INTRODUCTION

SUMMARY

- Argues that single sourcing puts pressures on the workforce and the very conception of "writer" and "document"
- Examines literature on change management for clues into managing the impacts of single sourcing on writers

The Implications of Single Sourcing for Writers and Writing

LOCKE CARTER

The topic of single sourcing—producing documents designed to be recombined and reused across projects and various media—has been covered in great detail in the past several years in books, trade journals, conferences, and academic journals. And during this time, technical communicators have developed the ammunition necessary to make the *why* and *how* arguments about single sourcing. The *why* arguments involve cost-cutting and revenue boosting, increasing the quality of products, greater efficiency and flexibility in production, and faster responsiveness to a constantly changing marketplace.

The *how* arguments are as varied as using tagged format languages like SGML and XML to employing broad enterprise content management tools for version and production control. Indeed, single sourcing is an innovation that has rapidly evolved from being a futuristic vision of the field only a few years ago to a realistic document practice that is practical for writing shops of all sizes.

The *hows* and *whys* of single sourcing are topics that are now hard to miss in print, at conferences, or in gatherings of technical communicators. Rather than summarize and define single sourcing, I will point the reader to an excellent review of the literature by Joe D. Williams, whose essay begins this special issue. He selectively summarizes the key works that define the issues in single sourcing, as well as the sources that contribute to this discussion of the implications of the practice for our field.

Although the field is becoming comfortable with the concept of single sourcing, we have barely begun to discuss what happens once everyone is doing it. Which of our paradigms will be pressured to shift and adjust to the new techniques? What will writing be like when writers don't really write any more (at least as we define *writing* in a traditional sense), but instead develop content? How will single sourcing change our emphasis in teaching technical communication in the future? These questions involve some of the aspects of single sourcing that the following issue seeks to address. We aim to move beyond the arguments about *why* to single source or *how* to single source, and to start a discussion about *what single sourcing means for the writer, for documents, and for the field in general.*

One might reasonably demand to know why this topic needs a special issue of *Technical communication.* After all, I do not recall a special issue on the impact of "cut-and-paste," "drag-and-drop," or other hot topics in the past. Why should a special issue be devoted to single sourcing and its impact on writers and writing? About a year ago, near the end of a course I was teaching on publication management and single sourcing, one of my students related what she had heard at a local STC meeting. Two technical writers were talking before the meeting started, and one of them said that he was studying single sourcing and was interested to know what the other writer thought about it. The other writer said something to this effect: "Our management said they're thinking of implementing single sourcing, and we told them that if they do it, we'll all walk!"

As soon as I heard this tale, I wrote to George Hayhoe to propose this special issue because it raised in my consciousness something that I had already begun to realize through implementing, studying, and teaching single sourcing. The technique has broad implications for writers and writing that go far beyond software use, content management, or production initiatives involving quality, speed, or efficiency.

As a practice, single sourcing puts pressure on the seemingly stable constructs of the writer and the document in ways that many previous innovations have not. After all, no one (to my knowledge) has declared they would quit their jobs if management implemented a new stylesheet calling for sans serif typeface for all company documentation, switched from FrameMaker to Quark, or (at least in recent times) replaced the office Macintosh computers with Dells. Why would an entire team of technical writers threaten to "walk" if single sourcing were implemented?

They would quit for the same reason that factory workers threaten to quit if management decides to bring in robotic welders. When production techniques are changed radically, workers often perceive this change as a threat to their jobs and their way of doing things. One of the consequences that organizations face when they adopt new technology is that many "business as usual" practices are suddenly thrown into flux, and this is the case with single sourcing. Like all technical innovations, the technique involves much more than mere artifacts, purchases, or operations. It is a technology unto itself, and here I am defining technology very broadly as any technique that is codified, implemented, taught, and instilled with organizational values. Using this definition, it is easy to view single sourcing as a technology itself, quite apart from the tools that are used to implement single sourcing.

