

Guest Editors' Introduction: Rationalizing and Rhetoricizing Content Management

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While content management systems (CMSs) might be a new concept to many people in our field, content management as a practice within our discipline is not; our field has been studying it and practicing it for years, though under different headings: single sourcing, knowledge management, and course management (such as in the form of WebCT and Blackboard). We started our work on this special issue with a rather ambitious mission—to bring together some diverse perspectives on content management and CMSs, to both theorize and operationalize the content management practice, and to rationalize our participation in the broad domain of content management discourse. Grounded on the premise that technical communication requires information and knowledge management, this special issue is one of the first systematic and deliberate attempts to extend our perspectives, both theoretical and practical, about technical communication from the relatively static sphere of document design to the more dynamic horizon of content (information/knowledge) management.

UNDERSTANDING CONTENT MANAGEMENT

Content management, broadly defined, refers to the “process of collecting, managing, and publishing information to whatever medium you need” (Boiko, 2005, p. xv). A content management system, then, is any systematic method designed to organize and distribute information, while content management system software automates the system, typically providing “a platform for managing the creation, review, filing, updating, distribution, and storage of structured and unstructured content” (White, 2002, p. 20). The industry of information management and distribution is increasingly interested in CMSs, as witnessed by the ninth annual Content Management

Strategies conference in 2007 (<http://www.cm-strategies.com>); the presence of numerous consulting firms offering advice about how to manage information assets; and a rising tide of books devoted to teaching people how to use XML to “datatize” text, separate form from content, and make it possible to search, sort, and repurpose information on the fly. The effect of writing in these electronic environments has been profound for technical communicators. Rather than thinking of the end product of their work as tangible products or even documents, they are beginning to see their efforts as part of an endless flow of information. At the same time, working in these environments has proven extremely problematic.

Content management has a direct bearing on our field because a central issue in content management is the role (or a lack thereof) of technical communicators in the process of CMS design and implementation. One common problem facing content management systems is the disproportionate ratio between cost and effectiveness. On the one hand, companies are spending billions of dollars on such systems—\$0.83 billion in 2000 and \$3.27 billion projected for 2008 (“Web content,” 2002). A majority of companies—over 70%—consider content management to be an issue for intranet development and are developing solutions for it, either internally or externally (“Cracking,” 2001). On the other hand, a large percentage of such systems fail to yield the kind of effectiveness that is even remotely acceptable by industry standards. As Stephen Jefferey-Poulter (2003) has claimed, CMS implementations have rarely been successful (p. 159).

The failure of content management systems can be attributed to several factors. For one thing, “[a] CMS is probably the most complex rollout an organization will manage” (White, 2002, p. 22), involving multiple departments and personnel groups that often have little in common. The purpose of CMS software is to centralize all communications practices, to standardize layout and design, and to increase efficiency when it come to distributing information, ensuring that the company stays on message and does not issue redundant or conflicting statements. In order to achieve this level of control, every piece of information an organization issues has to originate from within the CMS database, and thus everyone writing for the organization has to get used to creating, storing, sharing, and publishing within the system, which means that nearly everyone has to change his or her writing practices to fit inside the CMS’s framework. Changing the way people work is an immensely difficult task, especially if the changes most clearly benefit the organization while doing nothing clearly beneficial for the individual users. Add to this the notion that all departments now have to inhabit the same technological writing space, and you can see how complex the business communications dynamic becomes when you roll out a CMS software solution.

Another factor contributing to the difficulty of CMS implementation is that most content management systems take a systems-based approach toward managing content/information/knowledge at the cost of considerations for content and user needs. As Jefferey-Poulter points out, most CMSs do not allow for a wide range of exception and improvisation and may eventually demotivate users

(p. 159). What also gets lost amid all this focus on technology (systems and software) is the content—“not just any content, but useful content” (Robertson, 2002). Too often, in implementing CMSs, businesses ask what technology should be used to manage the information but overlook the more important question of what information the business needs (Robertson, 2002). As a result, the content creators, i.e., technical communicators, are “often the worst served by a new content management system” (Robertson, 2002).

