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Usability Report: Gutenberg Accessibility Audit

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Introduction

This report is intended to serve as a guide to facilitate the development of the Gutenberg editor released as part of version 5.0 of WordPress. WordPress is a free and open source content management system in use by more than 60 million websites with a user base ranging from small Individual bloggers to large companies, educational institutions, and government agencies.

As part of Tenon's accessibility audit, the team conducted usability testing by asking participants to perform three main tasks, each with five sub-tasks. Each meeting was recorded using Zoom's web conferencing application which captured participants' live navigation choices and comments. At the end of each task, each participant was asked a series of questions to determine task completion rates, overall satisfaction rating, and feedback.

Methodology

Remote Sessions with Think-Aloud Protocol

The test administrator contacted and recruited participants from an internally compiled list of experienced usability testers. The test administrator sent e-mails to attendees informing them of the test logistics and requesting their availability and participation. Participants responded with an appropriate date and time. Each individual session lasted approximately one hour. During the session, the test administrator explained the test session and asked the participant to perform three main tasks. Participants then used the Gutenberg editor to try and complete each task.

After the completion of each task, the test administrator asked the participant to rate the website overall by using a 5-point Likert scale (Strongly Disagree to Strongly Agree) for eight subjective measures including:

- Ease of use
- Frequency of use

- Difficulty to keep track of location in website
- Learn ability – how easy it would be for most users to learn to use the website
- Information facilitation – how quickly participant could find information
- Look & feel appeal – homepage’s content makes me want to explore the site further
- Site content – site’s content would keep me coming back
- Site organization

In addition, the test administrator asked the participants the following overall website questions:

- What the participant liked most.
- What the participant liked least.
- Recommendations for improvement.

This data was then quantified using a System Usability Scale to measure effectiveness, efficiency, and satisfaction with the task.

Participants

Nine participants were scheduled over two weeks in late February and early May 2019. All participants had a higher-than-average level of technical experience, some of whom having professional experience in web development and some having direct and current experience with WordPress. Of the nine participants:

- 3 participants were blind.
- 2 participants were blind with motor impairments
- 1 participant had cognitive impairments
- 2 participants had mobility impairments
- 1 participant was visually impaired

Evaluation Tasks/Scenarios

Testing was conducted using a [think aloud protocol](#) whereby participants verbalize what comes to mind as they complete a task. Each participant was asked to perform three tasks, each with five sub-tasks:

- Create new content
 1. Add a new post
 2. Add a 5 word title
 3. Add 5 sentences of text
 4. Add an image
 5. Add a section of content of your choosing, text, links, images, media etc.
- Edit content
 1. Edit the title
 2. Amend an existing paragraph of text by adding more text halfway through it.
 3. Change the format of a section of text to be bold.
 4. Add a section of content of your choosing, text, links, images, media etc.
 5. Change the text alignment of a section of text to be center aligned
- Amend post options
 1. Preview the post
 2. Publish the post
 3. Open the options for the post and create a tag for the post
 4. Change the overlay color for a selected item in the post
 5. Open the kebab menu and change the editor

Results

Task Completion Success Rate

Overall, six of nine participants (66.7%) completed Task 1 (Create New Content). Seven of the nine (77.8%) completed Task 2 (Edit Content). Only four of nine (44.5%) completed Task 3 (Amend Post Options).

Task and Participant Type	SUS Average	Completion Rate
Task 1: All Users	50	66.67%
Task 1: Blind	39	66.67%
Task 1: Visually Impaired	90	0%

Task and Participant Type	SUS Average	Completion Rate
Task 1: Cognitively Challenged	75	100%
Task 1: Dexterity Impaired	38	66.67%
Task 2: All Users	48	77.78%
Task 2: Blind	33	66.67%
Task 2: Visually Impaired	95	100%
Task 2: Cognitively Challenged	65	100%
Task 2: Dexterity Impaired	45	66.67%
Task 3: All Users	39	44.44%
Task 3: Blind	8	16.67%
Task 3: Visually Impaired	95	100%
Task 3: Cognitively Challenged	75	100%
Task 3: Dexterity Impaired	27	66.67%

Task Ratings

Task One: Create new content

The steps for Task One were to:

1. Add a new post
2. Add a 5 word title
3. Add 5 sentences of text
4. Add an image
5. Add a section of content of your choosing, text, links, images, media etc.

