

CMS IMPLEMENTATION SURVIVAL GUIDE

CONTENT

THE NEW WAVE OF CMS	3
ENTER THE CMS IMPLEMENTATION PATTERN	4
BREAKING THE PATTERN	6
Kicking the Tires	6
Project Planning	7
Features Planning	7
Legacy Influence	8
Adjacent Systems	8
Migration	8
Content	9
Digital Assets	9
Performance	9
Human Factor	10
Customer Experience	10
OUT IN THE LIGHT	11

THE NEW WAVE OF CMS

Content Management System implementation is becoming an increasingly more complex task. As the systems themselves evolve and encompass more features, the functionality expectations escalate as well. When it comes to Web Content Management, the trends quickly turn into requirements, forcing the new systems to continue expanding their scope in attempts to keep-up.

The new generation of CMS platforms is seeking not only to accommodate technical needs, but also to accommodate the clients of the system. These clients can be separated into two categories, each facing a different side of CMS. The first group is composed of the system users, mainly responsible for the actual content management process, and exposed to the back-end of the platform. The second group includes the clients that experience the final product of the CMS, that being an actual site, or a set of sites, possibly on multiple distribution platforms.

To the CMS platform users, the important bulk of functionality is centered on providing a visual interface for the various areas of web content production and manipulation. The evolved WCM system aims to allow its users to perform complex tasks, such as content production, multi-site and multi-channel content distribution, social features' integration, while requiring none-to-minimal development effort. Ultimately, a non-technical person should be able to manage content, structure, client settings and much more.

On the other side of the CMS trench, the result of the WCM evolution has been the focus shift towards the Customer and Customer Experience Management (CXM). CXM is defined by Gartner as “The practice of designing and reacting to customer interactions in order to meet or exceed customer expectations and so increase customer satisfaction, loyalty and advocacy.”¹ This translates into a variety of user-targeting features, such as CRM, ecommerce and marketing tools. The new platforms also allow for higher degree of content delivery customization, as well as provide customer intelligence and analysis tools.

As the usability demands escalate and gain sophistication, the same becomes true for the underlying functionality. The new systems aim to facilitate input and management of content from multiple sources, simplify syndication to consumers, and provide other interoperability features that require less customization and development. The content, while highly mutable, is intended to be structured and presented in clear and consistent manner, enabling its use and re-use throughout the system. Indexing, search, import and export are all expected OOTB necessities.

Presently, there are a number of CMS solutions on the market, all varying in their functional scope. Forrester identifies Adobe DEP (formerly Day CQ) and SDL as current leaders, in CXM realm in particular. Both platforms are highly capable, sporting numerous CXM features such as robust multi-channel and multi-language content delivery capabilities. Both platforms also embrace the customer experience paradigm – targeting by enriching and refining the interface-based functionality.

¹ Gartner, [IT Definitions and Glossary](#)

ENTER CMS IMPLEMENTATION PATTERN

None of the technology manifestations that are new and exciting are resulting in hype. New CXM platforms, particularly the ones offering already-hyped functionality, are of no exception, receiving their share of buzz. The increase in publicity, however, is not always beneficial. This becomes particularly evident when it comes to the system selection process, where the hype can become a dangerously influential factor.

