

Key Trends in Software User Assistance

Part two—Emerging paradigms and opportunities

Part 1 of this series discussed the current and future trends associated with software User Assistance (UA). This included most valued UA skills, UA technologies, and platform support. Read now.

This is the second of a two-part series discussing the current and future issues associated with software User Assistance (UA). This part will focus on the emerging paradigms in information technology and User Assistance which include comprehensive support strategies, integration with Agile methods, emerging opportunities in technical writing, editing simulations and videocasts, supporting mobile devices, and search engine optimization.

Comprehensive support options

One of the ongoing misunderstandings about User Assistance outside our profession is that it consists strictly of Help and manuals. This is unfortunate, given the reality of what we do. The more progressive UA departments have embraced a very broad concept of what it means to provide support for our users.

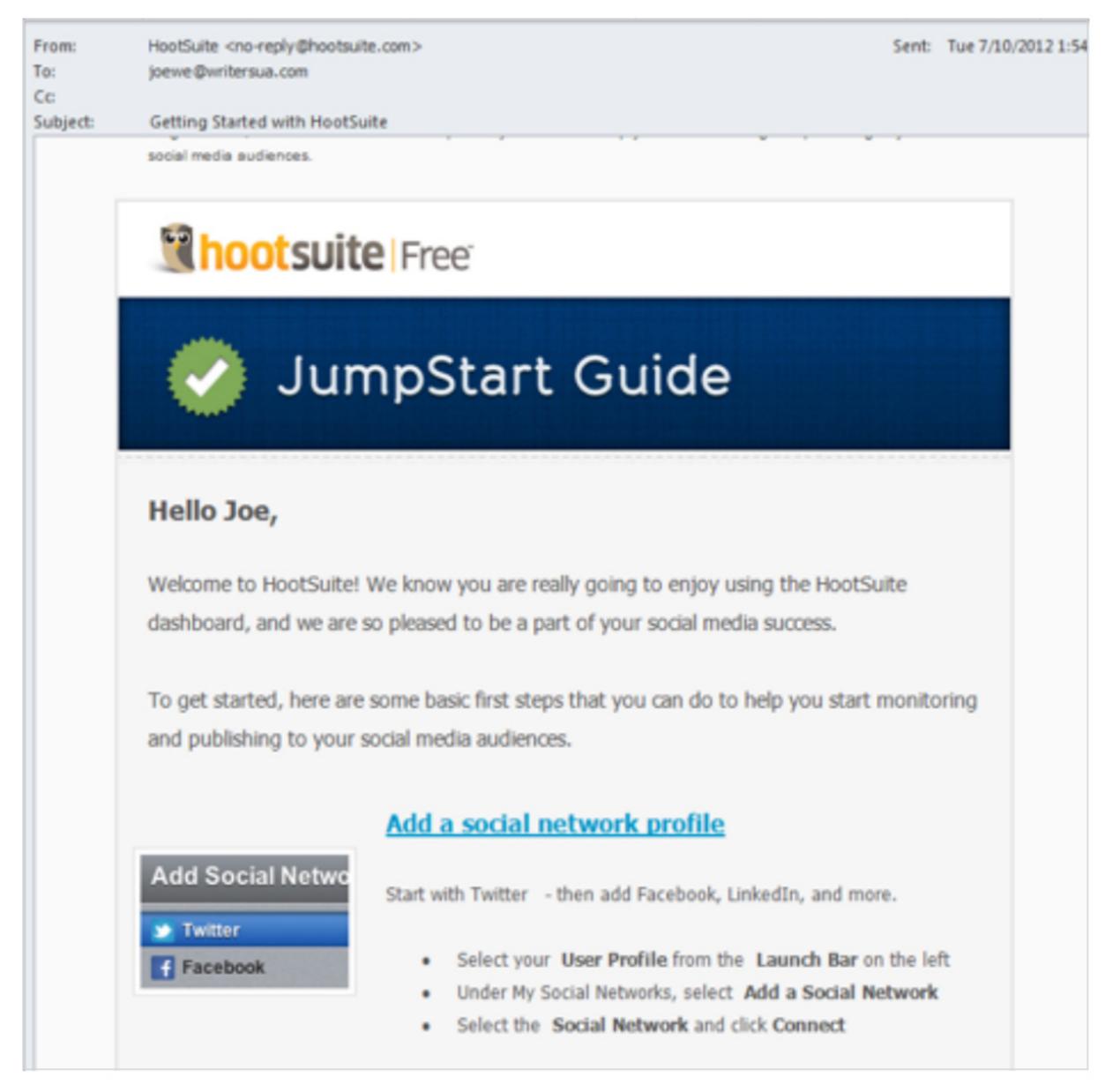
Every user is different and likes to consume information in different ways, different contexts. A comprehensive view of User Assistance recognizes this and attempts to provide a variety of options to users in order to get the information they need. The following table lists most of the options that are available to us. In any given situation or project, we may offer only two or three ways to get the information. But it helps to have all of these designs in our bag of tricks.

