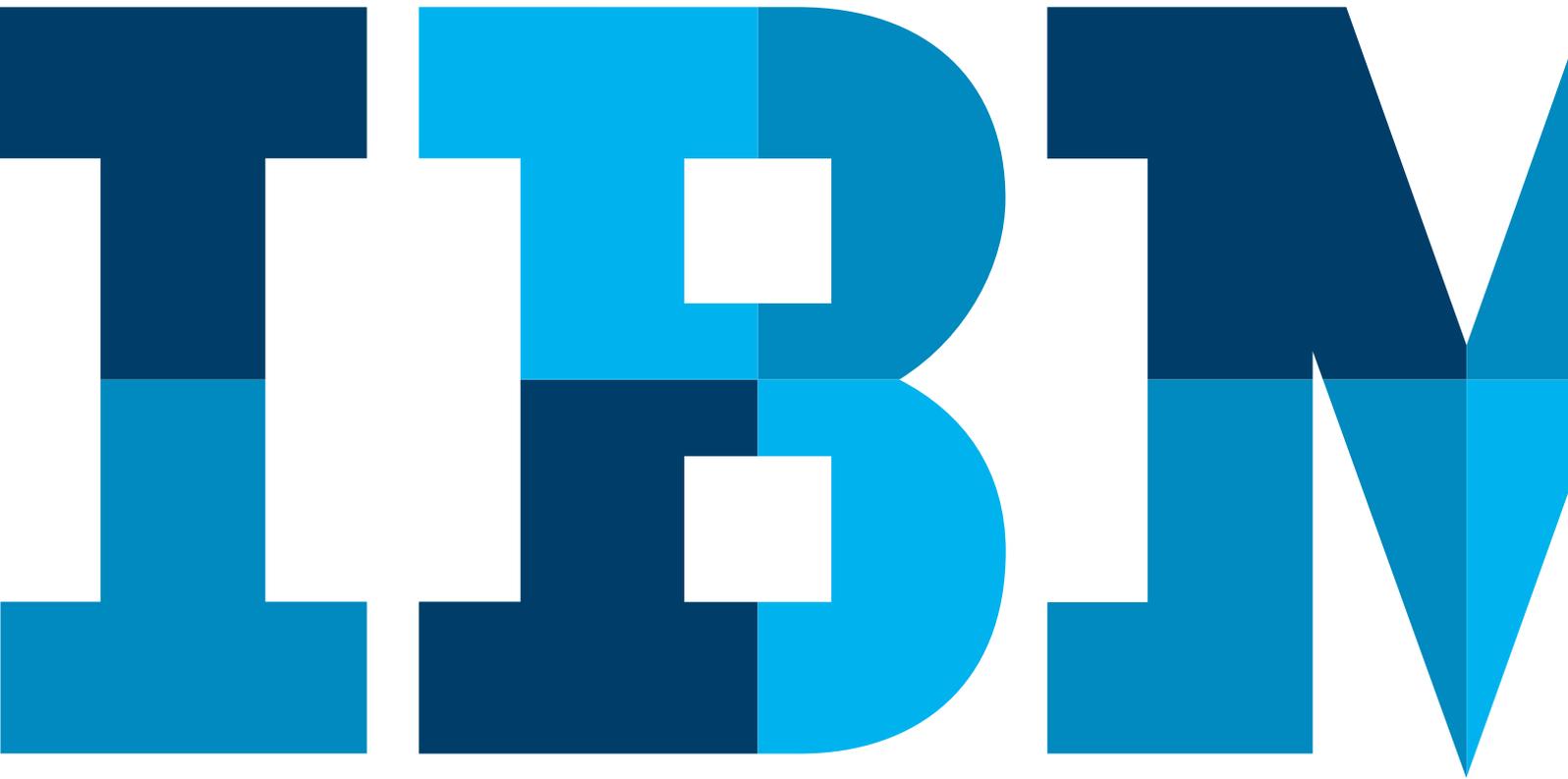


# Digital Reinvention in action for the media industry

*What to do and how to make it happen*



## Abstract

The organisations that will lead the media industry will be those that fully embrace Digital Reinvention and the profound reassessment of business practices that it requires. Digital Reinvention starts with one priority: to create unique, compelling experiences for customers, partners, employees and other stakeholders. For traditional organisations, Digital Reinvention involves a fundamental ground-up reinvention of strategy, operations and technology.

## Executive Summary

The media industry continues to change at an unprecedented rate. Who could have predicted that the Rio 2016 Olympics would generate 218,000 hours of digital coverage, nearly double that of TV and 2.5 times more than London 2012? Or that four out of five millennials subscribed to over-the-top (OTT) television in 2016?

The rapidly developing digital ecosystem shifts the dynamics of the broadcast and media world, forcing it to become more innovative and agile to meet increasing customer expectations and fight off new competition for their audience's time and wallets. The opportunity to take ever-stronger creative content to consumers with a more engaging, personalised experience is present and prescient. The challenge is to monetize that content and to neutralise the new competitors, which requires alternative business models and moving with agility and speed.

