Ethan Nissley

Dini Nadzaruddin

Mario Gomez

Manilyn Cabrera

Bella Chen

Client CITY OF SHORELINE







SHORELINE Current Desktop View

Calendar

City Council Special Meeting March 20, 2017

City Council Regular Meeting March 20, 2017

Beautify & care for your streamside property March 23, 2017

Parks, Recreation & Cultural Services/Tree Board Meeting March 23, 2017

City Council Workshop Dinner Meeting

March 27, 2017

City Council Regular Meeting March 27, 2017

Home Improvement Workshop & Vendor Fair March 28, 2017

Richmond Beach Saltwater Park Volunteer Work Party April 1, 2017

City Council Regular Meeting April 3, 2017

Planning Commission Meeting April 6, 2017

City Council Workshop Dinner Meetina

April 10, 2017

City Council Regular Meeting April 10, 2017

> FULL CALENDAR ... CURRENTS NEWSLETTER IN



What's New in Shoreline



Comment on the Trail Along the Rail

The City is investigating the possibility of building a multi-use trail running roughly parallel to the light rail alignment through Shoreline. Please provide your comments in a short survey.



Shoreline City Council approves supplemental paid family leave for City staff

The policy will allow staff to take up to 12 weeks of paid time off to care for a sick family member, bond with a new child, or for their own personal health



Twin Ponds Giving Garden tops area contributions The 2016 Solid Ground "Growing and Giving" report names Twin Ponds Giving Garden as the top contributor of produce to a local food bank of all Seattle area p-patches and community gardens



Preview the Spring/Summer Recreation Guide Now The Recreation Guide is your source for Parks Department sponsored spring and summer camps, trips, programs, and events for everyone at every age. Registration starts March 20 for Shoreline residents. Preview the digital Recreation Guide now to make your spring and summer plans.



Tree regulations in Shoreline

One way ensuring there is no net loss of the City's tree canopy coverage is by regulating the rate of cutting and requiring replacement trees to be

planted.



Neighborhood Spotlight: Briarcrest

Briarcrest Neighborhood brackets the southeastern border and includes both Hamlin and South Woods Parks. The neighborhood association places equity at the top of their values list.

















Recreation Registration



Permits & Development



Departments



Online Service Request



Station Area Planning



Alert Shoreline

Understand how users of the website are interacting with the information presented! Interaction Information Architecture Design Content Visual Strategy Design User **Functionality** Interface Usability







Join the housing conversati

Need Help? Give Us A Call. 206-684-2489(CITY)

Find Fire Department Jobs

The Seattle Fire Department is an Equal Opportunity Employer that values diversity in its workforce. Services & Information

Elected Officials

ivic T

۲t Z eattl

houg

2017.1

Morri:

Departments

Visiting Seattle

News.Seattle.Gov

Event Calendar

Calculate Minimum Wage

Calculate the minimum wage for employees working in Seattle.





Seattle Police
@getyourcarback

CONTACT CALL 911***

MAROON 2001 SUBARU LEGACY SW

LIC/HYFLYR.WA ***DO NOT MAKE



HOME

PROGRAMS AND INITIATIVES

GUIDES TO BOSTON

NEWS

EVENTS

DEPARTMENTS

GOVERNMENT

PLACES

WORK FOR THE CITY

CITY of BOSTON

Mayor Martin J. Walsh

BOSTON.GC

Mayor Walsh will discuss today's executive orders on immigration at 4 p.m. WATCH THE PRESS CONFERENCE

WEDNESDAY, JANUARY 25



BUILDING CLOSURES

All municipal buildings are open based on their regular



TRASH AND RECYCLING

Pickup is on a normal schedule today.



PARKING METERS

Parking meters are operating normally today.



TOW LOT

The tow lot is open from 7 a.m. - 11 p.m. Automated

STREET CLEANING Today is the fourth Wednesday of the month

PUBLIC NOTICES PAY AND APPLY



User Personas

User personas give us a glimpse at the goals people have in mind when visiting the city of Shoreline's website. These personas are useful in the creation of real life situations that enable designers to make sites that are more user friendly for everyone.



