

Usability Testing of Food Recipe Sites: An Evaluation of Food Network and Budget Bytes



Aimée Wilkerson
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INTRODUCTION

Food is more than a necessity. It's a medium that allows people to decompress after a long day, connect over a holiday, and even gain a sense of pride in one's creative abilities. Recipe sites allow home cooks to discover meal ideas, learn cooking techniques, and build some structure around the cooking process.

The internet has given home cooks the ability to share their cooking journeys through food blogs and food companies a chance to expand their engagement online.

GOAL OF TESTING

While there are many recipe sites to choose from, not all websites are made with the user experience in mind. Recipe sites must prioritize the user experience to satisfy home cooks' needs. The goal of this research report is to analyze how people of different cooking backgrounds can have effective, efficient, and pleasant experiences.

RATIONALE FOR SITE SELECTION

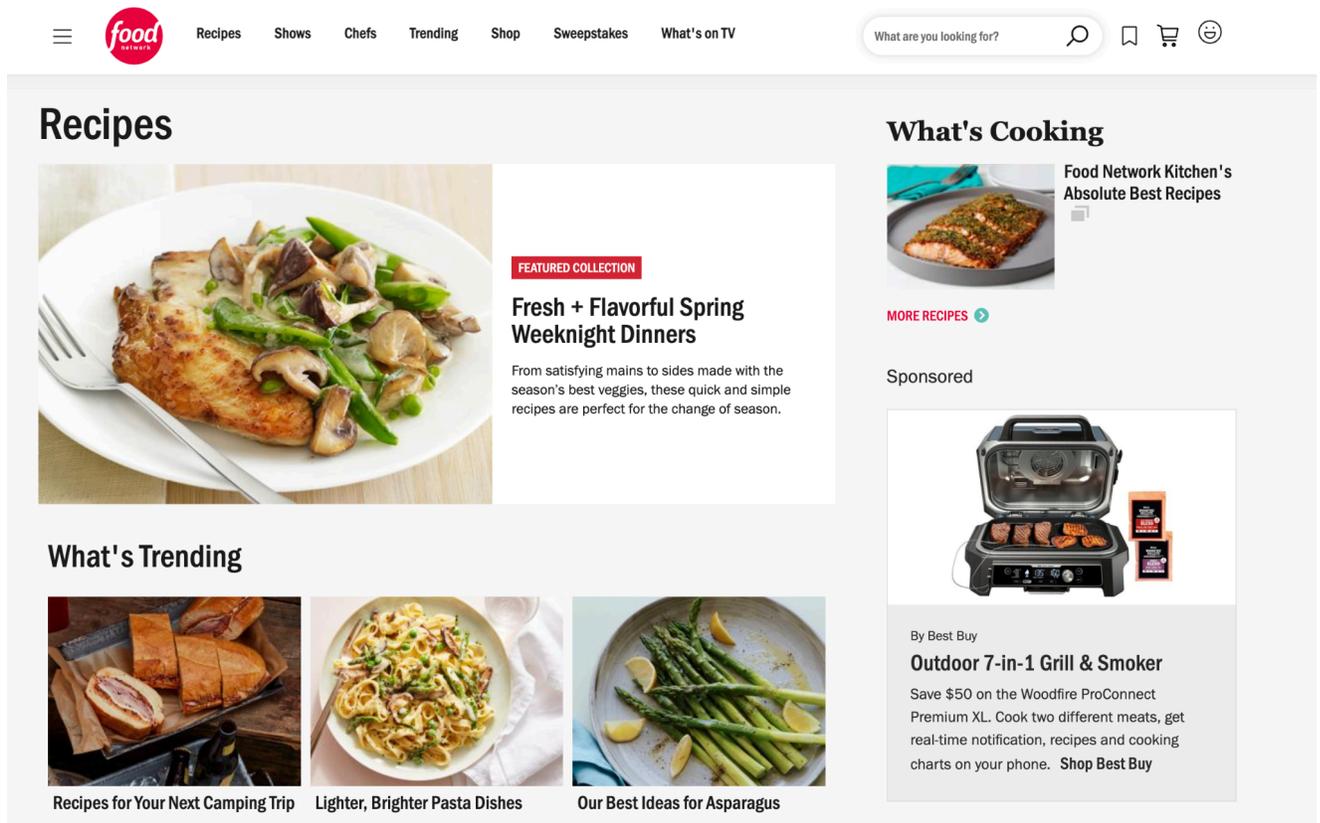
I chose two sites - <https://www.foodnetwork.com/recipes> and <https://www.budgetbytes.com/>. The Food Network is a television network that has been around for more than 30 years and serves millions through their television programming (Food Network, 2024). Their website serves as an extension of their recipes, chef videos, and other food resources, making them a well-known platform. I chose Budget Bytes because they have a few interactive design features to organize and support user experience that I don't see on many websites. I wanted to see if the users would notice and have an opinion on the features.

