SUMMARY
◆ Presents results of a 2003 survey with influential practitioners on innovation, global concerns, management, the impact of new technologies, and future professional roles
◆ Provides recommendations for the future focus of the profession

The Future of Technical Communication:

How Innovation, Technology, Information Management, and Other Forces Are Shaping the Future of the Profession

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In December 2003, I completed a master's degree at Polytechnic University in New York City in the management of technology (MOT). The following research was conducted as one of the requirements for that degree. This article looks at the future of technical communication from the point of view of many of its most seasoned and influential practitioners. And it wraps that point of view around the themes of the MOT program—innovation, global concerns, managing technical leaders and practitioners, the impact of new technologies, and the future role of technologists in organizations. It concludes by providing a series of recommendations for the future direction of the profession.

INTRODUCTION

Technical communication is the translation of the language of the expert into the language of the novice. (Kistler 2003)

In May 2003, at the STC's 50th Annual Conference in Dallas, TX, closing session presenters made some startling and eye-opening statements. According to De Murr, manager of the technical publications department for Walt Disney Imagineering and STC fellow, who attended the session,

. . . the speakers were presenting a doom and gloom view. I spoke to people afterwards who heard the same message. There was a negativity that was saying that if you didn't get an MBA, you might not be employable with your current skills. They were implying that the technical communicator of five years ago would not survive five years from now—that the whole profession would go away. (Murr 2003)

The response to the presentation was lively. Many walked away wondering if there was a future for our profession at all.

The STC itself has seen the need to revitalize and "also recognizes that the organization must evolve to be more competitive moving forward." To achieve this evolution, the STC has formed a Transformation Team charged with "developing and refining the future state vision and charting the operational course to transforming STC from its current state to that future vision" (Society for Technical Communication 2004).

So it seems that we as a profession are indeed at some sort of crossroads. What does that mean for the profession?

Where are we going? Will we disappear? Or will we, as we have done many times in the past, reinvent ourselves to face new requirements? What do we need to do differently or need to be thinking about to survive?

METHODOLOGY

To discover what the tide of thinking is in the field today, I conducted a series of interviews in October and November 2003 with a group of experienced practitioners in our field. I also sent a questionnaire covering similar topics to a separate group of participants worldwide. The 28 participants included senior-level professionals, in large corporations and small, located across the United States and in international locations including Canada, the U.K., India, Austria, Japan, and the Republic of China. The group included recruiters, managers, consultants, hands-on practitioners, academics, and individuals who, from their participation in professional society activities and/or prominence in the field, have been known to be thought leaders in our profession.

I formulated the interview questions around what I knew to be key themes in the field today and also to satisfy the requirements for my degree program. (See Appendix A for the questionnaire used for all participants.) Thus, I will be discussing the responses in light of themes that are impacting the management of technical communicators as a component of the larger notion of the management of technology. These themes include such ideas as our skills and the future role of the technical communicator, challenges facing the managers of technical communicators, the importance of our function and our role in innovation, our concerns with global business and technology issues, the education of our future practitioners, and some of the technologies that affect us today and will affect us going forward.

The responses from the questionnaires and interviews were analyzed and distilled into the set of action points and recommendations presented at the end of this paper.

WHAT IS A TECHNICAL COMMUNICATOR TODAY?

Technical communicators are the anthropologists of the technical world for their ability be participant-observers in the efforts in which they are involved. (Decatrel 2003)

A technical communicator, as the STC defines the role, would be anyone whose "job involves communicating technical information" (Society for Technical Communication 2004). This may mean anyone whose professional job title or daily job role includes technical writing, editing, illustration, Web design, or any number of related functions. In more sophisticated environments, he or she might be testing usability of products and contributing to the design of such products, especially those elements that are used to convey information.

I presented my participants with a list of skills that are common to practitioners in our field and asked them to identify the five they thought were most important (see Appendix A, Question 7). The temptation of most participants was to want to check them all off—implying that all the skills shown are important. Most struggled to select only five.

But the one common denominator was writing—everyone agreed that a technical communicator must, at the core, be able to write. "I wish I would not have to check off writing—that I could take that for granted," says George Hayhoe, professor and director of the master of science program in technical communication management in the School of Engineering at Mercer University. "Today's students are really into online communication and multimedia communication. They find writing and editing to be less interesting. They think they won't need these skills" (Hayhoe 2003a). But the lack of interest in it does not eliminate its importance.

Cheryl Lockett-Zubak, president of Work Write, Inc., author and user assistance specialist, notes that "technical skills may initially get you the job. But technical skills are not what will make you excel at the job. Writing is. You have to be able to do both" (Lockett-Zubak 2003).

A significant skill that I did not list is one adeptly identified by Jack Molisani, a former STC chapter president, whose business includes outsourcing and placement of technical communicators. He labeled this skill "the evaluation of importance," the ability to recognize what is important in a situation or in a set of information. I have been searching for a name for this trait for years, for it is a core skill that I have seen lacking in many senior-level professionals. It's the proverbial ability to "see the forest for the trees" and to still know which individual trees matter. It's the ability to ask the right questions of a subject matter expert so as to "cut to the chase" and not waste a busy person's time. It's the ability to know what to include and exclude from an explanation to make it accurate and complete, without being overly detailed. And it is absolutely crucial to success in our field.

Some additional skills raised by the participants included:
- Being proficient at instructional design
- Being big-picture oriented and project oriented
- Having a user orientation
- Understanding readers and reading, and understanding how people read, use, and understand documents
- Being a quick study
- Having strong interpersonal skills
- Being good at team building

The role and importance of the technical communicator has been changing over the last few years in most organizations. We are becoming more than writers. We are also becoming product usability experts. Whitney Quesenbery, user interface designer and consultant, says, "What I have seen is that documentation departments are beginning to see that they cannot operate in a 'ghetto' just focusing on manuals. Communication with users takes place in the [user interface], in documentation, but also on extranets, Web sites, and a broad spectrum of different channels" (Quesenbery 2003). And it is into all of these channels that the technical communicator has been moving in recent years.

But no definition of the technical communicator today would be complete without a mention of the persona of the technical communicator. I have been hiring and managing technical communicators for 15 of my more than 20 years in the field. We are, as a breed, an eclectic and unusual group of people. Participants in this study agreed that people drawn to this field are often introverted, smart, artistic, creative, perfectionistic, rigid, and fascinated with details of writing and technology. Saul Carliner, assistant professor of educational technology at Concordia University, Montreal, Canada, summed it up well: "We need to learn to be flexible and get along. Although no formal study has been done, there is a preponderance of evidence on our traits. We are clerk-oriented and rule-bound. While periods matter in our jobs, they don't matter in people's lives" (Carliner 2003).

Thus, coupled with our complex skill set is a complex personality that puts us in our unique place in the professional world.

WHAT FORCES ARE AFFECTING THE FIELD?

I've gone W-2 for the first time in 20 years. I couldn't pay myself out of my own business for a year. At the point of survival, I'm taking a job. (Glick-Smith 2003)

Judy Glick-Smith, owner of her own technical communication business, took her first full-time job in over 20 years in October 2003. Her former business that specialized in technical communication placement, projects, and outsourcing closed its doors on 30 September 2003. She now has started a new business, which she will get off the ground while supporting herself with her new full-time job. Her new business will have an entirely new focus.

