

Information Architecture in Technical Communication

Written Fall 2024, Edited Spring 2026
For: ENG 5311 - Foundations of Technical Communication

Candice Harrell
Texas State University
Spring 2026

Introduction

In an era when an astonishing 2.5 quintillion bytes of data are produced daily (Perez), the need for systems in which this information is stored, navigated, accessed, and retrieved has become paramount. Information architecture (IA) plays a critical role in this process. Defined in the *Journal of Information Architecture* as “the art and science of organizing information so that it is findable, manageable, and useful...[as well as] an enterprise-wide activity that includes such aspects as data architecture, metadata management, and knowledge management” (Downey & Banerjee 25), IA serves as a foundational discipline. It supports and intersects with fields like UX Design, Library Science, and Computer Science. This literature review, however, focuses on IA’s importance to the field of Technical Communication (TC).

From my school readings, it is evident that IA is not only relevant to TC but is also deeply intertwined with its core practices. For example, in his keyword essay, “Information,” William Hart-Davidson says, “IA can be considered a complementary path to practicing technical communication skills and applying technical communication knowledge” (Davidson 149). Drawing on this and other instances, as well as my professional experience, I posit that while IA and TC are distinct professional fields, IA is not only important to but also inextricable from TC.

In this review of literature from TC publications, I sought to answer the question “Why is information architecture important to the field of technical communication?” My instincts told me that it is important, but I needed to understand *how* and *why*. In my three years of working in technical writing and knowledge management, I’ve found that different aspects of IA, such as information hierarchy, organization, metadata, and taxonomy, are central to the work I do in

industry. When I enrolled in the MATC program at Texas State University, I sought to learn more about IA as it pertains to TC and my work. In the courses offered in the program, I found indications that though some elements of IA might be touched in different classes, there were no courses on offer that explicitly cover the principles of and scholarship on IA as it pertains to TC. Because of this, I decided to independently explore the literature in this field to understand the importance of IA as it has been discussed and peer-reviewed by TC academics.

This literature review focuses on relevant papers published between 2000-2024. Initially, I intended to limit my research to papers from the past 10 years (2014-2024), but after encountering a dearth of more recent scholarship on IA, I expanded my scope. My options were constrained to publications within the field of technical communications: *Technical Communication*, *The Journal of Technical Writing and Communication*, *The Journal of Business and Technical Communication*, *Technical Communication Quarterly*, *Communication Design Quarterly*, and *IEEE Transactions on Professional Communication*. Within these journals, I searched for papers focusing on information architecture, information design, knowledge management, component content management (CCM), single-sourcing, navigation, and retrieval. Because of the interdisciplinarity of IA and the multi-faceted nature of TC, I also searched for articles on content management systems (CMS) and content strategy as they pertain to IA because these are interlocking pieces of the IA/TC puzzle. My search yielded the most IA-specific results between the years 2000-2012, after which scholarship on IA within the field of TC seems to have dropped off. Similar to the fragments of IA I found within my master's program, academic work on IA was continued only peripherally within the scholarship of related but distinct fields like content strategy and content management. It is as though the conversation around IA within TC ended.

My examination of the literature is conducted through the lens of the human-information interaction theoretical framework. This framework "emphasizes communicating information, not writing documents or designing websites, nor methods of creating content" (Albers xii). Through this lens, I look at technical communication as a more holistic practice that encompasses information architecture as fundamental because it allows end-users to interact with rather than just consume information.

I have structured my review in three sections: an introduction, a review of the literature, and a conclusion that looks to the future of IA research within the field of TC. I have chosen not to use subheadings within the literature review section because, while there are some common threads throughout different papers, others have only the most tenuous or even abstract connection to the discourse. For example, Matthew McCool's work on the localization of IA or Michael Salvo's work on IA as a site of exchange through which to democratize technologization.

