



# Features and Functions

censhare's pioneering, universal content management platform lets you connect with your audiences on any channel, in any language, locally or globally.

Every aspect of our semantic database technology helps reduce time and costs. All content is interlinked, bringing every image, video, document and file under complete control. Everyone is connected to the platform enabling a smoother, more collaborative production process while greater automation in content management allows a rapid response to new opportunities.

You'll get new freedom to create and deliver quality communications at lower cost with exceptional efficiency. Just like Allianz, Dyson, Christie's, Lufthansa and hundreds more.

Autumn 2020

# The Need for Universal Content Management

## Everything is going digital

Digitization is powering the customer experience. More content is needed in more channels, with faster delivery. Only then can you create relevant, enticing, informative and timely experiences for every customer.

Successful engagements demand content to be transformed for a variety of channels as organizations today use a vast array of print, web, mobile, social media, digital Point of Sale (POS) signage, and many other channels. And customers rightly expect a consistent experience across all those channels.

Managing this complexity is a substantial challenge for most organizations.

## Silos prevent a holistic customer experience

Traditionally, customers were engaged separately by the marketing, sales and service departments, with limited interaction between the functions at each step.

Many organizations are still using such silo systems and processes today, preventing a holistic customer experience as well as their ability to realize the full value of their digitized content.

With silo systems, they continue to:

- Waste time and valuable resources
- Waste the value of content
- Miss sales opportunities
- Lose control of costs

It can be a frustrating experience, but it doesn't have to be.

## Universal Content Management is different

censhare Universal Content Management is a single platform that solves the pains that organizations typically experience with conventional digital asset and content management software, as well as product information management software.

Now, product information, service descriptions, photos, price lists, user guides, infographics, logos, articles and other content can be used quickly and efficiently to create marketing campaigns that are more effective than ever.

With censhare you can efficiently manage your marketing processes to generate personalized content for your customers and push it to the channels that matter:

- Customers can be reached with the right content on their preferred channel at the right time
- Resources are used efficiently, and time is saved
- The full value of content is achieved
- You can address sales opportunities as soon as they arise
- You avoid errors and improve the quality of your campaigns
- Costs are reduced and campaigns become more effective

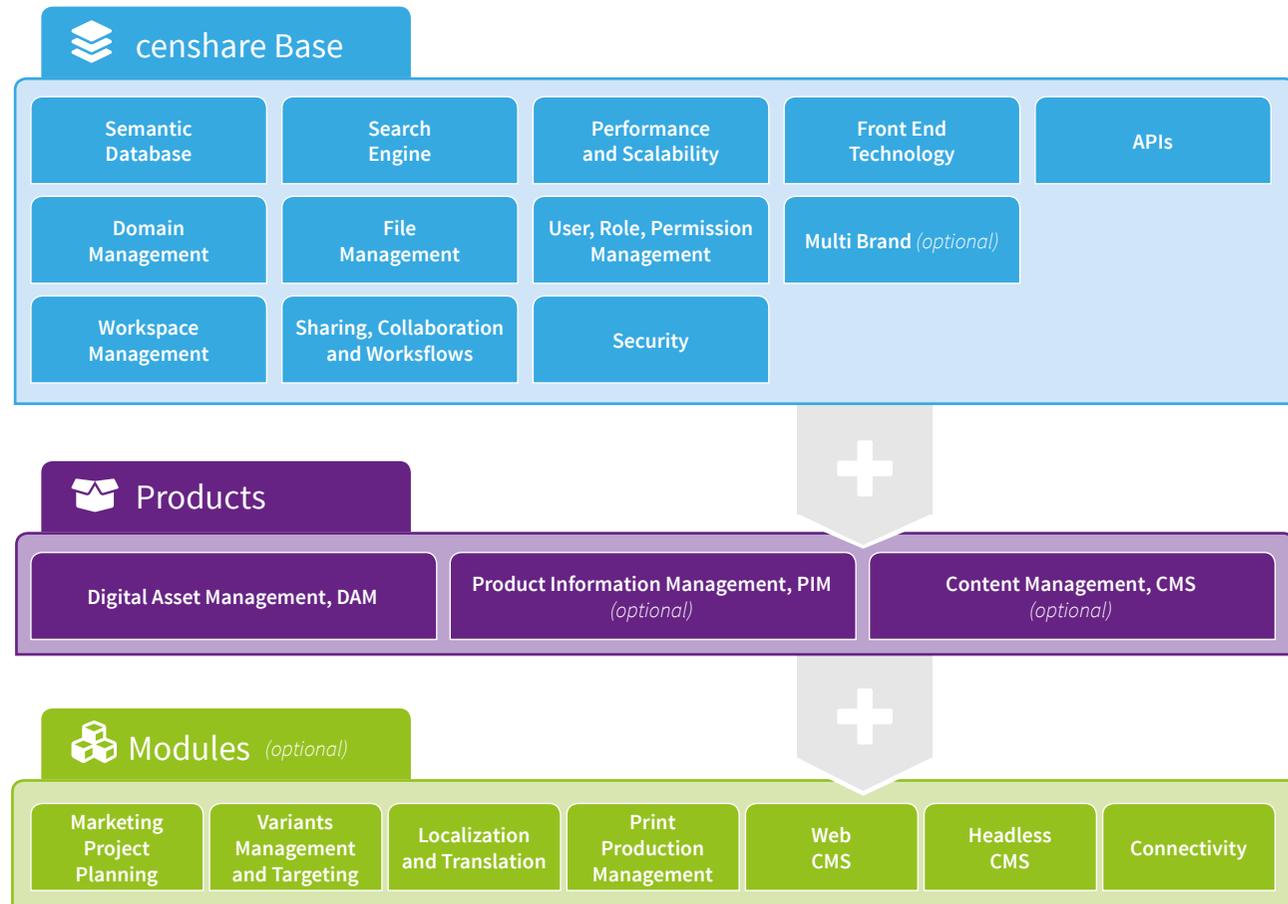
Collaboration tools provide an easy way for colleagues to work together on any digital asset or object and create notes, assign new tasks and streamline the collaborative process.