"For technical writers, writing is only 15–20 percent of the job," she explains. "In my new business, I'm now selling to the 80 percent of the job, which is the analysis piece." In her new company, she will focus on selling services to an entirely different audience—not documen-

tation or development managers, but presidents of companies who need the kind of skills and intelligence she can offer. She says, "If we don't recognize quickly what the impact of the current environment is going to be, we could die out, and the business analysts and product designers will take over. All of today's technical communicators will be working at Wal-Mart and driving buses" (Glick-Smith 2003).

Reduced IT spending and the economy
Glick-Smith's story is just one of many I heard in the course of my research about how hard times have been in our profession for the last three years. It's thought that as many as one-third of us have lost our jobs, and most of those are senior-level people (Lockett-Zubak 2003). Membership in the STC is down as much as 20–25% (Hayhoe 2003a; See 2004).

Peaking at a high of over 25,000 members in 2001, the STC saw a 9% drop in membership in fiscal year 2002, the largest single year drop in 30 years (See 2004). "In the past," says George Hayhoe, "membership usually increased during a downturn as people invested in it as a means of forming contacts and assisting in their professional development. Some people I spoke to at the STC conference are seeing their third recession since the early 1980s. But this time, business is not coming back" (Hayhoe 2003a).

"The economic slowdown has hit our community particularly hard. Budgets have been slashed. The technical communicator is not seen as essential. Technical communication departments are being shut down or cut down to the bare bones. So the work that is being done is also bare bones," says Donna Timpone, STC chapter president and owner of her own technical communication business, UserEdge (Timpone 2003).

Even at large companies that are heavily dependent on documentation, the effects are being felt. Amy Logsdon Taricco, user assistance manager for the Tablet PC project at Microsoft, has felt the impact.

Reduced IT spending has a huge impact. The budgets are severely tight. We have to justify our resources like crazy and do more with fewer people. We have to continually justify the value added in design, user resources, and user experience. I need to justify that this position for a technical writer is more important than another position they might want to add for a researcher. It's very difficult, especially compared with years ago. (Logsdon Taricco 2003)

The importance and role of the documentation function
All too often, the technical communication function is not seen as vital to an organization. George Hayhoe

notes, "The role is generally less significant than it was five years ago. Companies are offshoring it and downsizing it. That indicates that technical communication is not seen as strategic—not a core business function" (Hayhoe 2003a).

This lack of a strategic orientation is rooted in our often being seen as a service function and not as a bottom-line contributor in most firms, leaving the manager of technical communication with little or no political clout in the organization.

JoAnn Hackos, director of the Center for Information-Development Management and well-known author in the field of documentation management, says she believes that managers are challenged to take information development organizations into the main stream of their companies' work rather than being seen as a "service" function. "There is a constant battle to show value, which means that managers have to develop a clear notion of what value means in a larger corporate sense. I see too many cases where managers tell me that they aren't permitted to interact with customers. I don't see how we can possibly advance our standing without customer contact. Otherwise we are working in a complete vacuum. Work done without customer understanding is easily outsourced off shore" (Hackos 2003).

But strides have been made to make that shift to the mainstream. The model for information development at IBM is an example. At IBM, technical writers are equivalent to other technologists in title, and their influence is growing.

IBM's Andrea Ames calls herself an information strategist—"a captive information architect." She was one of the presenters at that controversial closing session of the STC Annual Conference in 2003. She is a cross-divisional internal consultant at the corporate level. "I tell people what I do all day is attend meetings and influence people." She says that the role of the technical communicator at IBM is a fairly good one. "It's significant. And is getting more significant. A lot of people have been there for 10, 15, 20 years and have been writing manuals. They are about the 'Commodity' role that I mention[ed] in my presentation. We have work groups and councils that are working to create consistency across the organizations, including looking at reuse and tools." Ames is a high-ranking professional at IBM, and thus she is able to have tremendous strategic influence. "So when I push the strategic piece, they don't push back!" (Ames 2003a).

Our persona, once again

And we, once again, cannot escape the force of our over-arching personality. Vici Koster-Lenhardt, who manages technical publications for Coca-Cola in Vienna, Austria, knows us well.

We are in an industry of whiners . . . . I don't include myself in that group! But we are seen as very sensitive, not very business focused. It's not just political savvy I am talking about. It's earning the right to be able to say to others on our projects that the documentation was not correctly included in the project plan—without whining. Then we will be heard and will make a difference. (Koster-Lenhardt 2003)

The tough economic environment coupled with our personalities adds to our struggle. Jack Molisani concurs, saying "Technical writers tend to focus on perfection of information instead of on good enough information. You need to be delivering what the customer wants—whether the customer is inside or outside the firm—that's the most important thing" (Molisani 2003).

WHAT IS OUR FUTURE ROLE IN ORGANIZATIONS?

The next big thing is figuring out who we are. Teamwork is central to the health of our profession. We can't just sit in our cubes anymore. We have to be seen as critical to the development of a product. (Lockett-Zubak 2003)

As I noted in the introduction, our profession today seems to be at a crossroads. Interestingly, I believe that this crossroads was created in part by the intersection of economic factors and the personality of our profession. Thus, our future role needs to be one that represents new economic value to those who pay us and new technical, service, and social value to those who work with us. Neil Perlin, consultant and STC associate fellow, sees it like this:

I think that our role has to change as the environment changes. To do so, we need to get out of the cubicle to shake the artsy introvert image, become more technical, become more involved in company operations and even strategic direction setting, and start thinking "content" rather than "technical writing." I think this will be one of the greatest challenges for those who entered the field before the mid-1980s and thus before the explosion of technology that we see today. (Perlin 2003)

Many of the participants in this study expressed the sentiment that the new role of the technical communicator is going to be much more closely linked with that of the product developer—and that if we did not seek out this relationship, our function may become extinct. "We need to be proactive and take part in the product development process. We need to be perceived as an important part of the technology," says Cheryl Lockett-Zubak. "We shouldn't just expect this as some sort of gift—it should be true because we earned the position" (Lockett-Zubak 2003).
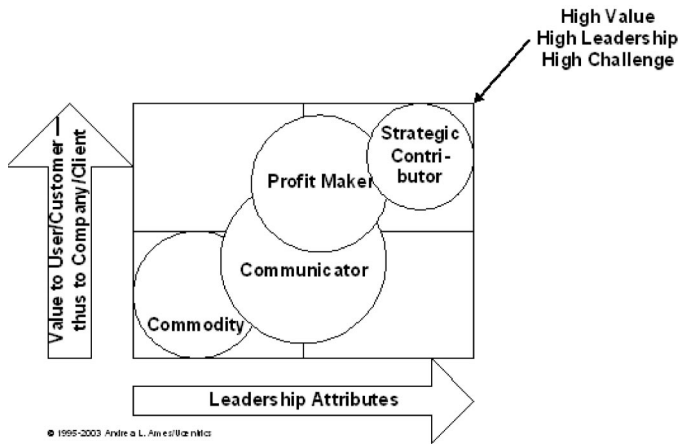
Figure 1. Andrea Ames's value continuum for technical communicators.

