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Mathews, Elizabeth T. ***Small Business Online User Documentation: Practices and Priorities***

Abstract

In response to a gap in the literature addressing the creation process and types of user documentation businesses upload to their websites, this study looks at online user documents and elicits the perspective of employees working in small business settings in order to discover trends in documentation practices, and to forecast the perceived value of online user documentation in the near future. The author used semi-structured interviews to collect data from individuals who create or support online documentation in their work. In the second part of the study, the author analyzed a sample of publicly available user documentation on small to mid-sized company websites to chart documentation types and features. Results of the semi-structured interviews revealed the following themes. First, they highlighted the importance of interdisciplinary collaboration in creating, reviewing, and publishing online user documentation. Secondly, the results indicated that online user documentation is considered a medium to low priority when compared to other projects. Despite this perception, the participants indicated that resources devoted to documentation are not diminishing, but rather growing in one way or another. The web document analysis found the most common types of online user documentation are product data sheets and blogs/articles. The length of documents and volume of documentation for each company varied widely in the sample, but common features included use of color graphics and document hierarchy such as headings. To conclude, the implications of the findings, limitations of the study, and possible extensions for future research are discussed.

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Chapter I: Introduction

Online documentation has evolved from print documentation such as user manuals, and it now includes a broader range of resources, including those published on company websites. Both printable and interactive experiences are available for consumers to engage with, beyond what they learn from sales representatives of a particular company. One documentation software provider defines this with the term “online help documentation,” referring to content that “helps customers understand and operate the product by breaking down technological terms to make it easy-to-understand” (Marshall, 2023, para. 9). The term online user documentation is proposed here to shift the focus from product operation and troubleshooting to a broader concept of providing knowledge to the user of the products. Online user documentation refers to any customer-facing instructions or reference materials published by a business on its website that are intended to provide information in support of a user’s experience with the company and its products. Online user documentation includes information embedded into a webpage as well as downloadable PDFS or links to multimedia content including manuals, data sheets, how-to videos, FAQ sheets, and knowledge articles.

No matter what the format is, online user documentation may be a positive point of engagement, or it may lead to unchecked frustration. In an ideal situation, a company produces a well-designed, accurate, and up-to-date resource which provides all necessary information and is a pleasure to read. The worst-case scenario involves a document that causes additional problems, where the user would have been better off without it. Users could misassemble or misuse a product due to poor documentation (Lerner et al., 2004). Perspectives on what makes a quality online user document vary depending on the intention of the individual asked. Forbes outlined this difference by comparing technical communicators with marketers (Fulkerson, 2010). In their example, a technical communicator calls quality documentation “unambiguous, up-to-date, and accurate content,” whereas a good document for a marketer “informs prospects how their product is differentiated and steers them expeditiously through the sales cycle”

(Fulkerson, 2010, para. 7). This difference highlights the complexity of the documentation creation process: how can online documentation satisfy the goals of all stakeholders?

Statement of the Problem

A company's website has included user documentation for a long time, but the behind-the-scenes strategy and best practices for creating, reviewing, and publishing this web content is missing from much of the technical communication literature. Not only is there a gap regarding user content strategy, but there is also no distinction between large versus small businesses. In particular, smaller consumer product businesses respond to the same demand for quality documentation and user support as larger companies, but they may not have as extensive resources. Furthermore, the Aberdeen Group found the top reported challenge of small businesses in their use of technology is a "lack of knowledge and understanding of the technology" (Michelotti, 2022, para. 2).

As users and technologies continue to evolve, businesses of any size need to establish effective ways of creating and maintaining meaningful systems of user support. All companies are tasked with investing in improvements, which may include documentation, or risk a potential decline in customer satisfaction (Gök et al., 2019). With all the projects a business regards as important, online user documentation may be high or even very low on the list of priorities. Some may see technology as the answer to their documentation management needs, while other business leaders may prefer running their communications projects status quo. If businesses do hope to invest in a new user documentation project, it may be challenging to find scholarly research supporting or guiding their decisions.

Although there are many examples of instructional content made available to customers online, there is limited formal data describing how these resources are created and updated. In an age of information, it is helpful for business leaders to understand how information is put together, checked for accuracy, revised, and updated in their companies. For the writers creating documentation, their perspective is valuable, but not found as a focus in technical

communication literature. The role of technical writers is discussed (Dubinsky, 2015), but the value of their work and how user documentation fits into the vision of their respective companies is a critical but missing element.

Purpose of the Study

Toward this aim, the purpose of this research project is two-fold. First, it seeks to better define current product web documentation practices used by smaller to mid-sized businesses. Second, it aims to discover the prioritization of online user documentation projects as perceived by individuals who create or review these documents. Learning more about the state of online user documentation would benefit the field in a number of ways. Technical writers and other creative professionals need to understand what they are expected to produce and be aware of any conventions in style and organization that are commonly used. In light of emerging technologies, it is also important for writers to be aware of trends in how companies are sharing product knowledge and connecting to their customers. Similarities and differences in practices and formats offer insight into what tools and skills are needed to add value to existing and future documentation projects. Understanding how small teams approach documentation is additionally helpful for writers who find themselves in these smaller settings.

Assumptions of the Study

Regarding this study, the following assumptions exist:

1. Online user documentation is intended for product users.
2. Customers are considered users by the product manufacturer.
3. Companies publish product information on their website.

Definition of Terms

Definitions for key terms used in this paper are as follows:

Online User Documentation

Any customer-facing instructions or reference materials published by a business on its website that are intended to provide information in support of a user's experience with the company and its products.

User

An individual who uses a manufactured product.

Limitations of the Study

As described above, the focus of the study is limited to materials that are uploaded on a company website, which excludes all other product documentation, including customer-facing documentation that is printed or otherwise provided to customers. Participant criteria include working for a small or mid-sized company as well as playing some role in online documentation management. As a result, the number of eligible participants is smaller, and results may not be representative of the larger population of small business documentation professionals. Practices may also be company-specific and not comparable to the practices used by other firms.

Methodology

To uncover the most common online user documentation types, I will analyze and classify documentation from company websites into categories and compare their features. I will then use semi-structured interviews to ask questions about company priorities and approaches to online user documentation. This includes how documentation work tasks are distributed among departments and individuals, what percentage of time is spent on documentation, and determine whether new or existing documents make up the majority of work. Another question asks about future plans and documentation technologies. While the features mapped from downloaded resources provide data about information currently available, the interview questions probe for the reasoning behind decisions to maintain, improve, or switch focus from online documentation.

Chapter II: Literature Review

While most consumer product companies are likely to produce at least one type of online user documentation, little is known about the process used to create and manage these web resources. Even less is known about the reasoning behind a company deciding to invest in online user documentation projects, their prioritization, and their distribution of work. In addition, documentation has come a long way since “thousand-page user manuals,” but no studies report to what extent users relied or rely on print manuals or if they rely on online user documentation (Fulkerson, 2010). An understanding of the rhetorical situation surrounding user needs, business priorities, and the technical writing process is needed to assess current practice and guide online user documentation and other web resource projects of the future.