## Build the system to match your needs

The platform delivers all the capabilities you need to successfully run a digital business. They all operate on the same foundation and can be configured according to your needs:

- Digital Asset Management (DAM)
- Product Information Management (PIM)
- Content Management (CMS)

Functionality modules can further extend the wide range of use cases from standard ones like brand management to complex ones like print production management and retail publication management.



*As a censhare client you will always get a powerful Digital Asset Management solution that includes the core features and functions of the censhare platform, i.e. the semantic database, the collaboration features, the search engine, and so on. Then you can pick products that cover additional needs (Product Information Management or Content Management). Finally, you can refine the functionality of your system by adding specific modules. The modularity of the platform enables you to grow your censhare solution at the speed that your business requires.*

## The censhare Approach

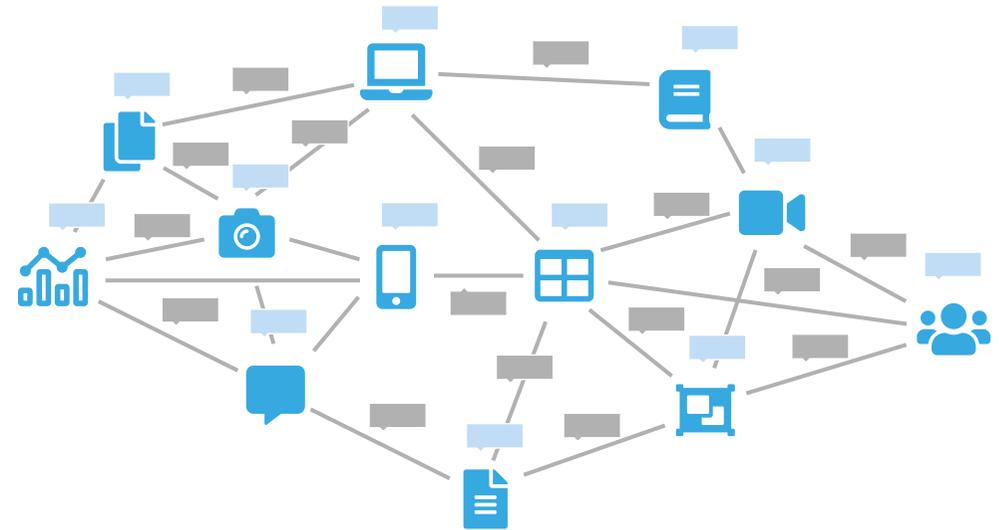
censhare develops and improves the core components of the Universal Content Management system itself, including the combined database and search engine, as well as the XML platform with XSLT engine. Our philosophy is to use promising, forward looking technologies to bring new capabilities and levels of performance.

This technology approach is most apparent in the platform's underlying semantic database structure that saves all information and metadata in objects, along with their relationships with each other.

The objects, metadata of the objects, the relations of the objects, and metadata of the relations can be freely defined and linked to each other. This leads to a new, contextual information level being created almost automatically – a powerful approach that models the real world in the digital realm.

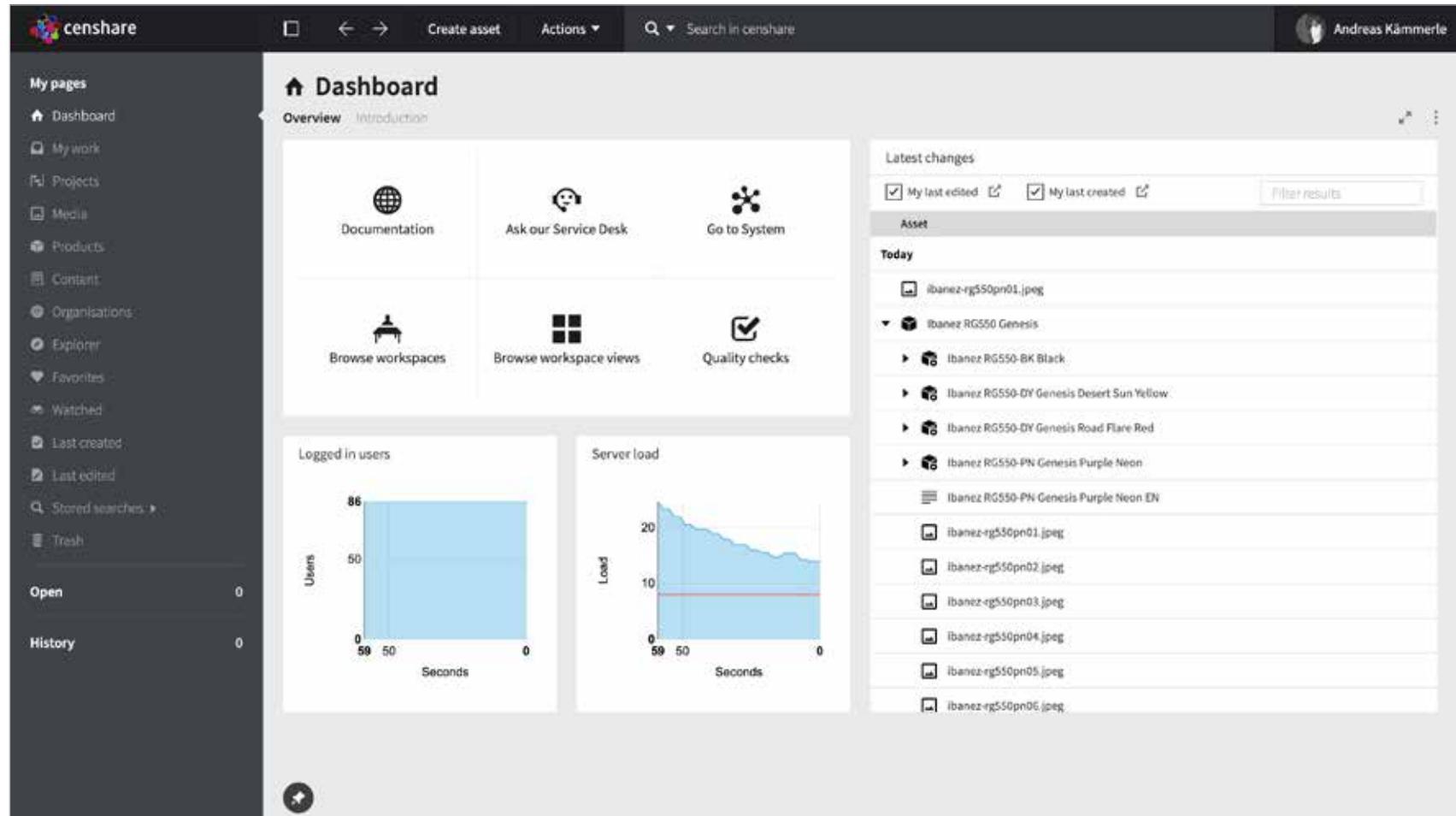
For example, the information *{photo is used in article}* can be used to show a list of articles containing that specific image. This is a common task when using photos with time sensitive use rights that need to be removed from collateral and online media once expired. Likewise, the information *{photo has been shot on 31/03/2018}* can be used to find all photos from the same photo shoot, and designers can quickly look for an alternative shot if they are not happy with a specific image.