In my interviews and in the questionnaire, I asked each participant to tell me what they thought the "next big thing" was going to be for our profession. George Hayhoe agreed with Cheryl Lockett-Zubak that the next big thing is where we go as a profession. Hayhoe reflected back on Andrea Ames's presentation in Dallas, as well. He said, "Andrea's continuum is [on target]. If we don't break out of the conviction that to be a technical communicator is about knowing all the tools, if we don't demonstrate how we add value, that we are a strategic part of the business, we are doomed" (Hayhoe 2003a).

The "continuum" to which Hayhoe refers (see Figure 1) is Ames's depiction of the direction our profession and its practitioners need to move to ensure our future role in organizations. It is an image that shows us moving from a role of low value and low leadership—the "commodity role" many in our profession are in today—to high value and high leadership—a "strategic contributor role" we need to seek out (Ames 2003b).

Says Ames, "We need the ability to drive profitability and strategy and product usability and adoption though information soft skills. The writing needs to be a no-brainer—a baseline skill. We now need expanded skills: Negotiation, driving strategy. We need to be moving technical communication into the realm of user experience design. We need to look at our jobs more expansively, taking a broader perspective" (Ames 2003a).

Donna Timpone summed the same idea up nicely: "To ensure our future role, we need to be flexible and not resist change. We need to think outside the box. We need to be sources of new ideas. We need to present a different approach and keep up on new tools and capabilities. We need to keep ourselves and our skills [constantly in front of] management" (Timpone 2003).

In other words, we need to reinvent ourselves, and that responsibility begins with our managers.

WHAT SHOULD MANAGERS OF TECHNICAL COMMUNICATORS BE CONCERNED WITH?

In the workplace, we don't demand that much from our technical communicators. Employees who get too wigged out about italics and bolding should be fired after a warning! We, as a profession, need to learn how a business is run, so that management won't say we are comma chasers. (Carliner 2003)

There was much talk throughout the interviews and questionnaires about the uncertainty of our future as a profession, but little doubt about how to make a difference in that future: The change has to begin with the leadership in our profession. JoAnn Hackos expressed her concerns that only organizations with strong and inspired leadership will survive. "That leadership is politically savvy, aware of arguing for the right values, focused on usefulness for the customers, willing to reduce costs and increase efficiencies, and able to stand with other middle managers" she says. Without such leadership, she feels that jobs will continue to be reduced and outsourced. "In a way, we priced ourselves out of the market in the 90s, earning high salaries for work that provided dubious corporate value" (Hackos 2003). In her view, we must change the fundamental ways we frame our business to survive.

How do we do that? We need to look for opportunities to use our unique skills to show value. But the seeking of opportunity and capitalizing on it is one of those skills that seems to be outside our common skillset. "It's the looking for the opportunities that the typical introverted technical writer doesn't do!" says Vici Koster-Lenhardt. "The managers or the extraverts are going to have to be out there creating these opportunities for us" (Koster-Lenhardt 2003).

One of the ways we can do that is for our managers to focus on acquiring more business acumen. This may mean both standing up for ourselves in ways we never have, and educating ourselves on aspects of business that we have never before concerned ourselves with. Jack Molisani says, "We are ignorant of how business works. We need to be able to justify our costs against the bottom line. We need to learn to create business cases. We need to speak 'CEO'" (Molisani 2003).

Andrea Ames's path to the role of strategic contributor requires a rise on the leadership axis of her chart:

It's not about a specific technology. It's a way of thinking about our jobs. It means gaining business skills so that we can communicate with the bean counters who evaluate projects from a managerial perspective. Having

business skills, demonstrating value, pushing strategy, showing ROI, showing how we contribute to profitability, all based on principles of usability, being a customer and user advocate. This needs to be true for our industry, or we may not have an industry anymore. Being the commoditized technical writer just isn't going to work anymore. (Ames 2003a)

Hiring

Not only do our leaders need to develop themselves, they also need to take a fresh look at who they are selecting in the profession who will become our future leaders. This means taking a fresh look at the hiring process.

Jack Molisani is outspoken on the subject of hiring and has published articles on the subject in the STC's magazine *Intercom* and elsewhere (Molisani 1999). When I interviewed him, he harkened back to those same basic required skills: communicating using the written word, being a quick study, being a good investigator, and having the ability to learn tools quickly. The key point is that tools are the last skill on the list. "Today, I would say the ability to learn quickly and adapt, a tolerance for change, hands-on technical skills appropriate to what you are documenting, experience in the industry in which you are writing, and communication skills are key" (Molisani 2003).

But tools have often been our guide when looking at candidates to hire. Saul Carliner says, "If we hire based solely on tool skills, we are setting the agenda for our entire field. Writing is more important than technical [tool] skills. Technical [tool] skills are perishable. We've screwed up our profession by focusing on perishable skills and taking the focus away from the strategic, intellectual skills" (Carliner 2003).

This idea of raising the bar in hiring for our profession has been the theme of my own speaking and writing for some time. When hiring, I suggest that a manager look for a solid overall professional package, and not just a set of specific tools and experience. In evaluating that overall package, the hiring manager should be asking the following questions (Giammona 2001):

◆ Does the candidate have a professional demeanor?
◆ Does the candidate write well?
◆ Does the candidate have good project management skills?
◆ Does the candidate have good self-management skills (time management, multi-tasking, appropriate separation of work and personal issues)?
◆ Is the candidate a good verbal communicator?
◆ Is the candidate a team player?
◆ Is the candidate technically qualified for the opening (or teachable if specific skills are not present)?
◆ Would the candidate contribute to or enhance the positive image of your department in the firm?

◆ Is the candidate a person you and your team would want to spend every day with for the next two to five years?

If you cannot answer yes to all the above questions, the person you are considering is probably not the kind of person who can handle the challenges our profession is facing today and can grow to become a future leader.

Outsourcing

One issue managers are facing today is outsourcing. It is an issue that we need to be prepared to discuss intelligently with our management as we look for ways to save money and show our value. Most of us in management will be asked to consider the option or will face the reality of it in the near future—whether it means our entire function is sent offshore or whether certain work is sent outside our firm. When approaching outsourcing, the study participants raised several useful points for consideration.

First, we need to be able to articulate for management when outsourcing makes sense. Jack Molisani observes that outsourcing can be successful for discretely defined projects. "It's hard to lend a hand as an outsourcer. If you just want someone to come in and help out with a heavy workload, you are better off hiring a temporary onsite person than working in a relationship with an outsourcer" (Molisani 2003).

Outsourcing is also helpful if it is viewed as a means of boosting the capabilities of the current staff to equip them to go forward, preparing them to add value in the future without the ongoing support of the outsourcer. Cheryl Lockett-Zubak feels that it is important that outsourcing not remove work from the current staff. "We should develop partnerships that support the existing staff, not remove someone's job" (Lockett-Zubak 2003).

