The media industry: in the vanguard of digital transformation

The media industry has already been transformed by several waves of digitalization. To thrive, media enterprises will have to keep technology at the heart of what they do, helping create compelling content and reach new audiences.

Social media, video-streaming services and smartphone apps compete continuously for our attention. 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 integrate their material into high-quality user experiences, with customized content, better viewing recommendations, more personalized and relevant adverts, and online tools to recreate those ‘office water-cooler’ conversations about the latest hit TV series.

For media organizations to create the right content and present it in the correct context will require innovation and digitization throughout the business, from discovering new methods of creation (e.g. crowdsourcing) to experimenting with imaginative distribution channels (e.g. through connected retail apps).

Digital has become so important that the boundary between the media and technology industries has broken down, with 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, to help them reach younger audiences, create compelling content and services, and distribute and monetize that content more efficiently.

$1.3 trillion
Potential value of digital transformation in the media industry for business and society to 2025

Source: World Economic Forum / Accenture analysis

We have identified three themes that will define the evolution of the media industry over the next decade:

1. Personalization and contextualization
2. Content fragmentation
3. Partnerships and industrialization

The Digital Transformation Initiative

The Digital Transformation Initiative (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 the 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.

To find out more about the DTI project, visit reports.weforum.org/digital-transformation
Key trends reshaping the media industry

A combination of demographic, consumer and technology trends is dramatically remodelling the media landscape.

Demographics

• **A growing global middle class** is driving demand for new media services focusing on convenience, education, premium content and video-on-demand.

4.9 billion People in the global middle class in 2050 – up from 1.8 billion in 2009

Source: OECD Observer, ‘An emerging middle class’

• **The emergence of millennials** (the generation born between 1980 and 2000) is creating demand for technology services that offer convenience, memorable experiences and instant access to content.

• **An ageing world population** is leading to increased demand for health and wellness, entertainment and education services designed for older people.

• **Urbanization** will contribute to increased demand for media offerings designed with people’s commutes and busy work lives in mind.

New consumer behaviours

• **Changing consumer expectations.** Younger generations are keen to consume content from around the globe. Their expectations are built around instant gratification.

• **Editorial content, advertising and propaganda.** Consumers are increasingly savvy at spotting marketing or PR spin disguised as editorial content. Marketers are looking to engage consumers through storytelling or providing useful information (brand utility).

• **The rise of the amateur content creator.** Younger users are flocking to channels run by amateur content creators, who have developed a new kind of relationship with their audience by building up a dialogue with fans.

12.3 billion Number of views for content creator PewDiePie’s channel – the most popular on YouTube

Source: YouTube, correct as of June 2016

• **Content curation and delightful experiences.** Clean mobile reading experiences and native advertising platforms are reaching new audiences, enhancing the user experience and allowing publishers to charge a premium to advertisers.

• **Security, privacy and trust.** Consumers are increasingly aware that their daily lives are being turned into data that can be analysed and monetized by third parties. They want more transparency and better data privacy.
A combination of demographic, consumer and technology trends is dramatically remodelling the media landscape.

**Ecosystem challenges**

- **Start-up disruptions.** Talent, access to technology and a ‘change the world’ attitude are allowing start-ups to bloom across the world, putting competitive pressure on traditional media companies.

- **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 and Intel through their partnership with Vice Media).

- **Access to financial resources.** Creative people are finding novel ways to fund new products and services. Content creators are turning to innovative sources of financing such as crowdfunding platforms.

- **The transformation of work.** Digital transformation is creating demand for some highly skilled digital roles, while making some job categories redundant.

- **Regulatory uncertainty.** Legal frameworks surrounding intellectual property are not ready for a new generation of media consumers who expect instant access to content from anywhere on the globe.

**Technology trends**

The media industry has already been transformed by several waves of digital innovation.

**Four waves of digital transformation that have swept the media industry**

Today, the media industry continues to face dramatic, technology-driven change. 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.** Companies can get consumer insights across many channels and devices, allowing them to deliver relevant and meaningful experiences.

- **Mobile and social.** Continuous and instant access, particularly through sharing on social media, empowers users to promote or destroy brands and institutions.

- **The industrialization of the media industry.** Companies are automating content creation and distribution, digitizing catalogues and inventories, launching new rights management systems and writing algorithms to create content.
Future horizons: digital themes and initiatives

Calculating the value of digital transformation in the media industry.

Drawing on these industry and technology trends, we have identified three digital themes that we believe will be central to the digital transformation of the media industry over the next decade.

Within each theme, we have identified digital initiatives that can be pursued by media enterprises, highlighting case studies that illustrate the relevance of these initiatives to the industry.

