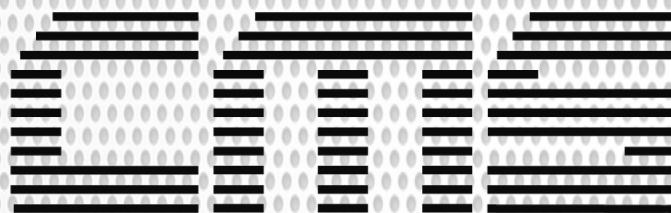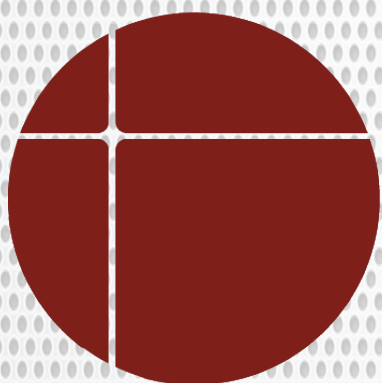# "Simplifying Digital LifeStyle"

CMS

SIMPLIFYING LIFE

APPLICATION NOTE

Prepared by
Media Infra Solution Group I CMS Computers Ltd

WHITE PAPER

Introduction

Established in 1976, CMS Computers Limited is one of the leading IT & ITES Players in India with over 3,500 employees across the country

The Group Headquartered in Mumbai, has a combined turnover of $200 M , having offices in all Tier 1 & most of the Tier 2 cities in India

The Media Infra Solution Group (MISG), a division of CMS Computers Limited, is India's leading and the most trusted solution provider in traditional broadcast and online video platforms. With its nationwide presence and unrivaled expertise of more than three decades, MISG provides nothing but the best price performance ratio to its valued clientele.

Proprietary Statement:

This document contains confidential and proprietary information and is the property of **CMS Computers Ltd Business Protocol**.This document was prepared for the sole purpose of evaluating and deploying the products and services proposed.It is submitted in confidence, on the condition that, by receiving it, agreed not to reproduce or copy it, in whole or in part, or to furnish such to others, or to make any other use of it except for the evaluation purposes or departmental audit stated or else to return it to **CMS Computers Ltd** upon request.The previous statement shall not apply to the extent that such statement violates any Central or State Laws requiring such information to be made available to public.In the event this document results in contract, you may retain this for use, including making any necessary copies related to the products and services covered by such contract.The offerings presented in this document, excluding leasing quotes or rates is valid for the warranty coverage by the specified OEM from the document date unless **CMS Computers Ltd** authorizes an Extension.The prices offered in the following is strictly confidential and can be intended to change depending on the OEM offerings.

Vision:

A world of seamless connections between People, Educators & Ideas (Contents).

Mission:

To help customers better engage digital audiences in high profile digital education ecosystem with the most sophisticated cutting edge technologies

