# A call to action

## Disruptive technologies barometer: Media sector

KPMG International

kpmg.com/TMTbarometer

# Foreword

The shelf life of a corporation has never been shorter than it is today, thanks to a confluence of factors, including globalization, regulatory change, customer demand and, of course, disruptive technologies. For today's corporate leaders and decision-makers, inaction and indecision in the face of these changes, particularly on the rapidly changing technological front, can have grave consequences for their businesses. Resting on your company's laurels or getting romantic about the way(s) your company has generated revenue in the past can be a great way to render your business obsolete.

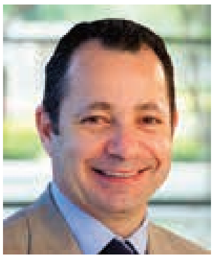
There are lessons to be learned from the massive wave of technological disruption that transformed the music industry — a wave that began with the invention of digitization and compression standards (e.g., MP3) and peer-to-peer sharing (e.g., Napster), which eventually gave rise to iTunes and, more recently, music streaming. One of those lessons is that even in the face of significant disruption, new business models and business opportunities emerged.

Newspapers around the world are currently grappling with these challenges as their operational models and revenue streams are under attack during a period of significant digital disruption. It remains to be seen, however, which business models will eventually prevail in the newspaper business. And, of course, the traditional players in television and movies are seeing their business models increasingly under pressure as well, with new up-starts and over-the-top, on-demand technologies being introduced seemingly every month.

A growing list of technologies continues to disrupt the media industry, presenting both opportunities and threats to the leaders of companies within it. KPMG commissioned Forrester Consulting to conduct a global study on disruptive technology adoption trends, along with the organizational and customer impacts of these technologies on companies. The study offers key insights into the challenges, opportunities, organizational changes, investments and key performance indicators deriving from disruptive technology.

Technological disruption is at a pace and scale we have never seen before. Distribution channels are changing. Speed-to-market is increasing. The ways in which consumers access media content continues to be in a state of flux. Yet, at a time when businesses need to be adapting to stay competitive, our research tells us that many of them are not.

In the following pages, we seek to navigate a landscape increasingly disrupted by emerging technologies. Our goal is to help media industry decision-makers better prioritize the disruptive technologies that are reshaping both the customer experiences and operating models of their industry, and then take the appropriate actions to improve their competitive standing in an increasingly disrupted world.



**Peter Mercieca**
Global Chair
Media & Telecommunications
KPMG International

**David Elms**
Partner, Head of Media
KPMG in the UK

# Executive summary

Media companies around the world continue to face a period of profound transformation brought about by the prevalence of disruptive technologies. As part of this seismic shift, a growing number of media executives admit they've seen the writing on the wall — that to succeed over the long term it will be necessary for their companies to evolve from their traditional roles as the suppliers of content and products (e.g., newspapers, movies, TV shows, etc.) to their new roles as the developers and curators of solutions that allow customers to consume the content they want in a real-time, on-demand and cost-effective manner. Amid this turmoil, our findings reveal that:

1. **Many media companies remain resistant to change:** While many companies continue to enjoy strong cash flows today, the status quo will not be a viable, long-term business strategy.
2. **Embracing the digital future will mean different things for different companies:** While adopting an all-digital approach may be the right strategy for a video on-demand provider, it could be crippling to the business model of a newspaper. Customization will be key.
3. **Contradictions abound:** While the majority of media executives say they're optimistic about the opportunities associated with disruptive technologies, many are not ready to capitalize on those opportunities.
4. **Indecision around business models can be fatal:** There are no silver bullets. Media executives must be willing to experiment and adopt an early-mover, fast-follower and/or fail-fast approach. They must be willing to experiment with new business models, and based on the metrics, pursue what works and shelve what doesn't in a fail-fast environment. Not taking this approach can leave companies at risk to being usurped by a competitor or start-up.
5. **While disruptive technologies are causing widespread concern, there are also significant opportunities:** Media executives are concerned about how technology is disrupting their business models, the way they engage with customers and the way they monetize their products/services. While the risks are evident, there are also significant opportunities, such as the potential to forge stronger, more valuable relationships with customers, improve customer service and the speed of business, and make operations more efficient.
6. **Investment needs to be more strategic:** Many media companies are spreading their investments too broadly in an attempt to hedge their bets. And while the survey results point to the importance of experimentation and adopting a fail-fast mentality, this needs to be done as part of a strategic game plan. Ultimately, decision-makers need to understand the technologies and then determine what will work for their companies and invest accordingly.
7. **Benchmarking is key:** It is imperative that as they plan, adapt and evolve in a disruptive environment, media companies benchmark their progress and results against their peers, as well as technology upstarts in their industries and potential competitors from other industries.

As is the case with any large-scale change to the business environment, disruptive technologies represent both opportunities and threats to established media companies. The results of our survey indicate that too few executives and board members are sufficiently focused on the implications of technological disruption to their businesses, cash flows and monetization strategies. The harsh reality is that the threats will outnumber the opportunities for those that fail to take action.

> “This is a call to action. There are huge opportunities for media companies but also significant threats. Now is the time for change.”
>
> **David Elms**
> Head of Media, KPMG in the UK

# Contents

# The status quo is not a viable long-term option

It's no secret that media companies are among the most technologically disrupted organizations in the world today due to technological advances, consolidation and threats from new entrants from within and outside the industry. Yet, many of the major players continue to be relatively successful despite the ongoing challenges in the business environment.

As a result, many media companies have been resistant to change and slow to adapt to disruptive technologies. Over the long-term, however, the status quo will not be a viable business strategy for companies in the media space.

The kind of massive transformation that took place in the music industry over the past 15 years is now taking place in other verticals. On a fundamental level, what we're witnessing with much of this disruption is a shift away from the traditional, linear model of content creation and delivery to one that is based more around the development of 'solutions'.

For example, Netflix, Hulu and video on-demand are solutions to an unmet customer demand for immediate access to content on the platform of their choice. The trend of turning what used to be products (TV shows, movies, music, etc.) into a solution and then selling it via new and more convenient platforms is meeting customers' demands and is also changing the economics of the sector.

In certain sub-sectors, however, it can be damaging to migrate too quickly into a digital environment. The prime example is the newspaper business. Too sudden a shift to a digital strategy can end up undermining a newspaper company's own market in a world in which news is available through hundreds of other sites for free. At the same time, as evidenced by Blockbuster and a host of other media companies that now serve as cautionary tales, moving too slowly can be equally damaging.

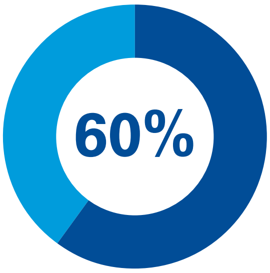
## A shift from traditional models

The harsh reality for some media companies is the stark realization that their traditional business models are simply not going to be sustainable for the longer term. For those companies, future success may lie in taking their current cash flow and deploying it toward a shift into an entirely different line of business.

The impacts of disruptive technology can be multi-faceted and hard to pin down. Disruptive technology can act as a driver of change, breaking down old processes and ways of doing things. Its effects, however, are pervasive, requiring business to invest and, plan differently, and in doing so, let go of old assumptions and habits, act boldly, and adapting their corporate cultures to reflect these changes.

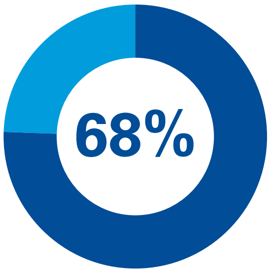
The continued digitization of video content, built on a foundation of cloud computing, continues to wreak havoc on traditional business models. Content owners view these technologies as ways to disintermediate traditional distribution channels and offer content direct to the consumer. For example, Netflix has amassed more than 80 million global streaming video subscribers and HBO is creating cracks in the traditional cable monopoly, thanks to the wild popularity of its flagship show, *Game of Thrones*. "But at the same time, however, the proliferation of devices and apps has democratized the creation of content which, in turn, is threatening the traditional content owners," says Markus Kreher, Head of Media, KPMG in Germany. "And while all of this is taking place, many of the traditional distribution players are responding by acquiring content providers, pushing smaller bundles on their customers and embracing over-the-top distribution."

