

# THE WORK AHEAD

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The Second Half of the Chessboard:  
Media & Entertainment Is Nearing the  
'End of Digital's Beginning'

By Robert Hoyle Brown and P.K. Prasanna

## The Work Ahead is a research series providing insight and guidance on how businesses – and jobs – will evolve in the digital economy.

*Although the media & entertainment industry was among the first to digitize its products and services, most M&E businesses don't consider themselves to be digital leaders, according to our latest study. Established players need to use their early momentum to pivot to new business, operating and technology models in which digital not only permeates the front office but is also infused into the middle and back offices, powering innovation and efficiency across the value chain.*

*In this installment of our Work Ahead series, we look at the new digital economics of the M&E industry, as well as the ways in which leadership and strategy – from linking customer interfaces to operational core functions, to preparing for the advent of the “experience economy” – will enable M&E leaders to innovate work in an increasingly digital future.*

# THE WORK AHEAD IN MEDIA & ENTERTAINMENT

Talkies. Cinerama. Betamax. DVDs. Napster. Kindle. Netflix. MP3s. Augmented reality (AR). Virtual reality (VR). Whatever the delivery mechanism du jour, media & entertainment businesses have been grappling for decades to leverage technological advancements to innovate their platforms.

The examples are legion. The “small screen” of living room TVs supplanting the “big screen” of movie theaters, and then the “mini-screen” of mobile devices eclipsing both. The expanding reach and market value of gaming, with universities now offering e-sport scholarships. Amazon’s swift emergence as a major studio and content creator. Facebook’s hyper-personalized ad-serving. Netflix’s data mining to finely tailor content offerings to customer tastes.

Yet, even though M&E companies were among the earliest adopters of advanced digital technologies, it’s as if they’ve only just begun. Some would say they’re experiencing the “second half of the chessboard” conundrum, in which an exponentially growing factor begins to significantly impact business strategy (akin to doubling the number of grains of rice on each of the 32 squares of a chessboard).<sup>1</sup> If the industry once thought that digitizing its products and services was the endgame, M&E players now realize they’ve only made their first few moves.

In the spectrum of disruption, different segments of the M&E industry are at different points of maturity. The onslaught of change has arguably ushered in a golden age of television, a resurgence in documentary film making, an uptick in quality journalism, and bold new immersive experiences in gaming. Opportunities to increase revenues, tap new markets and beat the competition lurk everywhere. At the same time, it’s getting harder to discern the “clean bright lines” of the various M&E sectors, especially when every headline grabs at our attention, and every tweet is clickbait. Just keeping up with these changes, let alone setting a direction for the work ahead, is a full-time job.

To better understand the pressures facing M&E businesses and the progress they’re making on adapting for the future of work, Cognizant’s Center for the Future of Work, in conjunction with the renowned economist Nouriel Roubini, surveyed 350 top executives at leading M&E companies. (For the full study methodology, see page 27.) We found that with their running start, and despite the critical business challenges of heavy consolidation and profit pressures, M&E organizations are now poised to expand their digital mastery across their business, operating and technology models to significantly impact market performance.

Beyond the front office, where consumers have been treated to digital products and services from M&E providers for the better part of two decades, the middle and back offices are the new digital frontier.<sup>2</sup> Consider that in early 2018, Netflix released the latest film in the *Cloverfield* series to a rapturous reception from fans with no advance warning, save for one commercial during the Super Bowl, just a few hours prior to release. That’s a media game-changer, all at the push of a (very sophisticated) digital button. More out-of-left-field moves like Netflix’s will rock the operating models and organizational alignment of all players in the industry.

At the same time, according to our study, more than 95% of M&E companies would not characterize themselves as being digital leaders. This is a shocking admission that requires urgent action if these businesses are to master digital for business success.

Even for those in the middle of the pack, it is critical to learn how to achieve the best return on their digital investments, in order to overcome the lackluster growth and profitability challenges of recent years. To enable the agile innovations required to compete, M&E players need to invest now in technologies such as artificial intelligence (AI), blockchain, and AR and VR, and develop the processes necessary to experiment rapidly and move on to new initiatives if the expected benefits do not materialize quickly.

## Key Insights

Our study uncovered five key findings that illuminate the imperatives for M&E organizations as they expand their digital efforts beyond the customer interface:

**1 Spending on new technology is slated to increase by 50% in five years.** M&E businesses plan to boost technology spending from 10% of annual revenues today to nearly 15% in 2022, which is somewhat less than other industries in our Work Ahead study.<sup>3</sup> As for specific technologies that will enable the changes needed, nearly 80% of respondents cited mobility as having the greatest impact, with the use of wearables rising, especially in gaming (92%). AI, AR, VR and blockchain are all expected to play important roles.

**2 True M&E digital leaders – those with an integrated front- and back-end, and strong digital growth and innovation – are rare.** Certain industry sub-sectors, such as gaming, cable and advertising, are significantly ahead in terms of digital maturity, particularly compared with music and film. However, the vast majority of M&E companies wouldn't characterize their organizations as being digital leaders, and "digital sprinters" account for just 3% of respondents. To move to the next phase of digital maturity, M&E businesses need leadership with a growth mindset.

**3 The path to digital leadership rests on coupling talent to a strategic vision.** Digital leaders exhibit a variety of common behaviors, such as building a culture of innovation, instilling a customer-focused vision, rewarding "intrapreneurship" and defining leadership roles. Although it's important to stay ahead of the technology curve and continuously innovate products and services, digital sprinters recognize that with the right culture, processes and team, the other pieces will fall into place. Over 60% of respondents believe strategic thinking is the main factor in succeeding on the path to digital leadership.

**4 "Entertainment" will give way to AR- and VR-powered "experiences."** Rather than passively seeking to be "entertained," consumers will soon demand immersive experiences powered by AR and VR. All M&E sectors plan significant AR/VR adoption by 2020. M&E businesses will need agile IT systems and flexible processes to deliver compelling experiences – and to create new ones when the whims of consumer desires shift.

**5 End-to-end operating models will connect the customer experience to middle- and back-office processes.** Integration of front-, middle- and back-end processes is a hallmark of digital maturity – a level that few M&E companies have yet achieved, according to our study. The payoff of end-to-end integration is the capacity to deliver on-demand content, tailored to the platform, location, language and format of the consumer, and personalized to consumer preferences, behaviors and needs, globally, in a profitable fashion.

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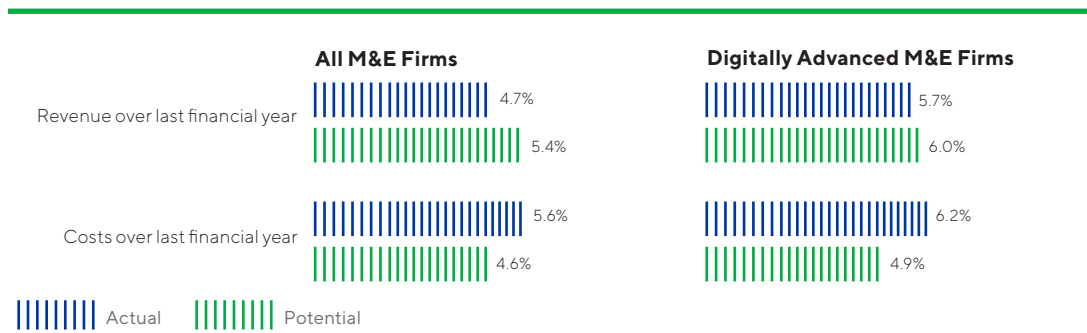
# TECHNOLOGY INVESTMENTS: PLACING YOUR BETS

Despite the relentless onslaught of digital change, the M&E industry invests somewhat less than other industries on technology. While spending is slated to increase to nearly 15% of annual revenue by 2022, that's still lower than our Work Ahead study's cross-industry 2020 benchmark of 16.6% of annual revenues.<sup>4</sup>

As M&E businesses push deeper into the digital chessboard and realign their businesses around digital, we expect more organizations to embrace the strategy of “giving” on costs to “getting” more revenues. Given that virtually all consumption mechanisms will soon be digital, failure to increase technology investments is not an option.

