Kallie Reed

November 8, 2020

TWC 544

Usability Test Report The Missouri Department of Revenue

Introduction

The Missouri Department of Revenue website features usability issues that could potentially hinder users from accomplishing their tasks when visiting the site. The following usability test report summarizes a usability test that was conducted on the site, analyzes the results of the test, and provides recommendations that could improve the functionality of the site and overall user experience.

Website

I chose to test the Missouri Department of Revenue website. Government websites are not typically known for ease of use or a positive user experience. The Missouri Department of Revenue website hosts information about different tax-related and official topics. You can find information about personal and business taxes, driver licenses, and vehicle licensing and registration. A user might visit the website for a number of reasons, maybe they lost their license or state ID and need information on how to get a new one, or maybe they would like to check the state of their tax return. The Missouri Department of Revenue website is a hub for governmental and state information; if the information you are looking for is not hosted on the site itself, the site can at least point you in the right direction.

The Missouri Department of Revenue website stuck out to me most notably for two reasons: site navigation and organization. The site hosts a lot of information, and that in itself can be an issue. Without a good organizational system or way of presenting the information in an orderly manner, the site looks cluttered and unkempt. The site features a standard top ribbon navigation menu with clickable links to pages for forms and manuals, online services, individual tax, business tax, motor vehicle, and driver license. While this is standard for most websites, there are an additional two ribbon menus in different areas on the same page that offer the same exact links, this is redundant and only clutters the page unnecessarily. There are also many flashing ads and clickable images that can be quite distracting and a large number of additional links and PDFs across the site. Finally, when you do click on a link, often times the organization and presentation of the information seems unintuitive. For example, when

inquiring about the Missouri REAL ID, which is one task scenario performed by my test participants, the user comes across these images:

he follow	ving resour	ces are available	for your convenience:
rochures	s, Informati	on Packet and In	teractive Guide:
	REAL DR		Missouri Real ID Guide Write the State of th

FIGURE 1: REAL ID IMAGES

When a user clicks on the first two images, they are directed to a search results page with clickable PDF links. The PDF links open either of the two images. If that seems confusing or redundant, it is. When you click on the first image, you are directed to two PDF files, one for the first image and one for the second image. Then, when you click back to return to the previous page and click the second image, you are taken back to the same page with PDF links for both the first and second image. However, when you click the third image, the PDF opens directly. Additionally, the PDF that opens when you click the third image contains all of the information that a user could need regarding the REAL ID. The rest of the page (which is set up like an FAQ page with many questions that basically all say the same thing) is redundant and not necessary. These poor design features do not make it impossible to locate information, but they could possibly be distracting and detract users from their task.

Test Method

I conducted one in-person test and two remote tests via Zoom. To prepare for testing, I first wrote a document that stated the goal of the usability test and the three task scenarios that I would be asking my participants to complete. Then, I created a survey using Google Forms. The survey was to be completed by my participants after the testing was completed. It asked my participants for demographic information, their prior knowledge of the site (if any), and their opinions of the site's navigation, organization, and overall usability. I emailed the task scenario document and post-test survey to each of my participants.

Using Janet M. Six's article, "Tips for Conducting Remote UX Research and Testing, Part 1," as a guide, I ensured my participants were welcomed, comfortable, and prepared for testing. I conducted the two remote tests first via Zoom meetings and the in-person test followed. When each Zoom meeting started, I ensured all video and audio was working properly and ensured my participants were okay with sharing their screen and using a webcam. I made sure they received the task scenario document and survey. I briefly explained to them what usability and usability testing are and the purpose and goal of this specific test. I then read the task scenario document out loud with them to ensure they understood the goal of each task and asked if they had any questions. The in-person test followed the same set-up procedures, excluding checking audio and visual equipment, of course. I asked each participant to say what they were thinking as they used the site out loud so that I may take note of their opinions and experiences during the test. I read each task scenario out loud again for clarity at the beginning of each task test. I then started a timer, and my participants performed the task scenarios.

Participant Demographics

Table 1 shows the demographics of my participants, and a chart showing their familiarity with the site prior to testing is depicted in Figure 2.

