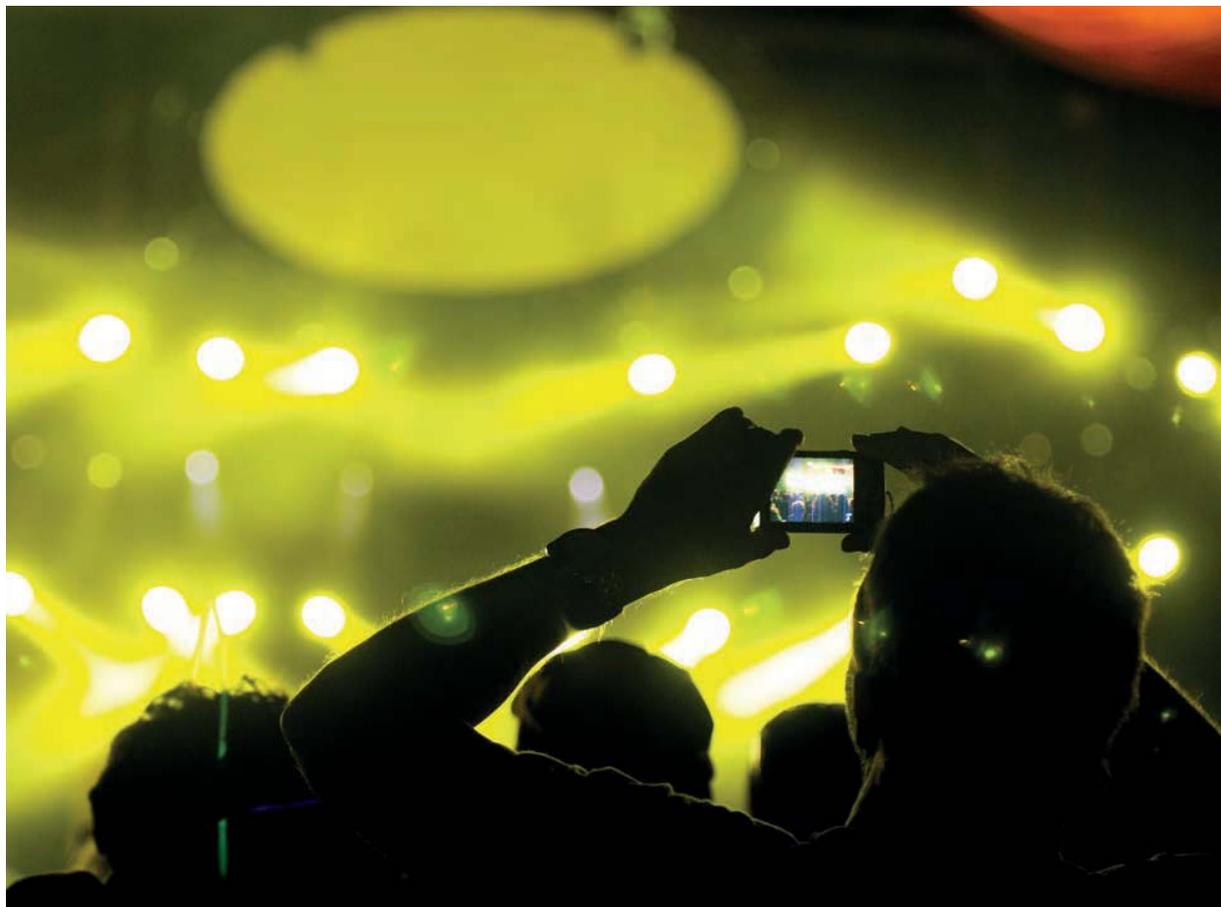

***Perspectives from the Global
Entertainment and Media Outlook
2017-2021***

Curtain up!

User experience takes center stage



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***Perspectives from the Global
Entertainment and Media Outlook
2017–2021***

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User experience takes center stage

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About this report



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Brad Silver

Each year we take a deep dive into the findings of our Global entertainment and media outlook. Whether you're a newcomer to the Outlook or a longtime subscriber to our data, you should regard this document as an annual report for businesses that invest and operate in the entertainment and media (E&M) industry and in related sectors, such as technology, communications, retail, and e-commerce.

As you read through this report, we're confident you will come away with actionable business insights based on the trends we're identifying and charting across the 17 defined segments and 54 countries our research covers. The authors of this report connect the dots between the business challenges our clients face today, whether they are coping with value-chain disruption or mapping an M&A strategy, and the highly detailed segment and country data that emerges from the research.

The intensive debate, discussion, and analysis we engage in each year yields important insights. For 2017, we see an important set of takeaways that should inform and shape your strategy. Companies that wish to capture value amid shifting consumer preferences and business model disruptions must focus on an increasingly prominent source of competitive advantage: user experience. They must harness technology and data to attract, retain, and engage users — and convert them into devoted fans.

And these imperatives assume a larger importance because, as we document, the E&M industry is confronting several challenges to continued top-line growth.

To learn more about how the findings in this report can apply to your business, or how your company can subscribe to the full body of Outlook research, please connect directly with your local PwC team. Alternatively, you can reach out to either of us, and we'll put you in touch with our local leaders in your geography. We look forward to hearing from and working with you.

Best regards,

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Methodology and definitions

Historical data collection

All forecasts have been built starting with the collection of historical data from a variety of sources. A baseline of accurate and comprehensive historical data is collected in the first instance from publicly available information, including from trade association and government agencies. When this data is used directly, these sources are cited accordingly. In addition, interviews with relevant associations, regulators and leading players have been held to gather insights and estimates not available in the public domain. When this information is collected, it is used as part of calculations, and the sources are proprietary.

Forecasting methods

All forecasts are prepared as part of a collaborative, integrated process involving both quantitative and qualitative analysis. The forecasts are the result of a rigorous process of scoping, market mapping, data collection, statistical modeling, and validation.

