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2. Foreword

There is widespread recognition among leaders in most industries that the role of digital technology is rapidly shifting, from being a driver of marginal efficiency to an enabler of fundamental innovation and disruption.

Digitalization is the cause of large-scale and sweeping transformations across multiple aspects of business, providing unparalleled opportunities for value creation and capture, while also representing a major source of risk. Business leaders across all sectors are grappling with the strategic implications of these transformations for their organizations, industry ecosystems, and society. The economic and societal implications of digitalization are contested and raising serious questions about the wider impact of digital transformation.

While it is clear that digital technology will transform most industries, there are a number of challenges that need to be understood. These include factors such as the pace of changing customer expectations, cultural transformation, outdated regulation, and identifying and accessing the right skills – to name just a few. These challenges need to be addressed by industry and government leaders to unlock the substantial benefits digital offers society and industry.

Digital Transformation of Industries (DTI) is a project launched by the World Economic Forum in 2015 as part of the Future of the Internet Global Challenge Initiative. It is an ongoing initiative that serves as the focal point for new opportunities and themes arising from latest developments and trends from the digitalization of business and society. It supports the Forum’s broader activity around the theme of the Fourth Industrial Revolution.

A key component of the DTI project in 2015 has been the quantification of the value at stake for both business and society over the next decade from the digital transformation of six industries. The ‘compass’ for these industry sectors is being set and it is imperative that all stakeholders collaborate to maximize benefits for both society and industry. Digitalization is one of the most fundamental drivers of transformation ever and, at the same time, a unique chance to shape our future. The World Economic Forum is committed to helping leaders understand these implications and supporting them on the journey to shape better opportunities for business and society.

In 2016, the DTI initiative will focus on the impact of digital transformation on an additional 10 industries, further deep-dives into industries from this year’s project, as well as examine a number of cross-industry topics such as platform governance, societal impact, and policy and regulation.

The report was prepared in collaboration with Accenture, whom we would like to thank for their support. We would also like to thank the Steering Committee, the Working Group members, as well as the more than 200 experts from business, government and academia and over 100 industry partners who were involved in shaping the insights and recommendations of this project. We are confident that the findings will contribute to improving the state of the world through digital transformation, both for business and society.

Bruce Weinelt
Head of Digital Transformation
World Economic Forum
3. Executive Summary

Almost 20 years ago, an influential essay, entitled “Content is King”, was published. At a time when most people didn’t have email accounts, it made some bold predictions, most notably: “Content is where I expect much of the real money will be made on the internet, just as it was in broadcasting.” For the best part of two decades, its author, Bill Gates, has been proved spectacularly right.

Today, however, the picture is more complicated. The media, entertainment and information industries (“media industry” have already been transformed by several waves of digitalization – file-sharing, streaming, social and mobile – driven by consumers’ evolving desires to access any content from anywhere in the world, any time they want to. Social media, video-streaming services and smartphone apps compete continuously for our attention every moment we are awake. With gigabytes of content being created every second, media companies are engaged in a tooth-and-claw battle for consumers’ attention.

In this hypercompetitive market, having great content is no longer enough. Media enterprises need to transform their offerings into high-quality user experiences, with customized content, better recommendations of what to watch or listen to next, more personalized and relevant adverts, and the tools that customers need to recreate online those “office water-cooler” conversations about the latest hit TV series.

To create the right content and present it in the correct context, media organizations will require innovation and digitalization throughout their business, from discovering new methods of creating content (such as crowdsourcing) to experimenting with imaginative ways to distribute it (e.g., through connected retail apps).

Digital has become so important that the boundaries between the media and technology industries have broken down. This has implications for both traditional media companies and digitally-native start-ups. To thrive, these enterprises will need to keep technology at the heart of what they do, but to help them reach younger audiences, they must create compelling content and services, and distribute and monetize their content more efficiently.

Our analysis suggests the combined value at stake for industry and society over the next 10 years (2016 to 2025) could be ~$1.3 trillion, of which the value at stake for the industry is ~$1.0 trillion and for society ~$300 billion.

Drawing on our interviews with leading figures in the media industry and our analysis of the major consumer and technological trends affecting the sector, this report identifies three digital themes that will define the evolution of the media industry over the next decade:

**Personalization and contextualization** As ever more content is produced, marketers and content creators will need to produce personalized content and personalized advertising to engage consumers facing information overload. The total value at stake due to personalization and contextualization initiatives is ~$420 billion, but both these developments will raise data privacy and security issues that firms will need to resolve ethically and transparently. Consumer requirements for increased privacy amid concerns regarding data breach is expected to erode ~$170 billion due to a combination of increased adoption of ad-blockers as well as rising cost of data breaches.

**Content fragmentation** Content is being distributed across an increasing number of platforms, devices and media. Increased usage of over-the-top (OTT) services coupled with the growing popularity of second screen services, the emergence of content communities as newer avenues for revenue generation, and newer IP frameworks could lead to ~$700 billion of value at stake for the media industry. The value to society of ~$160 billion over the next decade is driven primarily by access to affordable content, time savings leading to increased productivity and improved educational levels.

**Partnerships and industrialization** As the creation and distribution of content have become fragmented, partnerships in the media industry have become more important. Technology is enabling enterprises to partner with their audiences to fund or co-create innovative content. Higher customer engagement in the media industry through social media usage at live events as well as the inclusion of customers in the process of content creation could result in ~$300 billion
combined value at stake for the industry and society. Companies will need to harness the technology effectively, setting it at the heart of a digital organization, balancing creativity in content creation with industrializing digital processes such as production and distribution.

Building on our analysis of these three themes, we have drawn up a number of recommendations for business leaders that will help position their enterprises for success in an era of intense innovation. Developing a digital business is about speed and agility, so we have considered a number of tactical, shorter-term capabilities and investments. Our recommendations span the use of data, digital strategy, learning through failing faster and more cheaply, and updating legal and intellectual property frameworks for the digital age.

Figure 1: Value chain MEI industries

Value Chain

<table>
<thead>
<tr>
<th>Creation</th>
<th>Aggregation</th>
<th>Distribution</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entertainment Firms</strong></td>
<td><strong>Broadcasting Firms</strong></td>
<td>• Traditional cable operators</td>
<td>• Television</td>
</tr>
<tr>
<td>• Studios &amp; production companies</td>
<td>• Traditional cable networks</td>
<td>• Satellite players</td>
<td>• Music players</td>
</tr>
<tr>
<td>• Traditional record companies</td>
<td>• Rights dealers</td>
<td>• Cinemas &amp; movie theaters</td>
<td>• Smart TVs</td>
</tr>
<tr>
<td><strong>Independent Creators</strong></td>
<td>• Traditional music publishers</td>
<td>• Concerts</td>
<td>• Personal computers</td>
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<td>• Independent filmmakers</td>
<td><strong>Online Platforms</strong></td>
<td>• IP-TV operators</td>
<td>• Mobile phones</td>
</tr>
<tr>
<td>• Independent music recorders</td>
<td>• Online &amp; app-based</td>
<td>• Broadband service providers</td>
<td>• Apps and software</td>
</tr>
<tr>
<td>• Crowd-created casual content</td>
<td><strong>Consumption</strong></td>
<td><strong>Advertising</strong></td>
<td><strong>Creative agencies</strong></td>
</tr>
<tr>
<td><strong>Publishing Firms</strong></td>
<td><strong>Online Platforms</strong></td>
<td>• Brick and mortar retailers</td>
<td>• Traditional content creation for all media</td>
</tr>
<tr>
<td>• Academic, non-academic professional writers</td>
<td>• Self-publishing platforms</td>
<td>• E-commerce players</td>
<td>• Increased focus on digital channels</td>
</tr>
<tr>
<td>• News and journalism</td>
<td>• Online &amp; app-based</td>
<td>• Broadband service providers</td>
<td>• Interactive and social campaigning</td>
</tr>
<tr>
<td><strong>Independent Creators</strong></td>
<td>• Social networks</td>
<td><strong>Media agencies</strong></td>
<td>• Traditional content and resource allocations</td>
</tr>
<tr>
<td>• Self-publishers</td>
<td><strong>Gaming Firms</strong></td>
<td>• Television</td>
<td>• Ad servers and networks</td>
</tr>
<tr>
<td>• Bloggers and social networkers</td>
<td><strong>Online Platforms</strong></td>
<td><strong>Creative agencies</strong></td>
<td><strong>Media agencies</strong></td>
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<td><strong>Gaming Firms</strong></td>
<td>• Traditional gaming companies</td>
<td>• Music players</td>
<td>• Traditional content and resource allocations</td>
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<td>• Traditional designers and gaming companies</td>
<td><strong>Online Platforms</strong></td>
<td>• Satellite players</td>
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<tr>
<th>Media</th>
<th>Comms and Tech</th>
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<td>Traditional participants</td>
<td>Digitally enabled participants</td>
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4. Industry Context

From buying a newspaper to opening a news app on your tablet, from renting a DVD or Blu-Ray disc to streaming your favourite television series on a smart TV, from buying a cookbook to getting customized recipe suggestions on your smartphone, it’s undeniable that the digital transformation of the media industry has already begun.

This report considers how digital transformation will enable the media, entertainment and information (MEI) industries (which we define as broadcasting, publishing, advertising and gaming, and refer to as the “media industry”) to create more value for businesses and audiences. We also assess the implications that this transformation could have for society. We see digital transformation as the use of innovative technologies, data and connectivity by enterprises to create value, revenue and efficiency through remodelling of their own resources and capabilities, redefining their relationship with consumers and reimagining the services they offer.

Digital transformation of the media industry has been driven by changing consumer behaviour and expectations, especially among younger generations who demand instant access to content, anytime, anywhere. Coupled with these changes in consumer habits, impressive technological advances in recent years have enabled media organizations to begin offering the digital services that users are demanding. However, the industry still has considerable work to do to properly serve digital customers. The entertainment content industry (music, film and TV) needs to transform the way it operates, potentially making a short-term sacrifice to profit in the long term. Consumers are growing impatient with services that do not meet consumers’ requirements and the industry’s inability to react to their changing behaviours quickly enough.

“Hollywood needs to wake up to the idea that there’s been a permanent change in viewing habits by younger audiences or the economic model for movie studios and broadcasters is going to be at risk. Kids have grown up accustomed to viewing content differently than their parents and grandparents did.”