> "The proliferation of devices and apps has democratized the creation of content which, in turn, is threatening the traditional content owners."
>
> **Markus Kreher**
> Head of Media, KPMG in Germany




**of media leaders surveyed believe that disruptive technologies are having a positive impact on their company's performance.**

Organization




**of media leaders surveyed believe that disruptive technologies are having a positive impact on their industry's performance.**

Industry

Our survey revealed an intriguing contradiction among media executives, when it comes to their attitudes about the opportunities presented by disruptive technologies compared with their companies' levels of preparedness. When executives were asked about the impacts of disruptive technology on their organizations and their industry as a whole, the majority of the decision-makers expressed optimism. Sixty percent of media leaders said disruptive technologies were having a positive impact on their organization, while 68 percent went on to say that these technologies were having a positive impact on their industry as a whole.

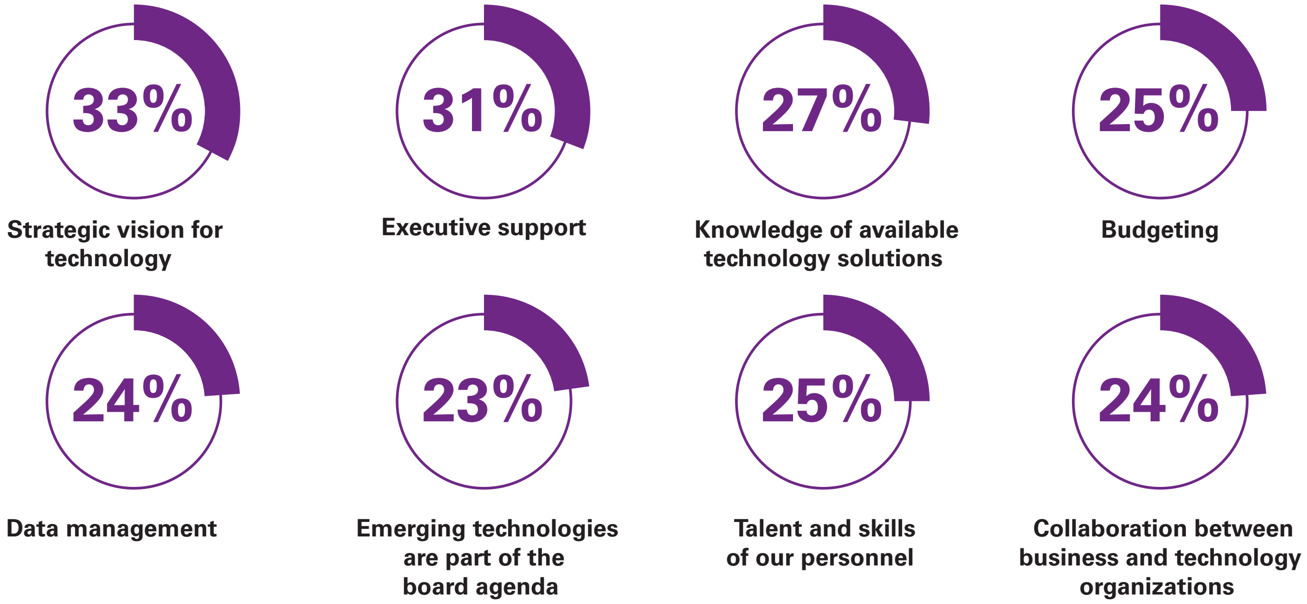
However, that strong sense of optimism does not translate into organizational preparedness. In fact, only 33 percent of media leaders are very prepared in their strategic vision for technology and less than one third are "very prepared" when it comes to their knowledge of available technology or the skills of their workforce.

These findings warrant the attention of decision-makers in the media industry. The difference between these high levels of optimism and low levels of preparedness is stark and may point to a sort of false optimism among media executives. While many CEOs may be instinctively inferring that 'where there's change, there's opportunity', the fact that so many of them have said their companies are not yet prepared for those changes tells us that they have yet to identify exactly what that opportunity looks like for their business. This is a sizable risk, as a company cannot adapt toward an opportunity that it has not yet identified.

If anything, recent history has shown us that disruptive technology laggards may be left behind by those that are more responsive. Even though the practical applications of many of these technologies have yet to be clearly defined, media company leaders must be willing to experiment and adopt new technologies as part of an ongoing mission to, in effect, disrupt their own companies. If not, the only other option is to sit on the sidelines and wait until another competitor or upstart does it for them. The cost of inaction and/or inertia is high and, in some cases, can threaten the very survival of the organization.

## Media organizations are ill-prepared for disruptive technologies

**"How prepared is your company to address each of the following opportunities/issues as they relate to new, disruptive technologies?" [Very prepared]**




Base: 580 business and IT decision-makers at media companies
Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, January 2016

# Areas of growing concern

The survey results tell us that to a high degree, media executives' concerns about their own organizations' performance are rooted in competitive pressures — not only from existing competitors from within their industries, but also players from other industries who are now encroaching on their turf.

A prime example has been Google, and more recently, Facebook's growing advertising business, which continues to take dollars away from traditional media companies such as newspapers, magazines, radio and TV stations. In fact, Facebook's advertising revenue leaped 57 percent in the first quarter of 2016, from US$3.3 billion to US$5.2 billion. As the social network's advertising clout continues to grow year-over-year, traditional media companies that rely on advertising dollars continue to struggle to find ways to augment their shrinking advertising revenues.

When we polled media executives about the origins of the negative impact of disruptive technologies on their company's performance, 74 percent of respondents said that 'new competitors have emerged from within our industry as a result of using disruptive technologies'. In addition, 61 percent said that 'disruptive technologies brought new competitors into our industry from other industries'. And almost half (44 percent) of respondents said that 'our competitors are leveraging disruptive technologies to their advantage'. Finally, 44 percent of respondents reported that 'disruptive technologies are undermining our company's business model'.

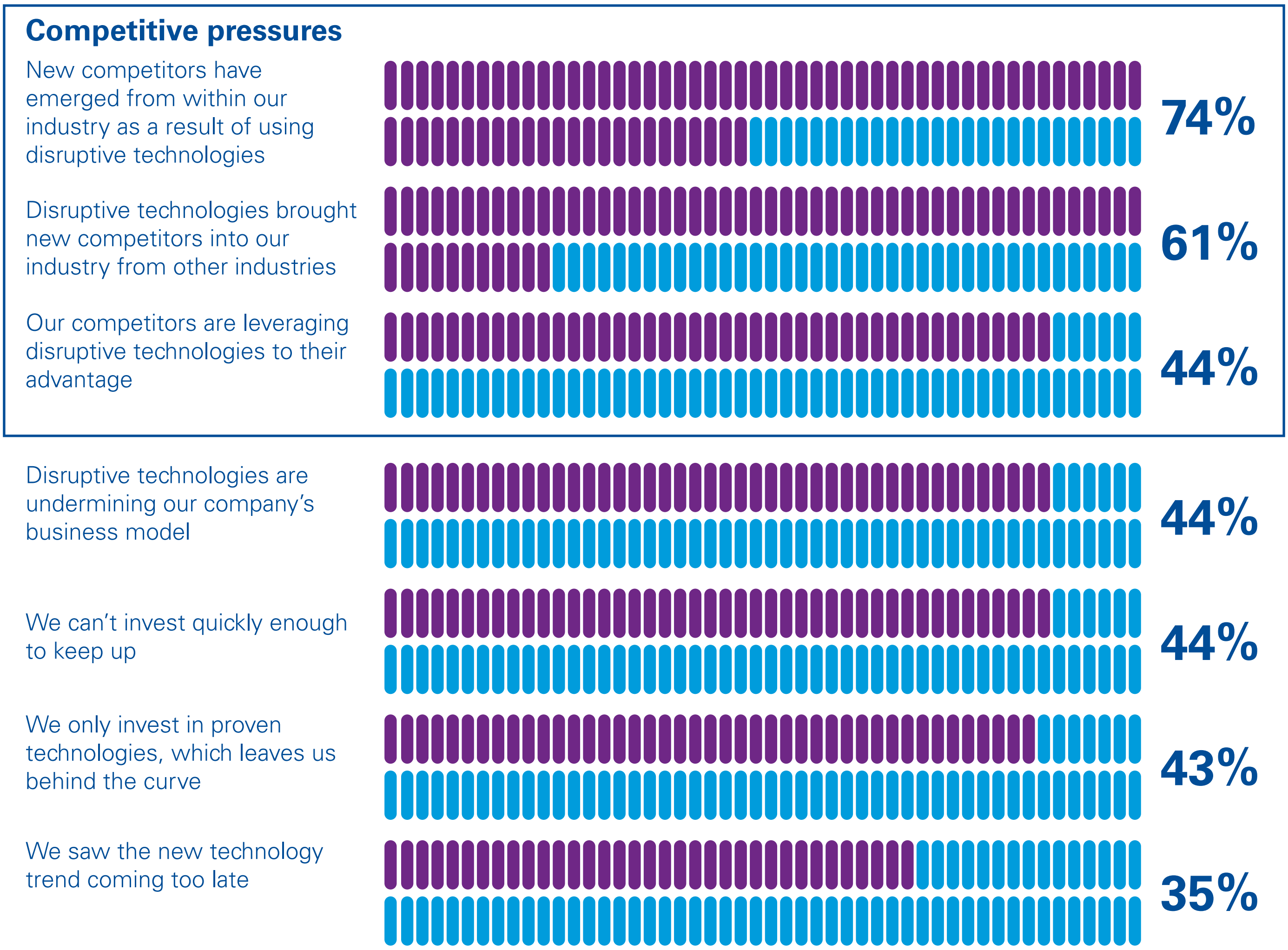
While the majority of media executives reported that disruptive technologies were having a positive impact on their industry and their organization, these results clearly cause for concern. Many of these same respondents reported seismic shifts in their competitive landscapes — shifts that will need to be addressed in order to protect customer loyalty, revenue sources and market share.