Business Owners

User Traits:

- 25 70 years old
- The younger the more tech savvy and the older the less
- Small mid size businesses, corporations, developers

User Goals:

- Look for available properties
- Look for business incentives and initiatives
- Locate online business license application form
- Find information on taxes and permits

- Learn more about the city
- Download maps and other related forms
- Submit application for permits and licenses.



Job Seekers

User Traits:

- Looking to apply
- Searching for new opportunities
- Somewhat Tech savvy

User Goals:

- Look and apply for opening jobs
- Looking for government related jobs
- Want to work close to home

- Find and browse opening opportunities
- Check status of applied jobs
- Find information about careers



Residents

User Traits:

- New and current
- Single family
- Senior citizens
- Teens/Tweens



User Goals:

- Looking for events around the neighborhoods
- Want to stay up to date about what's happening around the city
- Want to get involved in the community
- Want to look for contact information on local businesses/services
- Looking for emergency contact

- View event calendar
- Read news about the city/neighborhoods
- View the community directory
- Look for residents' associations and clubs
- Sign-up to be a volunteer

Community Leaders

User Traits:

- Residents' Associations
- Neighborhood council

User Goals:

- Connecting with other neighborhood associations
- Need to address concerns on condition of the city/neighborhoods (maintenance and developments)
- Want to stay up to date on current events and future plans

- Check city council meeting schedule
- View list of neighborhood associations and the contact info
- Find contact info for city representatives
- Look for news and updates about the city



METHODS WE USE

Competitive Analysis

Heuristic Evaluation

Card Sort

Usability Testing

Competitive Analysis

What is Competitive Analysis?

A method of evaluating a website with its competitors' to identify strengths and weaknesses of each respective website.

Why Competitive Analysis?

- ❖ Help brands or companies discover the loopholes that exist within their websites
- This method will essentially help companies improve their websites to meet their business goals

Objectives for conducting competitive analysis:

- Identify strengths and weaknesses
- Analyze functionality of the website
- Identify navigational system that works for users
- Gather data and make decisions on what to add and eliminate from the website
- Make recommendations on visual design

ASSESSMENT CRITERIA

Navigation structure

Site features

Responsiveness

User interaction

Visual audit

COMPETITIVE ANALYSIS: CITY OF BOSTON



TUESDAY, MARCH 21











NAVIGATION STRUCTURE

Pros: labels are straight-forward

Cons: hamburger menu

SITE FEATURES

Pros: built-in forms, translation into 5 main

languages

Cons: Too many CTA's on main page, a lot of

scrolling.

RESPONSIVENESS

Pros: Mobile-first approach, consistent and

clean design

Cons: utility collapses into the toggle menu

in mobile version

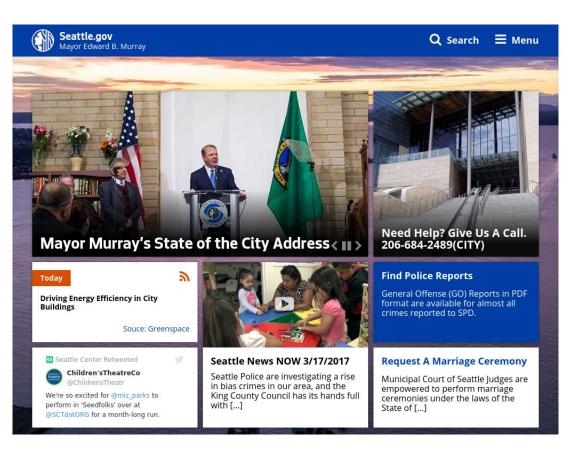
USER INTERACTION

Pros: Interactive step-by-step process, easy access to information

VISUAL AUDIT

Pros: visually attractive, consistent theme, use icons and images to balance the look