As the broadcast industry reinvents itself, what strategies are emerging? What will differentiate leading organizations in the future? We argue that the firms that lead are those that fully embrace the concept of Digital Reinvention and the profound reassessment of business practices that it requires.

This paper aims to help media companies make the decisive shift to succeeding in the digital era. In this era, customers are more demanding, the level of competition is more intense and expanding, and investors punish those without a digital strategy. For successful Digital Reinvention, organizations need to pursue a new strategic focus, build new expertise, and establish new ways of working. This paper explores what each of these concepts means for a media organization and how to envision and enact the necessary change.

## Getting ahead as change accelerates

The seismic shift in the broadcast industry is clearly apparent and widely reported. The accelerated rate of change in the last two years is palpable. Consumer spending on digital content will reach \$180 billion in 2017, up 29 percent in two years.<sup>1</sup> Four out of five millennials now subscribe to over the OTT television.<sup>2</sup> US programmatic TV advertising spending will reach \$4.43 billion in 2018, up by a factor of six in three years.<sup>3</sup>

The Rio 2016 Olympics demonstrated how media consumption patterns have changed. Rio 2016 generated 218,000 hours of digital coverage, nearly double TV coverage and 2.5 times more than London 2012. More than 9 million hours of content was streamed on the Olympic Video Player.<sup>4</sup> Online users streamed 1.86 billion minutes of NBC's Rio 2016 coverage, topping the combined number for London and Sochi, Russia. This increased number represents a dramatic shift in viewing habits as NBC reported a 17 percent drop in linear viewing for the first 10 nights.<sup>5</sup>

As a new generation of technology savvy customers demand sophisticated, tailored experiences, rapid technological change fundamentally alters traditional business economics. There were 1.4 million fewer US pay TV subscribers in the second quarter of 2016 versus a year earlier. That's only a 1.5 percent drop. Linear television clearly remains critical, but it represents a significant trend, especially when you consider that more young people do not have pay TV subscriptions.<sup>6</sup>

However, like many industries, the media business faces a challenge in responding to these shifts. In our survey of broadcast industry leaders, 40 percent consider their organizations not truly agile. Fewer than half believe their technology platforms are fit-for-purpose.<sup>7</sup> Budgets are poorly prioritized in the European pay TV industry. Studies show that 50 percent of the budget is used to keep the lights on and 30-40 percent for incremental improvements, leaving only 10-20 percent of the budget, at best, for innovation.<sup>8</sup>

### From Digitization to Digital Reinvention

To compete and thrive in the face of disruption, media organizations need to embrace Digital Reinvention. Over the past two decades, businesses experienced a Digital Maturation. As digital technologies emerged, companies progressively digitized processes and functions as they changed from analog to digital. For example, Digital Asset Management and Media Asset Management emphasized how to store and manage digital assets and their associated metadata. Large-scale moves of asset libraries from physical media to cloud-based storage ensued.

Next, these companies embarked on a digital transformation that integrated digital processes to offer more individualized experiences, for example the omnichannel single view of the customer. This transformation took old business processes like Customer Relationship Management (CRM) and production workflow and moved them to digital, improved business processes, removing the dependency on spreadsheets and paper.

Digital Reinvention combines multiple technologies, including cloud, cognitive, mobile, and the Internet of Things (IoT). Digital Reinvention rethinks customer and partner relationships putting customer needs, use, and aspirations first. It also helps organizations create unique, compelling experiences for their customers, partners, employees, and other stakeholders. These benefits arise regardless of whether enablement or fulfillment of the experience involves direct provision of products or services, or orchestration of services from partners by way of a business ecosystem. The most successful digitally reinvented businesses establish a platform of engagement for their customers, acting as enabler and conduit.

#### New digital economy requires reinvention

<b>Digitization</b>	Moving from physical media to digital storage
<b>Digital Transformation</b>	Integrating across digital processes and technologies
<b>Digital Reinvention</b>	Fundamental re-imagining of the value chain and exosystem—how media engages with customers

Figure 1: Digital maturation

For traditional organizations, Digital Reinvention involves a fundamental ground-up reinvention of strategy, operations, and technology. Strategically, digitally reinvented businesses maintain an overarching focus on experience rather than production. They embrace technological change and disruption and conceive their organization within the context of an overall business ecosystem.

From an operations perspective, digitally reinvented businesses commit to continuous calibration and improvement. They foster cultures of everyday innovation among individuals and across the ecosystem, and they work to interchange seamlessly between the physical and digital.

From a technological perspective, digitally reinvented businesses can effortlessly flip between self-owned, shared, or rented capabilities. These businesses are fluent in the language and business impact of technological innovation. They also seek to realize the full potential of new technologies either directly or with the assistance of partner ecosystems.

For successful Digital Reinvention, organizations need to pursue a new strategic focus, build new expertise, and establish new ways of working.