Further complicating things for many media companies today is the fact that the rapid pace of technological disruption (and the associated increase in competition) is making it difficult for many of them to catch up once the competition has made its move. More than a third of respondents (35 percent) said that they saw the new technology trend coming too late, while nearly half of respondents (44 percent) said they couldn't invest quickly enough to keep up. As a company begins to lose its competitive position in the marketplace, it can be difficult, if not impossible, to regain that lost ground.

Social media, cloud technologies, mobile apps and threats to their monetization strategies are all keeping media executives awake at night. "The value chain that virtually all media companies have relied upon for many decades is being massively disrupted," says

## Reasons for negative impact on company performance

**"To what do you attribute the negative impact of disruptive technologies on your organization's performance?"**
(Select all that apply)




Base: 84 business and IT decision-makers at media companies where disruptive technologies are having a somewhat or significant negative impact on their organization

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, January 2016

Jeremy Dain, Director, TMT Strategy Group, KPMG in the UK. "Consumers are no longer passively waiting for their preferred content to come to them through the same old distribution channels. They want it on their schedule and they want to consume it through their platform of choice." This disruption of the traditional value chain is fragmenting audiences and, as a result, advertising revenues are diminishing.

According to our survey results, 87 percent of respondents said they are concerned about the increased use of social media disrupting the way they engage with their customers.

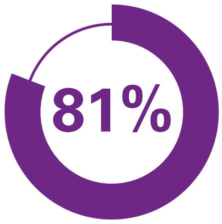
Not far behind are concerns about cloud-based technologies and services disrupting their business models as cited by 81 percent of respondents. Further, 80 percent said they were concerned about the potential of disruptive technologies to threaten monetization in the media sector. Media leaders' concerns about monetization should not be surprising. Over the past 15 years, for example, newspaper revenues from print subscriptions has declined faster than revenue from online advertising has risen.

The trends taking place with cloud, mobile and social media technologies are putting immense pressure on media companies — not only with respect to their economic models, but also in terms of how they're interacting with their customers. This pressure is being felt by companies throughout the industry, from content creation through to distribution. Amid these ongoing changes, a significant percentage of executives are fearful that their current revenue streams and operating models will be changed or altogether overturned in the years to come.

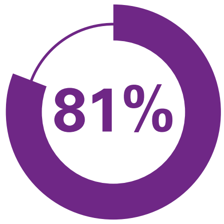
## Areas of concern for media companies

**“Thinking about the potential impact of disruptive technologies on your business in the future, how concerned are you with the following issues?” [Somewhat to extremely concerned]**

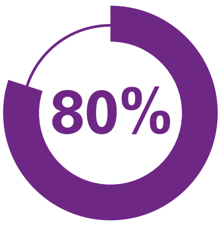

**Increased use of social media is disrupting how media providers engage with consumers**




**Cloud-based technologies and services are disrupting our business model**




**Broadband and mobile growth threatens the sustainability of traditional media platforms**




**Disruptive technologies threaten monetization in the media sector**


**Linear programming (traditional broadcasting) is being replaced by non-linear programming (Netflix and other st eaming services)**


**Core operating models need to change due to pressure from disruptive technologies**

Base: 580 business and IT decision-makers at media companies
Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, January 2016

## KPMG insight

### What does disruption mean for newspapers?

While the largest players, such as *The Wall Street Journal* or *The New York Times* (and those with differentiated content), can institute a paywall, smaller players and those with a ubiquitous news model are faced with significant challenges. Chief among those challenges is the diminishing value of the journalism content these newspapers produce. As more news organizations, websites and blogs generate and distribute news content, it is making it more difficult for traditional newspapers to create differentiated, valuable content. In effect, because of the increased commoditization of journalism, the actual value ascribed to newspapers’ content has changed in the minds of the consumers.

Further complicating matters is the fact that many smaller newspapers are being pressured to turn to increasingly sophisticated advertising mechanisms, backed by marketing technology platforms, in order to earn revenues in this new media world. At the same time, they need to shed costly analog infrastructure as aggregation of content, global sourcing of talent and real-time production rewards a leaner and more agile approach to the business.

# Organizational impacts of disruptive technologies

It is clear that disruptive technologies have the potential to significantly change the underlying economics of specific business processes. Disruptive technologies are affecting both the operating models and the ways in which media companies serve their customers.

We surveyed media leaders to understand where they were investing and the impact these technologies were having on their organizations. Many of these technologies are still at relatively early stages of development, and will continue to evolve and be deployed in different ways. To maximize the benefits of these technologies, it will be important for companies to consider not only the impacts on business models, but also how they can use these tools to improve internal operations. Media organizations cannot simply sit back and rely on the marketplace to develop the cutting edge ways to deploy these technologies in a sector as specialized as media.

> “Leaders of media companies need to look broadly and holistically at their operating models, both in the front and back office, and see how they can best service their customers in a rapidly evolving world.”
>
> **David Elms**
> Head of Media, KPMG in the UK