Note: The only source of all consumer and advertising spend data is the Global entertainment and media outlook; however, all the data, charts, and graphs (unless stated otherwise) in this publication are taken from the Global entertainment and media outlook.

Definitions

Do you want access to consumer and advertising spending data at the click of a button? The Global entertainment and media outlook is a comprehensive source of global analyses and five-year forecasts of consumer and advertising spending across 54 countries for 17 segments:

- Books
- Business-to-business
- Cinema
- Data consumption
- E-sports
- Internet access
- Internet advertising
- Internet video
- Magazines
- Music
- Newspaper
- Out-of-home advertising
- Radio
- Traditional TV and home video
- TV advertising
- Video games
- Virtual reality

To access the full segment definitions for the Outlook, please visit www.pwc.com/outlook

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Many other professionals from the PwC entertainment and media practice, across 54 countries, reviewed and added local expertise to this publication.





Curtain up!

by Deborah Bothun and
Christopher Vollmer

Executive summary

It's a cliché to note that something fundamental has changed in the global entertainment and media (E&M) industry. But the reality is that something significant *has* changed. E&M companies have been accustomed to competing and creating differentiation primarily based on two dimensions: content and distribution. Now they must focus more intensely on a third: user experience.

To thrive in a marketplace that is increasingly competitive, slower-growing, and dependent on personal recommendations, companies must develop strategies that engage, grow, and monetize their most valuable customers — i.e., their fans. To do so, they must combine excellent content with breadth and depth of distribution, and then bring it all together in an innovative user experience, in which the content is discoverable easily on an array of screens and at an attractive price. Simply capturing the natural growth in consumers and their uptake of services and content with existing approaches is no longer sufficient.

Across the industry, the resulting quest to create the most compelling, engaging, and intuitive user experiences is now the primary objective for growth and investment strategies — and technology and data lie at their center. Pursuing these strategies will help companies thrive in an era of complexity and slowing top-line growth from the traditional revenue streams that have nourished the E&M industry to date.



A new focus on the user

Historically, the debate in the E&M industry has revolved around the relative importance of content versus distribution, and the strategic value of combining the two. We've seen this play out in vertical integration, industry consolidation, and, to dust off a phrase from the recent past, digital convergence strategies. More always equaled better, and size itself became the defining competitive advantage.

Rapid changes in technology, user behavior, and business models, however, have created a gap between how consumers want to experience and pay for entertainment and media and how companies produce and distribute their offerings. To bridge this gap, companies should pursue two related strategies: (1) focus their efforts on building businesses and brands anchored by active, higher-value communities of fans, who are united by shared passions, values, and

interests; and (2) capitalize on those emerging technologies that delight users in new ways, deliver superior user experiences, and enhance productivity (see Exhibit 1).

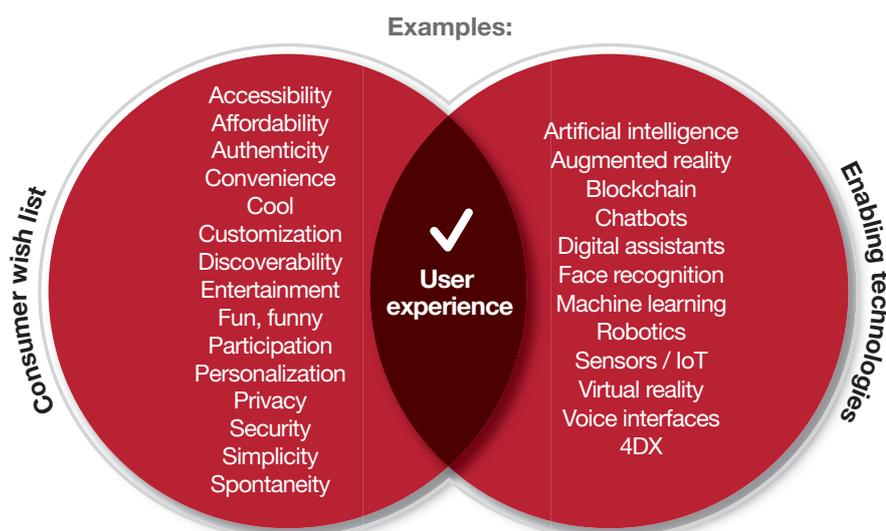
Fan-centric businesses

In a Summer 2017 *strategy+business* article, "How to Make Entertainment and Media Businesses 'Fan'-tastic," Christopher Vollmer described why E&M businesses built around fans command multiple strategic advantages in today's hypercompetitive landscape. The steady march of digital technology has ushered in a more direct-to-consumer environment characterized by greater choice and user control. With an ever-greater supply of media, there is simply too much competition to allow E&M businesses to survive on experiences that disproportionately cater to casual "eyeballs," infrequent users, and other lower-value audiences. By contrast, businesses that are fan-centric will find

themselves with audiences that are more engaged, are more committed, and spend more per capita. Today's fans will also recruit tomorrow's. And companies that "super-serve" fans via new and deeper experiences will move faster to unlock opportunities for revenue expansion. Embracing a fan-centric approach requires making transformational changes throughout the enterprise. Ultimately, the four most important priorities for business leaders to consider are:

- **Know who the fans are.** Companies must be able to distinguish their fans from casual users, understand what drives fandom for their brands, and analyze the relative value of different audience or user segments. This creates an imperative to build deeper user insights and better targeting capabilities. To do this, E&M companies must strengthen capabilities in data analytics, measurement, and management. They can then more readily analyze what converts users into higher-value fans. These insights can help executives concentrate resources on the initiatives that matter most for driving overall company growth and profitability.
- **Increase business agility and flexibility.** Today's fast-moving, tech- and experience-driven market is compelling E&M companies to optimize their operations in new ways. Organizations need to be wired so they have the flexibility to respond faster to new user preferences, new business models, and new technologies. Teams must be more multidisciplinary in their approaches — bringing together expertise across content, product, technology, distribution, and sales more smoothly than ever before. For many E&M businesses, this means transforming organization structure, teaming models, and company culture.