What's more, you can define individual properties for each object and related links, enabling you to precisely define its context, for example locales, languages, regions, countries, target groups, channels, devices, personas, and more, and utilize this information for content delivery and channel execution.



*censhare's unique semantic database structure supports the creation of contextual relations between all kinds of objects smartly and on the fly, enabling users to intuitively find digital assets and explore and amend related content and information as needed.*

# User Interface: Dashboard



Workspaces customize the look and feel of censhare, for example the dashboard elements, the navigation bar, and more. The administrator can define whether a user may change the settings for his workspace.

# Database Structure, Search Engine, Front End, and API

With censhare, you can rely on the latest generation of our inhouse developed in-memory graph database.

What's more, as a leading vendor in the digital information management space, censhare always looks at new, promising technologies and applies them to the platform as required.

For example, we adopted AngularJS front end technology early and, at the time of writing, are migrating the solution towards Angular. This makes censhare future proof even for new, as yet unknown, use cases and scenarios.

<p><b>Semantic Database Structure</b> Achieves class leading performance with comparatively low infrastructure requirements</p>	<ul style="list-style-type: none"> <li>• Rapid transaction processing of structured data (Online Transaction Processing – OLTP)</li> </ul>
<p><b>Search Engine</b> Fast search engine for all content and associated metadata, including flexible filter functions</p>	<ul style="list-style-type: none"> <li>• Full text search for all content and metadata</li> <li>• Multiple views with filters: list, gallery, card, column, relation, detail</li> <li>• Smart, detailed, and expert search</li> <li>• Smart, intuitive filters</li> <li>• Searches can be stored and shared</li> <li>• No query language knowledge required, even for complex searches</li> <li>• Rapid and complex searches in structured data via any criteria (Online Analytical Processing – OLAP)</li> <li>• Rapid searches in unstructured content, e.g. text (information retrieval), and combined with searches in structured data</li> </ul>
<p><b>Performance and Scalability</b> Performance, stability and low resource use with a modular structure for easy scaling</p>	<ul style="list-style-type: none"> <li>• Excellent single instance performance</li> <li>• Vertical and horizontal scalability</li> </ul>
<p><b>Front End Technology</b> The web based client is a rich Internet application using the latest web technologies to support modern web browsers</p>	<ul style="list-style-type: none"> <li>• HTML5, CSS3, JavaScript / TypeScript, Angular and AngularJS</li> <li>• Single page web application</li> <li>• No installation of additional software or plug-ins</li> <li>• Alternatively, a native Java based client can be used</li> </ul>
<p><b>API</b></p>	<ul style="list-style-type: none"> <li>• Enable transfer and consolidation of data from most data sources and systems for use with censhare</li> </ul>

# Domain and Permission Management

The powerful domain concept supports multiple tenants while preventing users assigned to one domain from seeing or accessing content from another domain.

<p><b>Domain Management</b> Functions for assigning digital assets and selected master data to specific users and user groups</p>	<ul style="list-style-type: none"> <li>• Users and user groups can be restricted to access and use just templates and content assets that have been approved for their domain</li> <li>• Two independent domain trees available</li> <li>• Flexible configuration to match business needs</li> </ul>
<p><b>File Management</b> Manage physical files and their metadata within censhare and distributed file systems</p>	<ul style="list-style-type: none"> <li>• Separated storage of metadata and files:             <ul style="list-style-type: none"> <li>– Metadata of assets are stored in the core database</li> <li>– Files are stored in the traditional file system</li> </ul> </li> <li>• Distributed file systems supported</li> <li>• Archiving and file replication supported</li> <li>• Flexible assignement of keywords and tags to each file</li> <li>• Offline database supported</li> </ul>
<p><b>User, Role, and Permission Management</b> Manage permissions and functionality for users with individual roles and rights</p>	<ul style="list-style-type: none"> <li>• Granular permission management for roles and users</li> <li>• Bespoke interface for administrators</li> <li>• Control access to and editing of selected data, features and objects based on user, user role, user group, region, country and more</li> <li>• User management uses the semantic database structure for flexibility when assigning user permissions</li> </ul>
<p><b>Multi Brand (optional)</b></p>	<ul style="list-style-type: none"> <li>• Add business units, external clients, brands or subbrands to your censhare environment</li> </ul>

# Workspaces, Collaboration and Workflows

Workspaces define the look of the home page, the left navigation pane and other pages for users, user groups and roles. Users can customize their workspaces according to their preferences.

By providing dedicated configurations for common use cases, censhare reflects the key learnings and best practices from projects around the world. These standard configurations include roles, workflows, domains and users. They are intuitive to use and consistent across the solution, enabling users to access the same tools in the same ways regardless of the asset they're interacting with.

New installations can be deployed quickly due to pre-defined workspaces, data structures and workflows. Dedicated master data makes configuration much easier.

- The standard workspace structure describes how static pages, such as the dashboard and asset pages are organized.
- Users can collaborate and share information across the organization using workflows centered around the digital assets they are working on.
- Security has the highest importance at censhare. We protect all hosted data against unauthorized access and data loss by using state-of-the-art technology and redundant processes and systems. Access to and editing of assets can be restricted to specific users and groups of users.