## Disruptive technologies are improving the operating model

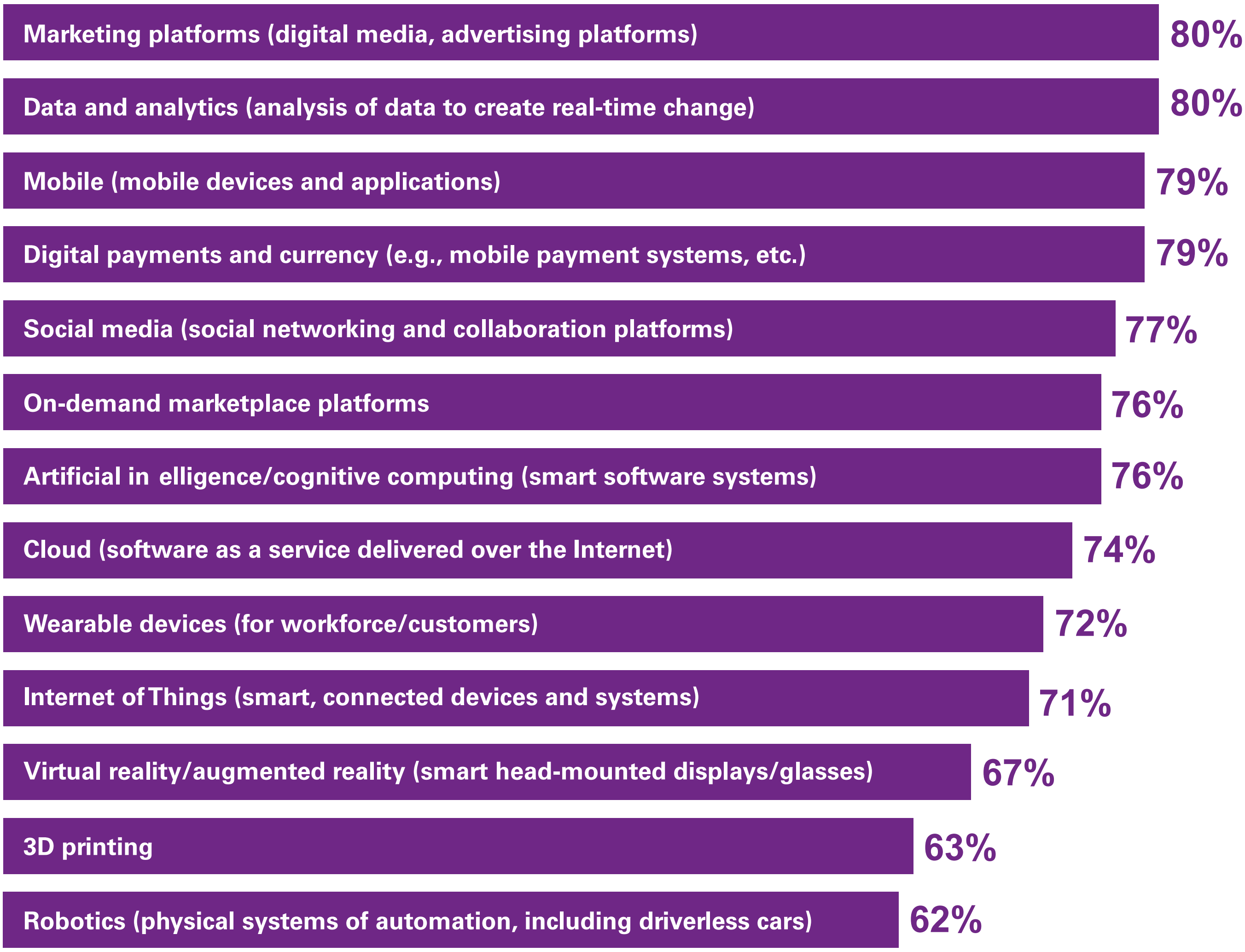
Media leaders are using disruptive technologies as a way to drive improvements in operational performance of their front or back office. According to the survey, decision makers at media organizations say that marketing platforms, data and analytics (D&A), mobile devices/applications, and digital payments and currency are having the most impact on how they run their operations.

It is worth noting that all 13 technologies presented to respondents are having a notable impact on the way media companies are serving customers and running their business operations. Even the lowest-ranking technology — robotics — was cited by 62 percent as having a “moderate” to “significant” impact on business operations. This indicates that decision-makers at media companies realize that disruptive technology is a business imperative, but many are finding it difficult to pinpoint exactly which disruptive technologies represent the biggest or most important opportunities or threats to operations of their companies. As such, many of them might be casting a wide net while they assess the potential implications and/or applications of these various technologies.

> “Operational excellence has driven our success in the last five years. Moving forward, it will be how we integrate data from our businesses into our decision making around disruptive media that will spur our next growth wave.”
>
> **Vince Pizzica**
> SEVP, Corporate Development & Technology at Technicolor

## Impact of disruptive technologies on the way media companies run their operations

**"To what extent are each of the following technology areas changing how you run your operations (i.e., driving productivity, running workfl ws, moving goods and services, operating infrastructure, and other internally focused business activities)?" [Moderate or significa t impact]**




Base: 580 business and IT decision-makers at media companies
Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, January 2016

What's even more interesting is the manner in which some of these disruptive technologies are changing the way media companies run their operations. When it comes to driving productivity, respondents said the Internet of Things (IoT) (50 percent), robotics (49 percent), and digital payments and currency (47 percent) are helping them to be more productive. In practical terms, some media companies are already using IoT devices to harvest various forms of data, including consumer preferences, location, demographics, and then using that data to deliver more personalized content across multiple channels.

Our survey respondents also said artificial intelligence/cognitive computing (46 percent) and 3D printing (45 percent) were helping them to improve quality at their companies. Disruptive technologies were also allowing them to reduce personnel costs. For example, the Associated Press has already started using artificial intelligence to write sports articles and has announced plans to use automated software to cover 10,000 Minor League Baseball games per year. The company is also using automated software to produce quarterly earnings reports for 4,000 companies. That's a tenfold increase from the 400 companies they previously covered with human writers. Thomson Reuters, as another example, is using in-house technology to create machine-written articles. As these examples illustrate, artificial intelligence has entered the 'era of narrative' — a trend that will grow and expand into other corners of the media sector as the technology improves.

## Ways disruptive technologies are changing how media companies run operations

**"How are each of the following technologies changing how you run your operations?"**
(Select all that apply)

| | We can drive productivity | We can improve quality | We're able to reduce overall costs |
|---|---|---|---|
| Internet of Things (N=416) | **50%** | 27% | **36%** |
| Data and analytics (N=465) | 43% | **41%** | 19% |
| Robotics (N=363) | **49%** | 34% | 13% |
| Artificial intelligence/cognitive computing (N=439) | 46% | **46%** | 19% |
| Marketing platforms (N=463) | 41% | 37% | 17% |
| Virtual reality/augmented reality (N=389) | 37% | **41%** | 12% |
| 3D printing (N=366) | 41% | **45%** | 11% |
| Digital payments and currency (N=441) | **47%** | 36% | 16% |
| On-demand marketplace platforms (N=406) | 45% | 35% | 17% |
| Wearable devices (N=392) | 43% | 32% | 20% |

Top-ranked technologies in each category.

Base: Varies; business and IT decision-makers at media companies where disruptive technology is having a moderate or significant impact on how they run their operations
Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, January 2016

# Disruptive technologies are transforming business models and the customer experience

Disruptive technologies are also having fundamental changes on customer experience. In the past, consumers were detached completely from the content creators and providers. Increasingly, we're seeing brands interacting with their consumers in real time. Companies can also track precisely what people are consuming. They can tell what types of TV shows, movies and articles they're consuming, when they're hitting the pause button, and which paragraphs they're skipping over. This is providing companies with a tremendous amount of data that, in theory, can position them to provide even greater value to the consumers by offering them more of what they like. And, by enhancing their value proposition, they could presumably charge more for their services. This mountain of consumer-driven data could even be used to help inform or drive the creative process. Armed with terabytes of consumer data, companies can develop content based on a set of data-driven attributes that are deemed to make a story or article 'successful'.

The reality, however, is that most traditional media companies get a failing grade when it comes to D&A. A traditional newspaper or TV provider, for example, knows shockingly little about its end customers. In some instances, they may have access to vague information about gender, age or where they live. Compare that, however, to the information that a company like Netflix has about its customers, including the preferred programming and viewing patterns of the various individuals in the household, which devices they prefer to watch on, and other details. Netflix then uses this data to provide more personalized content, thereby strengthening the customer relationship and the overall value proposition.

When we look more closely at the ways these disruptive technologies are changing the manner in which media companies are servicing their customers, we see that the biggest impacts are in the areas of supporting customers more effectively after purchase, monetizing products or services differently, and marketing to customers more effectively. Indeed, respondents said IoT (48 percent), artificial intelligence/cognitive computing (47 percent), and digital payments and currency (47 percent) were helping them to support customers more effectively after purchase. In terms of helping them to monetize their products or services differently, respondents said that on-demand marketplace platforms (42 percent), digital payments and currency (41 percent), and artificial intelligence/cognitive computing (40 percent) were having an impact in that area. And when it comes to allowing these organizations to market more effectively to their customers, 46 percent cited IoT, while 42 percent said D&A was playing a role in that area.

> “You may have a legacy business with a strong customer base that you built up over years, but your inability to target, personalize, and offer something that is seamless to consume, is disruptive technology for us from a media standpoint.”
>
> **Head of Business Strategy at a South African media company,** commenting on his company's struggles with finding a balance between existing revenue streams and building new ones

## Ways disruptive techs are changing how media companies serve their customers

**"How are each of the following technologies changing how you serve your customers?"**
(Select all that apply)

| | We're improving customer experience metrics | We're developing new products or services | We're marketing to customers more effectively | We're monetizing our products or services differently |
|---|---|---|---|---|
| Internet of Things (N=443) | 19% | 31% | 46% | 26% |
| Data and analytics (N=448) | 21% | 24% | 42% | 37% |
| Robotics (N=376) | 20% | 12% | 36% | 32% |
| Artificial intelligence/cognitive computing (N=430) | 18% | 19% | 30% | 40% |
| Marketing platforms (N=461) | 30% | 15% | 31% | 39% |
| Virtual reality/augmented reality (N=381) | 26% | 15% | 28% | 38% |
| 3D printing (N=386) | 20% | 22% | 21% | 31% |
| Digital payments and currency (N=442) | 22% | 15% | 35% | 41% |
| On-demand marketplace platforms (N=428) | 26% | 16% | 36% | 42% |
| Wearable devices (N=412) | 20% | 19% | 33% | 34% |

Top-ranked technologies in each category.