#### What does a reinvented firm look like?

<b>Strategy</b>	<ul style="list-style-type: none"> <li>• Focus on experience</li> <li>• Embrace disruption</li> <li>• Embrace the ecosystem</li> </ul>
<b>Operations</b>	<ul style="list-style-type: none"> <li>• Continuous reinvention</li> <li>• Iterative innovation</li> <li>• Integrate physical with digital</li> </ul>
<b>Technology</b>	<ul style="list-style-type: none"> <li>• Decapitalise</li> <li>• Truly embrace agile</li> <li>• Push the envelope</li> </ul>

*Figure 2:* Characteristics of digitally reinvented firms

Very few traditional organizations are willing and able to reinvent themselves completely. GE is an example of a company that has undergone Digital Reinvention. To change customer experience, GE shifted focus from manufacturing and selling things to helping customers achieve business outcomes. To do so, GE changed its focus, launching GE

Digital as a new business unit, to deliver insights about existing equipment and divesting financial assets. GE's Predix analytics platform represents a new way to work, suggesting how to improve equipment performance and prevent unnecessary replacement of large capital assets.<sup>9</sup> GE also invested in new expertise. Instead of hiring mechanical engineers to build new physical products, GE is hiring millennial software engineers for its new digital business.<sup>10</sup>

### Why reinvent?

Media organizations face pressure to reinvent from all angles—investors, competition, customers, and technology.

#### Investors

Most traditional media companies' share price performance lagged that of digital media companies over the last two years. Many media companies have an asset-based business model and built very large and successful businesses based on assets such as films, programmes, sports rights, cable networks or satellite operations. However, these models are difficult and expensive to scale. What started as a barrier to entry has become a barrier to success.

Service and software providers can achieve more favourable growth, but are still limited by the number of employees or the number of software products they can develop.

The rise of digital allowed for a hypergrowth organization that we call the network orchestrator. Investors see more value in the network orchestrator model, which involves owning few, if any assets. Instead, network orchestrators build a platform with aggregated content or services that attract customers to that platform by providing a great experience and monetizing it through advertising, subscriptions, or revenue sharing. That's why Uber, the world's largest transportation company, owns no vehicles; Facebook, the biggest media company, creates no content; Alibaba, the most valuable retailer, owns no inventory; and Airbnb, the largest accommodation provider, owns no real estate.

## Competition

The competition pressure for traditional media companies is intense. Before digital, the media companies competed against each other—studios and production companies against other studios and content distributors against other content distributors. The situation now is much more fluid and complex.

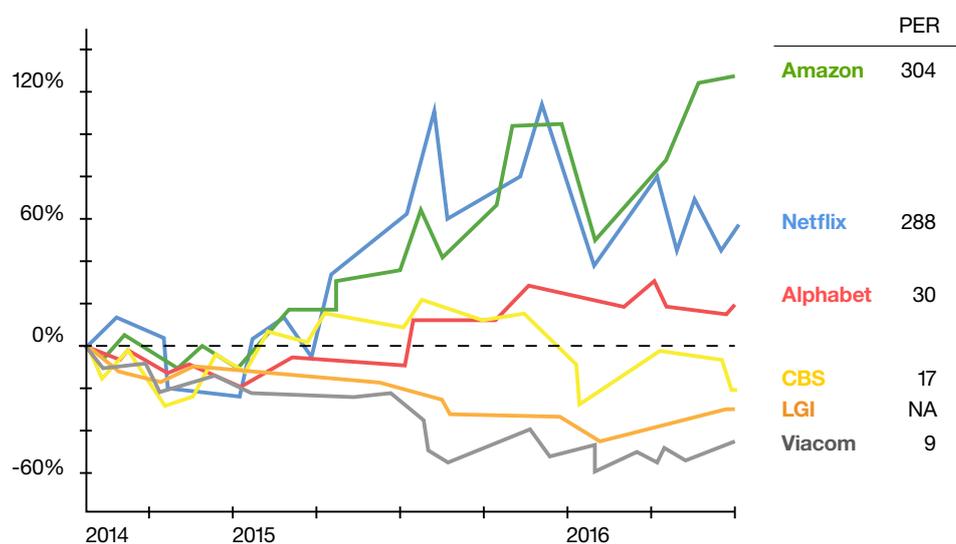
OTT specialists now account for an increasing amount of traffic, for example Netflix has 83 million subscribers in 190 countries.<sup>11</sup> Internet giants, such as Amazon, play every space: film and television production, cloud-based media supply chain, OTT, physical product distribution, and learning. It is no surprise that the top two categories of competitors in our 2016 industry survey were:

- Specialist OTT video on demand providers (for example, Netflix, Amazon Prime, HULU)
- Larger global internet companies (for example, Google, Facebook, Apple, Snapchat)

This is only part of the competitive picture, however. Studios like Disney established their own channels to take their content to consumers. Telecom network operators are changing their strategies to create and acquire unique content; for example, Verizon's acquisitions of AOL and Yahoo and BT's creation of its own sports channel.

