



SAP Industry Paper – Digital Media

New Media **Inspire and Shape**

A digital world that reinvents content consumption and commerce.



“Digital transformation has happened in the media industry. We see the winners being those companies that can build enduring consumer relationships, driven by compelling personalized content.”

Richard Whittington
Senior Vice President
Media Business Solutions
SAP SE

Message from Richard

Dear Customers and Partners,

Many industries are undergoing digital transformation. Digital transformation is not new to media companies. There have been several “waves” of digital disruption, segment by segment, as technologies have evolved, and consumers have driven the shift.

What is clear now is that those media companies that can build enduring consumer relationships will win. These relationships will be built on a deep understanding of the consumer, and not just on their media habits, but on a number of other data triangulations.

Targeted content offers and up- and cross-selling opportunities will help media companies grow new revenue streams to augment traditional disrupted ones.

Advances in technology such as machine learning, virtual and augmented reality, and more intelligent media consumption platforms will drive further opportunities to deliver an even more compelling content experience. This will sharpen personalization at scale both in terms of accuracy of content discovery and recommendation. Consumer and content insight will become a competitive weapon as consumer choices explode.

Insight driven by easier and more action-orientated data tools will allow media executives to respond in shorter time frames, allowing constant experimentation with business models.

The media workforce will evolve, which is already skewing towards the millennial end of the spectrum more than most industries. In the war for talent, competitive media companies will be required to provide their mobile-focused workforce with the tools and flexibility to work when and how they want. The ability of the organization to constantly fine-tune its labor mix will be essential as business models change and the fundamental economics of the industry shifts. This is not something to fear but to embrace. The pace of change is energizing.

Media companies who wish to outperform their competitors in the digital age should focus their energies on four strategic digital priorities:

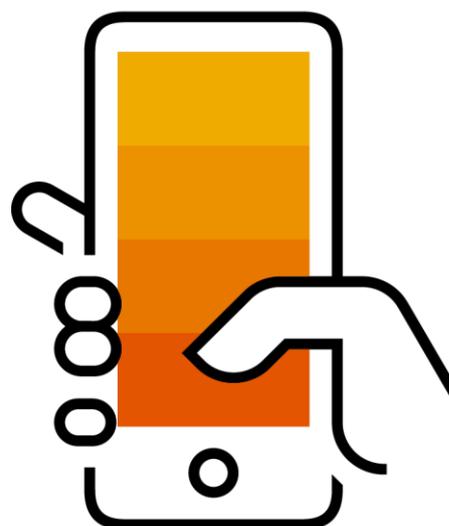
- Audience centricity
- Monetizing audience insights
- Maximizing media value
- Innovating the content experience

These are indeed exciting times. SAP has a long and storied history in the media industry. SAP works with 83% of the global media companies in the Forbes 2000. As a company, we are the forward boundaries of innovation. From blockchain technology to private advertising exchanges built on in-memory computing technology to SAP® Cloud Platform for extending, building, and integrating apps, we are committed to helping our media customers achieve simplicity and take advantage of the new opportunities afforded in a post digital world.

Richard Whittington
Senior Vice President
Media Business Solutions
SAP SE

Table of Contents

4	Digital Media – Big Picture
5	The Future: Priorities for Media
6	Reimagining Media
7	Reimagine Business Models
8	Reimagine Content Experience
9	Reimagine Business Processes
10	Reimagine Work
11	Innovating for Media
12	Digital Transformation Framework
13	SAP Digital Business Services Portfolio
14	Media – SAP Portfolio with SAP S/4 HANA and SAP Leonardo
15	SAP Cloud Platform – Platform as a Service
16	How Does It All Come Together? – Example
17	To the Next Level
18	Transforming to the Next Level
19	SAP Digital Business Services
20	Comprehensive SAP Ecosystem
21	Why SAP?
22	SAP Is Committed to Innovation
23	Additional Resources



Digital Media – Big Picture

We have come a long way into digital transformation that will continue to shape the media industry

DIGITAL TRANSFORMATION

For over 20 years now, digital transformation has been profoundly changing the media industry and the pace of change is still accelerating, driven by advances in consumer technologies. Technological advances include hyperconnectivity, immersive experiences, machine learning, audience insights through analytics, cloud, security, and privacy.

CONTENT IS STILL KING BUT THE RULES HAVE CHANGED

- **Mass media business models** are not adapted to the digital age. Simply distributing a digital version of an analog product through a digital channel neither creates significant new revenue, nor compensates for a decline in “analog” business (with the possible exception of e-books).
- **Business models need to be reimagined.** With a digital-first mind-set, they can distinguish themselves from the incumbent mass-media business unit with its hard-wired rules, norms, and metrics. The most successful business model innovation has originated outside traditional media lines of business.
- **Content no longer rules alone.** “Content is king” still holds true: content is still the most decisive factor in consumers’ choices, but it no longer rules alone. Google, Facebook Inc., Apple Inc., Amazon.com Inc., and other new entrants have disrupted the media industry with digital platforms that deliver third-party content to consumers. In 2016 Google and Facebook alone accounted for 98% of the growth in digital mobile advertising.
- **Disrupted strategies.** The sheer volumes of content that these platforms handle have resulted in very low prices for digital ad impressions. Media companies that had put their bets on a solely ad-funded “free-to-digital” business model, found themselves losing revenue where they were trading “analog dollars for digital pennies.”

DIRECT-TO-CONSUMER BUSINESS MODELS

- **Reimagined business models in the digital era.** To avoid the trap of being marginalized as content providers to the platforms, content generators were left with two options: 1. change their strategy and reeducate digital audiences about the virtues of “paid content,” and 2. stay on course on the same value chain but move beyond advertising into e-commerce.
- **New DNA:** Paid content and e-commerce require a consumer-centric business culture and the ability to serve an audience of one in direct-to-consumer engagements. For content providers who for decades had served an anonymous audience, mastering the direct-to-consumer model is one of the biggest digital transformation challenges.
- **Paid content:** Spotify, Netflix, Sky, and others introduced digital subscription services for audio and video streaming. The New York Times became the front-runner for experimenting with innovative models involving paywalls and metered models.
- **E-commerce:** Burda, Pro7Sat.1, Axel Springer, and Astro Malaysia are examples of media brands that leverage their audiences to generate significant portions of their digital revenue growth with e-commerce activities.
- **Data monetization.** The personalized direct-to-consumer engagements around content consumption and e-commerce yield unique insights into consumer behavior. The next big thing is business models that monetize these data assets securely and respect privacy regulations.



Digital business models are disruptive. The rules have changed.

- Printed classified advertising has been marginalized in European markets. Native digital disruptors like the digital job board StepStone¹ swiftly took the classified business to the cloud. The next step of business model innovation is to go beyond advertising into recruiting services. To advance the company’s digitalization strategy across the entire business, StepStone has moved applications to the cloud.
- Spotify and Netflix disrupted audio and home entertainment by introducing personalized content **streaming** and set the stage for the latest transformation to data-driven subscription marketing of cloud-stored content libraries.²
- Skyrock started as an independent radio station’s music blogging site. Skyrock used analytics and algorithms to link individual followers with matching interests, sharing playlists and forming communities. The group dynamic has proven much more effective for winning loyalty than acquiring individual followers. Skyrock became the leading social network in France.³

Access more information
on the latest technology
trends here:



The Future: Priorities for Media

STRATEGIC PRIORITIES FOR DIGITAL MEDIA COMPANIES

The digital journey of media companies has reached a point where the dust of early disruptions has settled and the new roles and road maps are more clearly defined. The most compelling opportunities for growth – maximizing reach and optimizing revenues from content and audience monetization – lie in the direct-to-consumer game. To remain viable in this play, former mass media companies need to transform the entire approach to serving audiences and build efficient operations for managing content customers and advertisers, as well as the interactions between all three. This translates into the following strategic priorities to focus on:



1. Audience centricity and serving the “segment of one”

Direct-to-consumer (D2C) business models require agile, innovative content consumption models that can be adapted to specific needs of narrowly defined target segments. At the same time, the challenges of acquiring and retaining potentially millions of customers in one go need to be mastered. Digital subscriptions and metered access models promise the best value and audience acceptance. Subscriber loyalty demands high quality of service with regards to billing, customer lifecycle, and churn prediction and management.



2. Audience insights and data monetization

Most of the data from audience interactions through digital channels are not being used. Collecting and analyzing this data at the level of an individual customer gives the organization essential insights. These insights are instrumental for predicting specific consumer needs and enabling direct data-driven marketing to maintain scale and optimize content packaging and catalog planning. They are also important for ensuring high-quality content experience and providing data to optimize subscriber marketing and content curation. Increasingly these data management features become an asset in their own right, opening opportunities for insights-as-a-service offerings to new business-to-business (B2B) customers.



3. From content to commerce – maximizing media value for sponsors and advertisers

Reliable data is instrumental for differentiating offerings to advertisers with precision targeting and data-based evidence of brand visibility and media value. By proving better return on ad spend to advertisers, digital content providers can disintermediate the middle men of the digital advertising business. This helps them improve profits from free-to-digital models – from “digital pennies to digital quarters.” Beyond advertising, D2C engagements with digital audiences open the door to e-commerce models and tighter integration with the advertiser’s value chain.