Base: Varies; business and IT decision-makers at media companies where disruptive technology is having a moderate or significant impact on how they serve their customers
Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, January 2016

# Hedging their bets

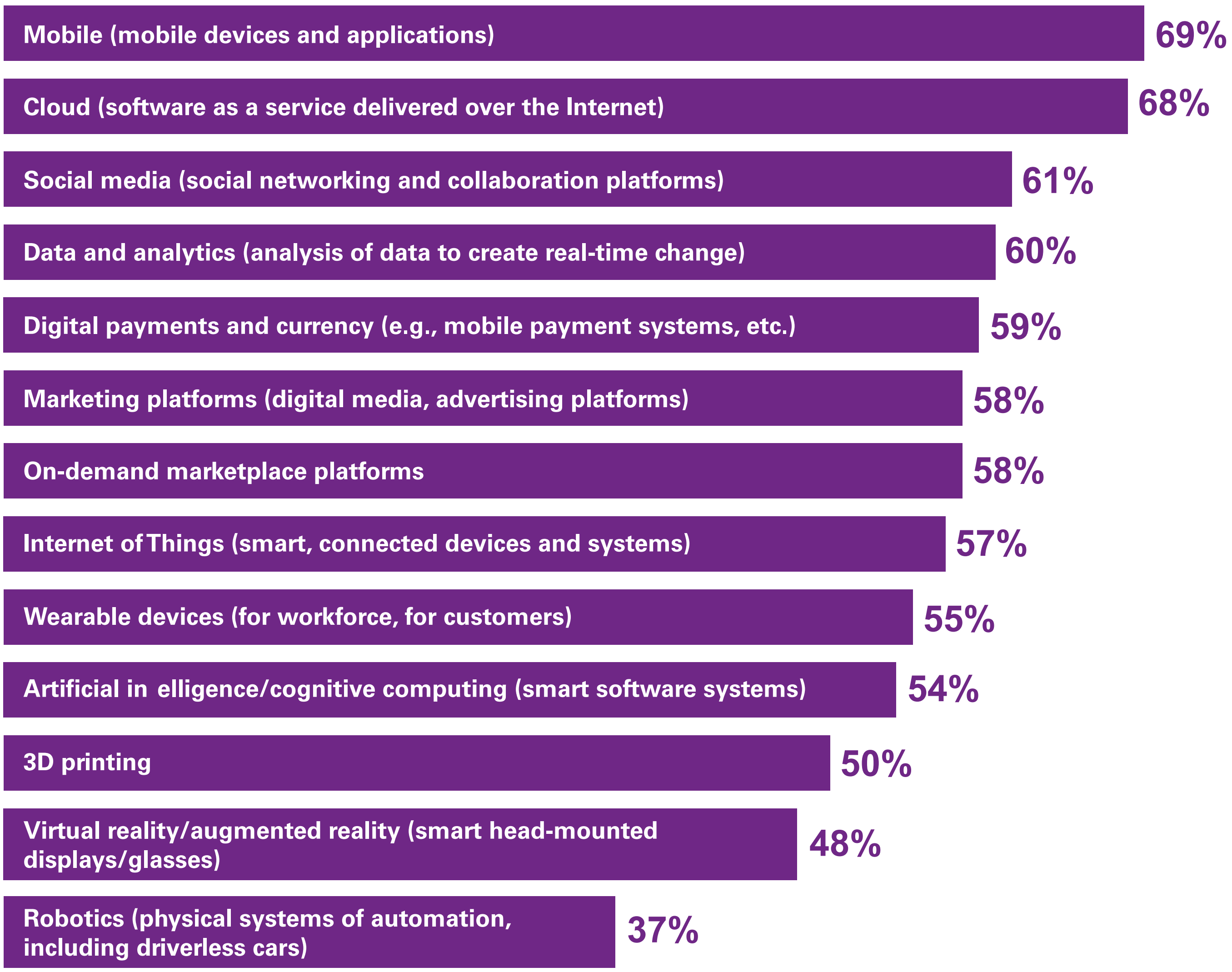
Making strategic investments in the right disruptive technologies can provide a company with a significant competitive advantage. One of the challenges in a business environment in which technological advances are being made at such a rapid pace is that leaders at media companies have a wide range of technologies to track and understand.

Leaders of media companies that are generating strong revenues know their current models are being disrupted and that they need to make changes. Unsure what the industry will look like in 12, 24 or 36 months from now, many media executives are making scattered investment choices in order to protect their companies and market share over the long term.

It is also worth noting that to an extent, investments are really a trailing indicator of the emergence of a disruptive technology. Before investments can be made, companies must first go through the process of monitoring, identifying and building a business case for a given technology before actually deploying dollars toward those technologies. With that in mind, we need to be mindful that the investments being made by media companies today show you where these organizations have built their plans.

## Disruptive technologies investment

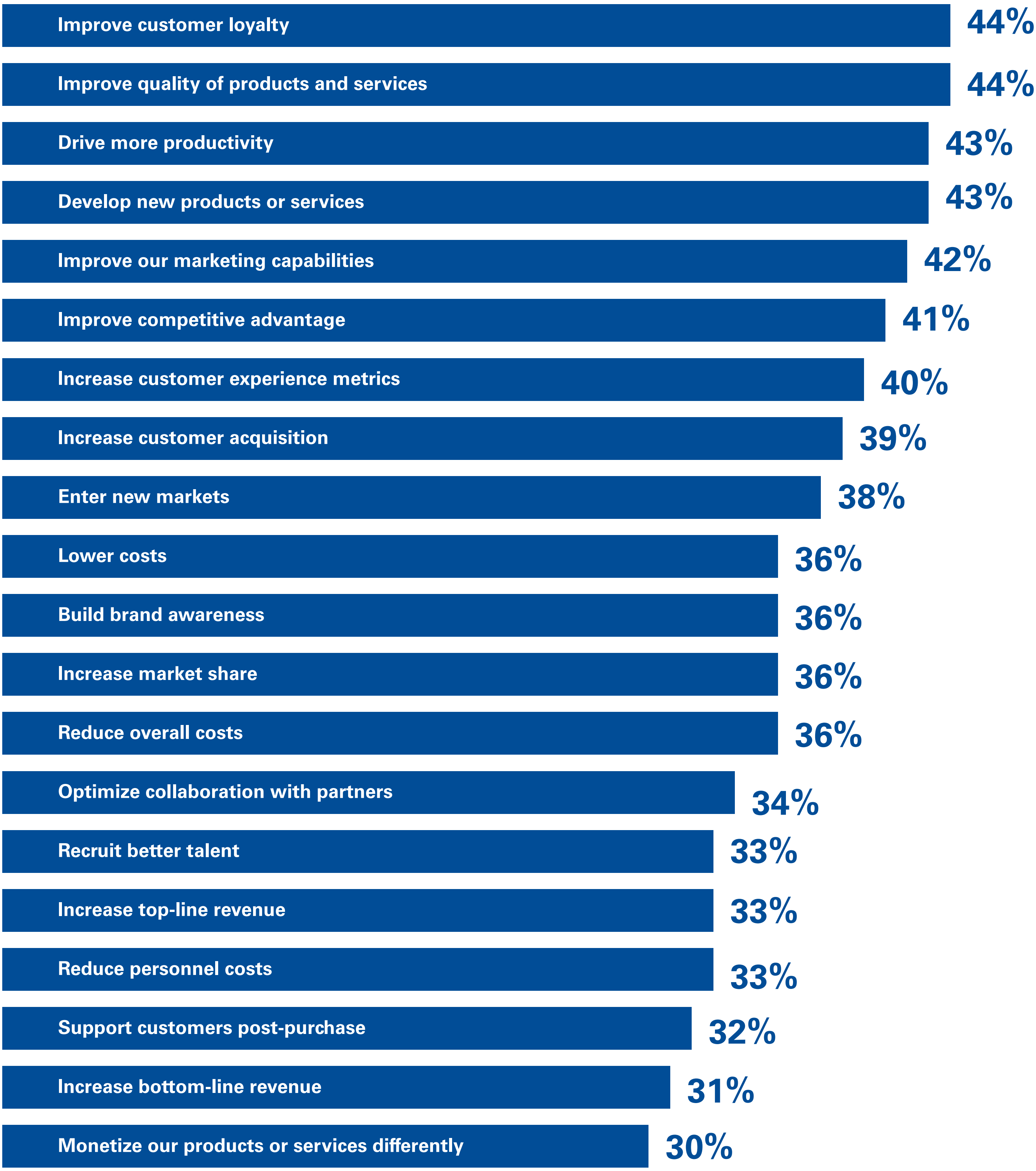
**"To what extent is your company investing in each of the following technologies?" (Tangible or strategic, significant investment)**




