

# Break the Burger

A UX Case Study on Web Navigation

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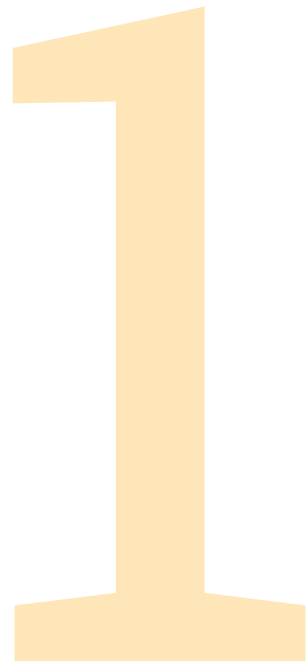


# Pressed for time?



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# What are we talking about?

Hamburger menus and other hidden navigation methods were developed to save space on mobile devices when the first iPhone came out. After a decade, this method has evolved visually but not functionally.

Due to this, the problems with the hamburger menu have been emerging, but it seems no one wants to believe the truth.

Therefore, a change needs to come to break the use of the hamburger menu. The way to do this, through qualitative and quantitative research, testing possible design solutions, and publishing those findings.

## Abstract

**Break the Burger is a case study to show the drawbacks of the hamburger menu and hidden menus and showcase possible tested solutions.**

## Introduction

Hidden navigation is becoming outdated and hurting the experience of the user. When the navigation is hidden from the user, it brings down the **discoverability** of the site (it takes users longer to find information they need) and the **overall metrics** (analytics that track business goals to better their profit).

# 2

## Research



### Observe



### Evaluate



### Rationalize

# Observe

The data that was gathered was collected through **Qualitative** and **Quantitative** listed below:

## Qualitative

System Usability Scale  
Surveys

## Quantitative

Questionnaire  
Interviews

Overall, this study recruited 50 people to gain feedback from the methods listed in this study.

# Evaluate

When enough feedback was gained, there was two evaluation methods used to uncover the overarching problem(s).

To do this, **Heuristic Analysis & Card Sorting** methods were used. The heuristic analysis was use to uncover major problems. Then, those problems were than used as base categories for the card sort. Once the categories are set, the data is organized and simplified to the overarching problems.

Here pictured is the Card Sorting in action. At the bottom is where data is organized.

The next level is the summary problem of each group. The second highest is the major problems between each summary card. At the top is the overarching problem.



# Rationalize

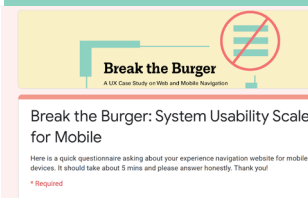
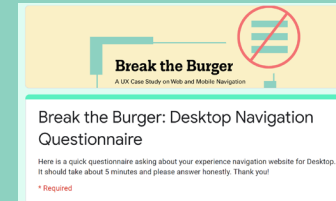
Within this stage, the data is used to determine and define the **metrics** and influences **new designs**.

Metrics, or applied analytics, are used to measure the level of impact, or the overall success, of the changes in the designs.

Therefore, these metrics will align with the discovered issues and the business goals to track the progress of the changes.

This was one of the questionnaire during the Observation phase. This one focused on navigation on desktop.

There was also a mobile version of this questionnaire



This one of the System Usability Surveys that was used during the Observation phase. This one focused on navigation on mobile.

There was a desktop version of this as well.

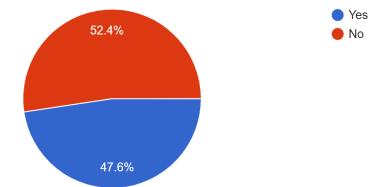
# Data & Problem

# 3

The **Questionnaires** were designed to see ***what*** people know about these of the hidden and hamburger menu.

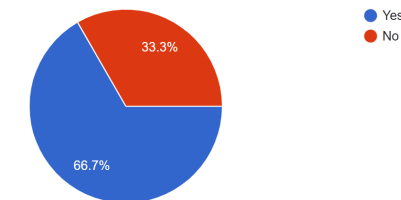
Do you know what hidden navigation is?