For a content management system to be successful, Hall (2001) argues, two important factors must be emphasized: end users (documentation specialists) and user needs. This focus on users and their needs is not totally lost on practitioners engaged in the discussion of CMSs (see, e.g., Baker, 2002; Hummel & Lechner, 2001; Lombardi, 2004). But as a community, technical communicators have yet to fully engage in the conversation.

RATIONALIZING CONTENT MANAGEMENT RHETORIC

With users—technical communicators—being at the center of CMS implementations, it is only logical for teachers and researchers in technical communication to join the discussion. With all the buzz from the industry about CMSs and the eventual, and in fact rather urgent, need for us to teach content management in our technical communication courses, it is high time for our field not only to gain a better understanding of CMSs but also to formulate a theoretically sound and pedagogically viable approach to content management.

More specifically, we see several important reasons for the involvement of technical communication researchers and practitioners in the design and implementation of CMSs and an exploration of relevant issues. First, the introduction of content management and content management systems promises a change of revolutionary nature in our conceptualization of the field of technical communication and what we teach. The advent of content management systems has not only created a new industry in which technical communicators can find new opportunities if properly prepared, but it has radically altered the field of technical communication. No longer can writers think in terms of texts or even publications. They have to start thinking in terms of asset management: the strict separation of form and content to allow for seamless repurposing of content, data mining, reduplication of effort control mechanisms, and writing in a collaborative environment with multiple authors and multiple purposes feeding off of and contributing to a conglomeration of assets that collectively make up a content archive. In other words, CMSs are transforming text into data, and the discipline of technical communication will never be the same.

Second, there is a glaring lack of involvement in CMS design by technical communication practitioners, teachers, and researchers. In most cases, even though CMSs are designed to be used by technical communicators, CMS design and im-

plementation in business settings, and sadly in university settings as well, involves only managers and IT personnel such as developers. The most important part of this whole puzzle—the end user, i.e., technical communicator—is often left out of the process. The very expression *content management* excludes any idea of writing or communicating and focuses on information independently of the people who produce or consume it. Nevertheless, these systems seem to promise so much in the way of centralized control that we cannot in good conscience graduate people in technical communication who are not prepared to work in these environments. And given their imperfections, we would be doing a great service not only to our students but to their employees as well if we can graduate people with the skill to critique and improve CMSs.

Third, research in such areas as single sourcing, knowledge management, and course management is already being done in our field. Furthermore, some technical communication teachers have been designing their own content management systems or customizing existing software to meet their own pedagogical needs. Yet we have not formulated a systematic conceptualization of and approach toward content management. In addition, as far as we know, books on content management systems have almost exclusively approached the topic from the practical perspective. In other words, they teach you how to design and/or use such systems without critical examinations of why such systems should be used in the first place and why they succeed or fail. Nor do they consider what effect working in such environments has on writing as a practice.

RHETORIZING CONTENT MANAGEMENT PRACTICE

In answer to such a need for more critical analysis of the content management practice, this special issue attempts to critically examine this practice from both theoretical and practical perspectives. It explores content management and CMSs as conceptual models, as information workflow strategies, and as internal-external communications environments that affect how writers write. The authors here investigate not just the *how* for content management but the *why*, not just to rationalize the content management practice and our participation in the practice but to rhetoricize such practice, i.e., to construct and deconstruct the discourse surrounding content management and to contextualize the design and implementation of CMSs for the benefit of not only the end result—information design and dissemination—but also the end users—technical communicators.