BUT WE ARE SO MUCH MORE

SUITE OF CLOUD-BASED DIGITAL PRESENCE SERVICES

INTEGRATED SaaS and DELIVERY PLATFORM

STREAMLINED **BUSINESS PROCESS**

ANALYTICS FOR **CONTENT DELIVERY AND CONSUMPTION**

CLOUD ECONOMICS THROUGH SCALE AND OPERATIONAL EXCELLENCE

PROFESSIONAL SERVICES TO ENSURE YOUR SUCCESS

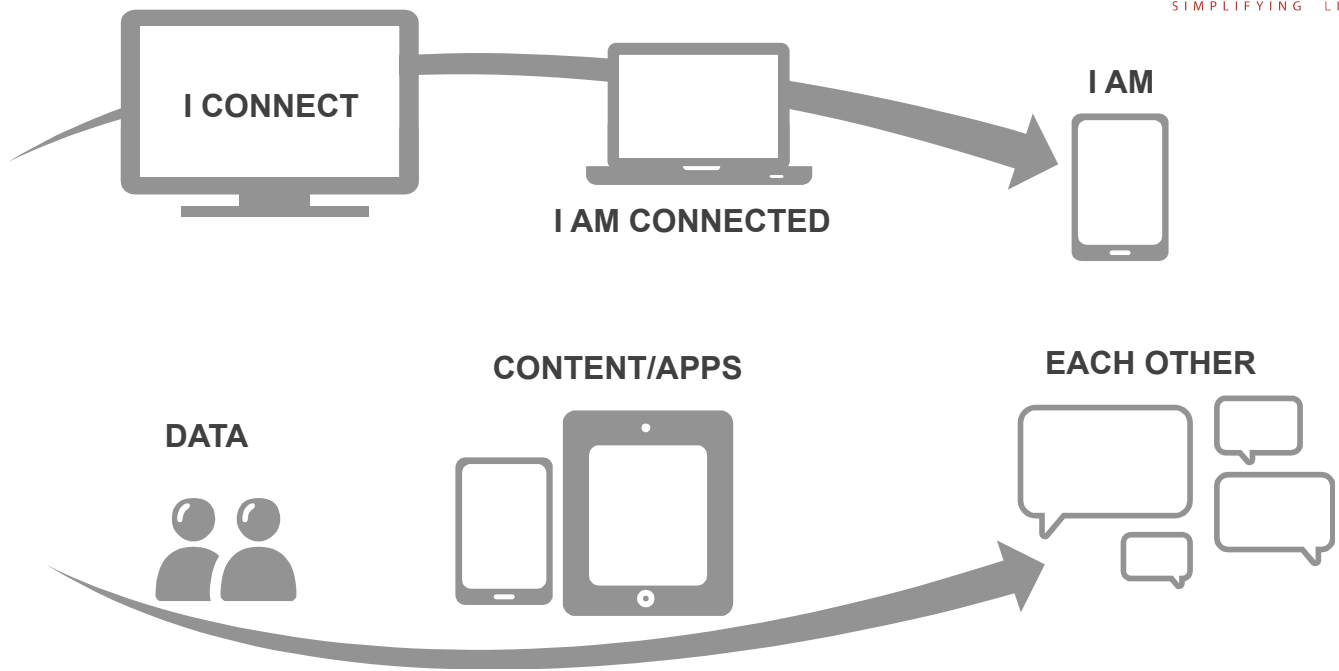BECAUSE WE **OWN AND OPERATE** ONE OF THE

WORLD'S LARGEST NETWORKS

OUR CUSTOMERS ARE ASSURED THEIR **DIGITAL CONTENT IS SUPERBLY DELIVERED**
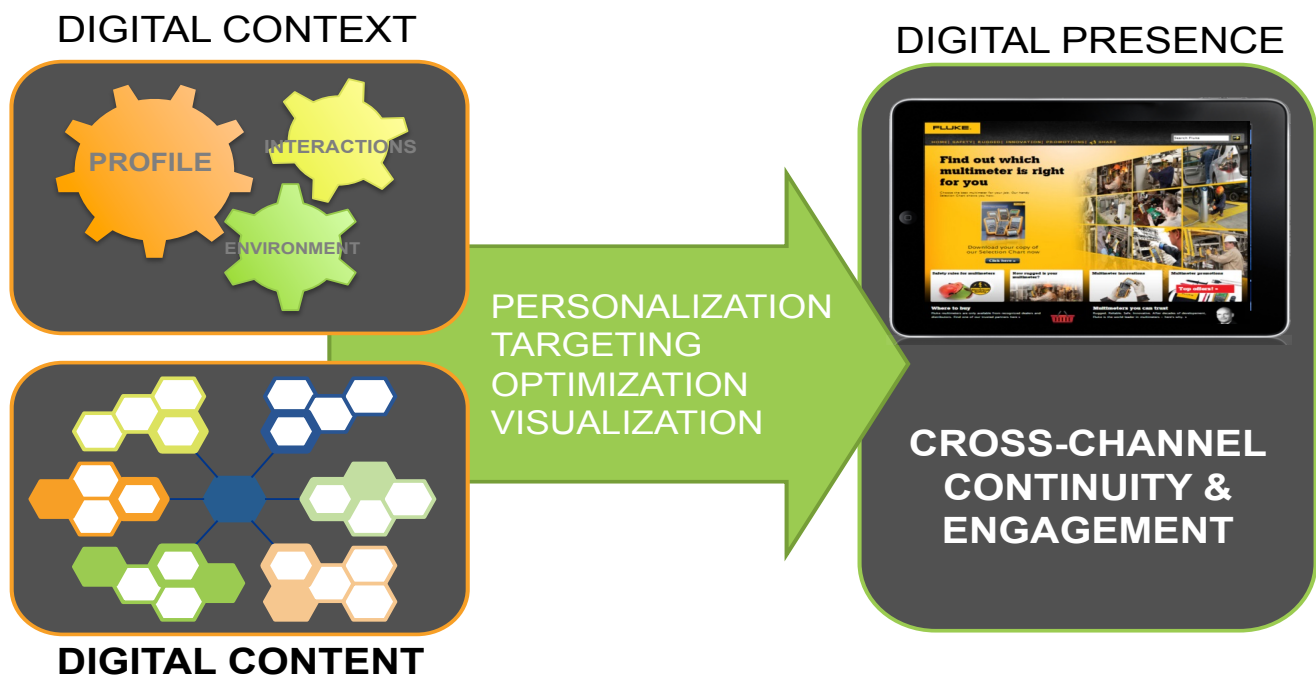
ON ANY DEVICE, ANYWHERE IN THE WORLD