Online User Documentation Creation

Of the paucity of studies uncovered, Smart et al. (2001) and Dubinsky (2015) represent the most recent exploration of the role technical writers play in business. Both studies include online user documentation as part of a larger discussion about the distribution of work for technical writers (Dubinsky, 2015; Smart et al., 2001). However, beyond distribution of work, the value of technical writers to a company’s strategy has not been studied or quantified. From Dubinsky (2015), the managers of technical writers all noted that documentation was accomplished through teams, but what contributions and hours were logged by individual departments completing distinct tasks was out of the scope of the research. They also found significant differences between the companies they interviewed about their processes, including when technical communication fits in the product development cycle. As this was the only study discussing creators, it is unknown whether there is a lack of commonality in the creation process, but there are no established best practices for creation, review and publishing online user documentation.

Dubinsky (2015) also represented the only example of research which included the point of view of managers of technical writers. Without more perspectives of creators or managers of

documentation, our understanding of the rhetorical situation surrounding online user documentation is limited. Dubinsky (2015) supported the added manager perspective and called it out as part of the basis for his study. He claimed, “One way toward understanding technical communicators in the 21st century is to examine companies’ understanding of what technical communicators produce and the processes involved in that production” (p. 120). Part of this understanding of documentation process is knowing what tools and resources are needed. Although a number of software companies and professionals specialize in helping businesses providing information to web visitors and managing large amounts of documentation, the value of these resources to business leaders has yet to be articulated in scholarly research.

Online User Documentation Perceived Value

Smart et al. (2001) expanded on other studies which discussed the choice of publishing content online or in print. They note that the shift from printed content to online documentation was partly a cost-savings strategy but adds that research did not address whether online documentation was in fact a cost-effective solution. This suggests the choice for businesses to move content online may not have been based on evidence. The impact of online documentation availability on sales and customer satisfaction is suggested as a way to measure effectiveness of the shift, but in the 20 years since his article, only a few studies consider customer satisfaction, and most did not look at online user documentation specifically (Anderson, 2013; de Bellis & Venkataramani Johar, 2020; McLean & Wilson, 2016; Roy et al., 2018). Gök et al. (2019) noted that previous studies did not assess customer perception in a research model, but their study looked at customer satisfaction regarding the product manual quality and found a link between perceived product quality and user manual quality. Consumers in their study included documentation as part of their overall impression of a product, and even of the company as a whole. Although only one study combined customer perception with user document quality (Gök et al., 2019), the findings support the idea that the impact of online user

documentation is worth considering. Even still, there is a lack of consensus in the literature as a whole.

Some studies exploring user documentation (online and print) looked at factors which shape the use and quality of product documentation. These include the readability of documents, the type of material (print versus multimedia), and the perceived usability and overall helpfulness (Anderson, 2013; Garousi et al., 2015; Gök et al., 2019; McLean & Wilson, 2016; Møller, 2013; Müller et al., 2013; Tenbrink & Maas, 2015). Other studies discuss whether documentation is used or not, and question what function it serves and whether it is needed at all (Blackler et al., 2016; Dubinsky, 2015; Harms et al., 2020; Oviedo-Trespalacios et al., 2021; Smart et al., 2001). Referring to software documentation, van Loggem (2013) argued against documentation stating, “documentation is required only where insufficient attention has been paid to the design of usability, user satisfaction and user experience, and documentation is not referred to by users anyhow” (p. 167). These studies supported claims that design should be intuitive to every user; such that they understand the product and can use it without needing to read about it. If it is true that users do not need or want to make use of online user documentation, a business would be ill-advised to spend resources developing it.

Customer and/or user experience and satisfaction may be a core pillar for many businesses. Users come with their related experience, notions about what they think they know and understand, and ideas about the best way to approach the task. Users may choose not to use documentation, or if they do, they may find it cumbersome. It is important for businesses to understand their customers’ reliance on the documentation they publish. They have to know how critical the product descriptions are to the safe or successful use of the product. The perspectives captured in the literature are primarily customers or users instructed to evaluate user documentation as part of an experiment, but not whether they regarded the document as necessary.

Usability of Documentation

Usability is one of the most common evaluation methods of online user documentation. Some studies described usability tests on documents prior to their release (Mirel, 1987), while others looked at the data in combination with other factors (Møller, 2013). User manuals and other instructional documents are studied in the literature more than any other type of user documentation. In regard to manuals, Oviedo-Trespalacios et al. (2021) reported "an adequate level of consensus in the literature regarding the poor usability and acceptability of user manuals" (p. 2). They cite research done by Blackler et al. (2016) which found that people do not read the manuals provided with many of their home appliances. If traditional user manuals can be difficult to navigate and are additionally rejected by users, a common answer noted in many conclusions is to move away from the user manual as a standard source of information.

When usability is low, it may result in users rejecting not only the document but also the product and company producing it. There is agreement within the literature for the types of issues that cause the most trouble in user documentation. First, Anderson (2013) found that poor readability scores impacted their population's understanding of user guides. They assessed readability and found the level meant the majority of users would struggle to comprehend it. Use of technical vocabulary that is not fully explained or jargon that is only acquired after many years in the field are both known barriers to the user. In the user survey portion of the Anderson (2013) study, a clearer layout, use of bold headings, addition of a frequently asked question section, and searchable keywords were called out as usability improvements. When ambiguity presented a usability issue, Tenbrink & Maas (2015) concluded that "it can be avoided by using clearly defined labels, specific perceptual information, and by repetition of visual elements in the text" (p. 346). Both studies confirm the importance of design elements such as layout and navigation elements in online help.

In testing relevant factors contributing to high-quality documentation, Anderson (2013) found that the contents page had the biggest impact on the participant's perception of usability.

Garousi et al. (2015) found “documentation up-to-datedness, relevance of content, accuracy and documentation preciseness” were most important (p. 664). Other important factors were “documentation completeness, visual models and accuracy,” but “documentation technology” was considered the least relevant factor (p. 676). This might lend support to a claim that users do not know what format of information is best, as long as they have a positive experience with the product. Dubinsky (2015) adds that it is important for technical writers to “keep it lean” (p. 130). To ensure the experience is positive, the user cannot be expected to digest too much information.