In “Coming to Content Management,” Bill Hart-Davidson, Grace Bernhardt, Michael McLeod, Martine Rife, and Jeffrey Grabill use a rhetorical approach to explore content management in its capacity to guide technical communicators and others involved in the process in their decision making about knowledge creation, information arrangement, tools selection, and workplace practice design. In their

opinion, “the process of coming to content management touches nearly everything about the culture of writing in an organization, beginning with how texts are understood and encompassing every step of the text generation life cycle up to and including the way a text should behave when a user interacts with it.” More importantly, they argue, organizations should view content management “as a change in the technological and social infrastructure that makes their organization work.” In their analysis of their two consulting experiences with Web content management, one with a national professional organization and the other with Michigan State University Libraries, the authors explore the dynamics as well as the complexities of content management and focus on relationships between information and people as well as the needs of end users. They caution that many aspects of content management are not yet well understood in technical communication, including, for example, how to balance information and people needs, how to define the role of communication and technical communicators in the content management practice, how to interpret the impact of the “fine-grained changes in writing practices” brought about by the content management practice on the work of writing, and how to better understand writing practices where “market, organizational, and rhetorical vectors intersect.” Nevertheless, the authors see promising implications of content management for technical communication: how workplace writing research may help transform organizational cultures and how technical communicators are in a capacity to provide expertise and critical services in helping small businesses and nonprofit organizations in their transition to a new infrastructure.

In “Content Management and the Separation of Presentation and Content,” Dave Clark scrutinizes a prevailing notion within content management practice—that of the separation of presentation (or form) from content. Contextualizing his discussion of the notion within its historical contexts, Clark delineates the different distinctions drawn by different scholars, fields, and practices between presentation and content and discusses their implications for content management. Drawing on research from such areas as politics, historical rhetorical theory, architecture, and technical communication, Clark argues that, while the separation of form from content is not a new concept, “no content is [truly] free of presentation” and that “[c]ontent and presentation are never separated.” Within the content management context, therefore, Clark suggests understanding this separation in two ways: (a) as content being complete texts, and presentation being output structure, navigation, and visual style; and (b) as content being content modules, and presentation being output structure, navigation, visual style, and genre definition. This separation, dictated by the nature of structured writing and single sourcing and by the technological nature of content management systems, is perceived in different ways in terms of its affordances by different participant groups involved in the content management process. These varying perspectives result in potential changes for technical communicators: new business pressures, new complexities in task and process management, changes in what it means to write genres, standardizing and

enforcing presentation, and new user expectations. Clark's in-depth, critical examination of the notion of separation of presentation from content no doubt deepens our understanding of one of the most critical distinctions about content management in the context of traditional, document-based technical writing.

Rebekka Andersen, on the other hand, in "The Rhetoric of Enterprise Content Management," problematizes the overall rhetoric of enterprise content management (ECM) and deconstructs the assumptions underlying ECM adoption. Business leaders, who are often the decision makers in the adoption and implementation of ECM systems, "tend to examine the value of ECM solutions and their disparate applications from a production process model, the extent to which the technologies promise to increase process efficiencies and reduce maintenance and system costs." Such an efficiency- and cost-oriented approach renders business leaders extremely susceptible to the kind of rhetoric ECM vendors employ to market their systems: bigger ROI, reduced time to market, increased worker and process efficiency, improved content quality, and increased knowledge sharing and collaboration. What gets lost amid this ECM vendor rhetoric, points out Andersen, is any consideration of whether such ECM solutions meet the needs of technical communicators, whose expertise is not sought "in the planning of ECM initiatives and implementation processes." Compounding the problem is the fact that technical communication researchers and practitioners are often confined to their own discipline in their discussion of content management solutions and are not actively participating in the content management discourse in the business world. To make ourselves a force to reckon with in the content management discourse, argues Andersen, we need to raise the visibility and accessibility of our scholarship in this area, go beyond our focus on end users and rhetorical problems, and make strong business arguments for rhetorical work so that those making critical business solutions will stop "view[ing] ECM as a technical solution to the sociotechnical and rhetorical challenges of empowerment, collaboration, quality, usability, and technology adoption." Andersen's piece provides a much-needed critical voice in examining the content management rhetoric in the business world and in strategically positioning technical communicators in the planning and implementation of content management solutions.