Base: 580 business and IT decision-makers at media companies
Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, January 2016

## Most-important business goals

**When investing in a disruptive technology, what are your company's most-important business goals?**
(Select all that apply)




Base: 580 business and IT decision-makers at media companies
Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, January 2016

Our survey findings reveal that most media companies are casting the net rather broadly, with a majority reporting that they are making a 'tangible' or 'strategic, significant' investment in a number of different technologies, with the most common being mobile (69 percent), cloud (68 percent), social media (61 percent) and D&A (60 percent).

One of the things we can infer from these findings is that given the broad style of investments across technologies, many media company leaders may be, in effect, `hedging their bets' and making technology investments across the board because they're not sure which direction to go. It will be incumbent upon decision-makers to experiment, fail-fast and strive to understand what will work for their company and then deploy their investment dollars against those opportunities that are likely to produce rewards while minimizing the risk of their investment.

As insightful as it is to know where these companies decided to deploy investments over the past several years, current business goals may provide us with a more current barometer of their strategic priorities — and investments — of tomorrow.

When asked about their companies' most important business goals (in the context of disruptive technology investment), 'improve customer loyalty' and 'improve quality of products and services' topped the list, with 44 percent of respondents citing each. Close behind were 'drive more productivity' and 'develop new products or services', which were both reported by 43 percent of respondents. These priority areas were followed by 'improve our marketing capabilities' (42 percent) and 'improve competitive advantage' (41 percent).

> "The operative word is organizational agility. The successful companies will be those that are well-positioned to adjust if and when a trend accelerates or decelerates."
>
> **Peter Mercieca**
> Global Chair, Media & Telecommunications, KPMG International

## The early-mover/fast-follower advantage matters

Being quick to adapt to external changes in the marketplace has always played a key role in business competition. And while there are always exceptions to every rule, in the age of disruptive technology, acting quickly has taken on a whole new degree of relevance in determining the competitive position and ultimate fortunes of many media companies.

In order to create sustainable new revenue opportunities for their companies, media leaders need to be early movers or fast followers that are willing to 'fail fast'. Reinforcing this sentiment is the fact that of those media executives who said disruptive technologies have had a positive impact on their organizations' performance, just over half (51 percent) attributed that success to the fact that 'we saw the new technology trend earlier than others', while more than a third (39 percent) said 'we invested in disruptive technologies at an early stage'.

In the Industrial Age, first-mover or fast-follower advantage used to mean entering a product line or geographic market before your competition did. Today, when the world is connected and the time it takes to go from a start-up to a formidable competitive threat can be measured in months, that advantage means being the first (or among the first) to exploit and adopt the power of disruptive technologies.

Our survey findings reinforced the fact that successful media companies are early movers. To that end, a significant percentage of the media executives reporting that disruptive technologies had a positive impact on their organization said they are focusing their efforts on reshaping their companies' business models (62 percent) and entering new markets (57 percent). However, it's important to note that making too quick and too drastic a change to the operating model in the face of disruption could do more harm than good. If a typical newspaper, for example, were to abandon its traditional business model and adopt a digital-only approach, our analysis shows that its revenues could drop significantly. The Newspaper Association of America reported that print ad revenues dropped from US$44.9 billion in 2003 to just US$16.4 billion in 2014. However, digital advertising revenues, which totaled US$3.5 billion in 2014, have not increased significantly, or filled the revenue gap, since 2006. Ultimately, the pace and degree of change will depend on the specific circumstances of the individual company.

## KPMG insight

### Mergers and acquisitions: Key opportunities

For many media companies, mergers and acquisitions will play a key role in their strategic planning. For those media and entertainment organizations with sizable cash reserves, acquiring or merging with a technology upstart or a competitor can be a faster and more desirable option than developing their own capabilities in-house. Perhaps the best example has been Walt Disney Studios, which, over the past decade, has been one of the most prolific acquirers in the world, picking up Pixar for US$7.4 billion in 2006, Marvel Entertainment Group for US$4 billion in 2009 and Lucasfilm for US$4 billion in 2012. Thanks in large part to these strategic acquisitions, the company is poised to amass a record US$7 billion in box office receipts globally for 2016 alone.

The jockeying continues throughout the sector, including a series of large deals, such as AT&T's proposed acquisition of Time Warner and 21st Century Fox's deal to acquire Sky Plc. Another mega-deal, the proposed merger between Viacom and CBS, collapsed in mid-December. According to an article in the Wall Street Journal, "Sumner Redstone and his daughter Shari Redstone have pulled their support for a merger of CBS Corp. and Viacom Inc., a big bet that struggling Viacom can turn around its fortunes amid a fast-changing media landscape." Undoubtedly, many of the media sectors' players[1], both large and small, will continue to consider mergers and acquisitions as they play this high-stakes game of musical chairs brought about, in large part, by disruptive technologies.

[1] The Wall Street Journal, "Redstone firm pulls support for Viacom-CBS merger", 12 December 2016.

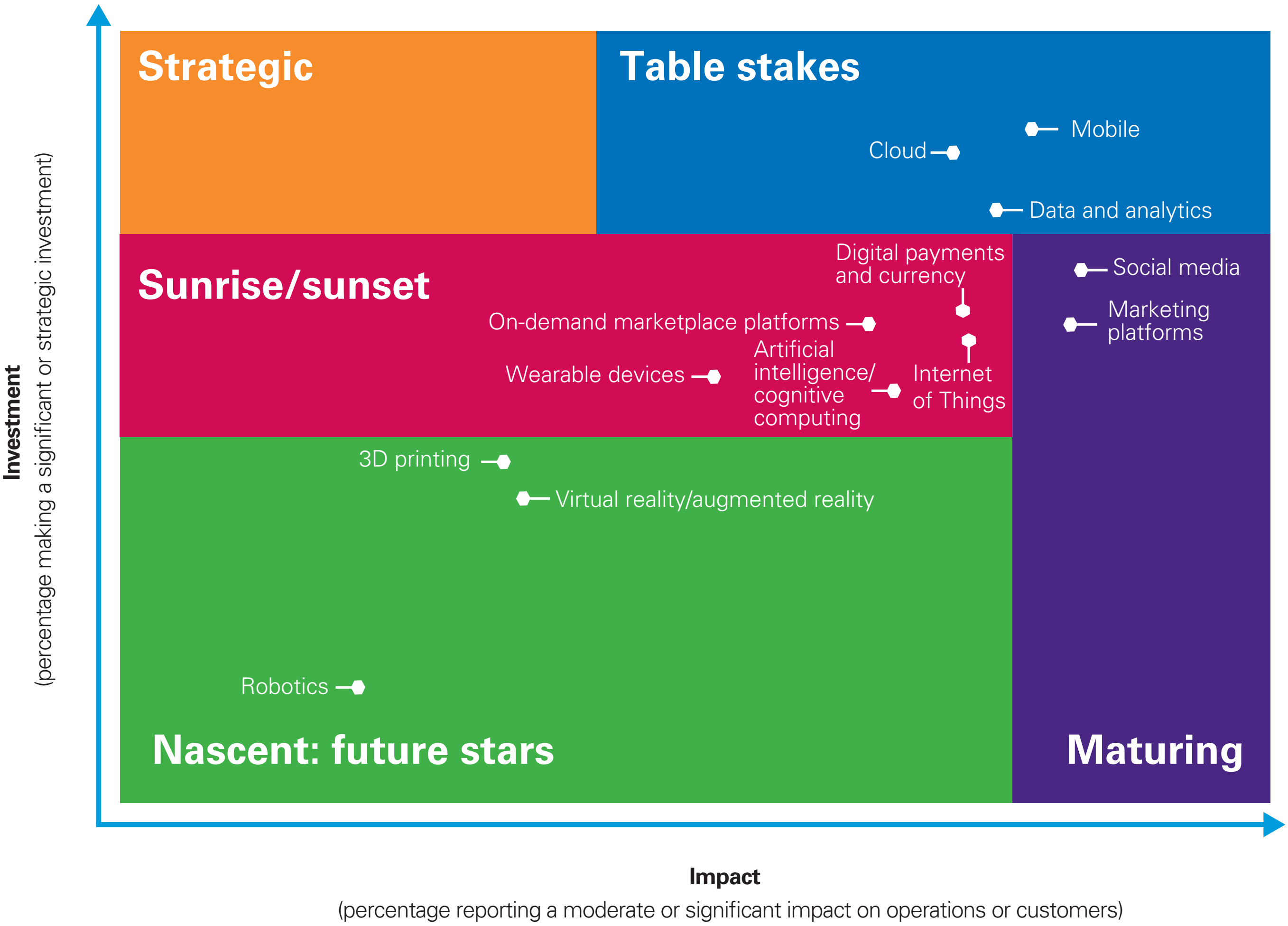
# Disruptive technology: The intersection of impact and investment