COMPETITIVE ANALYSIS: CITY OF SEATTLE



NAVIGATION STRUCTURE

Pros: simple

Cons: labels are vague, doesn't expand into dropdown, a lot of clicks to get to a page

SITE FEATURES

Pros: filter options on gateway to refine search,

online services

Cons: CTAs/important features are placed at the bottom, content in the collage are not consistent

RESPONSIVENESS

Pros: Mobile-friendly, looks better in mobile view

Cons: 3rd party widget (aka forms) not

responsive

USER INTERACTION

Pros: provides necessary online services for

users

Cons: some pages are text heavy

VISUAL AUDIT

Pros: consistent color theme

Cons: typography, layouts not consistent, use of

images on top of background image.

COMPETITIVE ANALYSIS RECOMMENDATION

STRUCTURE	• Tor mobile version, adopt toggie mena for main hav
SITE FEATURES	 Make important feature (CTA's) more prominent Integrate an online service (built-in-forms) into the website Add filter options to help users with their search
RESPONSIVENESS	Redesign breakpoints so that mobile users can have a better experience with navigation on smaller screens.
USER INTERACTION	 Organize information that allow users to easily look at not only the steps needed but also the options that they have when accomplishing a task (step-by-step and guidelines) Include feedback form to understand what users want
VISUAL AUDIT	 Make website less cluttered (whitespace, icons, images) focus on typography to improve the overall aesthetics of the website

Use high quality images

Include 'select a language' option in utility

For mobile version, adopt toggle menu for main nav

*

NAVIGATION

Heuristic Evaluation

What is Heuristic Evaluation?

A usability inspection method where a group of usability experts evaluate user interface (UI) of a website and judge its compliance with recognized usability principles (the "heuristics").

Why use Heuristic Evaluation?

- Help finding Usability Problems within an interface design
- It gives a clear visual representation of a potential usability problems to test with a set of participants

10 Usability Heuristics

Visibility of system status

Recognition rather than recall

Match between system and the real world

Flexibility and efficiency of use

User control and freedom

Aesthetic and minimalist design

Consistency and standards

Helps users recognise, diagnose, and recover from errors

A Error prevention

Help and documentation

Heuristic Evaluation Process

- Creating user scenarios and tasks
- Evaluating tasks according the 10 heuristics
- Rate it using the "Severity Scale" 0-4
 - 0 No Problem
 - 1 Cosmetic problem only
 - 2 Minor usability problem
 - 3 Major usability problem
 - 4 Usability catastrophe



Heuristic Testing Scenario Example

Scenario 1: A business owner looking to expand his bakery business. He is in the preliminary stage of scouting for a suitable city to be the base of his next business venture.

Task:

- I. Find information that talks about the neighborhoods, the amenities and recreation in the city, the school, population and other relevant topics.
- II. Look for the process to set up a business in the city and apply for the business license
- III. Search for the list of offices for lease

Heuristic Testing Scenario Example

<u>Scenario 2</u>: User parents recently moved to a retired community in shoreline and he wants to learn about things to do for senior citizens. The user's parents are from India and they speak very little English.

Task:

- Find information about recreational programs for senior citizens.
- II. Look for reviews from other people.
- III. Find out about fees and schedules.
- IV. Find out about multicultural events.
- V. Find out about English lessons for adults.
- VI. Look for volunteering opportunities for seniors.

Results

	Scenario 1	Avg.	Scenario 2	Avg.
1. Visibility of system status	22322	2.2	22222	2
2. Match between system and the real world	22322	2.2	22322	2.2
3. User control and freedom	23333	2.8	22221	1.8
4. Consistency and standards	22332	2.4	23233	2.6
5. Error prevention	01210	0.8	00000	0
6. Recognition rather than recall	12223	2	22332	2.4
7. Flexibility and efficiency of use	2 3 3 4 4	3.2	23232	2.4
8. Aesthetic and minimalist design	2 4 3 4 4	4.2	13333	2.6
9. Help users recognize, diagnose, and recover from errors	22220	1.6	00000	0
10. Help and documentation	23232	2.4	3 4 3 4 4	3.6

Findings

- Gateway pages needed major redesign
- Lack of consistency in navigation and terminology
- Too much information in too many places
- Some breadcrumbs are misleading
- Lack of help and documentation materials

Card Sorting for Information Architecture

What is Card Sorting?