SITE DESCRIPTION & HOMEPAGES

Food Network - <https://www.foodnetwork.com/recipes>

The food network recipes site (figure 1) has a light and bright interface with a

simple font and good color contrast. While the colors of the page make information visually clear, the homepage does have ads on the right side and requires a lot of scrolling to get to the bottom of the homepage. The page highlights different collections of recipes in different sections like “What’s trending,” “Go Meatless,” and “Cook Smarter, Not Harder.” At the bottom of the page, there is a latest stories section where people can read food related articles and can find a “recipes A to Z” button that leads users to all the website’s recipes.

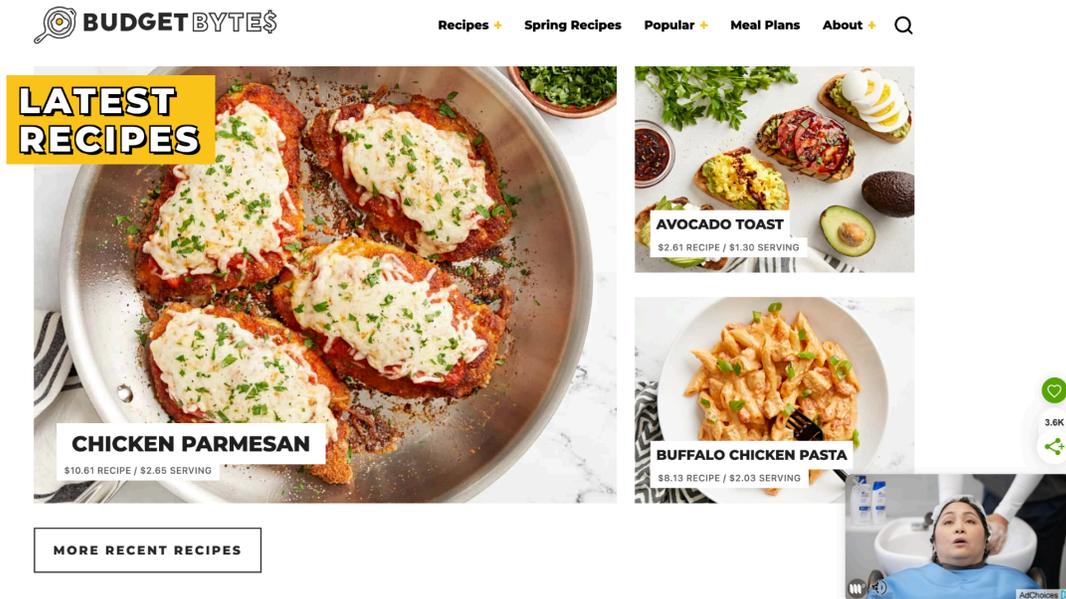


(Figure 1 - Top Third of Food Network Recipe Homepage)

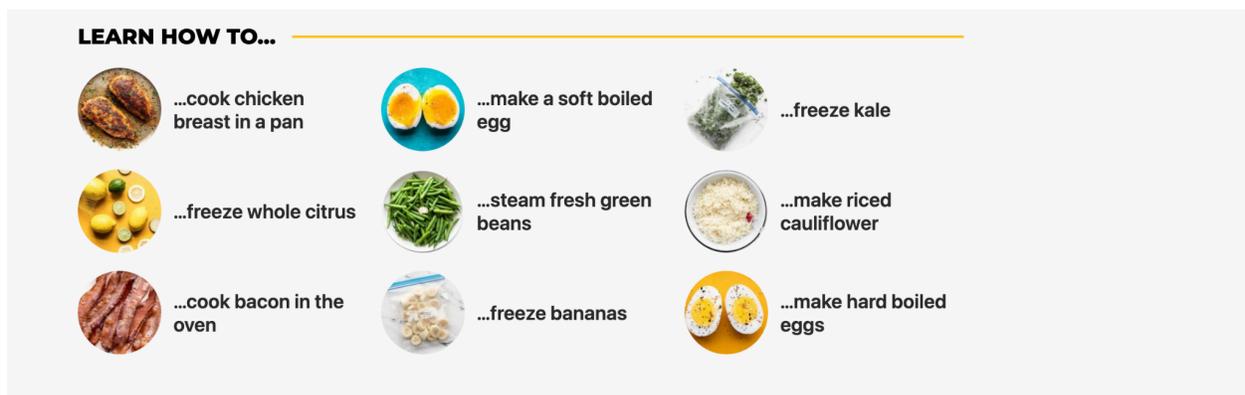
Budget Bytes - <https://www.budgetbytes.com/>

Like Food Network, Budgetbytes has a light colored background and primarily black font too. While both sites have images showcasing different recipes, the images on Budget Bytes are slightly bigger. Additionally, Budgetbytes seems to capitalize on the draw of their site by providing low-cost recipes (figure 2). They make sure to make the prices of each recipe on the homepage clearly displayed on the image of the recipes or just below each recipe. The homepage is long and requires users to scroll a fair amount to get to the bottom of the page, but the

content is clearly organized and placed into clear groups separated by bolded subheadings and yellow lines creating a clear visual hierarchy (figure 3). Lastly, as you scroll down on the page, Budget Bytes shares the type of content that users can explore throughout the site, including “How to” recipes for basic food and recipe catalogs like “22 Easy Lunch Ideas.”