So how should media industry leaders go about benchmarking themselves against their peers in order to better prioritize the disruptive technologies they should be embracing or pursuing?

Building on the data and insights from our study, we evaluated the 13 measured disruptive technologies using the following metrics: impact on operations, impact on business models and level of investment. We then combined these three metrics into a barometer, which we call the Disruptive Technology Value Map, which can help guide media industry leaders' investment decisions around disruptive technologies.

Based on the framework, these technologies fall into five categories and can help media companies benchmark themselves against their peers to prioritize different disruptive technologies.

## KPMG Framework: Disruptive technology value map




Base: 580 business and IT decision-makers at media companies
Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, January 2016

> "Augmented reality has been pegged as the next platform and could be a key disruptor."

**Philip Wong**
Principal, Technology, Media and Telecommunications, Global Strategy Group, KPMG in the US

# The five stages of disruptive technology

**Based on investment-versus-impact model**

## 01 Table stakes

Table stakes technologies receive high investment and generate strong impact right now. They've reached an initial stage of business maturity, but remain innovative and challenging to master. In the media industry, cloud, mobile and D&A are now table stakes technologies. These technologies are also often interrelated at media companies (e.g., an organization that runs its D&A and/or mobile functions in the cloud).

## 02 Strategic

Strategic technologies receive significant investment today in search of strong impact tomorrow. They are high on investment and medium-to-low in terms of impact. In the media industry, there are no technologies that currently fit this description. In the quest for the strategic technologies of tomorrow, however, media executives would be well-served to survey the technologies that are currently in the sunrise and nascent categories, such as artificial intelligence, IoT, virtual reality/augmented reality and so on.

## 03 Maturing

Maturing technologies create strong impact but no longer require sizable investment. They now receive low to medium investment levels and continue to generate steady value. Social media and marketing platforms would fall into this category. Both are business-critical to most media organizations, however, they no longer require the same kind of investment they demanded in previous years.

## 04 Sunrise/sunset

Sunrise technologies receive medium levels of targeted investment and have begun to generate medium levels of impact as well. Sunset technologies have passed through their era of peak effectiveness and are now seeing declining levels of both investment and impact. In both cases, these technologies fall into the medium investment, medium impact center of the technology value map. In the media industry, they are all sunrise technologies, including digital payments and currency, on-demand marketplaces, D&A, IoT, artificial intelligence and wearables. Each of these represents a rising area of investment and impact. The impact of IoT remains to be seen — its utilization in media is very specific and at this time there isn't a big focus on it within the sector. There is opportunity within operations, but not in customer improvements.

## 05 Nascent: Future stars

Nascent technologies receive lesser levels of targeted investment and have yet to generate significant impact, yet are seen as potential future stars. In the media industry, these would include technologies such as virtual and augmented reality, 3D printing, and robotics. "Whilst the responses from media executives have suggested that robotics is a nascent technology in terms of investment quantum and impact, at KPMG we believe that there will be a very rapid adoption of robotic process automation — or Digital Labor, as we call it — to reduce back office cost and improve front office efficiency in the very immediate future" notes Peter Mercieca, Global Chair, Media and Telecommunications, KPMG International. Media leaders should also be keeping a strong eye on virtual reality and augmented reality as the potential applications are almost unlimited and include gaming applications, the ability for people to watch sports programming in virtual reality environments and more. However, as we saw with 3D TV, which failed to live up to initial expectations in terms of consumer demand, it remains to be seen if virtual reality and augmented reality will give rise to mass market applications in the coming years.

# Reshaping media organizations for disruptive technologies

As is the case with any large-scale change to the business environment, disruptive technologies represent both opportunities and threats to established media companies. However, the results of our survey indicate too few media executives and board members appear to be sufficiently focused on the implications of technological disruption to their businesses, cash flows and monetization strategies.

For the media company looking to become a disruptor, success is going to require taking a long, hard look at the organization's managerial focus, organizational structure, key performance indicators and workforce strategy. We believe that to successfully navigate the winds of change in the media sector will require leadership teams to:

**Get the timing right:** While our survey results reinforce the fact that successful media companies are early movers, the pace and degree of change will depend on the specific circumstances of the individual company. A newspaper that moves too quickly to an all-digital format could put its current revenues at risk. Conversely, a media company that waits too long to act may find itself losing market share to more agile players. Media leaders need to actively monitor the business environment and engage in scenario planning to inform decisions around timing.

**Get their CEOs more engaged and involved:** Fewer than half of media industry leaders agree (31 percent) or strongly agree (15 percent) that their C-suite executives are keeping a close eye on disruptive technology. In today's business environment, that is simply not enough. Who will make the difficult prioritization decisions? Who will take the case for funding to the board? Disruptive technology must be raised to a top-tier C-level concern in the media industry.

**Hire/train the right workforce:** It will be critical for media organizations to have well-trained employees with the skills to excel in a fast-changing environment. Therefore, a significant element of their strategic investments needs to be in the recruitment and training of personnel.

**Become more active innovators:** Media company leadership teams cannot simply sit on the sidelines and wait for the rest of the marketplace to discover the most effective ways to apply these disruptive technologies. There needs to be a team or function tasked with focusing on experimenting with new ways to utilize these technologies in their own businesses to create an operational and/or customer experience advantage.

**Engage in robust scenario planning:** One of the most important processes media companies should be engaging in is robust scenario planning. What do the different scenarios look like? How will you respond to each? If you anticipate that your current advertising revenues will disappear within five years, what is the plan to respond to that situation? Leadership teams need to understand which levers to pull if certain changes take place in the market.

## Establish protocols for making investment decisions

Media leaders need to be on the lookout for best-in-class approaches for making investment decisions around disruptive technologies that will drive value for their firms. However, our survey results reveal that only some media industry executives report that they are actively engaging in these best practices today.