>10% OF ALL TRAFFIC   **20+ PETABYTES** CLOUD STORAGE
8.5tbps EGRESS   **80+ POPs**
3.2 BILLION OBJECTS/HOUR   **21,000+** SERVERS

I CONNECT

I AM CONNECTED

I AM

DATA

CONTENT/APPS

EACH OTHER

Our Commitments :

- Our Team can help you Create, Manage & Deliver a sophisticated Digital Presence over customized tailor made OVP (Online Video Processing) Platform

- Your Story. Your Content + All Digital Touchpoint's With Audiences

- Self Education | Social Media Integration | Rich Media | Mobile Publishing | Globalization

- Video | Relevancy | Delivery

DIGITAL CONTEXT

PROFILE

INTERACTIONS

ENVIRONMENT

DIGITAL CONTENT

PERSONALIZATION
TARGETING
OPTIMIZATION
VISUALIZATION

DIGITAL PRESENCE

CROSS-CHANNEL CONTINUITY & ENGAGEMENT

content management

delivery

insights

cloud storage

performance

video

Infrastructure
& Services
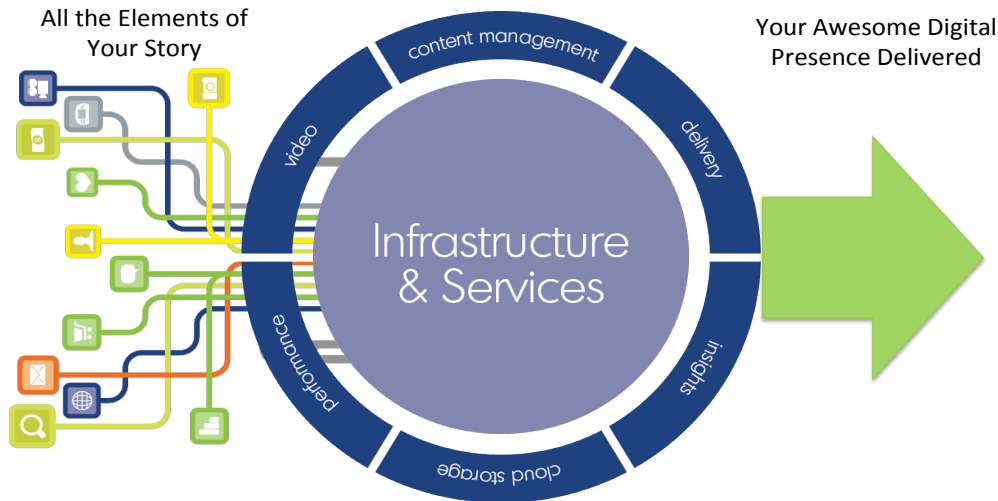
Key Offerings:

Video Content Management-

Upload, encode, and manage content with a business friendly interface as simple as iTunes. Control delivery, create advertising opportunities, and organize media easily and intuitively.