21 responses



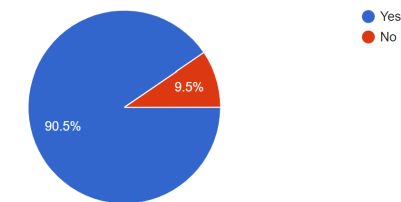
Have you seen this in a different style?

21 responses



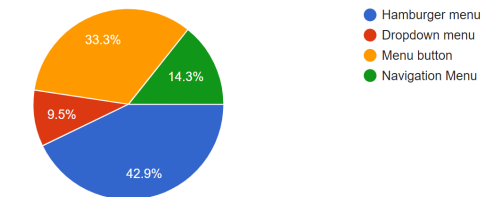
Have you seen or used this icon?

21 responses



What is that icon called?

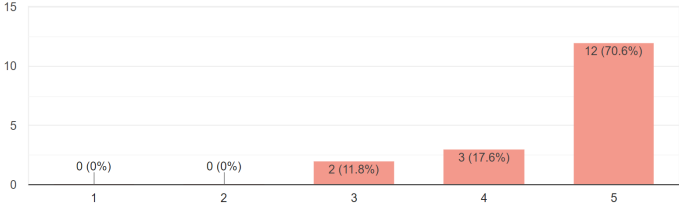
21 responses



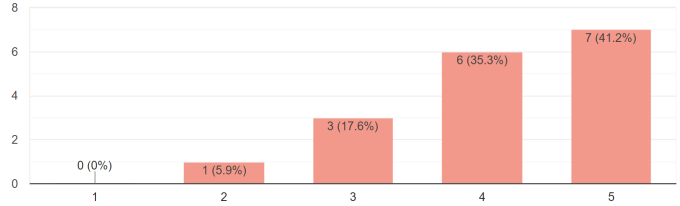
## Data gathered

From there, a **System Usability Survey** was used to see ***why*** these problems were happening . The scale that was used was from Strongly Disagree to Strongly Agree (1 to 5).

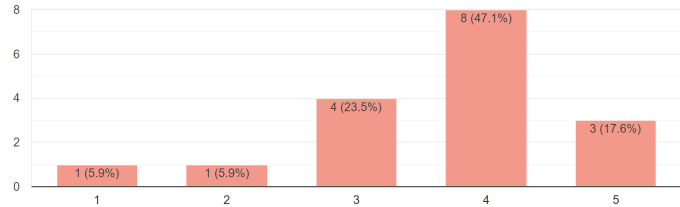
I find it easy to navigate a website when I can see the options.  
17 responses



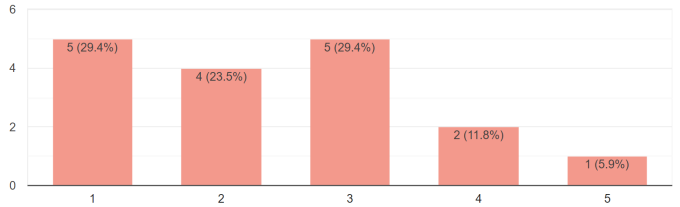
I have no problems finding information when I need to tap to reveal the navigation menu.  
17 responses



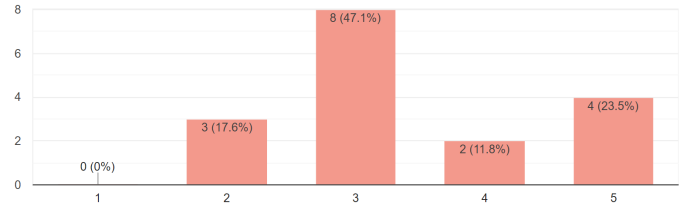
I have an easy time touching/tapping the icon menu with my finger.  
17 responses