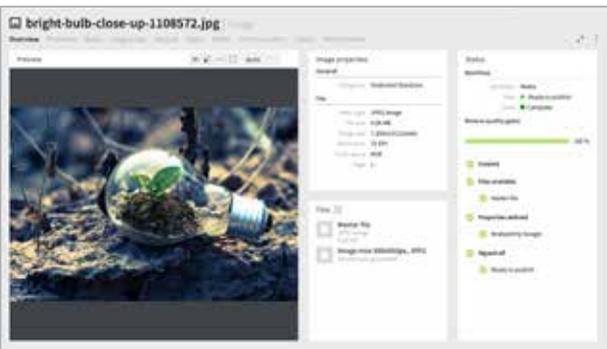
<p><b>Workspace Management</b></p>	<ul style="list-style-type: none"> <li>• Six default user interface languages: US English, German, French, Italian, Japanese, Spanish</li> <li>• User workspaces save all changes that a user makes in that workspace</li> <li>• Workspaces can be defined for users, user groups and roles</li> <li>• Workspace settings will always be applied upon user log-in</li> <li>• Dedicated configurations for common use cases like DAM, PIM and Content Management, including pre-defined workspaces, data structures, roles, workflows, domains, users, master data and sample assets</li> </ul>
<p><b>Sharing, Collaboration and Workflows</b> Content focused collaboration across the organization</p>	<ul style="list-style-type: none"> <li>• Check in/check out functionality</li> <li>• Temporary download links with landing pages (optional, see page 16)</li> <li>• Initiate a conversation on any asset and add recipients</li> <li>• Integrated message application</li> <li>• Integrated approval workflows with history log of approval interactions</li> <li>• Add sticky text notes to any asset with previews</li> <li>• View and change workflow statuses in a Kanban board view</li> <li>• Unlimited number of fully customizable workflows and sequential workflow steps</li> </ul>
<p><b>Security</b> Features and settings to define user access rules, password rules, timeouts, and backup schedule</p>	<ul style="list-style-type: none"> <li>• Granular permissions define who can access or edit which assets</li> <li>• Rights can be assigned to individual users or groups of users</li> <li>• User rights managed through a bespoke administrator interface</li> <li>• Protected client versions without administrative features (optional)</li> <li>• SSL encrypted client-server-communication</li> <li>• Strong access management</li> <li>• Encrypted passwords</li> <li>• Expiring passwords (optional)</li> <li>• User changeable passwords (optional)</li> <li>• Enforcement of best practice password policies concerning length, complexity, history, age, etc.</li> <li>• Customizable requirements for password strength using regex</li> <li>• Password strength verification with immediate feedback to users</li> <li>• Support for server-side creation and distribution of passwords</li> <li>• Automatic log out of inactive users</li> <li>• Regular backups that can be rolled back quickly</li> </ul>

# Digital Asset Management

Digital Asset Management (DAM) provides a centralized solution for managing every type of digital content, such as images, videos, text documents, graphics, media files, presentations and more.

- The solution allows users to create assets and asset variants, store them centrally, edit and update them, add useful reference information and unlimited links to any other asset. This enables users to search censhare’s semantic database rapidly for assets according to almost any criteria.

- A single record for each asset is created which can reference any related information, including information on target audiences, sources, usage rights, or other legal information. This makes it the ‘single point of truth’ for anyone in your organization who works with digital assets. All changes are tracked in the system and can be reverted to a previous version easily.

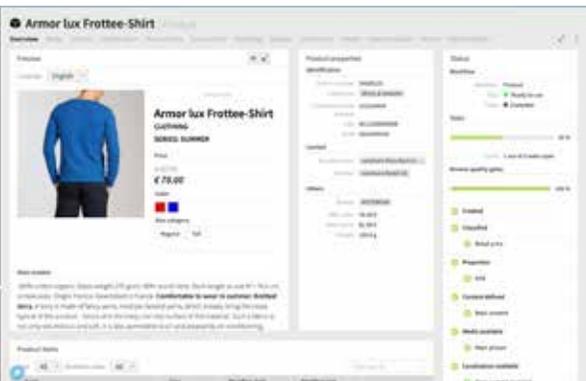


*censhare DAM offers an intuitive web client that shows workflow status, quality gates, all available information and metadata for each digital asset, regardless of the file format. The system accepts any file, including camera raw files, videos, presentations, and more.*

<p><b>Upload, Edit and Download</b> Easily upload any content as a digital asset by drag and drop, via automated processes or via interfaces (APIs)</p>	<ul style="list-style-type: none"> <li>• Supports all file formats, including video and 3D</li> <li>• Bulk upload and export via drag and drop</li> <li>• Automated import and export</li> <li>• Transfer of metadata (XMP, EXIF, IPTC)</li> <li>• Multi level duplicate checks</li> </ul>
<p><b>Manage, Organize and Archive</b> Functions for managing, organizing and archiving digital assets and associated metadata</p>	<ul style="list-style-type: none"> <li>• Flexible tagging and definition of features</li> <li>• Automated versioning</li> <li>• Integrated image editor</li> <li>• Interactive previews for all relevant 3D file formats</li> <li>• Image and video version generation</li> <li>• Rule based archiving and dearchiving</li> <li>• Management of different language, regional and content versions</li> </ul>

# Product Information Management

Product Information Management (PIM) is a complete solution for managing and providing product data for the efficient and accurate use across the business, especially for the production of sales and marketing content for all channels.



The overview page of censhare PIM makes best use of the available space and shows essential product information including workflow status and quality gates. Additional tabs enable users to intuitively work with, for example, related media files, and to edit and manage product data. The integrated completeness check for each product helps users quickly assess which information is still missing from the product data.

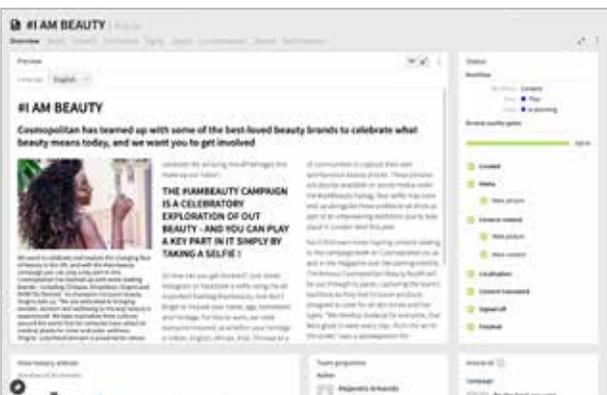
- The solution aggregates and harmonizes product information and technical data across an enterprise to create a 'single source of truth' for everyone.
- It can help you control the completeness and accuracy of your product data while giving them a flexible way to create, manage, translate and syndicate product information for use internally and across all marketing channels.
- PIM integrates all product data from any source to create a record that can be managed and updated easily. It then helps linking relevant content and resources to the product information. This data can then be used in all content processes across your organization.
- It can also control and manage the automated update of approved content across all media, from websites and online shops, to mobile apps, print collateral and POS applications.