A comprehensive view of User Assistance attempts to provide a variety of options to users in order to get the information they need.

Context-sensitive topics	Wizards
FAQs	Tip sheets
Community portal	Printable user guide
Twitter	RSS feeds / email
Server-based content	UI Help text
'Cheat' sheets	Glossary and Index
Release notes	Blogs
Training videos	Knowledge base
Wikis	YouTube

If your software is constantly changing, you may want to implement regular notifications of updates via Twitter. An explanation of a new touch interface might best be presented as a YouTube video. A one-time software set-up routine is often best served by a wizard. A complicated User Interface (UI) might benefit from helpful phrases embedded on screen. The example below shows how email is used to provide new customers with helpful introductory instructions.

One of the challenges is assembling the right set of tools...the Adobe Technical Communication Suite is a good start.



If you find yourself providing assistance in only one or two ways, you may want to consider expanding your repertoire. One of the challenges of this approach is assembling the right set of tools. The Adobe* Technical Communication Suite is a good start. The inclusion of RoboHelp, Captivate, FrameMaker, PhotoShop, and Acrobat provides you with a variety of tools that can accomplish much. However, other tools would be needed to match the evolving technology. The tools you use should support an easy and clean import and export of content so that it can be used in a wide variety of situations.

Better content through an Agile method

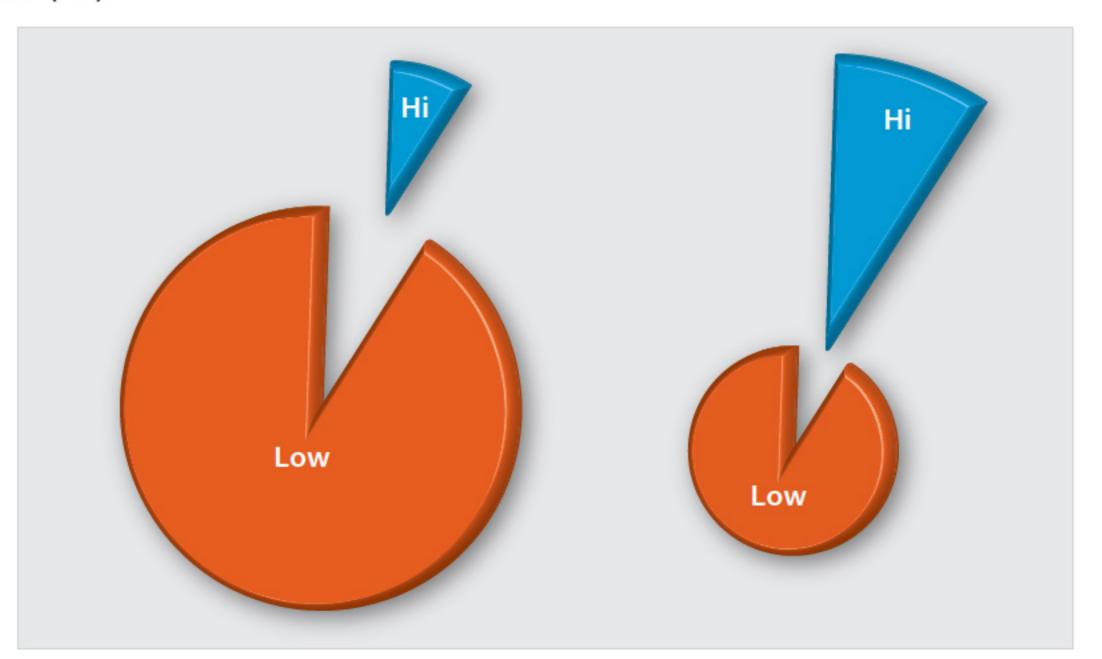
The traditional form of technical writing has been severely broken. Not because of the usefulness of words but from our inability to cut back on the word count. It is time for UA professionals to make a dramatic change in their thinking, to move away from comprehensive writing, and move toward crafted writing.