	Gender	Age	Location
Participant 1	Female	39	Nashville, TN
Participant 2	Male	28	St. Louis, MO
Participant 3	Male	32	St. Louis, MO

 TABLE 1: PARTICIPANT DEMOGRAPHICS



FIGURE 2: PARTICIPANT FAMILIARITY WITH MISSOURI DEPARTMENT OF REVENUE WEBSITE

Findings

My usability test included the following task scenarios:

- 1. You have been hearing a lot about a new form of identification (the Missouri REAL ID) that will be required to board domestic flights, but you do not know much about it. You have a business trip coming up in a few months, so you are visiting the Missouri Department of Revenue website to verify if you will need a REAL ID or not and the requirements for obtaining one, if necessary.
- 2. You recently started a new small business, and you need to register your business with the Department of Labor. Locate information on how to register your business on the Department of Revenue website.
- 3. You want to obtain a commercial driver's license (CDL) for a new job opportunity. On the Missouri Department of Revenue website, locate the rules and requirements to take both the written and practical CDL exam.

Task Scenario 1: Missouri REAL ID

Task Scenario 1 required my participants to locate information about the Missouri REAL ID and determine if they will need to obtain one for future business travels. Each participant started from the home page, and I observed as they navigated a path to the necessary information. Table 2 shows the amount of time it took each participant to locate the correct information.

Participant	Time
1	4 minutes
2	4 minutes, 3 seconds
3	1 minute, 41 seconds

 TABLE 2: TASK SCENARIO 1 TIME RESULTS

As the test began, Participant 1 stated that she "likes to read all options before making a decision," meaning, she likes to look over the whole page and all available options before she chooses what to click. She eventually chose the "online services" menu option. After scrolling through that page for a couple of minutes, she decided she was not in the correct location and then tried using the search bar at the top of the page. This search yielded a great number of PDFs and links but none that really caught the participant's eye. She finally then landed on the "driver license" menu tab (this is the correct location) and found the necessary information a few seconds after. Participant 1 stated that the thing about the site she took most issue with was the amount of clickable links and that it could be difficult to locate what you're looking for because there are so many options.

Participant 2 stated at the beginning of the test that he likes to ignore all ads and flashing banners on a website and go straight to the top menu bar for navigation. Participant 2 initially clicked the correct menu tab of "driver license," but was distracted by the amount of information and clicked on a few other tabs. Regarding the information on-screen he stated, "wow, this is a lot of information. I don't really know what I'm looking at." He eventually navigated his way back to the driver license tab after a few minutes of searching and located the necessary information.

Participant 3 stated that he had never heard of the REAL ID before, so he wasn't sure what he was looking for exactly. Because of this, his initial reaction was to use the search bar at the top of the page. This search again yielded many links and PDFs, but Participant 3 spotted one that looked promising after about a minute. He found a PDF that included all the information he needed. He stated because the search bar had yielded such a quick result, he did not encounter any issues with this search.

Task Scenario 2: Small Business Taxes

Task Scenario 2 required my participants to locate information about registering a new small business with the department of labor. Each participant started from the home page, and I observed as they navigated a path to the necessary information. Table 3 shows the amount of time it took each participant to locate the correct information.

Participant	Time
1	54 seconds
2	2 minutes, 17 seconds
3	23 seconds

TABLE 3: TASK SCENARIO 2 TIME RESULTS

Participant 1 located this information rather quickly. Starting from the home screen, she navigated to "forms and manuals" and found a link titled "business registration." She reported no issues in locating this information.

Participant 2 again started from the main menu ribbon. He spent a couple minutes scrolling through the "online services" page (which is not the correct page) before finally navigating to the "business taxes" page and locating a link for registering a business online. He noted that because there are so many links it can be time consuming attempting to locate specific information.

Participant 3 located this information the quickest, in just 23 seconds. Starting from the home page, he scrolled down a bit and noticed a box of "popular services." In this box there is a link for registering your business online.

Task Scenario 3: Commercial Driver License

Task Scenario 3 required my participants to locate information about the rules and requirements to take the written and practical exam to obtain a commercial driver license (CDL). Each participant started from the home page, and I observed as they navigated a path to the necessary information. Table 4 shows the amount of time it took each participant to locate the correct information.

TABLE 4: TASK SCENARIO 3 TIME RESULTS

Participant	Time
1	3 minutes
2	20 seconds
3	1 minute, 24 seconds

Participant 1 spent quite a lot of time scrolling through the information on the "motor vehicle" page and did not find any information concerning a CDL. She commented on the amount of information available on the page. After a few minutes, she again tuned to the search bar. After searching CDL, she located a PDF outlining the license requirements.