So far, digital initiatives have increased costs by 5.6% but have simultaneously improved revenues 4.7% (see Figure 1). Digitally advanced M&E companies have experienced a 5.7% increase in revenues through the use of digital technologies, but with an attendant increase of 6.2% in costs. It's also instructive to look at the results by segment: Gaming, cable and advertising are already the biggest spenders and will continue to be in 2022. At the low end, music companies achieved a 3.4% increase in revenues through the use of digital technologies, with an increase of 4.6% in costs.

### Impact of Digital Technologies on Performance



Response base: 350 M&E senior executives  
 Source: Cognizant Center for the Future of Work  
 Figure 1

We also asked companies what they predicted would happen to revenues and costs if they could wave a magic wand and *immediately* implement a digital transformation program across all core processes. In that scenario, respondents saw a reversal in the revenue/cost balance, with revenue rising 5.4% and costs increasing just 4.6%. Digitally advanced companies saw even greater potential: 6% revenue growth, and costs rising a more modest 4.9%.

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Adopting more relevant business models, meanwhile, is complex, and even paradoxical, for M&E players. On the one hand, they need to reinvent their business; on the other, they need to prop up sagging margins to meet shareholder expectations. On average, M&E businesses had 5.1% revenue growth and net profit margins of 4% over the last two years. While gross margins are much higher for the industry, net margins are lower due to the deduction of all expenses, interest, taxes and preferred stock dividends.

New digital channels have forced fast shifts in strategy and revenue models. With M&E products increasingly becoming digital code (i.e., a downloadable movie, a song, a game, an e-book, an ad placement on social media, etc.), the zero marginal cost of the “make once, use many times” model has transformed the economics of gaming, music, film and advertising. The return on investment is real for companies that realign their business around being digital.

Even the late-to-the-party sector of publishing has seen a digital revenue renaissance in some quarters as a direct consequence of paywalls. *The New York Times* now manages to pull in an estimated half of its revenues (\$500 million) through online channels, compared with \$60 million at the Jeff-Bezos-owned *Washington Post*, BuzzFeed’s \$170 million and \$146 million at The Huffington Post.<sup>5</sup> Steps like these may be more astute now than ever, especially with the possible changes ahead in the social media/publisher partnership. For example, in the wake of the purported content-manipulation scandals during the 2016 election, Facebook is deprioritizing content from publishers in favor of connections with friends and family.<sup>6</sup> At least for now, this means yet another rethink for publishers, which may need to invest in their own channels to control distribution.

We anticipate significant escalation in digital investments, through 2020 and beyond. In general, about one-quarter of all M&E revenue now comes through digital channels, according to our study, and the percentage is projected to grow to one-third by 2020. The figures vary by sector: Gaming and advertising currently have the highest digital revenue (28% and 26%, respectively), while film and music have the lowest (21% for each). As media giants like Disney and others double-down on streaming services, revenue through digital channels is likely to grow significantly.

## QUICK TAKE

# The Technologies that Move the M&E Needle

Nearly 80% of respondents cited mobility as having the broadest impact over the next two years, with the use of wearables rising, especially in gaming (92%) (see Figure 2). AI, AR, VR and blockchain are all expected play important roles, with wide variations across segments.

AI was named as a critical technology among advertisers (73%) and publishers (66%) vs. the M&E industry overall (55%). Central to the creation of immersive consumer experiences, AR/VR are considered vital by gaming (89%), broadcasting

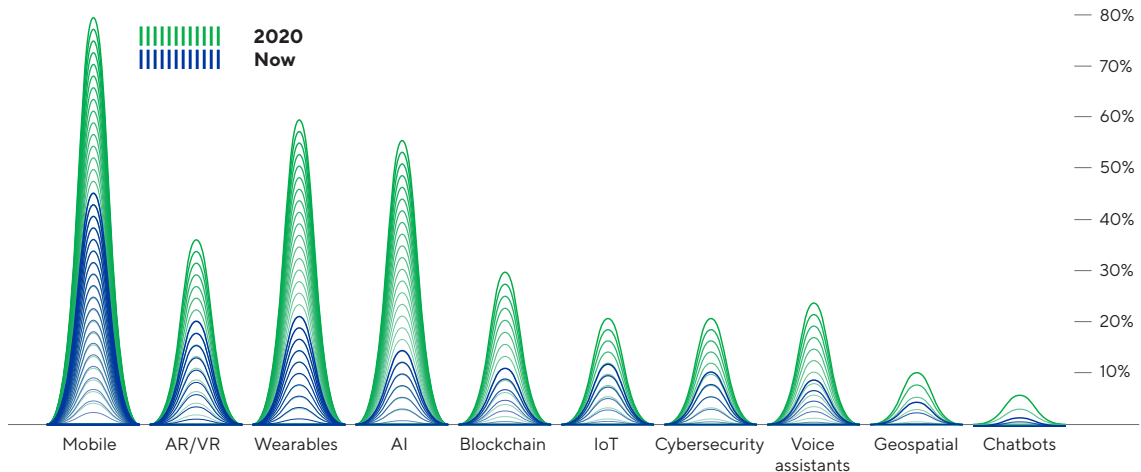


(70%) and film respondents (78%), and nearly inconsequential for advertisers (4%) and music providers (0%).

Because it allows for both decentralized and tamper-resistant transactions, blockchain may have many future M&E applications, from facilitating royalties and crowdfunding, to digital advertising and distribution. Our study shows that blockchain is still not fully understood by the industry, with just 29% of respondents expecting it to be key in two years. The digital winners will be those who fruitfully leverage game-changing technologies in the near term. To get there will require a fail-fast attitude and willingness to experiment broadly.<sup>7</sup>

## Impact of Digital Technology

Respondents were asked how large of an impact the following digital technologies were having on their overall business today and what was expected in 2020. (Percent of respondents saying "high impact.")