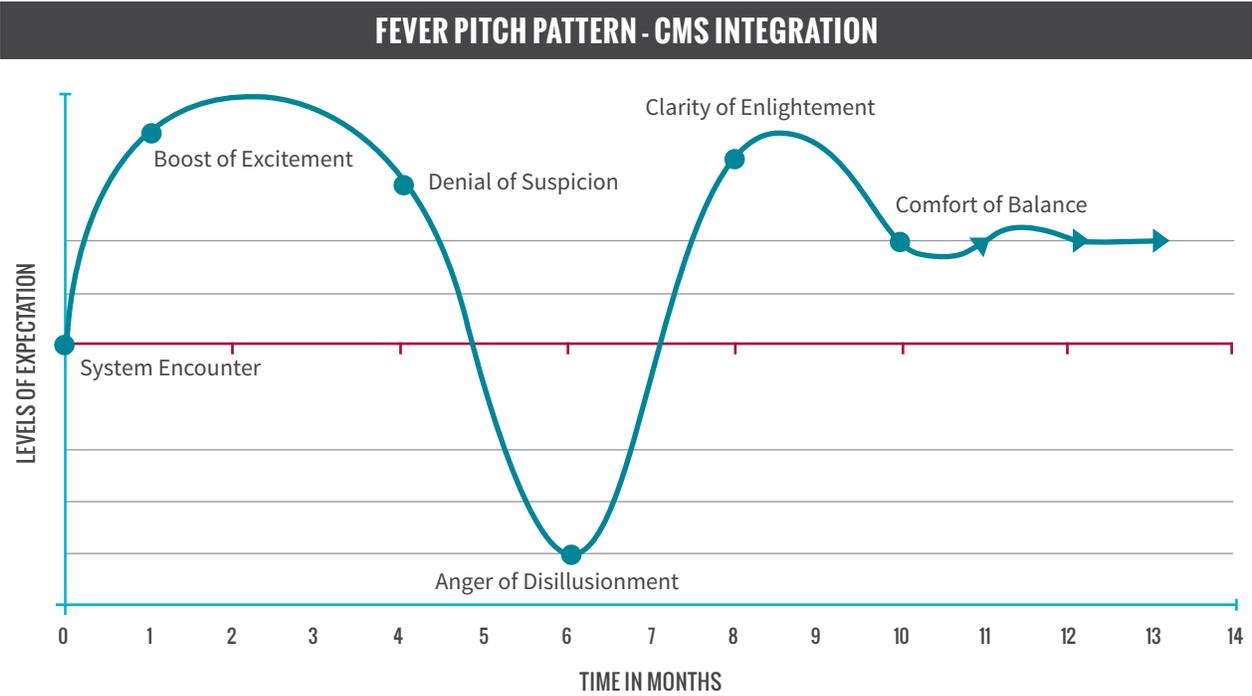


FIGURE 1.
Fever Pitch Pattern.

In many cases, the system remains a virtual “black box” to the parties participating in CMS selection process, who’s exposure to the platform is often limited to demos, documents and specs. As a result, once the new CMS is selected and the integration begins, the projects risk to venture into the Fever Pitch Pattern.

- **Boost of Excitement** – the initial stage that fuels the project. Everything appears simple and within the reach. Nothing exists that can not be instantly solved with the magic of the new CMS. Little involvement is necessary, as everything should just work.
- **Denial of Suspicion** – the initial doubts start creeping in after some cracks show up during technical meetings and a few initial deadlines are missed, but all signs are either ignored or rationalized. The project is perceived as “gaining speed,” and no adjustments are considered.
- **Anger of Disillusionment** – the long suspicion of the project being off-track and behind the schedule is finally confirmed and the initial disappointment quickly turns to anger. The competencies of the product and people are questioned, and the blame is freely distributed. Decisions are made which tend to increase the pressure in measures that are disproportional to the actual progress.
- **Clarity of Enlightenment** – eventual realization that some adjustments are needed to the project scope, the timing, project involvement and the overall process. The platform’s functionality within the given context becomes clear and demarcated. Existing progress is adequately assessed and the project is re-planned and re-structured.
- **Comfort of Balance** – once the requirements, the timelines and the processes are adjusted, so are the expectations. The project achieves some equilibrium and consistent progress becomes evident.

BREAKING THE PATTERN

While there are numerous factors that contribute to the proliferation of the Metamorphic Pattern, a number of them can be isolated and managed provocatively. While not guaranteed to completely eliminate the fluctuations of the cycle, there are a number of considerations and practices that can smooth them out, creating a shortcut to the Slope of Enlightenment.

KICKING THE TIRES

Platform selection is largely deterministic to a project success, but is often overlooked in its importance. Investing some extra time, effort and resources can help to ultimately prevent the potential losses resulting from making a wrong choice.