There is also another form of competition. Broadcasters now compete for customers' time against several digital media and entertainment options, including mobile applications, music streaming, instant messaging, social media and games.

This competition is constantly evolving. For example, Netflix started as a customer of the studios and broadcasters, buying their content and creating a new channel to distribute it. Then Netflix decided that their customer analytics meant that they knew their audience better than the studios, so they developed their own content, effectively becoming a competitor for the studios.



*“If you measure the market caps from the traditional telcos and cable companies towards the Googles and Apples it’s been mind-blowing... and the tension is there.”*

— Michael Ronen and Dan Dase,  
Goldman Sachs, Aug 2016

Source: [www.goldmansachs.com/our-thinking/podcasts/episodes/08-26-2016-dase-ronen.html](http://www.goldmansachs.com/our-thinking/podcasts/episodes/08-26-2016-dase-ronen.html)

Figure 3: Investor pressure to reinvent

Source: Yahoo Finance, July 2016 and Morgan Stanley podcast, August 2016

Spotify and others transformed music by providing instant access to all songs at any time. Spotify recently launched a documentary series (*Metallica: The Early Years*), which suggests an evolution towards a music lifestyle destination with video, audio, articles, tickets and any other resource a music fan wants.<sup>12</sup>

These examples show that your most challenging competitor might be the one you never saw coming.

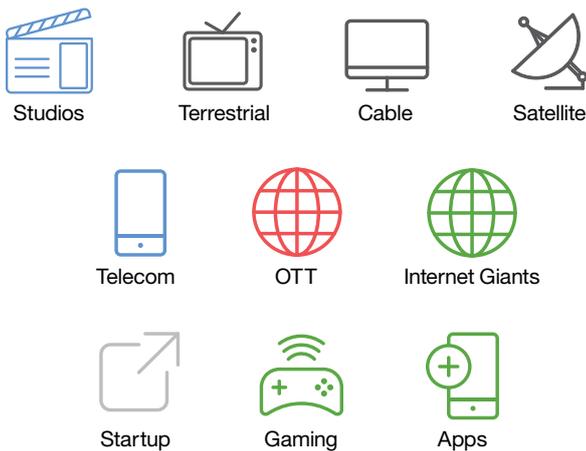


Figure 4: Competitive pressure in a changing ecosystem

## Customers

Pressure from customers arises because expectations surrounding customer experience are now extraordinarily high. Consumers are used to choice, convenience, simplicity, and innovation from the products and services they use daily:

- Spotify has not only captured the millennial desire to rent and not own, but its weekly Discover playlist selects personalized music for each user to increase usage and “stickiness”.
- Starbucks’ loyalty app allows customers to pay and bank points and order in advance to decrease the friction and time associated with a purchase.
- Apple is in its own category with regard to customer experience, with a very strong focus on design excellence for all new products and services.
- Amazon redefined the retail category, but is now a disruptive contender in other areas. Alexa is a new operating system for everyday life and Amazon Video emerged as a real competitor to Netflix, which traditional media companies have been unable to do.

Consumers have similarly high expectations of the experience they receive from media organisations. Consumers want to access all their content anywhere; however, they also want their content personalised with recommendations aligned to their individual tastes and interests, and even mood. The TV industry does a good job of addressing some of these needs but lags many industries in other areas. By not satisfying latent demand, we leave money on the table:

- The industry made significant strides in making content available everywhere, with content streaming to several devices rapidly becoming the norm.
- Although some strides are being made to integrate all content on some platforms, “everything” is more of a challenge because it is still necessary to jump between platforms to access all content.
- “Personalisation” is the industry’s biggest challenge. Most broadcasters and platforms do not know their audiences well enough to make relevant, consistent recommendations at scale, and certainly not “in the moment” nor adjusted for mood or immediate sentiment.

## Technology

The march of technological progress creates urgent and accelerating need to drive rapid change in our industry. It took 75 years for the telephone to reach 50 million users and 12 years for the mobile phone to achieve the same milestone. In 2016, Pokemon Go! reached the 50 million mark in just 19 days.<sup>13</sup>

## Dealing with the pace of change

Speed is the new imperative. The challenges for media companies are: Are you moving at the speed of innovation and technology? Can you move at the speed of culture? Are you keeping pace with your customer? Are you addressing the urgency generated by the brutal and rapacious capital markets? If you don’t know where your main competition is coming from, how can you keep up with it?<sup>14</sup>

## Mapping the way forward

To succeed in today’s environment, media organizations must offer compelling new experiences, establish new focus, build new expertise, and devise new ways of working. Successful Digital Reinvention involves a fundamental re-imagination of how a media organization operates and how it engages with its environment. Executing in only one of these areas is like a stool with a shorter leg that will topple the entire structure. Successful reinvention requires focus across all of these elements.