Exhibit 1: Move over, content. Move over, distribution. User experience is king



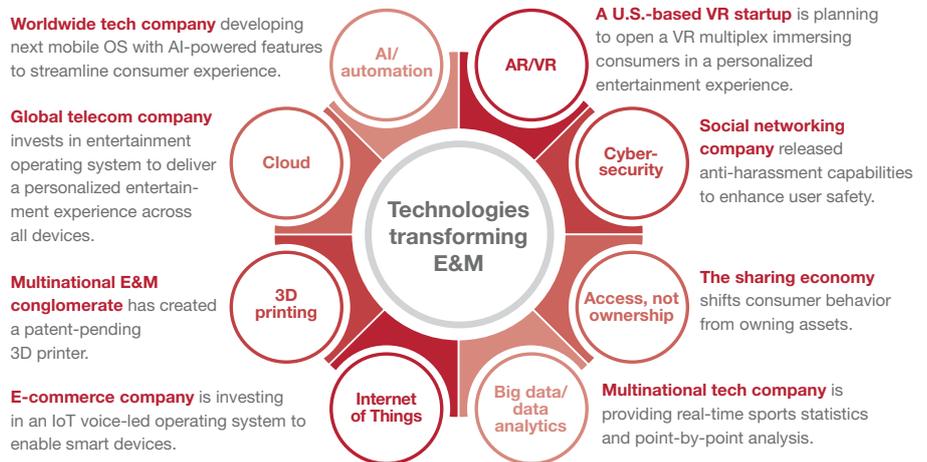
Source: PwC

- Monetize the total fan relationship.** Fans want to do more with their favorite E&M brands than just watch. And fans are by definition fanatics: They are the users who cannot get enough of the brands they love. Following fan passions creates a natural pathway to identifying new revenue opportunities. By superserving fans and extending the brands and franchises associated with passionate fans into new areas, E&M companies can create additional revenue opportunities in core offerings across multiple business models, including advertising, subscriptions, and transactions.
- Adopt a user-/fan-centric focus.** Leading E&M companies will develop the capabilities to compete and win in an increasingly direct-to-consumer landscape. This means moving from playing solely in a wholesale world, where other players in the value chain often manage the end-user relationship, to operating in a more retail-like environment, where companies deliver end-to-end experiences directly to users, consumers, and fans. Capabilities in areas such as user interface design, customer acquisition and retention, personalization, customer service, and even billing will therefore become more critical to E&M success moving forward.

Improve user experience through emerging technologies

For E&M companies, a great user experience (UX) and advances in data and digital technology — along with great content — provide the makings of a virtuous circle. Increasing engagement and attention can lead to the capture of more data and more understanding about what crucial customers want. And that understanding enables companies to further refine, target, and engage their core audiences in ways that delight

Exhibit 2: Companies are leveraging emerging technologies to enhance the user experience



Source: *Business Insider, Forbes, Variety, International Data Corp., Tech News World, CNBC, PwC*

and retain them. That ultimately creates further opportunities for value creation.

In the U.S. and China, a few large companies — Netflix, Tencent, Baidu — have successfully embraced emerging technologies to achieve these goals. In their Summer 2017 *strategy+business* article, “AI Is Already Entertaining You,” Deborah Bothun and David Lancefield explored how technology, media, and telecommunications companies are using artificial intelligence (AI) solutions to increase productivity, enhance creativity, and innovate in ways that address consumers’ desires and challenges. Although we’re still in the early days of machine learning and autonomous systems, many of the executives Bothun and Lancefield interviewed recognize that AI is not just another IT investment — it is becoming part of the technology stack and touches all parts of the business. AI is a key component of seven of the eight emerging technologies PwC has identified as having the biggest

potential to improve user experience (see Exhibit 2).

A caveat is necessary in any discussion of investments in technology and data. It is increasingly challenging to measure with great precision the E&M industry revenue and value generated by the collection, mining, and use of data. If companies can deploy data to sell more subscriptions, capabilities in this area will show up in revenue totals immediately. But, of course, there are ways to monetize data that aren’t captured by traditional methods of E&M spend measurement — for instance, data can be used to enhance e-commerce, build brand loyalty, and increase engagement. These factors are implicitly included in valuations of companies, but not necessarily in the traditional revenue measurement buckets.

A slowdown in global growth

Across segments, and at any stage of the economic cycle, it is clear that connecting with consumers as fans and focusing on the user experience can be powerful levers for growth and profitability. These capabilities assume a particularly high importance when top-line growth begins to ebb in a sector or industry. Which is precisely the challenge many participants in the E&M industry are facing. In our annual review of the Global entertainment and media outlook data, we look at a composite of all 54 countries and 17 segments included in the study to arrive at a global market forecast. Few businesses have global strategies that neatly match all of these markets. Still, we use this approach to take the temperature of how the overall industry is faring from year to year. Over the next five years we're projecting that annual growth in the E&M industry will average 4.2 percent, down from the 4.4 percent CAGR we forecast last year.

Barring a step change in technology, experiences, or platforms, the growth rate of the E&M industry will be below the growth rate of global GDP. Simply put, based on the traditional revenue streams that have driven growth historically, E&M is losing market share in the global economy (see *Exhibit 3*).

Why is this happening? This slowdown stems from a set of challenges that are specific to E&M businesses as well as larger factors that are affecting many industries.