In my review of the literature, the first author, Janice Redish, founder of the Document Design Centre, attempts to answer the question "What is information design?" "Information design" as a term is a forerunner of the later term "information architecture." Amber Swope expands on this inquiry by asking what an information architect is and conducting a survey to determine the professional and educational path to becoming one. In a two-part series of papers, the next authors, Julie Dyke Ford and Richard Mott, begin to map the convergence of IA and TC through the widespread adoption of single-sourcing systems. Similarly, Tatiana Batova and Rebekka Anderson examine both trade and scholarly literature to identify the changing skills and role requirements needed by technical communicators working in CCM environments. Abe Crystal, an Information Science scholar, discusses the importance of more nuanced,

user-centered navigation structures within IA frameworks to improve documents' usability and accessibility, which, in turn, affects how technical communicators compose content. Mingram Li then explores a similar vein of inquiry in the application of IA principles to Information Visualization, which pertains to TC as the visual representation of complex information. Matthew McCool turns his attention to international and intercultural technical communication and how not only documents but also information organization structures should be localized based on deeper cultural considerations. Michael Salvo and Stewart Whittemore move the discussion to rhetoric. Salvo explores the effect of technical communicators as rhetors who can influence and guide discourse around technologization through IA. Whittemore turns his attention to the UX design of CMSs with a focus on usability for writers within these systems and how classical rhetorical mnemonic strategies can be used to decrease cognitive load and improve innovation.

By analyzing and synthesizing insights from these works, this review extrapolates the importance of IA to TC in different aspects of the field as the scholarship has identified thus far and offers suggestions for future research in areas where there are present gaps. In the following section, I will delve deeper into each of these works and how they relate to my research question.

Literature Review

With the exponential progress of digital technology, the information landscape in which technical communicators practice their profession has changed dramatically. This is most clearly seen in years since connectivity through the internet has gone from a nice-to-have luxury to an essential utility, like electricity or phone service. The formats and affordances by which our communications are received have largely moved from the physical and tactile to the digital in

websites, applications, software, intranets, content management systems, and more. With this change comes not only the opportunity for delivering more information of more types but also the difficulty of managing and organizing so much information in a way that it is accessible and usable to users.

Historically, the scope of technical communications was largely confined to the document—the ways it's written, organized, structured, and designed for specific media. As the media in which communications are disseminated have expanded, technical communicators have increasingly had to turn their attention beyond what happens within a document to how the document itself is organized within an information management system.

This changing landscape and the need for TPCs to adapt their skills in response is something that Janice Redish noted in the year 2000 in her foundational text “What is Information Design?” In it, she describes the changing landscape of technical communication and the roles of professionals within it, saying that “as technical communicators, we do all the parts of the process” (Redish 165), which includes both the structure of a document as well as the organizational structure in which the document lives. This article, written just as the internet had shifted from a technological novelty to an integral part of life in the modern world, dedicates a section to “Information Design on the Web.” As both an art and an organizational practice, web design was still in its infancy. Because of this, Redish focuses on the changing role of technical communicators within this genre. She says that while we must pay attention to “information design in the narrower sense of...the mix of text and pictures and to presentation on the screen,” to develop a successful website, we must also “select the relevant content and organize it into an appropriate hierarchy for ease of navigating quickly to the right place” (Redish 166).

Though this is a foundational work in the area of information design, Redish alludes to the importance of what will come to be called information architecture in the field of technical communication. She speaks to the need for technical communicators to “pay close attention to information design in both the broad and narrow meanings,” an act that calls for technical communicators to understand “the business goals, the users, [and] the ways users will work with documents” and to be “involved in planning [the output format for their documents]” (Redish 166). Reddish saw a changing world in which technical communicators’ expertise could no longer be limited to intra-document structures. To adapt and excel, we need an understanding of single-source components’ and documents’ interrelatedness and organization within a border structure. Despite the paper’s importance, one limitation of it is Redish’s over-reliance on her own experience and expertise as a resource. As such, this paper reads more like an editorial than an academic article.