Andrew Feenberg (1999), the philosopher of technology, argues convincingly about how such technologies may produce gaps between those who implement and administer them and those who use them. These gaps alienate the users of technology when they feel as if their input is needed or desired, even if they are the daily users of (and hence, practical experts on) these technologies. For our purposes, we can recognize that it is one thing to implement single sourcing, but quite another to be the writers, graphic designers, and editors who work with such a system, especially if the knowledge those specialists have is not valued in the zeal to implement the technique.

For Feenberg, those who have practical knowledge of technologies need to be participants in the maintenance, design, and administration of those technologies to feel like members of the community and provide healthy balance to the system-centered technologists. He terms this relationship between designers and users "deep democratization."

In the absence of such participation, the effects of radical change—and starting a single-sourcing initiative certainly qualifies as a technology innovation that radically changes an entire manufacturing process—may disenfranchise writers. The fear of being left out or run over by the machinery of efficiency is enough to cause writers like those described above to quite their jobs. The key concept in these circumstances, I believe, is rapid or radical change. Writers have clearly adapted in the past and will continue to do so, but adapting to incremental change is considerably easier than adapting to sweeping change.

ORGANIZATIONAL CHANGE

In looking at the literature on the effects of technological change on employees, two common themes emerge. First, intense change may wreak havoc with employees. Roskies, Liker, and Roitman (1988) argue that, in an environment of intense technological change, employees perceive themselves as winners, losers, or sideliners. Their findings suggest that one of the only differences between the winners and losers is the losers' belief or perception that they will no longer have a place in the company when technological changes are complete. And this perception is not based on job title or time with the organization.

Stensaker and colleagues (2002) identify a situation they call "excessive change," the perception by employees that change is too intense and too frequent for them to digest. Excessive change may lead to "initiative overload, organizational chaos, and resistance to change" (p. 298), even in employees who are supportive of change. Schalk, Campbell, and Freese (1998) argue that the key to employee change is the "psychological contract," the "employee's perception of the reciprocal obligations existing with their employer" (p. 157).

And these observations lead me to the second obvious theme in change literature: managers must examine how they introduce and communicate change initiatives if they are to avoid this chaos, fear, and resistance. Indeed, this care toward the employee's psychological contract, more than an employee's attitude toward change itself, determines the degree to which change is accepted or rejected. As Schalk, Campbell, and Freese observe, "If, in the implementation process of change, the current psychological contracts of employees are taken into consideration, and if the way of communication, support and participation is in agreement with the employees' contracts, violations of contracts may be prevented," thus enabling change while retaining employees (p. 162).

One of the best ways of accomplishing this goal is to share the big picture of organizational strategy with all the affected workers (Stensaker and colleagues, p. 310). But it is not enough to simply explain the big picture. In analyzing communications about change, Lewis (2000) discovered that not only are initial vision, mission, and desired achievements critical, but that ongoing communications that repeat, reframe, and often evolve those values are integral to avoid stalled or failed change programs.

The chaos and fear of writers facing a shift from a craftsman model of document production to a single-sourcing model is certainly understandable (and perhaps justified) to a certain extent. Let us return to the era of the adoption of desktop publishing and personal computing in general. Vir-

tually every business that had formerly employed typing pools to produce text suddenly no longer needed the typing pool. Law offices, newspaper firms, and technical writing organizations all shifted the means of production of texts from a model that involved the separate jobs of writer, layout, typist, editor, printer, graphic designer to a model that combined many of those functions into one or two writers, some computer software, and personal printing technology. The typing pool was disbanded, its members either fired or offered a chance to retrain for word processing.

The shift from the unique production of individual texts to single sourcing of documents holds the likelihood of similar upheaval, and two of the authors in this issue treat the subject of how to deal with the organizational effects of single sourcing. Ann Rockley, who has probably done more than anyone to clarify the issues facing writers in the area of single sourcing, cautions us to avoid the tunnel vision of technology in implementing single sourcing and argues that the primary nature of change in your organization will involve your people, *not* your technology. Jeanette Bottitta, Alexia Prendergast Idoura, and Lisa Pappas examine the shift to single sourcing as a case of organizational change, emphasizing the nature of writing teams undergoing such changes.