Also recognizing the plight of technical communicators confronted with content management systems and single-sourcing tools and the lack of adequate attention to the poor usability of such writing tools, in "Metadata and Memory" Stewart Whittemore approaches the topic from a different perspective "by turning to the rhetorical canon of memory as an appropriate source for insights into how stored information can be flexibly retrieved and used during composing activities." One of the key aspects to working within a content management environment, according to Whittemore, is the difficulty involved in understanding the relationships between different pieces of information, i.e., understanding and remembering metadata, because the writing environments afforded by the current content man-

agement systems “do not provide adequate means for integrating metadata into the composing process,” “overburden writers” with a high demand for both long-term and short-term memories, and “fail to adequately mediate these composing activities.” A potential solution to this problem, proposes Whittemore, can be found in the heart of technical communication theory—the rhetorical tradition—and, more specifically, the rhetorical canon of memory. To Whittemore, the rhetorical canon of memory’s “concern for retrieving and adapting existing knowledge to the exigencies of shifting rhetorical situations” provides valuable insights into tackling some of the contemporary issues confronting content management: “content customizability and granularity, information retrieval, and on-demand delivery.” Whittemore believes the mnemonic systems employed by ancient rhetors offer practical implications for the design of the memory tools in content management systems. For example, as a solution to the long-term memory problem, the spatial visualizations from the Ciceronian tradition could suggest that future content management systems should afford the writer “the ability to easily form a ‘compositive image’ of her text-in-progress or to understand that text’s relationship to other content.” At the same time, as a solution to the short-term memory problem, the Quintilian tradition’s view of the physical writing surface as a structured space, and thus a means for visual memory, to foreground the image of the writer’s text, implies the possibility of content management system design that could afford means for the writer to use her own text to “keep track of certain pieces of metadata during composition.”

What does all this discussion about content management issues mean, then, for our curriculum design? That is precisely the question, at least part of it that Charlotte Robidoux attempts to answer in her article. In “Rhetorically Structured Content: Developing a Collaborative Single-Sourcing Curriculum,” she examines three prominent approaches of structured writing: the project-based, bottom-up approach by Kurt Ament, who outlines methods of modular writing for 19 different modules; the information modeling approach proposed by Ann Rockley, who adopts a bidirectional approach to structure by considering both high-level analyses and explicit guidelines; and the tiered-information approach by JoAnne Hackos, who “developed a theory of structure that consists of three components: an Information Model, information types, and content units.” Drawing on her own experience of structured writing design at Hewlett-Packard, Robidoux shares some specific ideas about designing a collaborative structured writing curriculum by describing what such a curriculum looks like. Her sample structured writing curriculum includes four modules: defining structure, structuring content, analyzing content, and reusing content. For each module, Robidoux lays out the learning objectives, suggested readings, discussion topics, and possible assignments. For anyone considering a structured writing curriculum, Robidoux’s sample would be an excellent starting point.

We are pleased with the range of topics covered in this special issue. Even though the nature of the journal limits the number of articles we could include, we

believe the perspectives represented here are relatively diverse. Content management, no doubt, is still a relatively new area within the academic circle, although it is by no means a new practice in the industry. Despite the pioneering efforts of some of our peers in this area, most of us, including practitioners and business decision makers, are still grappling with the critical issues of content management, as evidenced by the burgeoning discussions in both academia and the industry. We hope, with the assembly of this special issue, not so much to offer definitive answers on these issues as to open up discussions for a better understanding of the phenomenon and its implications for technical communication.

ACKNOWLEDGMENTS

We wish to acknowledge the hard work of our contributing authors, whose perspectives on content management will no doubt bring fresh insight to research in this area. We also want to thank Mark Zachry, the *TCQ* editor, for his meticulous guidance and incredible patience in working with us through this entire process. Last but not least, we wish to express our sincere gratitude to the following reviewers, whose unselfish and invaluable work ensured the quality of the publications in this special issue: Jennifer Bowie (Georgia State University), Paul Dombrowski (University of Central Florida), Fred Kemp (Texas Tech University), Carol Lipson (Syracuse University), Tom Moriarty (Salisbury University), Tim Peebles (Elon University), Todd Reid (Microsoft Corporation), Carlos Salinas (University of Texas, El Paso), Michael Salvo (Purdue University), Dickie Selfe (Ohio State University), Lee Tesdell (Minnesota State University, Mankato), and Mike Zerbe (York College).

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