These digital themes and initiatives provide a framework for us to calculate the potential value that digital transformation in the media industry could deliver over the next decade – both for the industry itself and wider society.

Delivering value through digital transformation for the media industry and society

How we calculated the value of digital transformation

Our value-at-stake methodology aims to assess the impact of digital transformation initiatives on industry, customers, society, and the environment. It provides value estimates of global industry operating profits that are at stake from 2016 to 2025, and the contribution that digital transformation can make to customers, society, and environment in that time frame.

Value at stake for industry comprises two elements. First, the potential impact on an industry’s operating profits that will be generated from digital initiatives (value addition). Secondly, operating profits that will shift between different industry players (value migration). Value-at-stake for society measures the value impact of digital transformation for customers, society, and the environment.

For a full explanation of our value-at-stake methodology, visit digital.weforum.org.
1. Personalization and contextualization

Personalization is revolutionizing the way users consume content and how media companies monetize it.

The amount of new content published every week would take longer than a human lifetime to consume. Having great content is no longer enough to stand out amid this overload of information that internet users face. Media enterprises must engage consumers with their content and advertising through personalization and contextualization.

2.5 quintillion Bytes of data created every day

300 million Number of photos uploaded to Facebook every day

~400 hours Duration of video uploaded every minute to YouTube

Sources: IBM, "What is big data?"; Zephoria, "The Top 20 Valuable Facebook Statistics"; ReelSEO, "500 Hours of Video Uploaded To YouTube Every Minute [Forecast]". Correct as of June 2016.

Personalization and contextualization: digital initiatives

- Personalized advertising

Brands need to be smart and embrace ‘enhanced pull advertising’.

Brands must be creative and innovative in communicating a product or brand’s value proposition without actually advertising it. They can achieve this through content marketing, word-of-mouth referrals, customer relationship management, and sales promotions and discounts.

Unlocking value from personalization and contextualization

Data privacy and transparency

Phygital

Personalized content

Personalized advertising

Value at stake ($ billion, 2016-2025)

Source: World Economic Forum / Accenture analysis

Case study: NFL and Verizon (Phygital – digital media becomes physical)

For the 2015 Super Bowl, the NFL, in partnership with Verizon, launched the Super Bowl Stadium App, which allowed fans to watch instant replays from four different camera angles on their phones and even catch the famous half-time commercials. 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.

Source: Mashable, “NFL’s Super Bowl app is only for those in the stadium on the day”
Personalization is revolutionizing the way users consume content and how media companies monetize it.

**Personalization and contextualization: digital initiatives (continued)**

- **Personalized content**
  
  Consumers need a trusted filter or personal guide that can separate the signal from the noise and deliver personalized recommendations.
  
  Content aggregators have the biggest opportunity to benefit from offering personalized content. They can encourage users to spend more time on their platforms through enhanced recommendations of related content presented via a clean, seamless interface.

- **Data privacy and transparency reform**
  
  As internet businesses become increasingly global, their attractiveness as targets for hackers and criminals increases.
  
  Catastrophic breaches of data security happen all too frequently. There is a likelihood of further data leaks without significant improvements in data security. As a consequence of consumer concerns and regulatory pressure, responsible media companies are moving towards communicating more transparently with their customers about how their data will be used.

- **‘Phygital’ – digital media becomes physical**
  
  As the Internet of Things grows rapidly, media and retail are merging, particularly through advances in connected retail.
  
  Digital signage, beacons and Digital out of Home technologies are providing consumers with an entirely different retail experience. While walking around a shop, they can now be given relevant, tailored content, such as videos, offers and specials. Live events also have the potential to be transformed, as arenas and venues become connected and media starts to flow inside (see case study).

- **‘Advicetising’ – advertising as personal advice**
  
  Traditional advertising is becoming less effective as internet users react negatively to generic adverts that disrupt their online activity.
  
  Marketers now find it more effective to provide users with useful, personalized information or advice, while also implicitly or explicitly promoting a brand, product or service. Advances in data analytics and machine learning mean they have gotten better at framing these ‘advicetisements’ but they have by no means perfected this technique.
2. Content fragmentation

Content fragmentation presents huge challenges — and big opportunities — for media enterprises.

Across all segments of the media industry, we are seeing content fragmentation, from broadcasting (streaming services are making content available across multiple platforms and devices) to publishing (where book publishers are trying to bypass retailers to sell directly to customers). In advertising, the market is fragmented across formats such as search, classified and video adverts.

Content fragmentation: digital initiatives

• OTT and OTT 2.0

Over-the-top (OTT) services give access to a far greater range of TV series and films from around the world than would be available on national broadcasters. Alongside the growth in OTT services, broadcasting is being changed by another trend – the growth of the second screen. 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, which we are calling OTT 2.0.