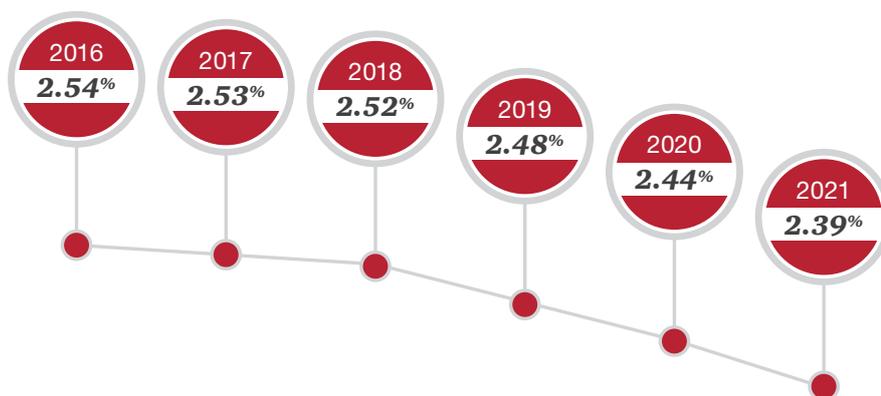
Are consumers maxed out on media?

Because so many of our conversations with CEOs and board members currently start off with questions about overarching geopolitical, regulatory, and technological uncertainties, we're confident that some of the projected decline in growth stems from these risks. (See "A trio of macro challenges," page 18.) However, even if we hold the macro risk steady, the E&M industry is

Based on the traditional revenue streams that have powered growth to date, E&M is losing market share in the global economy.

Exhibit 3: Global E&M revenue as a share of global GDP

E&M revenue will fall as a share of global GDP over the next five years



Source: Global entertainment and media outlook 2017–2021, PwC, Ovum

facing significant pressures on growth. That's because it appears we may have arrived at a tipping point. In many of the largest markets, and hence in the industry as a whole, E&M businesses are approaching or have reached a form of saturation. It may be that there are limits to the willingness and ability of people to consume and pay for the expanding array of media products and services. But it could also be that as digital media markets mature, and as user experiences improve, consumer and advertising spending is becoming more efficient. As consumers purchase streaming subscriptions instead of buying music downloads, and as advertisers make targeted online buys

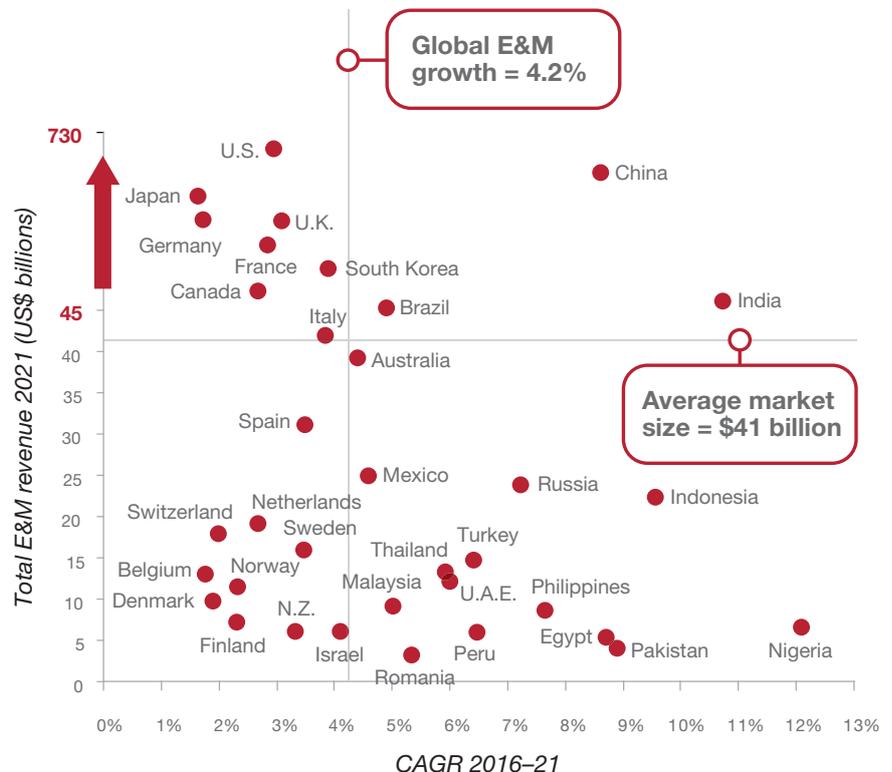
instead of mass-media purchases, their overall spending may not grow as rapidly as in the past.

The same truism that holds for most consumer markets holds true for the E&M industry: As markets mature, they grow more slowly (*see Exhibit 4*). The most rapid growth rates will be seen in less-developed markets and economies, where E&M spending on a per capita basis is generally quite low (*see Exhibit 5*).

There are no real outliers or exceptions to this rule. As Exhibit 4 (call it a seesaw chart) shows, the top left quadrant is populated by mature markets in North America and Europe, and wealthier

Exhibit 4: A world of differences

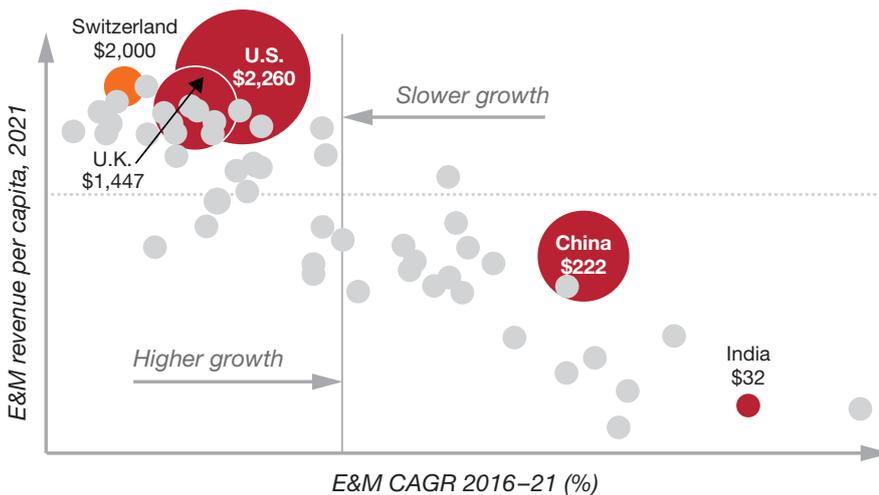
Scale vs. growth in global E&M markets



Source: Global entertainment and media outlook 2017-2021, PwC, Ovum

Exhibit 5: Markets with low per capita spending will grow most quickly

- Each bubble represents a country
- Size of bubble represents total E&M revenue
- Dollar amount represents per capita spending