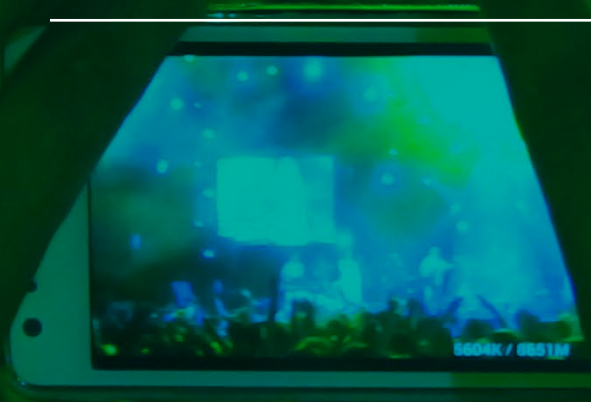


Response base: 350 M&E senior executives  
Source: Cognizant Center for the Future of Work  
Figure 2

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# A LOOK AT THE M&E DIGITAL LEADERS

True digital leaders – those with integrated front- and back-ends and strong digital growth and innovation – are rare in today’s M&E industry, accounting for just 3% of the companies studied (see Figure 3, next page). In other words, more than 95% of M&E companies wouldn’t characterize their organizations as being digital leaders, and most expect to put the finishing touches on the first phase of their digital transformation within two to three years. Within their own segments, more than half of respondents (54%) say they’re behind or on par with the competition in terms of digital maturity, and 46% believing they’re ahead.

The outlook shifts, however, by 2022, when all respondents plan to be of above-average digital maturity – which is not mathematically possible. Clearly, many respondents are overestimating their companies’ digital capabilities, or underestimating the progress their competitors expect to make. Digital transformation is a moving target, not a destination. It pays to be realistic.

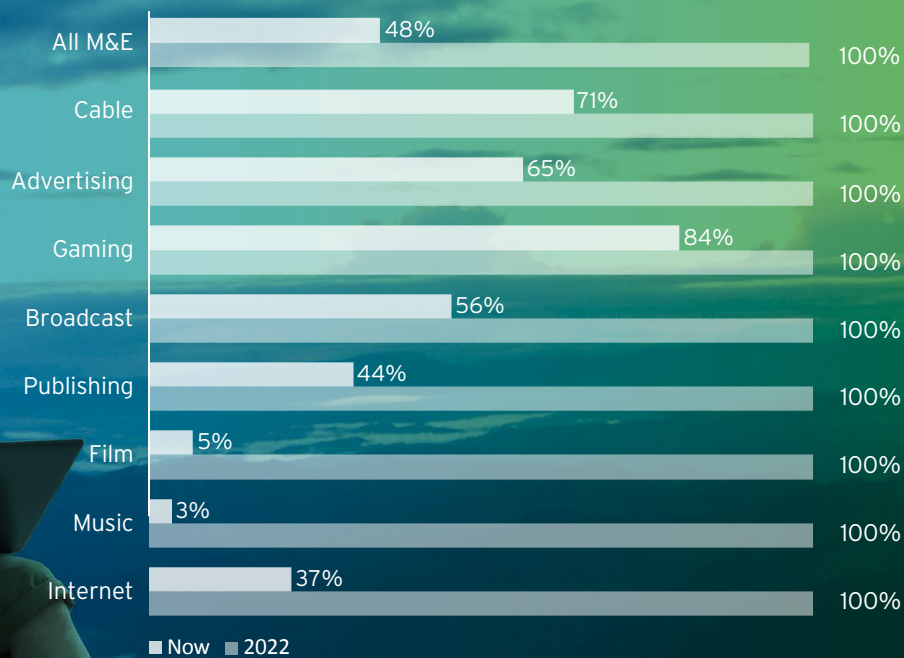


## In Pursuit of Digital Leadership

Respondents were asked to assess their digital maturity now and in the future.

	Now	2022
<b>DIGITAL LEADER</b>	3%	47%
<b>MATURING</b>	45%	53%
<b>TRANSITIONING</b>	51%	0%
<b>BEGINNER</b>	1%	0%

### DIGITALLY ADVANCED (MATURING + LEADERS)



Over half of respondents are now in the early stages of digital maturity. By 2022, *all of them* plan to be advanced – and 47% expect to be digital leaders.

Response base: 350 senior media & entertainment executives  
 Source: Cognizant Center for the Future of Work  
 Figure 3

Certain industry sub-sectors, such as gaming, cable and advertising, are significantly ahead in terms of digital maturity, particularly compared with music and film. For these businesses, their first-half-of-the-chessboard momentum will sustain them, and as discrete sectors become digital ecosystems, the sub-sectors will begin to blend, blurring even the broadest definitions of M&E.

In the words of the CEO of a leading gaming engine, Unity 3D, “We call it a game engine, but really it’s an animation/interactive/lighting/physics/presence engine. And it happens to also be what Audi needs. And it happens to be what the guys at the Large Hadron Collider also need.”<sup>8</sup> Engines like Unity will become fundamental building blocks and platforms for new digital technologies such as AR and VR, especially as immersive experiences overtake entertainment.

The underlying good news for all players: There’s still time to catch up – as long as organizations are willing to look ahead into the second half of the chessboard. Becoming an M&E “digital sprinter” is currently an elite destination reached by those who’ve moved beyond “knowing something needs to happen” to “making something happen,” and from “do we have to change,” to “how do we change?”

The need for leadership with a growth mindset is essential. From film to music to publishing, the migration from transactional relationships to digital-fueled subscription models is funding new content and original programming. Established players also need strong leadership to stem the talent drain, especially in certain sectors, such as gaming and film. Advertising companies such as WPP and Publicis Groupe are hemorrhaging employees to Facebook and Google, with WPP losing more than 2,000 employees to the two companies, and relatively few flowing in the other direction.<sup>9</sup> To win the war for talent – specifically millennial talent – M&E companies will need to invest in new business models and new ways of working that more closely mirror their born-digital counterparts.

## **QUICK TAKE**

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# The Netflix Strategy Pivot

Some M&E executives still see proposed digital initiatives as too radical. But the right project can touch off a powerful flywheel effect. Consider Netflix, a paragon of M&E digital leadership, which was mercilessly mocked for its multi-brand distribution strategy a few years ago (remember Qwikster?), which it ultimately disbanded.<sup>10</sup> It’s easy to forget now, but the company’s strategic swivel laid the groundwork for the company’s success today.

It’s instructive that Netflix, in fact, embraces a culture of change and allows for failure. To wit: the company’s recent announcement that it’s spending \$8 billion to produce an impressive 700 new original shows and movies in 2018. (With a patron like that, why would anyone in Hollywood work anywhere else?!) Netflix’s leadership mindset is essentially “the bigger the total investment, the less risk is attributed to each project.”<sup>11</sup> It’s also indisputably proving that – with M&E – content is king.

Critical lessons from Netflix's leadership (whether embarking on solo strategies or with other content providers) include:

- Create as tight a link with the viewer/consumer as possible.
- Don't use customer intimacy to threaten, dilute or otherwise risk the brand (a valuable lesson learned by Facebook – and others – over the past year).
- Enable viewers to binge. "Tune in next time!" serials died a long time ago.