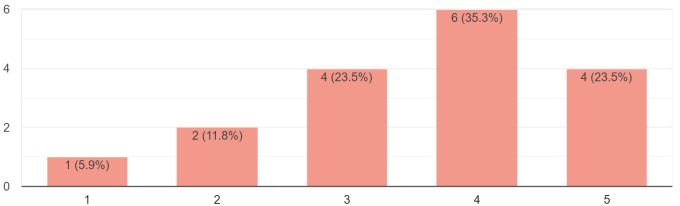
I do not get frustrated when using a website because of unclear navigation.  
17 responses



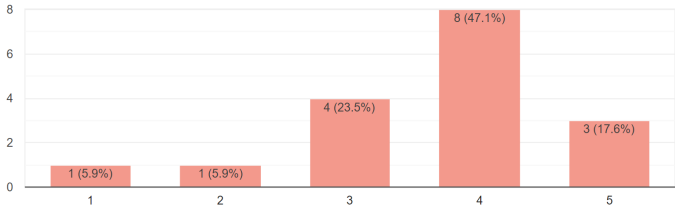
When navigation is not visible, I have a hard time finding the menu.  
17 responses



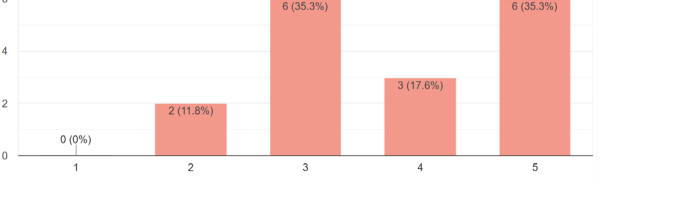
I have an easy time reaching the icon menu with my finger.  
17 responses



If the navigation is hidden, I find it easier to find it by looking for the icon.  
17 responses



If the navigation is hidden, I find it easier to find it by looking for the word "Menu".  
17 responses



The last research that was done was face-to-face **interviews**. There were a total of six (6) interviewees that were asked a series of question about using hidden and hamburger menus and their opinions on the design and functionality of it.

Some notable finding are listed below:

**Having to click more**

**Forces user to stop what they  
are doing**

**Unclear Iconography**

## Defined Metrics

**% Increase of Success rate**

**% Increase in Directness rate**

**Decrease in average time  
Searching**

## The Problem

From the research, it was uncovered that hidden menus and Hamburger menus are:

**Not Flexible  
&  
Lack of Consistency and Control**

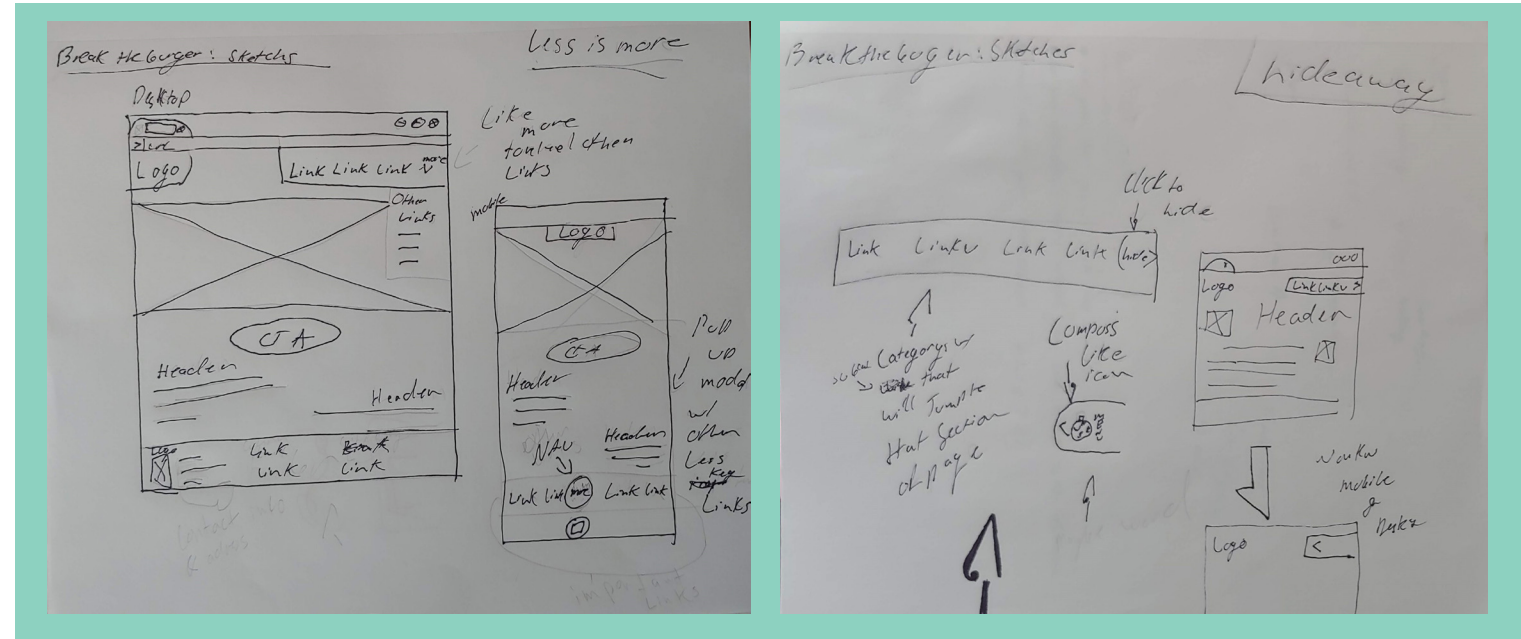


# Testing

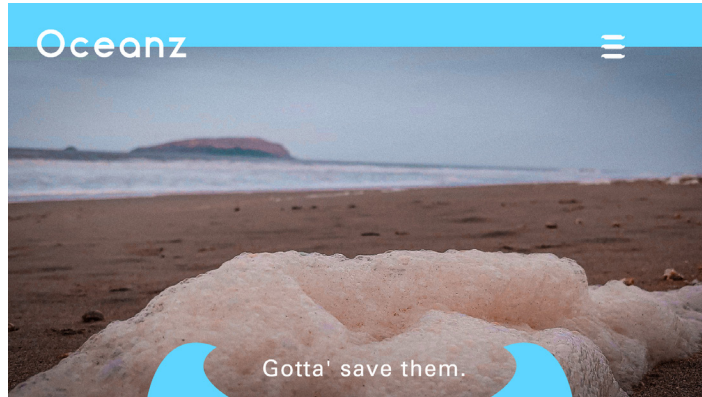
4

All together, there were **two strong** ideas that became possible solutions. On the left, you have a menu that only holds 7 labels, is an in-line, visible navigation, and separates important and less important links. On the right, is a concept that has 4 labels and can be collapsed and reopened at the user's request.

## Sketches

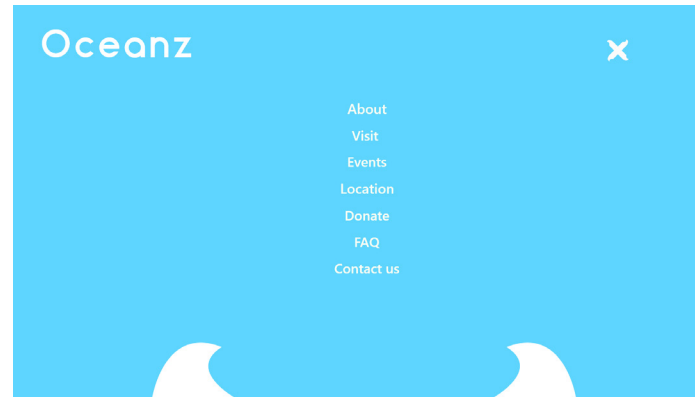


# Mock-ups



For the test, a minimal fake website was created that focused on the navigation function for the site. ***With that said, there is no connection, or a bigger picture, behind the image, logo mark, or the slogan used.*** Each design as the same form, but a different navigation method.