Task and Participant Type	SUS Average	Completion Rate
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Task 1: All Users	50	66.67%
Task 1: Blind	39	66.67%
Task 1: Visually Impaired	90	0%
Task 1: Cognitively Challenged	75	100%
Task 1: Dexterity Impaired	38	66.67%

Table 1: Task One Results

TASK ONE SYSTEM USABILITY SCALE

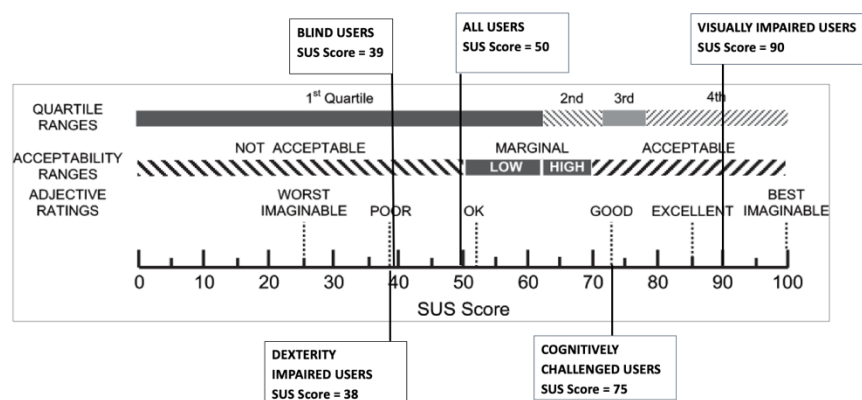


Figure 1: Task One SUS Scale

Task Two: Edit Content

The steps for Task Two were to:

1. Edit the title
2. Amend an existing paragraph of text by adding more text halfway through it.
3. Change the format of a section of text to be bold.
4. Add a section of content of your choosing, text, links, images, media etc.
5. Change the text alignment of a section of text to be center aligned

Task and Participant Type

SUS Average

Completion Rate

Task 2: All Users	48	77.78%
Task 2: Blind	33	66.67%
Task 2: Visually Impaired	95	100%
Task 2: Cognitively Challenged	65	100%
Task 2: Dexterity Impaired	45	66.67%

Table 2: Task Two Results

TASK TWO SYSTEM USABILITY SCALE

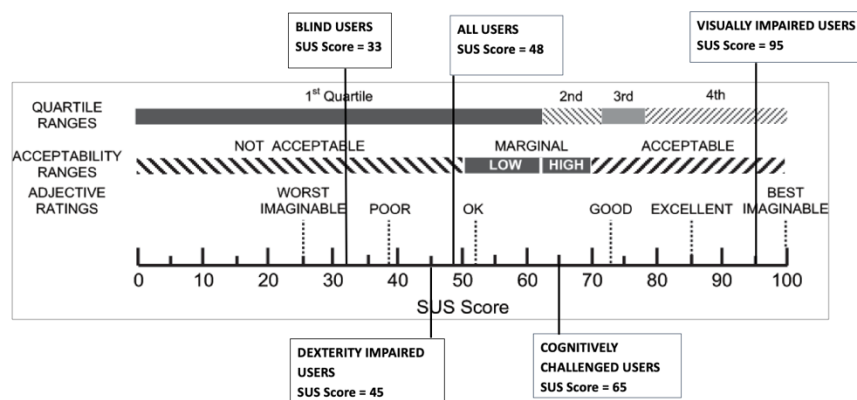


Figure 2: Task Two SUS Scale

Task Three: Amend Post Options

The steps for Task Three were to:

1. Preview the post
2. Publish the post
3. Open the options for the post and create a tag for the post
4. Change the overlay color for a selected item in the post
5. Open the kebab menu and change the editor

Task and Participant Type

SUS Average

Completion Rate

Task 3: All Users	39	44.44%
Task 3: Blind	8	16.67%
Task 3: Visually Impaired	95	100%
Task 3: Cognitively Challenged	75	100%
Task 3: Dexterity Impaired	27	66.67%

Table 3: Task Three Results

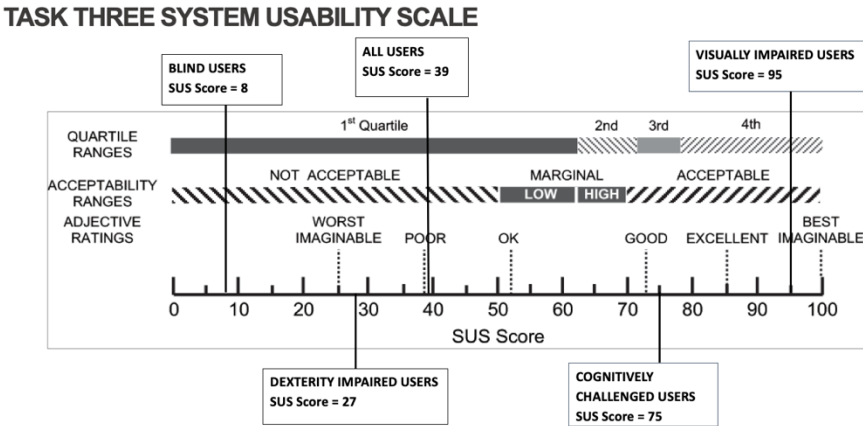


Figure 3: Task Three SUS Scale

Conclusion

As the above demonstrates, the SUS score, when measured across all test participants places Gutenberg squarely in the 1st Quartile, described as “Not Acceptable”. Cognitively Impaired and Visually Impaired users were the only participants who scored higher than the 1st Quartile. Overall, Gutenberg’s user experience is consistently poor. The data from our Technical Report provides insight into the development shortcomings that caused such low ratings.