– Chris McGurk, Chairman and Chief Executive Officer, Cinedigm

In this section, we analyse the most important (consumer, ecosystem and technological) trends that are driving digital innovation in the media industry.

a. Market trends

Major demographic shifts, coupled with the continuous interaction between technologies, consumer behaviour and businesses, are transforming how media is created, accessed and consumed, which in turn is having an impact on society.

As the global middle class grows (from 1.8 billion people in 2009 to an estimated 4.9 billion in 2030\(^1\)), demand for new media services focusing on convenience, education, premium content and video-on-demand will grow, particularly in emerging economies. Meanwhile, the rise of the millennials (the generation born between 1981 and 1997 who are predicted to make up 75% of the global workforce by 2025\(^2\)), is creating demand for technology services that offer convenience, memorable experiences and instant access to content. At the same time, the world’s population is ageing (with the number of people aged over 60 projected to double to 2 billion in 2050\(^3\)), leading to increased demand for health and wellness, and entertainment and education services designed for older people. Finally, urbanization (as shown by a forecast increase of 2.5 billion people in the world’s urban population by 2050\(^4\)) will contribute to increased demand for media offerings designed with people’s commutes and busy work lives in mind.

New consumer behaviour and expectations

“I don’t think our business models are keeping pace with the changes taking place in consumer behaviour.”

– Kevin Tsujihara, Chairman and Chief Executive Officer, Warner Bros. Entertainment\(^5\)

These demographic shifts are having a dramatic impact on what consumers expect from media, how they consume it, and on their familiarity and savviness in navigating the digital world.
Changing consumer expectations and behaviour: While older generations (such as the baby boomers) have more localized media consumption habits, younger generations, and especially millennials, are keen to consume content from anywhere in the world immediately. Moreover, as the boundaries between industries blur, customers judge their experience of a service not only against its competitors in that sector but also against the best apps or services from other industries. These “liquid expectations” mean that benchmarks within industry sectors are no longer relevant, as customers build their expectations on top-quality digital user experiences.

Younger users especially have expectations that are built on instant gratification, especially the ability to access content from anywhere in the world immediately. Moreover, as the boundaries between industries blur, customers judge their experience of a service not only against its competitors in that sector but also against the best apps or services from other industries. These “liquid expectations” mean that benchmarks within industry sectors are no longer relevant, as customers build their expectations on top-quality digital user experiences.

The adoption of smartphones is also changing the way consumers experience media: 89% of consumers access long-form video content online, and 87% of consumers use a smartphone as their second screen while watching TV to interact with friends or to access more information about the content on the main screen.6

Editorial content, advertising and propaganda: Consumers are increasingly savvy at spotting marketing, PR spin or propaganda disguised as editorial content. To attract and keep the trust of consumers in a very crowded market, media brands will need to invest in trusted and transparent editorial processes and quality content.

“Product first, brand second. If I ask you years ago about Uber or Airbnb, you’ve probably heard about them. But if I ask you about their logo, could you visualize it or describe it? Probably not. Old campaigns are based on visual iconography. Today, people discover new brands through experiences and conversations in social media.”
– Sanjay Nazerali, Global Chief Strategy Officer, Dentsu Aegis Network

Advertising itself is changing, as the effectiveness of traditional online advertising, which aimed to grab users’ attention through interrupting what they were doing or cluttering their screen, diminishes. As the growing numbers of internet users turn to ad-blocking software (200 million users; $22 billion in global ad revenues lost in 20155), marketers are changing their tactics and looking to engage consumers through storytelling or providing useful information (brand utility).

The rise of the amateur content creator: Users, particularly younger ones, are flocking to channels run by amateur or non-professional content creators, such as Swedish computer game commentator PewDiePie, who has amassed an astonishing 9 billion views on his YouTube channel.8 These “amateur” content creators have developed a new kind of relationship with their audience, spending time building up a dialogue with their fans and often referencing them by name in their videos. Many traditional players are partnering with or hiring these new players to reach new audiences (for example, through YouTube Stars or Penguin signing British YouTube phenomenon Zoella to write a novel7). Additionally, media players are starting to acquire companies that focus on producing or distributing short form content that mirrors the style and formats that amateur content creators have created demand for.

Consumers have limited time and bandwidth to watch content, so time spent watching amateur content is eating away at premium content revenues.

Content curation and delightful experiences: With so much content being produced, consumers can feel as if they are floundering in an ocean of music, news and video. They appreciate having someone to curate content for them, similar to what an editor would do with a (paper) magazine. Companies such as Atlantic Media, with its digitally native Quartz outlet, are reaching new and savvy audiences with clean mobile reading experiences and native advertising platforms that enhance the user experience and allow publishers to charge a premium to advertisers.

“Technology as it interfaces with the conventional television set has eliminated, to a certain extent, the traditional gatekeeper model that has allowed very few strategic players to reach consumers.”
– Robert L. Johnson, Founder and Chairman, RLJ Companies
Audiences are increasingly demanding filters to discover new and related content, to help them combat information overload. Creating smart, personalized and trusted filters are the key to building relationships that last over time. In the consumer sector, for instance, the success of Uber and Airbnb is not built around providing a car or home directly, but around a convenient service offering trusted access to assets owned by third parties.

According to Accenture’s Pulse of Media report, 33% of digital consumers would be willing to pay for online video services if more premium content was available.10

Security, privacy and trust: Consumers are becoming increasingly aware that their daily lives are being turned into data that can be analysed and monetized by third parties. As the realization sinks in that “if you're not paying for a product, you may be the product”, consumers are demanding more transparency from companies about how their data is being handled. Opaque and complicated privacy policies may prompt consumers to switch to services that offer them more transparency and better data privacy.

Media enterprises that use algorithms to customize content for their users also face trust issues. Algorithms are a point of differentiation for companies such as Google and Facebook, which therefore keep them secret. There is a temptation to manipulate the algorithms for commercial ends or simply in a spirit of experimentation (as was the case, controversially, with the Facebook newsfeed algorithm in 201211). Will companies need to make these customization algorithms public to retain the trust of their users?

“The algorithm is the new intermediary.”

Data analytics and real-time content management: As the volume of data grows, vast amounts remain unstructured (and hard to analyse), presenting a significant challenge, especially given the growing preference among users for consuming images and video.12

Ecosystem challenges
As the media industry adapts to the changing habits of its customer base, we have seen a number of significant changes to the landscape of the media sector.

Start-up disruptions: Talent, access to technology and a change-the-world attitude are allowing start-ups to bloom across the world, creating new businesses and lean models. Companies such as Vice or BuzzFeed, with digitally savvy newsrooms, are creating and promoting their own content with a low-cost approach and leveraging social networks and mobility as distribution channels. Once this breed of company reaches scale, it invests both in raising the quality of its content and in offering new services. These can include consulting, content marketing or building their own agencies to better serve advertisers, thereby putting competitive pressure on traditional media companies both in local and global markets.

With digital entertainment, the cost of licensing or producing premium-quality content is generally disproportionate at present to the consumer’s willingness to pay. Furthermore, traditional players continue to attempt to protect their core businesses despite the increasing demand for digital entertainment by consumers. As a result, pure digital distribution businesses are struggling to be profitable and survive.

Companies such as Netflix need to invest every time they expand into a new market to reach critical mass and make a profit. These companies therefore need significant support to gain market traction. This support can come from venture capital or investment from a company’s core business, as with Amazon Prime or Netflix and their DVD rental services. In the case of Hulu, the fact that it is a joint venture backed by several major Hollywood studios means that the cost of content – and therefore risk – is reduced.

Everybody is a content creator: A diverse set of brands and organizations now assume the role of broadcasters competing for consumer attention (for instance, Unilever or Intel through their partnership with Vice Media).
Access to financial resources: Creative people are finding creative ways to fund new products and services. Content creators are bypassing traditional media companies and turning to innovative sources of financing such as crowdfunding platforms. In its first six years, one such platform, Kickstarter, has raised more than $500 million for films, games, music and publishing projects.\(^{13}\)

The transformation of work: As in many other industries, digital transformation is likely to have a significant impact on employment, creating demand for some highly skilled and creative digital roles, while making some job categories outdated and redundant. As the workforce adapts to the digital economy, there is likely to be a need for lifelong learning to keep pace with the evolution of digital technology. The media industry will have the chance to create the educational and skill development tools for students and workers to keep their skills up to date throughout their careers.

“We have hired around 400 creative people during the past two years. They bring a new set of skills: social, analytics, user experience. They use digital tools in a different way. We need a new structure, processes, incentives and rewards.”

Regulatory uncertainty: Legal frameworks surrounding intellectual property (IP) are not ready for a new generation of media consumers who expect instant access to content from anywhere on the globe. As a consequence, many consumers are choosing to bypass conventional means to access content (for example, using virtual private network (VPN) services to access US Netflix in the United Kingdom). This could be to evade censorship or just to bypass legal restrictions relating to the availability of content in their countries. (According to GlobalWebIndex, Netflix has more than 20 million users in China alone.\(^{14}\)) Others are turning to file-sharing sites to access content illegally.

The European Commission is working on new regulations to create a digital single market, moving from 28 national markets to just one. The European digital market today is made up of national online services (42%) and US-based online services (54%). European Union (EU) cross-border online services represent only 4% of the total market. If successful, the digital single market could contribute €415 billion a year to the European economy, generate hundreds of thousands of jobs and create the right conditions for digital networks and innovative services to flourish.\(^{15}\)

a. Technology trends

Technological advances in recent years have transformed many industries, including media. The increase in mobile and internet penetration has made being connected a way of life for younger generations of consumers (in the UK, young adults spend an average of three-and-a-half hours a day using their smartphones). This presents media businesses with opportunities to fuel the continuous conversations that this connectivity allows. Alongside this increase in connectivity, technology now allows access to content anywhere, anytime, helping to meet consumer expectation (although not always legally). Meanwhile, the growing availability of open-source and free software, such as Amazon Web Services or app development kits, allows start-ups to build new businesses and innovative products in record time.

Finally, through the widespread availability of cheap sensors, connected devices and cloud computing, we are witnessing the birth of the internet of things, a network of connected machines delivering smart new services, which will offer the media industry a whole range of opportunities to create seamless, personalized services.

Digital trends

Against the background of these broader technological advances, there are a number of technological trends that we believe will be central to the digital transformation of the media industry.