Finally, use of unqualified resources can endanger the integrity of the work done by our function. This can especially be an issue overseas (an issue I will address later in this article). JoAnn Hackos voiced concerns that some overseas firms "are run by shrewd business people who don't know much, if anything, about our field. They do not contribute in any way to the advancement of the field. They simply do what they're hired to do, often by people who don't understand information development and delivery" (Hackos 2003).

HOW DO WE CONTRIBUTE TO INNOVATION?

Innovation occurs when people from different backgrounds come together to try to make something new. Can technical communicators contribute to innovation? Absolutely. Do we? Not often enough. (Lockett-Zubak 2003)

To a large extent, managing technology is all about managing innovation. So what is the technical communicator's role in this process?

The fact is, we often don't have one. Suzanne Sowinska, user assistance training manager at Microsoft, feels that our job requirements often exclude us from the innovative process. "Often, the skill that makes one a good technical writer does not qualify someone to be a true innovator. Most technical writers are acting as service or production professionals, strapped to meet deadlines, and are not asked to innovate" (Sowinska 2003).

But the fact that we are not asked does not necessarily mean that we are not qualified. We bring some unique gifts to the table. For example, "A writer can slice right through a discussion to reach a new understanding of things. That is one way we can contribute," says Cheryl Lockett-Zubak (Lockett-Zubak 2003).

De Murr sees it this way:

One of the many gifts we bring to the table is the unique ability to see all the trees and see the forest. We ask questions when we join a project team. The people on the project may only be seeing the tree. You ask how the tree fits into the forest. Sometimes these are uncomfortable questions. We can actually save a lot of money with this kind of questioning. This gift of understanding how pieces fit into the whole is how we add value to the innovative process. (Murr 2003)

Today's environment offers opportunities that exploit these unique gifts. "In the past, technical communicators have only been asked to think about small to midsize problems. Now there's no place for small thinking," says Andrea Ames. "When I look at the work I was doing 10 years ago versus the influence I am having today, it's amazing. It's not easy, but the environment today is primed for this! And the value I am adding is being recognized and rewarded" (Ames 2003a).

But we cannot make this contribution by sitting alone in our cubicles. We need to get involved in a project early on, says Amy Logsdon Taricco. "You need to develop skills in your current people to be involved in design or hire new people who can go in early to a project," she says. This may mean hiring people with different skills going forward. "You need an instructional design background, plus courage and interpersonal skills to go in there and face these opinionated design people" (Logsdon Taricco 2003).

What about innovation that advances our own profession? Cheryl Jenkins, a former Hewlett Packard employee who now manages projects for Microsoft, cited work at Microsoft that is categorizing information with content types. She says that customer-driven content is a next wave in our field, engaging the customer through chat rooms and community groups so that the customers write, or help to write, the content themselves, as is done in open source settings today (Jenkins 2003).

In the end, our contribution to innovation is the information products we produce. Says Vici Koster-Lenhardt, "The products [that] we deliver and that . . . contribute to the firm's success [are] our contribution to innovation" (Koster-Lenhardt 2003).

WHAT ARE THE GLOBAL CONCERNS IN OUR FIELD?

Along with innovation, the global nature of business is another important theme facing technology managers today. The technical communicator will need to be flexible to move with that strategy to be considered vital to operations.

JoAnn Hackos feels that a global focus is essential and will mean working closely with information developers in many languages and from different cultural perspectives. "The offshoring [of technical writing] is most likely to continue through globalization if not only through cost savings," says Hackos. This will mean taking a global perspective on information development. "In particular, it means extending our customer analysis reach outside the U.S., something we have rarely seen in the past," says Hackos. "We have to be very careful about expecting everyone to act and write like Americans, or being convinced that we always know best. We need to promote professionalism worldwide and work for higher wages in the field everywhere" (Hackos 2003).

Part of the development of professionalism will be the increasing need for the technical communicator to become project manager. Marian Newell, a consultant based in the U.K., explains.

I suspect that the [technical communication] field will shrink within the developed countries, as manufacturing and large sections of service industries continue to migrate to cheaper locations. I have prioritized project management in the skills list because I know several people managing teams of technical staff (often through outsourcing arrangements) in less developed countries and I expect the same trend to affect technical communication. (Newell 2003)

De Murr agrees with the changing role. "More and more of us here in the U.S. may become project managers as . . . [work] moves abroad. We will need to be editors, to bring the work back . . . to the U.S." (Murr 2003).

Offshoring of technical communication work

Certainly the top global concern for technical communicators in the U.S. is the notion of sending technical communication work offshore. Most participants in this study were

concerned about the production of English language materials outside of English-speaking countries. Cheryl Lockett-Zubak's comments were representative of many others.

> *I hear grumblings about offshore work. It's a concern. There is this idea that by using resources from other countries you are going to make your product more feasible—not necessarily better, just more feasible. And of course, we just lose jobs. It could become a problem because the main audience of most documents is U.S.-based. (Lockett-Zubak 2003)*

While there were many critics of the potential downsides of offshore arrangements, some practical upsides were noted as well. "A vendor model is in place for basic writing and editing," says Suzanne Sowinska "The benefits are low cost and 24-hour work cycles. Content created overnight abroad can be edited during the day. I've heard that companies have started to do this" (Sowinska 2003).

Regardless of the upsides or downsides, it is clear that movement of technical writing from U.S.-based companies to offshore locations has begun. Specific locations mentioned included Ireland, Chile, and India.

Technical communication in India

As with every other technical profession, the move offshore of technical communication from the U.S. to India has begun. Technical communication is a small, but growing profession in India. Layla Matthew, senior technical editor with Cisco Systems in Bangalore, reports on the changing nature of the profession there.

> *Initially in India, technical communicators were viewed as some type of secretaries! This was because technical communicators had access to word processors and were seen as people who "prettied up" documents for the engineers. Fortunately, that has changed. Now, to be an effective technical communicator, the person needs a degree/diploma from a reputable computer institution. Ideally, the technical communicator should have an engineering degree, but not many engineers are willing to be technical communicators. (Matthew 2003)*

What is the quality of the work that comes out of India? Matthew says, "So far, since all the writers at my company and I are fluent in English and have worked in the U.S. for some time, we do not have any translation/localization problems. Sometimes, however, some 'Indianisms' tend to creep into our writing. As an editor, I try to spot these and correct them" (Matthew 2003).

Judy Glick-Smith told of work being done for Alcatel in India.

> *The work that comes back from there is pretty good. As a result, I don't think that this kind of job [will be] coming back to the U.S. In India, [as in] the U.S. in the 1980s, the technical writers and programmers are job hopping for more money. Billing rates will go up. When rates get high enough there, the U.S. will start sending work to China. (Glick-Smith 2003)*

But today, they are working in India, and for wages that so far undercut U.S. wages that they cannot help but be attractive options to U.S. companies. Donna Timpone also reported that she recently heard of technical writers in India being paid as little as $6 to $8 USD per hour (Timpone 2003). As a result, outsourcing work to India is likely to increase for U.S. companies in the coming years.