Source: Global entertainment and media outlook 2017-2021, PwC, Ovum

Asia-Pacific markets, in which consumers spend a lot — more than US\$500 per capita annually — on E&M. In both the U.S. and Switzerland, consumers spend more than \$2,000 per capita. The bottom right quadrant is home to less-developed economies, which, although they may be highly populous, feature much lower per capita spending. In five of those markets (Pakistan, Nigeria, India, Egypt, and Vietnam, which have a combined population of 1.9 billion), per capita E&M spending is less than \$50 per year. Although revenues are rising rapidly in these markets, they are doing so from a very low base. As a matter of mathematics, the rapid growth in the lower right quadrant can't compensate for the lower growth in the upper left quadrant over the forecast period.

The majority of the traditional industry segments included in the Outlook forecast also show a decline in projected

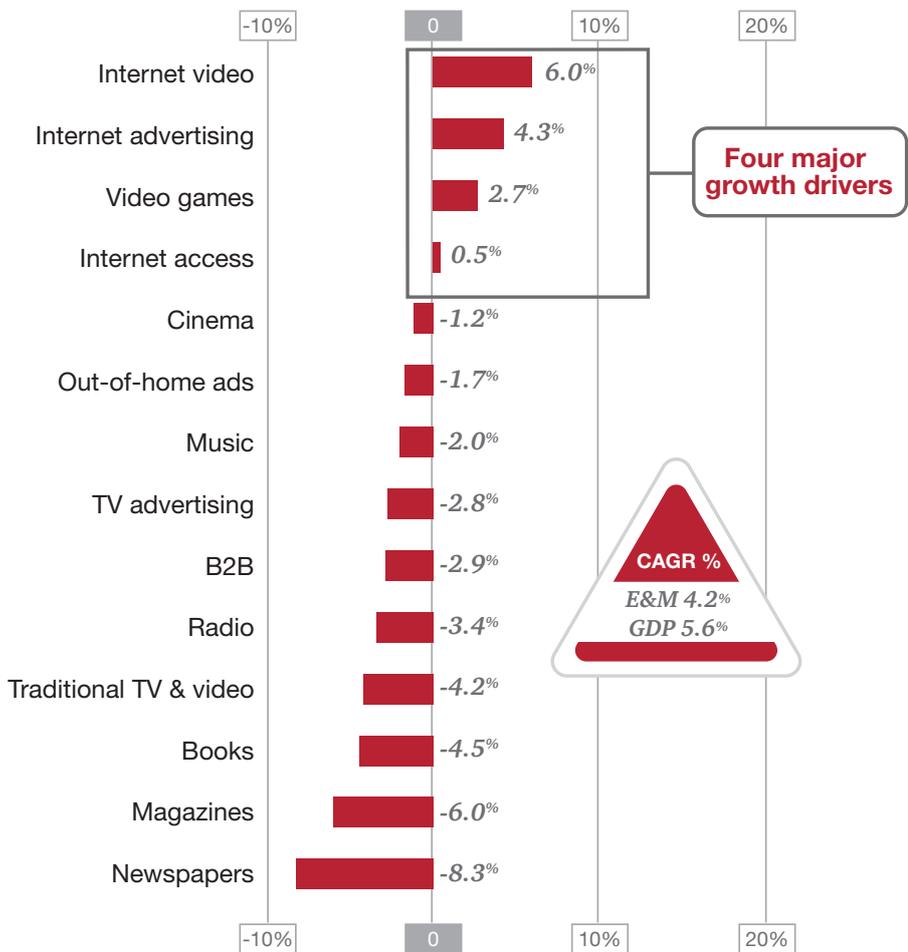
growth rates. Over the next five years, most E&M segments will struggle to keep pace with GDP growth. Only two segments, newspapers and magazines, are declining in absolute terms. But other major segments, including TV advertising, B2B content, and cinema, will shrink as a share of the global economy between now and 2021. And the areas that are showing growth, such as Internet video and Internet advertising, are not sufficiently large to overcome the stagnation in other areas (see Exhibit 6, next page).

In other words, we are approaching an industry plateau. Traditional, mature segments are in decline, the Internet and digital E&M content is growing but at a slowing rate and the next wave of content and entertainment is in areas such as e-sports and virtual reality, which are just beginning to ramp up. According to Nielsen's 2016 report on

It could be that as digital media markets mature, and as user experiences improve, consumer and advertising spending is becoming more efficient.

Exhibit 6: Internet video, Internet ads, gaming, and access are the engines powering global E&M growth

CAGR minus GDP growth by segment, 2016–21



● GDP CAGR %

Note: E-sports and VR have been excluded from this chart because their very high growth rates (from very low bases) would distort the scale. The data consumption segment is not included here because it is a usage-based metric.

Source: Global entertainment and media outlook 2017–2021, PwC, Ovum

total audience measurement, U.S. adults now spend 10 hours and 39 minutes a day consuming media, including an average of 4 hours and 31 minutes spent watching live television. Because the U.S. is the largest revenue market for both E&M overall and per capita spending, it is hard to see how its consumers will continue to boost their consumption and spending at levels above GDP growth unless there is a major change in “must have” technologies and brands. One example of such a technology step change could come with the adoption of autonomous vehicles — which would significantly add to the number of available screens and screen time for consumers.

Emerging areas

There’s another possible explanation for the apparent slowdown in growth. The universe of what is considered E&M spending is clearly expanding, in an ever-proliferating range of venues, platforms, devices, arenas, and consumer products. But many of these areas, which have significant growth potential, are not captured directly in the 17 segments that we follow. Many companies are channeling portions of their advertising budgets to e-commerce sites, but those totals are not aggregated. The tallies of cinema box office do not include the growing revenues movie theater owners realize from using their properties to stream sporting and music events. Live events have great appeal. Live music, a \$25.6 billion business, is projected to grow at a 3 percent CAGR through 2021. And we haven’t traditionally broken out live theater, which is booming: Broadway box office sales in 2016 alone were \$1.4 billion.

