

A Beacon Publication from Outsell's Gilbane Services

Guidance on Content Strategies, Practices, and Technologies

A Fresh Look at Web Content Management

Mastering the Core Capabilities of Contemporary Platforms

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July 2011

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Aristotle once said that, "*the whole is more than the sum of the parts.*" But what happens when some of those parts are missing, broken or only partially present?

The legendary Greek philosopher was talking about metaphysics at the time, but he might as well have been referring to Web Engagement Management (WEM). Much like *the whole*, WEM promises great progress based on some well-established sub-parts consisting of Web Content Management (WCM), web analytics, marketing automation, social media, a personalization engine and others. At Outsell Gilbane, we have embraced the notion of WEM since its inception, and even refer to engagement as the *new currency* of the Web in this era of marketing overload. As analysts, we note the staggering progress the market has made with regards to the Web and the capabilities that are now broadly available: from the new landscape of devices and channels which allow consumers to find nearly anything, at any time, from anywhere, to the technical innovations of the platforms themselves which enable them to do more, share more, and interact more. The maturation from "1.0" to "2.0" and even onto "3.0" has happened with blazing speed.

In the world of WCM, the talk has shifted over the years from version control and WYSIWYG editing to content scoring and digital marketing automation. Contemporary WCM now refers to traditional capabilities augmented by native or deeply integrated analytics, social media management, ecommerce capabilities, learning management and/or marketing campaign management among others. The technologies are blending to the benefit of the consumer, but are organizations ready to capitalize?

The technology has improved to be sure, yet many organizations continue to struggle with the basic challenges WCM set out to remedy. Yes, the core tenets are fundamental and should not be overlooked, but that does not mean they are easy. Digital marketers have fallen in love with the idea of presenting visitors with unique, consistent, contextually relevant and engaging experiences across numerous channels. They hope visitors will interact with their brands and convert into loyal customers, sharing their experiences with others along the way. However, that vision is a mirage for companies whose foundation is unsteady and who are challenged to publish a press release in a reasonable timeframe.

In this paper, we take a fresh look at the core aspects of today's WCM systems. We target an audience responsible for evaluating, or reevaluating, the WCM needs of their organizations, and we aim to arm them with an understanding of the technological advances of the principal capabilities available in these systems. We review the compounding complexities of today's landscape and their implications for immature and inefficient processes. And, lastly, we provide our perspective on the five foundational tenets of WCM, arguing that without a solid grasp on them, organizations will not be in position to capitalize on the modern-day offerings afforded by contemporary platforms.



Compounding Complexities

Today's web environment is not very forgiving of those in the business of managing web content. The fast-paced growth and change of the Web makes it an exciting field to be in if one's WCM ducks are in a row. Otherwise, the transformative realities we list below will cause immature processes to spin out of control.

Channels explosion. Gone are the days when "multichannel" was defined as web and print only. While managing these two channels simultaneously has been a thorn in the side of WCM vendors and practitioners alike for close to fifteen years, the number of channels has grown nearly as fast as those of a cable company over the same span. This explosion of channels, defined here as outlets through which organizations communicate messages to their audience, now includes email, any and all web properties, social platforms, physical devices, multimedia, SMS, and many more. And they continue to multiply at a staggering pace. The challenge with multichannel is not only with formatting, but also with the *context* of use. Rendering web pages properly on tablets and phones is undoubtedly important. However, consumers use these devices differently, and digital product managers should take this into account. While smartphone users are generally on the go and require more transactional experiences, tablet users tend to browse in more leisurely situations and are open to more immersive experiences.

Ubiquity of the Web. With the abundance of devices and channels combined with the expansion of cable networks and Wi-Fi, access to the web is literally available from nearly anywhere, at any time. Web traffic patterns of peak usage during business and evening hours are no longer the norm as consumers spend countless additional hours browsing content during commutes or from their nightstands.