A method for understanding how your website will be utilized from a user's perspective. Card sorting entails breaking down the contents of a website into topics and keywords, which are then presented to participants of a test group to categorize in a way that makes logical sense to them.

Why use this method?

Card sorting is a user-centered methodology that is inexpensive and effective.

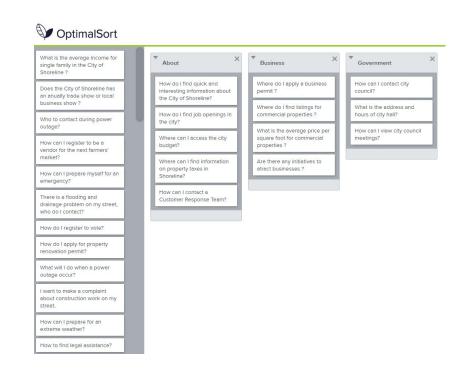
The result is content that is categorized from a bottom-up perspective, that is, from a user's perspective.

Card Sorting Process

A card sort can be done on paper or through a program such as Optimal Sort. We use Optimal Sort.

Example of questions:

- 1. Where and when will the weekend farmer's market be held?
- 2. How can I prepare myself for an emergency?
- 3. Where can I request public records?
- 4. Where do I apply a business permit?



Results: Similarity Matrix

How can I prepare myself for an emergency?

```
What will I do during an emergency?
100 100 Is there any Emergency Management in the area?
100 100 is there any relocation or evacuation site during an emergency?
00 100 100 100 100 Does a Shoreline have an emergency plans?
90 90 90 90 90 90 90 How can I be alerted if there's any emergency around the area?
80 80 80 80 80 80 70 70 60 What will I do when a power outage occur?
70 70 70 70 70 70 80 70 60 50 40 How can I contact the Emergency Management Coordinator of Shoreline
50 60 60 60 60 60 60 70 50 50 40 60 How can I contact Shoreline police, fire, or medical department for an emergency?
50 50 50 50 50 50 50 50 60 40 60 40 50 80 Who to contact during power outage?
30 30 30 30 30 30 30 30 40 20 50 30 20 40 60 There is a street light that is out on my street.
10 10 10 10 10 10 20 10 10 20 20 20 10 20 60 50 I want to make a complaint about construction work on my street.
10 10 10 10 10 10 10 10 10 10 30 20 10 10 30 60 40 60 I need to remove a tree from my property, do I need a permit from the City?
10 10 10 10 10 10 10 10 10 10 10 10 20 10 20 10 20 10 20 10 20 40 20 40 20 40 20 20 10 10 10 10 20 10 20 10 20 30 40 40 10 10 20 30 30 50 70 60 Where can I find a list of city ordinances?
```

The similarity matrix is a graphical representation of pair combinations.

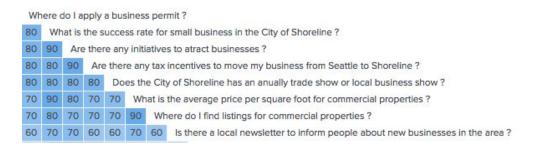
Results: Similarity Matrix

As expected, topics that were clearly related to one another had a high percentage of participants who agreed with the pairing.

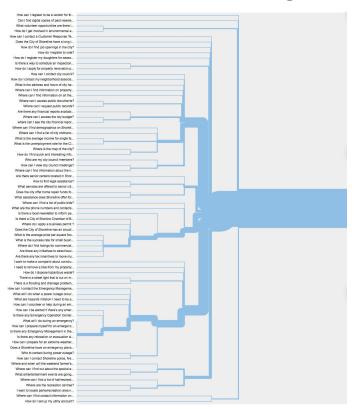
How can I prepare myself for an emergency?

