

Technical Communicators and Empathic Design

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Introduction

What We Do

Whether we call ourselves technical writers, technical communicators, instructional designers or graphic designers, we have the same mission: Producing user-friendly information. To many of us, this is not merely a means to a paycheck; it is an ethic.

What Is Empathic Design?

Just what is empathy?

- Identification with and understanding of another's situation, feelings, and motives.¹
- The power of mentally identifying oneself with (and so fully comprehending) a person or object of contemplation.²

Competent communication always addresses the audience's situation, feelings, and motives. Is the audience accessing a document for education? Entertainment? Under what conditions is the audience going to use it? How does the document designer best address the audience's goals?

The rules for good print documentation are well established. The new term *empathic design* is often associated with online communication.

Why We Need It

Businesses are moving to Web- and computer-based training. This approach saves money considering the costs of transporting instructors and trainees to a central location. This is particularly important considering our increasingly global economy.

However, not all are pleased with the results. Too often, online documentation and training are no more than hard copy in electronic form. This is not always bad. Adobe's portable document format (PDF) allows truly cross-platform information sharing. Manuals, reference

books, and other such materials may be distributed widely and economically. Older materials may be scanned, archived, and distributed.

Still, direct paper to online format is not the ideal for training. Many consider reading materials online to be boring.³ Reading online results in headaches and fatigue for more than a few people. Comprehension may drop 30 percent compared with reading hard copy text.⁴ (What paperless office?) Thus, the new technology gives us new challenges.

Don't Forget the Customer

Empathic design applies not just to internal training but the customer who pays your electric bills. As with any other product, computer- or software-based goods must be easy to use. If they are not, the customer becomes unhappy and takes the business elsewhere. It is estimated that every dollar spent making product user friendly yields \$10-\$100.⁵

Serving the User

Empathic Design Process

Empathic design is a five-step process:⁶

- Observe
- Capture Data
- Reflect & Analyze
- Brainstorm for Solutions
- Develop Prototypes

Observe

The older term usability testing is compared with the initial stages of empathic design. The empathic design concept emphasizes observing the user in the most natural environment possible. The actual workplace is considered superior to a laboratory because the former is more realistic. Furthermore, observing the actual environment may reveal that people use a product in ways the makers never considered. In one example, Cheerios manufacturers discovered that parents would carry the cereal in small bags to provide their children with quick snacks away from the home.⁷

People work in the strangest places. A picture book to help scuba divers identify fish had illustrations smaller than one would expect. This is because the divers were using the book underwater, and the water acts like a magnifying glass, making the images look larger than they actually are.⁸ This effort probably resulted in a more compact (and thus convenient) book for divers to use.

In technical communication, one might not always consider emotional issues. Yet these things are important. The user community's attitude toward the way the product is designed affects how they use it, or if they use it at all. Some companies have used ad campaigns attempting to claim despite the company's great size, it can do small things. One such

ad pictured the company as a giant, holding out a hand, upon which the customers stood. But would people enjoy being depicted as Lilliputians? Is the giant benevolent or condescending?

In another case, a study group of teenagers lampooned an anti-drug pamphlet. A section listing ways to say no to drugs was considered absurd:

Students ridiculed answers such as, “No thanks, I’m all-American. I’ll stick to milk” – identifying them as glaringly inadequate for coping with the reality of America’s playgrounds and streets...Another student pointed out the danger of using inappropriate responses like “I’d rather have a hot fudge sundae,” predicting “You’d get beat up if you said this.”⁹

The brochure also included a drawing of a teen, the race of whom could be African-American. Test group members found this insulting. One said, “...is he supposed to be black? Why are black men always shown in these brochures? I resent this crap!”¹⁰

Again, we live in a global economy. This means to consider racial issues when depicting people. Your production, and by association, your company is more likely to be seen as friendly if the audiences see people who look like them.

Consider the documentation’s tone when designing the illustrations. The November–December, 1997 issue of *The Harvard Business Review* includes the article Spark Innovation through Empathic Design. It includes reverse Lilliputian drawings; the researchers are small people in lab coats studying an enormous infant. Is anyone likely to be offended? Or is the concept just too cutesy for a Harvard publication?

Capture Data

The traditional means for capturing data has been interviewing the test subjects or taking notes while observing them using the product. However, some important cues can be missed while note taking.¹¹ Perhaps the most efficient means is via videotape,^{12,13} which captures things a note taker might miss and can be replayed for close examination.¹⁴

Reflect and Analyze

An outsider's view can help the technical communication team. Those without preconceived notions interpret information in new ways.¹⁵

This is akin to the technical writer's *raison d'être*. Typically, a subject matter expert is too close to the product to produce effective communication about it. This is why the world needs technical communicators, and lots of them!

Brainstorm for Solutions

An environment in which even wild ideas are encouraged is conducive to creativity. Once again, it is necessary to record data (ideas) so they will not be lost. These means of storage can be basic (scratch paper) or sophisticated (computerized).¹⁶

Develop Prototypes

This is like developing a draft. Refinement precedes production. Developing prototypes can be involved. In one case, designers building TV and VCR controls wore "fogged glasses, gloves, and weights on their arms and legs"¹⁷ so they could empathize with a senior citizen trying to use their product.

Scrutinizing the Concept

As technical communicators, our most powerful tool for empathic design is the human imagination. This is not just for envisioning testing and listening uncritically to feedback. We must do our best to put ourselves in the end user's place. Under what conditions do they work? Is the environment well lit? If they are completing a form on paper, do they have enough time to make detailed comments?

This researcher has worked as a technical communicator for over six years, working for two large companies. At times, the technical writing team in which the researcher worked had more than a dozen people. But in no case did the team have resources even approaching those needed for the techniques described in this paper.