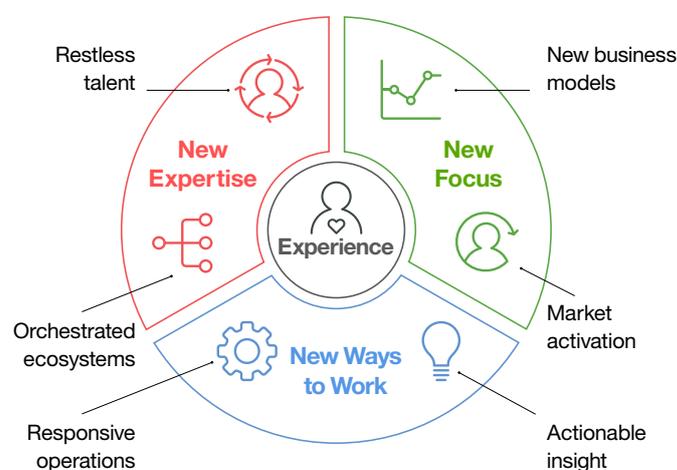


Figure 5: Digital Reinvention for the media industry.

## Personalised experience

Compelling new experiences must be relevant to each individual. Netflix has set the bar for providing content recommendation and delivery based on individual interests and tastes. However, even Netflix has not yet achieved the zenith of an intuitive and intelligent guide to content consumption.

Traditional media companies like the British Broadcasting Corporation (BBC) recognize the importance of personalisation. Some 7 million people are signed up to myBBC, which delivers personalised recommendations, alerts, news, and an improved iPlayer experience. The BBC extended this movement by launching a new Android and iOS app, BBC+, which offers signed-in users personalised information and recommendations from across the BBC.<sup>15</sup>

The ultimate consumer goal is to move from lots of content and channels and paralysis of choice to creating a truly effective “Channel for One” that is always in tune with its singular, fickle and heterogeneous individual audience. In striving for a segment of one, media companies need to combine the ability to develop deep and “in the moment” customer insights with the ability to act upon them instantly to deliver a fantastic experience. This segment of one needs to be a continuous process, taking account of an individual’s changing personal tastes, lifestyle, preferences and moods.

Our industry survey suggests that organisations already use customer insight in several ways to inform and drive their businesses. Marketers emerged as fearless users of data and customer insight because new ways to track and identify users offers a way to address the attribution challenge. Around half of the organisations that responded use customer insight to drive product development, social media strategy, and marketing campaigns. In addition, more than 40 percent are using insights to influence advertising placement. Recommendation engines were only mentioned by a quarter of our respondents. However, we expect focus on these engines to increase as personalisation strategies take hold.

Editorial and creative adoption of data is evident, but more embryonic. Although 38 percent of organisations use insights as input into content commissioning and some are moving forward boldly, gut instincts still dominate areas like commissioning, acquisition and casting. For instance, Netflix uses data to assemble projects and to identify types of content that their customers demand but are not getting from traditional studios.

