



Media and Broadcast Solutions

Engage your Audience in a Multi-screen World

Tectonic changes in technologies - mobile, convergence, broadband, 4G, device proliferation and location based services - are changing the way content is being produced, delivered, consumed and monetized. Audiences are increasingly looking for personalization with quality, time and medium taking center stage. New consumer-centric business models present challenges for developers, device manufacturers, DRM companies, aggregation platforms, content monetization players and delivery networks.

CMS offers India's leading and most trusted broadcast and online video solutions for media companies that wish to *engage their audiences across devices, locations and media types*.

Technology disruptions are creating unprecedented opportunity for broadcasters to gain consumer attention and engagement. Transition to multi-platform content, personalized distribution, streaming services, cloud based storage, and widespread usage of mobile devices and analytic applications are pervasive.

Our Products and Solutions

CMS' Media and Broadcasting Business has transformed from being a distributor of broadcast equipment into a major solution provider in the country leveraging domain expertise and technology capabilities across IT Infrastructure, Big Data Analytics, Social Media, Cloud and Mobile applications. We provide:

- End-to-end state-of-the-art digital broadcast solutions for satellite TV channels
- High-end applications like e-classrooms and telemedicine, which require seamless convergence of video and IT technologies
- Video Delivery & Conferencing Solutions
- New Media Solutions covering Encoding & Transcoding, Delivery, Publishing, Monitoring, Asset Management, Archiving & Monetization

CMS' Media & Broadcasting Services are designed to deliver value from digital content in a complex environment. We engage satellite channels, broadcasting companies, educational institutions, hospitals, media businesses, telecom companies, e-Commerce firms and digital consumers with unique, personalized interactive experiences.

We support a mix of business models to drive new revenue streams providing an end-to-end solution including hardware, software, integration, implementation, support, and lifecycle services.

The system includes News Room automation, end-to-end video production and all the hardware components necessary for smooth operations.

Installed at over 100+ locations, our solution provides collaboration, exchange of information and helps getting on air instantaneously



Satellite Broadcast Solutions

CMS' Satellite Broadcast Solutions suite provides the missing links needed to strengthen any broadcast infrastructure. We provide:



Studio and Production House Setup



Field Content Creation, Collection, Editing and Managing



Online Archiving and Library management



News Room Automation



Master Control Automation



Media Asset Management, Content Storage and Security



Teleport and Monitoring



RF Solution/OB integration/DSNG



Radio System

News Room Computer Systems

The quality levels of end-to-end News Room automation services are of global standards and trusted by broadcasters worldwide. Whether customers today are managing a mid-sized local newsroom or a large, multi-site news operation, CMS' News Room Computer System (NRCS) is designed to meet the complex requirements of media networks, production houses and entertainment companies.



Tele-medicine, e-classrooms and Bioinformatics

CMS is part of several telemedicine and virtual classroom engagements to provide value added media services to educational institutions, governments (for e-gov initiatives) and citizens.

Core solutions include:



Tele-conferencing
(Audio/Video)



Virtual Operation
Theatre (VOT)



Real time or
synchronous
telemedicine



Interactive
video-conferencing



Disaster management



Tele-education



Remote patient
monitoring



Consumer medical
and health
information

New Media Solutions

We help companies exploit the exciting new technologies of New Media - audio, video, image and social technologies – to improve their business while continuing to work with traditional broadcasting solutions.

Encoding and Transcoding

Our ingestion and content creation tools support your needs, from basic end-user upload and capture capabilities, to powerful tools for content administrators. The transcoding technology quickly converts any type of video into a variety of flavors (optimized output files), so that your viewers get the best quality video on any device.

Content Delivery

Our solutions deliver media over both un-managed and managed networks. Broadcasters, network operators and content distributors use our simple, cost-effective solution to broadcast jitter-free multicast video streaming over the public Internet.