User Research

More recently the focus in the literature has been placed on users or customers who interact with a given resource, rather than discussion of the resources themselves (de Bellis & Venkataramani Johar, 2020; Gök et al., 2019; McLean & Wilson, 2016;). A few studies explored customer preferences for documentation (Müller et al., 2013; Smart et al., 2001). In their study of internal user documentation used by employees, Mirel et al. (1987) uncovered a reason why knowledge transfer using the printed manual was not always preferred. Their results indicated a “reliance on social interaction for acquiring information” (p. 347). In practice, users would ask someone they believed to have more knowledge than they did. Similarly, in exploring whether manuals are even used at all, Harms et al. (2020) found the majority of users in their study reported using trial-and-error and talking about the systems with friends or family as opposed to reading the user manual. Müller et al. (2013) interestingly noted a preference customers had for newer technology (video tutorials or Augmented Reality via mobile device camera lens), even as they had improved performance with the paper manual in terms of completion times and error rates. Whether documentation supports individuals while they are at work or at home, people seem to want an alternative to reading about a concept they need to understand.

Additional human factors also mentioned in the literature include whether a user is an expert or a novice (Møller, 2013). The experience level of the user is especially important for

companies manufacturing products that could be used by both technical experts and also early-career trainees. Gattullo et al. (2020) adds that “some operators need to be instructed step-by-step in offline training sessions, while others may need just an overview at working time” (p. 5). In addition, they mention a number of factors that influence users: age, demographics, physical and cognitive abilities. The takeaway from these studies is that the needs of users vary widely and need to be accounted for when deciding how much information to make available online.

Some research findings bring the psychology of the user into the discussion of documentation preferences. In the Müller et al. (2013) study, the participants did not feel as confident of their abilities when using a paper manual. Research has also looked at customers’ willingness or resistance to adopt smart technology (de Bellis & Venkataramani Johar, 2020; Roy et al., 2018). Even if a feature is well-documented, the user may still prefer to skip it and opt to do as they always have done. A company that simply uploads a help document and never assesses it again would not know what aspects of their products are important to their customers. If customer data is not collected and analyzed, these businesses will remain disconnected to the feelings of the people they hope to satisfy.

Alternatives to Documentation

Even as companies do produce online user documentation, a business could choose an alternative method of communication. A variety of different combinations of customer support options are possible in today’s consumer product industry, whether that includes documentation or not. For instance, without online user documentation, some users receive printed materials sent with the product and are instructed to reach out to knowledgeable company representatives by phone, email, chat, or web contact form to obtain additional information. The people fielding these requests may be in customer service, technical service, sales, or any other aftermarket support department.

There is also a range of documentation management options, which reflects the wide range of needs and capabilities of consumer businesses. In small businesses, leaders may find

that documentation management is a challenge, especially if the effort takes away from more essential projects. The communications team may be smaller, and the work may compete with other responsibilities. In this way, small businesses may have a different mindset toward the creation of online user documentation. The resultant user documentation and expected resources may fall short of those enabled by large teams of professionals dedicated solely to the task of updating documentation. Document management software systems may also be too complex or too expensive. Such challenges create a different or diminished capacity for creating effective online user documentation systems.

Recent literature may point to other ways to accomplish customer support besides traditional online user documentation. Discussions include cloud-based computing, AI, and automation as these technologies are even more widely available (Brock & von Wangenheim, 2019; Gattullo et al., 2019; Hildebrand, 2019). Their potential applications are enumerated in a number of media sources as well as related studies (Cheng & Jiang, 2020; Nuruzzaman & Hussain, 2018; Shirk, 2019). The prevalence of this topic suggests that evolving web content and self-service systems are changing user interactions with businesses.

Considering all this, companies who traditionally offer manuals to customers may be better off retiring the manual format and instead produce and package technical information in a way that aligns with these trends. In comparing it to emerging technologies, if users do not want to use a paper manual, more interactive formats, such as a how-to video, knowledge article, or even animation may be the better way to reach users. Dubinsky (2015) describes the evolved work products expected from technical communication professionals as “integrated technical content” published as a “content experience” (p. 118). The industry has a long history of rejecting paper manuals, or what Gattullo et al. (2020) calls “static” documents. Instead, users can engage with “dynamic” content, defined as content which is accessed in real-time and displayed via virtual and augmented reality devices or holographic displays (p. 4). Gattullo et al. (2020) also looked at a system capable of acquiring data about the context and based on these

data, proposes documentation tailored to the current operating context. Müller et al. (2013) also pointed out advantages to referencing AR displays as perceived by their participants.

Beyond online user documentation practice, if businesses do not know or measure the impact of the online user documentation they produce, they may allocate resources without understanding the purpose of continuing to provide up-to-date and helpful online user documentation. Some may be accustomed to using data and analytics to drive improvements, including data obtained from their customers. Other businesses may not be looking at how their documents or websites are used, so they are less likely to know what changes they should be making and why. Long-established businesses, whether large or small, have years of experience with customers who struggled to understand the correct way to put a product together and begin to use it, for example. Knowledge of actual user experiences can be used to improve not only the product, but also the exchange of information between the business and the user.

If there is a case for continued online user documentation efforts, documentation creators could check the effectiveness of documentation when it is used. As pointed out by Dubinsky (2015), the work products expected from technical communication professionals have also evolved beyond writing responsibilities. Technical communicators or more broadly, content managers, can improve the connection between the user and the product by analyzing the documentation, based on what is known about factors influencing document quality and use. They can also stay informed about which formats are testing well with users and how their own companies can adopt these solutions. The goal of this research is to assess the current landscape of online user documentation: what types of documentation are available on consumer websites, how in-touch are business leaders with the “how” and the “why” of their company’s online user documentation, and where do we go from here?

Chapter III: Methodology

In order to discover how small to mid-sized businesses manage documentation, I first used semi-structured interviews to collect data from five representative companies. In using a set list of questions, I could compare companies in their approaches to documentation. The interview process provided an in-depth small business perspective by asking participants to evaluate and reflect on their company's practices. Qualitative research and the use of semi-structured interviews also allowed the opportunity to capture variability among different job roles, company missions, and industries served. Furthermore, this method was selected as the most practical option to connect with participants at a distance. The analysis of online user documentation incorporated documents created by individuals participating in interviews and documents from additional consumer product businesses. This approach served as a way to ground the experiences captured through interviews. I included a chart of documentation types and features to organize the data and enable a comparison among companies.

Subject Selection and Description

To recruit participants, I reached out to contacts who work in a creative role at a business. I also posted details of the study on LinkedIn, asking to follow up by email if interested. I received eight responses. The first requirement for participants was to be a current employee at a company or division of a company with less than 1000 employees. For the purpose of this study, I defined companies with 0-50 and 51-1000 employees as small to mid-sized businesses. The interviewees also each had some involvement in and knowledge of documentation management at their company. Five individuals met the criteria and were selected to participate. I asked each participant the same set of questions regarding who manages documentation, what types of documents their company creates, how they are prioritized, and what plans for documentation they have for the future.