However, Redish’s expertise allowed her some prescience in anticipating the changing roles of technical communicators as we’re confronted with increasingly complex technologies. In 2019, Amber Swope sought to define this changing role, particularly as it pertains to information architecture, in her paper, “Information Architects: What They Do and How to Become One.” This work is based on a survey of 35 professionals who work in IA, through which she attempts to identify different paths into the profession through the professional and educational backgrounds of participants. Information architecture as a discrete professional domain is difficult to define because “IA is usually considered a subset of skills used in other disciplines” (Swope 38). One discipline in which this dominates is technical communication, as evinced by the large proportion of TPCs in the survey who work in IA. The range of responses Swope received in this survey confirms that while there are many pathways into the profession, “the vast

majority of the respondents (67%) had technical communication experience either as the starting point or as part of their career path” (Swope 37).

While for Swope, this survey confirms her belief that there is more than “one way to become or be an information architect” (Swope 40), one major limitation is the sample size and the self-reported qualitative data, a limitation to which Swope readily admits. With only 35 participants offering subjective perspectives, the results can not be scaled to generalizability. A missed opportunity in this survey is the inclusion of questions that pertain to why IA skills are valuable and how they improve interactive communication between producers and end-users. However, even if this does not definitively show the importance of IA to TC, it does show the significant overlap in the two fields and the importance of IA skills to TC and vice versa.

In addition to its growing importance in user-facing information systems, the skills and principles of information architecture also became increasingly important to the systems within which technical communicators work. In their 2007 work, “The Convergence of Technical Communication and Information Architecture: Managing Single-Source Objects for Contemporary Media,” Julie Dyke Ford and Richard Mott argue that information architecture and technical communication began to converge in the adoption of single-sourcing systems. Single-sourcing is the practice of “treating units of information as dynamic objects rather than static end-products” (Mott and Ford 28). By doing this, technical communicators become information architects who “combine the flexibility of single-sourcing with the updating, storage/retrieval, distribution and sharing properties of networked environments” (Mott and Ford 28). As this convergence of IA and TC happened, technical communicators’ roles have expanded from documenting and translating information to include the organization and management of the documents we produce. In fact, the authors explicitly say that “technical communicators have

become architects of information” (Mott and Ford 43) and that in this role, “ technical communicators have an increasing responsibility for “organizing, creating, and presenting information [and] processes...within our professional environments” (Mott and Ford 43). They argue not that technical communicators must become information architects, but that the increased demands of their roles are creating a natural convergence, making the distinction between IAs and TCs less clear. This work implicitly addresses my research question because when two distinct professions begin to converge into one, the import of one to the other becomes inextricable.

Ford and Mott continue their discussion of this convergence in “The Convergence of Technical Communication and Information Architecture: Creating Singlesource Objects for Contemporary Media,” focusing on how to effectively communicate as technical communicators in an information landscape that has become “less hierarchical and linear and more encompassing of deep structures and metadata” (Ford and Mott 334). In this landscape, “professionals in our discipline transition from writing and designing documents to writing and designing [information] objects” (Ford and Mott 340). Information objects are dynamic units of information that can include words, lines of text, chapters of text, sound bites, video clips, or long-form video, all of which can be combined and repurposed to create complex informational structures. In this paper, the authors offer insights into how technical communicators as information architects can generate usable objects for users, incorporate multimedia components, and collaborate with others. The principles that undergird their argument are that technical communicators should “break away from genre-motivated communication and instead treat units of information as dynamic objects,” and that technical communicators should be referred to as information architects.

The authors argue that as the information landscape in which technical communicators work shifts, it has become crucial that we not only learn how to create and use these information objects but also that we understand how they are navigated through and retrieved by users. This is the realm of information architecture, and as such, technical communicators will have to expand their skills to include “many tasks usually associated with information architects” (Ford and Mott 333), such as XML, single-source writing and component integration, user testing, and metadata. Similar to their previous paper on the management of single-source objects, this work assumes the co-assimilation of IA into TC, thereby highlighting one’s importance to the other.