Limiting the selection committee to a particular unit (tech, business, marketing etc.) will subsequently limit the perspective of the needs, as well as the perspective of the system(s) considered. It's always better to attempt having representatives from a variety of groups on the committee, as the more diverse team will provide more complete feedback. It is also important for the committee to understand not only what the system does, but how it does it and what degree of potential effort – tech and non-tech – is required to use the listed features. To take a step further, a “try before you buy” approach can provide further insight via hands-on testing, sandbox set-up and even some POCs.

Once the system is identified from the functional point of view, it's important to consider the vendor. Different companies have different culture, support availability and general willingness to get involved. Establishing a positive and organic relationship with a prospective vendor is important, especially when selecting a more cutting-edge system.

PROJECT PLANNING

Planning of CMS implementation projects is often influenced by the inflated expectations that are the byproduct of limited exposure to a selected system. The overall view of the platform's potential role and its specifics is also something that is not always evident in the beginning. While it might appear that the system is supposed to fulfill all of the project's requirements, and then some, with little or no development, the functional gaps are often much larger than they seem at first.

Cost considerations play a very decisive role in a project's fate, yet they are not always clear, and often misprojected. While the costs of licensing and infrastructure accommodations are usually fairly evident, the cost of the system implementation appears much less obvious. Based on the most recent empirical statistics, as well as the feedback collected from other CMS integration providers, the cost of CMS platforms' integration tends to float around multiple times of the licensing price. The systems are getting more complex, and so are the requirements – it takes more to achieve more. The bigger the system, the more content needs to be entered and migrated, the more integration points need to be connected, the more expensive the project will grow.

Planning the CMS integration, it's important to recognize not just the overall final goal and its implications, but also how to reach this goal. While the macro-view might be going live by date X, it's not always the best approach to fully depend on that prospective. Breaking the project into smaller parts, each with it's own set of aims, deliverables and timelines will help to not only track the progress, but also measure the actual success of the project. It will also facilitate the resource planning – as the core implementing team is likely to stay the same, other resources' will be needed at different points of the project.

PROJECT PLANNING

The new CMS platforms offer a lot of OOTB functionality, making it seemingly easy to integrate. As a result, it is often the case for a feature to be added to the requirements for the reasons of supposed availability, as opposed to actual necessity. Additionally, the fact of a feature just being supported by the CMS suggests that it “should” be needed, turning some of the “Nice to Haves” into “Criticals.”

Looking at the features it's important to be specific about their criticality to the system, and to the initial launch. It's also important to assess the effort required to add/develop the features, as well as how they fit into the system, or affect other, truly-critical functions. Internationalization, custom UI and template configuration, content syndication and exposure, multi-channel distribution, social media features etc., have effect throughout the system, and need to be considered carefully.

LEGACY INFLUENCE

It is the most common situation when the new enterprise CMS systems serve as replacements for the old legacy systems, which have been in action for some time. Over their span of existence, these legacy platforms become highly embedded into the existing infrastructures and manage to grow in a variety of less-expected ways. The transition from old to new might seem like a one big step, but it needs to be carefully planned and managed.

Generally, systems are implemented because they are intended to fulfill a set of functional needs, and replaced when they fail to do so. However, there can be a variety of specific reasons – from technical to organizational – and they should be outlined. It also helps to assess the role of the current CMS, its functionality and its shortcomings in order to better understand the gaps that the new CMS is expected to fill. It is possible that the old system has so many existing dependencies that it will not be feasible to fully replace it, at least in the first phase(s). In that case, the scope of both, new and old, platforms needs to be clearly outlined, as well as the means and protocols of communication between the two.

ADJACENT SYSTEMS

Establishing interoperability is crucial when implementing a new CMS project. Enterprise CMS platforms rarely exit in isolation, and there are often multiple interactive flows – some are inherited from the previous system, some are new, some are transitional and some are intended to stay. Thorough cataloging these dependencies will help to establish the scope of work required and ultimately avoid functional interruption of the peripheral systems.

Master Data Management for various data and content sets need to be identified and the flows of incoming and outgoing content should be considered. There is likely to be a number of internal and external systems and services, all depending on the content in the CMS, as well as supplying content to the platform. Methods of communication, protocols, formats, structures etc. will vary from system to system and often require additional development on both sides.