Multilingual necessities. Another aspect of today's Web is the need for localized, multilingual content. International brands have struggled with the challenge of managing globalization issues for years, but even smaller organizations are now facing these same hurdles. With the tremendous advances in search technology and sharing capabilities, the long tail of the web is accessible and findable by anyone around the world. *Mom-and-pop-antique-lamps.com* is no longer patronized solely by locals from the small town in Kansas, USA, where the store is located. Nowadays, antique lamp collectors from New Zealand may be perusing the site as a result of a web search. This flattening of the world and expansion of the boundaries of the Web has led more brands to localize their content, thus ensuring that all who want to consume it can do so. Engagement and relevancy are the cornerstones of WEM, yet without the ability to speak to audiences in their native language, brands will never be relevant to a global audience.

Content proliferation. It used to be that a web editor may have had a lot of content to manage, but at least the amount was finite and under his control. In today's environment, content only begets more content as the web has become more social and the tracking mechanisms and analytics capabilities continue to improve. In days past, content was created once, distributed, and then read or consumed. That was about it. Consuming content was a *passive* activity. Think books, newspapers, television and Web 1.0. Now, with the digitization of content and the ubiquity of the Web, many consume content *actively*, thereby producing even more content for someone to manage. Consumers use social capabilities to share it with friends, broadcast it on Twitter, like it on Facebook, comment about it, bookmark it, and so forth. Even if the audience does not interact with the content, their consumption is being tracked as they search for it,



select it, click on it, open it, link to it, scroll it, and even mouse-over it. This proliferation of content and data exponentially increases the burden of management.

Social Web. As we have said before, the line between social media and the Web is no longer visible. The Web *is* social. Consumers expect their digital experiences to be interactive. The resulting ratings, reviews, comments, etc. from the content proliferation effect mentioned above need to be treated as equals in contemporary WCM systems, but this is not always the case. Take social comments as an example. Most systems have the ability to allow administrators to approve and disapprove comments. While this binary option may suffice on a low-traffic blog, how well does it work in a more collaborative environment where comments require more than two options? Should comments not be able to have workflows as well, allowing them to go through multiple layers of approval, or to be marked up and circulated as if they were native content? As ways of working and buying and interacting continue to morph through socialization, WCM systems will need to be able to keep pace.

Heightened consumer expectations. With the increased availability and socialization of the web, consumers have become empowered. They are accustomed to finding what they are looking for with ease. Regardless of the channel through which they access a website, they expect their experiences to be seamless and consistent. In many cases, they have either visited the site before or they found it via a search engine. In either case, they expect the site to know what they are looking for and to tailor their visit to suit their needs. If the site provides value in the form of relevant content, they may be willing to share information about themselves so that the brand can cater to their individual preferences even further when they return. They want their online experiences to be like those of Amazon.com or Netflix regardless of whether they are buying clothes for themselves, seeking information about their local government, or investigating a product on behalf of the corporate procurement team.

Time-to-market pressures. The implication of all this technology maturity on competition has been significant. In the same way that a collector in New Zealand can now buy a lamp from a small store in Kansas, the same small store in Kansas can also *compete* for business with a larger brand in New Zealand for that same collector's business. This example surfaces two points about competition which were hardly concerns just a decade ago: 1) competition is more global than ever before, and 2) size, in fact, does *not* matter. With regards to the latter, a blogger writing from the comfort of his bedroom can compete for readership with a major news outlet in much the same way that a startup with a good business model can compete with a major brand and win! With so much competition coming from every direction, there is extreme pressure on brands to be first to the market with product, information, news, etc.

While the implications of many of these circumstances on WCM systems are apparent, their impacts are both extensive and compounding. Without a solid base and mature processes, the complexities will prove overwhelming for any organization. In the next section, we will review five core capabilities that all organizations should prioritize before worrying about the bells and whistles of WCM.