Many of us have grown up in a professional culture that says, 'If we have a product with a hundred features, then we need to write procedures for each of these.' We believe that everything we've written needs to be reflected in the table of contents (TOC). Consequently, we beat around the bush, sacrificing the quality because of our desire to have quantity and uniformity.

We need to take a much more granular approach to resource allocation, to evaluate our feature set and find out the real pain points wherein majority of people are having problems. Your software support department can be an excellent source for this information. It is also valuable to interview customers yourself about why and when they need Help.

A key benefit of prioritizing your writing is that it makes it easier to quickly react to changes in your software and to new information about customer expectations.

Once you have of the required data, you can isolate the high priority topics from the overall topic pool. Creating support for these topics should take up the lion's share of your content development time. You may use a number of different types of UA to support those topics: a wizard, a YouTube video, a Help topic, a simulation, UI text. The rest of the topics in the topic pool can be completed as per the availability of time and resources. The figure below illustrates the idea of shifting from a system where every topic is equal (on the right) to one where the high priority topic gets a substantial share of attention (left).



This approach means breaking away from traditional hierarchies in our authoring tools as well. When working with Adobe* RoboHelp* and Adobe FrameMaker*, you need to customize the table of contents to highlight the pain point topics, use the automatically generated result only as a first draft and then fine-tune it by moving hot topics to the top of the hierarchy. Not all topics are equal. Make the more important ones very visible. Your TOC can also serve as a warning sign. If it is three levels or deeper, there is a good chance that your customers aren't going to easily find what they are looking for. Search can help, but only if supplemented with good metadata and descriptive topic titles.

Many of you have probably heard of Agile application UA development. A key benefit of prioritizing your writing is that it makes it easier to quickly react to changes in your software and to new information about customer expectations. Being mired in huge documentation sets limits your ability to spend time to adjust adequately to topics that may dramatically improve usability.

For example, if your tech support center identifies a dialog box that is constantly being misinterpreted, your team should be able to spend time in researching the problem, planning the solution, and implementing it. You need flexibility in your schedule to move the solving of pain points to the top of your production schedule whenever necessary.

Embracing an Agile UA should reduce the amount of overall documentation processing. The efficiency of today's content management systems has essentially made it easier to needlessly expand the volume of our documentation set. The more words we create initially, the more work needs to be done to process those into their final delivered form. We start with a certain volume of text which then needs to be edited for grammar, consistency and style, it needs to be tagged with markup, XML, HTML, CSS, etc., file formats need to be converted to other file formats, Help files and wizards need to be tested and debugged. It also involves translation, localization, followed by maintenance and management of the entire process.

Every written word dramatically increases the volume of information and the time and cost required to produce it. But this also works in reverse. When you write better with fewer words, you limit the resulting expansion of information, data, time, and cost. Hence, your writing pays for itself.

Great, effective, and crafted writing is not a commodity... television is a visual medium but fails to be completely effective in the absence of good scripts.