Returning to the chess analogy, it's better to go deeper into good content than sideways in attempts to be all things to all people. To stay relevant, strive to ensure the show/song/movie/game people want to watch/hear/play is only on your platform. And don't junk up your platform with low-quality content that will largely be ignored. One look at the scroll of content on cable – from the Magic Bullet Mixer infomercial to *Toddlers & Tiaras* – illustrates this vividly. With apologies to Bruce Springsteen: There's 757 channels and nothin' on.<sup>12</sup>

It's impossible to think of Netflix's streaming flywheel *not* running at today's speeds, to drive additional momentum into the coming worlds of VR, flooding the zone with original content, and more. Or consider the leadership mindset and strategic vision of players poised to jump on the entertainment opportunities afforded by the nascent technologies of AR. Lesson learned: When you hear Apple's Tim Cook or Facebook's Mark Zuckerberg talk about their strategies and visions for the AR world, pay attention. Like the old adage about hockey and pucks, you'll know it's exactly where they are skating.<sup>13</sup>



# HOW DIGITAL SPRINTERS ARE FORGING THEIR STRATEGIC PATH AHEAD



Sustaining a competitive advantage for digital M&E companies isn't just about relying on low-hanging fruit like digital advertising, which is very personalized and is ultimately why players like Facebook and Google are so effective. Even if companies have ramped up ad placement efforts (arguably cluttering up and diminishing the customer experience, not to mention wading into murkier-by-the-day waters of privacy concerns), it typically won't be enough to offset the revenue losses from traditional revenue models of yesteryear. Not everyone can be Google or Facebook, and strategically, not everyone should try to be. Relying on digital ad revenue alone might connote a failure or absence of strategic vision.

Instead, digital sprinters today are focused on building a culture of innovation and instilling a customer-focused vision. These leaders also reward "intrapreneurship" and define leadership roles. The path to digital leadership often comes down to coupling talent to a strategic vision. Like *The X-Files* of yesteryear, many firms that are digitally ahead know that "the truth is out there" (and likely inside their companies already, if they just knew where to look and how to cultivate for the future).<sup>14</sup>

Although it's important to stay ahead of the technology curve and continuously innovate products and services, digital sprinters recognize that it's more important to establish the right culture, processes and team; after that, the other pieces will fall into place. In our study, over 60% of respondents believe success is tied mainly to strategic thinking – building a culture of innovation, creating a digital vision, focusing on the customer, and ensuring the right teamwork and talent is in place (see Figure 4, next page). You might wonder, "But what about getting things done *today*?" While first-mover advantage is important to more than half of respondents (59%), opinions vary within specific sectors; for example, only 41% of film industry respondents have made significant digital progress on shortening time to market – a strategic imperative if there ever was one for film studios.

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## Fertilize Your Hedges, and Keep Your Oceans Blue

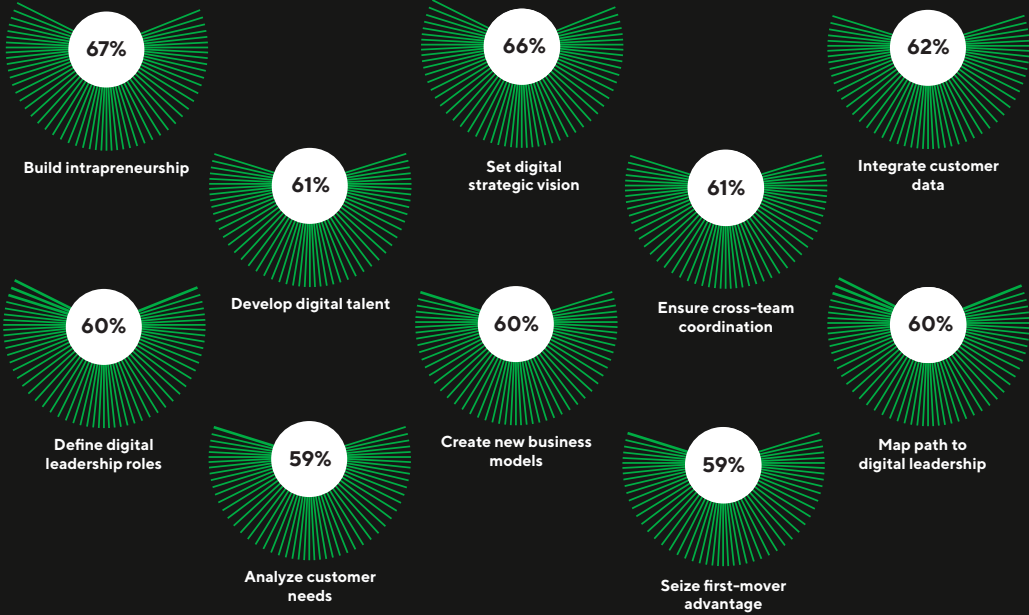
Digital sprinters also cultivate a diversity of counterintuitive approaches, hedging and arbitraging a handful of strategic initiatives. For example, are customers being engaged visually through a variety of formats and voices? How do different types of content directly contribute to the likelihood of attracting and retaining more eyes, ears, repeat views or subscribers? What about experiments with languages, simultaneous translation and emerging technologies like AR/VR and voice assistants? Most importantly, how can your organization match a variety of strategic initiatives under a cohesive media brand?

What might seem whimsical today won't seem so far-fetched tomorrow. We expect to see a quickening pace in competitive announcements that initially seem "odd." (Think Meg Whitman's NewTV startup with Jeffrey Katzenberg.<sup>15</sup>) Blue ocean strategies like these are becoming the norm across all sectors of the M&E industry. The goal is to create demand by serving new market segments that don't currently exist, a direct result of digital consumption increasing more rapidly than expected. For original content creators, global distribution occurs where there are territory-based licensing restrictions on most non-original content. Or take a niche content creator, like Studio Ghibli in Japan that creates pent-up demand through the scarcity of its content available via digital channels.

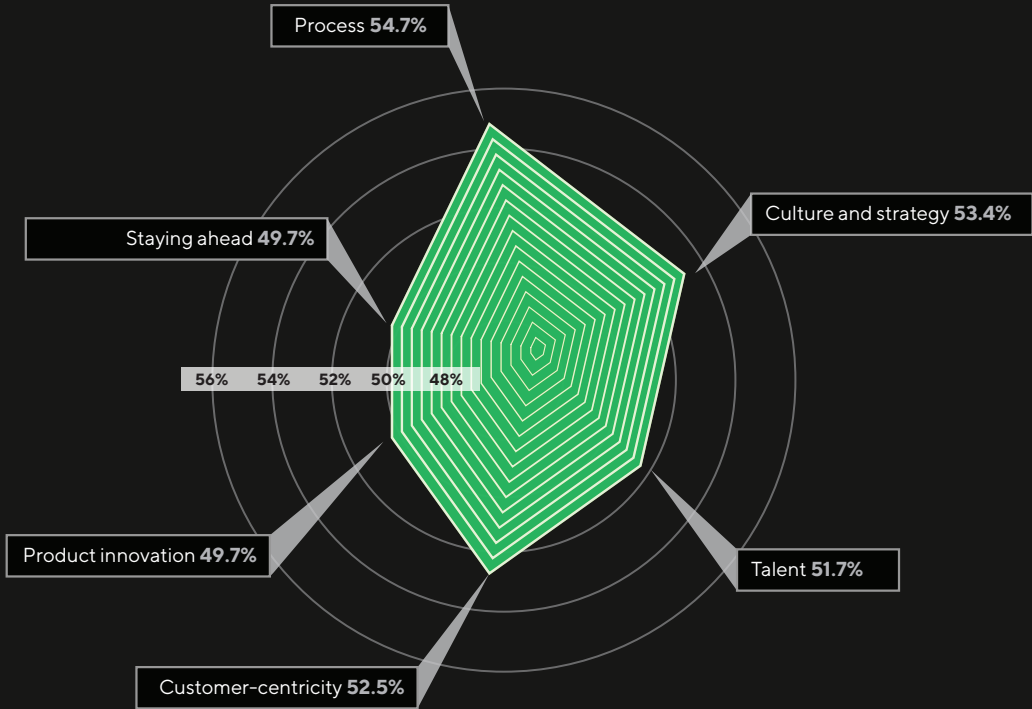


# Sprinters Stay Ahead of the Pack

Respondents were asked where their business had made significant progress in terms of digital transformation (multiple responses allowed).