(Figure 2 - Top part of *Budget Bytes Homepage*)



RECIPE ROUND UPS



(Figure 3 - Middle part of *Budget Bytes Homepage*)

METHODOLOGY

USERS

There were two participants in this study. Both users tested each website, Food Network and Budget Bytes. My criteria for choosing each user was based on a pre-test to ensure that all participants had some knowledge of food recipe sites and cooking language. I used the following questions to assess this: 1) “Have you ever used online recipe websites?,” 2) Do you have a recipe website that you will typically use? My criteria was that they answered yes to the first question.

User A is a 60-year old Black woman. She is a teaching artist and arts administrator, who enjoys cooking after work and for dinner parties. She uses recipe sites about 3-5x a month to find new ways to use the ingredients she already has or to find a new twist on a recipe. She typically uses Epicurious.

User B is a 33-year old Latino man, who is an immigration attorney. He relies on recipe sites to learn how to cook. He responded that he uses recipe sites 6 or more times a month for meal prepping, ideas for leftovers, and special occasions. Eatingwell, Allrecipes, TasteofHome, and instagram pages have been his go-to sources for recipes in the past.

INSTRUMENTS

Google Forms were used for the pre-test and post-test surveys. The pre-test asked basic demographic information and questions about whether participants had ever used a food recipe site. It was important that all participants in the testing answered that they’ve used recipe sites, so they had some basic understanding of recipe terminology.

The actual usability test session was conducted on Lookback. Using Lookback’s LiveShare feature, participants shared their screen and video while I moderated the test and took notes. The participants completed 4 tasks on both websites. As they were completing tasks, I asked participants to engage in the Think Aloud process (Hertzum, 2020) to provide additional insights into their experience with the platforms at the moment.

The post-test survey collected data on participants’ overall satisfaction with each

website. The post-test survey consisted of a modified, shortened version of the Computer Systems Usability Questionnaire (CSUQ) developed by Lewis (1995) to assess user satisfaction with computer systems. Additionally, I added open-ended questions to give participants a chance to expand on their thoughts on each website.

QUESTIONS ASKED

Pre-Test Survey Questions (excluding basic demographic questions)

1. Have you ever used online recipe websites?
2. In the last 30 days, how frequently do you use recipe websites?
3. Do you have a recipe website that you will typically use?
4. If so, what is the recipe site(s) you typically use? **Please put N/A if it does not apply.**
5. For what occasion and/or purpose do you seek out recipes websites? **Please put N/A if it does not apply.**

Usability Tasks

Task 1- First Impressions

Users have 2 minutes to look at the homepage.

- What are your thoughts on the overall homepage?
- What stands out on the homepage that is most interesting to you?
- Are there any components on the page that you like or dislike?

Task 2 - Specific Item

Scenario - Your family wants to have a make-your-own pizza night. There are a few family members that are health conscious and would like to know the nutritional information before the dinner.

- Find a BBQ chicken pizza recipe.
- Find the calories of each serving.
- Identify the ingredient measurement amounts for a group of 8 people.
- Locate the first comments for the recipe.
- Locate the cooking equipment you'd need.
- Find where you would share the recipe via email to a family member.
- What was your experience with finding the different features?

Task 3 - Open-Ended

Scenario - You are headed to the grocery store after a long day at work. You're looking to make a vegetarian meal with a total cook time of 45 minutes or less.

- Find any vegetarian meal that would be interesting to you with a total cook time of 45 mins or less.

Task 4 - Open-Ended

Look through the website for 3 minutes. Explore any features you'd like.

- What features were the most interesting to you?
- What features seemed to be the most useful to you?
- What features could be improved? How so?

Post-Test Survey Questions

1. Which website did you just explore?
2. Rate 1 to 7 from strongly disagree to strongly agree on the following statements:
 - I can effectively achieve my goals using this website.
 - I am able to efficiently achieve my goals using this website.
 - I feel comfortable using this website.
 - It was easy to learn to use this website.
 - Whenever I make a mistake using the website, I recover easily and quickly.
 - The information on the website is easy to understand.
 - The information is effective in helping me complete the tasks and scenarios.
 - The organization of information on the website is clear.
 - The interface of the website is pleasant.
 - I like using the interface of this website.
 - This website has all the functions and capabilities I expect it to have.
 - Overall, I am satisfied with this website.
3. How would you describe your experience with this website?
4. Would you use such a website in real life? Why or why not?
5. What did you like the most and/or least about this website? Why?
6. What features would make you more likely to use this website more?