Emerging opportunities in UA

Today, some people in the tech comm community believe that to get ahead you need to get away from writing. They perceive it as a commodity, that where strategic planning is to be, info architecture is the key, usability, anything but writing. And that is wrong.

Connecting a noun with a verb may be a commodity. Great, effective, and crafted writing is not a commodity which is why Hollywood fretted over the writers' strike a few years ago. Television is a visual medium but fails to be completely effective in the absence of good scripts.

It is not all about the money. I've always liked to write, and I'm not going to stop writing and change careers solely because some people in my profession have decided they don't like to write anymore.

If you take a wider view of our role, the exciting reality is that in the software world, there are more opportunities than ever in technical writing. Many new opportunities have emerged through Web 2.0 and an explosion of multimedia information on the web. Let me run you through some of these opportunities.

Magazine-style articles targeted at users have become more widespread as a supplemental form of User Assistance. Articles can be a great way to cover unique features and challenges in depth and in a more conversational style than traditional documentation. Writing good articles requires a high-level of craft and if you are going to start doing them, it is best to have a commitment to doing them on a regular basis.



Discussion groups are not new to the software world, but they are increasingly becoming visible as part of user support. However, without moderators and an effort to manage threads and contributions, it can be extremely difficult to build a base of solid information. Consider taking over your company's discussion boards and mining the messages for nuggets of valuable information that can be repackaged and delivered in other ways.

You can make an extremely good case that technical writers are the right people to own the creation and management of all of the text of the user interface. This is at odds with how the software industry has evolved. It can be tough for writers to get involved with software development in the early stages. But it

Experience with video capture and editing is an essential part of the User Assistance tool set... Adobe Captivate provides one of the most important components for video editing, the timeline.

is certain that they are the most qualified people to be making these decisions. Selecting the right words to fit into what is often limited and valuable screen real estate, is a great area to add to your repertoire.

Finally, more and more organizations are providing information portals and knowledge bases for disseminating content. The problem is excessive information or unavailability of appropriate topic access. Microsoft has an enormous amount of good information in their knowledge bases, but it is difficult to find. Hence, curating is very important for any content repository.

It can be helpful to process your content with single-source tools that make it easier to publish information in a variety of formats.

Editing of simulations and videocasts

Blogs and videocasts are great ways to provide insights and training about the best ways to use software. Both, however, require a commitment to effective writing. Poorly written blogs are not very attractive. And videocasts without scripting often fall flat.

Videocasts are part of the larger opportunity of training and eLearning. Providing video lessons about a software is a method that continues to grow in popularity. Partly due to the accessibility of video production technology. Unfortunately, without a grounding in effect, instructional design, and solid scripting, the results are often unwatchable. Get involved with crafting the words for this type of User Assistance.