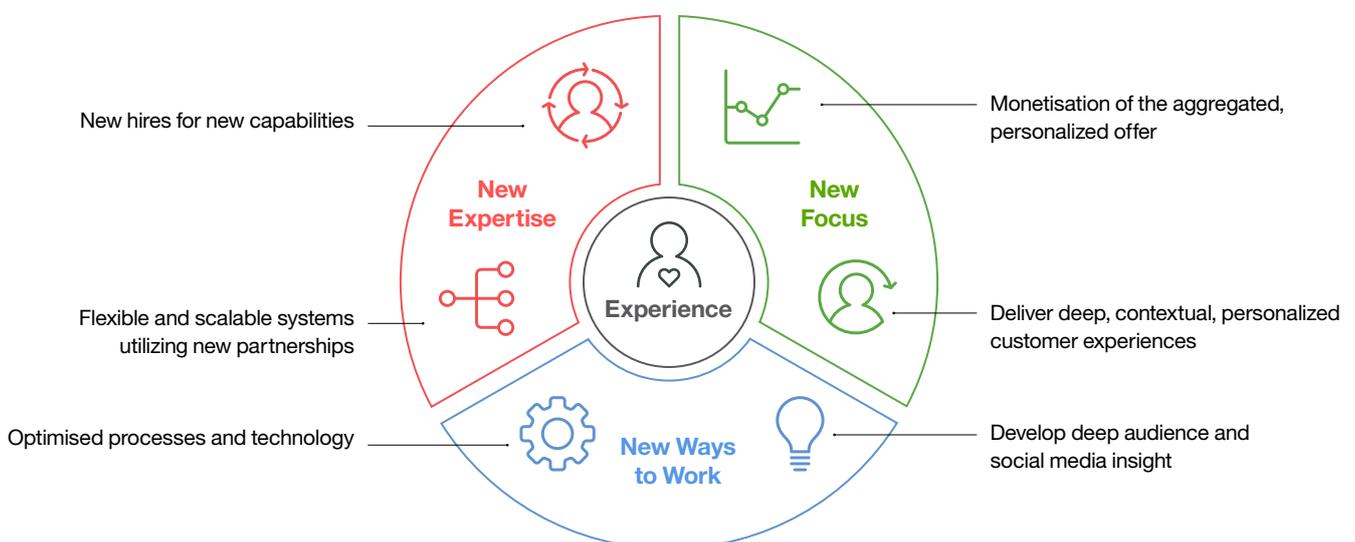


Figure 6: The customer experience is integral

## New focus

Leading businesses that embrace new focus develop new ways of realizing and monetizing value. In turn, this new focus spawns new business models, new forms of financing, and better, more holistic ways of conducting risk assessments. Leaders also engage the market in deeper, more compelling ways and create strategies and execution plans to deliver deep, contextual, compelling experiences, and to find new ways to monetize customer interactions.

New focus for a media company can mean developing a personalised offer that aggregates all programmes from all channels into a “Channel for One”, and it includes building a radically new business model to monetize it. This model might follow an asset-light, network orchestrator approach instead of the traditional media approach based on large investments in content assets. By necessity, new focus involves partnerships with other organisations, some of which are competitors, and it might include cannibalizing existing revenue streams.

In general, this new focus questions the status quo, forcing companies to think the unthinkable and be willing to be a first mover rather than a fast follower. For example, developing the ability to distribute rapidly through any channel enables a media organization to build new business models. Our survey shows that 75 percent of respondents strongly agree or agree that their organization embraces new platforms that can expand their reach in the marketplace, even if they do not control the end customer interaction.<sup>16</sup>

Consider Spotify. Few people thought it was possible to go from customers owning content to a subscription model where they don't keep the content. Twitter pushes the boundaries of the platform through live sports deals. Likewise, Facebook Live aggressively invests in content for their live tool, which can threaten the broadcasters' grip on the areas where the broadcasters thought they had a unique differentiator: live sports and breaking news.

Examples of new business models and market activation announced in 2016 are:

- Dutch publisher and media group Telegraaf Media Group and ITV-owned producer and distributor Talpa confirmed plans to launch two OTT channels this year.<sup>17</sup>
- HBO struck a deal with Vodafone in Spain for the launch of its planned streaming video-on-demand service, HBO España.<sup>18</sup>
- News UK announced a multi-million pound investment in video, including purpose-built studios.<sup>19</sup>

The emergence of digital and mobile devices now means that every application (app) on a phone competes with every other app for the free time of a consumer. This fragmentation means that media companies must work harder to secure the consumer's attention for two hours. They also need to be more creative about the channels they use to reach the customer. This change can be through mutually beneficial partnerships or creative acquisitions. There is no roadmap, so organisations need to be prepared to test ideas, scale quickly and not close the door on strategies that did not work in the past.

## Respondents reported that their organisations use customer feedback in the following ways:

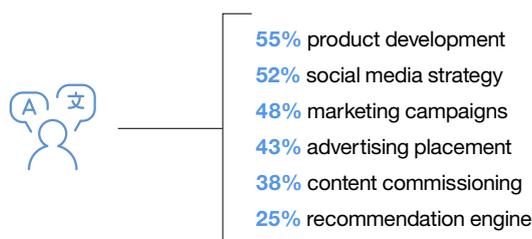


Figure 7: How media companies are using customer feedback  
Source: Online survey of broadcast industry leaders conducted by IBC and IBM, 2016

### **New ways to work**

Leading businesses that embrace new ways to work digitize products, services and processes to help them redefine the customer experience. They augment these steps by applying predictive analytics, cognitive computing, the IoT, and automation. These additions create a fully integrated, flexible and agile operational environment necessary to support and enable deep experiences.

### **Channel for One**

The idea of a “Channel for One” depends entirely on the media organisation’s ability to develop both deep customer insights and responsive operations that allow them to serve the perfect content “in the moment”. This progression is clearly a challenge for the industry; 53 percent of the survey respondents didn’t think their technology platforms were fit for purpose and allowed them to act quickly.<sup>20</sup>

Data forms the foundation of the “Channel for One” approach. It is essential, first, to demand real-time, data-driven decisions across all aspects of the business, which involves trading, bartering and partnering to secure external data sources. After the data is secured, the company must be able to quickly process the data using advanced algorithms, and a cognitive computing capability. These capabilities include understanding natural language and learning about each individual’s tastes, preferences and sentiment and how they evolve over time.

Media organisations are already building the foundations. For example, AMC Networks uses analytics to evaluate audience preferences and behavior. AMC then uses these insights to make wiser scheduling choices and data-driven marketing decisions.<sup>21</sup> In Brazil, Grupo Globo analysed fans’ feelings about the FIFA World Cup, enhancing its mobile app with a “social thermometer” that highlighted hot social media topics during each match in real time. This analysis helped Globo dynamically adapt its broadcasts to fans’ interests, boosting ratings. Social thermometer users spent 70 percent more time using the app, giving advertisers greater value.<sup>22</sup>

Collecting and processing audience data is one challenge. The second is to act upon it, which requires a complete re-engineering of a media company’s operations. Responding in real time can mean offering anything from a box set to a specific section of a programme and anything in between. Real time response also entails streaming in real time to any one of several devices. This progression has massive implications in all areas of the business, including content management, media workflow, rights and royalties and customer billing, for example.