4. Content experience innovation

To differentiate in D2C digital engagements, compelling content must be paired with an innovative and interactive content experience. The content experience must always stay on top of the latest technology innovations deployed on devices. At the same time, it must promote consistent engagement across digital channels. To meet demand for data-driven personalization, the same piece of content may be marketed with a different feel to a variety of narrowly defined audience segments. At the ultimate level of the “segment of one,” data-driven personalized selection and promotion of content is focused on driving consistent engagement. It facilitates content browsing and aids serendipitous search.

REIMAGINING

But how do you approach these strategic priorities? First, decide what role you wish to play in the new digital media universe and how to interact with the platforms. Next, have a clear digital-first strategy and reimagine how data from digital audience interactions can drive and optimize business models, content experience, and business processes. Then, develop these on top of a scalable data platform.

The ability to capture, understand and monetize audience interaction data will be the core of the next iterations of digital media business models.

40%

greater ability to utilize Big Data to gain insights with well-established analytics and data modeling⁴

68%

of customers are willing to pay more for a better customer experience⁵

7%

increase in customer satisfaction when profiles and interaction history for customers are available at the point of interaction⁶



Reimagining Media

The digital media universe offers new opportunities.

In a digital media universe, a data-driven personalized content experience will redefine news consumption, entertainment, and learning and blur the lines between media and e-commerce.



Reimagine Business Models

Digital media business models evolve with new value propositions coming from direct-to-consumer engagement, commerce integration, platform play, and data-driven customization of content delivery and advertising targeting.

AUDIENCE CENTRICITY

Content providers have to make careful decisions about serving audiences of aggregator platforms or engaging in direct-to-consumer content delivery mechanisms themselves.

Content supply to platforms for revenue share is straight-forward and enables content companies to focus on what they can do best: content portfolio management. However, future business innovation and growth opportunities will rely heavily on data from digital consumer engagements. Therefore, owning the consumer interaction point and the ability to segment audiences and maintaining and monetizing the relationship is vital to participating directly in this opportunity. An array of D2C business models are evolving. They include: content and audience segment-specific variations of subscriptions, pay walls, “freemiums,” metered models, pay-per-view, advertising, and e-commerce-supported models.

MAXIMIZING MEDIA VALUE

The D2C relationship with digital audiences enables media companies to increase their value and revenue share to the advertiser’s value chain with:

- Disintermediated, data-driven automation in digital advertising campaigns with traceable outcomes across all digital media touch points
- Established D2C interactions extended beyond advertising into transactional e-commerce
- Media touchpoints through which media brands can profile their audiences more specifically than general online retailers, allowing better targeting of advertising and commerce offerings and thus a more effective and personal relationship⁷



Combining media and commerce
German broadcaster ProSiebenSat.1 expands e-commerce activities with the acquisition of online flight booking service Etraveli⁸

MONETIZATION OF AUDIENCE INSIGHTS

D2C touchpoints to the digital audience enable media companies to track audiences through content consumption, social media activities, advertising interactions, and shopping transactions, thus defining each individual in a very specific and detailed fashion. These trails of data, or “digital bread crumbs,” can be exploited to optimize content curation, packaging, the consumer experience, and targeting of advertising campaigns and retail recommendations.

Solid data-supported evidence in media value reports will change digital advertising and help providers differentiate their inventory. Beyond that, media companies are discovering that these data management features are an asset in their own right, enabling them to capitalize on insights-as-a-service offerings that help new B2B customers to optimize their business.

COMPETING AS A PLATFORM

Aggregator platforms have been the greatest performers in the early stages of the digital transformation. Most players are all new entrants who innovated on platform technology and did not have any mass media legacy to maintain. The giants strive to become universal platforms in the larger markets for everything from search, social media, content streaming, e-commerce, location-based services, classified ads, and communications. However, even the giants can’t be everywhere. There are still opportunities to establish platform business models, especially in emerging markets and specialized niches.

Transformation of video consumption

A recent study revealed that 25% of the world’s Internet users consume digital video content every day,⁹ and the rate is expected to grow rapidly. Leading Internet TV provider Netflix has made its strategy to replace linear TV.¹⁰ Global over-the-top (OTT) video revenues are predicted to double from US\$26 billion in 2015 to \$51.1 billion in 2020.¹¹



Reimagine Content Experience

Original, compelling content remains a decisive factor in consumer choices, but digital audiences expect the content to be paired with new, cool ways of experiencing content. Differentiation and specificity in competition for the digital audience stems from new technology capabilities to experience digital content.

DIRECT-TO-CONSUMER DIGITAL CONTENT DISTRIBUTION

Differentiating user experience is a key factor for making direct-to-consumer (D2C) business models successful – simply taking a print magazine and publishing it 1:1 on a tablet has not created growth or even compensated for any decline in print sales and subscriptions. Media companies need to put special focus on innovative deployment of cutting-edge technologies:

INNOVATING THE CONTENT EXPERIENCE

Younger digital generations have grown up in a world where seamless ubiquitous access to digital video has become the norm. For this visually primed audience, video has become the primary format for consuming information across all areas: news, entertainment, communications, and education. Extending on that trend, technology advances and new device features associated with augmented and virtual reality will introduce a new, differentiating, and immersive experience. Viewers will:

- Experience sports events from the perspective of a participant, for example, that of the racing pilot or the rider in a tournament
- Be at a concert or party and invite friends living abroad to accompany them virtually to share the experience
- Walk across the Forum Romanum wearing augmented reality glasses that enable them to experience a day in Rome in the year 10 B.C., and instead of consulting a printed travel guide, will interact with (virtual) Roman citizens who explain to them what they see

DATA-DRIVEN PERSONALIZED CONTENT

With the wealth of choices, deciding on the best content to consume in a specific moment can become an issue. Current personalized real-time content curation relies on static data: content metadata gets matched to your profile data collected at previous consumption sessions. This can be enhanced by:

- Defining content tags and metadata as data input for personalized content curation. So far, this has been a labor-intensive manual process. Machine learning technology redefines video content analysis through automation and higher levels of precision and detail in scene recognition, making possible content tagging for sophisticated personalized content.
- Providing wearable devices that collect data about physical exercise, location, moods, and emotions and which add real-time user contextual data to the personalized content curation.
- Designing headsets for audio-visual training to optimize learning effectiveness by adapting content presentation based on the detected ability to concentrate, need for a pause, memorization effectiveness.



YouTube CEO, Susan Wojcicki, announces the introduction of shopping-enabled videos.¹²



NEW GENERATION

Leading companies are introducing a new executive role into their organizations: The chief digital officer (CDO) is responsible for driving digitalization into every aspect of a company – first and foremost its products.¹³

Reimagine Business Processes

Technology advances in managing large volumes of data, machine learning capabilities, and predictive analytics result in new possibilities to improve and optimize business process. The possibilities are endless. Here are just a few examples.

DIGITAL SUBSCRIPTIONS AND BUNDLED OFFERINGS

D2C business models hinge on personalized subscriptions and usage-based services. In order to succeed, a business must have the capability to launch customer-centric subscription offers rapidly in order to stand out from the competition.

AUDIENCE ANALYTICS

Every consumer interaction creates a set of data that can be used to increase engagement. For example, enriching this data with additional insights such as OTT video consumption, psychographic, and demographic information allows for a far greater understanding of the media consumer.

CONTENT-EMBEDDED COMMERCE

Digital interactive media demands an evolution from advertising to seamless click-through shopping options without media breaks. Any relevant content can be transformed into a digital storefront for product placement of merchandising items, travel, tickets, or exclusive access to premium content.

AUDIENCE PROFILING AND PERSONALIZATION

This is rapidly becoming the norm as more demanding consumers want a personalized and relevant experience. All companies can benefit from a digital, 360-degree view of the consumer and the market in real time. Without this, they risk becoming irrelevant to today's consumer.

METERING AND ENTITLEMENT

In D2C engagements, content monetization of reach relies on offering individually configurable buying options with flexible subscriptions. By building dynamic pricing models, businesses can leverage competitive differentiators to get ahead within their industry. Examples include metered pay walls, usage- and frequency-based entitlements, and combining digital and physical purchases.

DATA-DRIVEN JOURNALISM

Automated data curation from opinion polling, social media, and other sources helps journalists to detect, verify, and publish stories faster. A new role for professional journalism stems from data-driven news verification and fact checking and discrimination between authentic news and fake news.



Internet protocol television (IPTV) programming is expected to pervade the pay TV market,¹⁵ creating potential for new relationships with OTT streaming video on demand (SVOD).¹⁶

TALENT DISCOVERY

Machine learning technology can help early detection of rising stars and new trends in social media platforms, be it music tracks, video channels, or blogs about special interests.

PERSONALIZED CONTENT CURATION

Defining content tags and metadata as input for personalized content curation has so far been an effort-intensive manual process. Machine learning technology redefines video content analysis through automation. Higher levels of precision and detail in scene recognition and content metadata can be matched with audience profiles and real-time situational context data for sophisticated personalized content curation.

BRAND EXPOSURE MEASUREMENT

Advertising brands require accurate reporting on media value from sponsors. Traditional methodologies designed decades ago no longer cope with the proliferation of channels and audience fragmentation. Machine learning technology automates and scales brand visibility measurement and brings back reliable data on which business interactions between media and sponsoring brands can be based.

DIGITAL ADVERTISING DISINTERMEDIATION

With today's digital advertising network, the revenue for the supply side is low and the return value for the advertiser is often obscure. D2C engagement with a digital audience provides the data needed to disintermediate the network and engage with advertisers in a private network that provides full transparency on advertising performance and higher revenue share for the publisher.