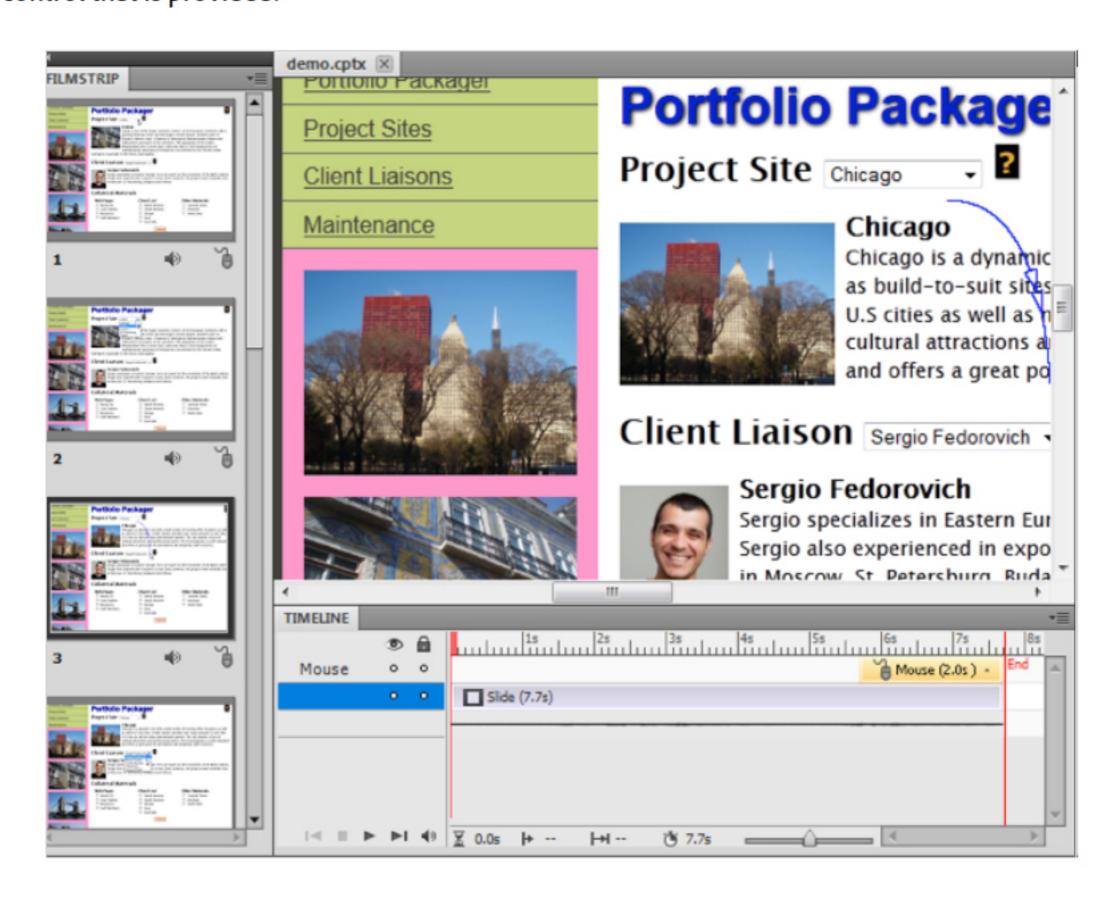
Experience with video capture and editing is an essential part of the User Assistance tool set. I've been doing a lot of work with instructional video over the past few months. The purpose is to provide an up-tempo visual aid for topics that are pain points for users.

If you are looking for a video editing tool, one of the most important components is the timeline. Adobe Captivate provides this capability. All of your clips, narration, music, captions, and special effects will be attached to slides along a chronological line going from left to right in the timeline.

Media elements can be moved forward and backward in the timeline or locked to very specific points. Media elements located at the same point along the timeline will be synced together in the movie. The viewing window lets you review media clips individually or combined with other elements.

Static images like screen captures, photos, and titles can be dropped into the timeline as well. You can set duration for the amount of time you want the image to appear on the screen for. You can also select from a number of slide transition effects.

All good editing tools will let you do all of the above. But, the tools will vary in the level of sophistication and control that is provided.