Data analytics and real-time content management: Data collection and analytics enable companies to get consumer insights across many channels and devices, allowing them to deliver relevant, unique and meaningful experiences. The key for media enterprises is to adapt content according to a rounded view of customers, their interests, behavioural patterns and the context in which they are consuming the content.
This real-time use of data analytics and content management is particularly important as media organizations no longer only provide pieces of content but also experiential services built around that content. Media firms are engaged in a fierce battle for consumers' attention (by providing attractive mass media content that stands out amid the flood of similar content) and in a constant war against consumers' impatience (by providing premium content such as TV series, sports or films that keep a viewer engaged for longer).

### Case study

**Netflix** can provide a 100% personalized content recommendation to its customers based on their historic consumption and behaviour during past viewing sessions. Netflix algorithms can also detect viewers’ intent and interest by determining which movies and television shows are watched on its platform, how many of these programmes are viewed from beginning to end, how often they are paused or rewound, how often they are searched for by particular users and how frequently they are mentioned on social media platforms. The mix of all this data and sophisticated algorithms allows Netflix to decide which content to invest hundreds of millions of dollars in producing.

**Spotify** gives its users the opportunity – in real time – to listen to new artists based on their listening habits, preferences and context.

### Mobile and social: The power of mobile and social is transforming how media is accessed, consumed and perceived.  

First, continuous and instant access, particularly through sharing on social media, empowers users to promote or “bring down” brands and institutions. Overnight stardom or instant reputational crises are new phenomena that need to be managed from social, business and technology perspectives (for instance, handling traffic peaks in servers). Social and mobile also give media companies greater crowdsourcing powers, either through users evaluating products (such as *House of Cards* on Netflix) or collaborating on content creation (Facebook, Twitter, LinkedIn, Medium or Amazon’s Kindle Direct Publishing are some examples). Social media is also helping companies create content by generating conversations with audiences, as illustrated by the way Storify can derive insights from its users and co-create content with them. However, as mobile and social continue to proliferate, fewer companies are able to retain control over the services, applications and content they are delivering.

### Industrialization of the media industry: New digital processes are changing how media is created, distributed and monetized. Traditionally, the media industry focused on creating content and optimizing distribution, but today many companies are automating this, digitizing catalogues and inventories, launching new rights management systems, optimizing content creation workflows and writing algorithms to create content.

“Platforms don’t usually value content quality in the same way. The cost of creating good quality content is high. They have found a low-cost manner to get content and distribute it.”  

Similarly, automated processes are matching content and advertising, a capability offered by Google through its programmatic advertising service platform, AdSense, which allows advertisers to bid for visibility in search results and optimize their ad spending.

Artificial intelligence (AI) is also being used to create content from structured datasets, such as financial reports, by using natural language generation algorithms (as pioneered by companies such as Narrative Science). The Grid® goes a step further, offering complete websites designed by AI, reducing costs significantly.

### Case study

**Dataminr** is a service that reads Twitter streams, public datasets and other unconventional sources of information and transforms them into actionable signals. Through algorithms, Dataminr allows its clients to detect the earliest signals for breaking news, real-world events and emerging trends relevant to finance, news, the public sector or security and crisis management.
Drone journalism. Drones are starting to be used by journalists for different reporting needs, including sports, investigative, disaster, weather or environmental journalism. The University of Nebraska-Lincoln has created the Drone Journalism Lab to explore how drones can be used for reporting from a law and ethics perspective.

Adoption of digital technologies

“The difference between media and other industries is that there’s nothing that hasn’t been touched by digital. Is the humanity adoption of technology what is changing the industry?”

– Sanjay Nazerali, Global Chief Strategy Officer, Dentsu Aegis Network

The media industry has already been transformed by several waves of digital transformation. Each wave has been driven by the impatience of consumers for content, with new technologies often coming from disruptive outsiders rather than traditional industry heavyweights. As each wave has washed over the industry, media companies have faced the dilemma of whether to fight (say, through litigation against copyright infringers) or embrace the possibilities that the new technology offers.

The first wave of digital transformation took place in the last years of the 20th century, as Napster and file-sharing suddenly appeared, building on consumers’ love of music and the nascent social aspects of the internet. People were prepared to put up with poor user experience in return for being able to discover as much music as they liked, at no cost. The music industry chose to fight this wave of innovation through a series of lawsuits against users of file-sharing services.

The next wave of digital innovation arrived in the early 2000s as media companies realized that file-sharing had fundamentally changed how people wanted to access music and content. Selling CDs or DVDs was no longer going to work. So Apple created iTunes, which gave consumers a great user experience and an ecosystem of devices (iPods) and services for listening to music. Where music led, other media followed. For example, the launch of the Kindle in 2007 allowed people to access books digitally.

In the second half of the decade, as mobile, social and the cloud grew in importance, consumers began to expect access to their music, books and films anywhere and anytime. As data connectivity started to become ubiquitous in many countries, consumers began to subscribe to streaming services such as Spotify. At the same time, media become more personal, with content aggregators using analytics to create tailored recommendations for users.

The fourth wave of digital transformation is now breaking: For many companies, the priorities are to fix the basics, making sure that their social and media strategies are correct, their catalogues are digitized and accessible through the cloud, and data is used intelligently to extract more value from targeted advertising.

Alongside these fundamentals, creative use of technology allows companies such as Spotify to leverage behavioural data to create new ways of discovering and experiencing music through dynamic and personalized categories; for example, according to mood rather than more traditional divisions such as genre or artist.

Case study

Mobile, context awareness and creativity are facilitating new experiences that have become possible only recently. Spotify Running matches the user’s running pace and plays music to match. Spotify has also partnered with Uber to allow users to play their music lists or discover new music on car speakers during their journey through Uber Spotify Lists.

The next transformational innovation is likely to be the internet of things and the Living Services wave, giving media enterprises opportunities to move into new ecosystems such as connected cars (there has been a 14% rise in ownership of in-vehicle entertainment systems).
One of the key lessons from this process is that successful digital companies across all the sectors “build their value propositions on top of user expectations and behaviours”, creating the right user experiences with accessibility and convenience in mind.
5. Future Horizons

Digital themes and initiatives
We have identified a number of digital initiatives that will be the building blocks media companies can use to transform their businesses. These initiatives are all concrete, short- to medium-term developments illustrated with real-world examples.

The initiatives are grouped into three themes – personalization and contextualization, content fragmentation, and partnerships and industrialization – which we believe will be of vital importance to the digital transformation of the media industry. These themes and initiatives have been drawn from our analysis of the significant trends affecting the sector and from the insights arising from our interviews with leading figures in the media industry.

a. Personalization and contextualization

Every day we create 2.5 quintillion bytes of data and upload 300 million photos to Facebook. Having great content is no longer enough to stand out amid the overload of information that internet users face. Improved user engagement is now at the centre of strategy for the media industry, and, as outlined in the Forum’s Digital Media and Society report, “Marketers who master the art of communicating to consumers through meaningful content, targeted in a non-invasive and personalized manner, stand a better chance of fruitfully engaging the end user.” The initiatives in this theme all relate to presenting consumers with content and advertising in engaging ways.

Media organizations, whether broadcasters, publishers or advertisers, have to present content in a way that’s relevant to users and helps them discover new and related content. The algorithms behind personalized content are still in their infancy but improving them will be crucial if publishers or broadcasters want their users to remain loyal and active.

For advertisers, it will become increasingly important to gather contextual information, such as screen-in-use, online behaviour, the consumer’s location, time of day and past exposure to adverts, to present users with the most contextually relevant personalized advertising. Marketers will also look to create “advicevertising”, which provides consumers with genuinely useful, customized information while also implicitly or explicitly promoting a brand or service. In the future, good advertising will be a positive component of the user experience becoming a natural part of consumers’ conversations.

As companies use more and more personal data to create increasingly personalized advertising and content, this will raise complex issues relating to data privacy and transparency. How businesses deal with these privacy challenges in terms of transparency and ethics could become a point of differentiation from their rivals.

Finally, as the context in which people consume media becomes ever more important, we will see more “phygital” services, as digital media engagement will be integrated more with a physical user experience. There will be opportunities for companies to harness the technology behind the internet of things to create memorable, digitally enhanced experiences for fans at concerts, sports matches and other live events.

Personalized advertising
“Data without human insights is a useless commodity.”
– Sanjay Nazerali, Global Chief Strategy Officer, Dentsu Aegis Network

Personalized advertising is becoming increasingly important as traditional advertising is becoming less effective at engaging consumers, especially younger ones. A study by ComScore found that millennials, who collectively have substantial purchasing power (estimated at $170 billion a year), are less attentive, less likely to find advertisements interesting and more likely to find them irritating than older generations. Ad clutter on desktop and mobile browsers is creating bad user experiences, damaging brands and encouraging users to turn to ad-blocking software, which
translated into $5.8 billion of blocked revenue in the United States in 2014. This number is expected to reach $10.7 billion in 2015 and $20.3 billion by 2016.  

“Advertising is not designed to integrate well with social media . . . you cannot just dump an advert into someone’s conversation.”

– Sanjay Nazerali, Global Chief Strategy Officer, Dentsu Aegis Network

Marketers are improving their tracking of consumers’ digital activities. The first wave was web-based, using traditional, static metrics (such as age, sex and income). We are now in the second wave of analytics, built on mobile technology and social media. Advertisers can now pinpoint users’ location from their smartphone, and identify users’ friends and interests from their social media activity. This type of analytics is harder to carry out, often dealing with unstructured data from social media, such as ideas and preferences, but allows adverts to be better tailored, according to the context of where the consumers are located and what they are doing.

Although Google ($59.6 billion in advertising revenue in 2014) and Facebook ($11.5 billion in advertising revenue in 2014) are the biggest platforms for leveraging customer information to target adverts, there are also a number of specialist companies operating in this field.

The negative impact of digital advertising on user experience seems to be the real price of free content. Cookies and megabytes of code from advertising networks are slowing the download of information and eating away mobile data plans. Ultimately, even tailored adverts are irritating due to their persistence. Once you search for a flight to Athens, for instance, banners and advertisements start to populate your browsing sessions even weeks after you have returned from visiting the Parthenon.

Brands need to be smart and embrace “enhanced-pull advertising”. They need to apply creativity and innovation in communicating a product or brand’s value proposition without actually advertising it, through content marketing, word-of-mouth referrals, customer relationship management, and sales promotions and discounts. An enhanced version of this includes use of branded content marketing to entertain consumers and entice participation with the content, use of expert reviews and articles of bloggers, and other strategies to foster conversations around a product.