• Communities of content

As advertisers build their strategy around communities of content, social media is starting to compete more strongly against search for advertising revenue. 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.

• Intellectual property (IP) frameworks for the digital age

Many users do not understand or accept artificial scarcity of content caused by laws, regulations and issues surrounding rights. Widespread copyright infringement and virtual private networks (VPN) use pose challenges for the media industry. The industry must choose between defending outdated intellectual property frameworks – through better encryption and prosecutions of infringers – and evolving legal and commercial frameworks to better meet the needs of customers.

23.8% Proportion of global bandwidth taken up by copyright infringement in 2011

410 million Number of people using VPN access to browse the web anonymously

Sources: CNBC, “Piracy rules the web, dominating 23.8% of internet traffic”; Digiday, “Seriously dark traffic: 500 million people globally hide their IP addresses”

Unlocking value from content fragmentation

<table>
<thead>
<tr>
<th>IP framework</th>
<th>Communities of content</th>
<th>OTT and OTT 2.0</th>
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Source: World Economic Forum / Accenture analysis

Case study: Netflix (OTT and OTT 2.0)

Netflix has been the most successful subscription-based OTT service, launching services in around 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. 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.

Source: Gigaom, “Netflix spends $150 million on content recommendations every year”
3. Partnerships and industrialization

To thrive in the digital era, media companies must be leaner, nimbler and more open to working with ecosystem partners.

Partnerships have become much more important as the creation and distribution of content has fragmented across many different platforms.

To engage new audiences, media businesses will need to partner with consumers to co-create and crowdsource material. Alongside the move towards greater collaboration across the industry, digital transformation is pushing companies towards the industrialization of their content-creation workflows and the automation of their content distribution processes.

Partnerships and industrialization: digital initiatives

• Engagement, co-creation and crowdsourcing
  
  The ubiquity of social media and smartphones now gives content creators far greater power to produce new storylines almost in real time.

  Content creators can take advantage of improved connectivity, data collection and analytics to harness their audience’s ideas when developing shows. Enabling audiences to interact with content creators could build more loyalty and engagement with the content.

• The digital organization
  
  Truly digital enterprises are leaner, nimbler and better suited to keeping pace with the fast-changing preferences and habits of consumers.

  The digital organization of the future will have a centralized, data-driven infrastructure and management (cloud services, digitized catalogue of content), surrounded by independent units that can move fast to create new products across different platforms or apps. Digital organizations will have the perfect balance of art and science, with a mixture of creative roles (such as designers and editors) and data-oriented roles (such as engineers and data scientists).

• Flexible, predictive, precise content creation
  
  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.

  Content creators are now starting to use predictive analytics to try to maximize their chances of generating successful content. This approach is likely to become more popular and widely used, drawing on data from many sources (such as social, behavioural or personal). If it is applied too often, 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.

Unlocking value from partnerships and industrialization

Source: World Economic Forum / Accenture analysis

Case study: Vox Media (The digital organization)

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.

Source: New York Times, Vox Takes Melding of Journalism and Technology to a New Level
How can media companies succeed in an era of digital transformation?

Media organizations need to move fast to become digital businesses.

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.

**Recommendations**

**Understand and leverage data through human insights**

Use data both to optimize content and industrialize the process of creating content. True innovation comes from how this data is interpreted and used to make strategic decisions.

**Be obsessed with delighting audiences**

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.

**Develop a clear vision and a digital strategy**

Don’t be distracted by shiny new toys; fix the basics first. Develop a clear strategy around mobile, video, social, analytics and user experience. Only then consider which industries and technologies outside your core business might offer opportunities for your company.

**Set up a high-quotient digital team**

Unconstrained experimentation is essential to keep up with changes in this volatile industry. Traditional companies need to encourage a culture shift, with generational diversity the key to maximizing the talents of older and younger employees.

**New digital departments**

Risk aversion, overbearing regulations and small print can crush innovative ideas to death. Companies need to adapt the way they measure success and update their back-office legal functions to the digital era.

**Intellectual property**

Adapt intellectual property frameworks so that they can coexist with consumer expectations that now demand immediate access to content.

**Fail faster, fail cheaper**

Consider a strategy to develop, launch and test new ideas using the right metrics, starting with user traction before financial metrics. Find or fund ventures that could most disrupt you so that you are prepared for any potentially transformational changes.

**Develop your ‘collaborative’ advantage**

Collaborative advantage means being able to create an internal shared view of the customer while scouting and partnering externally with different cross-industry players across the value chain and creating new value propositions.

For our full recommendations, please read our in-depth report on digital transformation in the media industry, available at digital.weforum.org.
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References
For a full list of sources and references, please refer to our in-depth report on the media industry, available at digital.weforum.org.