Instrumentation

I designed the questions to uncover trends in online user documentation practices. Each section of the interview was used to understand the value of documentation and find out if the majority of companies hope to maintain, improve, or decide to switch focus from online user documentation in the near future (Appendix A).

Data Collection Procedures

Participants were contacted in an introductory email that explained the study and requirements. Those who consented to participate were interviewed over the phone, where they were asked a series of standard questions about their company's online user documentation. (See Appendices A, B, & C). The first set of questions asked about the distribution of work for online documentation, and whether they primarily create new documentation or update existing documentation. They were then asked about their current online user documentation projects and to specify which ones are completed once and which ones are continually updated. Next, they were asked to explain what priority level these projects were given and why. In terms of priorities, they were asked to comment on what seems to be most important to the company when making these decisions. The last section of the interview asked about resources and technology they expect to use for future documentation projects, (i.e. additional software tools, personnel, outsourced contract work, others). Responses were transcribed from the interviews and themes from interviews were drawn out and analyzed and compared among participants.

In the second part of the study, I accessed and analyzed online user documentation that was publicly available on representative company websites. I used both resources from businesses represented in the interviews and an additional ten consumer product businesses. Samples for the second part of the study were found from a wide search for consumer product companies meeting the following criteria: small businesses, employing 0-50 employees or mid-sized businesses employing 51-1000 employees. First, I completed a global search of common consumer products to identify potential samples. From the list of companies producing

consumer goods, I checked the employee size listed on a database or estimated by LinkedIn. The website of each prospective company was then reviewed to determine that at least one example of online customer documentation was available for viewing or downloading. I classified each sample as a subtype of online user documentation. Types included embedded information on the website, downloadable pdfs, or links to multimedia. Web content not intended to support the user in learning about the company's products was excluded.

Data Analysis

I examined the following classification categories: product data sheet, user manual, product guide, frequently asked questions, instructional videos, blogs/articles and interactive content. The document classification data arose from categories associated with user documentation in the literature. The 10th Usability Heuristic from Jakob Nielson informed two elements of Table 1 (Joyce, 2020; Nielson, 1994): easy to search and length. I added the remaining features from the literature that were described as having an impact for users, i.e. organization, graphics and whether it was up to date (see Table 1).

Table 1

Defined Usability Features

Feature	Definition/Reference
Length	How lengthy is the content?
	Nielson (1994) – help documentation should be concise. Dubinsky (2015) – content should be kept lean.
Access	Does the website provide resources that are available to the public, and are any only available with a login?
	Nielson (1994) – easy for users to find what they need.
Searchable	Can a user search what they need in a search bar that pulls up a specific word or topic on the webpage or document?
	Nielson (1994) – documentation should be easy to search. Anderson (2013) – searchable keywords improve usability.
Revision/Control	Is a revision date printed on the webpage or document? Are there any visible control numbers on the document?
	Garousi et al. (2015) – up-to date perceived as higher quality.
Organization/Hierarchy	Is the document organized and does it use headers, TOC, and so forth?
	Anderson (2013) – Contents page, use of bold headings and a clearer layout impact usability. Tenbrink & Maas (2015) – use clearly defined labels to avoid ambiguity and improve a document's usability.
Visuals/Media	Does documentation incorporate visuals?
	Garousi et al. (2015) – use visuals for perceived higher quality. Tenbrink & Maas (2015) – support text with visuals to avoid ambiguity and improve a document's usability.

Limitations

Limitations of this investigation included lack of prior data on the subject of website product information/user documentation. The sample size was also limited to participants who

are involved in documentation at their company and who are currently employed in this role. The businesses meeting participant criteria had to market a consumer product and be considered small to mid-sized.

Summary

As part of this exploration of practices, I chose semi-structured interviews to uncover the perspective of writers and other content collaborators. The interviews were designed to ask about prioritization and reasoning for online user documentation as well as the tools and resources used to create the documents. To complement the interviews, the online user document data collection filled in the types of documents and common features used by the sample of businesses. The two approaches to understanding online user documentation aimed to fill the gap in understanding how these documents are created now as well as in the future. Including document types and features in addition to the people involved in creating them allowed for the most complete picture of current documentation practice.

Chapter IV: Results

Demographic

A total of five individuals participated in the interviews. The five participants represented companies in the food and beverage industry, equipment manufacturing, chemical and cosmetic products, and software products. The job roles included technical writing supervisor, graphic designer, marketing, and sales. Company sizes ranged from 50 employees to 1000+ employees. Two participants in 51-250 range, one participant 250-500, and two participants 500-1000+.

Item Analysis

The first part of the study involved semi-structured interviews using a set list of questions with participants. Results from the interviews were then compared with the documentation analysis portion of the study.

Participant Interview Data

The interviews included four sections (See Appendices A, B & C). The first section asked about distribution of work for documentation projects, the second asked about current projects and processes, the third asked about the importance of documentation, and the last section asked about future projects, technology, and resources planned for documentation.

Section 1 - Who Creates Documentation. All participants reported a team approach to creating and approving documentation, but the processes and people involved varied. Documentation projects included interdepartmental collaboration among groups such as sales, marketing, safety/regulatory. In every case, marketing teams were involved in the user documentation process. One respondent reported the number of people involved varies according to project, and the number varied from 3-4 people to 17. Some respondents reported a documentation team of technical writers, with additional job roles that included content analyst/specialist and information architects. When asked if their companies used additional

outsourced contract work, only one respondent reported contract work for some photos and videos they upload online. All participants also mentioned managerial oversight of the creation and approval of product documents prior to publishing them online. The approval process varied from a structured, multi-level approval, to just one manager signing off on product copy. Some required every document to be approved while others noted managers overseeing projects without looking at every piece of content.

In terms of distribution of work, most respondents reported one or more individuals dedicated solely to documentation tasks. Employees with more responsibilities worked anywhere from 10% up to 99% of the time on documentation. Designers produced mostly new documentation (up to 80%), and multiple respondents explained this was in line with a recent increase in new documentation. Besides designers, work for writers went both ways: some worked mostly (80-100%) on updating content, others worked on mostly new documents (80%).

Section 2 - Describing Current Projects/Documentation Update Process. The types of documentation reported described product documentation as current and ongoing. Another current project included an update to all online product data sheets. The estimated time to complete one-time projects ranged from 3 to 6 months. Of the projects described as “ongoing,” types included operator manuals, installation instructions, service bulletins, animations, quick start guides, and safety data sheets.

When talking about updates to user documentation, half of the respondents mentioned that updates result from product changes. For all respondents, the process to update involves a change request or proposal communicated to the team who will update the documents. Respondents reported that the role of the person who initiates document projects varies. All reported role in marketing, and two specifically reported marketing leaders were responsible for online user documentation. Additional roles initiating documentation changes included product owners, engineering, and sales.