When these areas of focus are grouped into categories, it becomes clear that digital sprinters' highest priorities are getting the right culture, processes and team in place.



Response base: 350 senior media & entertainment executives  
 Source: Cognizant Center for the Future of Work  
 Figure 4

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Integration of end-to-end front-, middle- and back-end processes is a hallmark of digital maturity – a level few M&E companies have yet achieved.

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## End-to-End Operating Models Connecting Customer Experience to Back-Office Processes

The key question now becomes: How do you quickly take an infrastructure and operating model and move it to a “digital first” or “digital only” model?

Several years ago, the chief data officer (CDO) role was established in many organizations to take charge of certain digital technologies or assume ownership for digital transformation. This was needed because companies were so engrained in old ways of working that they needed a separate person to gain traction with new ways of working. Now, however, the CDO role is beginning to lose prominence or disappear altogether. That’s because digital has moved beyond niche status and is now the primary way companies do business and make revenue. Organizations can no longer afford to split ownership of digital and non-digital. For this reason, technology ownership is returning to the CTO/CIO, who in many cases is responsible for integrating digital technologies and processes into all other operations.

Integration of end-to-end front-, middle- and back-end processes is a hallmark of digital maturity – a level few M&E companies have yet achieved. The payoff of reaching this exalted state is the ability to deliver exciting, immersive content that is tailored to the platform, location and language/format of the consumer’s choice, and personalized based on consumer preferences, behaviors and needs, delivered on-demand, globally, in a profitable fashion. For this to be achievable, companies need flexible systems and processes to be able to chase new opportunities and quickly pivot to new ideas.

Case in point is Archant, an English newspaper company that 10 days after the Brexit vote launched *The New European*, a publication that addressed the informational needs of the 48% who voted to remain.<sup>16</sup> Archant was able to achieve that feat as a result of agile teams coming together quickly.

In 2016, Netflix famously launched in more than 100 countries on the same day, taking into account local content rights issues and payment challenges. It could do this thanks to a flexible platform that allows it to distribute content quickly, anywhere on the globe. The spoils of end-to-end integration are many, and over the near term, failing to integrate will mean failing to compete.

# PREPARING FOR THE EXPERIENCE ECONOMY

Many M&E senior leaders have cut their teeth on products and services that are considered “entertainment.” Yet that term is likely to give way as digital technologies, including AI, big data analytics and AR, usher in the “experience economy.” Rather than passively seeking to be entertained, consumers will look for – and, soon enough, demand – mind-blowing moments catalyzed by digital tools, opening the door for creativity, self-actualization and immersive experiences. This prospect isn’t far off from where gaming companies are today. (For more on the future of AR and the experience economy, read our report “[Augmenting the Reality of Everything.](#)”)

The rise of the experience economy means that even stalwarts among the traditional M&E companies may – quickly – encounter Silicon Valley juggernauts as their biggest competitors in this arena, especially in “traditional” segments such as film and television.

The experience economy also has the potential to “melt” the sectors of the M&E industry into an ecosystem that reaches far beyond traditional segments. Today’s car companies could be tomorrow’s leading game companies. Imagine if Tesla had invented Pokémon Go! and (with all due consideration given to safety) suggested different routes and streets to take to rack up points, and working with Waze, helped to pick apart the Gordian knot of reducing traffic congestion?

Moribund retailers could reboot as places that are safe for immersive experiences. Hospitality organizations could supplant movies, TV and social media by delivering consumers’ wants and needs as curated experiences. (Airbnb Experiences, bookable one- or two-day excursions with locals, are a current example.<sup>17</sup>) Autonomous vehicles will be ripe canvasses for in-cabin, captive viewing.

AR and VR are critical enablers of the experience economy. Say you’re a huge fan of George R. R. Martin and are on a five-hour plane ride from JFK to SFO. What if you could plug into your AR *Game of Thrones* immersive channel and dynamically interact with different characters, settings or kingdoms? When you get bored, how about switching to the *Indiana Jones* channel or venturing into the world of *Stranger Things*, *Harry Potter* or the dancers of *La La Land*? And so on.

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## QUICK TAKE

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# Disney Bets on Content

Purveying high-caliber entertainment experiences since the 1920s, The Walt Disney Company understands the growing importance of offering consumers next-level immersive experiences driven by technology. (Disney's theme parks are arguably the first examples of augmented reality, successfully shutting out the outside world so guests can focus on an all-consuming curated and branded experience.)

Disney's 2017 acquisition of BamTech appears to be a pillar of its experience strategy, as the company has developed a Netflix-esque sports experience for Major League Baseball (MLB) fans.<sup>18</sup> Users create profiles that allow the platform to understand their teams, their geolocation, their players, related news and lots of other goodies.

Accumulated knowledge of fans' preferences result in compellingly tailored experiences. Pete Rose fans, for example, could do a deep dive into every aspect of his career – highlights, greatest moments, biographical notes, current interviews and the like. The BamTech platform is as sophisticated as Netflix, many believe, but is deployed slightly differently. Disney is clearly a believer, placing BamTech at the center of its emerging direct-to-consumer model, along with its planned purchase of Fox.<sup>19</sup>

In the perennial M&E tug of war between content and distribution, Disney has placed its bets on the former and is moving inexorably to allow consumers to access that content directly. Perhaps more than any other entertainment company, Disney proceeds methodically and meticulously, ensuring its every move fits with its multi-generational cradle-to-grave relationship with its customers.

## How AR/VR Will Transform Work by 2020

Respondents were asked how augmented and virtual reality technologies are likely to transform work and customer experiences for their business in 2022.

	All M&E firms	Advertising	Gaming	Cable	Broadcasting	Film	Publishing	Music
Help see things in 3-D	98%	↑100%	↑100%	↑100%	98%	↓94%	↓94%	97%
Help see information simply	77%	70%	↑97%	↑76%	72%	↑91%	↓28%	↑84%
Help see things in 2-D	70%	70%	↑83%	↓60%	70%	↑77%	↓67%	↓65%
Deliver experiences via wearables	55%	↓48%	60%	↓52%	↓45%	57%	61%	↑71%
Deliver experiences via mobile	51%	↑55%	↑54%	45%	45%	↑57%	↓33%	↑61%
Train and teach people	40%	33%	↑46%	↑43%	↑43%	37%	↓17%	↑48%
Deliver fixed/static experiences	39%	↑55%	40%	36%	↓28%	43%	↓22%	↑52%
Help people collaborate	38%	↑64%	40%	31%	30%	↑46%	↓6%	39%
Deliver repurposed experiences	34%	↓24%	↑43%	↑38%	↓21%	↑40%	33%	↑42%
Deliver head-mounted experiences	25%	24%	↓17%	↑31%	26%	↑29%	↑33%	↓16%
Deliver newly-created experiences	18%	18%	↓14%	↑29%	19%	↓14%	17%	↓10%

Response base: 350 senior media & entertainment executives

Source: Cognizant Center for the Future of Work

Figure 5

Business processes will also become AR-enhanced “journeys.” Just as most new technology today starts in the consumer space and moves to the enterprise, AR will catalyze advances in gaming – but it won’t stop there. It will meld people, places, time, space, things, business processes, changes of events, A/B choices and next-best actions into a fusion and flow we call a journey.<sup>20</sup>

As befits the advent of the experience economy, all M&E sectors will make heavy use of AR and VR by 2020 (see Figure 5). Top application areas include bringing 3-D objects to life (all sectors), helping to visualize information (gaming, film and Internet services are the big users), helping users see things in 2-D (gaming, unsurprisingly, tops the list) and delivering experiences via wearables (gaming and publishing sectors are the most interested).