<p><b>Product Data Integration</b></p>	<ul style="list-style-type: none"> <li>• Interface to integrate data from any system through Pentaho Data Integration (also see Connectivity Module on page 19)</li> </ul>
<p><b>Product Data Management</b> Manages all product information and relates them to product groups, families and variants, and links product data with media and product descriptions</p>	<ul style="list-style-type: none"> <li>• Flexible product information structures</li> <li>• In line processing of product master data</li> <li>• Connections to all media assets</li> <li>• Mass processing of product data</li> <li>• Process based automation</li> <li>• Manages product variants</li> <li>• Integrated editor for mass data editing</li> </ul>
<p><b>Product Data Quality</b> Checks the quality of product data to identify potential improvements</p>	<ul style="list-style-type: none"> <li>• Checks the completeness of product content and uses individual approval processes for checking data</li> <li>• Configurable completeness checks, including quality gates and reports on quality gates</li> <li>• Integrated workflows</li> <li>• Versioning of all content</li> </ul>
<p><b>Product Data Export</b> Publishes product content directly from the PIM solution to communication channels, or transfers product information to external systems</p>	<ul style="list-style-type: none"> <li>• Manual, partial or fully automated export to communication channels</li> <li>• Provisions product content to external systems via XML feeds and APIs</li> </ul>
<p><b>Product Classification Management</b></p>	<ul style="list-style-type: none"> <li>• Product classification based on industry standard GS1 GPC (Global Product Classification)</li> </ul>

# Content Management

Omnichannel Content Management System (CMS) enables users to create media neutral content using standard article structures and the censhare editor.

- Using the intuitive content editor, content is created in XML without exposing users to complexity.
- Any content is created in a channel agnostic way. Based on templates, final content can be transformed to print, web, newsletters, and more.
- censhare CMS provides a Content as a Service (CaaS) layer with the actual delivery into channels being taken care of at a later stage via robust functions that hand the content to partners, channels or service providers for further processing.
- The flexible Application Programming Interface (API) also allows app developers to create omnichannel applications with ease. (Please also see Headless CMS on page 17.)



*Content Management enables users to create media neutral content and publish that content to various channels using templates. The overview page shows a preview for the article, including its current workflow status and the Quality Gates.*

<p><b>Content Management</b></p>	<ul style="list-style-type: none"> <li>• Integrated content editor with output channel previews and word/character counter</li> <li>• Multilingual standard document structure based on XML</li> <li>• Variants for output channels with specific characteristics</li> <li>• Workflows, notifications and automatic processes</li> <li>• Process control from brief to design to production across the complete content lifecycle</li> <li>• Transform and export content to web, mobile, POS and print</li> <li>• Flexible functions for content export to any other channel</li> <li>• Manual and automated publishing of posts on Facebook, Youtube and Twitter</li> </ul>
<p><b>Neutral Content (XML)</b> Content is saved in media neutral, semantically labeled XML</p>	<ul style="list-style-type: none"> <li>• Enables programmatic processing for different channels</li> <li>• Schema definition with RELAX NG, the high performance schema description language for document oriented content</li> </ul>
<p><b>Content Data Quality</b> Checks the quality of content data for identification of potential improvements</p>	<ul style="list-style-type: none"> <li>• Checks the completeness of content and uses individual approval processes for checking data</li> <li>• Configurable completeness check</li> <li>• Integrated workflows</li> <li>• Versioning of all content</li> </ul>

# Marketing Project Planning

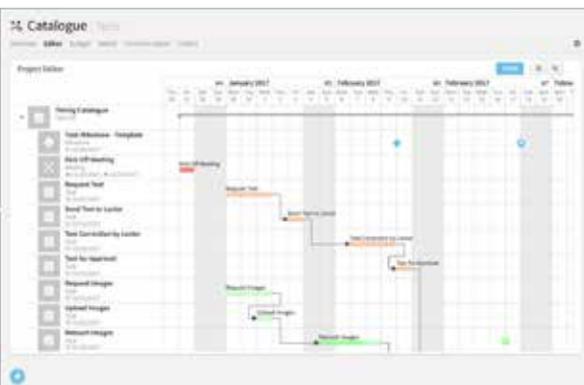
The integrated Marketing Project Planning module unifies and orchestrates all information needed for the efficient planning, creation, administration, management, distribution and reporting of marketing activities.

In one easy-to-use system, marketers get a comprehensive marketing planning tool. This enables them to more easily create campaigns that support and enhance the brand's value, as well as help keep them on budget and on schedule, no matter how complex the campaign and no matter how many campaigns are running in parallel.

## Marketing Project Planning

Functions to plan, manage and visualize marketing projects and campaigns across the organization and with suppliers with a full overview of all projects

- Create, edit and visualize projects, task lists and tasks by start and end date
- Transparent project overview
- Detailed project planning and management down to task and resources levels
- Management and organization of deadlines and dependencies
- Visual reporting including Gantt charts



*You can use Gantt charts for each project that show you the exact duration, dependencies, and status of each task within a project.*

- Orchestrate marketing activities, from brief to creative to production in one central system.
- Keep track of processes, workflows, approvals, markers and annotations.
- Apply quality gates and completeness checks.
- Plan authors, subjects and channels.
- See which content is required in which channel, and when?
- Easily build a media plan with KPIs and evaluate how well the goals have been reached.

# Variants Management and Targeting

Create context and relevance between target groups, information and content by tagging assets.

- Add keywords and categories to all your content, both manually and automatically.
- Create and manage as many variants as needed for each asset or information, for example for product variants, marketplaces, languages, channels or target groups.
- Deliver content and variants that match the segmentation data in your customer profiles.
- The rule based delivery of variants enables a foundation for targeting; more sophisticated applications and use cases can be implemented by connecting a Decision Making Engine via the Connectivity Module (see page 19.)