In fact, the researcher's conversations with other technical writers has uncovered this general observation: The funding needed to implement high concept ideas celebrated in technical communication circles often does not exist.

These observations do not constitute a scientific study. Nevertheless, if you find yourself in such an environment, the limitation is very real.

It is not the author's intent to discourage people or denigrate the empathic design concept. Rather, technical communicators must use all the tools at their disposal to help the end user. If technical communicators do not have something provided to them, they must use what they have, including their own creativity, to the best of their ability. Such is life.

Appendix: Typography on the Web

Introduction

With the personal computer and word processing software, people who otherwise would never have had the opportunity began designing documents. Unfortunately, this resulted in documents with multiple fonts, inconsistent headings, inadequate white space, and marginal readability.

With the World Wide Web, marginal documents are everywhere for everyone to see. Fortunately, the rules for good Web typography are relatively simple.

Be to the Point

While it can be appropriate to produce online documents that look like print books (Adobe PDF format is a good use for this), remember that people prefer to read online documentation quickly; they skim for what they want. Most do not want to scroll through seemingly endless pages of text. Be brief, and to the point.

Be Legible, Be Legible, and Be Legible

Color in Text

Consider this:

While it can be appropriate to produce online documents that look like print books (Adobe PDF format is a good use for this), remember that people prefer to read online documentation quickly; they skim for what they want. They do not want to scroll through seemingly endless pages of text.

Would someone enjoy reading that paragraph? Are the letterforms big enough to read without straining? Is the lemon yellow on a white background conducive to reading? Believe it or not, people are putting out Web pages formatted this way. Please do not do these things.

Normally we read black print on a white background, though it is best the paper not be blindingly white.¹⁸ White may not even be the ideal

background color, but whatever the color used, there must be sufficient contrast between the text and background.

They Must See It to Read It

Often typesetters select 11 points for printed text. Depending on the typeface, smaller or larger is acceptable. This document uses Book Antiqua, 11 point. This typeface is big enough that 10 points may have been adequate, but the author prefers to read type that is a little too big rather than a little too small.

If the user's eyes are likely to be 20–24 inches from the screen, go no lower than 10 points for body text. In fact, 12 points may be preferable.¹⁹ Also, consider that our population is growing older, and for some audiences 14 or even 16 points would be ideal.²⁰

Serif Versus Sans Serif

Conventional wisdom argues that serif typefaces like Times, Century Schoolbook, and Book Antiqua (which is similar to Palatino) are more legible than sans serif typefaces like Arial and Helvetica. Supposedly, the more graceful shapes found in serif typefaces help the eye move through the text. Some dispute this paradigm, but most accept it.

However, sans serif typefaces have come to be considered superior for online displays. Because serif typefaces are more complex, they may not reproduce as well on screen; they may look jagged and hard to read. With the continuing improvement in monitor technology, this issue becomes less and less important. However, not all users have state of the art monitors. For the time being, use sans serif typefaces. The following typefaces are considered good choices for online documentation:

Arial

Univers

Verdana

In fact, Verdana is specifically design for onscreen use.²¹ Someone made a font for this mission; take advantage of it!

Endnotes

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- ¹ "Empathy." *New American College Dictionary*. 3rd Ed.
- ² "Empathy." *The New Shorter Oxford English Dictionary Thumb Index Edition*. 1993.
- ³ Michelle Delio, "Report: Online Training 'Boring,'" *Wired News* 30 August 2000, 19 March, 2003 <<http://www.wired.com/news/print/0,1294,38504,00.html>>.
- ⁴ Ibid.
- ⁵ "User-Centered Design," *IBM Ease of Use: User-Centered Design Section*, 19 March 2003 <http://www-3.ibm.com/ibm/easy/eou_ext.nsf/Publish/570PV>.
- ⁶ Maisch Nichani, "Empathic Instructional Design," *elearningpost* 18 February 2002, 2 March 2003 <<http://www.elearningpost.com/features/archives/00103.asp>>.
- ⁷ Dorothy Leonard and Jeffrey F. Rayport, "Spark Innovation through Empathic Design," *Harvard Business Review* November/December 1997, 03 March 2003 <<http://mot.vuse.vanderbilt.edu/MTEFILELIB/Lectures/Ses17/Spark%20innovation%20through%empathic%design.doc>>.
- ⁸ Edward R. Tufte, *Visual Explanations* (Cheshire, Connecticut: Graphics Press, 1987) 114–116.
- ⁹ Karen A. Schriver, *Dynamics in Document Design* (New York: John Wiley & Sons, 1997) 175.
- ¹⁰ Ibid 172–173.
- ¹¹ Leonard and Rayport.
- ¹² Leonard and Rayport
- ¹³ Andre Burns, et al, "Delighting Customers through Empathic Design," 03 March 2003 <<http://cranfield.ac.uk/sims/ecotech/pdfdoc/idpm2.pdf.prn.pdf>>.
- ¹⁴ Leonard and Rayport.
- ¹⁵ Leonard and Rayport

¹⁶ Leonard and Rayport.

¹⁷ Leonard and Rayport.

¹⁸ Jan Tschibold, "The Importance of Tradition in Typography," trans. Hajo Hadelar, *The Form of the Book: Essays in the Morality of Good Design*, ed. Robert Bringhurst, Washington: Hartley & Marks, 1991) 30.

¹⁹ Schriver 506-507.

²⁰ Schriver 507.

²¹ "Verdana," *Microsoft Typography – Font information*, 08 May 2003
<<http://www.microsoft.com/typography/fonts/font.asp?FID=1&FNAME=Verdana&FVER=2.41>>.

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"Verdana." Microsoft Typography - Font information. 08 May 2003 <<http://www.microsoft.com/typography/fonts/font.asp?FID=1&FNAME=Verdana&FVER=2.41>>.