Pockets of divergence

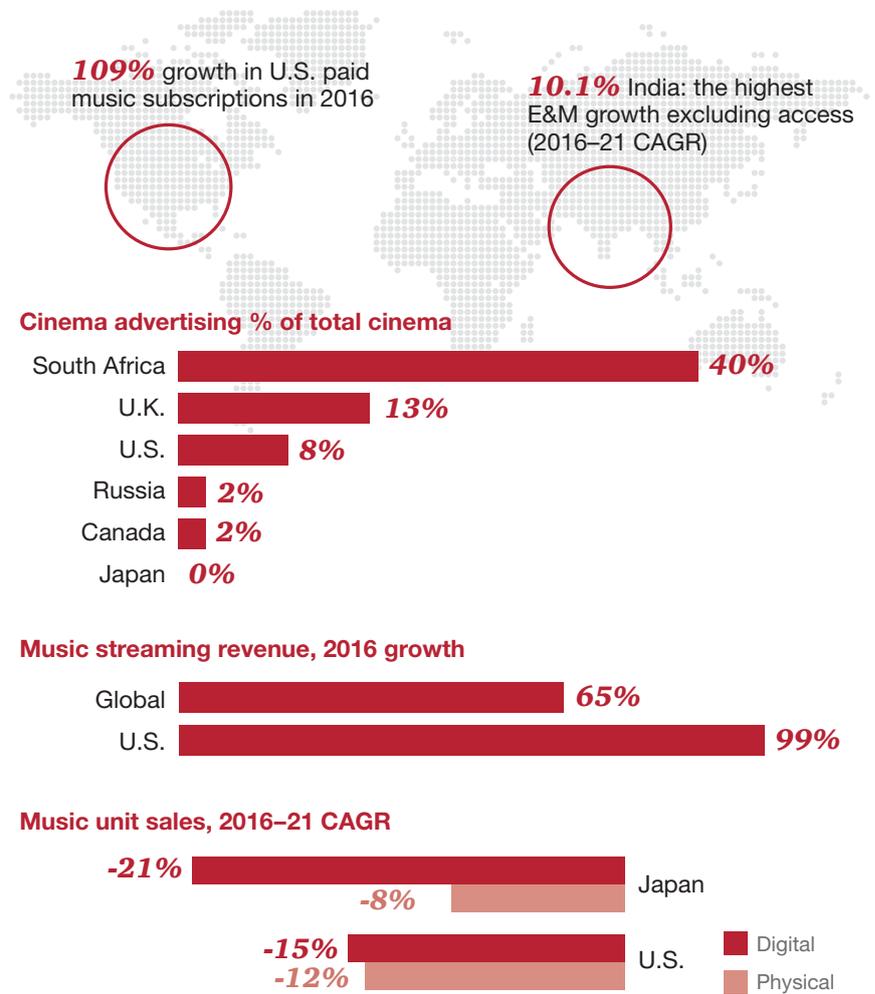
Not all markets or segments are slowing or in decline. Pockets of divergence and potential market growth opportunities surfaced in several areas of our research (see Exhibit 7).

Cinema. Global box office spending may be under pressure. But we were struck by the varying amounts of ad-based revenue as a proportion of cinema revenue — from essentially nothing in Japan to 40 percent in South Africa. Cinema is a medium that commands consumers' absolute attention — in most cultures, engaging with a second screen (e.g., checking email or Facebook on a smartphone during a movie) is frowned upon. These factors make cinemas an especially good place for targeting younger demographics. Although there might be resistance in certain countries to viewing ads, we believe there is ample room in many developed countries to use the largest screens available as a vehicle for targeted campaigns.

Music in Japan. Thanks to enduring consumer preferences, Japan's physical music unit sales will withstand the difficult global climate far better than other countries. Indeed, with projected unit sales of 88 million in 2021, Japan will have the highest such sales in the world and be one of the few markets that see only single-digit declines. Japan is the one remaining country in the world where Tower Records has a physical presence. Total music revenue per capita in Japan will be \$43 in 2021, nearly five times the global average of \$9.

E&M in India. E&M revenues will grow rapidly despite the fact that India is the least digitized of the 54 markets

Exhibit 7: Global divergences



Source: Global entertainment and media outlook 2017–2021, PwC, Ovum

we cover. This paradox actually makes sense. The low level of Internet access in India means the country's growing number of middle-class consumers have comparatively limited access to digital content and experiences. As a result, Indian consumers are investing

more of their rising incomes in *non-digital* traditional print and broadcast physical media, shielding segments such as television from the digital competition they face in other markets.

A trio of macro challenges

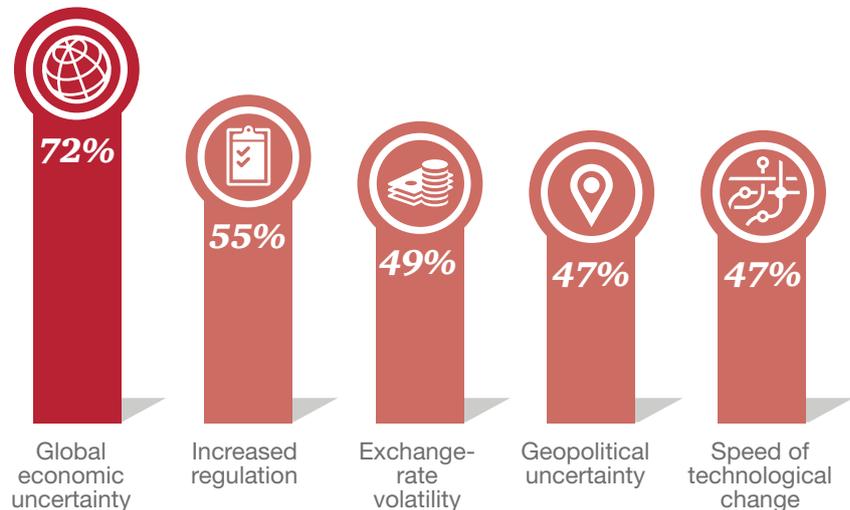
As E&M companies face a host of challenges particular to their own industries, they are also confronting big-picture forces that affect all companies operating in today's global context.

