"Information Architecture? In *My* Content?": What You Need to Know About IA

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For a practice that is about "making the complex clear," information architecture (IA) remains notoriously hard to define. What is IA and why should technical communicators care? As it turns out, information architecture provides the structure you need to prepare your content to be found and understood by not only your users, but also search crawlers and machine learning algorithms. Technology is driving change to how we structure content. Your organization will need to adapt. However, the move toward structured content does not need to begin as an enterprise-wide endeavor. IA provides methods and tools that can help technical communicators improve their content today, while better preparing their content for tomorrow's emerging technologies. We use concrete examples and a real-world case study to illustrate the benefits IA can bring to content creation.

Information architecture (IA) provides the structure technical communicators need in order to prepare their content to be found and understood by both human readers as well as search crawlers, machine learning algorithms, and other technologies. IA provides methods and tools that can help technical communicators improve their content today, while better preparing their content for tomorrow's emerging technologies.

Introduction to Information Architecture

Throughout the decades, the phrase "information architecture" has been used by different groups of professionals to describe distinct—but related—practices relating to the organization of information. Richard Saul Wurman, the man who coined the phrase in 1975, meant it in the sense of information design. His goal was to "make the complex clear" through infographics, diagrams, and creative two-dimensional page layouts.

With the publication of *Information Architecture for the World Wide Web* by Peter Morville and Louis Rosenfeld in 1998, "information architecture" became a way to apply the lessons of library science to the nascent World Wide Web. The focus was on improving the labeling, navigation, search, and findability of content on websites.

The scope of the practice of information architecture has steadily expanded since the 2010s, beginning with the publication of *Pervasive Information Architecture* by Andrea Resmini and Luca Rosati in 2011. Now that digital experiences take place across multiple devices and contexts, information architects play close attention to how language and design can be used to create a coherent sense of "place" for users even as they move from screen to screen.

Two Approaches to Information Architecture

Information architecture connects users to the content they need. This can be done by, for example, organizing the content on a website or app under intuitive navigation schemes. It can also be done by embedding structure and semantics directly into the content itself with code (often an XML standard such as DITA) so that the content can more readily be accessed. Generally speaking, user experience designers will focus on the first approach, and technical communicators will focus on the latter approach. That being said, both approaches are necessary to build a complete and coherent information architecture.

How Information Architecture Concerns Technical Communicators

Information architecture has implications for the way technical communicators write, the tools they use, and the audiences they reach. Writing should be topic-based and modular so that content can be reused and personalized as the audience or context requires. General-purpose writing software such as Microsoft Word will prove less useful than something like Oxygen XML Editor, a powerful tool that gives writers much better insight into the code-level structure and semantics of their content. Before hammering out the structure and semantics of their content, however, technical communicators will want to reevaluate the audiences for whom they are writing, especially since the transformed content will end up reaching new delivery channels and devices.

Getting Started with Information Architecture

Practicing information architecture begins with understanding your domain and the needs of your business and users. Once you understand what needs to be written, for whom, and why, you will want to write your content not in terms of "pages" but in terms of "chunks" that can be reused across all of your outputs. For now, take a look at the content you already have and create a content inventory. This will allow you to find patterns, recognize which pieces need updating (or deleting), and identify opportunities for reuse or chunking.

Case Study

The side-by-side comparison image seen in Figure 1 demonstrates how technical communicators at Precision Content Authoring Solutions Inc. were able to transform content to great effect. It is not so much that the technical communicators "added" information architecture; all content has some sort of inherent information architecture, whether it was designed purposefully or not. But by strategically and creatively re-organizing the information, the technical communicators were able to build an improved experience for readers.

In the image on the left, the content is dense and complex. The language is inconsistent and confusing. It is difficult for readers to scan and quickly make sense of the information.

In the image on the right, the content has been transformed. There is a clear and direct structure, superfluous words have been eliminated, and the added labels and visual elements make the information much easier to parse and understand.

Information architecture is not merely editing; it identifies, labels, and organizes the structure behind the words. Without a full view of the underlying code, it may not be apparent, but in addition to being more easily readable by humans, the content is also now more easily readable by machines because of the semantics associated with the text. These semantics will help algorithms make sense of the content and thus enable the algorithms to leverage the content in exciting ways today and far into the future.

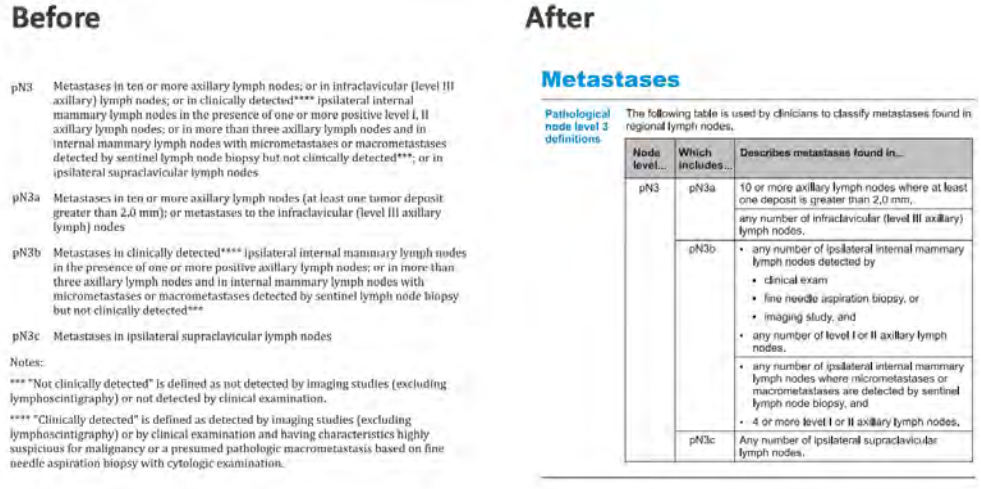

Figure 1. Content before and after its transformation

Conclusion

Information architecture is a deep and fascinating discipline that is highly relevant to any technical communicator who wants to ensure their content can be easily understood, used, and enjoyed by anyone—humans and machines alike.

Resources

Hanna, R., & Meyer, L. (2014, May 8). Transforming the application of cancer staging with intelligent content. Intelligent Content Conference, San Francisco, California.

Resmini, A., & Rosati, L. (2011). *Pervasive Information Architecture: Designing Cross-Channel User Experiences*. Elsevier.

Rosenfeld, L., & Morville, P. (1998). *Information Architecture for the World Wide Web*. O'Reilly & Associates.

Wurman, R. S. (1996). *Information Architects*. Graphis Press Corp.

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Author Biographies

Josh Anderson is an American-Canadian Associate Information Architect at Precision Content. He analyzes and structures content to reveal the insights that come from the creative organization of information. Josh was an English teacher in Japan and an SEO Specialist in the Chicagoland area before earning a Master of Information at the University of Toronto. In 2020, Josh co-organized and hosted a World IA Day event at the Shopify office in downtown Toronto. In his free time, Josh creates and listens to a wide variety of music.

Peihong Zhu is an Associate Information Architect at Precision Content Authoring Solutions Inc, a technical writer, and a member of the Society for Technical Communication. With previous work experience in life science and bioinformatics, she has intimate knowledge about scientific research, the pharmaceutical industry, and the software industry. Armed with years of experience in researching, organizing, and analyzing information, as well as formal training in DITA, user experience research, and technical writing, Peihong is passionate about using her skills to communicate the importance of information architecture.