Optimized adaptive bit rate Player-

Player comes with multiple templates to create unique viewing experience. Match brand look and feel, customize player controls, colors, and playlists using the intuitive player builder tool.

Reporting-

Full performance analytics by channel, engagement analytics by media type, usage information by account. Integration with popular analytics engine (e.g. Omniture, Google Analytics). Includes real-time and historical analysis of aggregated and individual live events by region, format, bitrate, and viewing duration.

Encoding and Delivery-

Includes a massively scalable transcoding produces all the necessary formats to deliver an adaptive bit rate experience on every device.

Mobile Delivery

Includes smart device detection utilities, optimized transcoding for common mobile devices. Video player automatically adjust to your viewer's individual connection to deliver video at the highest-possible quality. We support multiple ingestion methods and every delivery format, including Flash RTMP, and Apple HLS.

Advertising , Monetization

Integration with best-of-breed ad servers and networks (DoubleClick, Tremor, LiveRail and YuMe). Support for VAST and VPAID, for delivery of: pre-roll, post-roll, mid-roll, overlay, companion and more. Full control over campaigns at both the video and channel level, creating targeting options, implementation of ad insertion policies, and adjustment of channel frequencies.

Portal Customization

Expansive API library and developer tools offer faster testing and deployment of integrations with other tools.

Resolution to Challenges:

Video management:

Many teams today require IT or engineering support to manage and publish video because existing tools are not designed to be used by business or marketing people, slowing down the process for getting appropriate video to their online audience. Also, many teams today are managing video as a separate workflow from other web and digital content, which is costly, and error prone

Storage:

Storage of GBs, TBs, and PBs of video replicated around the world can be expensive and difficult to if you don't have global storage network that scales up and down with video storage needs. And not being able to put automated policy rules around geo-restrictions, formatting and distribution can be costly.

Upload and Distribute:

Reaching a global audience with video may mean latency and buffering problems if companies cannot integrate seamlessly with a content delivery network with Online Video Processing Edge Services.

Analytics:

It's difficult to get key performance analytics by channel, engagement analytics by media type, usage information. Also many teams still cannot get reliable real-time and historical analysis of aggregated and individual live events by region, format, bit-rate, and viewing duration. If they can, it may require costly integration and maintenance with existing reporting tools.

Performance Bottleneck Overridden:

Accelerate delivery of a wide variety of web and mobile sites ranging from publishing/advertising to dynamic online commerce, business to business transaction websites and web based applications (SaaS etc..)

Cost Optimization:

Without requiring costly IT build-outs & dedicated Manpower

Using a combination browser-level acceleration and network layer optimization

Accelerating the web site presentation and bypassing the congestion of the public Internet to improve end-user experience, reduce site abandonment

What are the Business Challenges faced for Digital Content Publishing?

1. Delivering the fastest load times is difficult to do on a global scale: Customers want to improve their load times by speeding data long the shortest route. They want to make sure that audio and video files play smoothly by speeding the data transmission and eliminating pauses in streaming content.

2. Ensuring high availability of digital content is hard to do on a global scale: With content distributed across the globe, a server failure or disaster in one area may impact a company's website. They need to be assured that their content can be sent along the next-best channel to their audience.

3. It's difficult to manage traffic spikes: How do companies successfully support massive traffic spikes, either planned or unplanned for live events, launches, premiers and more without the support of massive global network and support staff?

4. It's difficult to support all the formats of different media types: Customers have to support Flash, Windows Media, MP3 streaming, HTTP, on-demand. It's even better if they can do via automated device detection.

5. Ensuring consistent content control is hard: Consistent business rules like how their content is delivered, including restrictions on where it can be viewed (down to the city) and how long it stays in cache needs to be done in automated way that can be adjusted at anytime.