MIGRATION

When a new platform is developed, the decision is often made about the existing content (if such exists). The decision can depend on many factors, particularly on how radically the intended new site differs in content and structure from its soon-to-be ancestor. It is also not unlikely that the structure and format of the existing content leaves a lot to be desired (for instance, a new CMS), so the potential migration efforts need to be carefully measured.

Sometimes, the new integration means all of the content will be brand new, but more often some of the old content will have to make it over to the new system. Old content sources and formats will largely determine the amount of effort that will be needed to accommodate the migration, as well as how well the old content is structured and how it maps to the new model. As not all of the old data might be crucial to the initial launch, the migration can also be planned in multiple iterations.

CONTENT

The modern Enterprise CMS platforms tend to have established paradigms for structuring and organizing the content. While these patterns are usually optimized to accommodate for the flexibility and ease of content manipulation via the user-friendly interface, they need to be carefully examined, understood and possibly augmented for the needs that are specific to the project.

There are usually multiple sources for the content – some is manually entered and some is pushed or pulled by the system automatically. A lot of the content can also be interconnected and it's important to identify these internal dependencies in order to plan the workflows and avoid potential content corruption. Search requirements also need to be considered when structuring the content to ensure the performance of potential queries.

DIGITAL ASSETS

Images, videos, documents and other binary assets will come into play, and will have to be organized and managed. New CMS is likely to provide some digital asset management functionality, but it is also likely to require a bit of configuration for these digital assets to become useful on the site.

Images and videos will both require a number of renditions of each asset as well as metadata enrichment. While the new CMS platforms provide the functionality needed for managing and serving both, there are always considerations of storage space, bandwidth etc. Videos have an additional dimension of complexity when it comes to formats and players, and are often better managed via specialized hosting providers.

PERFORMANCE

Everything can be well designed, engineered, developed and debugged, however, once the system is unable to handle the post-launch stress, none of the above will matter. Performance tuning cannot be overstated, but is often overlooked until much later than needed.

Adhering to the recommended practices will minimize the number of risk spots and should help to take maximum advantage of the system's capabilities. When launching, the caching strategies will become increasingly important, and anything that can be cached, probably should be cached (locally, or via Content Delivery Network, or both). Index optimization is another performance factor that particularly affects the dynamic content, where data needs to be retrieved via queries. Considering the amount of code that usually goes into any system, it's also a good idea to run some low level profiling, to look for possible memory leaks, deadlocks or other issues that might surface when least expected.

THE HUMAN FACTOR

The system can be perfect, but it needs to be used and supported by people. Challenges in integration become not only technical, but also social/cultural. People get used to their particular way of doing things, and many find comfort in routines. Forcing the system upon an organization can often produce a sharp rejection, potentially resulting in the overall failure. Getting more people involved, interested and excited about the new CMS is the strategy that will ultimately pay off by shifting the focus to the positive aspects of the impending change.

Technical groups will have to adjust to giving some of the control over the site to the non-technical groups. The non-technical groups will have to learn how to take that control and use it wisely. Appropriate training should be arranged for everyone involved and exposure to the system should start early as possible. Involving some of the prospective users into the testing can also serve as a useful training tool.

CUSTOMER EXPERIENCE

With the CXM coming more and more into focus, it's important to consider and prioritize the CXM features for the new system. While the temptation is always to go "all the way," there is a possibility for a more reserved but ultimately more rewarding approach.

Since it's not the late 90's anymore, having just a website is no longer viewed as a great accomplishment. The site often needs to be optimized for the multitude of existing channels and platforms, possibly changing in appearance and content depending on the target. The site might also require to be localized, which might not only involve the OOTB localization functionality of the new CMS, but also involve additional integration effort with the translation providing party. The cost of the actual translation is also often overlooked, and should be assessed up-front.

Personalization of content, marketing community features, customer intelligence and the like, are all plausible requirement candidates. Most, if not all, are within the technical bounds of the new CMS systems, but will require different degree of effort and involvement to augment and configure, particularly in order to expose these features to the non-technical audience.