100 What will I do during an emergency?
100 100 Is there any Emergency Management in the area?
100 100 100 Is there any relocation or evacuation site during an emergency?
100 100 100 100 How can I prepare for an extreme weather?
100 100 100 100 100 Does a Shoreline have an emergency plans?

Our team determined that any topic paired together by more than 60% of our participants would be considered valid.



Results: Dendrogram



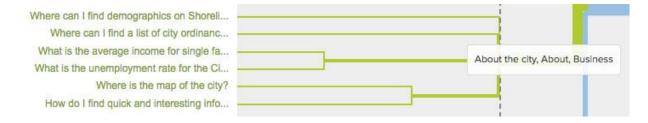
The Dendrogram displays a set of information established from the categories that were developed by the participants and their arrangement of the cards.

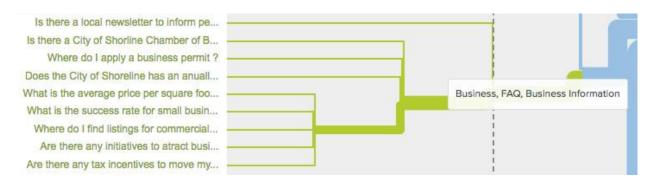
This method of data analysis makes it easy to visualize relations among the categories.

Results: Dendrogram

The results concluded that 70% participants grouped these topics together into relevant

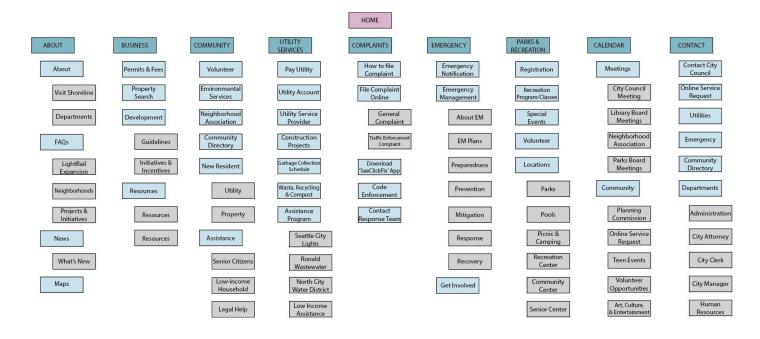
categories.





Recommendations based on Card Sort

By combining the Dendrograms and Similarity Matrix, we were able to identify certain patterns that gave us a better understanding of how best to restructure the site.



Usability Testing for Website Interface

What is usability testing?

The primary goal for usability testing is to better understand how users access and search for information when navigating through a website.

Our research

We hope to find answers for the following questions:

- 1. Is the information architecture intuitive?
- 2. Is it easy to find information?

Usability Testing: Process

Introduction Process
Usability Testing
Think Aloud Protocol
Post-Test Questionnaire

Usability Testing: Task Example

Scenario #1

Participant wants to find local activities for his/her daughter.

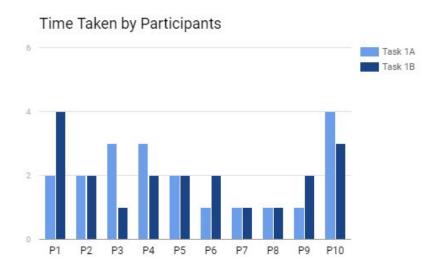
Task A - From the Home Page (without using the Search feature), locate the date, time, and location for Tween Night.

Scenario #2

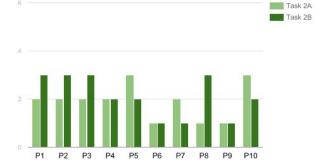
Participant is looking to start a business in Shoreline.

Task A - From the Home Page (without using the Search feature), find out how much sales tax is in Shoreline.