6. Getting useful, actionable analytics: It's difficult to get key performance analytics object type, popularity, bandwidth and storage use and detailed logs for live events. If they can, it may require costly integration and maintenance with existing reporting tools.

7. Ensuring highest level security on global scale is hard: How can companies continually monitor and react to internet-based threats that can potentially bring down a their Internet services?

Digital Mindsets

We make it simpler for you...
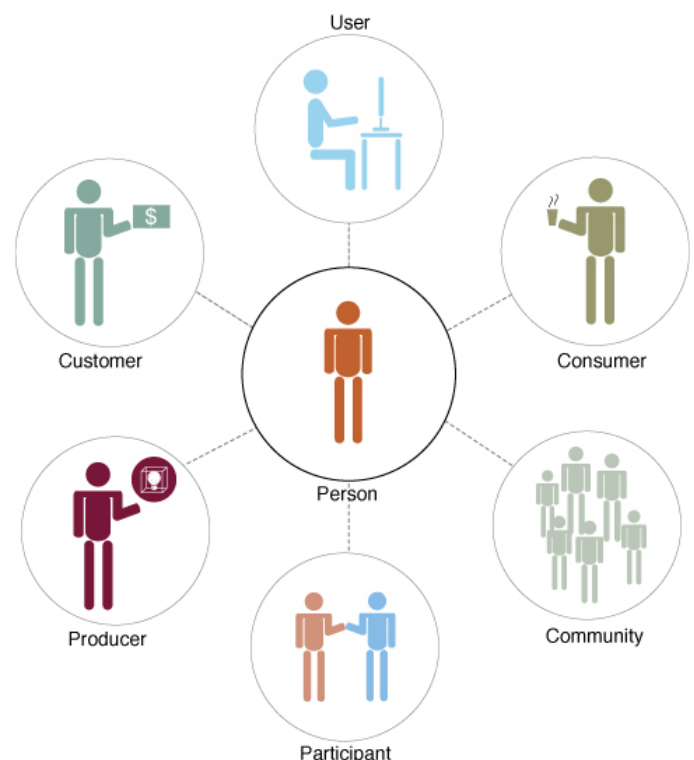
1) Consistent Delivery Provides full support for content in any format: HTTP, Flash, Windows Media, and MP3 streaming media, and more. And as a customer's bandwidth needs change, we can you can scale up or down – supporting anything from massive, multi-million user live events to static homepage content.

2) Content Control Users can create automated business rules so there are no additional configurations to write and maintain. Users can configure overrides and in times of immediate need users can purge content right away

3) Cache Control Users can modify rules around what content lives in cache and how long it stays to match audience behavior. That means that frequently requested objects load at optimal speed. Global POPs ensure that files are closest to end-users wherever they are in the world.

4) Bandwidth control For content with high abandon rates, such as video and social media, users can choose a rate limiting option. Rate limiting caps the data transfer rate allocated to each delivery. So if the user stops watching a video early, LLNW servers only deliver the portion that was viewed. That means customers only pay for what their audience actually consumes.

5) Geographic and Reporting Compliance LLNW's geo-IP database ensures compliance geographic restrictions to match a user's IP address with a predefined rule set. For sites where advertising is a primary driver, users can constrain their audience to fit the advertiser's target. LLNW also assesses traffic at the global or continent level, and let customers drill down instantly for city-by-city details.

6) URL Authentication Allows customers to generate a unique, time-based URL each time a visitor requests specific content. Because the URL can be configured to expire quickly, customer's content and bandwidth are protected from abuse by spiders, bots, and deep linking. Even if another site were to embed the link, it would no longer be functional. That prevents other parties.

7) Highly Secured Networking isolated traffic from Public Internet with performance benchmark with secured social media networking for Digital Education.