Tatiana Batova and Rebekka Anderson continued the exploration of the changing skills of those working in TC, specifically within CCM environments. In 2017, they published “A Systematic Literature Review of Changes in Roles/Skills in Component Content Management Environments and Implications for Education.” The authors reviewed both peer-reviewed and trade publication articles to assess the skills required of technical communicators working within CCM environments. CCM environments focus on content as small units of information as opposed to entire documents, and they use methodologies and processes such as single-sourcing, structured writing, content strategy, DITA, content management systems, and XML editing to produce and publish content (Batova and Anderson 173). Like Ford and Mott, Batova and Anderson suggest this broadening of responsibilities signifies that technical communicators must expand their skill set beyond the traditional scope of TC to include “skills in management, strategic thinking, information design, and information architecture” (Batova and Anderson 190), as well as a “thorough understanding of CMSs, XML, and the practices of writing modular and reusable content” (Batova and Anderson 192). Because “the adoption of CCM has reached

critical mass” (Batova, 173), these skills are increasingly requisite. Included in this expanded skill set is information architecture.

Though the role of information architect is often standalone and distinct from those within the realm of TC, in their answer to the research question “How can technical communicators transition to the new and changed roles?” Batova and Anderson say that “Technical communicators who create and manage information assets have traditionally performed the roles of information architects” and that “in CCM environments, they engage in similar but expanded tasks that include content auditing, information modeling, creating semantic markup, and prototyping new user environments” (Batova and Anderson 184). However, they point out that it’s “unrealistic to expect writers to be experts at information architecture just because they know how to create folder structures within shared drives (Batova and Anderson 184) and that “the role of information architect in CCM environments often requires years of on-the-ground experience and a comprehensive understanding of an organization’s content in its various forms” (Batova and Anderson 185). Just because there is a necessary expansion of the technical communicator’s role into IA, doesn’t mean that these skills are easily won or even taught in TC programs. This highlights the need for more scholarship and pedagogy in IA as it pertains to TC.

Concurrent with the push for the expansion of the technical communicator’s role to include IA skills, there was discussion in the field of TC about the need to rethink how we think about IA frameworks, with an emphasis on how people look for information. In his paper “Facets Are Fundamental: Rethinking Information Architecture Frameworks,” Abe Crystal introduces his Faceted Classification Framework (FaF), in which both attributes (raw data describing inherent properties) and facets (data that has been analyzed, synthesized, and assigned

interpreted meaning) of information should be seen as fundamental to how we organize and label our documents for retrieval within an IA framework. In 2007, at the time of publication, most IA frameworks were attribute-based and didn't take into account "the multitude of criteria that may influence users' relevance judgments," which are often "multidimensional, holistic, and highly personal and idiosyncratic," (Crystal 18). Because attributes alone can't account for this, Crystal calls for "IA frameworks and practices [that] incorporate these wider and more nuanced conceptions of relevance [which] faceted classification provides" (Crystal 18). By calling attention to this gap between attributes and facets, Crystal shows that not only are IA frameworks important to human-information interaction but by augmenting these IAs with additional approaches that "provide navigation systems and user interfaces based on an underlying framework of faceted classification" (Crystal 16), we can help "people find and use information even more effectively" (Crystal 25).

This focus on information labeling within an organizational framework highlights the increased awareness of how a document's usability depends on more than its contents. As technical communicators are increasingly tasked with responsibilities involving users' information needs, taxonomy, navigation, organization, and retrieval, it becomes apparent that matters of how people search for information can no longer be relegated to other roles or fields. Acts of information architecture are central to the prime initiative of TC, which is to make complex information clear and understandable to the intended audience. For information to be communicated effectively, it must be findable and retrievable at the relevant time. Because this paper was published 17 years ago, our field would benefit from further study on how information labeling for search functionality has evolved, determining whether or not a faceted approach has been adopted, and if it has, how it has affected the efficiency of information retrieval for users.