That being the case, we as a profession need to be prepared for the project management and editorial challenges this kind of work will demand, and build the relationships needed to succeed. Saul Carliner explains:

> *I visited India and that sparked an incredible relationship with the India STC chapter. They do write well. Yes, there are some problems. But their work is more than adequate and they want to do a good job. By all means, send the "coding" to India—the production of bulk manuals. And over here in the U.S., we need to learn to be more productive. If you are providing communication services in the U.S., show how you are adding value. (Carliner 2003)*

HOW SHOULD WE BE EDUCATING FUTURE PRACTITIONERS?

Technical communication has emerged as a distinct academic major at many universities. One can pursue a degree at the bachelor's, master's or PhD levels, or obtain a certificate through an abbreviated course of study. But views on the value, content, and structure of degree programs varied greatly with study participants.

Jack Molisani took an extreme position.

> *You don't need a degree in technical writing. There is not that much to learn. Get a degree in computer science or engineering and take a class in technical writing. If you understand a concept—like circuit design—you can understand all kinds of circuits. I don't think academics are preparing people to be technical writers. (Molisani 2003)*

Some argued that there is a middle ground, somewhere between a dedicated degree and having no academic preparation at all. Vancouver-based consultant Dar-

ren Barefoot described his approach to solving this problem.

> *If I were creating an academic program, it would be half in the engineering or computer science department and half in the writing department. [Then] technical writers would have as much technical writing as possible. To be viable and above average, you need to have business savvy, or get some industry experience, or have a technical background. The days of the arts major going into technical writing are numbered. (Barefoot 2003)*

The majority of those whom I interviewed or who filled out questionnaires felt that a technical writing degree was a valid pursuit—and a large number of the participants were themselves involved on either a full- or part-time basis in the education of technical communicators. "The program that I teach in," says Andrea Ames, "helps with the visibility of our professionals and provides people with the skills they need to be strategic contributors" (Ames 2003a). Technical communication programs are being taken more seriously by many universities. According to Stan Dicks, a professor at North Carolina State University, "Technical communication is becoming more important at my school. We currently offer an MS degree in technical communication. In the last five years we have hired two new faculty in the field, and we currently have a proposal on the table for a new PhD program" (Dicks 2003).

What shape should these programs take? There was a general agreement that more emphasis on business skills is important—that the programs should better prepare students for work in the "real world." Barry Batorsky of DeVry Institute says that in recent years his technical writing course got absorbed into a more general business writing course, but that it has, in the last year, been resurrected as technical writing, with a student population from both technical and management programs (Batorsky 2003).

JoAnn Hackos agrees with this trend.

> *I'd like to see the training programs be much more business oriented than they are today. I don't believe that graduates are well prepared for the demands of the job. I would also like to see a focus on more extroverts than introverts. We should not be attracting people to the programs who are so introverted that they have difficulty speaking up for themselves. Students need to be prepared to make a business case for their work, to hold their own with senior managers, not be afraid of their shadows. (Hackos 2003)*

But while business skills, especially project management, were a popular theme, there was one point of general agreement: programs still need to emphasize writing. Cheryl Lockett-Zubak sums it up: "At first technical writing programs were all writing. Then they focused on electronic publishing and writing. Now they look at HTML, information design, publishing, and writing; but they should always be something *plus* writing" (Lockett-Zubak 2003).

Saul Carliner cited several common problems in technical communication programs that need be addressed (Carliner 2003). These include:

- ◆ PhD programs that do not prepare the participants to be technical communication leaders in the academy and industry
- ◆ Lack of distinction between bachelor's and master's programs
- ◆ Lack of professional experience and understanding by professors, and university hiring practices that do not offer tenure-track positions to people with non-academic backgrounds to encourage movement of seasoned professionals into teaching

Some schools are actively seeking new alternatives to make their programs more relevant to today's marketplace. Karen Schnakenberg, director of professional and technical writing at Carnegie Mellon University, indicated that her program is now interacting with the School of Design to create a joint master's in communication planning and information design. "Half of the students come from a writing background and half from a design background," Schnakenberg explains. "Writing is taught from a design perspective—writing as a design process" (Schnakenberg 2003).

In the U.K., the flavor of education for technical communicators is also changing. Marian Newell explains.

> *In the U.K., we are seeing a steady shift from City & Guilds (trade) qualifications to more academic alternatives, specifically through Sheffield Hallam University's distance learning MA course. An attempt to set up national vocational qualifications stalled, apparently due to issues with funding and industry interest. I expect more technical communicators to pursue an academic qualification to increase their professional standing and distinguish themselves from their peers. I expect the City & Guilds modules to be withdrawn at some point. (Newell 2003)*

In India, the education of technical communicators is also evolving. Layla Matthew notes, "Earlier, we had people with journalism degrees and degrees in English applying for technical communication jobs. Now we realize that a technical communicator needs strong technical skills, Web design skills, and interviewing skills. Future training for technical communicators will be based on sharpening these skills" (Matthew 2003).

The curriculum for today's programs also needs to be forward-looking in terms of the technologies and changing business models affecting our field. Stan Dicks indicated that his program is increasing the focus on translation and localization (Dicks 2003). Other study participants indicated the importance of including subjects such as content management, single sourcing, information management and architecture, user awareness, and design of information for mobile and voice devices—all areas that are commonly encountered in technical communication literature, conferences, and practice in firms today.

WHAT TECHNOLOGIES ARE IMPACTING US?

Single sourcing should have impacted us but it has not. . . . There's a lot of talk and there are a lot of conference sessions on single sourcing, but not a lot of people are doing it. (Molisani 2003)

The list of technologies that impact the technical communication profession could be endless—especially if you consider that every technology that can be documented is a technology that potentially impacts us. But in the course of this study, there were definitely several technology themes that consistently surfaced.

Information management—Content management and single sourcing

Single sourcing is "using a single document source to generate multiple types of document outputs" (Williams 2003). And a content management system might be used to store content in a database separately from the templates that control its appearance, so content can be updated or reused in various contexts without anyone changing the content (Executive guides 2003). The two together are meant to empower publishers of information, saving time and redundancy, and making information easy to access and publish. And while both of these issues are widely discussed, their impact on the industry seems to be slow in coming.

Gavin Ireland, president of the Institute for Scientific and Technical Communicators (ISTC) in the U.K., says, "Single sourcing is a concept that I'm still trying to introduce and so far is being treated with disbelief. Content management has just been introduced and is having a great effect already. The initial setup was very expensive in terms of time, but we are already seeing benefits in time, quality, and management" (Ireland 2003).

Cheryl Lockett-Zubak indicates that it's difficult for these concepts to break into companies from the technical communication function.

. . . it is a hard process for a company to take on. To make it successful, you can't start on a large scale. Pick

the places that make the most sense to start and add in the rest later. In our profession, unless you have the whole company on board, you can't afford to do it. It's too expensive. It's mostly large companies that are doing it. (Lockett-Zubak 2003)

In fact, Vici Koster-Lenhardt believes that momentum for these systems and processes will end up coming from outside our area rather than within: "The next big thing is likely to be a tool that so simplifies content management that it becomes mainstream and that people in the business outside the documentation area will be asking why we aren't using it" (Koster-Lenhardt 2003).