Economic and geopolitical risks.

According to the 2016 CEO Pulse study from PwC's Global Crisis Centre, economic and geopolitical uncertainties are among the top two threats for companies today (see Exhibit 8). The growth forecasts for the E&M industry have been lowered in part to reflect the broad-based economic and political uncertainty that has stemmed from the U.K.'s Brexit plans and from national elections in which populist and anti-globalization themes have emerged — whether it is in the U.S., France, or the Netherlands. Despite its promise, Latin America, and particularly Brazil, remains hampered by issues of governance. China's growth remains steady although not without significant challenges: economic imbalances continue to grow, leadership has slowed market reforms, and economic trade-offs are becoming more acute.

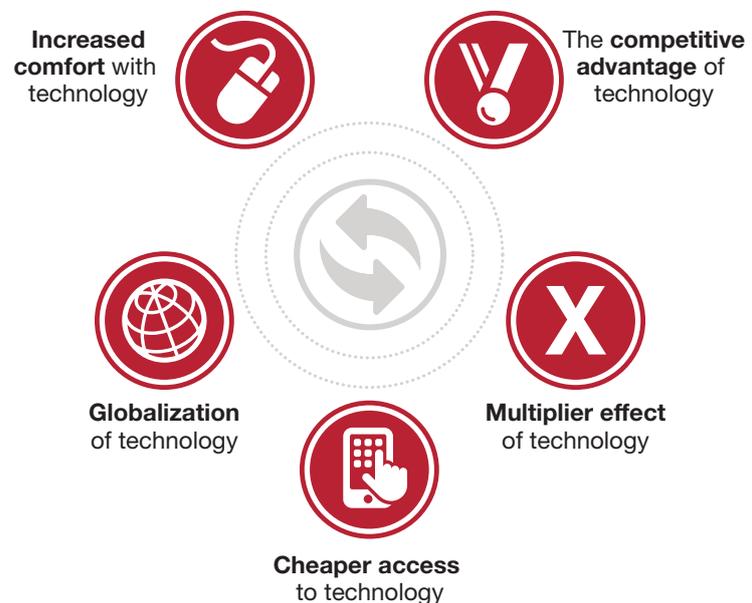
There's always a base level of uncertainty inherent in the global economy. But the severity of issues such as slow growth, currency policy, civil unrest, and geopolitical tensions have intensified concerns.

Exhibit 8: Global economic uncertainty is the top threat identified by CEOs



Source: PwC CEO Pulse 2016

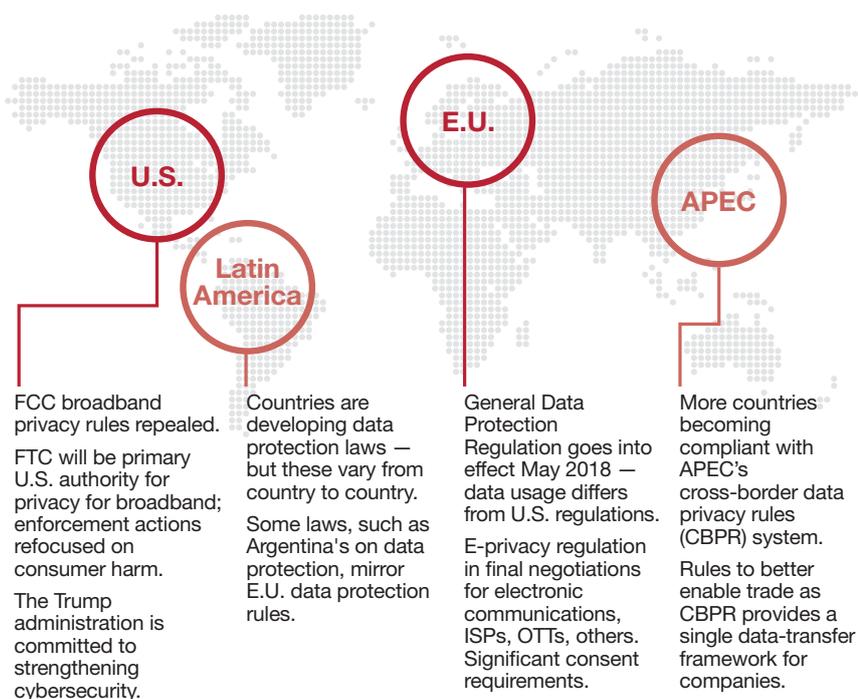
Exhibit 9: Catalysts of change



Source: PwC

Exhibit 10: Data protection regulations are evolving in the United States and abroad

Data privacy and security are top of mind today for policymakers and regulators in the U.S. and abroad:



Stakeholder-generated codes of conduct/best practices and the need for **interoperable global standards** are emerging as key policy themes, as regulators do not want to stifle innovation in industries such as the IoT, autonomous vehicles, commercial drones, artificial intelligence, and other emerging technologies.

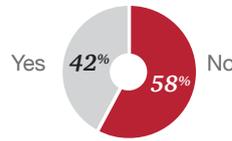
Source: PwC

Speed of technological change.