Section 3 – How Is Documentation Prioritized. Participants reported the prioritization of online user documentation projects on a 5-point scale of importance (see Table 2).

Table 2

Prioritization of Online User Documentation

1. Critical	X				
2. High					
3. Medium	X	X	X		
4. Low				X	
5. Very Low					X

Note. X – indicates participant response.

When compared to other projects, online product documentation was considered medium to low priority. One noted that documentation is not perceived to help sales, and another respondent called their work “valuable, but often an afterthought.” On the other hand, one respondent noted that product documentation could also be considered critical, even as it is a medium-level priority, since their products are not released without documentation. To account for the rating, participants were asked their opinion about what is important for a project to be valued. Responses included the following:

- benefit to operations
- consumer safety
- brand identity
- increased sales
- customer knowledge
- customer satisfaction
- alignment to company mission

- speed/sense of urgency
- legal obligations

Section 4 – What Documentation Resources and Technology Are Planned. In order to forecast online user documentation projects in years to come, participants were asked to describe resources for future projects. Multiple participants described changes to organizational structure and growth of the documentation team. One participant noted future outsourced contract design work, while another participant mentioned a shift from contract marketing to an internal team. In terms of technology, most participants mentioned documentation tools, one to maintain the use of existing help-authoring software, the other a move to DITA information architecture. Additional software tools were also mentioned by most participants which included photo editing, animation, and augmented reality (AR).

Online User Documentation Data

Examples of online user documentation were taken from fifteen company websites (see Table 3). Of the company documents analyzed, the top categories of content were product data sheets and blogs/articles. The majority of samples also featured instructional videos, FAQs, and user manuals. All representative companies uploaded at least two types of content, with one-third of the sample creating three or more different types of online user documentation. Only one category was not represented: interactive animations or augmented reality (AR).

Table 3

Online User Document Classification

	Product data sheet	User manual	Product guide	FAQ	Instructional video	Blog/ article	Interactive (AR/ animation)
1.	X	X		X	X		
2.			X	X	X		
3.		X		X	X	X	
4.	X			X	X	X	
5.	X	X					
6.	X	X	X	X	X	X	
7.	X	X				X	
8.				X	X	X	
9.			X			X	
10.	X	X		X		X	
11.	X						
12	X	X		X		X	
13.	X	X	X	X	X	X	
14.	X		X				
15.					X	X	

Note. X – indicates the presence of the document type for the company.

Table 4 shows that of the company documents analyzed, the length of content ranged for product data sheets from 50-200 words up to an entire page of text. Manual length ranged from 25-50 pages, and the length of blogs and articles was either 1-2 pages or up to 20 pages. Instructional videos were mostly a minute or less, but a longer 10-minute video was also found. Although some companies may choose to provide content only to clients, access to these

resources was public except for a couple companies that offered customer training and some content with a login. The ability to search within the online user documentation was found in some but not the majority of samples, and revision dates were also not as common. Most samples employed some level of hierarchy to organize the page, whether that was with a table of contents or headers. Content almost always contained color graphics to supplement text.

Table 4

Online User Document Features

	Type	Length	Access	Search	Revision /control	Organization /hierarchy	Visuals /media
1.	Frequently asked questions (FAQs)	100 words	Yes	No	No	Yes	Yes, color graphics
2.	Product information	50 words	Yes	No	No	Yes	Yes, color graphics
3.	Frequently asked questions (FAQs) Manual Blog How-to article	1 page	Yes	Yes	No	Yes Table of Contents/ Headers	Yes, 2D/3D color graphics
4.	Frequently asked questions (FAQs) Product information Video	150 words	Yes	No	No	Yes Headers	No

	Type	Length	Access	Search	Revision /control	Organization /hierarchy	Visuals /media
5.	Product information Product data sheet	50-100 words to 120 pages	Yes	No Yes	No Yes	Yes	Yes, 2D/3D graphics
6.	Frequently asked questions (FAQs) Product information Blog	1 page	Yes	No	No Yes	Yes	Yes, 3D color graphics
7.	Manual Product information Articles	2 pages to 46 pages	Yes	No	No	Yes	Yes, color graphics
8.	Product information	50 words	Yes	No	No	No	Yes, color graphics
9.	Product information	50 words	Yes	No	No	Yes	Yes, color graphics
10.	Product information Frequently asked questions (FAQs) Blog Articles	1 -2 pages to 20+ pages	Yes	Yes	No No Yes Yes	Yes Yes Yes Yes	Yes, color graphics
11.	Product information	25-50 words to 1 page	Yes	No	No	Yes	Yes, color graphics

	Type	Length	Access	Search	Revision /control	Organization /hierarchy	Visuals /media
12.	Product information Manual Frequently asked questions (FAQs) Blog Articles	1-2 page to 20+ pages	Yes	Yes	No No Yes Yes Yes	Yes	Yes, color graphics & screen-shots
13.	Product information Manual Video Articles Frequently asked questions (FAQs) Specifications Troubleshooting	28 pages (manual)	Yes	Yes, not all	No	Yes	Yes, graphics
14.	Product information Catalog	200 words	Yes	Yes	Yes	Yes	Yes, graphics
15.	Blog Video Podcast Webinar	10-40 minute videos	Yes, login needed for some	No	No	No	Yes, screen-shots

Research Questions

My study's research questions focus on online user documentation produced by small to mid-sized businesses:

1. What online user documentation practices are used?
2. What types of online user documentation are created?
3. Are creators generating more new content or managing existing content?
4. Do managers want to improve online user documentation, maintain current documents, or develop solutions to replace documentation?
5. What do online user documentation projects look like in the near future?

Chapter V: Discussion, Conclusions, and Recommendations

The results from this study demonstrate a continued utilization of online user documents as a point of connection to product users. An ongoing process to upload product information is common to almost all of the participants, with the exception of one participant whose consumer food/beverage product continues to have less need for instructional content and updates. The professionals responsible for documentation include writers, but the collaboration among departments seems to be a universal approach to online user documentation creation.

Discussion

The discovery that web content management continues to be a focus may not be surprising, given the influence of the Internet and eCommerce. Furthermore, as businesses continue to connect with users through their website, the use of communications professionals to fulfill these job functions seems likely. When asked about future plans, the participants agreed the technical writer or product communications specialist's responsibilities will still be needed, and even expanded. Therefore, we may conclude that results support the continued maintenance of existing online user documentation as well as larger allocation of resources to online user documentation projects going forward.