Case study

**InMobi**, an Indian company headquartered in Bengaluru, specializes in offering customized adverts on mobile platforms, a task that is made more difficult by users finding mobile ads particularly intrusive. With its Miip platform, launched in July 2015, it can embed adverts in 40,000 apps such as Spotify, Rhymeo and Vidzy and even allow users to buy the advertised product without leaving the app they are using. InMobi has more than 10% of the market for mobile advertising with 50 billion advertising impressions every month, leading some to value the company at up to $2 billion.

**Verve**, which has raised more than $36 million in funding since it was founded in 2005, is another company specializing in personalized advertising for mobile users. It takes a different approach – integrating mobile advertising with location-based services to offer contextually relevant communications. By using real-time location data, Verve can deliver adverts to consumers at the right time on their path to purchase and connect that message with actual store-level foot traffic. Verve has a database of more than 3 million verified locations in more than 150 categories, allowing it to tailor adverts more accurately.

Despite the success of these companies, regulations and consumer concern are starting to limit advertisers from using personal data as freely as they wish (for more analysis of data privacy, see the third initiative under Personalization and contextualization below). Personalized advertising is still at an early stage of its evolution. Companies are using data to understand what a consumer is doing but often not why they are doing it. Companies still need to work harder to better understand consumer motivations and create meaningful advertising that provides value and can be part of a conversation, rather than interrupting it.
Digital value at stake

Driven by higher profit margins from personalized advertisements as well as increased personalization of mobile advertising – the fastest-growing advertising channel – and improved customization of search ads, personalized advertising has the potential to create ~$190 billion of value for the media industry.

But personalization is driving online advertising into prominence at the expense of radio and print, with ~$50 billion of value expected to migrate away from these traditional advertising channels.

Due to the higher returns that personalized advertising offers and an eye on potential long-term benefits from increased brand loyalty, the total value at stake for B2B customers (evaluated as value to external industry) over the next 10 years is expected to be ~$80 billion.

Personalized content

“The huge trend is marketers and brands becoming publishers. There are more content producers coming from a non-traditional, non-journalistic spectrum.”

Consumers are drowning in a flood of content. The amount of new content published every week would take longer than a human lifetime to consume. Every minute, Twitter users tweet about 300,000 times, Instagram users post almost 220,000 photos and WhatsApp users send 14 million messages.32 Consumer attention is becoming increasingly fragmented across content platforms, often with their own alerts and replicated versions of the same piece of content.

“The demand for trusted, high-quality content that people can rely on has never been higher. But providing high-quality content is not supported by the actual cost structure of many media companies.”

In this cluttered digital space, consumers need a trusted filter or personal guide that can separate the signal from the noise and deliver personal recommendations to the user. Contextual information is very important, as users can have very different tastes or needs depending on the time of day, where they are and what they are doing. This guide or curator needs to understand the consumer’s historical consumption patterns, cultural tastes, location, time of day and also take account of the user’s feedback on the recommendations it produces. On top of this, the guide will need to incorporate ratings for content from reliable sources to try to offer the most meaningful and appealing information to the user. Above all, the recommendations need to be presented elegantly, in a clean, seamless user interface.

“We want to be part of our audience’s world and their daily habits. We have adapted versions to many channels like YouTube, Facebook or Snapchat.”
– Spencer Baim, Chief Strategy Officer, Vice Media

The media enterprises that have the biggest opportunity to benefit from offering personalized content will be content aggregators, who can encourage users to spend more time on their platforms through enhanced recommendations of related content. However, there will also be opportunities and implications for advertisers, advertising companies, content creators and rights owners; for instance, how to make their content as attractive as possible for the recommendation engines to pick up. There will also be challenges surrounding intellectual property law and integrating content creators, partners and potentially payment services into one platform. Perhaps the most significant test for the firms that create recommendation engines will be to win and retain consumers’ trust, and convince them that they are receiving unbiased information and recommendations. As consumers’ tastes and preferences are prone to change, however, recommendation systems have the potential to enrich the cultural life of consumers by encouraging the discovery of new content and information.
Case study

Some companies are already moving towards offering personalized content. **Pandora**, a freemium music-streaming service, gives users recommendations based on their listening habits. Each song is analysed for up to 450 characteristics that have a bearing on user preferences, resulting in a uniquely customized experience for each listener. The recommendations are improved through feedback from listeners who have contributed more than 25 billion thumbs-up or thumbs-down ratings since Pandora launched in 2000. The effectiveness of the recommendations have contributed to the growth of Pandora’s user base to more than 200 million and its revenue to just under $1 billion in 2014.

**YouTube** offers a similar service for video streaming, providing recommendations of related content. Its recommendation engine won an Emmy Award in 2013 to acknowledge the computer science that powers it and the impact it has had on the media industry. YouTube recommendations have helped contribute to a 50% increase year on year in the hours that its 1 billion users spend watching videos on the site each month.

Digital value at stake

Notwithstanding the quality of content available on OTT platforms such as YouTube and Netflix, their growth is being aided by their strong recommendation engines. The potential value at stake to the industry, excluding overlap with other initiatives, is expected to be ~$20 billion.

Personalized content has the potential to create ~$110 billion of value for society in the next decade, as content recommendations enable users to put the time they would have spent searching for content to more productive uses.

B2B consumers of the media industry can benefit from the increased consumer spending through customized product recommendations and personalized offers. This can potentially generate ~$50 billion in additional value.

Data privacy and transparency reform

“Brands are collecting and using data about consumers in many cases without transparency. They have to be very careful about this.”
– Anne Hunter, Senior Vice-President, Global Marketing Strategy, ComScore

“People say that Facebook is the new TV. If this is true, we need to think about the human implications of data and governance. The more we track human behaviour, the more intrusive we are. There is a balance between accuracy and privacy and we need governance.”
– Sanjay Nazerali, Global Chief Strategy Officer, Dentsu Aegis Network

According to Accenture, 54% of digital consumers are cautious about the information they share due to lack of confidence in the online security that protects their personal data. Additionally, according to a 2015 global end-user survey by the World Economic Forum, 69% of those surveyed reported that anonymity and privacy are either important or very important in digital media consumption.

Catastrophic breaches of data security happen all too frequently. In recent years, personal data from tens of millions of consumers have been compromised in separate incidents. To take just a few examples, Sony PlayStation Network (data from 77 million users), Target (card details from up to 40 million shoppers), AOL (data from 2.4 million users), Adobe (36 million users) and Ashley Madison (37 million users) have all been disastrously compromised. As internet businesses become increasingly global, their attractiveness as targets for hackers and criminals increases, raising the likelihood of further data leaks without significant improvements in data security. These incidents keep data privacy and security concerns at the front of consumers’ minds and increase pressure on regulatory authorities to introduce stricter regulations governing the collection and use of personal data.

In tandem with these concerns about data security, regulators have started to take a more aggressive approach to the technology sector. Most notably, the European Commission is taking on Google in a regulatory battle over its
dominance of the internet search and mobile operating systems markets, and investigating whether it is presenting search results independently of its own commercial interests.\textsuperscript{38}

As a consequence of consumer concerns and regulatory pressure, media companies are moving towards communicating more transparently with their customers about how their data will be used, although some bad practices continue. Responsible companies are already restricting the ways in which they will monetize that data. The companies most affected by these changes are online platforms, marketing companies and data-mining and processing firms.

**Case study**

As data privacy and transparency become more important, there will be increasing opportunities for media companies to offer best practices in this area as a point of differentiation against their competitors. Apple is already trying to set itself apart from fellow technology giants Facebook and Google by stating that it will not sell consumer data to third parties. Apple states that it restricts the use of consumer data to designing products and services and refining user experience. Google is taking steps to increase transparency about how they use consumer data with the launch of My Activity. This feature gives users greater control over which items of personal data Google can store.

Some companies see opportunities for new business models growing out of consumer concerns about data privacy. Datacoup is a New York-based start-up that enables users to monetize their own data without passing personal information to advertisers. It promises users who sign up the possibility of earning up to $8 a month in return for access to their social media accounts and data about the online payments they make. Datacoup is eventually looking to sell anonymized data profiles to marketers but, to succeed, it faces the challenge of signing up a large enough user base to create sufficiently large pools of data to attract interest from advertisers.\textsuperscript{39}

Further opportunities for the reform of data privacy and transparency practices exist, particularly surrounding the use of data belonging to children, who may not be able to give their informed consent about how their data can be used. This is a particularly relevant issue as many websites do not have effective age verification procedures.

**Digital value at stake**

Inability to meet the demands of consumers, intrusion into their private space and behavioral tracking could lead to a potential value erosion of $170 billion for the industry due to higher penetration of ad-blocking, loss in revenues from use of advanced privacy settings and higher costs of data breaches.

Rising concerns about privacy and use of such tools are also expected to impact the external industry as they will limit the benefits from personalization. The expected loss to B2B consumers is $80 billion.

**Phygital: Digital media become physical**

The rapid growth of the internet of things, which is predicted to double in size from 2015 to 2020,\textsuperscript{40} has enabled digital media to become integrated in the physical world. This development has been most noticeable in two areas, retail and live events.

Media and retail are merging, particularly through advances in connected retail. Digital signage, beacons and Digital out of Home (DOOH) technologies are providing consumers with an entirely different retail experience. While walking around a shop, consumers can now be given relevant, tailored content, such as videos, offers and specials. Shop staff will also be able to access (with the shopper’s consent) personal, transactional and social data, which provide rich customer insights and enable the delivery of highly personalized retail experiences. It has been forecast that by 2016 connected retail will influence 44% of retail sales.
Case study

**Topshop** is in the vanguard of connected retail, embedding technology in its marketing, stores and shopper experience, so that everybody who has the Topshop app can access exclusive previews and content from the launch of new clothing lines. This creates a favourable "showroom" effect and extends the reach of Topshop’s marketing campaigns.

Live events also have the potential to be transformed, as arenas and venues become connected and media start to flow inside. The “connected stadium” experience allows fans’ experience of a sports event or concert to be augmented through the availability of replays, special interviews or alerts about merchandise, refreshment deals and wait times for concessions stands or lavatories on their smartphones.

Case study

Apps that improve the experience of sports fans watching a game in the stadium have been launched. For the 2015 **Super Bowl** in Phoenix, the **National Football League**, in partnership with Verizon, launched the Super Bowl Stadium App, which allowed fans to watch instant replays from four camera angles on their phones and even catch the famous half-time commercials. The app also offers seating plans and maps of where food concessions are located in the stadium. Using geofencing beacons (tiny sensors that use Bluetooth to detect nearby smartphones), the app is designed to work only inside the stadium itself. In-stadium apps have the potential for sports teams and event promoters to start a conversation with fans and, further down the line, encourage them to buy merchandise, subscriptions to online content or tickets to future events.