Our solution **reduces costs** by eliminating huge overhead expenses for additional bandwidth, expensive VPN services and high-end network equipment

For managed networks, we deliver content leveraging our partnership with large CDNs which is connected directly to hundreds of user access networks globally for a faster, better experience. The integrated suite offers services, infrastructure, and powerful software to publish and deliver exceptional digital experiences—websites, games, downloads, software—anywhere, to any device, every single time.

Content Publishing Solutions

Our pre-integrated, out-of-the-box publishing apps and video players simplify publishing. We publish content to any type of device - mobile, PC, tablet, set-top-box, or connected TV. Our smart-player technology automatically delivers the right player, stream, and advertising to any device, with just a single embedded code. Publishing takes place through:

- Live Streaming, Access Control and Scheduling
- Video Extensions for Content Management (CMS) & Learning Management Systems (LMS)
- Mobile Web and HTML5
- TV Everywhere and OTT, Publish to Set-top boxes
- API, Open Source and Open Standards

Content Monitoring and Social Media Analytics

Broadcast and IPTV Monitoring

Whether you want to re-purpose and deliver content to multiple platforms, comply with regulations or analyze rating data and media, we have solutions for you. Our enhanced video recording solution captures any number of audio and video channels at any bit rate or frame-size and includes content archiving and extraction, bookmarks, annotation, transcoding and delivery management all in a single solution accessible from any computer.



Social Media Monitoring

We provide a powerful suite of tools for graphical, organic, real-time analysis of deep social media and big data, offering among the most complete Open Source Intelligence (OSINT) solution for government and enterprises.

With our solutions, analysts can access a comprehensive array of tools needed throughout the web intelligence production lifecycle for:

- Social media mapping and analysis
- Creation and operation of Virtual Avatars
- Data collection, processing and report generation

And, managers are equipped to view operator output in real-time, facilitate collaboration, and measure efficiency.

The operations platform supports cloaked target engagement and proactive influence, switch identities instantly, on the fly; single operator, multiple avatars and full activity log, complete audit trail.

Content Monetization Solutions

With our video platform systems, we make content monetization easy. You can choose the optimal business model – ad based, subscription based, transaction based and distribution – that works for your business. We support a variety of advertising formats including linear, non-linear, contextual ads in the video content. With integration to a number of ad networks, we make it easy to generate revenue by setting rules, targeting options, and frequencies through:

- Ad Formats, Control and Targeting
- Advertising and Ad Networks
- VAST and VPAID Support, Player Branding
- Pay-Per-View
- Open and Extensible Monetization Plugins
- SEO, Content Discovery & Related Content
- Deep Search, Syndication & Distribution
- Analytics

Media Asset Management, Archival and DRM

Our new approach towards media big data creation, consumption, and communication addresses a wide spectrum of media content workflows and management via offering storage platforms that can address real-time collaborative editing, media management, and local and remote accessing to near-line archival needs of the media companies.

Our products are platform independent, application independent, (in many cases) location independent and with support for mobile devices like iPad and smartphones for heterogeneous scalability and interoperability. We also work with partners around workflow and management products that support ingest, search, media processing, communication and collaboration, integrated third party transcoding, and archiving to LTO tape or optic devices like Blu-ray and other stages of media.



CMS– Ahead of the Technology Curve

As a pioneer of the IT movement in India since 1976, CMS Computers adds value to every industry through its products, services and solutions.

Even as the world is waking up to the benefits of big data, mobility and analytics, CMS has already innovated and implemented well over 200 Smart City elements leveraging big data and analytics for holistic city management. These have been in the areas of e-governance services, transportation and traffic solutions, energy management solutions, surveillance and workforce management, broadcasting solutions as well as software services aligning technology with client businesses across sectors.

With over 4000 employees and a pan India presence across 100+ locations, CMS has leveraged the collective power of IT and the Internet of Things (IoT) to improve and simplify the lives of citizens, corporations and the government.



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