



CMS platform Consolidation – Challenges & Solutions

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1 Why consolidation is a must for legacy CMS platforms

In order to cut costs & reduce complexities, companies are focusing on consolidating disparate CMS systems & replacing them with a platform-based solution that helps achieve the following benefits:

- a. A shared CMS platform across portals which is easy to maintain & develop
- b. Improved collaboration, as content can be shared across sites
- c. Increased reusability of content and assets
- d. Drives consistency within the marketing team
- e. Allows teams to control their own sites or sub sites, as needed
- f. Simplifies maintenance and security updates
- g. Shorten time to market

However, the consolidation of different CMS into a single platform has its own set of challenges which need to be understood in detail before planning for an effective approach.

2 Challenges on the way to CMS consolidation

Mostly companies begin consolidation with the migration of simpler websites to the new platform and start building complex components/features on top of what is already available. However, the entire process can be cumbersome and time-consuming, if not planned properly. There are quite a few challenges that are inevitable on the way to consolidation, some of which have been listed below:

2.1 Setting-up the initial architecture

Deciding the initial architecture, whether it's going to be single-site or multi-site set-up requires deep understanding of organizational structure. Most of the companies today are opting for multi-site architecture as it provides scalability to grow in different regions, product, service lines etc. while keeping the development and maintenance cost low.

A common scenario may be of a global organization with multiple brands and regional marketing departments offering products based on the needs of the local market. Each department is required to maintain the specific content on their site while keeping the brand's identity intact. In this scenario you would also need a CMS that provides excellent multilingual and multi-site architecture capabilities.

2.2 Unknown dependencies

There can be multiple unknown dependencies on legacy CMS systems that are sometime difficult to find without getting into the code level details. Also, many times, these codes have been developed by external partners and are proprietary, making it difficult to access & understand.

2.3 Content migration

Content migration requires serious efforts and cannot be underestimated. Hence, it requires buy-in and support from

senior executives in the organization.

Content with varied data schemas require transformations before it is migrated to a common platform.

Considerations in content migration

- a. Content variations
- b. SEO and meta data
- c. URLs and redirects
- d. Custom code and features
- e. Legal & compliance requirements

2.4 Different UI & navigational styles

Different UI & Navigational styles result in inconsistent brand experience & disconnected customer experience. Also, the customer expects new UI to be much more efficient that provides access to key functionalities and which is highly intuitive & sophisticated.

Creating a new UI considering all the brand elements, intuitiveness & exciting user experience, while maintaining performance expectations, accessibility requirements etc. needs a lot of investment and involvement of creative agencies.

2.5 Change management & user acceptance

Re-skilling of content management team for the new platform is essential to improve productivity & to reduce time to market. Change management should be well-planned & carried out smoothly to avoid any kind of dissonance with different teams working with the organization.

2.6 Unique CMS requirements

Different legacy CMS supports unique requirements from business stakeholders. Implementing all these unique requirements catered by different CMS on a single platform may not be feasible & is time consuming.

3 Pre-requisite to CMS Platform Consolidation

3.1 Content inventory

It's critical to know the existing content inside out – quantity and quality, analytics, patterns etc. This involves extracting all the content types & creating an inventory out of it. During the extraction phase, all pages and content types should be extracted, including relevant information such as:

- a. Metadata - All metadata associated with the content item in the current CMS, such as the date, publication state or language
- b. Fields and structure - The fields that make up a page or content type, associated formats, syntax, value lists, restrictions and dependencies, if any
- c. Relations – Relationship with other content items in the CMS
- d. Location – The location where the content item is found on the site

3.2 Developing content strategy

Once the content inventory is available, analyze it to identify the content that is useful, can be safely deleted & require enrichment as part of the overall content strategy. The strategy should address the following areas:

- Content types/ format, structure that will be used in the new CMS platform
- The channels where the content will be published
- Content migration planning
- Content creation methods, content management lifecycle, governance etc.

3.3 Analysis of as-is CMS features & alignment with to-be web strategy

List out the key features offered by existing CMS and the features required in the future to support the web strategy. A quick reference to the features list is given below,

- Administration
- Editing & publishing tools
- Built-in SEO tools
- Social media integration
- Analytics
- Workflow and publishing controls
- Security & permissions
- Content templates & types
- Comprehensive search
- Multi-language support

- Personalization features
- Version history with rollback
- Responsive web design
- Integration with other products
- Scalability
- Community support
- Asset management etc.