Increased Proficiency, Engagement & Viewers Attention:
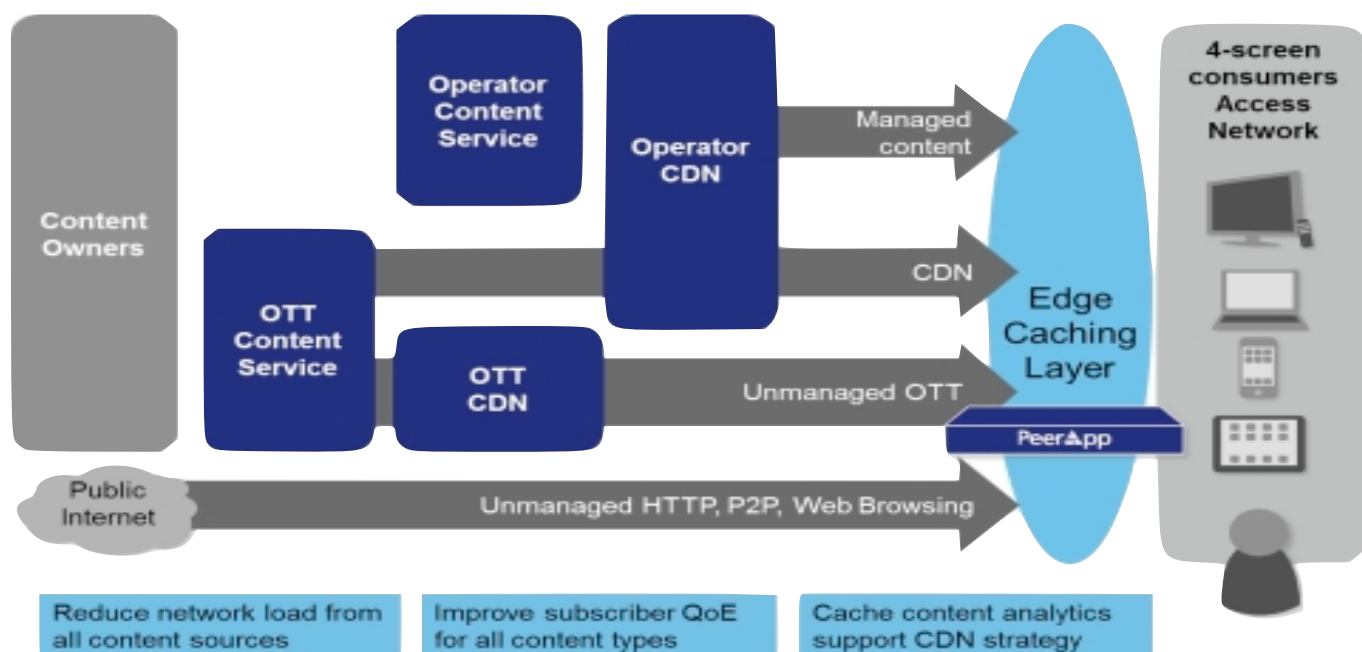
CMS Content Suite accelerate combines front-end acceleration technology with dynamic network optimization to produce the industry-best Time to Action