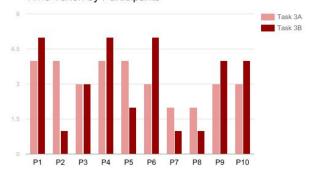
Usability Testing: Results



Time Taken by Participants

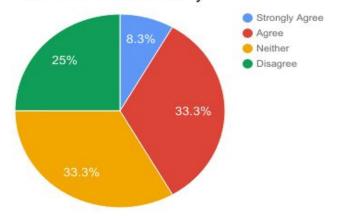


Time Taken by Participants

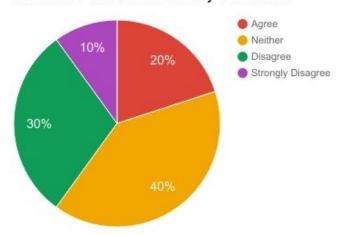


Usability Testing: Results from Post-Test Q's

I would have organized the website's information nav differently



I think the website hierarchy is intuitive



Usability Testing: Positive Feedback

Participant 1

"Layout isn't bad, it doesn't link to another website"

Participant 2

"The calendar on homepage is implemented well"

Participant 3

"The sidebar calendar is kind of nice"

Usability Testing: Negative Feedback

Participant 1

"Update the current design"

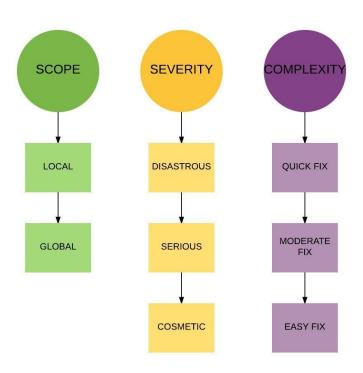
Participant 2

"Drop down menu are to cluttered, and links can be better"

Participant 3

"Repetitive Links, and needs larger main nav font"

Usability Testing: Analyzing the Data



Usability Testing: Analyzing the Data Example

Problem:

Labels are misleading. Some labels are too specific and might not cater to all users.

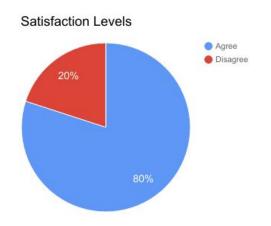
Participant # supporting claim:

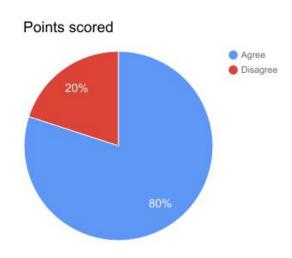
P1, P2, P6, P7

Scope: Global

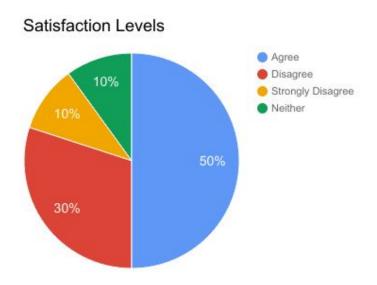
Severity: Serious **Complexity:** Quick

Overall our research shows that our participants did not struggle greatly to complete each task. 80% were satisfied with how long they took to complete the tasks, and 80% were satisfied with the ease of completing the tasks.





However, 50% said they would have organized the site differently.



Information Architecture

Our team suggests reorganizing the navigation. The existing top-level navigation has a sub-navigation that contains too many gateway and destination pages. Adding more top-level navigations will give more visual organization to the site.

We recommend coming up with a new set of labels through a comprehensive card sorting study, to remedy the issue of misleading labels.

Visual Design

Our recommendation is to work with the designer to come up with a consistent visual design for the website that takes into consideration the issues brought up by the participants, such as larger fonts, and less clutter.

Conclusions

The city of Shoreline website in its present state is usable but there are a number of areas that are in need of upgrade.

According to the data collected a redesign of the Shoreline website would be reducing the number of gateway and pages on the drop down menu, more consistency in navigation and terminology, a more updated look and feel, more appropriate labels, as well as less repetitive information.

Improvements made in these areas will greatly enhance the user experience.