<p><b>Variants Management</b>                  Functions to create content variants based on defined target groups, including language variants, regional variants, and complex variant management</p>	<ul style="list-style-type: none"> <li>• Complex variants management and handling, including language variants and regional variants</li> <li>• Creation of variants for targeted communication</li> </ul>
<p><b>Targeting</b>                  Functions to create context between target groups, information and content, and rules to deliver content and content variants matching personal interests as defined in user profiles containing segmentation information</p>	<ul style="list-style-type: none"> <li>• Dialogs for defining metadata targeting criteria</li> <li>• Available for person, company and target group assets</li> <li>• Target groups can be referenced on products, contents and information of any kind (articles, article variants, videos, etc.)</li> <li>• Flexible targeting rules</li> </ul>

# Localization and Translation

Make your content fit for global use by applying localized content and managing translations.\*

- Create and manage as many language variants of your digital assets, metadata and other information as you need, including language characteristics (e.g., US English and UK English) as well as regional characteristics (e.g., English and French for Canada.)
- Integrate your existing translation services and agencies via interfaces.
- Workflows ease the path towards final translations that can be used in all content processes right away.

<p><b>Translation Management</b> Supports all locales through one user interface for all content and metadata translation tasks</p>	<ul style="list-style-type: none"> <li>• Translation support for Adobe® InCopy®, XML and Microsoft Office documents</li> <li>• Translates content and metadata</li> <li>• Automatic segment translation for regional content localization</li> <li>• Variations with regional and language specific characteristics</li> <li>• Centralized workflow management</li> <li>• Word and character count for documents directly from the search results</li> </ul>
<p><b>Interface for Translation Management</b></p>	<ul style="list-style-type: none"> <li>• Integration of external translation services via XLIFF interface</li> <li>• Integrated interface using the Translation Memory eXchange (TMX) specification allows automated, hotfolder based, high performance import from Trados, Across and Transit</li> </ul>

\* Requires Variants Management and Targeting, please see page 13.

# Print Production Management

Print Production Management manages print related digital assets and streamlines the creation and production of print based material through integrated page planning, workflows and automation.

- Print Production Management simplifies the planning, creation, production and management of all print products such as adverts, brochures, catalogs, datasheets, magazines, price lists and more. It simplifies collaboration between the design department, copywriters and editors, as well as external resources.

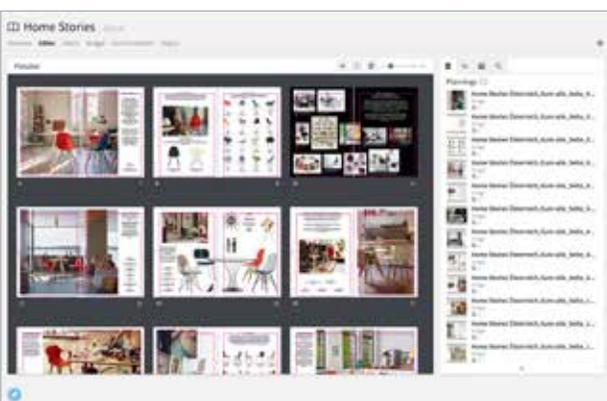
- censhare integrates page planning, as well as layouts created in Adobe® InDesign® and texts created in Adobe® InCopy®, to enable full transparency for all users and simplify the entire publishing process for creative experts.

- The integrated workflows can be adapted flexibly to existing print related workflows within your organization. For example, a magazine's production can be split into separate tasks (usually individual pages or multi page articles) that can be designed in parallel. The status of each task can

<p><b>Print Production Management with Adobe® tools</b></p>	<ul style="list-style-type: none"> <li>• Full Adobe® InDesign® integration, providing tools to create, edit and manage layout files for professional printing</li> <li>• Adobe® InCopy® integration with tools to create, edit, and manage texts, including comments, track, review, accept and reject changes, and displaying overset text and invisible characters</li> <li>• Integrated layout editor for Adobe® InDesign® templates</li> <li>• Support for Adobe® InDesign® scripts</li> </ul>
<p><b>Print Production Management with censhare tools</b></p>	<ul style="list-style-type: none"> <li>• Integrated page planning for layouts, adverts and print sheets</li> <li>• Drag and drop placement of media, products and other content</li> <li>• Resource planning</li> <li>• Centralized workflow management</li> <li>• Collaboration with comments, markers and notes</li> <li>• Automated functions</li> </ul>

be tracked because workflows are an essential feature of the censhare platform.

- The design process and print production can be automated to amend digital assets held in a central repository and create updated final print ready files with only manual approval being needed, enabling organizations to retain ultimate control if required.



*censhare's tight integration with Adobe® InDesign® and Adobe® InCopy® enables you to work on your printed assets without having to leave the censhare client. All images, copy, and product information can be easily included in the print process which can be automated.*

# Web CMS

The Web Content Management solution enables users to author simple and complex websites, microsities and communities and manage their content.

- Easily manage single or multiple web sites with a feature rich web content management system that is fully integrated into censhare.
- Transform digital content automatically for use with specific channels and applications.
- The Web CMS includes the Online Portal with preconfigured content and information structures as well as a standard set of functions and HTML templates. Customer specific adjustments and extensions are carried out as part of a project.

- An extensible application programming interface (API) is available as part of the Connectivity Module, enabling advanced integration capabilities (see page 19).
- In addition to the default capability of sending temporary download links to customers and prospects (see page 8), you can extend this function by offering an individualized, intuitive microsite. This can be customized according to your needs, for example, by using your brand elements. The microsite shows the downloads that are available for each individual as a list with integrated shopping cart.