The necessity of navigation strategies that help people explore and understand information also extends into the visual communication realm of TC, particularly information visualization (InfoVis). InfoVis “focuses on using visual methods to represent abstract information and reinforce human cognition” (Li et al. 44). Like other types of technical communication, the goal of InfoVis is to communicate complex information to people in an accessible, simplified way. In the 2017 paper “Comparing Infovis Designs with Different Information Architecture for Communicating Complex Information,” Mingran Li and co-authors use the IA principles of objects, choice, disclosure, exemplars, front doors, multiple classification, focused navigation, and growth (Li et al. 51) to create three interactive InfoVis designs about one dataset, which they then compared to determine which of the three was most effective. Because of the complexity of the information and the necessity for interactivity in order to empower the user to adjust the input according to highly personalized variables, the authors turned to IA which has a “solid theoretical foundation for organizing information and designing navigation strategies to help people explore and understand information” (L et al. 44). The results of this experiment showed that by “following the principles of IA and the lessons learned from IA practices” the authors showed they had “room to improve the current system and, more generally, to design better visualization systems to communicate complex information” (Li et al. 55).

This article showcases how the principles and activity of information architecture can be applied to a specific area of technical communication in order to improve usability. If a practice within a profession is improved by the application of another discipline, that discipline has proved itself to be important to the profession. This is an example of the increasing obscuration of the line separating TC from IA, particularly for technical communicators involved in

visualizing complex information for their audience. Because this paper is one of the more recent in this literature review, it highlights the need for more research into undiscovered applications of IA principles in different areas of TC. Even nearly a quarter of the way through this century, we're still unearthing areas of TC in which IA skills can be, should be, and even are applied, but about which there is little scholarship.

The convergence of IA and TC doesn't just extend into different branches of technical communication; it also extends beyond national boundaries. With the modern proliferation of international companies and products marketed in international markets, producing meaningful communications for intended audiences becomes an ever more salient concern. This concern is not only with how content is localized but also with how the organizational architecture of the content is localized. In his 2006 article "Information Architecture: Intercultural Human Factors," Matthew McCool describes a gap in scholarship, saying that "excellent research has been conducted about both information architecture and intercultural communication, but...they rarely found cause for convergence" (Mc Cool 167). Through his efforts to bridge this gap in scholarship, McCool makes a case study of a failed project to provide online product documentation for a Japanese audience. The project, though adapted to the Japanese market according to conventional localization practices—rhetorically based translation and modifications to currency, color, and other explicit cultural adaptations—resulted in customer confusion and a high volume of support calls. In his examination of the project, McCool focused on a framework of three approaches to IA (superstructure, chunking, and navigation), and five cultural dimensions (universal and particular, individual and collective, uncertainty avoidance, contextual continuum, and temporal order).

The author concludes that “writing and designing . . . technical information for diverse audiences . . . requires going beyond [the] outer features of culture” (McCool 180), and that effective technical communication to international audiences demands that we localize “the very infrastructure of that information [and] redesign[] the architecture of that information” (McCool 180) with an understanding of varied core cultural contexts. To achieve the rhetorical purpose and meet the needs of international audiences, both content and information architectures should be localized using methods that go beyond language and explicit culture. For technical communicators who value meaningful communication, this highlights the importance of our focus on not only *what* our content says to audiences in other cultures, but also *how* that content is structured and organized so that meaning and usability are preserved. However, despite how compelling McCool’s argument was, it is limited by the dearth of broader evidence since his conclusions derive from a single case study. This is enough to warrant further research into IA localization based on deeper cultural markers and its effects on the efficacy of international TC.

In the two studies that follow, we shift into the rhetorical realm. These two papers, while relevant to both TC and IA, do not seem to connect to the other contemporary scholarship. In his 2004 paper “Rhetorical Action in Professional Space: Information Architecture as Critical Practice,” 2004, Michael Salvo explored the rhetorical use of information architecture in an unexpected way—as a site at which technical communicators enact authorship to facilitate democratic participation in technological progress. Salvo identifies a problem in technical communication research in which many “analytic methods for collecting, assessing, and representing data and turning these data into usable information” have been identified, but no strategies have been put forth “for putting the hard-won information to use and enacting strategies for action that meaningfully engage the world” (Salvo 39-40). He seeks to rectify this

through the identification of the issue of the one-way flow of information from technocrat, through the technical communicator, to the user. Salvo argues that through information architecture, technical communicators can serve as more than one-way conduits and begin to facilitate the democratization of technological development through their roles as rhetors who can both invent and influence discourse.