### **New expertise**

In a digitally reinvented company, things are more flexible, scalable and fast. Media processing requirements are more dynamic, peaky and difficult to predict; therefore, it might be necessary to rethink how capacity is provisioned—cloud approaches or sharing with other organisations might be options to consider.

Strong control and management of external partners is essential to success. Fewer than half of our survey respondents believe their technology platforms are fit-for-purpose. Often, the task of integrating multiple disparate proprietary systems rests with the broadcaster. The industry can be more demanding of its supplier base because there is no longer time for traditional long IT integration projects.

Media companies need to change		
Personalisation requires new tools and techniques	E2E operations need complete reinvention	Think laterally about how you deliver
<ul style="list-style-type: none"> <li>• Cognitive computing</li> <li>• Real-time computing</li> <li>• Primary and tertiary data</li> </ul>	<ul style="list-style-type: none"> <li>• Content management</li> <li>• Customer billing</li> <li>• Rights and royalties</li> </ul>	<ul style="list-style-type: none"> <li>• Share assets</li> <li>• Move to cloud</li> <li>• Predict for peak</li> </ul>

Figure 8: Implications of reinvention for a media company

Leading businesses identify, retain and build the right talent needed to create and sustain a digital organization. The most successful businesses take measures to create and perpetuate an innovation-infused culture that incorporates design thinking, agile working and fearless experimentation.

Building new expertise involves hiring digital natives throughout the organization to force change in the traditional workforce. It also involves retraining the existing workforce in the latest ways of working, which includes design thinking, agile development, experimenting, taking risks and taking an iterative approach.

Progress is occurring. According to our survey, 52 percent agree that their company tests new products quickly. Digital Reinvention emphasizes working with speed.<sup>23</sup> While “agile” has become central to the new digital economy, practical working techniques, such as co-located self-organizing teams, prototyping, and developing minimum viable products, are the norm in digitally reinvented firms.

For example, Snapchat stated that it only releases 1 percent of the product features that it is working on at any given time. This statement implies that their engineering workforce rapidly creates products and features that never see the light of day. To do this cost effectively, the teams must focus on the minimal viable product and align on the success criteria for an enhancement, so it can be evaluated quickly and continuously, and either continued or dropped.

## Executing Digital Reinvention

Digital Reinvention is not easy and organisations need to focus on all aspects simultaneously. For example, you cannot re-skill a workforce without new products and business model activations for them to work on. You cannot embed analytics into business operations if the workforce does not understand how and why to use the data. The pieces fit together like a jigsaw puzzle and investments into one area are not realized without the others. The following four initial steps can set organizations on the path toward digital reinvention.

### Step 1: Envision possibilities

Use envision sessions such as design thinking<sup>24</sup> to produce a definitive reinvention blueprint, to more deeply understand customers, to brainstorm new ideas, and to visualize unexpected scenarios. Incorporate external stakeholders to encourage thinking that goes beyond business-as-usual.

### Step 2: Create pilots

Create pilots and prototypes using agile development, test them with customers, and get them to market quickly to promote feedback and iteration. Establish communities of interest to beta test innovations. Build a foundation of capabilities that support the ability to scale successful innovations quickly or wind down unsuccessful ones.

### Step 3: Deepen capabilities

Augment capabilities with strategic initiatives, and continue to build and deploy necessary applications aligned to the target Digital Reinvention operating model and ecosystem strategy. As pilots evolve, practical limitations or impediments around development will emerge. Adopt a continuous iterative strategy to build new or extend existing capabilities.

### Step 4: Orchestrate ecosystems

Embrace holistic reinvention rather than a series of point solutions by maintaining a clear focus on deep needs, aspirations, or desires of customers. Focus also on the network of people necessary to create and deliver on that customer promise. Successful ecosystems can create environments that deliver compelling experiences, which might include products, services, and other forms of interactions.

## Conclusion

Digitization redefined how people live and changed the traditional media industry structures and economics, which allows reinterpretation of what it means to be a customer and a citizen. This change is not a 'phase' that needs to be worked through; instead, it's a fundamental shift in how the industry works. While the industry is only now fully adopting OTT and Internet Protocol television (IPTV) technologies, it is moving into Virtual Reality/Augmented Reality (VR/AR) for content, blockchain for contract management and artificial intelligence for customer interactions. The pace of change seems enormous, but there is no sign of a let-up.

To thrive in this rapidly changing business environment, media organizations need to offer customers compelling new personalised experiences, establish new focus, build new expertise, and devise new ways of working. This framework needs to be fully adopted to achieve reinvention, rather than selecting just the items that are easy or non-controversial to achieve.