RETAIL-SPONSORED CONTENT ACCESS

Access to content can be made available after a purchase from a retailer. Starbucks gives free music downloads to its paying customers, combining the added value of the music industry with retail sales.

With the glass-to-glass digital content network, live streaming has become available for everyone to share content and has ignited a new advertising format that is on the path to becoming be the next big thing for digital marketing.¹⁴



AI Jazeera's digital-only news platform AJ+ has passed the milestone of 1 billion online video views a year.¹⁷

Reimagine Work

The fundamental transformation from a product-centric mass media to an audience-centric, digital direct-to-consumer business requires an adaptive workforce with new skills in order to adjust to the profound changes in how we work, learn, and interact.

Most substantial business transformations automate manual tasks, enrich jobs, and create new types of work.

Ad hoc collaboration and learning bring together the right people at the right time, independently of organizational boundaries, to learn and perform a task in the most timely, efficient, and effective manner.

Transparency and access to data are key for empowering the digital workforce and enabling professionals to tackle problems with confidence while taking their organizations to even higher levels of innovation and excellence.

External workforce have digital access to applications and data on demand and in real time, regardless if they are part of the core or the extended workforce. Thus, knowledge work can be more efficiently distributed over a wider community of specialized experts and talents.

Mobile and distributed workers require applications that are simple and scalable across different platforms, ensuring that the right information is easily and quickly accessible, at the right time, and on the right device.

Machine learning and predictive and self-learning software accelerates the delegation of business processes and decisions from people to machines.

Flexible workforce management: The players in the digital media network are high-tech companies that operate large-scale technical and digital assets. Many processes and services are orchestrated through data-driven automation. However, the transformation to the digital media network also creates hundreds of millions of new personal interactions. These include interactions between service partners in the digital media asset supply and distribution network, between the core and the extended workforce, and with the consumer over social and direct channels. Real-time digital information on the right devices is critical to advancing the business agenda through interaction between people.



“As an independent agency leading the evolution of advertising in a postdigital world, we use our culture as competitive weapon. SAP SuccessFactors® solutions have been a valuable talent management tool that’s helped us establish what high performance really means.”

Lea Daughtridge Wharton, Director of Human Relations, McKinney¹⁸

“At KOFIC we are building a high-performance organization using SAP SuccessFactors solutions. The platform is clear, simple, and robust, helping us get the most out of each employee’s talent.”

Yang Kyu Shik, Team Manager, General Management Department, Korean Film Council¹⁹

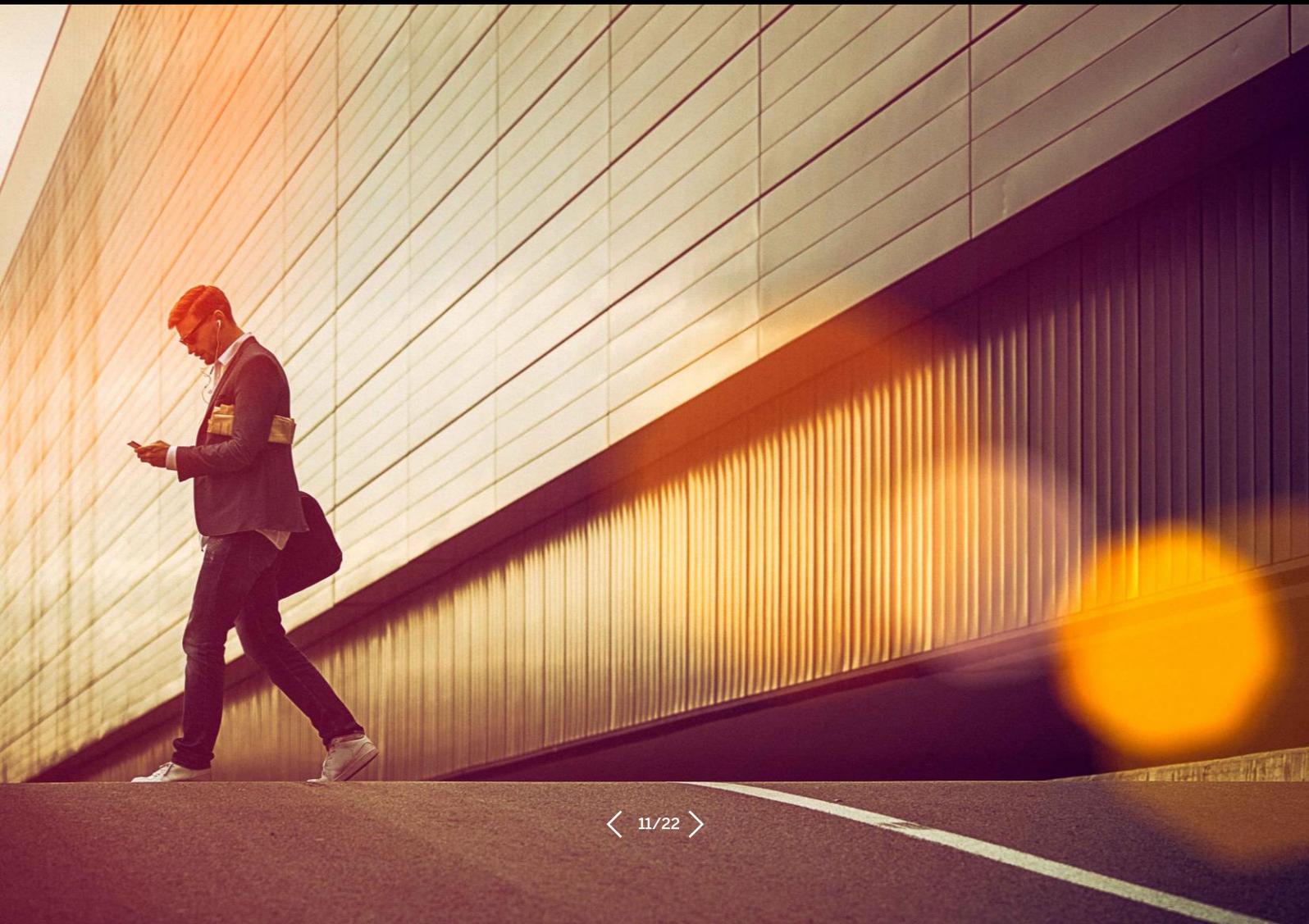


78%

Of employees say it is very important to work for a digitally enabled company or digital leader²⁰

Innovating **for Media**

Technology and solution innovations from SAP and its partners in the media industry.



Digital Transformation Framework

Every company needs to think about the five pillars of a digital strategy

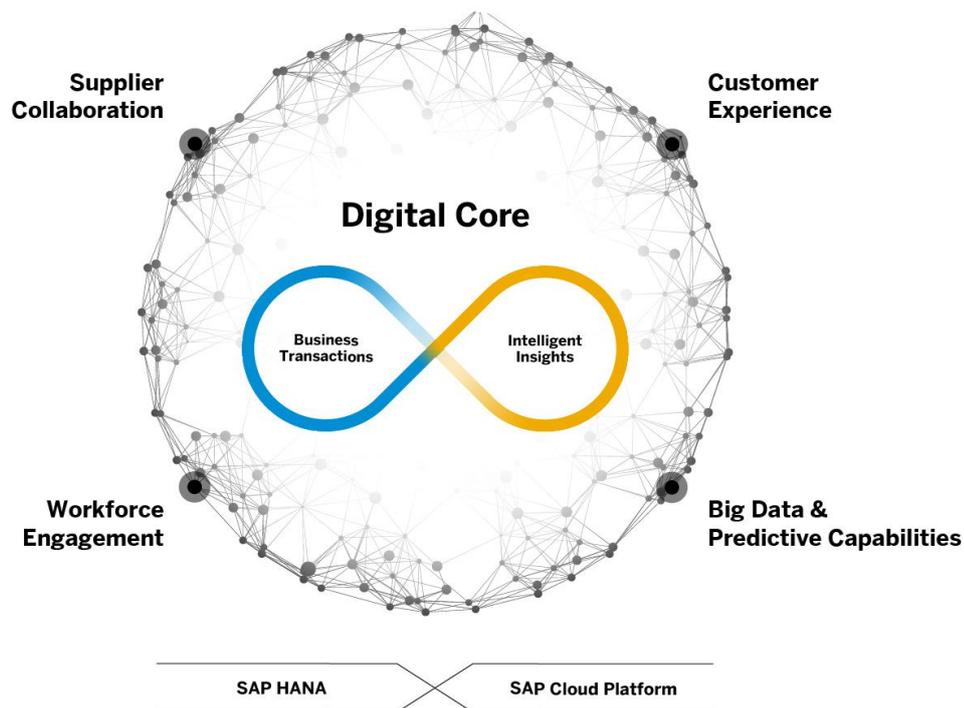
SAP built the digital business framework to support media and entertainment companies as they develop and execute on their enterprise strategy to transform, fully leverage, and contribute to the digital media network.

Media companies must digitalize to grow new profits and reduce costs by simplifying their operations. The value of the digital economy is based on how to serve the consumer or prosumer. Value creation often comes from innovative, differentiating technology solutions, which are based on and coordinated by the digital core solutions. The digital business framework is the platform for innovation and business process optimization, connecting the workforce, the Internet of Things, the supply network, and customers.