To the question posed by Dubinsky (2015) where the role of the technical writer is moving beyond writing into integrated technical content, this may be true but has not been demonstrated here in the sample of small to mid-sized businesses. The traditional forms of online user documentation as seen in previous literature are still widely used among consumer product companies. It is notable that not a single company currently deploys AR or highly interactive user content. The final interview question hoped to probe into whether these projects are already underway or being discussed, in light of technologies such as artificial intelligence (AI) found in the news. Only one participant expressed a future project to incorporate animation and augmented reality (AR). This snapshot of small business perspectives and practices did not rule out animation and AR, but offers a reality check about how quickly businesses, particularly

small business can transition systems of managing documents and documentation projects. The findings about new and existing documentation projects also shed light into how these professionals are expected to devote their time. For writers spending a majority of time updating content, time spent creating an additional new content experience may not be possible given their current workload. Nevertheless, multiple participants expressed either that a current focus on projects updating online documentation were a shift from previously focusing exclusively on new documentation, or vice versa. The balance between updating existing content and diving into new resources for these companies seems to shift as priorities change, rather than being a constant division of work.

Conclusions

The analysis of user documents available online showed that their use is widespread. Representative companies have dedicated a portion of their website to offer these materials, often in a specific resources tab. Some even maintain revisions, clearly printed at the bottom of the webpage, and for all companies, user documentation is available for public access. Sometimes search within the document was available, and organizational hierarchy is used more often than not. The types of materials seen are comparable among consumer product companies. Although it is not specifically addressed in formal literature, it seems there is a collective understanding of what materials should accompany consumer products.

Of the documentation I examined, product data sheets are most common, perhaps because they incorporate content from both technical and marketing departments in one page. These may be the most efficient way to present product information, and can be read on the web, easily printed out and shared. Product data sheets and blogs or knowledge articles directly adhere to Nielson's 10th Usability Heuristic. These documents make it easy for the user to find what they need and are not too long. This experience is the direct opposite for manuals which contain many pages and may be written for a highly technical audience, as explored in the literature. Regardless, manuals were still near the top of the list of most widely used type of

online user documentation in my study. Product guides were not as common, where a company was more likely to use a product data sheet for quick reference, and a full manual for more details. Overall, the sample revealed similar practices in online user documentation as the same types and same usability features were found across all companies.

Interviews suggest that product content relies heavily on marketing and sales personnel. Their opinions matter both to initiate documentation projects and to approve copy prior to it getting published on the web. These results demonstrate that interdisciplinary collaboration and the marketing department in particular are very important to the online user documentation process. This may make sense, as marketing seeks to guide users into future purchases (Fulkerson, 2010). It is no surprise that marketing teams care about web information, especially when it could impact whether web users become or continue to be customers who are loyal to the brand. While the organizational structure varied widely for each sampled company, all reported some level of interdepartmental collaboration. The oversight and level of approval required for online documentation was highly variable among companies, which may suggest that document creation may be less standardized than other operations.

The area where companies differed most was in graphics management. This may be surprising for a couple reasons. First, since the tools used for graphics are based on software licenses, a single license would allow the use of a myriad of tools and materials. However, some businesses might illustrate parts in the same way, regardless of the newer features found in creative software. The lack of businesses maximizing their potential with creative software is a common occurrence according to a market report from the Aberdeen Group (Minkara, 2023). While the software tool has capabilities, the professionals using the software may not take the time to learn a new function or be encouraged to take their work to that next level. From the samples of user documentation, graphics are typically a secondary resource to supplement the text-based content. They are almost all in color instead of black and white, but in only one case 3D models were used. In the future, technical communications could focus more on visual

learning, but the current trend for online user documents involves the use of text to get the point across.

Recommendations

Besides content type, it is still unknown what function each of these online materials have for their respective customers. Future studies could include data that assesses user knowledge and abilities as a result of engaging with product resources. How-to videos may track view count, but that data does not inform whether the user was successful as a result of watching it. To test this, a company could add an interactive element at the end of the video so the user could mark whether or not they were successful. This data could be extracted and reviewed to drive content strategy. The impact of product resources by type could also drive the focus for content creators. For example, if sales representatives who use sell sheets do not increase their sales versus those who do not use documentation, those documents would no longer be a priority. Similarly, product data sheets which contain additional technical information could be assessed with user knowledge checks after reading them. If a user answered a content question correctly after reading the product data sheet, that document could be marked effective at increasing user knowledge.

The reason online user documentation projects are relevant but not particularly valued is unclear. Business leaders may still consider online user documents to be important but not necessary to ensure the success of the user. Furthermore, leaders may be wholly unfamiliar with what it takes to keep these documents updated and useful for their web visitors. Users themselves may not expect to be satisfied by finding their answers on a company's website. The documentation available to them may not have been designed with their preferences or learning style in mind. From the creator's perspective, designers and writers may be given projects without knowing how mission critical they are. Without analytics or user feedback on documentation, they may not know the purpose of maintaining accurate and engaging content,

other than fulfilling their job role. Overall, the current state of online user documentation involves a considerable amount of resources, but perhaps a lack of definitive strategy.

While the sample was small and focused on small business, these same themes may be true for larger corporations. Perhaps larger businesses will continue to lead the way in terms of generating customer data that better informs documentation strategy at a top level. This study adds the voices of small business teams who also respond to an ever-changing landscape of user help and customer support. Part of the solution for small businesses is noted by Aberdeen Group: “firms must evolve their activities to adopt smart knowledge management that’s more dynamic and data-driven to keep up with the pace and scope of changes affecting their activities” (Michelotti, 2023). This takeaway is echoed by the study findings and projects a future for online documentation that involves an informed approach to adopting and deploying smart technologies on the web.

References

Anderson, M. (2013). *The readability and usability of building user guides* [Master's thesis, Victoria University of Wellington]. ResearchArchive–Te Puna Rangahau. https://doi.org/10.26686/wgtn.17005471.v1

Blackler, A. L., Gomez, R., Popovic, V., & Thompson, M. H. (2016, January). Life is too short to RTFM: How users relate to documentation and excess features in consumer products. *Interacting with Computers*, *28*(1), 27-46. https://doi.org/10.1093/iwc/iwu023

Brock, J. K.-U., & von Wangenheim, F. (2019, July). Demystifying AI: What digital transformation leaders can teach you about realistic artificial intelligence. *California Management Review*, *61*(4), 110-134. https://doi.org/10.1177/1536504219865226

Cheng, Y., & Jiang, H. (2020,). How do AI-driven chatbots impact user experience? Examining gratifications, perceived privacy risk, satisfaction, loyalty, and continued use. *Journal of Broadcasting & Electronic Media*, *64*(4), 592-614. https://doi.org/10.1080/08838151.2020.1834296

de Bellis, E., & Venkataramani Johar, G. (2020, March). Autonomous shopping systems: Identifying and overcoming barriers to consumer adoption. *Journal of Consumer Retailing*, *96*(1), 74-87. https://doi.org/10.1016/j.jretai.2019.12.004

Dubinsky, J. (2015, May). Products and processes: Transition from "product documentation to ... integrated technical content". *Technical Communication*, *62*(2), 118-134. https://www.researchgate.net/publication/280394671_Products_and_Processes_Transition_from_Product_Documentation_to_Integrated_Technical_Content