GETTING  
READY  
FOR THE  
WORK AHEAD

Our research shows that most traditional M&E companies are onto the next critical phase, one that will require them to embrace digital as a tool for transforming their end-to-end operations and business models. Much work awaits the industry – for established titans and born-digitals, alike:

- **Leverage established-business strengths (such as depth of content offerings and breadth of distribution) to catch up to – and surpass – born-digital businesses.** Although start-ups had an early business advantage, traditional M&E players believe they are now neck-and-neck with their born-digital competitors. For example, born-digital companies report that 25.5% of their revenue is derived from digital channels vs. 23.8% for traditional companies. Thanks to years of digital innovation – and tapping the blossoming digital ecosystem through acquisitions and partnership – M&E incumbents believe they are now ahead in digital maturity, including the gains made from digital platforms that drive revenue and help to build their client base. In fact, 48% of incumbents said they expect to be digital leaders by 2022, markedly more than the 36% of born-digital outfits.
- **Make organizational and operational changes to forge a path to digital leadership.** M&E businesses can expect to encounter common stumbling blocks in the areas of data security, misalignment of digital investments and business goals, poor teamwork between IT and business heads, and organizational resistance. Anointing a digital leader and establishing a dedicated team is one way to move past these challenges; another is to remove the lines of demarcation between “digital” and “business operations” in favor of a boundaryless organization. A digital operating model that favors innovation, streamlined back-office processes and an entrepreneurial culture are all characteristics of digital leaders.
- **Manage the virtuous circle of digital investment.** M&E businesses should take a lesson from digital leaders inside and outside the industry, which are spending far more than the 10% average on technology (up to nearly 16%), but are seeing greater returns due to the compounding impact of their digital investments (invest more, grow more, then invest even more). We recommend at least 20% of technology budgets be geared toward digital innovation. The Catch-22: balancing business disruptions with the ability to increase investments. Some sectors, such as the beleaguered print and online news media, are challenged to find available funds for such investments, but failing to do so puts their future at risk.

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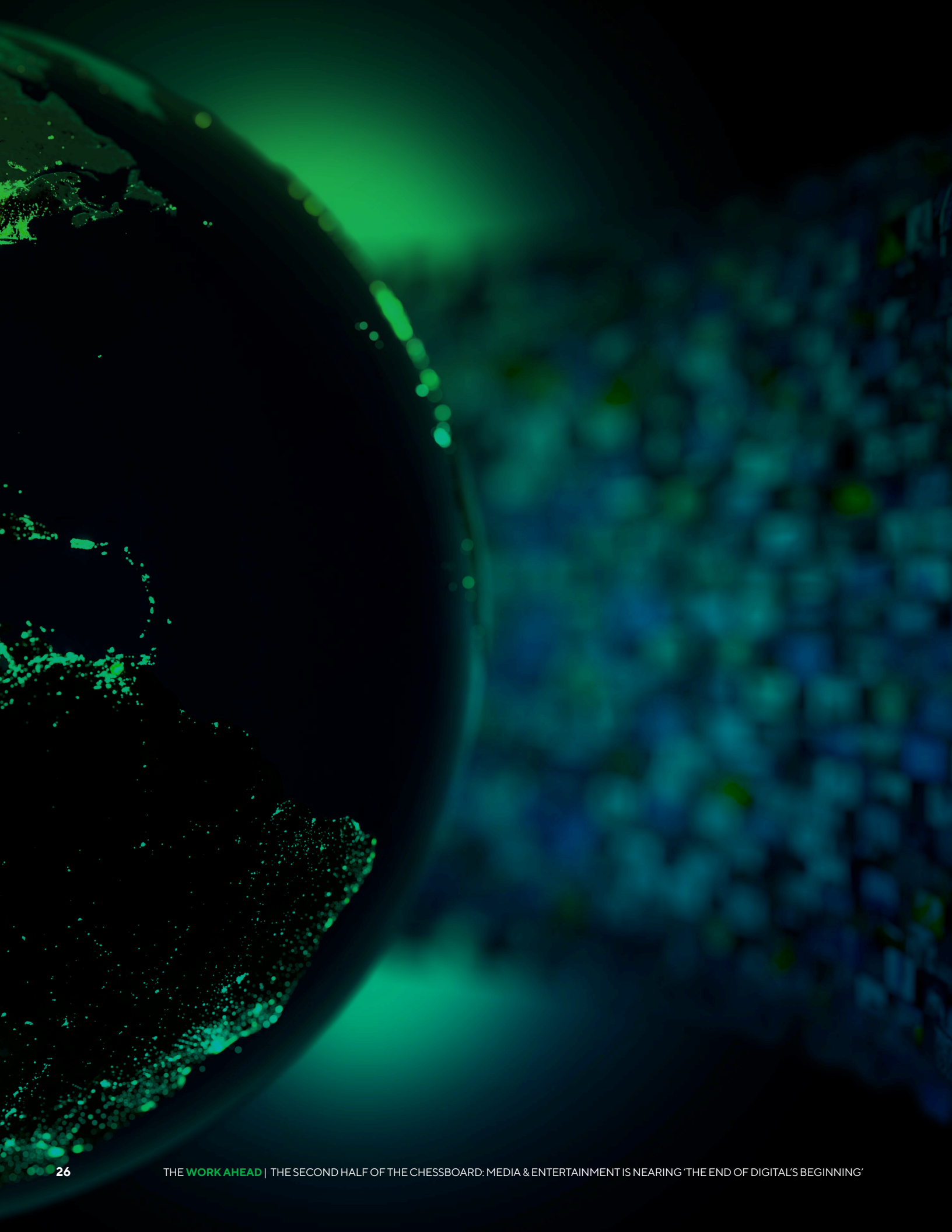


- **Begin now to experiment with advanced technologies as “entertainment” morphs into “experiences.”** Digital winners will leverage game-changing technologies over the next two to five years. Wearables will rise in mobile’s wake, and gaming engines for developers are galvanizing the emergent experiences of the AR space as the entertainment economy quickly gives way to the experience economy. In an industry that revolves around information and ideas, AI will have a major impact, as will blockchain when its use cases move from high concept to tangible reality.
- **Embrace the notion of digital ecosystems that need cultivation.** Rather than thinking they can develop everything themselves – particularly a mindset of traditional players – M&E companies need to be strategic in forging partnerships that will bring agility and speed to their go-to-market strategies. Legacy companies will find this to be a challenge because of the layers of approval or organizational barriers that discourage collaboration, systems that are not flexible and a lack of partners that can quickly help them where they don’t have the skill/ability. Digital ecosystems will be a key advantage going forward. A trusted partner can help coordinate and orchestrate the players and integrate the pieces.