The integration of digital media into the physical world has great potential for sports companies, retailers and marketers, while also providing benefits for shoppers and fans. There are, however, some difficulties involved. Properly connected retail or live events may require complex partnerships, which will need to be underpinned by a legal framework and revenue sharing. Internet connectivity at retail locations or live event venues requires investments to ensure seamless experiences for attendees.

For the organizers of concerts and sports events, the increasing integration of digital media into these events, particularly through a fan’s smartphone, also presents some risks. Livestreaming of events through apps such as Meerkat or Periscope is increasing rapidly. According to Cisco, mobile video will form 71% of all mobile data usage by 2019, a 25-fold increase on 2011 levels. With the popularity of livestreaming come risks to rights holders. At the Wimbledon tennis championships in 2015, efforts were made to stop spectators from using apps such as Periscope and Meerkat to share footage of the action on court.

Case study

Virtual reality (VR) seems to be the new wave of media and entertainment. Headsets such as Samsung’s Galaxy Gear VR, Google Cardboard, Vive, Sony, Oculus Rift and Microsoft HoloLens are bringing new opportunities for entertainment, work and education.

**Microsoft HoloLens** is a virtual reality headset that allows users to extend their creations beyond the scope of a screen. The platform integrates high-definition holograms with the user’s physical spaces and objects, unlocking new ways to create content, communicate, work and play. On its release, the platform will be focused more around developers and enterprises to make it attractive for users.

**Oculus Rift**, created in a garage, was finally acquired by Facebook for $2.3 billion. VR headsets are expected to be the next platform for games, information access, entertainment and communication.
Digital value at stake
Rapid growth in ‘on the go’ media consumption leading to integration of digital media with the physical world results in ~$90 billion of value at stake for the media industry by opening up newer avenues for the advertisers to target. Digitalization of content, in particular music, has also impacted the rise of physical consumption experiences: in numerous markets, it has led to an increase in live event attendance at the expense of recorded music.

This integration has also been augmented by growth in the use of beacons, digital signage and geo-targeting of customers. Furthermore, there is an emerging trend of static outdoor advertising on billboards being replaced by dynamic billboards with content based on local demographics.

The integration of digital media with the physical world is also expected to benefit the retail industry with potential value at stake of ~$40 billion over the next 10 years.

Advicetising: Advertising as personal advice
Traditional advertising is becoming less effective as internet users react negatively to generic adverts that disrupt their online activity, with advertisers finding it particularly difficult to attract the attention of younger generations of consumers using traditional methods. Marketers are now finding it more effective to provide users with useful, personalized information or advice, while also implicitly or explicitly promoting a brand, product or service, with the goal of “getting beyond the likes”.

Thanks to advances in data analytics and machine learning, marketers are becoming better at framing these advicetisements but have by no means perfected this technique. Missteps with targeting communications can prove costly to a brand’s reputation as consumers are particularly sensitive to concerns that a company might be exploiting their personal data or manipulating their emotions for commercial gain.

Case study
The advicetisements that succeed best are those that provide the user with genuinely useful information or a helpful service. Examples include Google Now, an intelligent personal assistant similar to Apple’s Siri, which helps users with queries expressed in natural speech. It provides alerts and reminders based on the consumer’s location and past activity, and also arranges information from users’ Gmail accounts, such as flight and hotel details, into cards that are easy to access. In this way, Google Now provides a helpful service for users while strengthening their connection to the Google brand.

Digital value at stake
This digital initiative hasn’t been valued separately and is covered in the value-at-stake analysis of other initiatives.

b. Content fragmentation

If the explosion in the volume of content produced is one of the defining trends of the internet era, then the fragmentation of content is the other. In the pre-digital era, music buyers could go to the shops and buy a CD; now they are presented with options to download tracks from iTunes, stream music on their laptop through Spotify, or listen to tunes bundled with their smartphone contract. While current affairs junkies used to buy a newspaper, now they can read the news on an app on their tablet, head to the website of a traditional newspaper or turn to any number of digitally native news outlets such as Vice or BuzzFeed.

Across all segments of the media industry, we are seeing content fragmentation, from broadcasting (where new entrants such as Netflix, Hulu and Amazon are leading, to content being available across multiple platforms and devices) to publishing (where book publishers are trying to bypass retailers to sell directly to customers). Content fragmentation is creating new opportunities for media enterprises to find innovative ways to create content through crowdsourcing or giving audiences the tools and power to create their own content. Fragmentation could create ~$700
billion of value for the industry over the next 10 years. It is also offering new models for media businesses, particularly in broadcasting, where Over the Top (OTT) services, such as Netflix and Hulu, are revolutionizing the sector.

“The lack of technical standards makes distribution one of the main challenges for media companies. Audiences are very fragmented across platforms, devices and operative systems. This situation hinders managing audiences and monetizing traffic.”
– José Manuel González Pacheco, Director General, Atresmedia Digital

The initiatives in this theme – OTT and OTT 2.0, communities of content and IP frameworks for the digital age – all present opportunities for media businesses that can adapt to an era of content fragmentation. In each case, however, many media organizations will need to adapt significantly how they do business to thrive in this environment.

OTT and OTT 2.0
As consumer tastes, particularly among younger generations, have become increasingly globalized, demand has soared for OTT services such as Netflix or Hulu that offer subscribers access to a far greater range of TV series and films from around the world than would be available from national broadcasters. Price is also a key driver of new behaviours: consumers can access hundreds of hours of premium content for $9.99 a month or less – the price they used to pay at Blockbuster for renting two DVDs only three years ago.

Alongside legal OTT services, some consumers, who expect instant and free access to content anytime and anywhere, are turning to illegal platforms to stream or download TV shows and films, often sacrificing picture and sound quality in return for being able to watch for free.

Case study

Netflix has been the most successful subscription-based OTT service, launching in about 50 countries. It has differentiated itself by using data to offer better recommendations and even to decide what content to commission or license. The company employs 300 people to maintain and improve its content recommendations, spending $150 million a year. It commissioned the highly successful House of Cards series (winner of six Emmys) in 2014 partly because insights from its data analytics suggested it would be successful. Based on its analysis of consumer viewing habits, it decided to release all 13 episodes at once, to cater to a growing preference among audiences to binge-watch TV series. The success of House of Cards more than doubled the number of Netflix subscribers from 27.5 million in 2012 to 61 million in July 2015.

Alongside the growth in OTT services, broadcasting is being changed by another trend: the growth of the second screen. It’s rare to see a programme that doesn’t put a Twitter hashtag up on screen to encourage conversations about the show on social media. With broadcasts of live events attracting huge numbers of tweets (the 2014 Oscars attracted more than 11 million), Twitter is looking to encourage this use of the second screen by offering curated experiences to tie in with live events.

At present, viewers turn to independent apps, such as Twitter, on the second screen, but we see potential for OTT operators to offer integrated services for both the first and second screens. We are calling this next stage of development OTT 2.0. This new breed of second-screen services and apps for movies and TV programmes will seamlessly mix action on the first screen with information about the movie or TV show, social features and the opportunity to buy related merchandise on the second screen. On the content creation side, second screen interactions will allow showrunners to know their audiences better, improve recommendations, and adapt programmes and advertising to them.

These OTT 2.0 services can become a new source of revenue for content creators, aggregators and online platforms that provide either free or paid-for content for the second screen. There are a number of obstacles to navigate, however, before OTT 2.0 can be introduced on a wide scale. There will be complexity surrounding rights, regulations and creating partnerships on a global and local scale. Also, if OTT 2.0 services are to include automatic content recognition for what
is playing on the first screen (rather like what Shazam does for music), there are technological challenges to make this work well if the original content is being streamed in low quality.

**Digital value at stake**
In the short run, OTT is expected to dilute value as there is a shift away from more profitable, traditional sources of revenue. However, in the long run, scale effect will enable the industry to generate additional profits, with the value addition expected to be ~$510 billion. A large part of this value addition stems from three sources: increased power of content creators who are in turn reducing the influence of distributors; higher usage of second-screen services which is opening up new avenues of monetization for advertisers and merchants; and growth in online gaming.

There exists significant value to society from the proliferation of OTT. Advantages include: access to cheap unbundled content leading to expenditure reduction; lower emissions due to digital viewership; wider access to education resources from the use of open-source platforms such as YouTube and educational portals such as Coursera. Rising education levels and standards of living, as well as other factors, can help deliver a total value to society over the next 10 years of ~$300 billion.

**Communities of content**
The popularity of social media continues to grow. UK and US consumers spend a quarter of their time with smartphones on social media. More than half of US adults who go online use two or more social media platforms, and 45% of Facebook users in the US use the site several times a day.\(^1\) One reason that social media appeals to users is that it allows them to build up communities focused on particular interests. Whether it is users subscribing to a YouTube channel specializing in documentaries or Pinterest users sharing ideas for wedding decorations or a Facebook group celebrating classic sport cars, there are millions of communities on social media catering to every taste.

Advertisers recognize the value of these communities, but smart marketers have realized that instead of interrupting these groups, they should listen to them and observe them, so that they can adopt a strategy that fits the context and behaviour of users for each specific platform. This is particularly important for mobile-based platforms and services. As advertisers build their strategy around communities of content, social media is starting to compete more strongly against search for advertising revenue. Although Google’s advertising revenue in 2014 ($59.6 billion) dwarfed Facebook’s ($11.5 billion), Facebook managed to earn a higher proportion of its revenue (24% in 2013) from advertising than Google. Google has long recognized the importance of social media for advertising, but its attempts to colonize this space through Google+ and Google Wave have failed.

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**Case study**

**Facebook** and **YouTube** are the most successful social platforms, but other media firms are offering more focused platforms that have found valuable niches. Pinterest is one of the most notable examples, with 72.8 million subscribers (85% of whom are female).\(^2\) Pinterest is designed so that users can create collections of pictures relating to themes that interest them, from vintage clothes to wedding decorations. As many of the photos that users pin are of products, the logical next step would be to make these items shoppable and transform pinboards into illustrated shopping lists, allowing users to buy the items on the Pinterest platform.