Fulkerson, A. (2010, August 9). *The evolution of user manuals*. Forbes. https://www.forbes.com/2010/08/07/customer-service-fulkerson-technology-documentation.html?sh=59acab04427f

Garousi, G., Garousi-Yusifoğlu, V., Ruhe, G., Zhi, J., Moussavi, M., & Smith, B. (2015). Usage and usefulness of technical software documentation: An industrial case study. *Information and Software Technology*, *57,* 664-682. https://doi.org/10.1016/j.infsof.2014.08.003

Gattullo, M., Scurari, G.W., Fiorentino, M., Uva, A. E., Ferrise, F., & Bordegoni, M. (2019). Towards augmented reality manuals for industry 4.0: A methodology. *Robotics and Computer-Integrated Manufacturing*, *56*, 276-286. https://doi.org/10.1016/j.rcim.2018.10.001

Gattullo, M., Evangelista, A., Manghisi, V. M., Uva, A. E., Fiorentino, M., Boccaccio, A., Ruta, M., Gabbard, J. L. (2020). Towards next generation technical documentation in augmented reality using a context-aware information manager. *Applied Sciences*, *10*(3), 780. https://doi.org/10.3390/app10030780

Gök, O., Ersoy, P., & Börühan, G. (2019). The effect of user manual quality on customer satisfaction: The mediating effect of perceived product quality. *Journal of Product & Brand Management*, *28*(4), 475–488. https://doi.org/10.1108/JPBM-10-2018-2054

Harms I. M., Bingen L., & Steffens J. (2020, April). Addressing the awareness gap: A combined survey and vehicle registration analysis to assess car owners' usage of ADAS in fleets. *Transportation Research Part A: Policy and Practice*, *134*, 65–77. https://doi.org/10.1016/j.tra.2020.01.018

Hildebrand, C. (2019, November 15). The machine age of marketing: How artificial intelligence changes the way people think, act, and decide. *NIM Marketing Intelligence Review*, *11*(2), 10-17. https://doi.org/10.2478/nimmir-2019-0010

Joyce, A. (2020, December 13). *Help and documentation (Usability heuristic #10)*. NN/g *Nielson Norman Group*. https://www.nngroup.com/articles/help-and-documentation/

Lerner, N.D., Singer, J.P. & Smith, T. P. (2004, September). A new resource for effective consumer product instructions: Manufacturer's guide to developing consumer product

instructions. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, *48*(16), 1983-1987. Human Factors and Ergonomics Society. https://doi.org/10.1177/154193120404801640

Marshall, D. (2023, April 21). How to create online help documentation | Madcap software. *Madcap Software*. https://www.madcapsoftware.com/blog/create-online-help-documentation/

McLean, G. & Wilson, A. (2016, July). Evolving the online customer experience … is there a role for online customer support? *Computers in Human Behavior*, *60*, 602-610. https://doi.org/10.1016/j.chb.2016.02.084

Michelotti, B. (2022, December 12). Using small business technology to tackle large human resource challenges. *Aberdeen Strategy and Research*. https://www.aberdeen.com/blog-posts/small-business-human-resources-technology-research-meets-reality/

Minkara, O. (2023). Four pillars for a best-in-class digital experience program in 2023 (and beyond). *Aberdeen Strategy and Research*. https://wp-aberdeen.s3.amazonaws.com/wp-content/uploads/2023/05/08071438/0921-18570-RR-4-Pillars-of-Digital-Experience-Final.pdfh

Mirel, B. (1987). Designing field research in technical communication: Usability testing for in-house user documentation. *Journal of Technical Writing and Communication, 17*(4), 347-354. https://doi.org/10.2190/3G4G-C1N7-75YK-7A6N

Møller, M. H. (2013, January 26). Usability testing of user manuals. *Communication & Language at Work, 2*(2), 51-59. https://doi.org/10.7146/claw.v1i2.7892

Müller, L., Aslan, I., Krüßen, L. (2013). GuideMe: A mobile augmented reality system to display user manuals for home appliances. In Reidsma, D., Katayose, H., & Nijholt, A. (Eds.), *Advances in Computer Entertainment, ACE 2013*, (Vol. 8253, 152-167). Lecture Notes in Computer Science. https://doi.org/10.1007/978-3-319-03161-3_11

Nielsen, J. (1994). Enhancing the explanatory power of usability heuristics. In C. Plaisant (Ed.), *CHI'94 Conference on Human Factors in Computing Systems* (pp.152-158). Association for Computing Machinery. https://dl.acm.org/doi/pdf/10.1145/191666.191729

Nuruzzaman, M., & Hussain, O. K. (2018, October 12-14). *A survey on chatbot implementation in customer service industry through deep neural networks* [conference session]. 2018 IEEE 15th International Conference on e-Business Engineering (ICEBE), Xi'an, China, 54-61. https://doi.org/10.1109/icebe.2018.00019

Oviedo-Trespalacios, O., Tichon, J., & Briant, O. (2021, June 17). Is a flick-through enough? A content analysis of advanced driver assistance systems (ADAS) user manuals. *PLOS ONE, 16*(6). https://doi.org/10.1371/journal.pone.0252688

Roy, S. K., Balaji, M. S., Quazi, A., & Quaddus, M. (2018). Predictors of customer acceptance of and resistance to smart technologies in the retail sector. *Journal of Retailing and Consumer Services*, *42*, 147-160. https://doi.org/10.1016/j.jretconser.2018.02.005

Shirk, K. (2019). *Helping users help themselves: Assessing accessibility of Graco Inc.'s online customer support center* [Research Paper]. University of Minnesota – Twin Cities Digital Conservancy. https://hdl.handle.net/11299/202781

Smart, K. L., Whiting, M.E., & Detienne, K.B. (2001). Assessing the need for printed and online documentation: A study of customer preference and use. *The Journal of Business Communication*, *38*(3), 285-314. https://doi.org/10.1177/002194360103800306

Tenbrink, T., & Maas, A. (2015). Efficiently connecting textual and visual information in operating instructions. *IEEE Transactions on Professional Communication*, *58*(4), 346-366. https://ieeexplore.ieee.org/document/7393885

van Loggem, B. (2013). User documentation: The Cinderella of information systems. In: Á. Rocha, A. Correia, T. Wilson, & K. Stroetmann (Eds.), *Advances in Information Systems and Technologies* (pp.167-177). Springer. https://doi.org/10.1007/978-3-642-36981-0_16

Appendix A

Interview Instrument

During our conversation today, you will be asked a series of questions about your company's online user documentation.

Part One

The first set of questions involves distribution of work for documentation projects.