OUT IN THE LIGHT

No matter the amount of knowledge and preparation, it will take time to get to the point where the productive balance is achieved. Taking more factors into consideration will help to balance-out the expectations, improve the planning, and will reduce the drastic transitions of the Fever Pitch Pattern, optimally, replacing it with the Game plan Pattern.

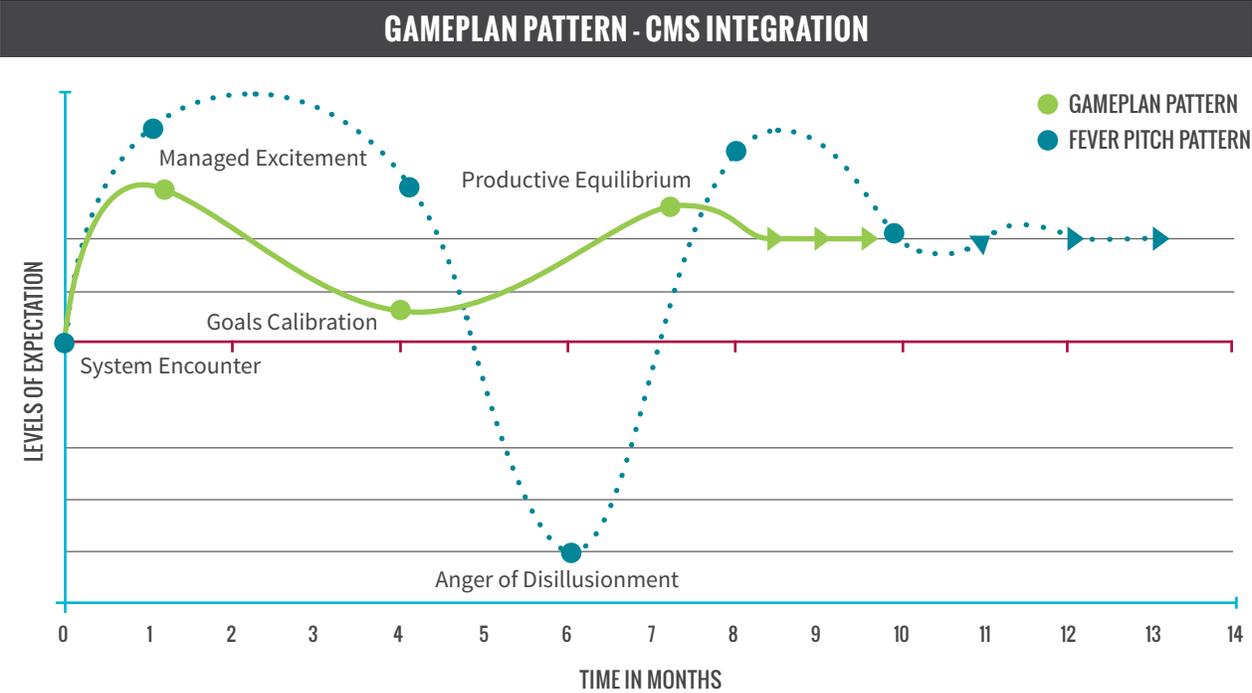


FIGURE 2.
Game plan Pattern

- **Managed Excitement** – based on all the research and planning, the excitement levels become less extreme and the expectations less dramatic.
- **Goals Calibration** – it's inevitable that the project will need some adjustments, once the integration process begins. Unexpected difficulties are bound to surface, but given the initial extensive planning, their effect will not be extreme.
- **Productive Equilibrium** – once the goals are calibrated and the processes are adjusted, the project will gain the needed balance, leading to stable progress.

In closing, it's important to consider that it takes an effort not only to get organized, but to convince and organize the parties involved in building the new system. While the goal is to bring the CMS to the non-technical masses, the process of doing that will be technically challenging. The overall success is not necessarily the initial deployment of the new platform, but the overall change that occurs, enabling effective interaction between developers, producers, marketing, business and other parties involved. This collaborative process will enable the new CMS to be implemented to its full potential and to continue its evolution as a system.



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