**Snapchat** is smaller than its instant messaging rival WhatsApp but has still attracted estimated valuations of $15 billion, partly because of its large and active user base of millennials (100 million daily active users\(^3\)). Advertisers have been keen to engage this user base through the Snapchat Stories and Snapchat Discover features. Snapchat Stories allow content to be posted and shared for repeat viewing for 24 hours and have been used by companies such as Universal and Coca-Cola for paid-for promotions.\(^4\) Snapchat Discover provides a way of organizing these Stories, partnering with media organizations such as Vice Media, CNN and ESPN to create different Discover channels.\(^5\) As of September 2015, Snapchat was getting 4 billion video views a day, putting it on par with Facebook.\(^6\)

**WeChat**, an instant messaging service operated by Chinese internet giant Tencent, is providing an insight into how communities of content (such as chat users) can be integrated with other services. WeChat, which has about 550
million active monthly users\textsuperscript{54}, employs Quick Response (QR) codes to allow users to follow other users or download apps. The QR codes send users to Tencent App Store, thus driving business to this part of the Tencent empire.\textsuperscript{55} WeChat is also integrating news, payment, shopping and taxi services into the app.

With communities of content springing up across many platforms, there is likely to be increased competition among online platforms and content aggregators to attract advertising spend. This fragmentation across platforms will also create challenges for advertisers and brands, and change the way they have conversations with consumers. They will need to develop processes to distribute and manage content, and to measure its effectiveness in making an impact on users across many platforms.

**Digital value at stake**
The potential value at stake for the industry of ~$90 billion in the coming decade is mainly driven by higher advertising spend on social media and growth in social media gaming.

Consumers benefit from communities of content due to easy availability of interest-specific content and increased self-personalization leading to time savings and enhanced productivity, with the total value at stake expected to be ~$20 billion.

External industries such as consumer goods are expected to benefit significantly from the rise in content communities, with potential value at stake of ~$220 billion. These industries are expected to gain from a higher profitability on every dollar of advertising spend, improved brand loyalty and enhanced customer engagement leading to increase customer lifetime value.

There are potential societal benefits from growth in content communities of this kind as they could generate additional employment opportunities.

**Intellectual property frameworks for the digital age**
For consumers, digital means abundance. Many users do not understand or accept artificial scarcity of content caused by laws, regulations and issues on rights. In 2011, 23.8\% of global bandwidth was taken up by copyright infringement. BitTorrent, the world’s protocol for peer-to-peer (P2P) sharing, has a 150 million-strong user base. Users are also increasingly turning to VPN access, with 410 million people worldwide browsing the web anonymously in this way.

According to GlobalWebIndex, more than 20\% of online adults in places such as Vietnam, Indonesia, Thailand, Brazil and India say they use VPNs to get better entertainment content that is not available in their countries.\textsuperscript{56}

“As an industry, we need to fix global content. The key thing about piracy is that some fraction of it is because users couldn’t get the content. That part we can fix. The basic solution is for Netflix to get global and have its content be the same all around the world so there’s no incentive to use a VPN. Some part of piracy, however, is because they just don’t want to pay. That’s the harder part.”
– Reed Hastings, Chief Executive Officer, Netflix\textsuperscript{57}

Widespread copyright infringement and VPN use pose a number of challenges for the media industry. First, most of the value in the sector is still built on selling and managing rights to content across time windows and different forms of media. Although it's hard to quantify, revenue is being lost to the media industry through users accessing copyrighted material illegally.\textsuperscript{58} Second, the use of VPN access is distorting analytics that are crucial to the digital advertising that funds many media services. This advertising needs precise data to target, optimize and track adverts, but is unable to obtain this information from users accessing the web through VPNs.

“We are finding much fraudulent traffic coming from many websites impacting businesses and society.”
– Anne Hunter, Senior Vice-President, Global Marketing Strategy, ComScore
This use of VPN access also distorts statistics about user bases for certain services. Many consumers in countries such as the UK are choosing to access US Netflix through VPNs because it offers a broader range of content than UK Netflix. As a consequence, statistics for Netflix's subscription base could show an inflated number of US subscribers because of people from elsewhere in the world accessing the US catalogue through VPNs.

The mismatch between current IP frameworks, media industry business models and customer behaviour is creating problems for cable operators, broadcasters and OTT services. IP frameworks and rights deals are still primarily structured around licensing content sequentially across different time windows, offering periods of exclusive access to content and licensing content to different distributors in different countries.

**Case study**

Traditional IP frameworks are under attack, and not only from consumers looking for instant access to content anywhere in the world. Regulators are also looking at certain practices relating to limiting rights in different geographies. In July 2015, the EU’s top antitrust authority issued formal complaints against six American studios and Sky TV in the UK, alleging that they were breaching European competition law by blocking viewers in other European countries from watching films on Sky’s UK and Irish pay-TV services.59

As consumers come increasingly to expect anytime-anywhere access to content from around the world, the media industry will be faced with an increasingly pressing decision. Should the industry defend old IP frameworks through better encryption and traceability of content and prosecutions of perpetrators? Or will it be possible for media companies to evolve their business models, and the legal and commercial frameworks that underpin them, to better meet the needs of their customers?

**Digital value at stake**

The potential value at stake for the industry from newer IP frameworks that promote creativity and ensure similar international policies is ~$100 billion.

While a block on VPN usage and a password crackdown might actually hurt the industry in the short run, it stands to benefit in the long run, once regulators are able to develop a paradigm for international content sharing rights.

Updating IP frameworks could benefit the industry by overcoming conflicts related to both copyrights and rights sharing between various parts of the media value chain. It could, however, also result in a potential cost to society of ~$160 billion as consumers have to pay for content they would otherwise access for free through illegal channels.

IP framework-intensive industries have been a huge source of employment across various countries. The task of bringing these frameworks in line with the technological advancements could create additional jobs in the media industry.

c. Partnerships and industrialization

As the landscape of the media industry has been reshaped by wave after wave of digital transformation, and the creation and distribution of content has fragmented across many different platforms, partnerships have become much more important. Around $210 billion of value is at stake for the media industry over the next 10 years from partnerships and industrialization.

To create content that appeals to younger generations and to distribute that content effectively across different platforms and devices, media businesses will need to partner with their audiences to co-create material, a phenomenon we explore in the next initiative: engagement, co-creation and crowdsourcing.

Alongside the move toward greater collaboration across the industry, digital transformation is pushing companies toward the industrialization of their content creation workflows and the automation, based on data analytics, of their
content distribution processes. In the other initiative for this theme, the digital organization, we assess the changes a media enterprise may need to make to succeed in the digital era. Finally, in our analysis of the flexible, predictive and precise content creation initiative, we look at how data analytics can be harnessed by media organizations in deciding what content to commission and how best to produce it.

**Engagement, co-creation and crowdsourcing**

Consumers fall into two camps when consuming media: active and passive. Viewers may tend to take a more passive attitude when watching dramas, but involve themselves more actively in sitcoms or reality shows and even more so in live events and sports. With improved connectivity, data collection and analytics, content creators are now able to take advantage of this to harness their audience’s ideas when creating shows.

This is not an entirely new concept. In 2006, a Finnish TV show, *Accidental Lovers*, involved audiences in deciding by SMS between three different scenarios for the end of the programme. However, the ubiquity of social media and smartphones now gives content creators far greater power to create new storylines almost in real time. Enabling audiences to interact with content creators has the potential to build more loyalty and engagement with the content, particularly if seamless second-screen support for an interactive, community-based experience can be designed.

**Case study**

Some enterprises have taken a different approach to co-creating content by partnering with promising talent to create youth-oriented content for *YouTube*. These multichannel networks, such as *Maker Studios*, which was acquired by *Disney* in March 2014, offer the film-makers and on-screen talent a cut of the gross revenue from the films that are produced. Maker, which partners with 55,000 independent content creators in more than 100 countries, is one of the biggest producers of short films, with 10 billion views every month and 650 million subscribers. Its most popular video series, *Epic Rap Battles of History*, has notched up more than 1.8 billion views.

Broadcasting has led the interactive content wave for more than 10 years. Games, sports events and talent shows have engaged audiences via SMS through voting or publishing messages on the TV screen. Many of these interactions are being migrated to social media platforms such as Twitter. For different types of content, some barriers to interactivity are proliferating. Interactive TV shows will require story trees rather than story arcs, with the likelihood that whole scenes may never be broadcast if they are not chosen by viewers. For high-budget TV shows, the added filming time with expensive cast and crew and extra spend on editing and post-production are likely to escalate costs significantly.

**Case study**

Some audiences, however, are bypassing traditional content creators (such as professional film-makers, musicians and authors) entirely and crowdsourcing content or events that interest them. An example of this is the creation of the *Crystal Maze* experience in London, which has raised £930,000, almost double its original target, through crowdfunding. Based on the cult UK game show of the same name (which, with a regular audience of more than 4 million, was one of Channel 4’s most popular programmes of the 1990s), it will offer visitors the chance to pit their wits against a series of physical and mental challenges.

**Digital value at stake**

Consumer willingness to spend additional sums of money when they are more engaged results in ~$210 billion of value at stake to the industry. That value comes from the rise in independent publishing, an increased propensity to spend on live events and higher penetration of user-generated content in videos.

The value to the external industry (B2B consumers) of ~$90 billion includes higher sales resulting from the presence of user-generated content.
The digital organization

“You need to understand how to create partnerships and know how to engage across different channels and platforms. You need to read and answer comments and establish a dialogue versus a one-direction conversation.”
– Spencer Baim, Chief Strategy Officer, Vice Media

Many of today’s media industry giants matured in the pre-digital age as analogue broadcasters, newspaper publishers or film studios. These companies have, in many cases, struggled to overhaul their processes, operations and structures to become enterprises designed for the digital age. The barriers that many of these organizations have come up against include a risk-averse approach, a tendency to measure performance using outdated business metrics and a lack of generational diversity in organizations, making it more difficult for them to provide the types of content and service that younger consumers are demanding.

The temptation for many firms has been to focus on the latest technology without doing the basics: wholesale digitization of content and processes, and adapting their business for social and mobile. However, this is not enough, as demonstrated by a new breed of digitally native media organizations. These enterprises are leaner, nimbler and better suited to keeping pace with the fast-changing preferences and habits of consumers.

Digital is transforming the number of resources and skills required within an organization. There is a trend towards fewer and higher-paid roles, with numerous tasks and responsibilities. Media represents the best mix between art and science; digital savviness, good technology understanding and creativity are key skills for media workers of the future.