Foundational Tenets

As technologists, content managers and digital marketers alike, WCM buyers and users are fascinated with a plethora of new and improved capabilities available in today's WCM systems. Features such as in-line web analytics, social media management, and globalization capabilities, just to name a few, make any five-year-



old WCM system pale in comparison. Digital marketers read about the latest features to hit the market and salivate as the descriptions of the business problems they solve resonate perfectly with those they face every day. *"If we could only just have one of those, all our problems would be solved..."*

Hardly dissimilar from the process of buying a new mobile phone, many WCM buyers fall into the feature trap. Rarely do Requests for Proposal ask about version control or metadata management, much in the same way that iPhone buyers seldom show off their new toys by demonstrating their call reception quality. Many focus more on the glamour of the brand and periphery functionality than on the capabilities that are core to the underlying system and align with their needs.

The five tenets described below should not be new to anyone familiar content management. However, we have worked with enough organizations, both large and small, to know that many businesses remain challenged by the fundamentals of web content management. The concepts are the same as they have been for years, but the technology has advanced, and all would be well advised to thoroughly review prospective purchases against these core capabilities. In fact, it will be very useful to review existing systems and processes against these tenets as well, as many user and scalability complaints are symptomatic of underlying problems with these basic capabilities.

1 Separation of content from presentation

Most content management systems have the ability to separate content from presentation, usually through the use of eXtensible Markup Language (XML) and templates. The structure imposed by this separation alone enables numerous contemporary capabilities. First, it facilitates content re-use across an organization's digital properties, streamlining the process of developing and managing content as well as ensuring a necessary level of message consistency. The personalization and socialization consumers have come to expect place heavy burdens on the generation of new content, and the ability to re-use existing content is a key aspect in the strategy to accommodate this need. Secondly, the structure enforced by the separation of content allows content to be published in numerous forms across all channels and devices. By example, a brand may wish to automatically tweet links of all newly published articles as an inbound marketing tactic. Without this imposed structure, it will not be possible to develop an appropriate 140-character headline, which a number of contemporary systems now facilitate out of the box. The separation principle also allows content to be shared across systems and applications. Since we view Web Engagement Management as the integration of WCM with web analytics, marketing campaign management, email management, CRM, social media management, and so forth, the ability to share unformatted content is a critical enabler. Finally, the ability to enforce brand uniformity across web properties, a challenge that keeps many senior marketers awake at night, is facilitated by this practice, given that look-and-feel consistency can be managed centrally and is no longer a responsibility of the content authors.

Separation of content from presentation is a common technical design philosophy, not exclusively held by WCM vendors. It allows developers and administrators to focus on the structure and navigation, while business users and subject matter experts focus on the content and creative design. It is worth noting, however, that there are different ways of addressing this problem, and not all WCM systems tackle this challenge sufficiently.



2 Content categorization

Much like the first tenet, content categorization is essential for meeting many modern-day expectations. It builds on the separation point above and involves the classification of content into structured taxonomies, grouping the content into logical, hierarchical relationships and describing it with metadata, or information about the content itself. Taxonomies, also known as controlled vocabularies, are a science unto themselves and are extremely useful. They not only enforce brand consistency by ensuring a common use of terms and classifications, but also allow content to be easily grouped into nodes, aiding the personalization and dynamic content delivery processes among many other things. As an example, if content is grouped into a node for “Industry,” all the products and services of the organization could be automatically filtered throughout a web property for a visitor given his or her selected industry. Likewise, a user could narrow search results by a facet equivalent to an aspect of the taxonomy.

