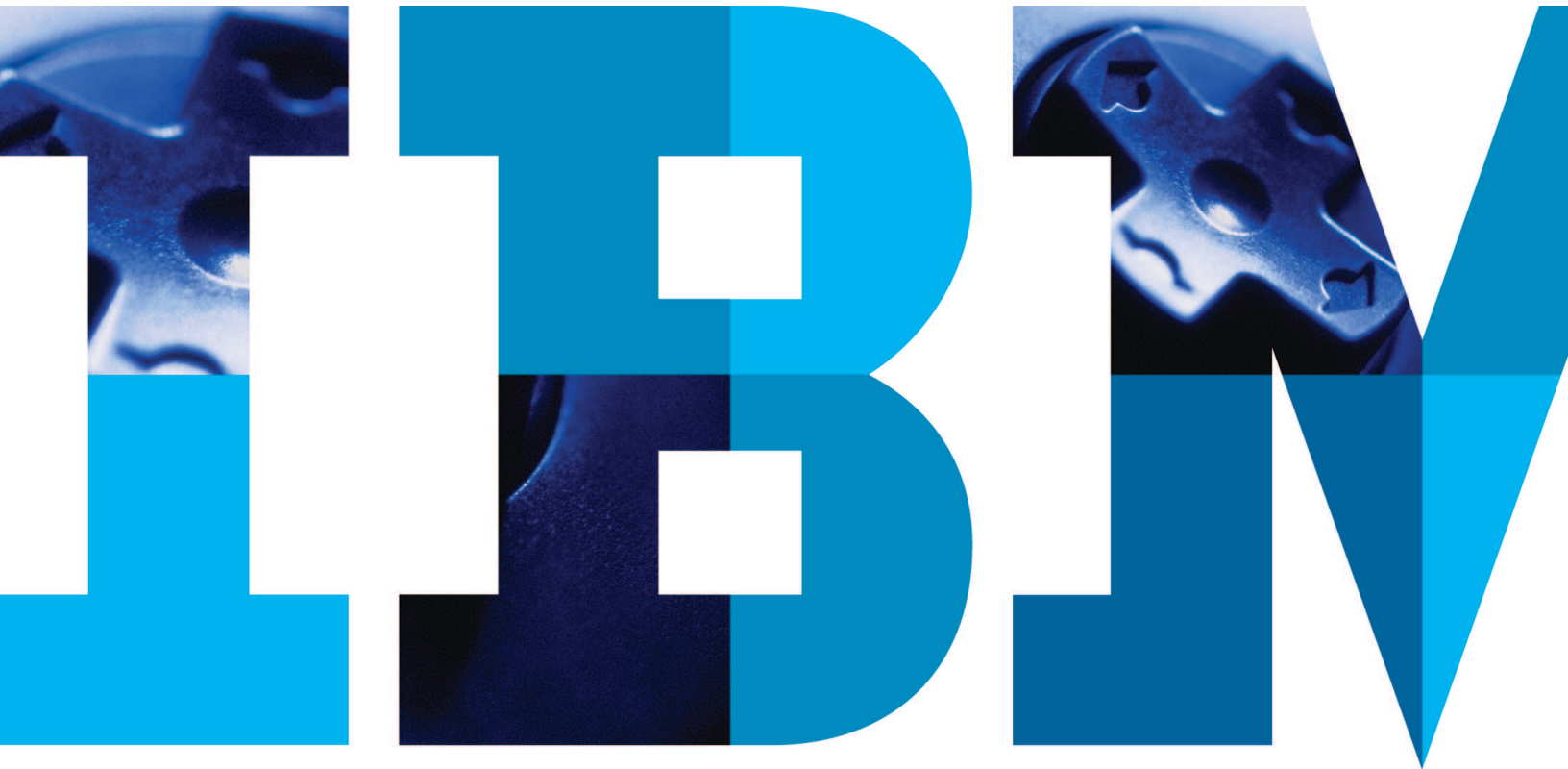# Integrating the connected customer across the digital supply chain—and beyond

How smarter technologies can help M&E companies deliver differentiated customer experiences

IBM

New consumer behaviors and technologies are rewriting the media and entertainment (M&E) industry script for customer engagement, content creation and distribution. Consumers are using multiple devices to stay connected at home, at work and "on the go," and expect providers to offer digital experiences and content that reflect their individual interests. To capture mind-share in this dynamic marketplace, it is up to media companies to create and deliver unique and meaningful experiences, while differentiating themselves from the competition.