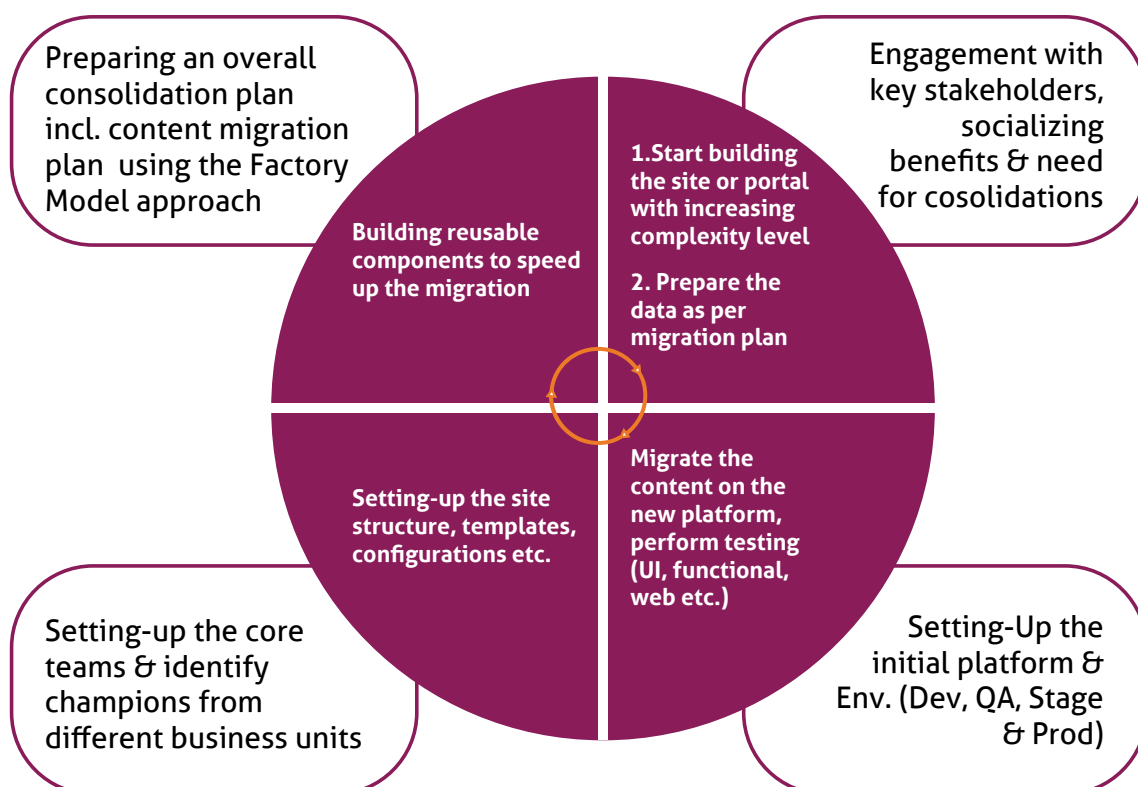
Once the requirements for the future CMS are finalized, it's easier to map them to the various CMS options available and choose an appropriate solution for the enterprise.

3.4 Stakeholder engagement & change management

It's important to manage the expectation of different stakeholders, whether internal or external, to effectively manage the transition to the new platform. Engaging all the key stakeholders including business and system users, administrators, editors & publishers, marketing teams, legal & compliance team, senior executives & sponsors helps in managing the expectation well. Also, it would be important to consider the skill set of the existing development team as they would need to be cross trained to the new technology environment. All these considerations smoothen the change acceptance among all the users, which is critical for the overall success of the program.

Also required is training on the new platform for the business & system users as part of the change management to speed-up the adoption of the new platform.

4 A Successful Approach to CMS Platform Consolidation



4.1 Engagement with key stakeholders

Stakeholder engagement is critical for the successful completion of the program, as it helps in the following:

- a. Brings everyone under one roof for transparency & better control of the program
- b. Helps in building trust among different stakeholders
- c. Ensuring that business priorities are well discussed, understood & agreed upon
- d. To provide better control mechanism & commitment from different teams which are part of the program
- e. Enhances accountability in decision-making

4.2 Prepare consolidation plan (incl. content migration plan)

Consolidation planning is required to clearly articulate & communicate the need, strategy & process to complete the consolidation exercise. Since consolidation is aimed at bringing websites from different platforms on to a single platform that can have unprecedented impact on business, it's critical that plan should include the following information for a smoother transition to the new platform.

1. Feasibility check w.r.t. different consolidation approaches in terms of growth opportunities, risks, RoI, availability of resources etc.
2. Consolidation governance structure, program management structure & team set-up
3. Project plan with detailed WBS (work breakdown structure) & clearly identified roles. It should also include the pre-launch, during-launch & post-launch activities
4. Content migration plan – This should include test plan & strategy for data migration, including preparation for Info Sec audit and plan for hardening the system for production
5. Stakeholder communication & change management plan

4.3 Identify champions from business Units

Consolidation of legacy platforms involves people from different business units, who have been using the systems for last few years and know the intricacies, processes, workflows that were built overtime around the system. It's key to identify such champions as they know the real pain points of using the outdated systems. They can help in the migration journey by providing key business information & championing support from a specific business unit.