**Case study**

Leading companies of this type include **Vice Media**, **BuzzFeed**, **Upworthy** and **Vox Media**. Described by the former Viacom CEO, Tom Freston, as “the next MTV”, Vice Media has built a model that mixes publishing, social media, video production and content marketing targeted at young, digitally savvy users. Vice has also launched Carrot Creative, its own media agency, to serve the needs of blue-chip advertisers such as Unilever, Ferrari, Intel, H&M, Red Bull, Oakley and Ford.

**Vox Media** is an American digital media company that currently has eight editorial brands, including SB Nation, The Verge and Re/code. Vox has created an innovative digital-first content management system that integrates content and advertising. Dubbed Chorus, it seamlessly allows journalists to publish content to any of the company’s websites, promote their content on social media and interact with readers.12

Vice Media and Vox Media provide some insights to what we think the digital organization of the future will look like. The organization will have a centralized, data-driven infrastructure and management (cloud services, digitized catalogue of content). Around this core there will be independent units that can move fast to create new products across different platforms or apps. These companies will have the perfect balance of art and science, with a mixture of creative roles (designers, editors, writers, creative minds) and data-oriented roles (engineers, analysts, data scientists).

Attracting and keeping the right talent will be crucial to the success of digital organizations. With industry boundaries blurring, media companies should search more widely for talent, scouting industries such as technology. Diversity, particularly generational diversity, will be important, with creative teams needing to think and talk the language of digital natives. In the short term, “reverse-mentoring” programmes, where millennials mentor senior executives, can prove useful.

It will be a necessity for all organizations across the media value chain, from content creators to distributors, from video producers to book publishers to in-house advertising agencies, to reform, retool and restructure their companies for the digital age.
Digital value at stake
There is a huge scope for media organizations to be leaner, nimbler and better suited to keep pace with fast-changing consumer expectations. Agencies that enable programmatic buying, tackle fraud and automate repetitive processes have been seen to gain consumer trust and earn higher revenues. The increased cost of personalization, as well as fragmentation, needs to be offset by improving efficiency of the media industry.

Not only do organizations need to change the way they operate, but there is also a demand for a shift in skill set required to survive this digital age. More analytical skills will be needed, as jobs that are repetitive in nature can be replaced by machines. Organizations will also need to create knowledge-management and-sharing platforms.

Digital value at stake was not quantified for this initiative.

Flexible, predictive, precise content creation

“Some media companies will be transformed into something similar to content factories where the brand will not be important. It will be about volume and distribution.”
– Anne Hunter, Senior Vice-President, Global Marketing Strategy, ComScore

Data is becoming more important in almost every aspect of our lives, and the creation of films, news articles, music and TV shows is no exception. Perhaps the clearest example of this is content creators using predictive analytics to try to maximize their chances of developing successful content, as exemplified by film studios using the tools provided by Epagogix to reduce their investment risk when green-lighting movies. Epagogix uses analytics to help studios with decisions about which scripts to commission, how to improve the script and at what level to set the budget.

“We take research and brand tracking very seriously, understanding and integrating the value of data. We are gut-led, but data-enabled.”
– Spencer Baim, Chief Strategy Officer, Vice Media

This approach is likely to become more popular and widely used, drawing on data from many sources (such as social, behavioural or personal). The widespread use of predictive analytics raises the possibility that this method of content creation could become a victim of its own success. If it is widely used, there is a danger that the algorithms employed might tend towards creating a “sea of sameness”, with audiences bored by predictable story arcs and characterization.

If companies choose to employ predictive analytics in content creation, they will need to be careful not to disregard human input completely, allowing creative staff to use their imaginations, experience and intuition to create memorable, original and unique content.

Case study

There are other approaches that can be taken to harness the power of social media in content creation. Snappy TV, which was acquired by Twitter in June 2014, provides powerful tools that allow users to edit and create clips from live TV feeds, which can then be instantly published on social media. Snappy TV has been used by sports organizations such as the US Open and NASCAR to put highlights clips on social media as quickly as possible. Apart from providing editing and publishing tools, Snappy TV also supplies the clip publisher with metrics about where the clip is being viewed and how engaged the viewers are.

Cognitive Networks, a start-up founded in 2008 and incubated by LG, has developed automatic content recognition (ACR) technology that is now integrated in LG Smart TVs. Viewers can opt in to overlays on the screen that provide information relevant to the show they are watching, such as a poll relating to the scene that is playing or a coupon that is tied to the advert that is being broadcast. Cognitive Networks provides the technology that recognizes the TV show that is being broadcast, while partners, such as the broadcaster or advertiser, provide the content for the on-screen overlay.

Companies are turning to crowdsourcing platforms such as Kaggle or academic institutions on data analysis to discover new models and patterns to extract value from real-world data. That’s the case for Twitter and MIT Media.
Lab, and the KDD (Knowledge Discovery and Data Mining) Cup where companies liberate real information for discovering patterns in their data sets (big data) to extract information and transform it into an understandable structure for further use. In 2007, Netflix sponsored the KDD Cup with the goal of creating predictive models for consumer preferences. The 2007 edition was won by the Spanish company, Neo Metrics (acquired by Accenture in 2012).

These new methods of data-driven content creation have the potential to affect all organizations across the media value chain, from producers to distributors to online platforms. However, obstacles need to be overcome – companies will need to assuage consumer concerns on data privacy, create effective heuristics and algorithms for creating fresh content cost-effectively with a reduced time to market, and safeguard creativity in the face of increased pressure to create popular content.

Digital value at stake
This initiative was not included in the scope of our value-at-stake analysis.
d. Media digital roadmap

Throughout our analysis, we have considered the time and complexity that it would take to bring each of our digital initiatives to scale. As Figure 2 illustrates, the majority of these initiatives are likely to reach the mainstream within the next five years.

**Figure 2: Evolution of Digital Transformation in the Media Sector**

- **Personalized Advertising**
- **Engagement, Co-creation and Crowdsourcing**
- **Communities of Content**
- **Phygital**
- **OTT and OTT 2.0**
- **Data Privacy & Transparency Reform**
- **Content Access & IP Rights**
- **Flexible, Predictive, Precise Creation**
- **Partnerships and Industrialization**

**Legend**
- **Personalization and Contextualization**
- **Content Fragmentation**
- **Partnerships and Industrialization**

Source: Accenture Credentials, Millward Brown, Cisco Reports on Big Data, IBM Reports on Data Analytics, Forbes, McKinsey Report on Media Industry, Accenture Value Lab Analysis

**Value at stake**

Until recently, media executives were "trading analogue dollars for digital pennies". Although the rapid digitization of the media sector has led to significant shifts in value along the industry's value chain, digital is no longer destroying the sector's profits.
After initial erosion in content monetization from digital disruption, there are signs that digital revenues are starting to replace and even out losses in analogue content revenues, specifically within the music industry. According to the International Federation of the Phonographic Industry, an estimated 41 million people paid for music subscription services in 2014, five times the number in 2010. Globally, digital music now accounts for 46% of total industry global revenues. Revenues from music subscription services grew by 39% in 2014. Also, revenues from advertising-supported streaming services, such as YouTube and Vevo, have gone up by 38.6%.

Digital platforms also allow artists to generate new revenue streams from live events, concerts, e-commerce and physical products such as apparel.

Every market is different. In Japan, for example, consumer spending on entertainment over the past 10 years has actually been a constant $4.5 billion to $5 billion, but the share of revenues from live concerts increased from 25% to 43%. At the same time, physical formats (DVDs, CDs, etc.) have experienced a significant decline.

Recent financial performance of the media industry
The market capitalization of leading media companies slumped in December 2008, but had tripled to $1.8 billion by the end of 2014, driven particularly by strong growth in the online platforms and broadcasting segments (as illustrated in Figure 4).

*Digital Traction metrics are not visible on the 10-K

‘Digital traction’ metrics are indicative of potential revenue generation and value creation in the future.

- Digital traction can be assessed through customer retention, active users and session frequency metrics
- Active membership and usage (as a percentage of total users) of digital platforms indicate stickiness and loyalty, e.g., WhatsApp
- Digital solutions with user retention scores greater than 45 days are typically valued more than $1 billion on an exponential growth path, e.g., Facebook, Dropbox
- Time spent on the app (per session and total number of sessions) is significant and indicates an engaged user experience
## Figure 4. Profit evolution distributed across industry segments

### Major Industry Participants

<table>
<thead>
<tr>
<th>Sample Peers</th>
<th>Entertainment</th>
<th>Publishing</th>
<th>Online Platforms</th>
<th>Broadcasting</th>
<th>Advertising</th>
<th>Gaming</th>
</tr>
</thead>
</table>
| Revenue Models | • License rights  
• Advertising  
• Merchandise | • Subscription  
• Advertising | • Access to the audience  
• Advertising  
• Subscription  
• Freemium services | • Programming fee  
• Advertising  
• OTT direct to consumer sales  
• Free to air | • Commissions  
• Creation fees  
• Research fees  
• Advertising, PR, brand building | • Advertising  
• Virtual currency/ goods  
• Downloads |
| Segment Revenue¹ 2014 | $89.2 billion | $76.8 billion | $103.6 billion | $150.3 billion | $111.4 billion | $53.8 billion |
| Share of Total Market Size 2014 | 63.0%² | 51.7% | 70.3% | 63.0%² | 69.7% | 52.9% |
| ROIC 2009 (selected peer average) | 4.9%³ | 5.4% | 15.8% | 9.3%⁴ | 4.5% | 2.5% |
| ROIC 2014 (selected peer average) | 10.0%³ | 6.8% | 10.7% | 11.9% | 8.2% | 6.0% |

Note: (1) Revenue and ROIC is based only on companies included in the segment peer group and does not represent the total market size of the industry (2) 56.1% is the combined representation of entertainment & broadcasting (E&B) companies in our peer set vs the total E&B market size (3) Most entertainment companies also operate broadcasting segments, therefore, ROIC for entertainment segment represents ROIC for the consolidated business (4) Represents ROIC for pure-play broadcasting companies. Source: Bloomberg, Gartner, McKinsey Report on Media Industry 2014, Accenture Value Lab Analysis
Many segments saw strong growth in earnings from 2009 to 2014. Broadcasters saw profits grow by 10.4% in each year from 2009 to 2014, online platforms 20.8% a year, advertising 14.9% a year and entertainment companies 12.1% a year. The highest profit margins were achieved by broadcasters and online platforms. Over the next few years (from 2014 to 2018), it is forecast that gaming companies will achieve significant growth in profits (17.9% a year) and also increase their margins. Online platforms, thanks to their global scale, and broadcasting are likely to stay the most profitable industry segments with the biggest profit pools (see Figure 6).
Figure 6. Profit pools for the media industry from 2009 to 2018 (forecast)

Media and Entertainment Industry Participants – Profit Pool Distribution, 2009-2014-2018

Note: Profit-pool analysis is based on selected peer group (refer to appendix for details)
Source: Bloomberg, Company Reports, Accenture Value Lab Analysis

In recent years, many traditional industry sectors and segments have merged. The media industry is no exception. Consulting firms are becoming marketing services companies, advertising businesses are transforming themselves into technology enterprises, and content creators are building in-house advertising agencies. At the same time, traditional distribution channels are fragmenting and overlapping, as content is being diluted into conversations across social media and messaging platforms such as WhatsApp or WeChat, affecting brand perception and revenue generation.