As a result, a new role will become increasingly important—the information architect who designs the information that goes into the content management system. Suzanne Sowinska elaborates:

The ability to become a content administrator is going to become more important. We are going to be needing a person to run the content server who also has the Web skills to make the content talk to the server. This is a specialized role requiring an analyst's mindset and skills in editing, Web development, server administration, indexing—the document storage business. Soon we are all going to be moving content from paper file cabinets to storage servers for long-term access. (Sowinska 2003)

The Internet

Clearly the impact of the Internet is only just begun to be felt. But it has profoundly changed our profession. The following observations were characteristic of the many comments about the importance and impact of the Internet.

The Internet has absolutely changed the way we work. You used to have a writer, editor, illustrator—no more. Now you have to do it all. The technology itself has changed. Now we have to use more online publishing than before. The media we publish to has changed. And the rate of change has dramatically changed. We moved from the arrival of the Internet to HTML to XML in two years. (Molisani 2003)

One appealing aspect of the Internet is that there are no printing vendors involved. You can make changes on the fly. The collaborative aspects are even more important. The relationship with the user can be more of a two-way street as a technical writer and as a company. You can get immediate, constant user feedback on products and documents. It's a fluid environment. It's OK if there's a typo and that the document has not been

reviewed three times. It's likely to change anyway. We become more a compiler and distributor of information. (Barefoot 2003)

Since my company is a networking company, all our documentation is on the Web. All our manuals are on our Web site, and the users do not need to get printed books. Since the manuals are on the Web, making corrections/updates is quicker than reprinting the manual. (Matthew 2003)

Wireless

There is no denying that wireless technology, like the Internet, is having a huge impact on society. However, the technical communicators that I surveyed vary greatly in their viewpoint on the importance of this technology. Some see wireless as nothing more than another platform on which to apply our skills—in fact, many see it that way. Others see it is a place where we can have a special impact.

"There is huge potential in wireless devices. There is an economy of information with these products—either auditory or visual. Knowing how people use information will be increasingly important." says De Murr, "Technical communicators will be a great ally to the developer in these kinds of products" (Murr 2003).

Amy Logsdon Taricco, whose team works on the Tablet PC project for Microsoft, has a large stake in the future of these devices. She believes that we'll have to be smarter about how to package the information for these small products, determining the least information that will be needed and creating simplistic information designs. "We'll need to make it friendly and get rid of the obtuse language we use. Computers are way too hard to use today. Wireless will impact information architecture and raise the bar for computer ease of use," she says (Logsdon Taricco 2003).

What else is new?

In response to interview requests to identify "the next big thing," many respondents offered comments that centered on technology. Table 1 shows a list of the technologies that were thought to be important trends for the technical communicator and a list of related skills that will be needed to support those technologies.

Not all of these technologies and skills are new to technical communication, but when they are fully in place, they will represent a significant shift in how we do our jobs.

The gaming industry is an interesting example. It is significant not only for the wide audience of young people who are invested in it today, but for the large audience of future adults whose style of interaction and expectations about information delivery are going to be shaped by their gaming experience. Suzanne Sowinska observes that "Today's 13 year-olds are going to expect the kinds of infor-

TABLE 1: IMPORTANT TECHNOLOGIES AND THE SKILLS NEEDED TO SUPPORT THEM

Technology Trends	Skills Needed to Support These Trends
Content management systems	Content administration
Single sourcing	Minimalistic writing
Embedded help systems	Interface design
E-learning	XML/database technologies
Speech recognition	Instructional design
Voice-to-print technology	Usability
Large format touch screens	Information architecture
Wireless technologies	Design of visual information
Gaming technologies	Standard meta-language
Standards	Shepherding community writing efforts
	Business analysis
	Human factors

mation exchange that they see in gaming to be everywhere by the time they grow up. This visual orientation will get translated into technical content through things like 3D modeling" (Sowinska 2003). Also from the gaming industry and the open source world will come the concept of user community-created documentation.

As many industries are standardizing to readily share information, technical communicators will need to be looking into standards of their own to handle the sophisticated information exchanges in our future. "I believe the next big thing will be the definition of internal standards and the adoption of both internal and external standards" says Neil Perlin. "This will be a difficult task for many writers, who approach technical communication as an art rather than a science, but it's the only way that our content can be made flexible enough to move in whatever direction the technology ultimately goes" (Perlin 2003).

In the end, there is no doubt that the technical communicator will continue to need to be technical.

WHERE DO WE GO FROM HERE?

It's time to stop whining about the past and look at the future. . . . Stop thinking about manuals, and start thinking about communication. (Quesenbery 2003)

As part of the interviews, respondents were asked, "What can we do to ensure our unique role going forward?" But as Andrea Ames responded, "Today our challenge is going to be to ensure *any* role, not just a unique

role!" (Ames 2003a).

So where do we go from here? There appear to be some obvious first steps. Here are the key steps our profession should be taking.

Become part of the development and innovation processes

The first step is to make a strong move toward inserting ourselves in the development and innovation processes for the products we support. There needs to be a clear connection in the minds of our employers between the sources of a firm's revenue and our contribution. That may mean acquiring some new skills. Cheryl Lockett-Zubak explains.

> If we aren't designing products, I don't know how many of us will be here [in the future]. We need to pick up additional skills. It will be [assumed] that we know how to take part in teams, that we have adaptable communication skills. We have to be technologists. (Lockett-Zubak 2003)

Jack Molisani agrees.

> In 5 to 10 years, we will be more tightly integrated with development teams. We will have to fight for that arrangement. The benefits will be that we will get in on projects earlier and have more say in the development of products. We would become [user interface] specialists as we [become] more involved in the design phase. (Molisani 2003)

This change means re-examining our core competencies and carefully defining them for those who pay for our services. According to Saul Carliner, "Everyone offers an idea of their core skills. We are not, as [a former] STC president was fond of saying, 'an umbrella profession.' We need to differentiate ourselves" (Carliner 2003).

By being more involved in product development, we will become more easily identifiable as contributors with a unique set of skills to offer. We will also be involved in innovation again, contributing actively the specialized knowledge that our skills make us well suited for. As Donna Timpone observes, "In 5 or 10 years, I hope that we will find our focus to be back on usability issues, providing more innovation in the areas of improving performance" (Timpone 2003).

Launch a public relations campaign for our profession

The time has come for our profession to make itself better known and understood in the wider world of technology and business. George Hayhoe underscored this point in his editorial in the August 2003 issue of *Technical communi-*

cation. He said, "The fact is that our profession is not widely known among management and the general public is no one's fault but our own. If we don't speak for ourselves, can we expect anyone else to do so?" He suggests that it is time to launch an active PR campaign in schools, with executive management, and in popular periodicals to make ourselves better understood and more widely known (Hayhoe 2003b).

Judy Glick-Smith agrees by saying, "Technical communicators can play a huge role in the future if they get out there and let people know what they can do. We need to let people know we want to be involved" (Glick-Smith 2003).