7. Did you prefer one website over the other? If so, why or why not?

PROCEDURE FOR TESTING

Based on Nielsen et al. 's (2000) methodology procedures, I sent each participant the pre-test to confirm that they were familiar with food recipe websites and had used them in the past to ensure they had a basic understanding of the cooking terminology that they would see on a recipe site. Additionally, I wanted to see the frequency at which they used the sites and for what purpose to later analyze whether that impacted their experiences on the sites. Participants filled out the pre-tests several days before the usability testing.

After receiving the pre-test survey, participants completed the usability testing. I greeted the participants via video on Lookback LiveShare, shared the goals of the study, and explained the think aloud process. Then, they began the four tasks. As each participant completed the task, I took notes during their think alouds. After they completed all 4 tasks for the first website, participants answered the post-test survey. They then repeated the same four tasks for the second website, followed by completing the same post-test survey about the second site.

DATA AND RESULTS

FINDINGS

Task 1- 2 Minute First Impressions of the Homepage

Users	Food Network Impressions	BudgetBytes Impression
User A	<ul style="list-style-type: none"> - Focused on the recipes (liked the variety of recipes - e.g. sheet pan recipes, pasta recipes) <ul style="list-style-type: none"> - “Oooh mmm pasta recipes” - Enjoyed seeing the images “so you’re not fooled by things” 	<ul style="list-style-type: none"> - Frustrated when the pop-up ad came up - When looking at the recipes displayed on the homepage shared that they were “not very appealing recipes for me based on the images” - “Nice bold lettering and fonts to show you what you’re looking at” - Liked the price/per recipe overlay on the images
User B	<ul style="list-style-type: none"> - Disliked all of the ads on the 	<ul style="list-style-type: none"> - Likes that it tells you the

	<p>homepage as they were “distracting”</p> <ul style="list-style-type: none"> - Liked that there's a good mix of types of recipes, but didn't understand the names of categories <ul style="list-style-type: none"> - Ex: “Cooking from the Pantry,” “Fill Your Table” - Asked “when you cook aren't you always filling the table? What does this mean?” 	<p>price of the recipes</p> <ul style="list-style-type: none"> - Didn't like the random pop-up ads - Liked the clear, specific categories on the home page - There was confusing button that “didn't match [their] expectations” and took them to another page - Liked that recipe categories that would be less frequently used were located further down on the home page
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Task 2 - Locate a BBQ Chicken Pizza Recipe Task

User A		
Food Network Actions/ Impressions	<ul style="list-style-type: none"> - Scrolled down to a pizza recipe before ultimately deciding to use the search feature - Used cook time information on the results page to decide on which recipe to use. - Responded positively to seeing who was the chef that created the recipe - Couldn't find calories in the original BBQ chicken recipe. Tried printing the recipe to see if they would show up in a print preview. It did not, so started the process again. - On the second recipe, the user couldn't locate the calorie information until I pointed out that it was on the page. Looked again at the top of the recipe and found it. - Needed to do math to figure out the serving size. Later mentioned wanting a feature that automatically calculated serving information for users. - Sighed when realized that they would have to read through all of the directions to figure out cooking information. - Immediately found the email icon (envelope) to share the recipe via email. - Liked clear ingredients and directions sections 	Time: 8:25

Budget Bytes Actions/ Impressions	<ul style="list-style-type: none"> - Immediately went to the search bar to type in “bbq chicken pizza” - Disappointed that the results page only had one recipe - Found the nutrition information by scrolling to the bottom - Accidentally clicked a pop-up ad - Liked that you could type the number of servings needed and the system changes the ingredient measurements - Found the cooking equipment by reading the instructions - Easily found the comments sections - Liked how they detailed how they calculated the recipe costs 	<u>Time:</u> Internet issues so unable to record how long it took.
User B		
Food Network Actions/ Impressions	<ul style="list-style-type: none"> - Used the search bar to find a recipe - Found it easy to locate the calorie information, but didn’t like the “extra step” of having to click the nutritional info button when the rest of the typical recipe information was prominent - Didn’t like having to do “mental math” to calculate servings - The ingredients were vague at times (unspecified amount of flour for “dusting”) - Wished the reviews were more recent (latest review on the recipe was 2013) - Liked distinct ingredients and directions sections 	<u>Time:</u> 10:02
Budget Bytes Actions/ Impressions	<ul style="list-style-type: none"> - Used the search function to get the recipe, but it yielded no results due to spelling in search - Too much “unnecessary” information ahead of the actual recipe; appreciated “jump to recipe” function - Wished there was a list of cooking equipment - Liked the serving size feature where you could type the number of serving you need 	<u>Time:</u> 8:43