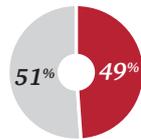
Technological advancements are appearing rapidly and simultaneously across many industries (see Exhibit 9). The E&M industry is facing a significant level of uncertainty concerning the speed of change in areas such as AI, 5G networks, IPv6 protocols, virtual reality (VR), and the Internet of Things (IoT). At the same time, uncertainty also surrounds the speed of monetization and the viability of new business models enabled by these new technologies. The concerns created by the confluence of these disruptions may have a chilling effect on investments. Alternatively, they could be largely offset by an increased level of spending on related consumer categories such as e-commerce, or by faster Internet speeds and more powerful devices that are fundamental to improving the user experience.

Regulatory risks. CEOs in all industries identified increased regulation as the second-most common threat. And within the E&M industry, regulatory challenges are evident in every major region. Beyond the changes to be expected with a new administration in the U.S., around the world we are seeing that issues of data privacy and security are capturing the attention of policymakers and regulators. Stronger regulations in these areas could make it more difficult to track data about personal preferences, thereby making it harder to improve the user experience (see Exhibit 10).

Exhibit 11: Are you paying more today for video content than you were one year ago?



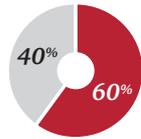
Pay-TV subscribers



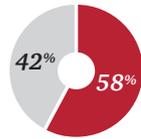
Cord trimmers



Cord cutters



Cord nevers



Total

● Yes ● No

- **Traditional pay-TV subscribers:**
 - Skew 35+ (69%)
 - Oldest group in survey
 - Report highest household income of all four groups
- **Cord trimmers:**
 - Under 35
 - Over one-third are 18 to 34 years old
 - Many have adopted skinny bundles to lower cost
- **Cord cutters:**
 - Skew younger than 35
 - Lower-than-average disposable income
- **Cord nevers:**
 - Youngest group in survey
 - 68% are younger than 35
 - Never subscribed to pay-TV
 - Prefer to cherry-pick content
 - Lowest household income



The baby boomers are aging out of their prime consumption years, and the generations that replace them may not exhibit the same propensity to spend on E&M.

Shifts in generational preferences

There's another long-term challenge to top-line growth. The baby boomers are aging out of their prime consumption years, and the generations that replace them may not exhibit the same propensity to spend on E&M. Over

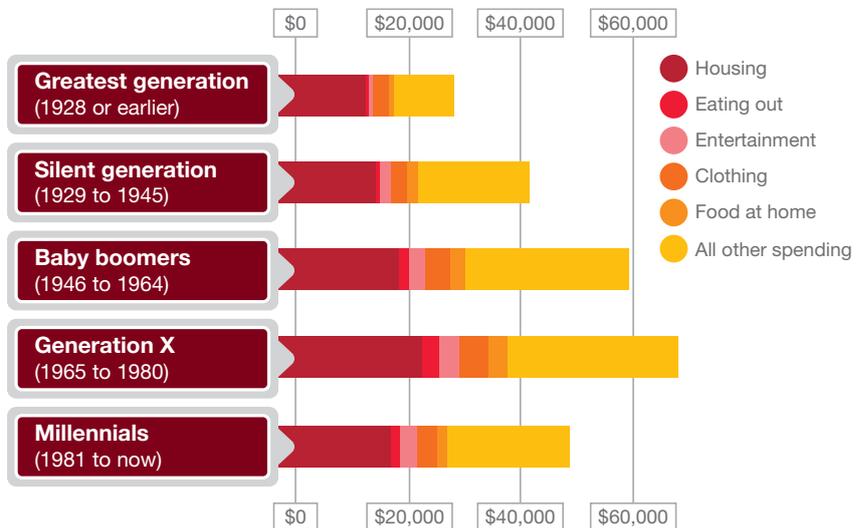
the past 10 years, PwC's Consumer Intelligence Series has captured the changing consumer behavior of millennials (those born between 1981 and 1998) and generation Z (born 1998 to now) across a number of topics. And it's clear that the impact of technology and digital media has changed the way younger generations experience and

Generational spending habits

Millennials, who are now the largest cohort in the U.S. workforce, have less money to spend than their elders. And they spend their scarce money differently. Two out of three millennials rent their home. They have the fewest vehicles per household (1.5) of any generation, except those born before 1929. Although they spend the largest share of their budget (more than 6 percent) eating out. And millennials spend significantly less on entertainment (\$2,186 annually) than baby boomers (\$3,286) and Generation X (\$3,231).

If millennials stick to their current spending habits as they age and earn more, it will have a significant impact on these industries.

Exhibit 12: U.S. household spending by generation (US\$)



Source: U.S. Department of Labor, Nov. 2016 (based on analysis of generational data from the Bureau of Labor Statistics)

purchase content. They stream songs or watch videos on YouTube instead of buying albums; they consume free news on Facebook or Snapchat instead of spending hundreds of dollars for home delivery of newspapers. Rather than subscribing to expensive pay-TV bundles, they source their video through a combination of over-the-top services (see Exhibit 11). According to a recent study, millennials account for 43 percent of the U.S. cordless population — those who have never had cable, satellite, or fiber-optic cable service and those who have cut the cord. Thirty percent of U.S. millennials are now cordless, compared with just 16 percent of baby boomers, according to GfK MRI's January 2017 "Survey of the American Consumer."

Of course, millennials will probably eventually marry, have children, and purchase homes in greater numbers. But it seems unlikely they will adopt their elders' habits when it comes to media consumption and spending.

Barring a step change in "must have" technology (e.g., autonomous vehicles), profitable growth in the E&M industry will increasingly come from capturing market share, rather than from market expansion.

Conclusion

Thriving in a world of slower growth, intense competition for attention, and continual disruption will be challenging. But the opportunities inherent in this world are immense. Our data, analysis, and perspective offers compelling insights into how E&M companies are adapting, investing, experimenting, and innovating. As we move forward, we know the Outlook will continue to be a valuable source of nuanced information and vital perspective on segments and geographic markets. Several of our PwC colleagues have explored the 2017 Outlook findings within the context of their specialization and geographic markets. The chapters that follow take you deeper into the analysis and their insights into industry trends and challenges across business models, value chains, technological change, content strategy, deals, and regulation.