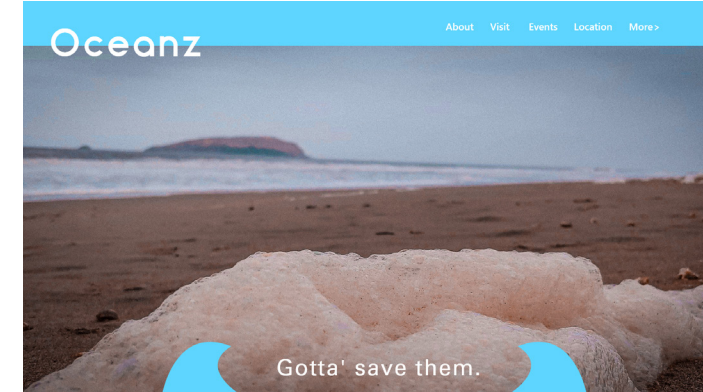
## Hidden/Hamburger Menu



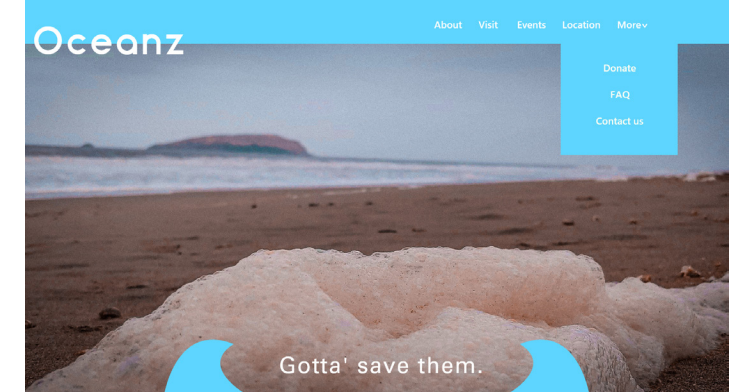
As for the new design, the first sketch was chosen because it solved the problem points that were uncovered: It allows for consistency, modularity, and has a balanced ratio of accessible and conceivable states.

# Process

## New Design



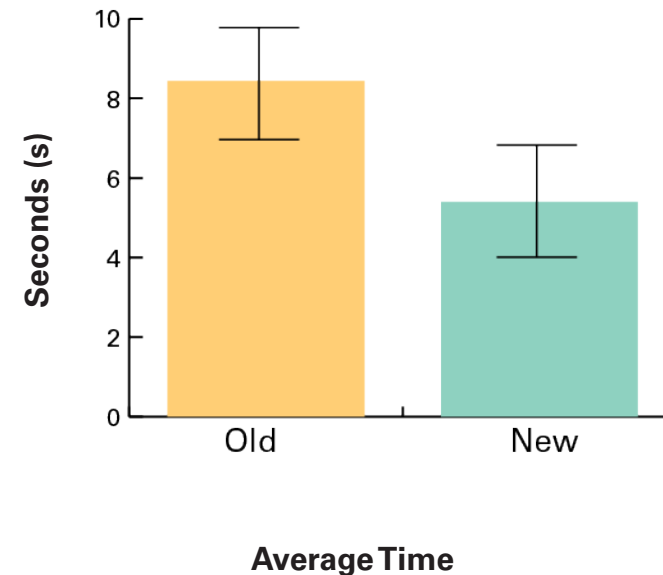
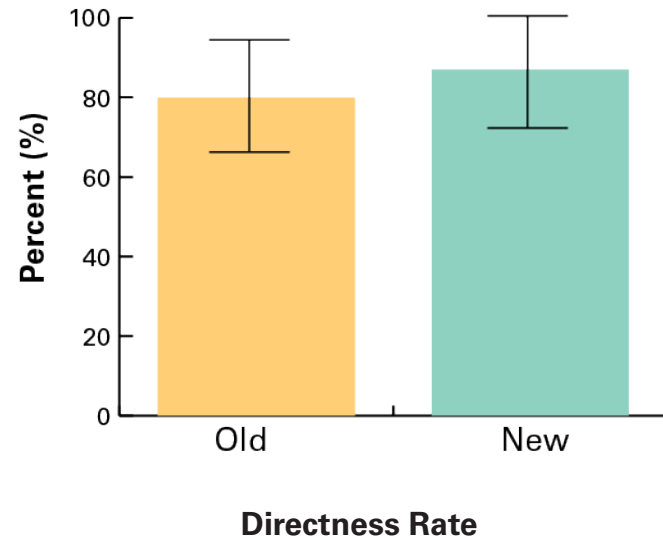
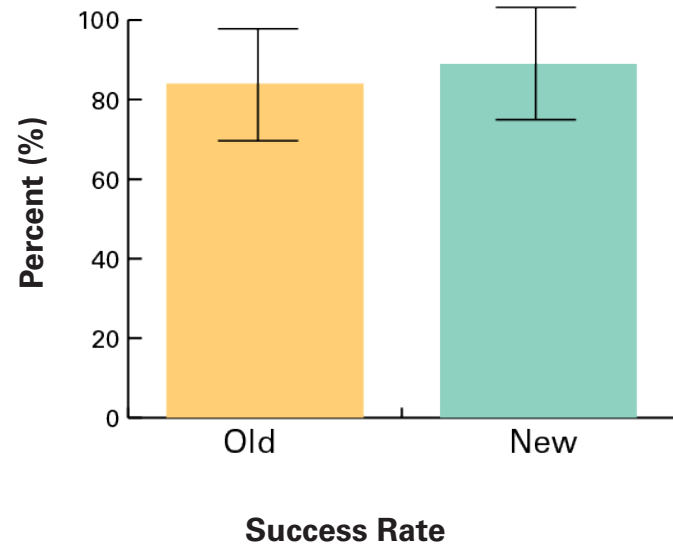
This usability test chosen for this study was a simple A/B test. Participates were given tasks, focused on using every part of the menu, to complete. During the test, **participants were timed, marked the type of success of failure (direct or indirect), and noted how directed they felt navigating the menu.**