Task 3 - Find a Vegetarian Recipe with a 45 Minute or Less Cook Time

User A		
Food Network Actions/ Impressions	<ul style="list-style-type: none"> - Immediately mentioned that there was a link on the homepage for vegetarian recipes, but used the search function to search for “vegetarian recipes” - Noticed the cook time on the search results page, so quickly used that to find a recipe that met the criteria 	<u>Time:</u> 1:30
Budget Bytes Actions/ Impressions	<ul style="list-style-type: none"> - Clicked on magnifying glass search icon and typed “vegetarian recipes” - Did not enjoy having to click the link of the recipes to find the cook time that was 45 minutes or less 	<u>Time:</u> Internet issues so unable to record how long it took.
User B		
Food Network Actions/ Impressions	<ul style="list-style-type: none"> - Confusing display of recipes in the search results - Wished there was a cook time filter when searching, but liked that the search results shared the cook time so it was easy to see which recipes would fall within the 45 minute cook time - Found a recipe with a different layout than the previous recipe in Task 2. Didn’t like this inconsistency and thought they had gone on a different page. 	<u>Time:</u> 3:39
Budget Bytes Actions/ Impressions	<ul style="list-style-type: none"> - Went to the popular tab to search for vegetarian recipes - Did not like that you had to click each recipe to see the cook time 	<u>Time:</u> 1:49

Task 4 - Explore Any Part of the Site for 3 Minutes

User A

Food Network Actions/ Impressions	<ul style="list-style-type: none"> - For the first time during testing, users explored the navigation bar and dropdown menus. - Navigated to the trending recipes link under the “trending” tab, but didn’t like the content on the page. - Found a smoked salmon recipe to explore. First question once looking at the recipe page was “what do the reviews say?” Immediately scrolled down to the review section and said “Ok forget it” after seeing the negative reviews. - Claimed interacting with the website was “easy” because of the navigation bar - Liked the font sizes on the recipe pages - Liked the clear separation of the ingredients on one side of recipes and the directions on the other side. - Liked that the cook time, ratings and number of people that rated were at the top so that she could make a quick before “getting into the weeds” - Enjoyed being able to see the reviews
Budget Bytes Actions/ Impressions	<ul style="list-style-type: none"> - When I had to navigation bar at the top of the screen - Looked at the “popular” tab and clicked on the “one pot meals” option on the list - Found a recipe with a slightly different set-up where they enjoyed that there was an equipment section of the recipe, but didn’t like that that it towards the bottom of the page. Felt it should be placed by the ingredients. - Liked the images because they helped make a “judgment call” - Liked that the ingredient are towards the top, so they could quickly realize if they already have the ingredients - Liked the cooking notes section that provided additional tips
User B	
Food Network Actions/ Impressions	<ul style="list-style-type: none"> - “Feels like you need to know what you're looking to make in order to be able to find it. You can't explore a certain type of cuisine and find a recipe.” - Looked for recipe and found the “refine by” filters to be confusing
Budget Bytes Actions/ Impressions	<ul style="list-style-type: none"> - Really enjoyed being able to see the price feature on all of the recipes - Wished when clicked the recipe search filter there were clear filters

Post-Test Survey Results

	Strong Disagree → Strongly Agree 1 2 3 4 5 6 7			
Statement	Food Network		Budget Bytes	
	User A	User B	User A	User B
I can effectively achieve my goals using this website.	5	4	6	6
I am able to efficiently achieve my goals using this website.	6	5	5	5
I feel comfortable using this website.	7	7	5	6
It was easy to learn to use this website.	7	7	4	5
Whenever I make a mistake using the website, I recover easily and quickly.	7	7	5	6
The information on the website is easy to understand.	7	7	5	6
The information is effective in helping me complete the tasks and scenarios.	7	7	6	5
The organization of information on the website is clear.	7	6	5	5

The interface of the website is pleasant.	7	7	5	6
I like using the interface of this website.	7	7	5	5
This website has all the functions and capabilities I expect it to have.	7	7	5	5
Overall, I am satisfied with this website.	7	6	5	6
Open Ended Questions				
User A - Food Network				
How would you describe your experience with this website?	It's easy to use which is what I expect when I'm using it for quick recipe searches			
Would you use such a website in real life? Why or why not?	Yes, because it's user-friendly, easy to read, the numbers in the instructions are large making it easy to read; they have multiple variations of recipes, and the food network check specialties too.			
What did you like the most and/or least about this website? Why?	I didn't like that the nutrition info wasn't always available.			
What features would make you more likely to use this website more?	I want to see the nutrition info all the time			
Did you prefer one website over the other? If so, why or why not?	Food Network because they have a wide variety of choices in similar recipes and categories.			
User A - Budget Bytes				