INTEGRATION/CONSOLIDATION OF WRITERS' SKILLS

One of the key questions involving technology of all kinds is how it affects the role of the individual writer. On one side of the issue is the possibility that single sourcing creates a new kind of writer, one who is more integrated than before. And by "integrated" we mean that the writer is required to integrate more skills to retain the self-image (and the job description) of writer. In the past, we have certainly seen a trend toward integration of technologies into writing. For example, before desktop publishing, one would not have expected writers to know much about font or layout, as they were specialists in text, grammar, style, rhetoric, information, or any one of a number of fundamental "on the page" skills. After widespread adoption of desktop publishing, which put the means of production into every writer's hands, writers' job descriptions were likely to include a requirement that they know layout software, understand typefaces and white space, and participate in the physical publication process in ways that were previously unheard of.

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In 1997, Henrietta Shirk cast the issue of technology in terms of consolidated versus expanded roles for technical communicators. She argued that we initially

> *simply attempt to integrate new technologies into our current practices. This period of integration is followed by a developing awareness of transition from old skills and concepts to new ones and by an evolving redefinition of the roles of the technical communicator in relation to technology. These events expand the field itself by creating accepted new roles within it. (p. 371)*

These changes are not isolated from each other, however. They are iterative, for "integration itself at some point breaks into further expansion, and so the cycle of change is continually repeating itself" (p. 372).

Does single sourcing follow Shirk's iterative view of the writer and the writer's roles and skills? Or does it spell the death of the unified writer? The jury is still obviously out, but one possible consequence of single sourcing is that the unified writer will be no more. The build-up of skills that writers possess may have come to a head; writing may be de-coupled from information design, from layout, from grammar. It may even come to pass that we don't have writers any more—just content developers. In this issue, Michael J. Albers takes such an approach, seeing single sourcing as the technique that forces specialization on the field, disintegrating the skill sets that have conglomerated into the unified concept of all-purpose writer. He theorizes that this disintegration impacts the career path of what we have traditionally called technical writers and concludes that the way one will advance in the field may be quite different under single sourcing.

It is possible, however, to view single sourcing as a force that points in the other direction, toward the tighter integration of skills, as Robert Kramer argues in this issue. He theorizes that the writer has an expanded or consolidated role, one that requires the further integration of skills to include management and technology specialists. He cautions us to recognize that this role, however, is not something that is desired by the writer but is instead demanded by the market and by technical requirements.

OTHER CONTEXTS OF SINGLE SOURCING

While the majority of the writers in this issue argue that single sourcing clearly impacts document organizations and personnel, two articles remind us that much more is at stake. If single sourcing points the way to the future of writing, then education must certainly participate in theorizing, analyzing, and teaching the concept. Michelle Eble takes on the issue of how a single sourcing world demands a different approach to teaching technical writing. Instead of teaching only uniquely authored documents, we should modify our courses to in-

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clude units on information modeling and structured writing. By expanding our own definitions of writing processes and products, we can provide our students with strategies for learning how to participate in single sourcing.

We may also wish to examine the technique of single sourcing through the lens of culture. Debbie Wiles combines two of her interests, single sourcing and China, and reports the results of her initial research into whether single sourcing involves certain cultural assumptions that would increase or decrease the chances that Chinese technical communicators will be able to implement single sourcing. While Chinese communicators are not currently engaged in single sourcing, Wiles concludes that the cultural, technical, and organizational prerequisites are already in place, and that the technique of single sourcing represents an ideal avenue through which Western and Eastern technical communicators can collaborate and learn from each other.

It is far too early to know how things will turn out. Our goal in presenting this special issue of *Technical communication* is to advance the discussion about single sourcing beyond economics, quality, and speed. In doing so, we also hope to initiate further debate about the very nature of writers and writing in light of technology innovation. The specific technology is single sourcing, but the broader issue involves how we integrate any technology into the field, how this integration redefines our processes and products, and how we perceive our own individual and organizational relationships in light of technological change. TC

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