As M&E reaches the end of the first phase of becoming digital, the industry has arrived at a critical inflection point. For at least the next few years, the frontline of digital transformation will reside within middle- and back-office operations, where there is much potential to apply advanced technologies to dramatically change business and operating models, with a focus on innovation.

M&E players need to reject the notion that digital transformation is a one-time thing. We are now in a cycle in which companies need to reevaluate their business models, ways of working, organizational structure and resources every few years to make sure they are positioned well. Transformation is the new normal. Your business needs to be set up culturally and organizationally to accommodate this.

At shift points like this, the old rulebooks no longer apply. If your organization feels it is doing “well enough” now, sustaining or redoubling those efforts may still not be enough moving forward. Bold moves are required to heighten contact, augment creativity and cultivate attention spans. The changes to come will make today’s M&E trends such as cord-cutting, paywalls, Slingbox, Apple TV and targeted advertising seem quaint. Like a good gamer, don’t be caught playing checkers – it’s time to start playing chess.



# Methodology

To supplement our Work Ahead program, Roubini ThoughtLab conducted a telephone survey of senior executives in the media & entertainment industry in November of 2017. The survey included 350 executives in the U.S., Canada, UK, France and Germany.

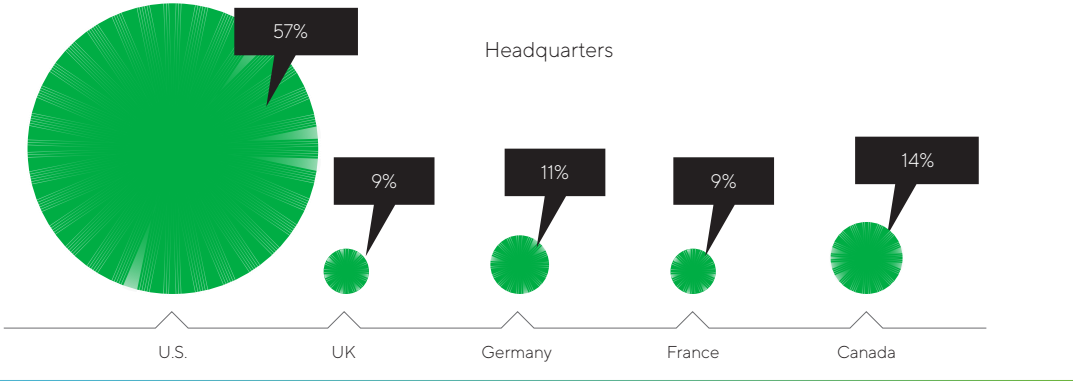
To ensure a balanced perspective, the survey cut across eight key sectors:

- Advertising
- Music
- Broadcasting
- Cable
- Filmed entertainment
- Publishing
- Gaming
- Internet services

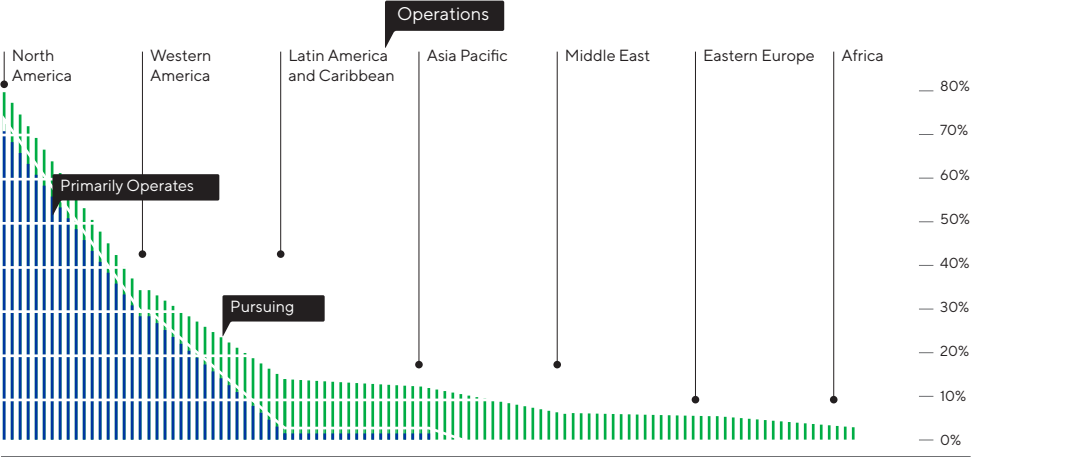
Half of the respondents worked in companies with annual revenues between \$500 million and \$999 million, and the other half in firms with annual revenues of \$1 billion or more.

## Headquarters and Areas of Operation

The M&E companies in our survey were largely from North America, by design, with the balance from the UK, France and Germany.



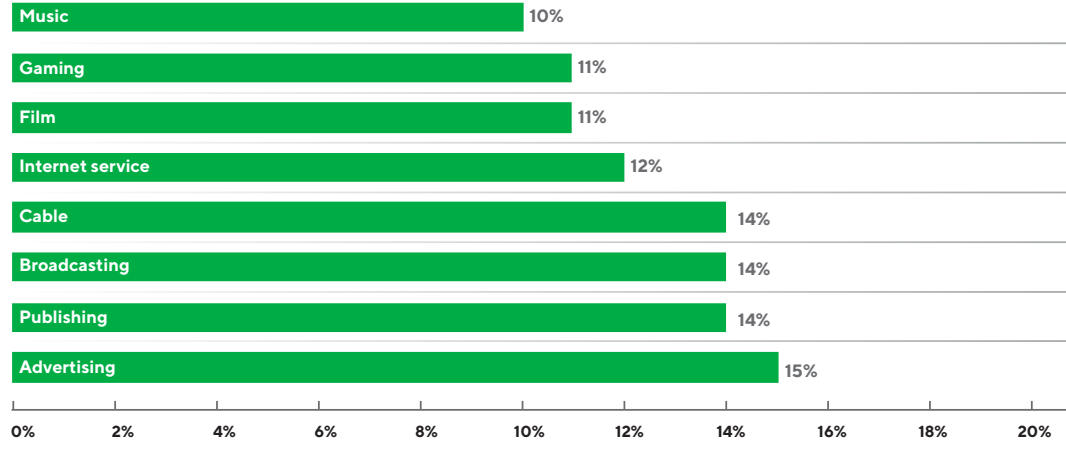
While these firms primarily operate in their home countries, they are also pursuing opportunities in other markets around the world.