How would you describe your experience with this website?	It was fine, new to me. I would come back to this site. I liked the additional content for the recipes, and I liked the estimated costs.
Would you use such a website in real life? Why or why not?	Yes, I live on a budget, but I like tasty meals.
What did you like the most and/or least about this website? Why?	I liked the additional info they gave about a recipe or ingredient, i.e., cooking with alcohol.
What features would make you more likely to use this website more?	the estimated costs
Did you prefer one website over the other? If so, why or why not?	N/A
User B - Food Network	
How would you describe your experience with this website?	The website is easy enough to navigate, but the categorization of discoverable items on the website is a little hard to navigate without entering more targeted searches into the website search box. E.g., it was easy enough to find the recipes that met the search criteria I was looking for by running recipe searches in the search box, but I don't think exploring and finding recipes would have otherwise been easy to accomplish had I tried to get to the same result by just selecting website links (as opposed to entering a targeted search). I also didn't like how the website used different website interfaces without any explanation or the placement of the website ads.
Would you use such a website in real life? Why or why not?	I would use a website like this in real life, but I would probably only use its search tool and don't think I would spend any time on the website for purposes of exploring

	new food recipes or types of food, since the non-searchable links on the site are not easy to navigate.
What did you like the most and/or least about this website? Why?	I liked how clear about time the searched recipe search results appeared, since this made it very easy to quickly identify which recipes would or would not fit the time constraints of the assignments.
What features would make you more likely to use this website more?	I wish the search function allowed for the user to also set search terms in terms of caloric intake, protein, and cuisine category, and cook-time. I think making elements of the recipes that are already known and identifiable on the actual recipe pages searchable and refine-able would make the search experience for the user easier to navigate and more enjoyable.
Did you prefer one website over the other? If so, why or why not?	N/A
User B - Budget Bytes	
How would you describe your experience with this website?	I enjoyed using the interface of the website, but I wished that it made navigating how long recipes would take to make more readily available and/or searchable so that the user does not have to open each recipe option to clarify if it falls within their estimated available cook-time.
Would you use such a website in real life? Why or why not?	I will use this site in real life. enjoyed how it allows the user to budget out their recipes and seems like it would make budgeting a large multi-course meal or appetizers for a dinner party easy to estimate (cost-wise). I also really enjoyed how the website allows the user to organically explore new recipe types by both navigating the different website links and searching a broad foot type, e.g., "tacos", and provide the user different food types that correspond to the search that may or may not be obvious search results. (E.g., searching tacos prompted a search result of lentil tacos, which seems

	like an interesting recipe that I have never seen before).
What did you like the most and/or least about this website? Why?	I like the ability to see the cost of the meal and the way that the interface encourages exploring the website for new recipes in a way that allows for the user to narrow their recipe searches by protein and other important search criteria. I also loved how the recipe pages allow the user to change the serving size in a way that changes the calorie information and ingredient information automatically. I only wish the site made estimating cook-time easier. I also wish the website made it clear what cooking tools would be needed to cook each recipe.
What features would make you more likely to use this website more?	I would use the recipe search feature.
Did you prefer one website over the other? If so, why or why not?	I prefer [budget bytes]. I think even though it does not readily tell the user how long a recipe will take to make--It makes up for this by overall providing a more navigable website interface that allows the user to quickly estimate cost and also avoid having to multiply fractions by auto-populating the ingredient and caloric information to the user in a way that corresponds to the number of servings being entered by the user. I think these features outweigh the inability to immediately estimate cook-time (since most of the recipes seem quick enough to cook).

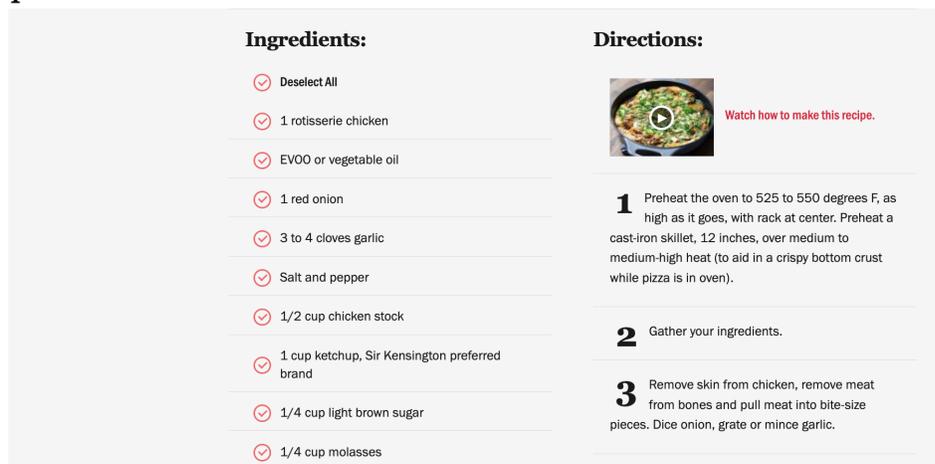
DISCUSSION

The goal of this research study is to see how efficient, effective, and pleasant user experiences are on two major food recipe websites. Based on user participants' experiences, we've made insights about the information, interaction, and interface designs of each website.