As companies reimagine their entire business, they need an IT architecture that provides both stability and long-term reliability for the core enterprise processes and at the same time allows for flexibility in areas where change is occurring on a constant basis.

As companies reimagine their entire business, they need an IT architecture that provides both stability and long-term reliability for the core enterprise processes and at the same time allows for flexibility in areas where change is occurring on a constant basis.

1. The digital core is the foundation for the core enterprise processes, which need to run consistently and uninterruptedly. The core supports real-time transactions and analytics, work with Big Data, and connectivity to the four outside pillars of the framework.
2. Big Data and predictive functions harness consumer connectivity, Big Data analytics, and data-driven automation for real-time insights and new business models.
3. Your customers require multiple channels to interact with you flexibly.
4. Flexibility and adaptability in working with business networks are key in order to onboard new suppliers quickly and shift to alternate suppliers easily.
5. And finally, a lot of flexibility is required when building and maintaining an agile workforce.

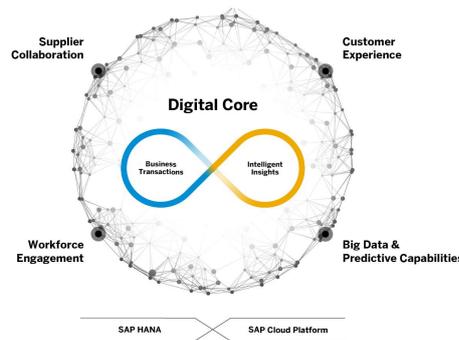


SAP Digital Business Services Portfolio

SAP innovated its portfolio to provide both a stable digital core as well as flexible line-of-business (LoB) extensions.

In the digital economy, simplification and business innovation matter more than ever. To achieve this effectively, it's important to cover the end-to-end digital transformation journey, ranging from planning a digital innovation road map and implementation plan with proven best practices to running all deployment options and ultimately optimizing for continuous innovation with a focus on outcomes. Processes are designed from the outset to flow end to end across the cloud-based solution extensions (listed in the white bands in the figure below).

They are fully integrated into the SAP S/4 HANA® Enterprise Management solution and optionally deployed to address business needs. The solution features shown in the dark blue band in the figure represent the digital core. They are delivered as part of SAP S/4HANA Enterprise Management. The items in the lighter blue band are also in the digital core and part of SAP S/4HANA Enterprise Management, but can be added as needed.



Digital innovation SAP Leonardo	<ul style="list-style-type: none"> Product lifecycle costing 			<ul style="list-style-type: none"> Brand impact Predictive analytics
Extensions	COMPELLING CONTENT CREATION <ul style="list-style-type: none"> Integrated business planning Innovation management 		CONTENT MONETIZATION <ul style="list-style-type: none"> Exchange media Cloud for sales Commerce Configure, price, and quote (CPQ) Billing 	AUDIENCE ENGAGEMENT <ul style="list-style-type: none"> BI platform SAP Vora Marketing profile Cloud for service Cloud for social engagement
	<ul style="list-style-type: none"> Enterprise portfolio and project management Commercial project management 		<ul style="list-style-type: none"> Sales planning and performance management SAP Hybris Billing and Invoicing 	
Digital core	SAP S/4HANA Enterprise Management			
	<ul style="list-style-type: none"> Operational purchasing Collaborative sourcing and contract management Invoice and payables management Supplier management Procurement analytics 		<ul style="list-style-type: none"> Order and contract management Sales order fulfillment cockpit User experience and interface solutions Settlement management Integration with SAP Hybris solutions 	<ul style="list-style-type: none"> Service management Service master data management Embedded analytics
	<ul style="list-style-type: none"> Financial planning and analysis Accounting and financial close Treasury management Receivables management Invoice management and accounts payable 		<ul style="list-style-type: none"> Accounting and closing operations Accounting Cost management Profitability analysis 	<ul style="list-style-type: none"> Time recording
Extensions	<ul style="list-style-type: none"> Spend analysis Sourcing Supply chain collaboration Buying Financial supply chain 	<ul style="list-style-type: none"> Business process consolidation Shared service framework Financial supply chain 	<ul style="list-style-type: none"> Core human resources and payroll Talent management Time and attendance management Human capital analytics 	
	<ul style="list-style-type: none"> Procurement 	<ul style="list-style-type: none"> Finance 	<ul style="list-style-type: none"> Human Resources 	
Digital innovation SAP Leonardo		<ul style="list-style-type: none"> Invoice matching Digital boardroom 		<ul style="list-style-type: none"> Resume matching Job matching

SAP Cloud Platform
Customize applications | Integrate apps, data, and processes | Build new apps

- Digital core: Core solution capabilities delivered as part of SAP S/4HANA Enterprise Management
- Digital Core: Solution capabilities that are also part of SAP S/4HANA Enterprise Management, but added/purchased as needed.
- Extensions: Cloud-based (LoB) solution extensions that are fully integrated with SAP S/4HANA Enterprise Management, but added/purchased as needed.
- Leonardo: Solution capabilities that are powered by a Leonardo technology and included in the Leonardo suite and how to add/purchase is not shown on this diagram.

Learn more about SAP solutions today and discover planned innovations by accessing the SAP solution road map for media here:



Digitally **reimagine** your business models through **new business capabilities**.

Media companies who understand the consumer, and deliver compelling content will achieve the promise offered by digital transformation

1. Media companies need to build enduring personalized relationships to drive deeper engagement to deliver better returns on their content investments and value to advertisers .
2. Data driven consumer, customer, and content insight is a competitive weapon as consumer media and entertainment choices become virtually limitless in an attention driven economy.

	Compelling Content Creation	Content Monetization	Audience Engagement	Procurement	Finance	Human Resources
	Chief Content Officer	Chief Revenue Officer	CMO	CPO	CFO	CHRO
Audience Centricity	<ul style="list-style-type: none"> Understand the audience to be able to develop compelling content Maximize content value across distribution platforms to drive ROI 	<ul style="list-style-type: none"> Develop new business models and adjust in real time to experiments Experiment with digital subscriptions and metered access models Manage platform / content mix 	<ul style="list-style-type: none"> Market with speed and agility Retain customers Profile and target audience 	<ul style="list-style-type: none"> Support to help ensure overall engagement profitability and to mitigate risk through real-time project financial performance 	<ul style="list-style-type: none"> Manage and match risk and cost against customer billing mechanisms proactively Optimize working capital 	<ul style="list-style-type: none"> Maintain top talent pipeline Attract and secure top talent Enable social collaboration among teams
Monetizing Audience Insights	<ul style="list-style-type: none"> Target the audience of one to drive greater engagement Microsegment the audience to drive higher value to advertisers Own the customer relationship and look for new revenue streams 	<ul style="list-style-type: none"> Look for incremental ways to drive profitable revenue growth by understanding and managing customer needs Exploit the growth in data to provide value to advertisers 	<ul style="list-style-type: none"> Get real-time customer insights Create data-driven marketing Produce subscriber marketing Provide context aware product recommendations 	<ul style="list-style-type: none"> Tune scalable quote-to-cash processes to requirements for digital acquisition, selling, and consumption Reflect new monetization models with usage and metered billing 	<ul style="list-style-type: none"> Include payment models for digital services into product calculations and financial reporting 	<ul style="list-style-type: none"> Identify, forecast, and address skill gaps Onboard and train employees quickly and seamlessly Train and certify workforce on new digital technologies
Maximizing Media Value	<ul style="list-style-type: none"> Understand the potential ROI of content Manage the value of content throughout its lifecycle Drive value out of amortized catalogue content 	<ul style="list-style-type: none"> Gain higher revenue share for advertisers, publishers, and consumers 	<ul style="list-style-type: none"> Focus advertising and marketing money on the highest value segments and consumers Respond in real time to events to energize content consumption Use predictive models to drive greatest return Procure advertising at the most competitive rates 	<ul style="list-style-type: none"> Disintermediating for improved return on advertising investment Be flexible on-boarding of alternative suppliers Curb maverick spend Integrate contingent workforce to augment own workforce efficiently 	<ul style="list-style-type: none"> Initiate digital rights management and compliance Use simulation and analysis to evaluate financial implications of strategic business choices 	<ul style="list-style-type: none"> Empower employees to make decisions in real time Manage external contractors in a flexible way Enable flexible work teams Institute flexible contracting to work with customers Procure and manage contingent labor and services for an optimized service delivery across regions

Typical business benefits*

- Better, faster, and more accurate decision making
- 61% less finance spending when product, channel and customer profitability is reviewed
- Increased profitability of titles, products, and services
- 17% pipeline growth when companies pursue cross sell and upsell opportunities
- Real-time insights into title performance
- 7% increase in customer satisfaction when profiles and history are available at the point of interaction
- Cost of procurement: -15% to -20%
- Worker acquisition time: -30% to -40%
- Days payables outstanding on targeted spend: -2 days to -5 days
- Audit cost: -20% to -40%
- Days to close annual books: -40% to -50%
- Cost of business and operations analysis and reporting: -5% to -10%
- Time & Attendance Function Cost Down
- HR FTE's: -44%