After each test was completed, a post usability survey was given. This was a three question survey that tracked the metrics that were defined earlier.

This process was repeated for the other design.

# Testing Results



## Results

Success Rate:

↑ 7%

Directness Rate:

↑ 10%

Average Time :

↑ 57%

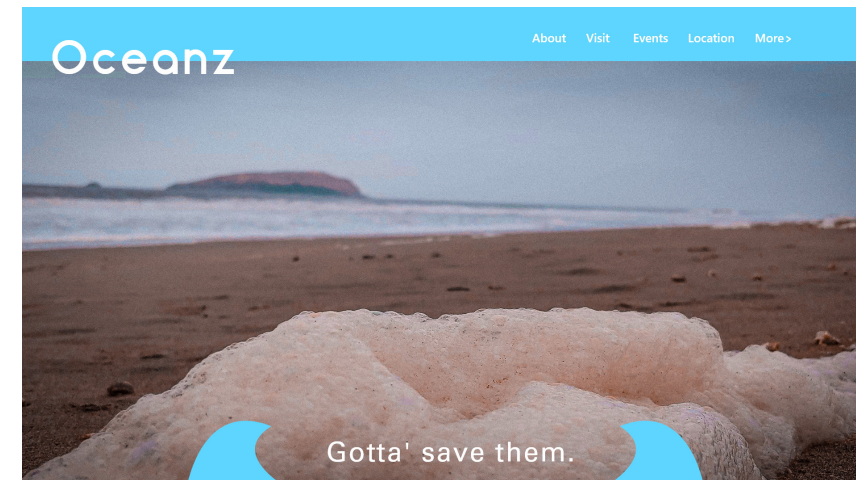
**Positive Impact**

5

# Conclusion

Hidden menus are hurting UX metrics and having a negative impact on the user's experience. Yes, the results are a lot smaller than anticipated but that is from a sample size of testing 5 people, due to lack of time.

However, no matter the number size, this still **proves that there are issues with success, directness, and average time when using hidden and hamburger menus.**



Moving forward, the use of the hamburger should be only for additional functionalities and not the a navigation method. Therefore, more time needs to be added into the navigation and information architecture design to create a user-centered solution.

***Let's Break this Burger and regain control!***

**Typefaces used in this booklet**

Rockwell, 50/60  
Univers, 10/12

IMM SeniorThesis Showcase  
Class of 2020