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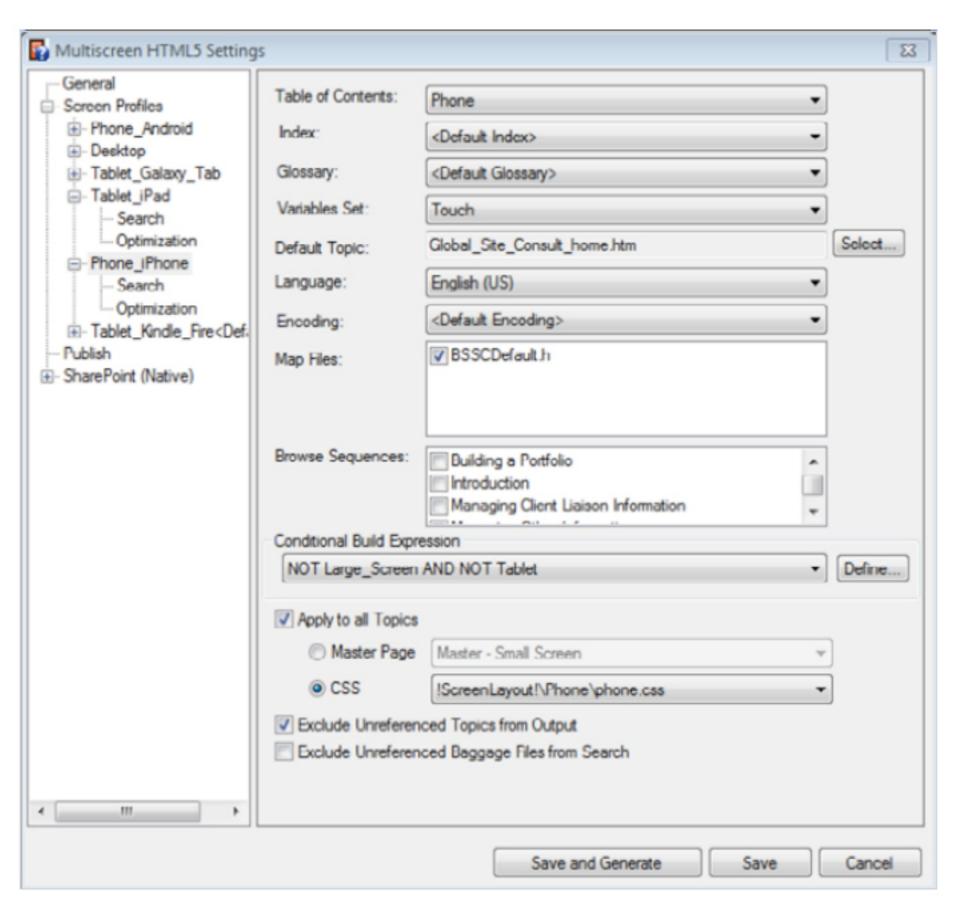
Keeping up with the mobile device explosion

We need to keep up with what is going on with mobile devices and applications. But it is easier said than done. I've been focusing on the mobile space for the past two years and still find it difficult to stay up-to-date on the ever-growing list of devices and associated operating systems. I'm actively working with iOS, Android, and Windows Phone 7, yet it is a struggle to deal with the on-going changes in just those three ecosystems.

One of the things that keep me going in this techo-chase is the amount of value in it. There are distinct differences on the surface of these environments and also under the hood. Windows Phone has a completely different form factor as compared to iOS. Android is different from both Windows and iOS. A person who buys an iPhone over an Android is doing it for reasons beyond the cost of the device and the service contract. I don't think you can effectively develop User Assistance for a mobile app without understanding the nuances of the user interface and the expectations of the customer. It has been very useful in identifying ideas for better ways to provide User Assistance.

One of the challenges in keeping up with the device explosion is the cost of the devices. It is impractical to have access to all possible devices. It may be difficult to justify having three or four of them. The average cost of a smartphone is about \$500-600. In the United States, this cost is often subsidized by the communication networks in exchange of 2-year service contract. These contracts can cost \$2,000-\$3,000. Adding to that is the obnoxious practice of the networks holding back on software updates to boost the sales of new devices and extended contracts.

Personally, I need only one contract—for my primary phone, iPhone 4S. I also have an Android Galaxy S and an HTC Focus for Windows Phone. It isn't practical to have multiple contracts. Also, I also can't afford the retail prices of new phones. What should a UA professional do?



iOS is not a problem for me. Apple pushes everyone forward at the same time on devices and software. If you like Apple products, you can upgrade the equipment every two years. The rigid control Apple has over their platform limits your effort to deal with more than a couple of variants in technology at one time. Hence, I would prefer keeping this as my primary, personal device. On the other hand, you can see the quick evolution of the Android platform from the ever-increasing set of statues outside the Googleplex in Mountain View, CA. In the past three years there have been seven major updates with sweet names—from Cupcake to Jelly Bean. Windows Phone has had fewer updates than Android, but I still want to get them to experiment with.