	Internet of Things	Machine Learning	Analytics	Blockchain	Big Data	
	SAP Cloud Platform	Analytics Services	UX Services	Mobile Services	Security Services	Collaboration Services
	Compelling Content Creation	Content Monetization	Audience Engagement	Procurement	Finance	Human Resources
Digital Innovation SAP® Leonardo	<ul style="list-style-type: none"> Product lifecycle costing 					
Extensions	<ul style="list-style-type: none"> Integrated business planning Innovation management 	<ul style="list-style-type: none"> Exchange media Cloud for sales Commerce Configure, price, and quote (CPQ) Billing 	<ul style="list-style-type: none"> BI platform SAP Vora™ Marketing profile Cloud for service Cloud for social engagement 	<ul style="list-style-type: none"> Spend analysis Sourcing Supply chain collaboration Buying Financial supply chain 	<ul style="list-style-type: none"> Invoice matching Digital boardroom 	<ul style="list-style-type: none"> Resume matching Job matching
Digital Core SAP S/4HANA®	<ul style="list-style-type: none"> Enterprise portfolio and project management Commercial project management Project control 	<ul style="list-style-type: none"> Sales planning and performance management SAP Hybris® Billing and Invoicing Order and contract management Sales order fulfillment cockpit User experience and interface solutions Settlement management Integration with SAP Hybris solutions 	<ul style="list-style-type: none"> Service management Service master data management Embedded analytics 	<ul style="list-style-type: none"> Operational purchasing Collaborative sourcing and contract management Invoice and payables management Supplier management Procurement analytics 	<ul style="list-style-type: none"> Business process consolidation Shared service framework Financial supply chain Financial planning and analysis Accounting and financial close Treasury management Receivables management Invoice management and accounts payable Accounting and closing operations Accounting Cost management Profitability analysis 	<ul style="list-style-type: none"> Core human resources and payroll Talent management Time and attendance management Human capital analytics Time recording

*Benefits are based on early adopters of SAP S/4HANA or conservative outside-in benefits of moving from a traditional enterprise resource planning solution to enhanced SAP S/4HANA and line-of-business or cloud capabilities..

SAP Cloud Platform – Platform as a Service

SAP Cloud Platform is the platform for innovation and digital business

The SAP HANA® platform and SAP Cloud Platform provide the mobile, collaboration, integration, and analytics functions media companies need to dream big, develop fast, and deliver everywhere, with the following features:

Application extensions

Extend current cloud and on-premise solutions for additional customization and enhanced business flows.

Audience analytics

Understand what's relevant for the audience, optimize content investments, and personalize content experience with insights taken from analytics apps powered by SAP HANA.

New cloud apps

Build innovative consumer-grade and industry apps quickly for today's always-on, mobile, social, and data-driven world.

Extended storage capabilities

Manage all structured, unstructured, and infinite data streams holistically with flexible combinations of data stream processing, in-memory computing technology, disk-based columnar storage, and Hadoop-based storage solutions.

Data footprint reduction

Reduce memory footprint and TCO significantly. In enterprise resource planning (ERP) software, we have seen about a 6x reduction through dictionary compression in SAP HANA. Removing aggregates and actual and historical data separation can further reduce the footprint up to 10x.

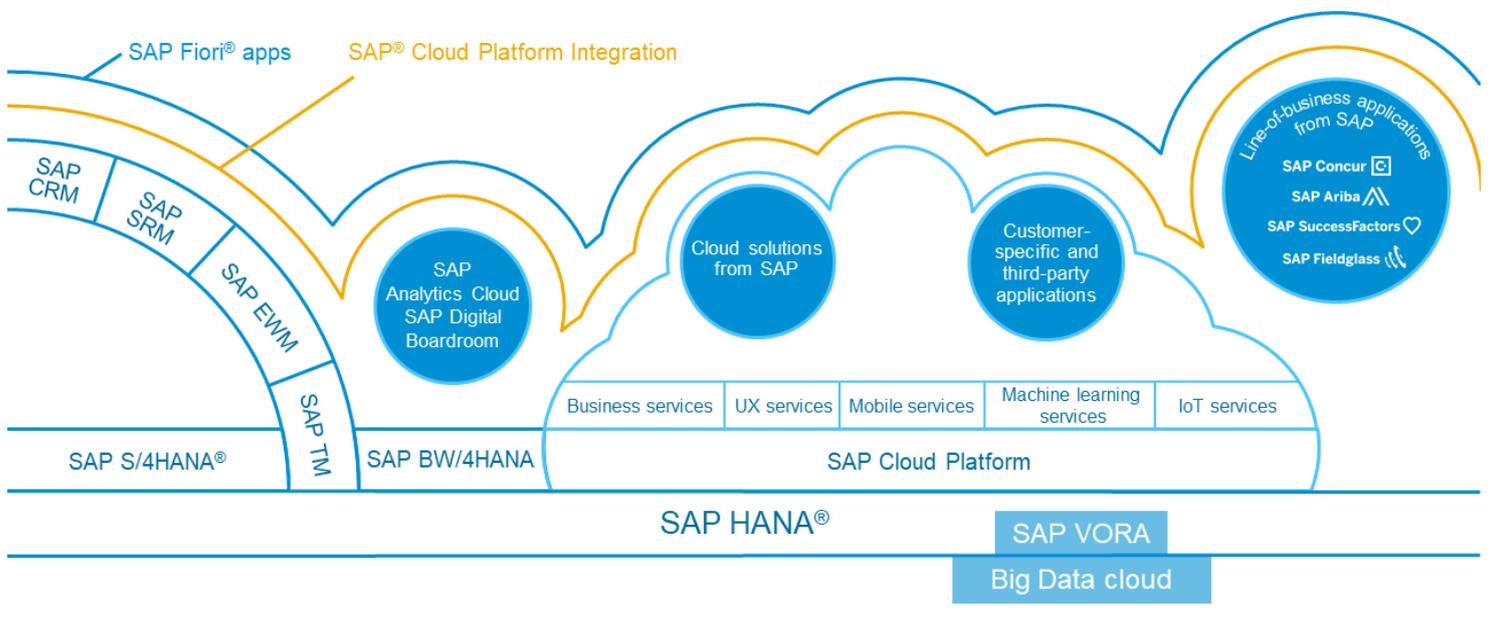
Invenio Business Solutions

provides comprehensive content lifecycle management from the inception of a new concept for a show, series, or title through planning, greenlighting processes, managing rights contracts, realization, and monetization.

Thomson Reuters

redefined up-to-the-moment storytelling by building an application for sourcing polling information on the SAP HANA platform.²¹

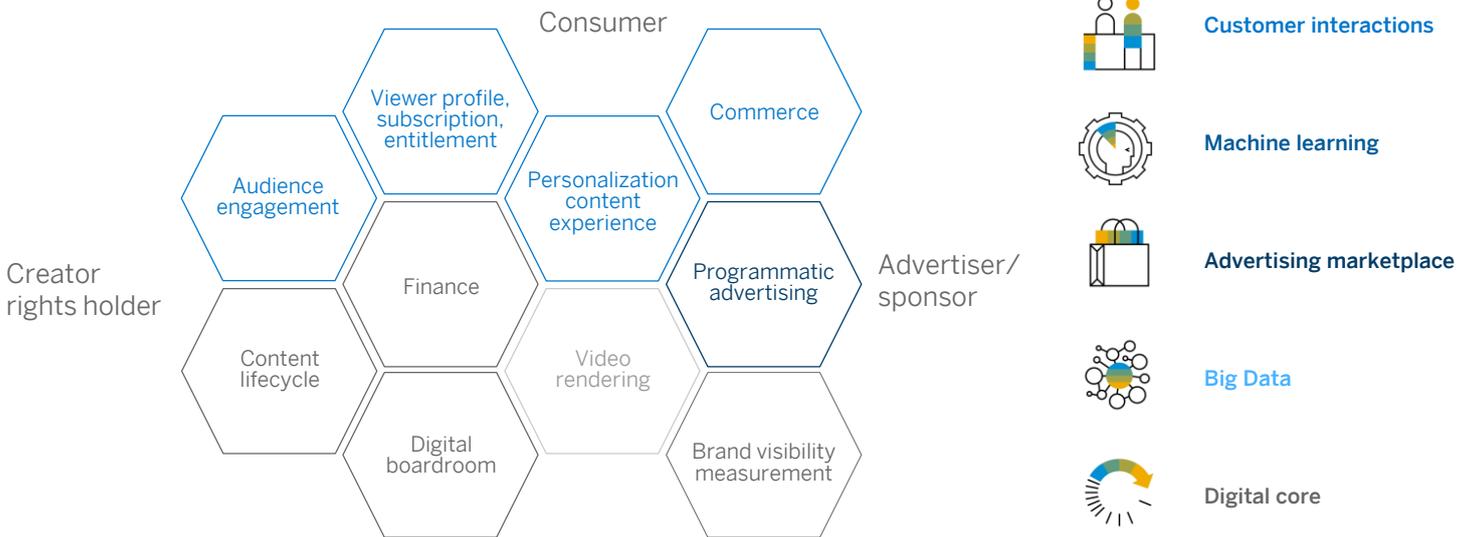
The Digital Transformation Platform from SAP



How Does It All Come Together? – Example

Digital videos on demand give viewers the choice and freedom to stream an individual program at any time they want. New media companies use technology to manage subscriptions, listen to sentiment, analyze how people consume video, understand brand visibility, and turn these insights into value to subscribers, sponsors, and advertisers.