INFORMATION DESIGN

Information design is a key part in the user experience. If users don't feel as if they can get the proper information needed, then they may not continue using the site. While User A gave a 7-rating to the statements "the information on the website is easy to understand" and "the information is effective in helping me complete the tasks and scenarios," during the think aloud activities both users shared flaws in the information design. Recipe sites have a plethora of information and Task 1, 2 & 3 were created so that users could see how information was presented and organized. According to Johnson (2020), structured information makes it easier to read, visual hierarchy with clear labels and sections makes it easier for readers to scan. Additionally, it's important to "eliminate needless words and repetition."

On the Food Network website, both users liked that there were clear sections for ingredients and directions (figure 4). It made it quick to read through. User A liked the "big numbers" in the directions section because they believed the presentation of information would make it easier to remember where they were in the recipe and remain on task.



(Figure 4. Distinct organization of ingredients and directions)

While Food Network employed a clear visual hierarchy with two separate sections on their recipe pages, their recipes did not have consistent information on all pages. During Task 2, the users had different experiences finding a BBQ chicken pizza recipe. While User B found a recipe that had the nutritional information at the top of the page (figure 5), User A had a difficult time finding this information. The original recipe User A found did not include the calorie information (figure 6). User A tried using the print function in hopes that the calorie information would somehow show up on the print preview version of the recipe. After I intervened, they found another recipe that had the nutritional information, but they still didn't notice the nutritional information due to the size. I suggest the font size be bigger and the color be changed. The pale red color does not have enough contrast behind the pale gray background.

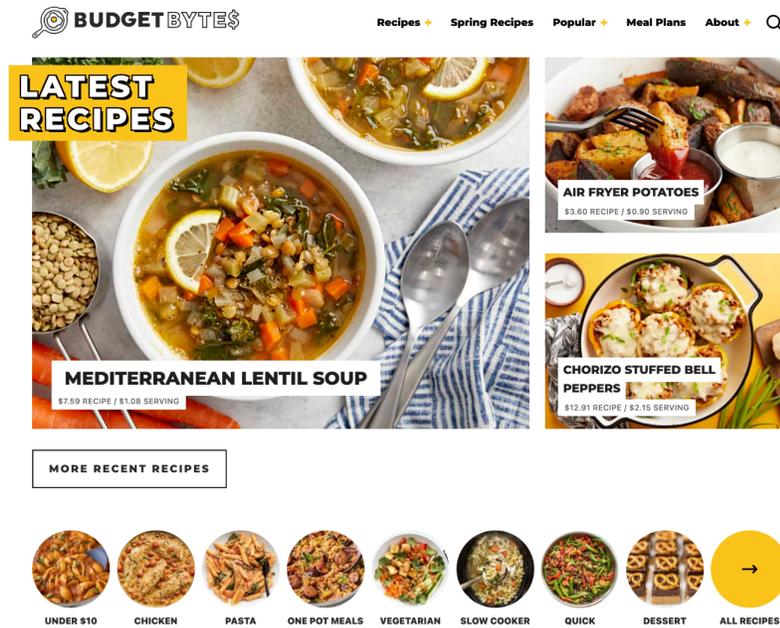


(Figure 5 - Recipe with Nutritional Info)



(Figure 6 - Recipe without Nutritional Info)

With the Budget Bytes site, User B felt that the site had clearer categories that used understandable terminology. They mentioned that the “what’s trending” and “fill your table” categories at the top of the Food Network homepage site were vague, whereas the Budget Bytes page had more typical recipe categories, such as “one pot meals” and “chicken” (figure 7).



(Figure 7 - Budget Bytes clear, frequently-used categories)

User A and User B disagreed on the layout of recipes on Budget Bytes. As shown in Figure 8, there is information about the recipe ahead of the actual ingredient and direction information. The information gives a purpose around using the recipes and other background information as well as substitute information. While User A liked reading through this information, User B felt like it was a distraction from the actual recipe. They asked “why is there substitution and additional ingredient information before you get to the listed ingredients?” I later went back to the recipe and found that you have to scroll approximately $\frac{1}{3}$ of the page before you get to the actual recipe. It seems that Budget Bytes realized there would be a mix of opinions about the amount of information, so they tried to mitigate people’s feelings about “excessive” information by adding a “jump to recipe” button, so people could skip over this type of information.