Two definitions of information architecture are offered; the first is limited to organizing information for user understanding. However, for Salvo, IA is more than an organizational structure for information. The second definition, which Salvo leans on for his argument, derives from the DOE-IAP's information management mission to have "the capability to readily acquire, share, protect, disseminate, and store the information needed to successfully accomplish [DOE] jobs" (Department of Energy 17). Accomplishing this mission requires user comprehension, user-centered design, and a feedback process to disrupt the one-way flow of information. These actions take place within IA, which Salvo describes as "the technological context of both information producers and consumers" (Salvo 47). Salvo expands on this description of IA, adding that it is "critical, self-conscious, and aimed at creating opportunities for engagement with both the constraints of the working world and the concerns of the world-at-large" (Salvo 61). In this type of rhetorically designed IA, technical communicators become two-way conduits that can help guide communication between tech designers and users, allowing users to have a voice and role in the progression of technology and society, which are intimately linked, instead of being pulled powerlessly along in the current of technocratically led technologization.

Salvo leans into Andrew Feenberg's idea that people have a way to resist imposed technologization through "sustained critique and pushing for change through participation" rather than through "a 'Great Refusal' to participate in technological culture" (Salvo 51). For

Salvo, IA is the site at which this can take place. As such, the role of technical communicator becomes central to this exchange as facilitators of communication, user-centered designers, and information architects, an assignment that Salvo takes as a given. In this schema of IA, user feedback is valued and changes future designs, and the circuit of communication is completed through “mechanisms for users to communicate back to designers” (Salvo 63). The outcome of this application of technical rhetoric engages users in a way that “produces feedback that informs future designs” (Salvo 62).

Salvo identified an important gap in scholarship around “enacting strategies for action that meaningfully engage the world” (Salvo 40) and added important ideas to the discourse around power in technologization and the evolving role of TC in communication as authors, rhetors, and agents of democratic participation in technology. However, the article is written in a dense and convoluted way, so the result is anything but accessible or democratic. Salvo espouses the importance of user-centered design, public participation, and accessibility in an article whose bar of educational and intellectual entry is extremely high.

One year after Salvo’s article was published, Stewart Whittemore published a paper that focused on a different rhetorical effect of information architecture—its effect on the technical communicators who produce content within it. Unlike Salvo’s focus on the populace, in “Metadata and Memory: Lessons from the Canon of Memoria for the Design of Content Management Systems,” Whittemore focuses on the usability of CMSs for writers. He criticizes the narrow focus of industry efforts in CMS development for being limited to usability for end-users, and he advocates for “future versions of CMSs [to] be redesigned to better support cognitive activity during the composing process” (Whittemore 89) through lessons from the rhetorical canon of memory. CMSs have been prized for their capability of storing vast amounts

of information. However, this function is useless without a design that equips writers for “careful retrieval and assembly of existing knowledge into new and useful configurations” and the ability to use information “in new and innovative ways” (Whittemore 107). These considerations in CMS design can unlock their full potential.

To refocus design on usability for TPCs, Whittemore turns to the classical rhetorical traditions of Cicero and Quintilian, particularly their mnemonic strategies pertaining to humans’ visual-spatial memory. He argues that “visual-spatial memory links information together nonverbally, in ways that both flexibly allow the introduction of new information and resist disruption and loss of existing information” (Whittemore 97), an assertion that has been widely validated by cognitive and information science. By combining principles of Ciceronian spatial visualizations and the Quintilianic tradition of short-term memory retrieval through awareness of text-in-progress, CMSs could be designed in a way that enables technical communicators to more effectively navigate, retrieve, and innovate using the massive amount of information stored in these systems.

Like Salvo’s work, this paper highlights an area of research and design that had not been prioritized previously. Whittemore suggests that the design of information architectures, such as CMSs, is crucial not only for the end-user but also for the writers who work within them. He argues that “real insight is most often achieved not in original and solitary acts of genius but rather in the careful retrieval and assembly of existing knowledge into new and useful configurations” (Whittemore 107), and as such, for technical communicators to maximize their innovative capacity, “an adequate system of usable memory” (Whittemore 107) in CMSs should be prioritized.