BUSINESS SCENARIO FOR DIGITAL VIDEO



EXAMPLE: DIGITAL VIDEO ON DEMAND

The number of subscription video on demand (SVOD) viewers worldwide is expected to grow from 160.7 million in 2015 to 366.3 million in 2021.⁹ SVOD revenues have soared from US\$0.9 billion in 2010 to \$11 billion in 2015 and are projected to grow to \$26 billion in 2021.¹¹ Netflix, Hulu, and Amazon Prime are expected to account for 30% of this total. Online TV and video advertising has been boosted in recent years by the rapid growth in mobile advertising.

As of 2017 there are massive amounts of data in this new online video ecosystem that are not being leveraged to optimize media services to viewers, creators and rights holders, and advertisers and sponsors. This is the where the end-to-end offering from SAP comes into play.

An SVOD solution starts with **viewers engaging** with the content, signing up for a **subscription** and **entitlements**, transacting in **commerce**, and resolving service disruption issues. At every step, the viewer's interaction with content, commerce, or customer service provides rich user-behavior data. This helps to understand what motivated casual viewers to sign up and to optimize the **personalization of content experience** to reap as many microsegments as commercially feasible.

Once the customer becomes a subscriber, the digital video company continues to capture, analyze, and leverage such data as account profile, payment preferences, how subscribers consume video, any service disruption history, expression of sentiments, engagement with interactive features, and commerce offerings. These **online video analytics** help to refine the consumer's experience and understand why subscribers churned or extended their subscriptions.

Further, these insights help chief editors to set priorities for investments with regard to **content lifecycle** management (acquisition, production, and distribution of content).

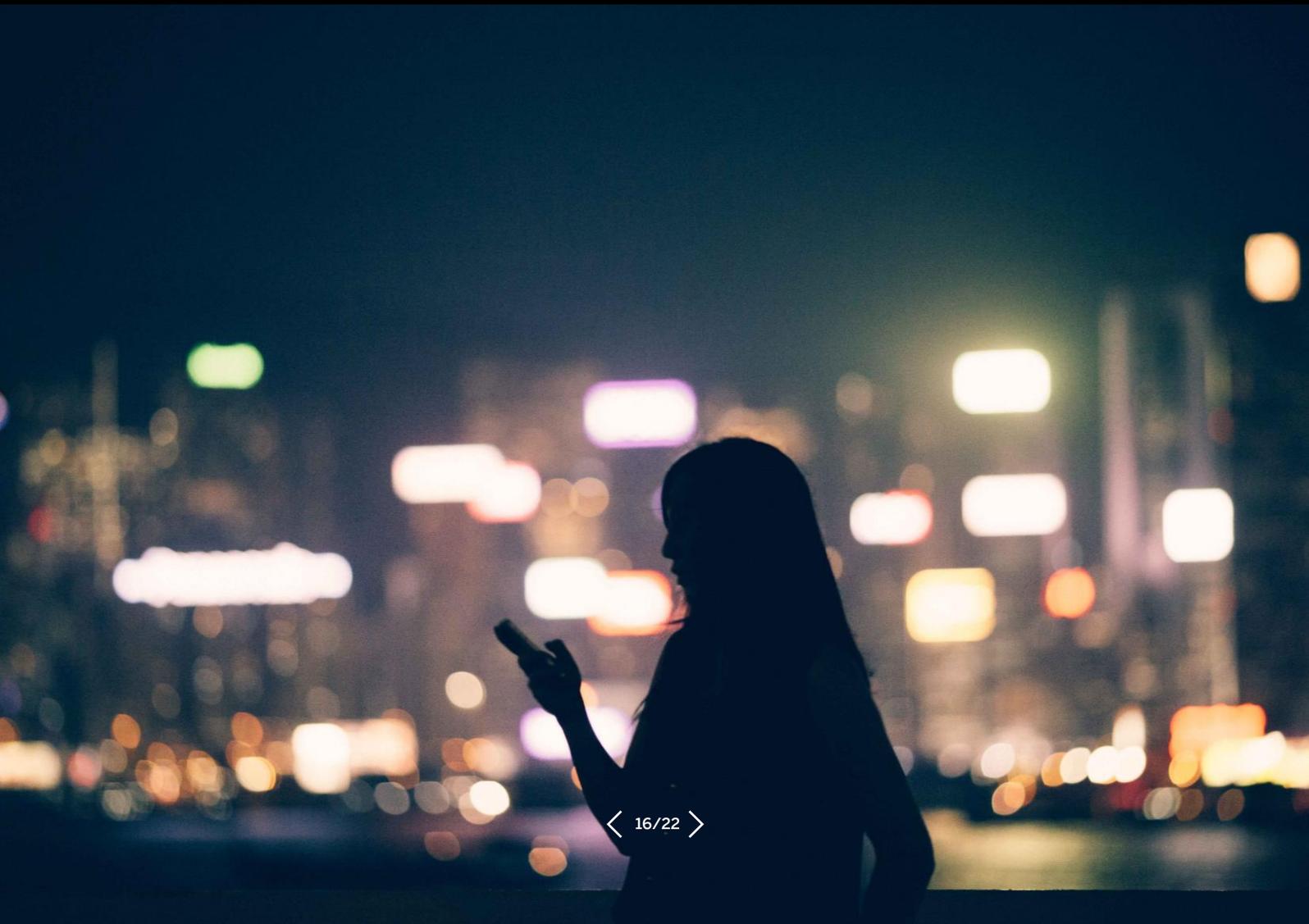
Audience data is also the basis for targeting advertising in **programmatic advertising**, and maneuvering digital media companies into a sweet spot to go beyond advertising to engage in online retail **commerce** business.

An accurate matching of viewing data with content metadata creates an understanding of total content value, whether with respect to content recommendation to viewers or with respect to **brand visibility** and media value assessments for sponsors and advertisers.

Eventually, all data converges into business performance management in **finance** and the **digital boardroom**.

To the Next Level

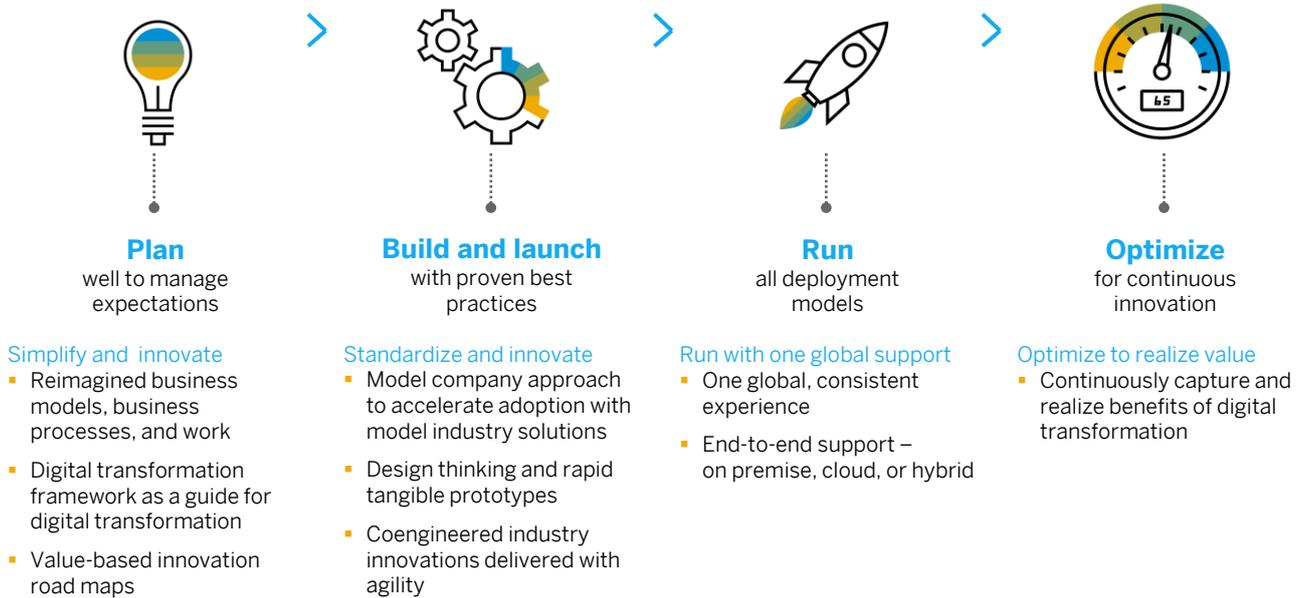
The journey to the next level of digital media begins with a capability analysis that results in the transformation agenda.