<p><b>Web CMS</b>                  Create websites to support specific marketing campaigns and programs, news and media portals</p>	<p>Functions for centralized creation and management of single or multiple web sites with unrestricted or restricted access and with identical or different branding.</p> <p>This enables you, for example, to create and manage a web site for a single brand, with several regional sites that use the centrally managed brand elements entirely or in parts. Each regional site can add or replace central content with regional or local content.</p> <ul style="list-style-type: none"> <li>• Simple site administration</li> <li>• Many standard widgets</li> <li>• HTML, CSS, JavaScript support</li> <li>• Flexible configuration, adjustable and expandable</li> <li>• Creates and manages microsities, single sites and multiple sites</li> <li>• Support for user generated content (UGC)</li> <li>• Multiple locales/languages supported</li> <li>• Simplified data model and templating</li> <li>• Library of responsive HTML templates</li> <li>• Configurable page layouts and widgets</li> <li>• Registration, login/permission system</li> <li>• Integrated search</li> <li>• Preview and download media assets</li> <li>• Ensures the quality, consistency and efficient maintenance of the content and overall appearance of the site</li> </ul>
<p><b>Share-Link Microsite</b>                  (optional)                  Share digital assets for downloading on an individualized microsite with intuitive shopping cart</p>	<ul style="list-style-type: none"> <li>• Microsite is shown before the actual download</li> <li>• Preview images for download files</li> <li>• Shopping cart function for download files</li> <li>• Available transformations can be selected by the user</li> <li>• Flexible and extensible</li> <li>• Can be customized with your brand elements</li> </ul>

# Headless CMS

Headless Content Management is a bridge between the censhare platform and external channels. Content is held and managed in the platform as normal but can also be accessed by external applications through Application Programming Interfaces (APIs).

These Headless CMS APIs allow content to be exchanged with any application, device or channel that requires access to a large, centralized content store. Typical examples are product information, images, video clips, documents, and artwork, but can also include user data and preferences, or other data.

- Developers have complete freedom to create their own innovative applications on top of censhare’s database or allow third party applications like ecommerce and web sites to use the data as required.
- This enables a wide range of possible use cases, like third party ecommerce sites, Mobile apps, Internet of Things (IoT) devices and applications, and Web Content Management Systems for public or private websites, and more.
- With the Headless CMS APIs you can support your own innovative applications and streamlined content production processes – approvals, workflows, translation management, or product information management for marketing – without having to change your complete marketing technology stack.

<p><b>Flexible Interface</b> Reuse and publish content to or pull content from any device or channel</p>	<ul style="list-style-type: none"> <li>• Let frontend developers use their favorite frameworks and tools to use censhare</li> <li>• No knowledge of censhare’s internal data structures required</li> <li>• Delivery infrastructure scales easily and flexibly</li> </ul>
<p><b>Defining Entities</b></p>	<ul style="list-style-type: none"> <li>• Entities and their properties are defined via JSON schemas</li> <li>• Schemas can be created, read, listed, updated and deleted via the API</li> </ul>
<p><b>Entities</b></p>	<ul style="list-style-type: none"> <li>• Entities can be created, listed, read, updated, and deleted</li> <li>• Entities are returned as JSON</li> </ul>
<p><b>Queries</b></p>	<ul style="list-style-type: none"> <li>• Queries are sent via HTTP GET or POST</li> <li>• Queries are based on the schema data model</li> <li>• Queries can include operators ('&amp;', ' ' and '!')</li> <li>• Relational queries are possible, e.g. articles of a specific author</li> <li>• Query results can include mixed entity types</li> </ul>
<p><b>Permission Management</b></p>	<ul style="list-style-type: none"> <li>• Role based             <ul style="list-style-type: none"> <li>– CRUD permissions on entity type level</li> <li>– Primarily intended for administration and machine to machine</li> <li>– Authentication via HTTP basic authentication</li> </ul> </li> <li>• User based             <ul style="list-style-type: none"> <li>– Entity level permissions</li> <li>– Access only if user and entity share same permission group</li> <li>– Authorization via JSON Web Token</li> </ul> </li> </ul>
<p><b>Use Cases</b></p>	<ul style="list-style-type: none"> <li>• All use cases from Web CMS supported (see page 16)</li> <li>• Functions for using censhare with a customized client</li> <li>• Server to server communication             <ul style="list-style-type: none"> <li>– Just data import from other systems</li> <li>– Just data export to other systems</li> <li>– Bidirectional communication between censhare and other systems</li> </ul> </li> </ul>

Continues on next page →

You can use the optional Headless CMS Client Starter Kit to support use cases that require a simplified user interface for censhare. The Starter Kit enables you to develop your own, significantly simplified user interfaces with reduced functionality.

This can be useful especially for bigger groups of users that do not have the experience or training to use a powerful content management solution like censhare as this is not part of their job description.

The Headless CMS Client Starter Kit provides all functions for the development.

- Easy entry for developing a simple solution that can be adapted to your needs.
- Intuitive user interfaces enable all users to complete specific tasks, regardless of their experience.
- Reduces the number of clicks to get a task done, increasing the speed and efficiency of the entire process.
- Little, if any, training required.
- Reduces the number of support tickets passed to IT functions, due to the intuitiveness of the user interface.

**Headless CMS Client Starter Kit**

(optional)

**Starter Kit, consisting of standardized building blocks to create customized extensions for censhare**

Provisioning of a React framework that uses the APIs of the Headless CMS Module to connect to censhare, including:

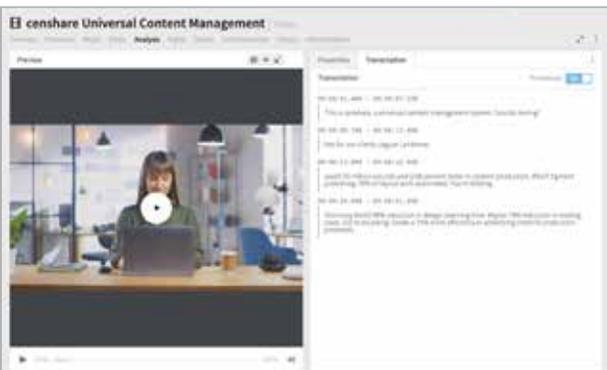
- Default building blocks of the current Release Candidate of the Client Starter Kit
- Partner access to the source code via GIT
- Documentation

Note: Installation and project specific customization will be charged separately.

# Connectivity

censhare can connect to internal and external systems via interfaces and Application Programming Interfaces (APIs).