Participants outside the U.S. also felt the same way. "First and foremost, we need to raise awareness of the profession by highlighting the benefits of using technical communicators, and the risks and costs of not using them," says Iain Wright, an editor for British Telecom (Wright 2003). Gavin Ireland of the ISTC agrees. "We need to keep going forward with technology and make sure we can sing the praises of technical communicators everywhere. Our biggest hurdle is that people aren't aware of us and the value that we can add to their products and services" (Ireland 2003).

How do we do this? In part, by taking better advantage of our native communication skills and by reaching out. That approach requires some of the additional steps described below.

Improve our professional societies

As mentioned earlier, STC is examining how to transform itself to better meet the needs of our profession. Some specific suggestions have been offered. In particular, we need to be sure that those leading us in the society are exercising the kinds of sound business sense that we are going to be expecting from our managers in the future. According to Saul Carliner, "We have zero business acumen. And we choose leaders in our professional societies with no business acumen" (Carliner 2003). This is often difficult when dealing with a volunteer organization. But it is up to the members themselves to ensure that they elect to office those among them who can be the best ambassadors for our profession.

The global growth of our profession is also going to be key as more work moves overseas. We need to do all we can to encourage international membership in the STC. As Saul Carliner observes, "Canadians earn three-quarters of what we earn in the States. In India, they earn one half. And India is our biggest growing market in . . . STC" (Carliner 2003).

Where should the strategic value of the society come from? From focusing on the kinds of forward-looking concerns for our profession that I am citing here. Others agree.

Ginny Redish, in her comments in the 50th anniversary issue of *Technical communication*, described the forward-looking perspective that STC needs to take. "Document design, information design, user experience design, usability, information architecture with content management, special needs, international focus, teaching, and many other aspects of communication all fit within STC" (Redish 2003).

Become better business people and managers

For the future, technical communication requires managers who are more professional in their management roles. This change is absolutely vital to our survival. We need to be able to sit at the table with the heads of technology functions in our organizations as well as with those on the business side, with those in manufacturing, marketing, sales, customer service, human resources, and with senior management, to pitch our services, make a business case for our functions and deliverables, and delineate eloquently the value we provide. The fact is that many of us—because we rise through the ranks from our traditional contributor's role and persona—have trouble making this transition. But, ironically, because of our unique role, we are often well prepared to make a significant management contribution. As George Hayhoe sees it,

> *Some of us . . . have a better understanding of the businesses we work in than virtually anyone else in our organizations because we are savvy and we have access to information that most people don't have access to in the normal course of our jobs. If we can see connections, we can know more than anyone. We can use that knowledge for the benefit of our businesses because we have other skills that allow us to make sense of things. Few others can do this. Our potential is huge. (Hayhoe 2003a)*

With that potential, we can see the rise of the technical communicator through the ranks of not only the wider technical organization but the corporation itself. "It will be a great day, when we see a technical communicator on the board of a company. We need to get the technical communicators out there on the golf course—seriously! We need to be interacting with the upper levels of the firm," says Vici Koster-Lenhardt (Koster-Lenhardt 2003). It's not impossible. My manager in my first documentation job 20 years ago is today the executive vice president of a software firm. But to rise to that role, not only did he exploit his communication skills, but he had to be willing to learn everything about the business he was in.

We can play this role of contributor to the business of the firm not just from the management level, but from the level of the individual as well. Darren Barefoot says that he tells young people entering the profession to "think of yourself not as an employee of your company but has a consultant for all the areas of the company. Make yourself more valuable to the company by learning what the company does" (Barefoot 2003).

The days are gone when we could sit in our corner cubicles and churn out documents. We now need to be prepare ourselves to compete in the world of business as well.

Repackage ourselves for the future

Throughout this article, we have been looking at the future role of the technical communicator. But our profession is not the only one standing at a crossroads today. As we look ahead, a whole new generation of future professionals is rising to adulthood. To prepare to be in the workplace with this next generation, and to prepare to produce information products to meet their needs, we need to be looking at the complete skillset that all professionals will need for the future, not just those unique to our own line of work.

The Partnership for 21st Century Skills has outlined what they believe will be the skillset needed for the workplace of the future (see Figure 2). Interestingly, this is not a skillset so very dissimilar to the one identified in this paper, including the need for business acumen, working better with others, and delivering more significant and complex contributions (Partnership for 21st Century Skills 2003).

What can prevent us from developing and exercising these 21st century skills? Nothing, perhaps, except, again, our core personas. "Technical writers are a lot of Myers-Briggs INFJ types, who lack soft skills and like to sit in their offices. The good ones, [the ones] who keep up with change, have strong interpersonal skills. It's the quiet ones who stay off in the corners who don't get ahead" says Vici-Koster-Lenhardt. Will there be room for the quiet ones going forward? Perhaps not in our profession or in any profession. Koster-Lenhardt continues, "Those interpersonal skills need to be a core skill of our profession—someone who grows, changes, goes out and tries new things. Introverts can learn to be extroverts when they need to!" (Koster-Lenhardt 2003).

This is a call to change for our practitioners. "My message to people," says Judy Glick-Smith, "is that you've got to keep learning and figure out how you add value. That is an ongoing process. It's how you keep being able to do what you love. You constantly need to repackage yourself—that's the trick!" (Glick-Smith 2003).

Going forward, technical communication will have a broader definition, which means our core skill, writing, will take on more flavors that it does today. Staying employed may depend on this flexibility at our core.

Darren Barefoot says, "For me, increasingly, I am more Web-oriented. I learned the administration of a Web site. I

Figure 2. Skills required for the 21st century.

gained applied industry knowledge, and I added some marketing skills. I'm not doing much user documentation anymore. I'm doing online demos, white papers, collateral materials. That's how I've reinvented myself" (Barefoot 2003).

Vici Koster-Lenhardt continues the theme, underscoring our core skill.

> But it still matters that you can write. That won't change. The writing deliverables might become broader. We evolved from user documents, installation guides, API documents, online help, information for online use, Information Mapping, and now perhaps [marketing communication]. Cuts in other writing positions will end up sending all kinds of writing in the company our way. So the ability to write different styles across the writing realm will be important. Not everyone has all of these kinds of writing in their bag of tricks. It will become a necessity for employment. (Koster-Lenhardt 2003)

DOES TECHNICAL COMMUNICATION MATTER?

There was a lot of debate in 2003 about the importance of information technology in general. Nicholas Carr, in his controversial article "IT doesn't matter" in *Harvard busi-*

ness review, argued that perhaps IT has become such a commodity that it is no longer a source of strategic value (Carr 2003). Is that true for technical communication? Are so many of us in the bottom left corner of Andrea Ames's value continuum for technical communicators as to not be adding value to the organizations we serve, and therefore making ourselves prime candidates for outsourcing or off-shoring?

We need to be concerned that if we do not act quickly to dispute the growing perception by our management that we are not strategic, our profession as we know it will be in jeopardy. In some respects, we already have begun the change, as the name "technical writer" drifts further from describing the core functions we provide. Whatever we are called, we *will* matter, and we will be making significant contributions in a new marketplace—we just may look a little different going forward. Judy Glick-Smith offers some options.