Transforming to the **Next Level**

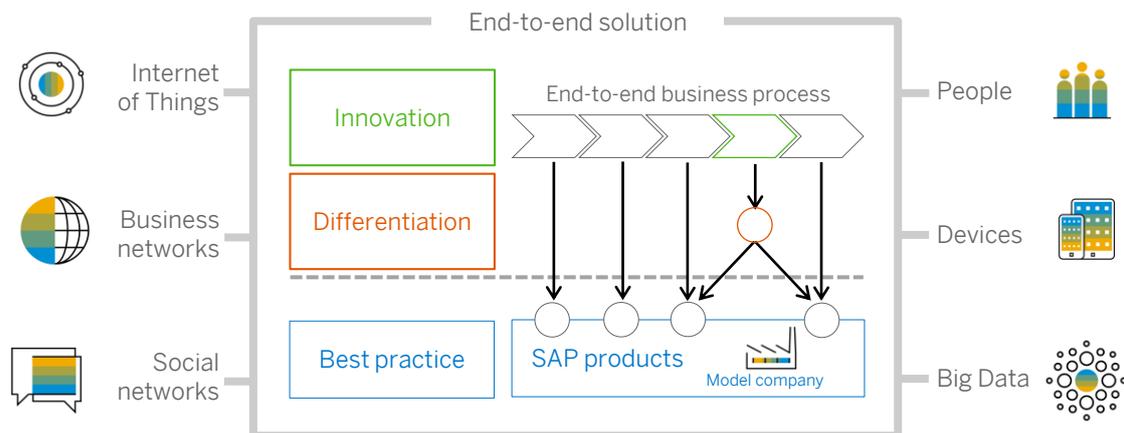
In the digital economy, simplification and business innovation matter more than ever. To achieve this effectively, it's important to cover the end-to-end digital transformation journey, ranging from planning a digital innovation road map and implementation plan with proven best practices to running all deployment options and ultimately optimizing for continuous innovation with a focus on outcomes.

The end-to-end digital transformation journey



To move forward with speed and agility, it helps to focus on live digital data instead of Big Data, and combine solution know-how and industry-specific process expertise with data analytics so that the right digital reference architecture is defined and delivered. In that context, we believe that a model company approach is very relevant to enabling you to transition from your current state to digital. Model companies represent the ideal form of standardization for a specific line of business or industry. They are built on existing SAP solutions using best-practice content, rapid prototyping solution packages, and additional content from customer projects. They provide a comprehensive baseline for rapid, customer-specific prototypes, cloud demos, and quick-start implementations.

Model Company Approach



SAP Digital Business Services

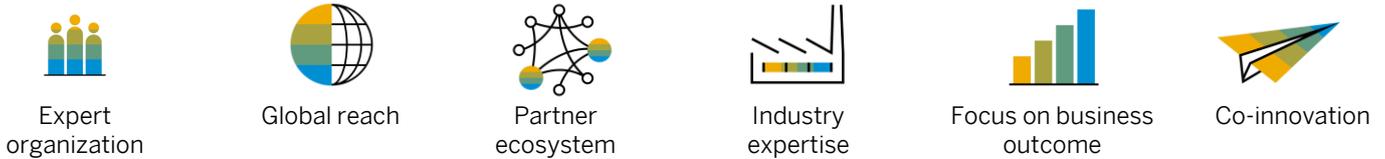
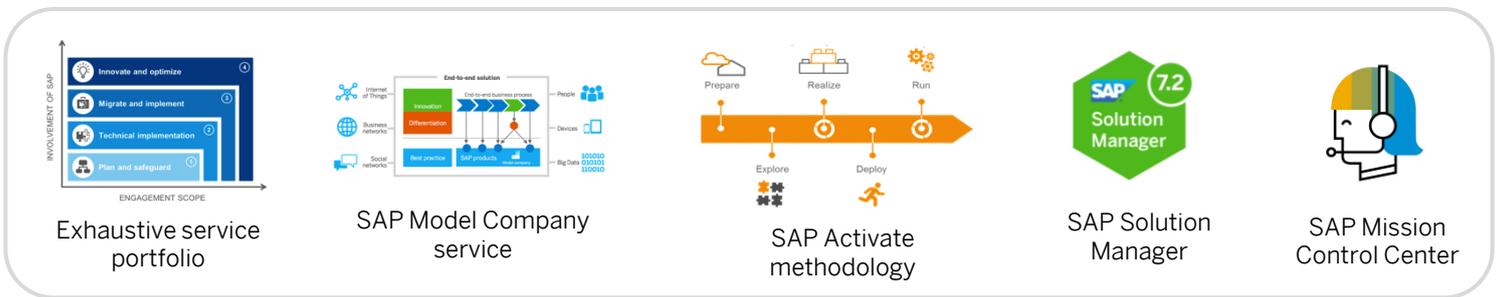
Enabling your success in digital transformation

SAP has a broad range of services to cover the end-to-end digital transformation journey, ranging from consulting on a digital innovation road map and implementation plan with proven best practices to the ability to run all deployment options and ultimately optimize for continuous innovation. We provide both choice and value within our service offerings, allowing you to tailor the proper approach based on your specific company expectations and industry requirements.

- 25,000 professionals in 70 countries
- Customers in 130 countries
- Outcomes delivered as one team in one contract
- Projects connected in real time to global network of support functions through SAP Mission Control Center
- SAP MaxAttention™ and SAP ActiveEmbedded services to safeguard investment
- Consistent experience – on premise, cloud, or hybrid
- Standardized adoption of processes and tools
- Streamlined onboarding and ramp-up of stakeholders

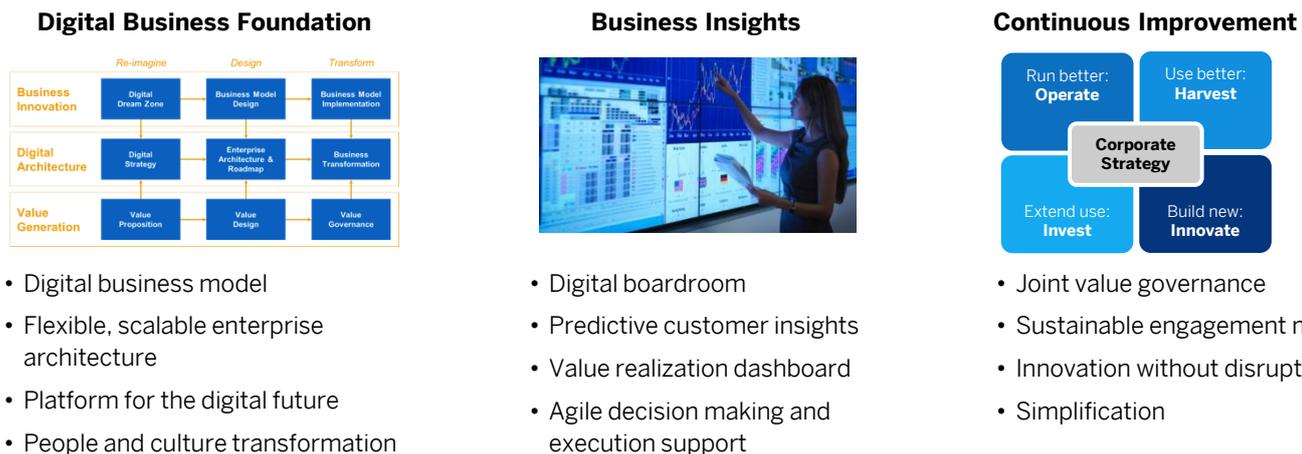
From proposing a comprehensive digitalization proposal to realizing and running it, SAP delivers on the digital transformation promise to its customers, on time, within budget, and on value.

Value delivery from SAP is possible due to our many unique, differentiating assets:



SAP Digital Business Services deliver digital innovation with simplification and accelerated implementation, which is key to adoption and value realization. Continuous improvement is supported through the ongoing assessment of real-life data insights and joint governance with customers.

Value delivery from SAP focuses on the following deliverables:



Comprehensive SAP Ecosystem

Orchestrating the world to deliver faster value

Our comprehensive ecosystem offers:

- A wide range of business services (OEM suppliers and data and content providers)
- Open architecture: choice of hardware and software
- Complementary and innovative third-party solutions
- Reach – partners to serve your business of any size, anywhere in the world
- Forum for influence and knowledge
- A large pool of industry experts with broad and deep skill sets

Our partner ecosystem includes, among others:



Business network

- 1.9 million suppliers
- 200 major travel partners (air, hotel, and car)
- 50,000 service and contingent labor providers

Influence forums and education

- 32 user groups across all regions
- 40+ industry councils
- SAP Community with >24 million unique visitors per year
- 1,800 members of the SAP® University Alliances network

Innovation

- 1,900+ OEM solution partners to extend SAP solutions
- 2,000 startups developing SAP HANA® apps