- Accepts and processes any kind of information, e.g. products, prices, markets, target groups, events, budgets, beacons, companies.
- Accepts and processes any kind of document, e.g. images, texts, audio files, video files, 3D models.
- Supports inheritance of properties based on definable rules.
- Monitors content quality (e.g. through Acrolinx).
- Machine Learning and Artificial Intelligence used for automatic recognition of:
  - Categories and entities
  - Sentiments of texts
  - Colors, entities, locations
  - Texts appearing in images and videos
  - Video content
  - Transcripts of videos



Automatically create full transcripts for any video asset in censhare, resulting in a pretty accurate text of the voice track, complete with time stamps.

<p><b>Level 1: Content Data Import and Export Interfaces via XML</b></p> <p>Import and export any file type as a digital asset by drag and drop, via automated processes or interfaces</p>	<ul style="list-style-type: none"> <li>• Client based and server based file imports and exports                     <ul style="list-style-type: none"> <li>- For imports: asset creation from dataset files and job tickets by generic asset interface server module</li> <li>- For exports: complex export settings can be preset as 'output channels', including transformation operations and file generation</li> </ul> </li> <li>• XML and JSON imports and exports with data mapping and data transformation</li> <li>• Automatic transformations into any XML format</li> <li>• XML and HTML export</li> <li>• XML feeds</li> <li>• Import/export large media files or folders quickly and efficiently</li> <li>• Supports all file formats, including video</li> <li>• Bulk import and export via drag and drop</li> <li>• Automated import and export</li> <li>• Transfer of metadata (XMP, EXIF, IPTC)</li> <li>• Multi level duplicate checks</li> </ul>
<p><b>Level 2: censhare Development API</b></p> <p>Developer API license for developing specific functionalities</p>	<ul style="list-style-type: none"> <li>• Enhance existing systems and processes by developing omnichannel applications, for example, to create customized reports and analyses</li> <li>• JavaScript API</li> <li>• Java API</li> </ul>
<p><b>Level 3: Data Integration</b></p> <p>Connect censhare to business intelligence and other software solutions</p>	<ul style="list-style-type: none"> <li>• Interface to Pentaho, a business intelligence solution that provides data integration, OLAP services, reporting, information dashboards, data mining and extract, transform, load (ETL) capabilities</li> <li>• Interface to Acrolinx, the #1 enterprise content governance solution</li> <li>• Interface to Google AI for automated analysis of images and videos</li> <li>• Usually requires an individual contract with each service provider and may cause additional charges depending on the selected service levels</li> </ul>

## Licenses & Hosting

censhare provides flexible license types and hosting options.

Pricing is based on selected functionality and number of users

We offer three hosting options:

- **OnSite**  
In your datacenter, managed by your IT staff
- **In the cloud**  
With a cloud vendor of your choice, managed by your IT staff
- **SaaS**  
With censhare in Germany, maintained by censhare in our data center that has been ISO 27001 certified and that is fully compliant with tight EU data protection laws

## Technical Support

Experienced specialists assist in conceiving and sizing system architecture, install and supervise ongoing systems, and offer second level support for censhare as well as the entire IT infrastructure of the censhare system.

We offer three distinct service packages.

- **Silver**  
Support times 9am – 6pm, Mon-Fri, guaranteed response time: 2 hours
- **Gold**  
Support times 8am – 9 pm, Mon-Fri, guaranteed response time: 90 minutes
- **Platinum**  
Support times 24/7/365, guaranteed response time: 60 minutes

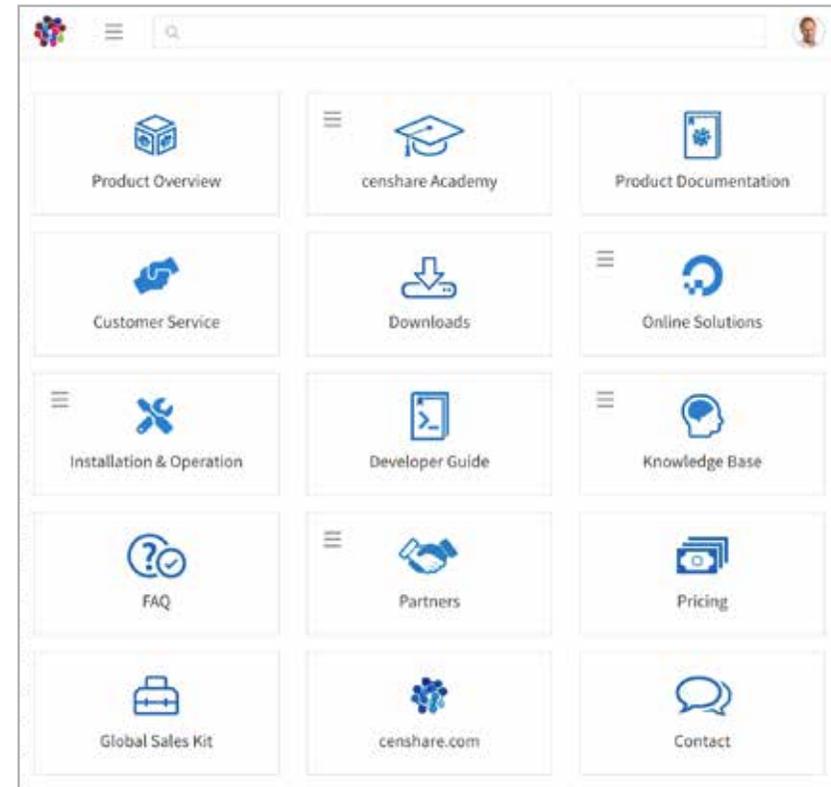
# censhare Community

censhare's extranet is called 'ecosphere'. It is home to a vivid community of censhare users, partners and staff.

This is the best place to look for announcements, product overviews and descriptions, documentation, tips, trainings as well as the latest product roadmap and the next planned release dates.

You will also find recordings of our release webinars that introduce you to the most important new features and functions for each release.

Join the ecosphere at <https://ecosphere.censhare.com>



*censhare's extranet is called the 'ecosphere' and provides plenty of information, ranging from product overviews, the censhare Academy and product documentation to developer guides, the knowledge base and contact information.*

## **about** censhare

Our pioneering, universal content management platform lets you connect with your audiences on any channel, in any language, locally or globally. Clients like Allianz, Dyson, Christie's, Lufthansa and many more have already discovered new freedom to create and deliver consistent quality content with exceptional efficiency.

**censhare.com**

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