4.4 Setting-up the infrastructure with core CMS platform

Provisioning of the infrastructure for the CMS platform & setting-up key processes around maintenance & upgradation of the platform is the next logical step. This also involves setting up the platform monitoring, systems alerts, downtime & performance issues as per the industry standards.

4.5 Setting-up the site structure, templates, configurations, user access, basic workflows etc.

Once the core CMS solution is up & running, the proposed site structure can be laid based on solution tenets like reusability, seamless and personalized experience, multi-lingual support etc. Also, basic workflows, commonly used templates and configurations can be set-up for faster deployment of the websites.

4.6 Setting-up the sites with C-1 complexity (lowest) level

It's advisable to start the consolidation process with the sites that are based on commonly used components and can easily be migrated to the new platform. This is useful as it quickly brings out any issue with the basic set-up of the platform & third-party integrations.

4.7 Building custom components on top of the core CMS solution

This is needed, as not all the components required to migrate a site will be available on the new platform, and hence, it's necessary to customize the existing component or create them from scratch. However, it's key to keep in mind the solution tenets of re-usability, extendibility & scalability while designing and developing the custom component.

4.8 Creating the APIs, set-up the iframe etc. for third party application integration

As existing sites would have integrations with third party applications for some useful features & data feeds. All the integration needs to be maintained as part of the new platform. APIs & iframes are some of the common ways to integrate third party applications with the CMS system. However, both have their pros and cons.

APIs requires more effort to implement but provide the best user experience in terms of interface, extendibility & consistent user experience on different devices. On the other hand, iframes are easy to implement, but come with their own interface design, and hence, cannot be tracked by the CMS system for analytics purposes.

4.9 Prepare the content as per the content migration plan

This primarily consists of two key steps – content evaluation & metadata mapping.

- a. Content evaluation – Before the commencement of the migration, we need to analyze the content that needs to be migrated as-is, what needs to be updated before migration & which content should be left-out. For this, both quantitative & qualitative analysis needs to be done. Quantitative analysis (automated), will provide you data points like last accessed, frequency of access etc. Content quality analysis requires more human intervention and it can provide following conclusions:

1. Which content can be deleted & what can be retained and migrated?

2. Which content requires revision before migration -how much revision is required

b. Metadata mapping - Once you decide on which content to migrate, it's required to map content metadata to the new data structure to ensure it fits properly into the new site. A key point to keep in mind while deciding on metadata is that post migration, the content should be searchable, sortable, filterable & displayable in a way that it can be easily used by end-user.

c. Redirect Mapping – For most of the key URLs, this can be done through 301 Redirect Map. It's quintessential to let the search engine know that you have moved your site to a new location. This would help in maintaining the page ranking, which can easily nosedive if redirect mapping is not done properly. This would reduce the traffic to the site tremendously.

4.10 Migrate the content for the smaller sites & perform testing (UI, functional, integration etc.)

To start with, it's always advisable to start small & test the waters. This would enable quick findings in terms of broken linkages, integrations, pages/components not being displayed properly etc. It's much easier to fix things for a smaller website & finding out the root cause for the errors. Also, automated regression test can be built upon incrementally using this approach, as the new platform is developed for components with increasing complexities.

4.11 Continue migrating the sites with higher complexity; repeat the steps from 4.7 to 4.10

Once a solid platform base has been established, and with required process for built automation, test automation, user management, digital properties management etc. in place, you

can start with migration of websites with higher complexity/business criticality.

5 Conclusion

Reducing TCO, improving reusability of assets and speeding up time to market are some of the main business use cases that drive the need for platform consolidation. However, any consolidation program requires detailed planning, fool-proof approach & commitment from the key stakeholders across the business units to be an ultimate success.

- Mindtree has worked with world's best-known brands in successfully planning & executing their strategic platform consolidation programs to deliver both bottom-line & top-line growth. A recent case study showcases Mindtree's engagement with a world class consumer products leader in consolidating the regionally diverse vendor base (around 100 vendors) to 2 global partners. The consolidation also achieved 100% adoption by business units, 30% reduction in time to market and over 33% reduction in cost through LEAN digital operations.

Mindtree has:

- Created unified web content management platform to support 1600+ digital properties
- Seamless collaboration across a portfolio of operations with defined SLAs and OLAs
- Multi-channel digital production and operations services for each of the sub-services

6 Bibliography

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