Implementation services

- 3,200 services partners
- Media-specific solutions and services

Platform and infrastructure

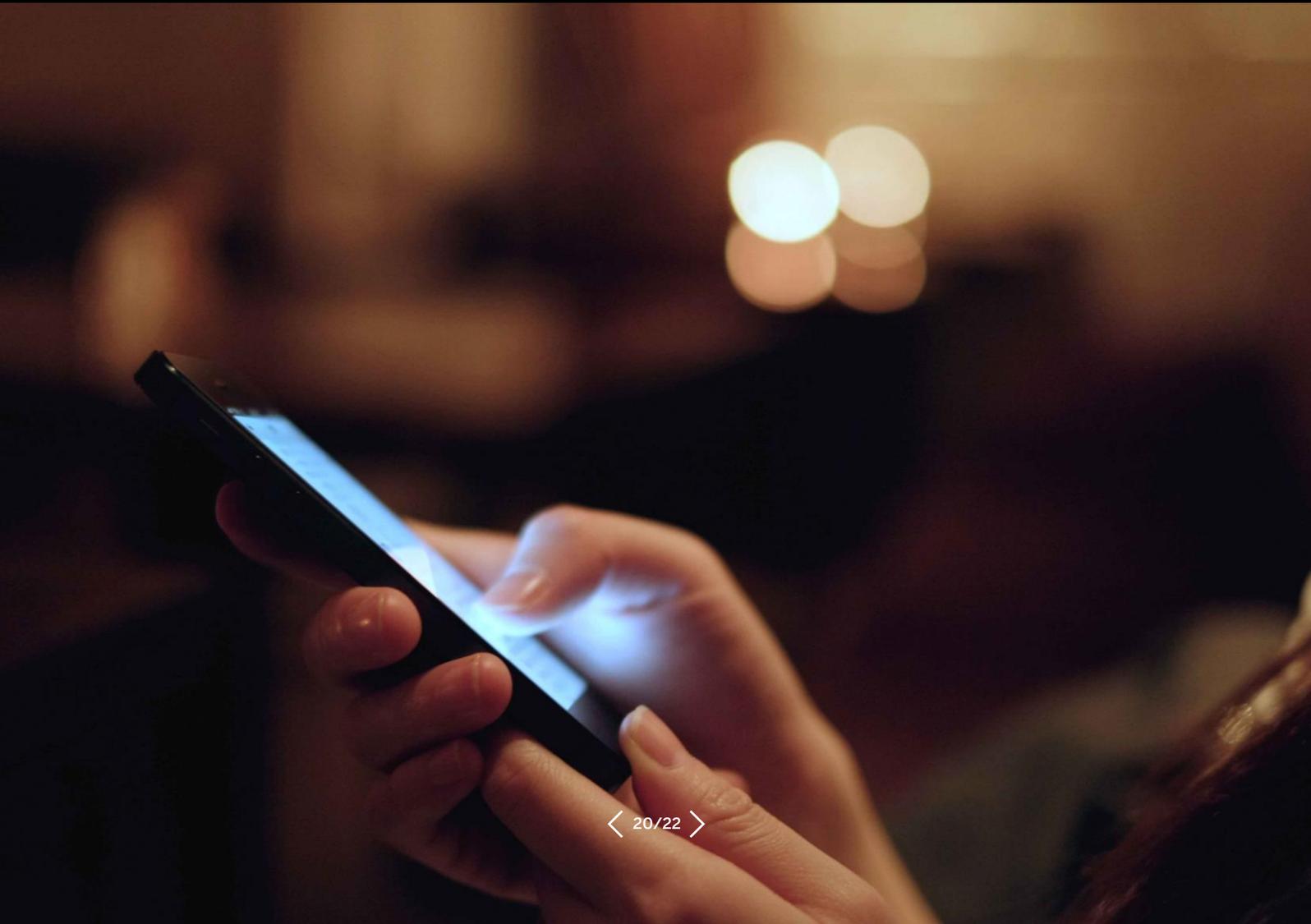
- 1,400 cloud partners

Channel and SMEs

- 4,800 channel partners

Why SAP?

SAP enables digital media network with the digital core, business networks, supply chains, and the internet of things.



SAP Is Committed to Innovation

Vision Help the world run better and improve people's lives

Mission Help retailers in the fast-moving, global marketplace to better innovate, compete, and stay relevant. To do this, we will provide retail solutions that improve the delivery of consistent, contextual, and relevant retail experiences.

Strategy Become **the** cloud company powered by SAP HANA



Global presence and relevance

- 87,000 employees representing 120 nationalities
- **350,000 customers**
- SAP operates in **191 countries**



Industry and line-of-business focus

- **98% of top valued brands** are our customers
- **18 of the 25 fastest-growing retailers in the world run SAP® software**
- **10 of the 10 most admired apparel retailers in the world run SAP solutions**



Digital economy ready

- **2011 SAP HANA® platform launched**
- **2012 SAP Cloud portfolio launched**
- **2014 business networks run by SAP are the largest marketplace in the world**
- **2015 SAP Cloud Platform launched**
- **2015 SAP S/4HANA®: Most modern ERP software**



Digital media enabled by SAP® software

- Media solutions **since 1994 support** subscription, advertising, and rights management
- **83% of media companies** in the Forbes Global 2000 are SAP customers
- SAP customers deliver more than **74% of radio and TV broadcasting content** worldwide

WALMART DATA CAFE

Walmart is an SAP HANA Innovation Award winner, recognized for its Data Café that breaks down data silos, providing a **single enterprise-wide view of timely information** for a large cross-section of operational staff looking to resolve daily issues.²²

CONNECTED DEVICES AND BIG DATA

We believe that the ability to **harness the power of data** and put it into context is at the heart of most of the digital-era business models. We are working with major international media companies as well as startups to impact their business in significant ways.

BIG DATA IN SPORTS

The National Basketball Association (NBA) has standardized **in-game tracking technology** in all 30 of its arenas. Using 6 cameras the system tracks the movements of every player on the court and the basketball 25 times per second, the data collected provides a plethora of innovative statistics based around speed, distance, player separation, and ball possession.²³

Additional Resources

Outlined below is additional external research that was used as supporting material for this paper.

1. "StepStone Steps into the Cloud with SAP Business ByDesign[®]," SAP News, March 2016, <http://news.sap.com/stepstone-steps-into-the-cloud-with-sap-business-bydesign>.
2. "How Netflix Transformed the Entertainment Management Industry," Digitalist Magazine by SAP, Oct. 12, 2016, www.digitalistmag.com/customer-experience/2016/10/12/netflix-transformed-entertainment-management-industry-04554692.
3. "Skyrock.com: Monetizing Social Networking with SAP InfitelInsight[®] Recommendation," SAP, March 2014, <https://dam.sap.com/dam-ws/download?id=Po85r5%2FrL0CEGidqu77v552Fu%2F9iSFeZBYzjftdAtJ%2BC53J7zeT88fRKH4c5MgE>.
4. "2014 Global Customer Service Barometer," American Express Company and Ebiquty Plc, 2014, <http://about.americanexpress.com/news/docs/2014x/2014-Global-Customer-Service-Barometer-US.pdf>.
5. SAP Benchmarking.
6. SAP Benchmarking.
7. "Worldwide pay-TV Subscribers to Exceed 1.1 Billion in 2019 with Increasing IPTV Market Share," ABI Research, Jan. 22, 2014, <https://www.abiresearch.com/press/worldwide-pay-tv-subscribers-to-exceed-11-billion/>.
8. "ProSiebenSat.1 expands e-commerce activities," Digital TV Europe, Oct. 12, 2015, www.digitaltveurope.net/441651/prosiebensat-1-expands-e-commerce-activities.
9. "Percentage of internet users in selected countries who watch online video content every day as of January 2017," Statista Inc., www.statista.com/statistics/319688/daily-online-video-usage.
10. "Netflix CEO on the TV Industry," Businessinsider.com, April 16, 2015, www.businessinsider.com/netflix-ceo-on-the-tv-industry-2015-4?IR=T.
11. "Global OTT TV and Video Forecasts," Digital TV research, July 2016, <https://www.digitaltvresearch.com/products/product?id=149>.
12. "YouTube Will Soon Be Able to Make Any Video Shopping-Enabled," Variety, Sept. 29, 2015, <http://variety.com/2015/digital/news/youtube-shopping-ads-videos-1201605533>.
13. "The Rise of the Chief Digital Officer," Rhys Grossman and Jana Rich, Russell Reynolds Associates, www.russellreynolds.com/insights/thought-leadership/the-rise-of-the-chief-digital-officer.
14. "Glass to Glass Internet Ecosystem task force," w3.org, Oct. 7, 2016, https://www.w3.org/2011/webtv/wiki/GGIE_TF.
15. "Worldwide pay-TV Subscribers to Exceed 1.1 Billion in 2019 with Increasing IPTV Market Share," ABI Research, Jan. 22, 2014, <https://www.abiresearch.com/press/worldwide-pay-tv-subscribers-to-exceed-11-billion/>.
16. "Global OTT TV and Video Forecasts," Digital TV research, July 2016, <https://www.digitaltvresearch.com/products/product?id=149>.
17. "AJ+ passes on billion milestone," Digital TV Europe, Oct. 12, 2015, <http://www.digitaltveurope.net/441711/aj-passes-one-billion-milestone>.
18. "SuccessFactors Launches Enhanced Business Execution Solutions for Small Businesses," SAP SuccessFactors (SAP), June 27, 2011, www.prnewswire.com/news-releases/successfactors-launches-enhanced-business-execution-solutions-for-small-businesses-124583868.html
19. "KOFIC: Bringing Korea to Hollywood with Help from SuccessFactors Solutions," https://www.successfactors.com/en_us/download.html?a=/content/dam/successfactors/en_us/resources/customer-success-profile/kofic-csp.pdf.
20. SAP Benchmarking
21. Reuters Polling Explorer, Thomson Reuters, <http://polling.reuters.com>.
22. "SAP HANA powers Walmart's Data Café," March 30, 2015, <https://ideas.sap.com/D25974>, "Walmart runs SAP HANA," Karenann Terrel, CIO, Wal-Mart Stores Inc., May 7, 2015, <https://www.youtube.com/watch?v=U2XWtb9rWGI>.
23. NBA Stats, <http://stats.nba.com/?ls=iref:nba:gnav>.

Note: All sources cited as "SAP" or "SAP Benchmarking" are based on our research with customers through our benchmarking program or other direct interactions with customers.

Note: Some images used are under license from Shutterstock.com.

Studio SAP | 53016enUS (17/10)

© 2017 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

The information contained herein may be changed without prior notice. Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platform directions and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, and they should not be relied upon in making purchasing decisions.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies.

See <http://global.sap.com/corporate-en/legal/copyright/index.epx> for additional trademark information and notices.