While Whittemore makes a compelling argument, the case is largely theoretical, built on abstractions and ideas. In order to take this work from theory to implementation, more work could be done to provide practical applications of these ideas and visual examples of CMSs designed according to mnemonic rhetorical strategies. Additionally, while Whittemore makes a case for improved innovation and efficiency, there is little focus on the potential for mnemonically designed IAs to improve interactive communication for end-users. This work would benefit from an exploration of outcomes that complete the communication loop between producers, technical communicators, and end-users.

Conclusion

Through this literature review, I sought to understand why information architecture is important to technical communication according to peer-reviewed scholarship from the field of TC. My findings confirm that, because of the interdisciplinary nature of IA, it is not only important to TC, but it also underpins the basic functionality of the discipline. A recurring theme of this research is the need for TC and its practitioners to adopt IA principles. Because of the changing landscape in which they work, technical communicators' roles and the skills required of them are increasingly those associated with IA, in areas that include single-source writing, metadata, taxonomy, XML, and user testing. In addition to how technical communicators must adapt their roles, to effectively communicate information through human-information interaction (a principal concern of TC), we must also concern ourselves with human-centered information organization to ensure that the documents we create are findable, accessible, and usable. We can accomplish this through an understanding and application of users' information needs and the mental models they use to find that information in both lexical and visual communications. How

people do this varies from culture to culture, and thus, there are implications of the importance of overlaying not only individuated information-seeking processes but also deep cultural dimensions for international and intercultural audiences.

There is also the rhetorical significance of information architectures to technical communicators as authors and rhetors. User-centered, accessible IAs serve as a site through which technical communicators can impact discourse around the trajectory of technologization by helping to amplify user voices and input.

In addition to improving users' experience in accessing and using the documents that technical communicators create, well-designed, rhetorically informed IAs can improve writers' experience while creating documents. The benefit of this improvement is increased innovation and efficiency as a result of a reduced cognitive load resulting from poor organization and navigation structures.

Unfortunately, in recent years, scholarship on IA within the TC discipline has declined. It is as though the conversation around IA within the field of TC ended around the year 2012. Perhaps this is due to the growing convergence of the two fields. Much of the current research done on IA in TC may be more implicit than explicit, as subsections within papers focused on other topics, like content strategy, UX design, or content management systems. One of the implications of this decline in IA research within TC is how it affects pedagogy both in undergraduate and graduate-level programs. Current scholarship is a major factor for programs in assessing the need for particular TC courses. Without ongoing research into IA as it pertains to TC, programs such as my MATC program wouldn't prioritize developing curriculum around this important aspect of TC work in industry.

There are many areas in which more explicit research on IA could be done. One area is the effects of IA design on accessibility within TC, both in a general sense and as it pertains to users with disabilities, particularly with respect to accessibility standards and universal design. Another opportunity lies in the localization of IA for international audiences. Because international communication and localization practices are particularly relevant to TC in an increasingly globalized world, a broader study into the effects of localized IA on effective human-information interaction and communication is warranted. Specifically, future research could address how we can adapt IA frameworks to support localized content and culturally specific navigation systems. More work could also be done to provide practicable, concrete examples of how InfoVis, CMS, and IAs could be designed to improve both end-user information retrieval and functionality for technical communicators working within these systems. Lastly, industry practitioners and students alike would benefit from rectification of the lack of instruction in IA and its principles, especially as several papers in this literature review addressed the changing roles and expectations of technical communicators working in the field. There is a notable scarcity of research into the effects of applied IA principles and practices in TC and a lack of demonstration of how these practices could be implemented in the real world. Based on my own professional experience, I can confirm that IA practices and principles are intimately linked with TC in industry. Future research in this area should prioritize bridging the gap between theory and praxis through an examination of how IA principles are integrated into the tools of the TC trade.