Categorization also includes the application of metadata, which can be used to drive dynamic content on a site as well as to ease findability and searchability. Metadata management has long been one of the more tedious, and therefore underappreciated, processes related to managing web content. When authoring content, users tend to focus on publishing their content as quickly and accurately as possible. They rarely spend the extra time to add keywords and other descriptive data that will never be seen, but will most assuredly lead to more people reading the actual content. A published article can be re-used and exposed to a wider audience, for example, if it is categorized as a “feature article” or associated with certain topics via metadata and then dynamically revealed on more web pages. When users do take the time to add metadata, they often use free-form keywords rather than structured terms, so the benefits are suspect unless the author is extremely careful about using consistent terminology (a process that can be facilitated by a taxonomy). To account for these challenges, contemporary WCM systems provide varying degrees of automation and structure to support the process. Metadata fields can be required or optional; they can be auto-populated based on the content hierarchy, inherited, standardized according to a centralized list or taxonomy, and more. Given the high dependence of a site’s overall usability on metadata, it is surprising that more organizations do not give it the proper attention.

3 Facilitated editing

One of the primary objectives of any WCM system is to enable non-technical users to manage the content of the website without the direct involvement of IT. This has been the goal since the first systems were developed, and all vendors have attempted to achieve this with varying degrees of success. Users are able to not only populate the pre-developed templates with content items, but also edit and markup the content itself to the degree the organization is willing to allow them to do so. Unfortunately, many WCM buyers in the market today mistakenly believe all WYSIWYG editors are created equal, but fifteen minutes of testing by a hands-on user would quickly dispel that notion. Testing by “real” users who know the common pitfalls does not always happen prior to the contracting process. This is short-sighted, considering that an overwhelming percent of users’ time with the system will inevitably be spent using the editor itself.

While not all editors are the same, there are certainly features available in some that facilitate the editorial process far more than others:



- **WYSIWYG configuration.** The ability to administratively customize the markup capabilities and privileges available for all WCM user groups. Some users may be allowed to change the font size, for example, while others may not. This should be configurable. Most robust systems have this capability today.
- **In-context or in-line editing.** Technically speaking, these are two different features, but both allow the user to see what content they have privileges to edit, and then to navigate to and edit that content directly from a webpage, which appears exactly as it will when published. This has become much more common in the past five years.
- **Integration with MS Office.** The markup on content pasted from MS Office is notoriously problematic, and most vendors have not found a pragmatic way for users to avoid tedious work-arounds. With only an exception or two, most continue to grapple with this challenge, so be sure to understand the approach any candidate product takes if copy/pasting from Word is a frequent use case. (It usually is.)
- **Digital assets.** There are many flavors of digital asset management, but we are referring here to the process by which the editor enables the user to upload images and other media assets directly from the editor. Additionally, some editors facilitate cropping, resizing and other similar ad hoc modifications without involving any third party tools or desktop applications. These features can be huge time savers.
- **Forms builder.** Soliciting information via forms from web visitors is so common these days that having a simple form builder available for non-technical users should be mandatory for most businesses. Vendors vary widely in the level of sophistication of the forms themselves, but many offer at least basic capabilities while others require third party tools.
- **SEO and accessibility.** More and more organizations are enforcing the use of search engine optimization practices to help bring traffic to their websites. Web accessibility standards, such as Section 508 and those established by W3C, are required on US government websites and are advisable for most others. In addition to facilitating the effective use of these practices throughout the content creation process, some editors now provide SEO and accessibility reporting to check the resulting web content and help authors improve compliance with these standards.
- **Preview.** Many implementations in the companies we work with still do not have true preview functionality that shows the content exactly as it will appear once published. Beyond the basics, device emulation and previews are becoming more and more handy as content mobilization expands, and the ability to preview the page based on a visitor persona in order to simulate their experience is also becoming expected.

4 Workflow

Many mature WCM systems have sufficient workflow capabilities. However, we frequently find clients challenged with workflow either because they have over-used it in a misinformed attempt to automate complex business processes and end-to-end publishing lifecycles, or because they have hardly used its capabilities at all. Within the context of WCM, workflow should primarily be expected to support content approval processes. Too few workflows may result in absent or inefficient content governance



(who approves the content before it is published? Who reviews it? Does it conform to brand standards?). Too many means the organization is prone to bottlenecks and will have a tough time achieving the speed-to-market metrics it seeks. We do not intend to indicate that the content approval processes supported by workflow cannot be complex. To the contrary, contemporary systems now enable more sophisticated parallel and branched processes, among others; however, our advice in this regard is to contain the scope of the automated processes to content approvals rather than end-to-end content cycles.