Note: Respondents were asked: "In which country is your company headquartered?" (N=350) and "In which markets does your company primarily operate, and in which additional region(s) is your company pursuing? Select all that apply." (N=350)

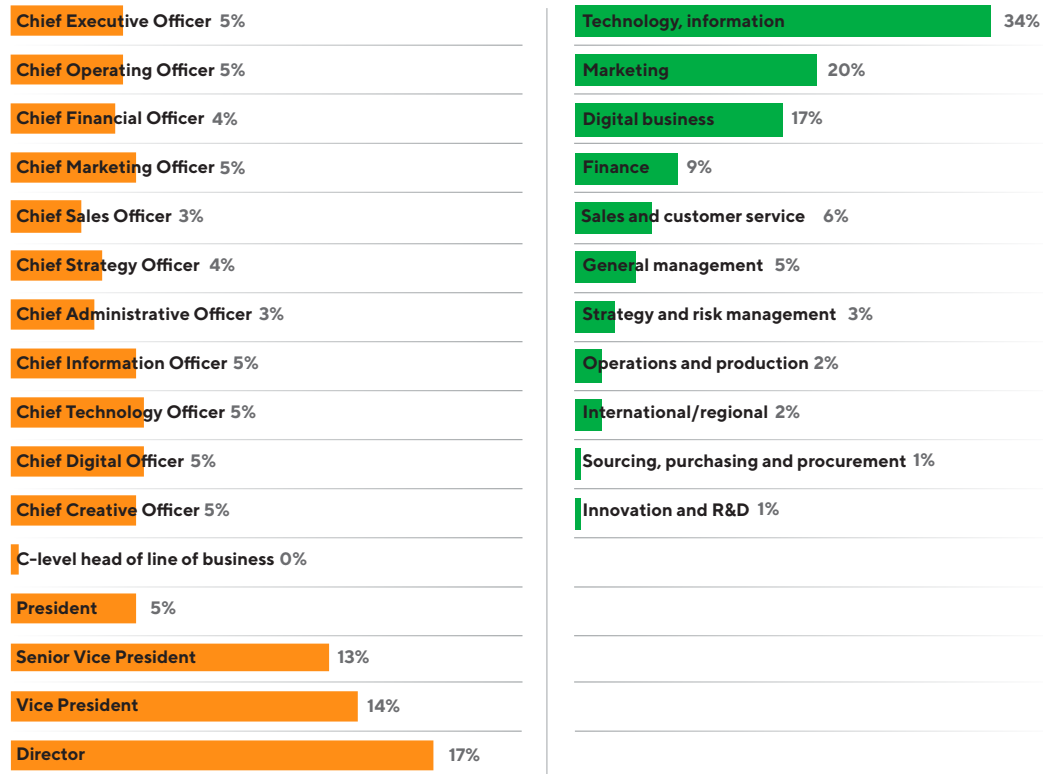
## A Cross-Section of M&E Sectors

Our survey covered a balanced cross-section of eight M&E industries. We ensured we had an adequate response for each industry for our statistical analysis. Although all of these sectors are pursuing digital transformation, they are following different paths and are using technology in diverging ways.



## Executive Level and Functional Area

To gain insight into different corporate views, we surveyed a group of C-level executives and direct reports across various functions.



# Endnotes

- <sup>1</sup> The phrase “second half of the chessboard” was coined by Ray Kurzweil, referencing the ancient “wheat and chessboard problem.” For more on the origins of this concept, see [https://en.wikipedia.org/wiki/Wheat\\_and\\_chessboard\\_problem](https://en.wikipedia.org/wiki/Wheat_and_chessboard_problem). While the number of grains on the first half of the chessboard is large, the amount on the second half is vastly (2 billion to 4 billion times) larger.
- <sup>2</sup> “The Work Ahead: Soaring Out of the Process Silo,” Cognizant Technology Solutions, 2016, <https://www.cognizant.com/whitepapers/the-work-ahead-soaring-out-of-the-process-silo-codex2436.pdf>.
- <sup>3</sup> “The Work Ahead: Mastering the Digital Economy,” Cognizant Technology Systems, 2017, <https://www.cognizant.com/Resources/the-work-ahead-mastering-the-digital-economy-codex2115.pdf>.
- <sup>4</sup> Ibid.
- <sup>5</sup> Gabriel Snyder, “How *The New York Times* Clawed its Way into the Future,” *Wired*, Feb. 12, 2017, <https://www.wired.com/2017/02/new-york-times-digital-journalism/>.
- <sup>6</sup> “Facebook Overhauls Newsfeed in Favor of ‘Meaningful Social Interactions,’” *The Guardian*, Jan. 11, 2018, <https://www.theguardian.com/technology/2018/jan/11/facebook-news-feed-algorithm-overhaul-mark-zuckerberg>.
- <sup>7</sup> For more on blockchain adoption and its potential for multiple industries, visit the blockchain portion of our website, <https://www.cognizant.com/blockchain>.
- <sup>8</sup> Lucas Matney, “With New Realities to Build, Unity Positioned to Become Tech Giant,” *Techcrunch*, May 25, 2017, <https://techcrunch.com/2017/05/25/with-new-realities-to-build-unity-positioned-to-become-tech-giant/>.
- <sup>9</sup> James Dean, “WPP’s Mad Men Joining Brain Drain to Google and Facebook,” *The Times*, Nov. 28, 2017, <https://www.thetimes.co.uk/article/wpp-s-mad-men-joining-brain-drain-to-google-and-facebook-0d26v3slk>.
- <sup>10</sup> A *Saturday Night Live* skit featured Reed Hastings (played by Jason Sudeikis) apologizing for Qwikster: <http://www.nbc.com/saturday-night-live/video/netflix-apology/n13218?snl=1>.
- <sup>11</sup> Todd Spangler, “Netflix Eyeing Total of About 700 Original Series in 2018,” *Variety*, Feb. 27, 2018, <http://variety.com/2018/digital/news/netflix-700-original-series-2018-1202711940/>.
- <sup>12</sup> “57 Channels (and Nothin’ On),” written by Bruce Springsteen, appearing on the album *Human Touch*, released in 1992.
- <sup>13</sup> “Augmenting the Reality of Everything,” Cognizant Technology Solutions, 2017, <https://www.cognizant.com/whitepapers/augmenting-the-reality-of-everything-codex3050.pdf>.
- <sup>14</sup> “The truth is out there” is the tagline for the TV series *The X-Files*, which ran from 1993 to 2002.
- <sup>15</sup> Jonathan Vanian, “Meg Whitman Appointed CEO of Jeffrey Katzenberg’s Mobile Media Startup NewTV,” *Fortune*, Jan. 24, 2018, <http://fortune.com/2018/01/24/meg-whitman-jeffrey-katzenberg-newtv/>.
- <sup>16</sup> Peter Preston, “The New European Is Still a Thing of Joy,” *The Guardian*, July 9, 2017, <https://www.theguardian.com/media/2017/jul/09/the-new-european-thing-of-joy-going-strong-one-year-after-launch>.
- <sup>17</sup> Leigh Gallagher, “Airbnb CEO: Here’s How ‘Experiences’ Are Doing So Far,” *Fortune*, Oct. 23, 2017, <http://fortune.com/2017/10/23/airbnb-ceo-experiences-new-york/>.
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Cognizant's Center for the Future of Work™ is chartered to examine how work is changing, and will change, in response to the emergence of new technologies, new business practices and new workers. The Center provides original research and analysis of work trends and dynamics, and collaborates with a wide range of business, technology and academic thinkers about what the future of work will look like as technology changes so many aspects of our working lives. For more information, visit [Cognizant.com/futureofwork](http://Cognizant.com/futureofwork), or contact Ben Pring, Cognizant VP and Managing Director of the Center for the Future of Work, at [Benjamin.Pring@cognizant.com](mailto:Benjamin.Pring@cognizant.com).

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