1. Who creates your documentation?
2. Who approves documentation?
3. How many people are involved?
4. How many employees are solely dedicated to documentation tasks?
5. If employees have multiple responsibilities besides documentation, what percentage of their time is spent on documentation?
6. How much time is spent creating new documentation?
7. How much time is spent updating existing documentation?

Part Two

The second set of questions is about current/most recent online user documentation projects.

1. What documentation projects are currently in progress or recently completed?
2. Are any ongoing or continually updated?
3. How are these documents updated?
4. How long did this project last?
5. Who initiated the project?

Part Three

The third set of questions is about how important documentation is to your company.

1. Compared to other tasks, what priority level was the most recent project given and why?

2. What seems to be most important to the company when making these decisions (i.e. project benefit to operations, customer satisfaction, cost of project, availability of employees)?

Part Four

The last set of questions are about resources and technology for future projects at your company.

1. What resources and technology do you expect to use for future documentation projects, (i.e. additional software tools, personnel, outsourced contract work, other)?

Thank you for your time and thoughtful answers. If you have any questions about the study, I can be reached by phone or email.

Appendix B

Informed Consent Memo

Informed Consent for Research Participation

Study Title:	Small Business Online User Documentation Practices and Priorities

Researcher Names	Department	Contact Information
Liz Mathews	English	Mathewse9255@my.uwstout.edu

Faculty Advisor	Department	Contact Information
Dr. Julie Watts	English	wattsj@uwstout.edu

Overview of the Research Study

Participation invitation:	You are invited to participate in the research study described below. Your participation is entirely voluntary, and you may stop your participation or withdraw from the study at any time and for any reason. If you choose to not participate or to stop your participation, there will be no negative consequences to you. Your decision to participate or not in this study will not change your relationship with the researchers or the University of Wisconsin-Stout.
Who can participate in this study:	Participants will be employees of a small business (0-50 employees) or mid-sized business (51-1000 employees) and serve a role in documentation management or oversee these professionals at their company. Documentation management roles include job functions such as information developer, writer, editor, or designer.
Study description:	This study looks at the types of online user documentation and documentation practices used now and planned for the future at small to mid-sized consumer product companies. Do companies hope to maintain, improve, or decide to switch focus from online user documentation in the near future?
What you will be asked to do:	Participants will be asked a series of open-ended interview questions about documents their company creates, how they are prioritized, and what future plans for documentation they may have.

Time commitment:	20 minutes
Participation risks:	The researcher(s) do not believe this study will cause you any discomfort or other risk beyond what you would normally experience in your daily life.
What will be done to minimize your participation risks:	Names of participants and company identifiers will be removed from interview data.
Participation benefits:	No tangible benefits

Confidentiality and Data Protection

Who will have access to your data:	Advisor
Data protection and future use:	Collected data will be stored on a password-protected computer, not printed out, and deleted following the conclusion of the study. I will not refer to company names or other personal identifiers during the analysis or dissemination of the research
Mandated reporting requirements:	

Protection of Human Research Subjects

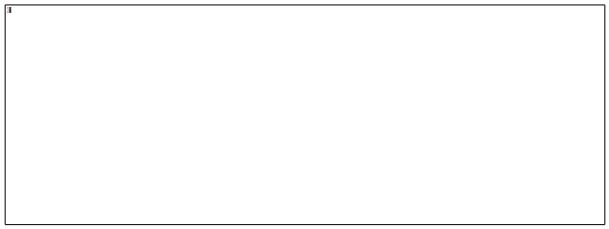
If you have questions about this study, please contact:	Liz Mathews; Dr. Julie Watts
If you have concerns about this study or your rights as a participant, please contact:	Institutional Review Board Chair University of Wisconsin-Stout Robert S. Swanson Learning Center #207 715-232-4042 irb@uwstout.edu
Your right to withdraw:	Your participation in this study is entirely voluntary. You may choose not to participate or to stop the study or survey without any adverse consequences to you. However, should you choose to participate and later wish to withdraw from the study, there may be no way to identify your data after it has been submitted. If you are participating in an anonymous survey, once you submit your responses, the data cannot be linked to you and cannot be withdrawn.
UW-Stout IRB approval statement:	This study has been reviewed and approved by the University of Wisconsin-Stout's Institutional Review Board (IRB). The IRB has determined that this study meets the ethical obligations for human subjects research as required by federal law and UW-Stout policies.

Implied Consent Statement

By completing the following survey, I am indicating that I agree to participate in this study and understand that I may stop my participation or withdraw my consent at any time during active participation.

Appendix C

IRB Approval Letter



INSTITUTIONAL REVIEW BOARD
Office of Research and Sponsored Programs
Robert S. Swanson Learning Center #201
715-232-4042
irb@uwstout.edu

Date: September 13, 2023

PI: Elizabeth Mathews

Department: ENG/PHILOSOPHY/COMM/STUDIES, GRADUATE STUDENT

Re: Initial - IRB-FY2024-1

Small Business Online User Documentation Practice and Priorities

Dear Elizabeth Mathews,

In accordance with Federal regulations, your project, *Small Business Online User Documentation Practice and Priorities*, was reviewed by a member of the University of Wisconsin - Stout Institutional Review Board and was determined to be **Exempt** from full review under the below Categories in accordance with Federal Policy for the Protection of Human Subjects (45 CFR 46).

Category: Category 2.(ii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or

You project is hereby approved and deemed exempt from further IRB review for 5 years from September 13, 2023. If a renewal of this approval is needed, it is to be submitted at least 10 working days prior to the expiration date.

Responsibilities for Principal Investigators of UW-Stout IRB-approved research:

1. No subjects may be involved in any study procedure prior to the IRB approval date or after the expiration date.
2. All unanticipated or serious adverse events must be reported to the IRB.
3. All protocol modifications must be approved prior to implementation unless they are intended to reduce risk.
4. All protocol deviations must be reported to the IRB.
5. All recruitment materials and methods must be approved by the IRB prior to being used.
6. Research which involves financial compensation to participants must follow appropriate UW-Stout payment procedures.
7. Consent forms must adhere to UW-Stout IRB standards and indicate that the research has been approved by the UW-Stout IRB as required by federal regulations (see UW-Stout IRB consent form templates for more details).
8. Researchers conducting human subjects' research under an approved exempt category are still ethically bound to follow the basic ethical principles of the Belmont Report, as reflected in the practice of obtaining informed consent from participants and adherence to IRB approved methods.
9. Any modifications to the approved study must be submitted for review through Cayuse IRB. All approval letters and study documents are located within the Study Details in Cayuse IRB.

Thank you for your cooperation with the IRB and best wishes with your project. If you have questions, please contact the IRB office at irb@uwstout.edu or by phone 715-232-4042, and your question will be directed to the appropriate person.

Sincerely,

Michael Mensink, Ph.D.; IRB Chair
University of Wisconsin-Stout Institutional Review Board