

# The Evolution of Online Help

## Part III: The Evolution of Help Authoring Tools



### History

The examples of help documentation discovered in ancient Egypt and Greece were undoubtedly carved by the sore hands of the world's first technical communicators. Relatively modern technical communication, first transcribed by hand and later reproduced by typewriter and printing press, did not begin to emerge until World War I (1914-1918) and World War II (1939-1945) when defense forces required extensive documentation for the use of weaponry, aeronautics, and other defense-related products. By the 1950s, courses in technical communication were widely available at the nation's leading technical colleges, where students were schooled in traditional grammar, writing dogma, and the day's foremost printing methods.

In 1950, well-known technical communicator Joseph D. Chapline authored an eight-page pamphlet called *Technical Writing*. Chapline's seminal work was distributed with the help of a printing press. It would be another forty years before technical communicators would have the everyday luxury of computers and modern help authoring tools (HATs).

The years since have witnessed the birth of HATs designed with functionality intended to keep pace with modern reading formats and the requirements of the Internet-driven, social media savvy end user.

### Writing and Reading Alignment

During the early days of personal computing, help documentation was almost universally delivered via printed text. The natural alignment of the technical communicator's writing environment and the end user's format required very few features beyond the standard word processor and basic diagrams. There was no conversion necessary to provide an acceptable user experience.

However, as technology advanced, end users began to shift to other reading environments. Native system help like WinHelp and digital documents like PDFs began to gain adoption. HATs followed suit, building tools that allowed companies to author their help documentation in one environment and publish to another. Microsoft Word, Adobe FrameMaker, and DITA became the standard authoring environments, and reading formats expanded to online help, browser-based help, wikis, and beyond.

With the bifurcation of the needs of the writer versus the needs and expectations of the reader, it has become clearer that HATs will eventually evolve to accommodate these diverse needs using a workflow that automates the transformation from a “writer friendly” format to a “reader friendly” format. Indeed, this trend has already been adopted in other data-centric solutions, i.e., databases and customer relationship management systems, where data can be easily moved from one system or format to another.

The dramatic increase in input and output formats requires HATs to be on continuous guard for required format updates or version enhancements. Yearly product updates, standard in the HAT community, are now being outpaced by the increased release cycles elsewhere in the software industry. Quarterly updates may be the new standard for keeping HAT users fully supported.

### **Mobile and Single-Source Publishing**

The increase in output formats has also driven up the demand for single-source publishing tools. Technical communicators require the ability to easily publish content across multiple systems without a redoubling of effort. Many HATs have attempted to capture this feature, although in designing their solutions with a print or standard help format in mind, many have missed the coming mobile revolution.

Morgan Stanley Research estimates that based on current trends, Internet accessed on mobile devices will overtake desktop Internet access by the year 2014. The Internet has jumped the rails, as the typical experience for most users is in the palm of their hands.

Thus, HATs must enable technical communicators to display their information accurately with advanced user interface modifications on a variety of tablet and mobile devices like the iPad, iPhone, and Android.

Advanced user interfaces must take into consideration the need for improved touchscreen navigation for end users, as this is a major point of differentiation between mobile and desktop browsing. Help deployed via mobile phones or tablets requires improved handling of large tables of contents, including clear display of miniature tables of contents and superb navigation of topics in order to quickly get the user to the correct page and avoid frustration. Should they fall short, help documents will be increasingly inaccessible to a large portion of their intended audience.

## **No More Silos**

Advances in technology have led to larger technical teams and the integration of individual technical communicators into areas they were not previously included. At many organizations, technical developers are now required to get involved with product development from day one, making it necessary for them to work as peers with members of the engineering team or other subject matter experts (SMEs).

Developing documentation in compressed cycles requires professionals that can author, publish, and share their deliverables in (sometimes) twenty-four hours or less. The writing, although critical, is oftentimes just as imperative as the ability to rapidly deliver documentation to other departments in order to meet deadlines and rapidly deliver help to the screens of end users.

This organizational shift makes it imperative that HATs support multi-author collaboration and build tools suitable for use by multiple roles within a company. This includes building sets of tools that allow writers, designers, managers, and developers to work side by side using the appropriate tool that is not over or under featured based on that user's role. Role-based usage should further force HAT vendors to review standard one-size-fits-all pricing models.

## **Deadwood to Avatars**

Collaboration is not only spreading among technical communication teams; in fact, today's end user is social media savvy, well connected, and in the habit of sharing comments with the public.

Social networking services such as Twitter, Facebook, and Disqus have emerged in the past decade and revolutionized the Internet, as well as nearly all forms of commerce. As a result of this trend, users now demand that content be a two-sided conversation.

Open APIs and simple plugins make using these services easy when utilizing a browser-based help system that supports open collaboration. Using social media to create a feedback loop for end users is essential to building excellent documentation. Various points of view and feedback from end users and subject matter experts can prompt internal responses and updates to future versions of help content or even the product itself.

It is now possible to publish to browser-based help, leverage the inherent open architecture of the Internet, and take advantage of extensive search capabilities using open APIs developed by Google and other search engines. This allows end users to reap the benefits of the latest search engine solution, which they already are familiar with and trust the types of results it produces.

Yet, very few HATs capitalize upon the Internet's unique infrastructure. Most are not offering features to enable the critical social media communication channel. HAT vendors must begin to fully support the integration of full search and social media capabilities or risk critical value of their customers' documentation.

## Conclusion

Although HATs have changed significantly in the last forty years, HAT vendors must continue toward a new paradigm shaped by advances in technology and new formats, the continued rise of the Internet and social media, and the growing ubiquity of mobile devices. Many HATs are still based on the outdated print delivery model and do not take into account the need for open collaboration between teams and interaction with end users. Product release cycles must be condensed in order to keep teams who deploy to and from multiple formats fully supported and able to serve their customers. Product components that provide an uncompromised transformation from the authoring environment to optimal reading formats will afford technical communicators the necessary trust that their solution will continue to meet the needs of the future. Pricing models need to be reviewed based on how the system is used within an organization rather than the product itself.

HAT vendors who recognize the opportunity to build tools that enable technical communicators and the organization to deliver excellent documentation that is easy for their end users to read, search, and share will gain market share in this new era of information and collaboration.