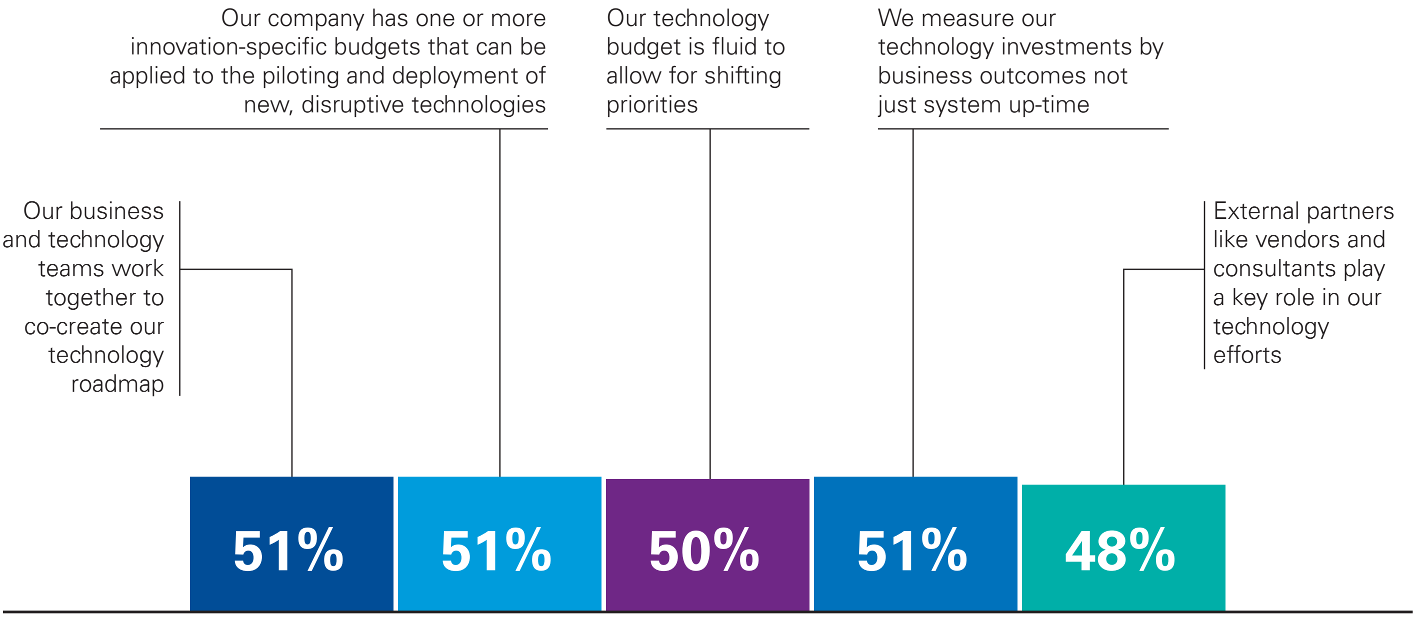
**Business focus:** Only 51 percent of media industry decision-makers report that their business and IT teams work together to co-create technology investment roadmaps. Highly successful media companies will want to adopt both practices, integrating their business and IT capabilities into a single innovation vector.

**Budgeting process:** A budgetary best practice is to have innovation specific budgets that can be applied to the piloting and deployment of new, disruptive technologies. Based on our findings, only about half (51 percent) of media leaders reported that their company has one or more innovation specific budgets. Another best practice is to make budgets fungible, establishing budgetary practices in which the technology budget is fluid enough to allow for shifting priorities. Only 50 percent say that is the case. The bottom line? If your company has neither an innovation budget nor the flexibility to shift funds mid-year in order to face new opportunities or threats, they should revisit their overall budgeting approach.

**External consultants:** Dealing with disruptive technologies requires a great deal of input from vendors who are constantly developing new technologies and from consultants who can help with both deployment and business implications (e.g. auditing, organizational structure, business strategy). However, only 48 percent of media industry decision-makers say vendors or consultants play a key role in their technology strategies today.

## How media leaders make investment decisions

**Which of the following statements characterize how your company makes investment decisions about technology?** (Select all that apply)




Base: 580 business and IT decision-makers at media companies
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# Conclusion

## Turning disruptive technology into a positive business reality

In today's brave new world of disruption, the bar has been raised for the leaders of media companies to evaluate, pilot and, where appropriate, deploy new technologies in order to adapt to a sector that is evolving with unprecedented speed. Those companies that succeed will do so, in part, because they are able to turn disruptive technologies into strategic competencies, making investments in organizational capabilities that translate technology into customer experience advantages and operational excellence.

Disruption is not the future. It is already here. The challenge for many media companies is that no one knows precisely how fast that disruption will occur or how deep it will go in any particular sector. What is clear, however, is that disruptive technologies will continue to place tremendous stresses on the economics of the media for the foreseeable future. Agility and adaptability will be the defining attributes of media companies that are able to succeed over the long term.

We have identified five key considerations that media organizations should keep in mind as they navigate an increasingly disrupted business environment.

### 1 Indecision around business models can be fatal

Taking a 'wait-and-see' approach to where the market and technologies are headed can be a risky, perhaps disastrous, course of action. Even the short-term future is uncertain and numerous factors, not the least of which are traditional and upstart competitors, are wreaking havoc with companies' forecasts and models. While there are no silver bullets, media companies need to be wary of resting on their laurels, waiting too long to act and/or deliberating endlessly about their strategic options. Instead, they must become more agile, engage in robust scenario planning and adopt a fail-fast approach to innovation.

### 2 Embracing a digital future will mean different things to different companies

There is no one-size-fits-all approach to successfully navigating the changes brought about by disruptive technologies. The best course of action will be different for each media company and will be dependent on a long list of factors. Further complicating matters is the fact that in the age of disruptive technologies, these factors are in a continuous state of flux and will be challenging to nail down. Media companies need to invest more time and capital in strategic planning and the issue of disruptive technology needs to be a high priority agenda item for C-suite executives and boards of directors.

### 3 Investing needs to be more strategic

Not unlike the gambler who places a chip on every number at the roulette table, our survey reveals a significant percentage of media companies are spreading their investments too broadly in an effort to hedge their bets in anticipation of an uncertain future. While versatility, agility and a willingness to fail-fast will be key attributes of successful media companies, this needs to be done as part of a more strategic game plan. While experimenting with a range of options is a smart approach, decision-makers need to determine the best course(s) of action and deploy their investments accordingly.

### 4 Embrace disruptive technology's potential for operational efficiencie

While it's easy to focus on how technology is disrupting media companies' business models and customer relationships, our insights reveal that there are sizable opportunities for media companies to use emerging technologies (e.g., D&A, IoT, cloud, robotics) to transform their front and back offices to become more efficient. In addition to generating cost savings, these operational efficiencies have the potential to accelerate innovation, enhance competitive position and strengthen relationships with customers.

### 5 The status quo is not a viable, long-term business alternative

Our survey shows that while media leaders are optimistic about the opportunities associated with disruptive technologies, too few of their companies are adequately prepared or positioned to take advantage of those opportunities. The corporate graveyard is filled with former billion dollar companies that missed (or chose to ignore) the winds of change at their peril. While there are undoubtedly incredible opportunities being created as a result of this period of disruptive technology, the threats will outnumber the opportunities for those companies that cling to the status quo.

# About the Survey

In January 2016, KPMG International commissioned Forrester Consulting to conduct a global study on disruptive technology adoption trends within the media sector to better understand the organizational and customer impact of these technologies on the main players. KPMG International surveyed 580 senior executives within media companies from 16 countries.

The respondents represent advertising, online, magazines, newspapers, broadcast, video, radio, social media content providers, cable TV and broadcasting, or similar. The study offers insights into the fears, opportunities, organizational changes, investments and key performance indicators deriving from disruptive technology.

Quantitative questions covered:

— The key disruptive technology adoption trends within the technology sector.

— How these technologies are impacting companies' business models, operations, marketing and customer-facing activities.

— Which disruptive technologies are the interviewees' companies investing in.

— What they hope to achieve from these investments.

Respondents represented major media companies from the following countries: Australia, Brazil, Canada, China, France, Germany, India, Israel, Japan, Portugal, South Africa, South Korea, Spain, Taiwan, the UK and the US.

The findings have been augmented with the views of technology leaders, subject matter experts and KPMG's technology experts from across its global network of member firms.

This survey is part of a wider body of research into the technology, media and telecommunications industries, involving 1,740 senior executives (580 from each industry).


# Acknowledgements

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— The KPMG International project team: Raj Balasubramanian, Alise Barnes, Carolyn Forest, Margaret Johnston, Eli Ranguelova and Sunitha Shivakumar.

# How KPMG can help: KPMG's media team

KPMG's team of media experts works with some of the largest and most prominent media, digital media, entertainment, publishing and film companies. Our teams help media clients address the urgent challenges brought on by disruption and better align their capabilities with today's consumers.

Our network of experts uses our industry experience to address challenges such as:

- finding new ways to adapt and change business models to attract and engage the next generation of digital consumers
- finding ways to deliver media content in efficient and profitable ways
- growing revenue, minimizing expenses and boosting internal operational efficiencies while reducing IT security risks
- leveraging smart tax strategies
- conducting sophisticated transactions, such as acquisitions, mergers and restructurings
- improving governance, transparency, reporting and transaction processes.

Our aim is to help our media clients become more agile and, in an era of unprecedented disruption, to move quickly to embrace the appropriate innovations and discard those that aren't supporting their strategic growth.

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