Both of these trends are having an impact about where value is created along the media industry value chain. Three segments of the industry have seen particularly significant shifts in value.

**Broadcasting**
Broadcasting has seen new entrants such as telcos and Over the Top (OTT) players including Netflix and Hulu. In some cases, these new entrants have created immense value, as exemplified by Netflix, whose revenues grew from $150 million in 2002 to $5.5 billion in 2014. During 2015, Netflix reached 65 million users worldwide.71 No part of the broadcasting value chain, from access to distribution to production, is immune from the influence of these new players. Netflix and Amazon are also moving from distribution to production, with Netflix tripling the amount of content it produces to 320 hours in 2015, and Amazon commissioning its own exclusive content, most notably a new show with the former presenters of the BBC’s global hit *Top Gear*.72
Publishing
In publishing, the democratization of content creation tools has seen amateur blogs become big business with companies such as Gawker (revenue of $45 million in 2014\textsuperscript{73}) and The Huffington Post (bought by AOL in 2011 for $315 million\textsuperscript{74}) now media heavyweights. The growth in crowdsourcing, self-publishing and user-generated content is creating new rivals for traditional news outlets and publishers. LinkedIn now publishes more than 50,000 posts a week and is morphing into a major business news provider. LinkedIn\textsuperscript{75}, which had revenues of $2.2 billion in 2014, is fighting to become a competitor to business news brands such as Quartz or more established ones such as The Economist, Wall Street Journal or The Financial Times.

“The critical capabilities for the future are connecting with a new generation that search for new types of storytelling and for whom traditional old-school formats are not attractive.”

Advertising
We are also seeing significant value shifts in advertising as many digital players now have their own native advertising platforms and internal agencies. This approach is being developed by the New York Times, Buzzfeed, Condé Nast and Vice, which are looking to take more control of advertising revenues and assert their independence from dominant advertising platforms such as Google. This strategy has created value for companies such as Vice and Buzzfeed.\textsuperscript{76} Another major trend is that advertising is becoming a data and insights business, with greater emphasis on programmatic advertising. Consequently, marketers are expected to spend $8.7 billion (or 29% of total digital ad spending) on display ads bought through real-time bidding.

“The traditional advertising is getting commoditized, and there’s a clear need for new formats and ways to engage consumers through creativity, entertainment, new formats of storytelling and being aware of continuous changes in consumer behaviours and expectations.”

Start-ups and disruption
There are many new entrants and digitally native start-ups are emerging. Pure digital players (such as Vox, Politico, Upworthy and Vice Media) focus on high-quality user experience, asymmetric and lean business models, and the use of technology to deliver new products and services. They are disrupting the traditional media landscape, leading to fragmentation followed by a period of convergence and consolidation, as large traditional media groups seek to invest in these disruptive new players. Vice, for example, has attracted $320 million in investment from traditional media groups, and NBCUniversal has invested $250 million in Buzzfeed. In broadcasting, a series of mergers and takeovers have seen the creation of a number of giant international television producers backed by media giants such as Discovery and 21st Century Fox.\textsuperscript{77}

In our analysis, we have assessed how digital transformation could create and shift value across the media industry. Importantly, value creation from our perspective does not only consider financial profits but also the social and environmental benefits that technological change can bring.
6. Recommendations

How to be a media digital champion

Based on our analysis of the three themes – personalization and contextualization, content fragmentation, and partnerships and industrialization – that are central to the digital transformation of the media industry, we have drawn up a number of recommendations for business leaders that will help position their enterprise for success in an era of intense digital innovation.

Developing a digital business is about speed, agility, scale and responsiveness to changes in the market and consumer behaviour. In light of that, there are a number of “no regret” capabilities – tactical, shorter-term investments – that industry players should start planning for today.

1. Find, attract, grow and keep talent with the help of digital tools and techniques

“It is hard to find people in a business that is continuously growing and changing. The skills we need are not taught in school. We are finding people in liberal schools. We need people that know how to make the right questions when technology is changing so fast.”

– Anne Hunter, Senior Vice-President, Global Marketing Strategy, ComScore

“Engineers have lots of opportunities and options. The same engineer that can work for us could be at Google or Facebook. We are building a large office in San Francisco to be closer to tech talent.”

– Fernando Bleichmar, Chief Strategy Officer, Cengage Learning

2. Understand and leverage data through human insights: On the efficiency side, start using data not only to serve or optimize content but also to help industrialize the process of creating content. On the engagement side, true innovation comes from how this data is interpreted and used to make strategic decisions. Creativity and good human intuition are essential capabilities to understand consumers and create new products and services.

“Companies are changing humans for algorithms and automation. We need to go from mere observation to understand the human motivations behind them and get to the real insights.”

– Sanjay Nazerali, Global Chief Strategy Officer, Dentsu Aegis Network

“Companies need to learn and relearn about consumer changes. Stats, questionnaires or focus groups are not enough. Getting to the consumer directly is the key to get relevant insights.”

– Kamal Bhadada, BG Head, TM&I Services, TATA Consulting Services

3. Set up a high-quotient digital team: Unconstrained experimentation is essential if media businesses want to keep up with changes in this highly volatile industry. Traditional companies need to encourage a culture shift, with generational diversity the key to maximizing the talents of older and younger employees.

“We need not ‘Creative Technologists’ but ‘Human Technologists’ that can understand and innovate around human behaviours. Companies that are doing an excellent job are in the Fast Consumer Goods industries.”

– Sanjay Nazerali, Global Chief Strategy Officer, Dentsu Aegis Network

4. Develop a clear vision and a digital strategy: Don’t be distracted by shiny new toys; instead, fix the basics first. Develop a clear strategy on mobile, video, social, analytics and user experience, which are the foundation for any media business. Once these capabilities have been addressed, consider which areas, industries and technologies outside your core field of business might offer opportunities for your company. Examples include sensors and wearables, the internet of things, the connected home or the connected car.
“There is a team whose mission is connecting different areas and initiatives to create a shared view around digital. This team has digital natives and millennials so the organization can learn from their consumption habits and behaviours.”
– José Manuel González Pacheco, Director-General, Atresmedia Digital

5. **Fail faster, fail cheaper**: Consider a strategy to develop, launch and test new ideas faster using the appropriate metrics, starting with user traction and then financial metrics. Find or fund ventures that could most disrupt you, so that you are prepared for any potential transformational changes. Develop agile, nimble and lean operating models that can leverage the power of digital for synching content generation and delivery, optimizing resources and increasing enterprise agility.

“Innovation needs to balance traffic, learnings and monetization. To be successful, every initiative has to provide value for the digital and the traditional business. However, there is a principle: first comes the product and then monetization.”
– José Manuel González Pacheco, Director General, Atresmedia Digital

6. **Be obsessed with delighting audiences**: Customers’ expectations now transcend industry boundaries, with the belief that a high-quality service in one industry should be connected and translate to the next. Content quality, accessibility, user interface – every strategic move should have the end customer experience at the core. Media companies need to create customized content to enhance consumer interactions and constantly look for new ways to engage users.

“The old way was about buying ads and interrupting consumers’ lives. Marketers are very lazy. Today it’s about strong consumer insights. It’s important to have a creative idea and to share it across the different platforms. Brands are becoming media and entertainment companies.”
– Spencer Baim, Chief Strategy Officer, Vice Media

7. **Develop your “collaborative advantage”**: Media is the most digital industry and its value chains are being disrupted continuously. The business is not an algorithm that can be optimized ad infinitum, so efficiencies have a limit and competitive advantage on its own is not enough. Collaborative advantage means being able to create an internal shared view of the customer and externally, scout and partner with different cross-industry players across the value chain and create new value propositions.

“It’s important to organize the company and share a common P&L, so they work aligned around a clear single-minded vision of the customer outcomes. It’s important to work with an operating model, organizational structure and a financial system that allows the company to be agile and adaptive to change.”
– Sanjay Nazerali, Global Chief Strategy Officer, Dentsu Aegis Network

“Many media companies do not have the technological background to build their solutions. The business is getting extended with new entrants like start-ups.”
– Fernando Bleichmar, Chief Strategy Officer, Cengage Learning

“Being on an island doesn’t work but also having partnerships with the wrong type of people doesn’t work either. Identifying and finding the right partners is key. We have relationships with HBO, YouTube, Facebook. They help us in our success. We understand each other and collaborate in our mutual success.”
– Spencer Baim, Chief Strategy Officer, Vice Media

“We need an A-class partner portfolio and to collaborate well. With some clients, they put us in a room with other six agencies and told us, ‘we’ve hired you so we need you to now collaborate’.”

8. **Build new digital departments**: Digital is not only about technology. The best ideas usually die in financial or legal departments, as risk aversion, regulations and small print crush innovative ideas into mediocrity. Companies need to adapt the way they measure success and their back-office legal functions to the digital era.
9. **Adapt intellectual property**: Take consumer expectations about immediate access to content into consideration and adapt intellectual property frameworks, as the logic behind current IP set-ups is not understood or accepted by consumers who demand anytime, anywhere access to content.

10. **Scout for and invest in new players**: Legacy media companies and corporations may need to invest in digital players to keep pace with innovation and attract younger audiences with new formats adapted to their content consumption patterns.
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Industry
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Digital Transformation of Industries: Media, Entertainment and Information

Unless otherwise stated, “profit” or “profits” in this report refer to Earnings Before Interest and Taxes (EBIT)

All annual growth rates referred to in this report are Compound Annual Growth Rates (CAGR)


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