Leaders can achieve Digital Reinvention by envisioning possibilities, creating pilots, deepening capabilities, and orchestrating new ecosystems. The journey will be neither easy nor without challenge, but Digital Reinvention is essential to the economic re-setting of the media industry.

## About this report

This report was prepared for the IBC Leaders' Summit in September 2016. As input, in July 2016 IBM and IBC conducted an online survey of broadcast industry leaders to determine the industry's progress in Digital Reinvention. The survey included responses from 60 C-level officers (CXOs) and senior managers.

## About IBM in Media and Entertainment

IBM helps media companies transform themselves into agile enterprises that serve the connected customer. From production workflow and audience analytics to mobile platforms and Cloud Video solutions, IBM helps clients with content production, content distribution, sales and services, marketing, and business systems. To read more, please visit [ibm.com/media](http://ibm.com/media)

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## Sources

- 1 Jupiter Research. 2016. [http://www.juniperresearch.com/press/press-releases/digital-content-revenues-to-exceed-\\$180bn-by-2017](http://www.juniperresearch.com/press/press-releases/digital-content-revenues-to-exceed-$180bn-by-2017)
- 2 Limelight Networks. 2016. State of Online video report [http://img03.en25.com/Web/LLNW/%7B5992f67d-5b01-441a-9cd9-602832d7e85d%7D\\_State\\_of\\_Online\\_Video\\_Report.pdf](http://img03.en25.com/Web/LLNW/%7B5992f67d-5b01-441a-9cd9-602832d7e85d%7D_State_of_Online_Video_Report.pdf)
- 3 eMarketer, Television Update Q2. 2016. <http://www.emarketer.com/Article/Programmatic-TV-Ad-Spending-More-Than-Double-This-Year/1014143>
- 4 International Olympic Committee. 2016. <https://www.olympic.org/news/rio-2016-sets-records-on-the-field-of-play-and-online-1>
- 5 Battaglio, Stephen. 2016. NBC's Olympic ratings drop while online viewership surges. <http://www.latimes.com/entertainment/envelope/cotown/la-et-ct-olympic-ratings-20160812-snap-story.html>
- 6 TV Rev article. 2016. <http://tvrev.com/cord-cutting-late-summer-2016/#.V8fs8z-zPoX>
- 7 Online survey of broadcast industry leaders conducted by IBC and IBM. 2016.
- 8 Pay TV White Paper. 2016. <https://dtv.nagra.com/paytvif>
- 9 General Electric: <https://www.ge.com/digital/>
- 10 The Wall Street Journal article. 2016. <http://www.wsj.com/articles/how-manufacturers-are-recruiting-millennials-1465351261>
- 11 Netflix. 2016. <https://ir.netflix.com/index.cfm>
- 12 Spotify News article. 2016. <https://news.spotify.com/us/2016/08/18/spotify-launches-first-music-documentary-landmark-metallica-the-early-years/>
- 13 TechTimes Article. 2016. <http://www.techtimes.com/articles/171437/20160726/pok%C3%A9mon-go-breaks-more-records-50-million-google-play-downloads-75-million-estimated-downloads-on-android-and-ios-combined.htm>
- 14 TechTimes article. 2016. <http://www.techtimes.com/articles/171437/20160726/pok%C3%A9mon-go-breaks-more-records-50-million-google-play-downloads-75-million-estimated-downloads-on-android-and-ios-combined.htm>
- Business Insider UK article. 2015. <http://uk.businessinsider.com/it-took-75-years-for-the-telephone-to-reach-100-million-users-and-it-took-candy-crush-15-months?r=US&IR=T>
- 15 The BBC Blog. 2016. <http://www.bbc.co.uk/blogs/aboutthebbc/entries/8d754948-e963-4e0d-9546-df2871c04315>
- 16 Online survey of broadcast industry leaders conducted by IBC and IBM. 2016.
- 17 Digital TV Europe article. 2016. <http://www.digitaltveurope.net/546262/telegraaf-and-talpa-preparing-ott-channels/>
- 18 Digital TV Europe article. 2016. <http://www.digitaltveurope.net/544782/hbo-teams-up-with-vodafone-for-launch-of-hbo-espana/>
- 19 News UK article. 2016. <https://www.news.co.uk/2016/06/news-uk-announces-multi-million-pound-video-investment/>

- 20 Online survey of broadcast industry leaders conducted by IBC and IBM. 2016.
- 21 IBM Case Study: AMC Networks. 2016. <http://www-03.ibm.com/software/businesscasestudies?synkey=A023603A76220M60>
- 22 IBM Case Study: Globo TV. 2016. <http://www-03.ibm.com/software/businesscasestudies/us/en/corp?synkey=W085221C53959R92>
- 23 Online survey of broadcast industry leaders conducted by IBC and IBM. 2016
- 24 IBM Design Thinking. <http://ibm.com/design/thinking/>



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