These dynamics present a set of challenges unparalleled in media and entertainment history. Connected customers are generating huge amounts of content every second—content that now can be captured, analyzed and used by your organization to assess and predict consumer usage and preferences. Conversely, media companies like yours need to be able to quickly develop and deliver the right content to the right customer across the right channels—and do it all before the competition.

To take advantage of these new revenue opportunities, and attract and retain connected customers, IBM believes that media and entertainment companies must use smarter, standards-based technologies—not only to reduce costs and optimize efficiency, but also to increase agility and responsiveness to market drivers. This model requires a data-driven, agile approach to operations—one that incorporates the preferences and requirements of the connected customer into every activity in the digital

supply chain and, in the process, provides solutions and strategies to generate sustainable transformation across the five M&E business domains of:

- Content production
- Content distribution
- Sales and services
- Marketing
- Business systems

The connected customer: delivering unique experiences that increase value

To succeed in the era of the connected customer, M&E companies—wherever they sit in the industry value chain—need to enhance and replace traditional media content with innovative digital experiences. You need to nurture and enrich customer relationships by delivering relevant content and experiences that appeal to consumers' unique digital personalities. To stay competitive, your new media offerings should be designed to increase viewership, subscribership and customers; improve advertising sales and effectiveness; reduce marketing costs; and lay the basis for customer-centric marketing. IBM connected customer solutions can help you:

- Drive growth and retention of visitors, viewers, readers and subscribers.
- Extend your advertising reach and ROI across multiple platforms.
- Increase revenue with differentiated digital content.
- Enhance online engagement, including traffic, page views and click-through rates.
- Improve your understanding of the media customer.

IBM solutions for the connected customer

IBM solutions for the connected customer can help your M&E organization provide differentiated, personalized experiences across channels and devices by using media-aware tools and data analytics to provide the insights you need to create and market better products—and increase consumer mindshare. The connected customer solutions portfolio includes:

- **Customer and market insight**—These solutions will help your M&E organization develop and segment customer profiles based on deep analysis of audience sentiment and behaviors, web and social interactions and transactions. By combining market data and trends, you can gain actionable insights to help you understand and anticipate customer behavior; measure audience response to drive CPMs (cost per thousand impressions); identify future ad sales targets; and offer real-time incentives to increase offer acceptance. Armed with this insight, your company can consistently make better product, marketing and monetization decisions.
- **Commerce and marketing optimization**—These optimization capabilities help you integrate and execute customer-centric marketing and commerce processes to improve operational efficiency and the customer buying experience. Implementing insight-driven processes to target the right customer with the right content at the right time increases conversions and customer value, thus increasing content revenues. Key benefits also include improved operational efficiency with optimized order management and fulfillment and streamlined partner integration and collaboration.

- **Multichannel customer experience**—Multichannel customer experience provides clustered media storage, provisioning and a delivery platform optimized for video workflow. The capabilities enable fast, cost-effective delivery of digital content across multiple distribution channels using fiber versus satellite. The ability to efficiently cross-sell and up-sell premium content like "digital locker" to home DVR customers will help to increase your programming and ad revenues and enhance the customer experience. Key benefits also include reduced capital equipment costs at head-ends and reduced storage costs due to less redundancy. Multichannel customer experience also helps you create new revenue opportunities with robust, multi-device application solutions, including visual design, user experience and complex application development.

The digital supply chain: building in agility to drive operational excellence

As the complexity of content sourcing and distribution intensifies to meet consumer demand, your company is struggling to lower the cost of content acquisition, management and distribution, while delivering content over an increasing number of channels and devices. You also want to improve cycle times and reduce costs, reduce time-to-market for new products and services and use improved operations to free up investment and resources to enable new digital business models. The IBM solutions portfolio for the digital supply chain can help you:

- Reduce time-to-market for products and services.
- Decrease production cycle times.
- Lower labor costs.
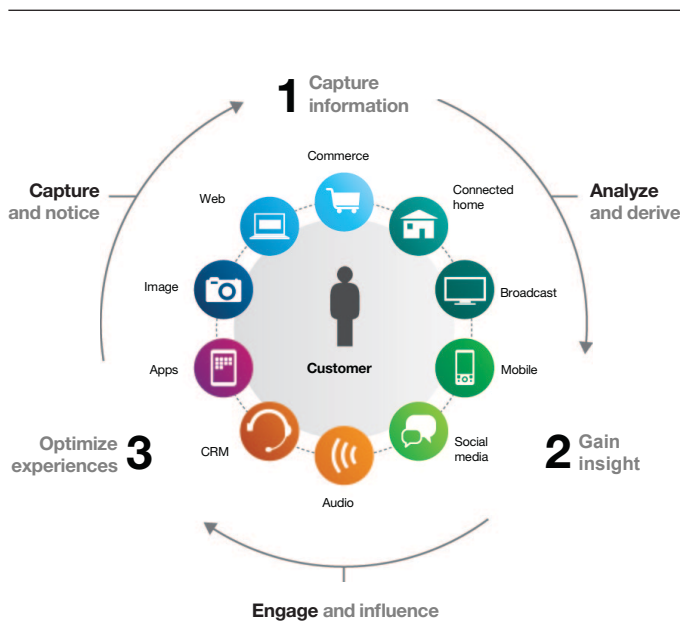- Reduce content storage costs.
- Eliminate royalty overpayments.