> The technical writer name is dead. It's not called technical writing or technical communication anymore. We have to call it something else. Requirements analysis or business analysis, or enterprise architecture or information architecture, or product design. Usability is hot today, but I believe it will become a no-brainer as things are more and more usable. Quality assurance is an option for us. Training and instructional design is another— becoming e-learning developers. All of these are options for our future. (Glick-Smith 2003)

Is the technical writer dead? In name, perhaps, but it appears that the role that was once called *technical writer* may have even broader future possibilities than ever previously imagined. It will be up to the leaders and practitioners in the profession to exploit those possibilities by taking the action steps outlined here—repackaging ourselves for a new marketplace, becoming more influential and savvy to the businesses we serve, supporting ourselves from within through vital professional societies, and making the world in general more aware of who are we and what we can do, starting with technical teams in our own firms who sit down the hall from us. With these actions to guide us, technical communication will continue to matter—more than ever—in the increasingly complex age of information. T**C**

APPENDIX A. INTERVIEW QUESTIONNAIRE

The Future of Technical Communication:
How Innovation, Technology, and Information Management are Shaping the Discipline

Please answer all the questions in Section 1. Then, based on your role and your experiences, please answer as many of the remaining questions as seem relevant to you or on which you would like to express an opinion.

SECTION ONE: BACKGROUND

1. Your comments may be quoted in the context of my paper. Your name will be attributed to your comments, unless you indicate that you wish to remain anonymous.

    ☐   You have my permission to use my name.
    ☐   I wish to remain anonymous

2. What is your current primary role in the Technical Communication field?

    ☐   Writer
    ☐   Editor
    ☐   Manager
    ☐   Consultant
    ☐   Educator
    ☐   Other: Enter your response here.

3. How long have you been in the field?

    ☐   1-5 Years
    ☐   6-10 Years
    ☐   11-20 Years
    ☐   More than 20 Years

4. Are you a member of a professional organization? (Check all that apply.)

    ☐   STC (Society for Technical Communication)
    ☐   ISTC (Institute for Scientific and technical communicators)
    ☐   IABC (International Association of Business Communicators)
    ☐   IEEE Professional Communications Society
    ☐   ACM SIGDOC
    ☐   UPA (Usability Professionals Association)
    ☐   ISPI (International Society for Performance and Instruction)
    ☐   Other: Enter your response here.
    ☐   I do not belong to any professional societies.

5. What is the primary way you stay current with changes in the Technical Communication industry? (Check only one.)

☐   Professional Society Meetings/Conferences
☐   Professional Society Publications
☐   Networking with Peers
☐   Technical Books and Periodicals
☐   Online Publications/Internet Sites
☐   Mail/Use Groups
☐   Other: Enter your response here.

6. Please provide in the box below or attach in a separate file a brief 1-2 paragraph career summary. I may be placing these in an appendix to my document to identify my contacts and references.

Enter your response here.

SECTION 2: TODAY'S LANDSCAPE

7. Which of the following skills would you say are the most important to the success of the technical communicator? Select five from the list below.

☐   Writing
☐   Editing
☐   Organizing Information
☐   Project Management
☐   Authoring/Publishing Tools
☐   Web Design
☐   Print Document Design
☐   Usability/GUI Design
☐   Information Architecture
☐   Research
☐   Interviewing/Listening
☐   Political Savvy
☐   Programming or Hands On Technical Skills
☐   Business/Industry-Specific Experience
☐   Other: Enter your response here.

8. How significant of a role does technical communication play in your company/industry? Has that changed in the last five years?

Enter your response here.

9. How has the Internet changed the way you perform your work?

Enter your response here.

10. What impact are single-sourcing and content management systems having on your organization? Is the technical communicator playing an active role in information management and knowledge management issues beyond you department and in your firm at large?

Enter your response here.

11. How has reduced IT spending impacted your technical writing organization?

Enter your response here.

12. Are you using outsourcing for the technical writing function? Why or why not? Is it successful? What are some of the greatest issues you face with outsourcing?

Enter your response here.

SECTION 3: THE FUTURE OUTLOOK

13. What do you see as the "Next Big Thing" for technical communicators?

Enter your response here.

14. What is the technical communicator's role in the realm of wireless devices (i.e., providing information related to small, mobile, or ubiquitous devices)?

Enter your response here.

15. What will technical communicators be doing five years from now? Ten?

Enter your response here.

16. Looking at the same list of skills from question 7 above, which five skills would you select as being the most important to the success of the technical communicator of the future?

- [ ] Writing
- [ ] Editing
- [ ] Organizing Information
- [ ] Project Management
- [ ] Authoring/Publishing Tools
- [ ] Web Design
- [ ] Print Document Design
- [ ] Usability/GUI Design
- [ ] Information Architecture
- [ ] Research
- [ ] Interviewing/Listening
- [ ] Political Savvy
- [ ] Programming or Hands On Technical Skills
- [ ] Business/Industry-Specific Experience
- [ ] Other: Enter your response here.

17. What can technical communicators do to ensure that our unique role in organizations continues to exist going forward?

SECTION 4: THE COMMUNICATOR AND THE INNOVATIVE PROCESS

18. What is the technical communicator contributing to your firm's innovative processes?

Enter your response here.

19. What is the most innovative thing you and your team are currently doing?

Enter your response here.

SECTION 5: GLOBAL PERSPECTIVES

20. If your organization is global, how centralized or decentralized is your documentation operation?

Enter your response here.

21. How important are translation and localization to the work you are doing?

Enter your response here.

22. What collaborative tools and methods are you using to connect multi-location teams?

Enter your response here.

23. Do you work in a global or multinational organization? If yes, in how many are technical communicators on staff in-country?

Enter your response here.

SECTION 6: MANAGEMENT ISSUES

24. As a manager of technical communicators, what is one of your key current challenges?

Enter your response here.

25. Is your team connected to strategic initiatives (e.g., customer products or documents for technical staff) or in a supporting role (e.g., policies and procedures or regulatory documents)?

Enter your response here.

26. How much political clout do you feel you have in your organization?

Enter your response here.

27. How have alternative work arrangements affected your role as technical communicator/manager?

Enter your response here.

28. How do you develop you staff? With limited resources, what would you most prefer to spend money on toward the development of your staff:

☐   Conferences
☐   Tools Training
☐   Professional Skills Training
☐   Project Management Training
☐   Technology Training
☐   Industry Training
☐   Design Skills Training
☐   Other: Enter your response here.

SECTION 7: ACADEMIC ISSUES

29. How will the training of technical communicators change in the future, based on your understanding of how the profession may change?

Enter your response here.

30. The primary focus of my teaching today is on (rank from 1-7, with 1 being the most important focus):

☐   Authoring/Publishing Tools
☐   Programming/Technical Tools
☐   Information Architecture
☐   GUI Design
☐   Graphic Design
☐   Writing/Editing
☐   Professional Skills
☐   General Business Skills
☐   Other: Enter your response here.

31. What is the hardest skill to teach a student in Technical Communications?

Enter your response here.

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