Creating and managing the workflows themselves is one area of significant improvement over the years. Some systems make the configuration of workflows easier than others with visual interfaces for non-technical users, and they have improved the notifications and capabilities for the users involved in the processes. Can they receive email notifications? Do those notifications allow them to preview content when approving or to approve / deny / comment directly via email? Can they electively disable notifications, and if so, is there a dashboard of some sort with a consolidated view of the items that await their action?

Another contemporary feature heavily dependent on advanced workflows is localization, which is far more than the initial act of translation. Creating parent-child relationships between versions of translated content and requesting translations is one set of workflows. Following those through to fruition is another, being notified of down-the-line changes to a translated child page is yet another, and so forth. Keeping global content in sync is no easy task and requires a system with sufficient localization functionality and know-how, where many of these automations come out-of-box. These capabilities are commonly associated with Translation Management Systems, but some WCM systems now provide modules that facilitate this process for basic multilingual requirements without the need for third party tools.

5 Version control and versioning

Proper version control and versioning capabilities are essential given the complexities of today's environment. To differentiate them from one another, version control is the system's ability to prevent users from overwriting each other's work, while versioning is its ability to name, store and publish those revisions. At the turn of the Millennium, there were not many differentiators among mature systems with respect to these capabilities, but in today's systems there are plenty. While most still adhere to check-in / check-out as the standard practice of enforcing version control, allowing only one person to edit a particular item of content at a time, others facilitate more advanced, real-time collaboration on content items by frequently saving each person's work (similar to the popular Google Docs application). From a versioning perspective, there are numerous distinguishing capabilities, the most noticeable being side-by-side version comparisons with the use of highlights, colors and other visual cues to alert reviewers to the changes between versions. This can ease the approval process and speed the time-to-market significantly. Additionally, the revisions can each be published separately and simultaneously to different destinations, facilitating multi-channel publication, personalization, and/or localization in the right situations.

The most relevant applications of versioning are its ability to rollback to previous editions of content as well as its ability to facilitate multilingual content management. Rollback capabilities are crucial for organizations, especially with regards to legal and compliance matters. Most WCM systems allow each content item to rollback separately, while others can rollback an entire page or website to a specified date in the past by reassembling all the individual content items. We have seen WCM systems save organizations millions of dollars in fines as they allow them to prove their historical compliance with regulations in a



matter of minutes rather than weeks. From a globalization standpoint, versioning capabilities in advanced systems allow translated versions of content to be managed in numerous languages simultaneously, a requirement of more and more organizations today.

Conclusion

Throughout this paper, we have called for a renewed focus on foundational capabilities as enablers to the fulfillment of cutting-edge requirements. We have also highlighted some differentiators among these capabilities and discussed the complexities of today's environment that make their mastery essential. Certainly, organizations that struggle with the fundamental principles will have problems realizing advanced promises if they do not improve. However, we are not merely suggesting that the proverbial adage of "walking before running" applies to WCM. Rather, in the case of WCM, we suggest that the way one walks must also evolve to keep pace with the technology that supports it. Unfortunately, one cannot merely check the box and take comfort knowing that yesterday's well-implemented core technology and processes will inevitably suffice for tomorrow, meanwhile turning their attention to more advanced competencies.

What once may have been sufficient may prove to be a liability without constant evolution. As suppliers of contemporary WCM tools have expanded their offerings to capitalize on the progressive capabilities of the Social Web, so too have they innovated their primary functionality to address the ever-increasing complexities of the environment. The *entire* suite of WCM tools has advanced, from the nucleus to the bleeding edge, and organizations must keep pace with both in order to remain competitive.





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