One way to cope is to buy unlocked phones that are out of contract. The fast growth of the smartphone market means there is a burgeoning market for used phones. I bought both the Android and Windows

Using conditional text and automated output targets means you can consistently and accurately deliver different content for different viewers.

phones used on eBay. It was about half of what it would have cost me to buy new devices without a service contract. Buying an unlocked phone meant that I could update the available operating system software without waiting for a carrier to send it. I use the Wi-Fi capability for Internet-based activities which is all I really need for testing apps and User Assistance.

Tools like Adobe RoboHelp provide the virtual kind of assistance. The latest version of the product comes with simulators for iPhone and iPad. It also offers a number of sample layouts for phones and tablets. You can preview your output in up to three layouts at the same time in multi-screen preview windows. You can also specify any number of screen dimension layouts. This may not be a replacement to actually having the physical devices. The best approach would be to use both virtual and physical devices throughout development.

Search Engine Optimization

I consider web-based search as the technology having the single biggest impact on how we deliver assistance to our users. What has been given to us through Google, Bing, and other search engines is a free and relatively easy way to ensure that our users find what they are looking for when they need it through a standard user interface. Understanding how to make your information findable through search engines is becoming an increasingly important skill.

The key element in making your information findable is to get your content onto a public-facing server. Everything else about search engine optimization is exactly that—optimization. The core value is provided to you just by making your information visible to Google and other search engines. In order to do that, you need to get all of your content into formats that search engines can understand and index.

If you have been developing your content using standard web technologies like HTML and CSS, then you are golden. Google, for example, knows how to process your information and add it to their indexing service. Likewise, XHTML, XML, XSLT are easily consumed by Google.

Other proprietary formats can create problems. Google can index a variety of file formats, but with differing levels of accuracy. For anything other than standard web formats, it will be mandatory for you to see if Google is making sense of the files you post.

The Adobe PDF format used to be a problem for Google. But they have done a lot of work to minimize such problems. For the most part, Google is able to consume PDF and make that content visible through search. Where things sometimes break down, is whether the link displayed by Google takes the user directly to the point in the PDF with the relevant content.

It can be easy to determine the 'googleability' of your content. Wait about a week after you have posted your content to a public-facing server, then start googling key phrases unique to your documentation. See whether or not Google has found your content and where it has been placed in the results.

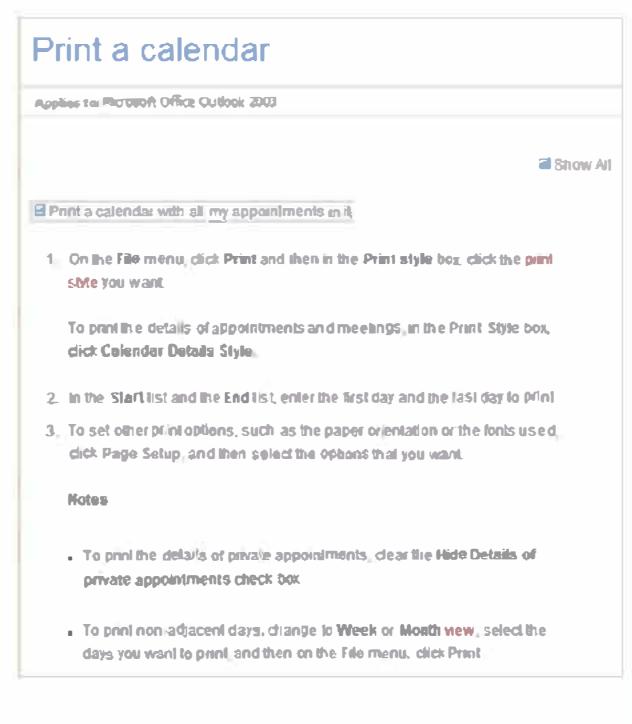
If your content is at the top of the hit list—congratulations! Your information will be easily found by your customers. If other pages are ahead of yours, those pages will be the ones that users are likely to view first. If the information is incorrect, your customers will be frustrated with your product—not with the page they found. People are going to use Google to search answers about your software. What do you want people to see when they use searches? It should be the correct information that has been written by you and that presents the right approach to using your software.