Figure 1. How differentiated experiences help increase customer value.

IBM solutions for the digital supply chain

IBM solutions for the digital supply chain can provide efficient content lifecycle management across your entire value chain, providing a critical mass of media assets to administer for faster, more efficient reuse, repackaging and distribution—and increased content ROI. These solutions include:

- **Revenue and royalty management**—These enterprise-class solutions help manage your business—from creation of a deal with contract terms and rights to royalty processing and payments. Revenue and royalty solutions help you streamline contract creation to close deals faster and achieve faster time to revenue; monitor client terms and conditions to resolve disputes and maintain relationships; track rights and royalty rates at a highly detailed level to ensure compliance; and maintain a secure, centralized contract database to minimize risk.

- **Workflow and business process management**—These solutions leverage a single platform to connect back-office systems and processes with production and distribution workflows, improving business insight and enabling faster time-to-market. The flexible infrastructure, fast-start tools and pre-built M&E templates can simplify and accelerate the integration of best-of-breed vendor solutions, repositories and services, and orchestrate workflows across the digital supply chain so your company can quickly take advantage of new market opportunities. Key benefits also include increased operational and asset management efficiency, and reduced content provisioning costs.

- **Storage and archive**—The storage and archive solutions provide flexible, open interfaces to enterprise applications and cost-effective solutions for storing, managing and protecting digital media for file-based systems. The use of a shared, highly scalable, open, standards-based storage pool eliminates islands of content and enables easy portability between digital archives and within file-based workflows using the Linear Tape File System (LTFS) format. Additional benefits include improved access to, and reuse of, assets due to enterprise-wide archive and essence management—increasing content monetization opportunities.

- **Back office transformation**—These solutions can help your M&E organization assess and improve the performance of finance and accounting, human resources, supply chain management and billing functions, and develop and implement service delivery process and quality improvements. By standardizing and streamlining processes across your back-office infrastructure, these solutions will help you improve time-to-market, enterprise collaboration and knowledge sharing, while significantly reducing fixed and variable costs.

The IBM Media Enterprise Framework

IBM solutions for the customer-centric enterprise and digital supply chain were developed on a foundation of flexible, media-aware tools, technologies and processes that can be customized and extended to support rapid growth and constant change. While the goal is to evolve your M&E infrastructure to support strategic connected customer and digital supply chain requirements, many companies are hindered by technology and workflows that were optimized for content created for a broad audience and a single distribution channel. This legacy model has left them with siloed, tightly-coupled and often inflexible systems that are costly to maintain and difficult to change.

The innovative, flexible, media-aware IBM® Media Enterprise Framework is designed to help improve your media and entertainment business operations and reduce costs through service-oriented architecture (SOA), standards-based processes, streamlined workflows and business intelligence. Using off-the-shelf or open-source components, the framework can help you take full advantage of your organization's existing technology investments, letting you build on what you have without having to rip and replace.

The framework is designed to integrate the following capabilities across the key M&E business domains:

- **Business process transformation:** This capability helps you plan and design your own roadmap for transformation in order to deploy new projects faster and with less risk. Your enterprise will be able to easily exchange media assets and data across business units and systems, and integrate or build workflows that support critical business transactions, market initiatives and industry imperatives. With IBM tools and industry-specific templates, it will take fewer IT staff to improve your sales order processes with new business rules; integrate major new applications such as ad-traffic systems; and monitor the performance of all enterprise applications. Improving the creation and management of workflows also reduces operational complexity while increasing reuse and content monetization—delivering higher quality content, higher profit margins and faster time-to-market.
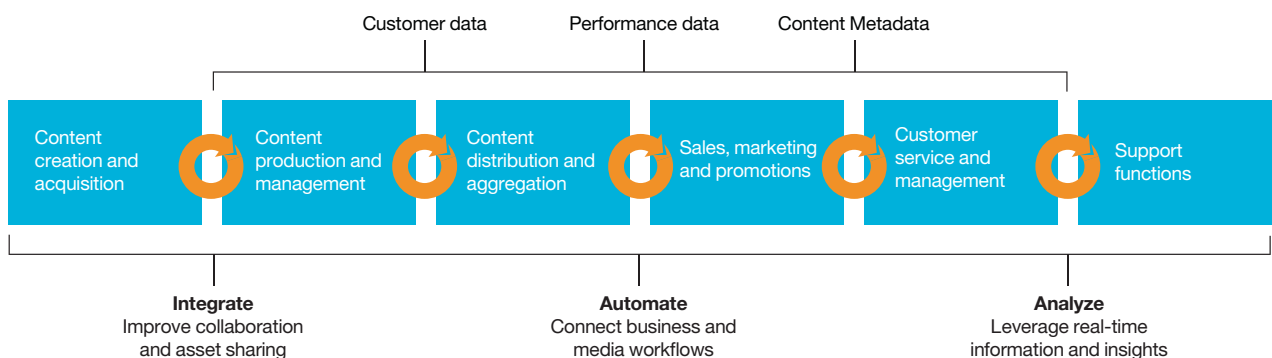

Figure 2. How an agile digital supply chain drives operational excellence.

- **Business analytics and optimization:** This capability gives your media and entertainment company the ability to quickly ingest, analyze and develop insights and new business processes from all types of consumer data, including online behaviors, social media conversations, mobile application events, set-top box viewing, and customer service interactions. The 360-degree insight will give you both the capacity and the knowledge to routinely use big data to increase customer and shareholder value. For example, you'll be able to: track cross-channel advertising inventories; run scenarios on revenue and yield optimization; employ piracy detection; and optimize traditional and social media strategies by measuring audience sentiment and fan engagement for providers and advertisers. The ability to use analytics to gain insights about customer behaviors can help your organization differentiate the customer experience, attract new audiences, reduce churn and improve customer satisfaction.

Transformation framework

Transformation focus areas

Enabling growth	**Enabling productivity**	**Enabling culture change**
• Product and service	• Business process excellence	• Transformational leadership
• Customer experience	• IT enablement	• Value-based culture
• Sales enablement		

Figure 3. Assess and improve the performance of finance & accounting, human resources, supply chain management and billing functions.

- **Media, metadata and information management:** Media and entertainment companies like yours must be able to find and repurpose content quickly. But many organizations d not know what is in their data "goldmine," let alone if the metadata is correct. Using the media, metadata and information management capability, you can better analyze repositories, cleanse the data, and transform it to a new master record model, enhancing retrieval, reuse and data ROI. When combined with the exceptional usability of enterprise-wide portal and search capabilities, the result is a holistic, up-to-date and accurate view of media asset information and intellectual property throughout your organization.

- **Multichannel enablement:** Delivering and managing content across channels is essential to meeting the connected customer imperative because it helps you enhance and personalize the user experience—wherever and however consumers choose to connect. Today, this customer-centric approach is the key to helping M&E companies differentiate themselves from the competition and increase customer satisfaction and retention. Multichannel enablement can help you package and repackage content in a variety of formats for a wide array of distribution channels and devices across multiple network protocols—from launching new programming, to entering new markets, to maximizing content ROI.

- **Infrastructure management and security solutions:** M&E companies must efficiently, securely and cost-effectively produce and distribute content, assets and services, both inside and outside their organizations. From on-premise and cloud-based systems and servers, to enterprise data and asset management, your infrastructure capabilities must work together to enable the flexibility and responsiveness your business partners and customers require. The infrastructure management and security capability helps you secure and consolidate your assets, networks, systems and channels to optimize operational and business performance.
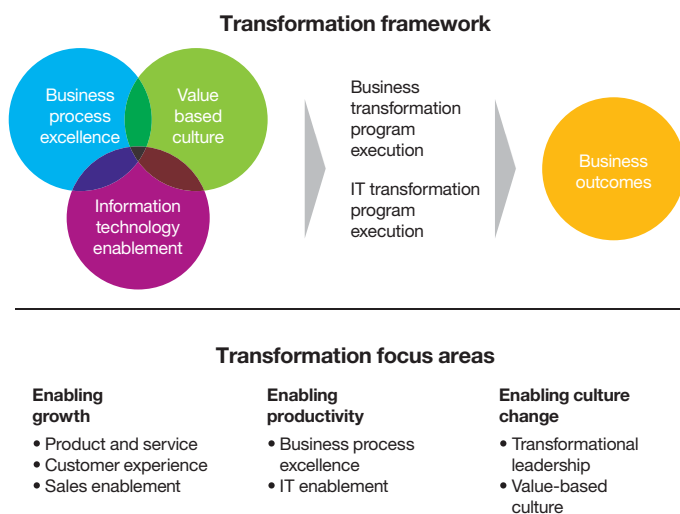
IBM Media Enterprise Framework

