company subset scored 129, compared with 96 for the more than 480 other respondents.

As a reminder, we defined digital leaders by three characteristics:

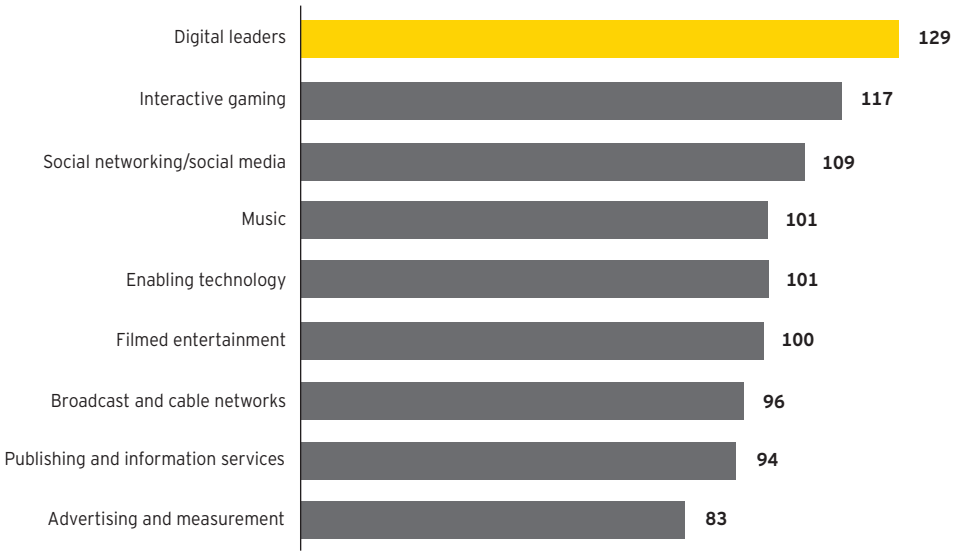
- They're already generating more than half their revenue from digital products and services.
- They've integrated customer data across at least two channels.
- They've deployed second-generation or later solutions of at least two of four key technologies (smart mobility, cloud computing, social media or big data analytics) for product development or revenue generation.

Given their 129 score on the Agility Index, it appears that the leaders' greater technology experience has offered them a clear vision of the digital future this report describes, in which a continuous stream of innovative new products and services is necessary to meet fast-changing customer behavior.

They also appear to have seen, and acted on, the requirement for organizational agility to overcome the challenges of that fast-moving future.

And they are more advanced in terms of using technologies such as social media and the cloud to create an internal culture around collaboration, and in using enabling technology tools to create flexibility in their back-end and back-office infrastructure.

Figure 23: Agility Index by M&E segments, enabling technology and digital leaders



Source: Ernst & Young analysis, 2013.

Acknowledgments

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Source notes

1 "Netflix subscriber Losses Evidence of Low OTT Threat," Business Wire, 26 October 2011, via Factiva, © 2011 Business Wire.

2 "Netflix Shares Surge Above $200 on Strong Subscriber Growth," *The Wall Street Journal Online*, 23 April 2013, via Factiva, © 2013 Dow Jones & Company, Inc.

3 "Hastings, Reed; Netflix Culture: Freedom & Responsibility," posted 1 August 2009, © 2013 SlideShare Inc.

4 "Netflix Shares Surge Above $200 on Strong Subscriber Growth" *The Wall Street Journal Online*, 23 April 2013, via Factiva, © 2013 Dow Jones & Company, Inc.

5 "Scaling Agile at Spotify: An interview with Henrik Kniberg," Infog.com. 9 April 2013.

6 "Virtual Products, Real Profits; Players Spend on Zynga's Games, but Quality Turns Some Off," *The Wall Street Journal Online*, 9 September 2011, via Factiva, © 2011 Dow Jones & Company, Inc.

Note: quotes throughout our report are from executive interviews conducted by Oxford Economics.



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