Time to Action is the time until an end user is able to interact with or perform tasks on a website or within a web application
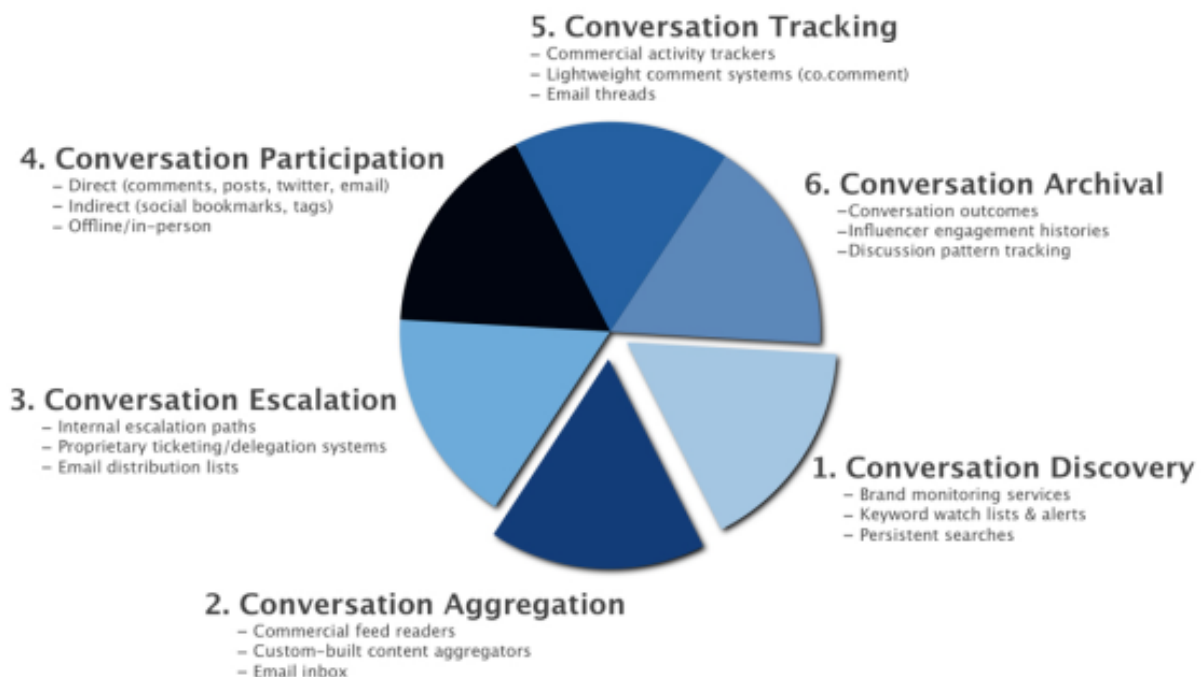
CMS's customers are concerned about improving their online users experience to:

- Reduced abandonment rates
- More page views - More time on site
- Increased engagement
- Increased data security
- Increased insight into end-user behavior
- Increased conversion rates and adoption
- Increased productivity through faster responding web applications
- Increased revenue

Summery :

An intuitive interface lets you load up your video and have it automatically converted to the formats you need. The player-builder tool has templates that let you customize controls, colors, and playlists to match your website. You can add metadata, keywords and other info in our interactive video viewer. You can add buttons that let viewers easily share with friends. It helps marketers and digital strategists better reach, engage, convert and monetize their audience by ensuring they can reach them at multiple online touch points with the most relevant video available.

Social Media Monitoring & Engagement

5. Conversation Tracking
– Commercial activity trackers
– Lightweight comment systems (co.comment)
– Email threads

4. Conversation Participation
– Direct (comments, posts, twitter, email)
– Indirect (social bookmarks, tags)
– Offline/in-person

6. Conversation Archival
–Conversation outcomes
–Influencer engagement histories
–Discussion pattern tracking

3. Conversation Escalation
– Internal escalation paths
– Proprietary ticketing/delegation systems
– Email distribution lists

1. Conversation Discovery
– Brand monitoring services
– Keyword watch lists & alerts
– Persistent searches

2. Conversation Aggregation
– Commercial feed readers
– Custom-built content aggregators
– Email inbox

cms

SIMPLIFYING   LIFE

Limelight
NETWORKS

It's Your Story.

Drive revenue, build loyalty, make it personal.

Limelight Orchestrate™ Digital Presence Platform

Learn More

Limelight Orchestrate Suite

Limelight Orchestrate is a cloud-based platform that provides a suite of tools to create, manage, deliver, and optimize your engagement across touchpoints.

Video

Content Management

Content Delivery

Performance

Cloud Storage

Insight

Discover Orchestrate

CMS COMPUTERS LIMITED

Mumbai - Corporate Office
CMS Computers Ltd.
CMS Lake Road Center, 70, Lake Road,
Kaycee Industires Compound,
Bhandup (W), Mumbai-400 078.
Phone: 022 67489000
Fax No. 022 67489001

Mumbai - Registered Office
CMS Computers Ltd.
201, Arcadia, Nariman Point,
Mumbai-400 021.
Phone: 022 22851580 / 22834494
Fax No. 022 22042734

Delhi
CMS Computers Ltd.
35,A Rear Building
Near Shiv Mandir, Maharani Bagh
Kilokari, New Delhi-110014
Phone: 011-30888400/461
Fax: 011-26348620