Media and entertainment business domains

Content production	Content distribution	Sales and service	Marketing	Business systems
Multichannel enablement				
Business analytics and optimization				
Business process management				
Media, metadata and information management				
Infrastructure management and security				

Service oriented architecture	Data architecture	IT infrastructure
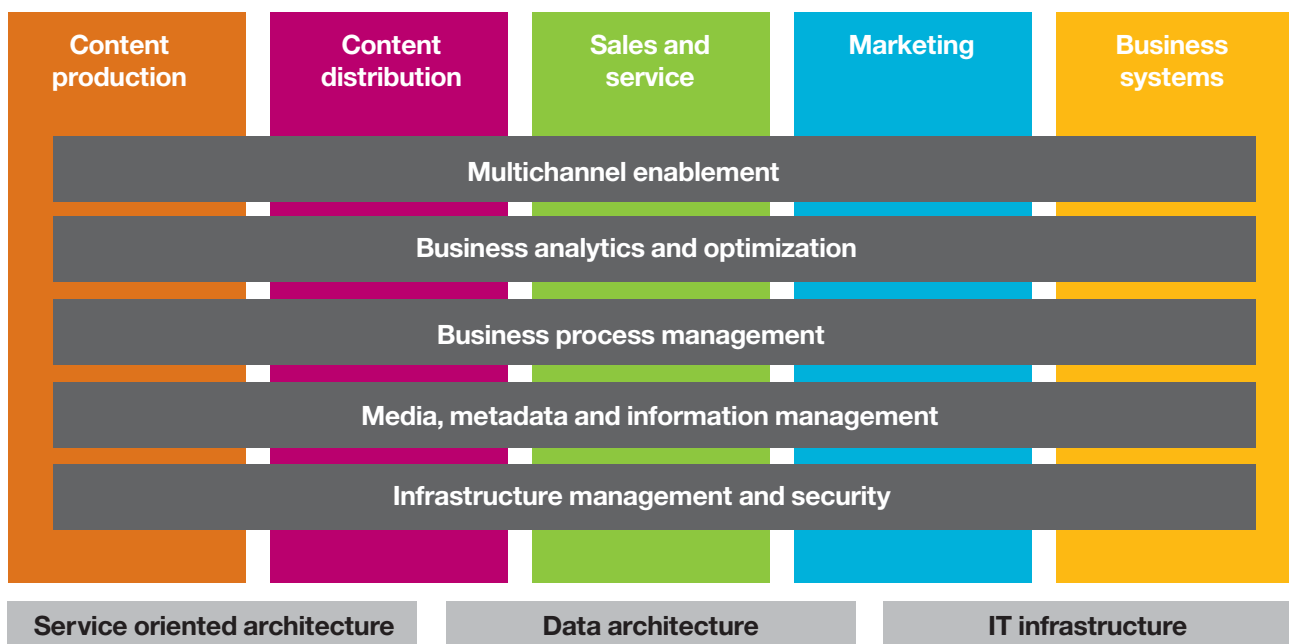
Figure 4. Our solutions are built on a media-aware, standards-based framework that aligns technology with media-specific business needs.

Why IBM?

IBM has one of the world's largest M&E consulting and services practices with deep industry knowledge and technology expertise in media applications and ISV ecosystems, including Linear Tape-Open (LTO) leadership in digital content infrastructure solutions. Our mission is to provide business insight, advanced research and powerful technologies to an industry undergoing an exciting, but challenging, digital transformation. For over a decade, IBM has been researching approaches to these emerging media industry challenges, investing billions in industry software assets, business process management (BPM, open, standards-based architectures, and big data management and analysis.

Over the years, these innovations have earned IBM and our global client companies awards and recognition, among them the: a 2011 Primetime Emmy Engineering Award for Innovation (Fox and IBM); the 2012 Visionary Media and Entertainment Company Award; and the 2011 Hollywood Post Alliance Engineering Excellence Award. Today, IBM is the largest private research organization in the world, with 18 consecutive years of patent leadership and Media Solution Labs in Dallas, Bethesda, LaGaude, Hursley, and Bangalore.

For more information

To learn more about IBM solutions for the connected customer and digital supply chain, please contact your IBM representative or IBM Business Partner, or visit the following website:
ibm.com/media