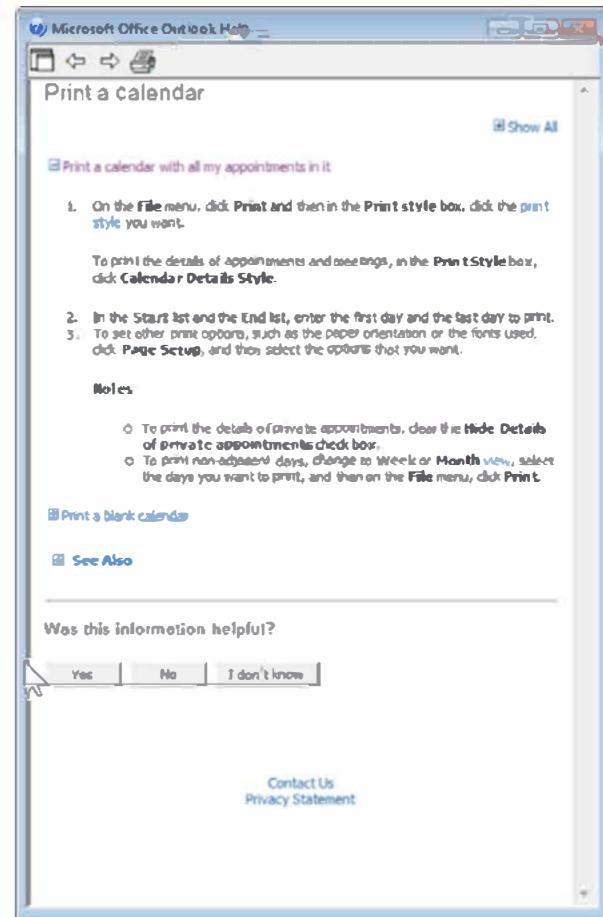
Unless your content is already on public-facing servers, you are going to need to make web-based versions of it. This almost certainly requires some form of single-source authoring strategy. If you have a large collection of context-sensitive Help and manuals, you will need to make, what I call, mirror versions.

The Microsoft example below illustrates this. Each of the context-sensitive Help topics for Outlook is duplicated as a web page. The wrapper around the content and the formatting is different, but the text is the same.

The Adobe* Technical Communication Suite is really good at supporting this type of authoring. Using conditional text and automated output targets means you can consistently and accurately deliver different content for different viewers. The Tech Comm tools also support the ability to include metadata throughout your documentation and metadata helps makes your content more easily visible in search results.

The best user assistance is the one that can support different users, in different ways, on different devices, platforms.





Conclusion

As with the software industry in general, the field of User Assistance is constantly evolving. However, it takes effort on our part to keep up with new technologies and techniques and try new approaches. Newer areas like instructional video, user interface text, and search engine optimization should match the needs and desires of today's software users than older formats. Traditional forms of User Assistance like printed documentation and online Help are still important. But we need to look at those deliverables closely and see how we can craft them to best meet the needs of our customers.

The best user assistance is the one that can support different users, in different ways, on different devices platforms. A strong single-source authoring strategy is more important than ever in helping us to achieve that goal.

Biography

Joe Welinske is the President of WritersUA.

Joe Welinske is the president and founder of WritersUA—a company devoted to providing training and information to User Assistance professionals. The WritersUA Conference draws hundreds of attendees each year from around the world to share the latest in User Assistance design and implementation. The free content on the WritersUA website attracts over 20,000 visitors each month. Joe most recently published 'Developing User Assistance for Mobile Apps'. He is currently teaching courses at Bellevue College and UC Silicon Valley. Joe received a B.S. in Industrial Engineering from the University of Illinois in 1981, and an M.S. in Adult Instructional Management from Loyola University in 1987.



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