Works Cited

- Albers, Michael J. *Human-Information Interaction and Technical Communication: Concepts and Frameworks*. IGI Global, 2012. <https://doi.org/10.4018/978-1-4666-0152-9>
- Batova, Tatiana, and Rebekka Anderson. "A Systematic Literature Review of Changes in Roles/Skills in Component Content Management Environments and Implications for Education." *Technical Communication Quarterly*, vol. 26, no. 2, Apr. 2017, pp. 173–200. EBSCOhost, <https://doi-org.libproxy.txstate.edu/10.1080/10572252.2017.1287958>.
- CRYSTAL, ABE. "Facets Are Fundamental: Rethinking Information Architecture Frameworks." *Technical Communication*, vol. 54, no. 1, 2007, pp. 16–26. *JSTOR*, <http://www.jstor.org/stable/43089465>. Accessed 1 Sept. 2024.
- Department of Energy. (1995). *Information architecture: Vol. 1. The foundations* (DOE Publication No. HR-0141). Washington, DC: Government Printing Office.
- Downey, L., & Banerjee, S. "Building an Information Architecture Checklist." *Journal of Information Architecture*, 2010. Issue 2, Vol. 2.
- FORD, JULIE DYKE, and RICHARD K. MOTT. "The Convergence of Technical Communication and Information Architecture: Creating Single-source Objects for Contemporary Media." *Technical Communication*, vol. 54, no. 3, 2007, pp. 333–42. *JSTOR*, <http://www.jstor.org/stable/43089508>. Accessed 1 Sept. 2024.
- Hart-Davidson, William, "Information." *Keywords in Technical and Professional Communication*, edited by Han Yu, & Jonathan Buehl, The WAC Clearinghouse; University Press of Colorado, 2023. Pp. 145-150. <https://doi.org/10.37514/TPC-B.2023.1923>
- Li, Mingran, et al. "Comparing Infovis Designs with Different Information Architecture for Communicating Complex Information." *Communication Design Quarterly Review*, vol. 5, no. 1, May 2017, pp. 43–56. EBSCOhost, <https://doi-org.libproxy.txstate.edu/10.1145/3090152.3090156>
- MCCOOL, MATTHEW. "Information Architecture: Intercultural Human Factors." *Technical Communication*, vol. 53, no. 2, 2006, pp. 167–83. *JSTOR*, <http://www.jstor.org/stable/43090714>. Accessed 1 Sept. 2024.
- Mott, Richard K., and Julie Dyke Ford. "The Convergence of Technical Communication and Information Architecture: Managing Single-Source Objects for Contemporary Media." *Technical Communication*, vol. 54, no. 1, Feb. 2007, pp. 27–45. EBSCOhost, search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.43089466&site=eds-live&scope=site.

- Perez, Ester Maria Amor. "How to manage complexity and realize the value of big data." *IBM.com*, 28 May. 2020, <https://www.ibm.com/think/insights/how-to-manage-complexity-and-realize-the-value-of-big-data#:~:text=A%20few%20years%20ago%2C%20a%20Forbes%20study,quintillion%20bytes%20of%20data%20created%20each%20day>. Accessed 17 Nov. 2024.
- Redish, Janice C.(Ginny). "What Is Information Design?" *Technical Communication*, vol. 47, no. 2, May 2000, p. 163. EBSCOhost, search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=3211897&site=ehost-live&scope=site
- Salvo, M. J. (2004). Rhetorical Action in Professional Space: Information Architecture as Critical Practice. *Journal of Business and Technical Communication*, 18(1), 39-66. <https://doi-org.libproxy.txstate.edu/10.1177/1050651903258129>
- Swope, Amber. "Information Architects : What They Do and How to Become One." *Communication Design Quarterly Review*, vol. 6, no. 3, Jan. 2019, pp. 32–43. EBSCOhost, <https://doi-org.libproxy.txstate.edu/10.1145/3309578.3309582>.
- Whittemore, Stewart. "Metadata and Memory: Lessons from the Canon of Memoria for the Design of Content Management Systems." *Technical Communication Quarterly*, vol. 17, no. 1, Win 2008, pp. 88–109. EBSCOhost, <https://doi-org.libproxy.txstate.edu/10.1080/10572250701590893>.