Participant 2 located the CDL information the quickest of the three. Starting from the home page, he navigated to the "driver license" page on the top menu and quickly found a link titled "commercial drivers," which lists all necessary information.

Participant 3 turned to the search bar immediately for this information. He searched "CDL exam" and quickly located the necessary information in a list of frequently asked questions (FAQ) results. Participant 3 noted that he liked the search feature, though sometimes it was not very intuitive and yielded odd results.

Survey Feedback

Figure 3 and Figure 4 depict the survey results for questions about the overall site navigation and organization. The two questions yielded similar results, and the participants rated the site's navigation and organization at about the mid-range. Both questions averaged at 6.5 on the scale. (For more detailed results, more participants would be required to test the site.)



FIGURE 3: SITE NAVIGATION



FIGURE 4: SITE ORGANIZATION

TABLE 5 AND

Table 6 show the feedback I received from my participants in the post-test survey. The participants bring up some interesting issues they experienced with the site, including unclear language and text and labels that blend together, making information difficult to discern.

TABLE 5: PARTICIPANT FEEDBACK—SITE ISSUES

What issues did you encounter while using the site, if any?

Sometimes the search bar came back with strange results. It also didn't spell check my entry completely changing the results.

Not all menus had language that made clear what you'd find under those pages.

No identifiable icons. Nothing stood out- most labels blended in to one another.

TABLE 6: PARTICIPANT FEEDBACK—IMPROVEMENTS

What changes would you suggest to improve site usability, if any?

Add in spell check for those of us that are rather bad at spelling.

A dropdown menu or improved search function would help with navigation.

Better category organization and highlighting frequently visited links.

Recommendations

The Missouri Department of Revenue site could benefit with a few improvements to enhance usability and user experience. First, removing redundant content, decluttering pages, and a greater use of white space could enhance clarity and make it easier for users to not only focus their attention on one thing at a time, but also help them to find what they are looking for quickly. In his article, "10 Usability Heuristics Every Designer Should Know," Michal Langmajer states that, "minimalism helps users to quickly access important information and come to the result quickly." (Langmajer, 2019) Additionally, as one of my test participants suggests, including a dropdown-style menu could improve the search function. By adding dropdown menus to the top ribbon menu bar, you could eliminate many of the links that are on the page itself. This would help to cut down on content and clutter on the page and make navigation simpler. Dropdown menus could also help to better categorize information into more specific areas.

Conclusion

The Missouri Department of Revenue website is host to a large variety of important information for Missouri residents. As such, it is crucial that this site have optimal usability and ease of use so its users can quickly and efficiently complete the task that brought them to the site. However, the current navigation and organization of the site may complicate the user experience. While the current usability issues do not make it impossible to use the site, they can cause frustration on the part of the user. By implementing the simple recommendations outlined above, the site's navigation and organization could potentially improve drastically and create a more user-friendly experience for Missouri residents.

References

- Six, J. M. (2020, October 19). *Tips for Conducting Remote UX Research and Testing, Part 1*. UX Matters. <u>https://www.uxmatters.com/mt/archives/2020/10/tips-for-conducting-remote-ux-research-and-testing-part-1.php</u>.
- Langmajer, Michal. (2019, July 9). *10 Usability Heuristics Every Designer Should Know*. UX Collective. <u>https://uxdesign.cc/10-usability-heuristics-every-designer-should-know-129b9779ac53</u>.

Test Goal and Task Scenarios

Goals: Test site navigation and organization. Does the cluttered-ness of the site detract from easy navigation or easy use? Is it distracting?

Task Scenarios:

- 1. You have been hearing a lot about a new form of identification (the Missouri REAL ID) that will be required to board domestic flights, but you do not know much about it. You have a business trip coming up in a few months, so you are visiting the Missouri Department of Revenue website to verify if you will need a REAL ID or not and the requirements for obtaining one, if necessary.
- 2. You recently started a new small business, and you need to register your business with the Department of Labor. Locate information on how to register your business on the Department of Revenue website.
- 3. You want to obtain a commercial driver's license (CDL) for a new job opportunity. On the Missouri Department of Revenue website, locate the rules and requirements to take both the written and practical CDL exam.