BBQ CHICKEN PIZZA

\$5.43 RECIPE / \$1.36 SERVING



by **Beth - Budget Bytes**

published Jun 18, 2020



5 from 7 votes

[PIN RECIPE](#)

[JUMP TO RECIPE →](#)

This post contains some affiliate links, which means that we make a small commission off items you purchase at no additional cost to you.

It's almost Friday, so I'm going to throw a quick little pizza recipe at ya! BBQ Chicken Pizza is such a classic with its sweet, tangy, and salty BBQ sauce, bits of juicy chicken, creamy cheese, and savory onions. But, after making pizzas for a living for a couple of years, I learned that there are a so many other fun things you can throw on top of a BBQ Chicken Pizza! So keep reading to grab the "classic" recipe below, plus some of my other "fun" toppings that go really well with these BBQ flavors.

(Figure 8 - Information ahead of the recipe)

INTERACTION DESIGN

Johnson (2020) outlined that human memory can be weak and we can often make mistakes and slips due to our poor memory. He went on to share "we can design interactive systems to support and augment attention and memory rather than burdening them." Using Task 2 & 3, I wanted to evaluate how users would naturally interact with the recipe pages of the site by searching and navigating the recipes pages. I was curious to see how the interaction design either helped or hindered the cognitive load of the users.

Part of task 2 required users to figure out the ingredient measurements for a group of 8 people. I incorporated this task into testing because I wanted to see how each user felt about having or lacking an interactive element that would make calculating ingredient amounts easier. Unlike on Budget Bytes, The food Network recipes lacked a toggle or box where you could increase or decrease serving sizes and have the ingredient amounts automatically recalculated. After

completing the task on Food Network, both users mentioned that they wished they didn't have to do "mental math" and even suggested a feature like Budget Bytes' prior to even testing the Budget Bytes site. Figure 9 shows the Budget Bytes feature.



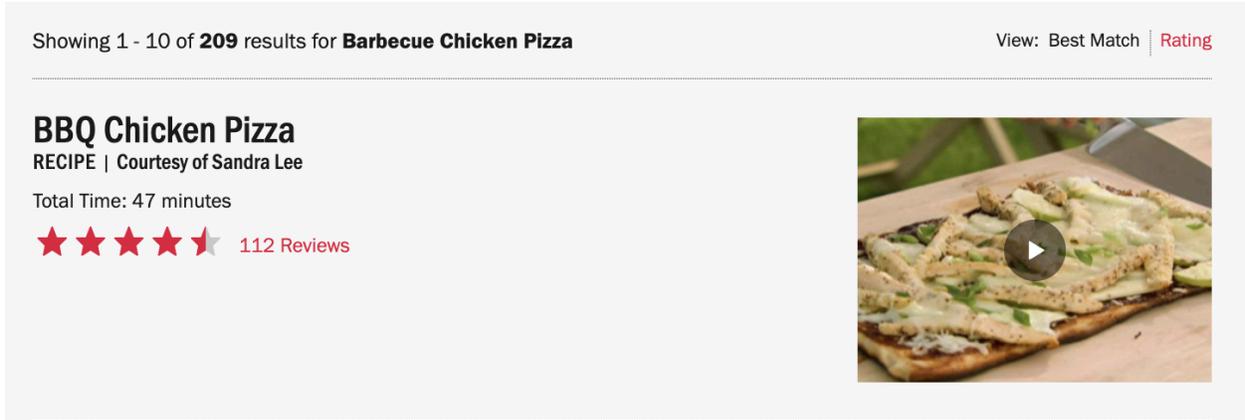
(Figure 9- Budget Bytes servings calculator)

I predicted that users would use filters to find recipes for tasks 2 and 3. Instead, they both opted to look for the search bar to locate recipes. They searched for recipes using key searches like "vegetarian recipes" or "bbq chicken pizza." From the search results, they'd find a recipe that met the task's other parameters. Budget Bytes did not create a search function that addressed user variability and left User B frustrated. When asked to look for BBQ chicken pizza, User B typed "barbecue chicken pizza" into the search, but no results were found because the recipe was titled "bbq chicken pizza." This was confusing to User B, who opened another tab to check if they misspelled barbecue. To their surprise, they had not! Users would benefit from a searching system that would recognize and allow for user variation in spelling, so they could remain focused on the task rather than check for spelling errors. Additionally, our peripheral vision is poor, so important information needs to pop for us to notice it. Red is commonly used to give users feedback on the errors they've made (Johnson, 2020). The Budget Bytes site had an error message above the search bar, but the black typography blends in with the rest of the information on the page making it difficult to notice (figure 10). Food Network does allow for user spelling errors. Rather than focusing on the spelling, the system predicted the recipe that the user was trying to find (figure 11).

Sorry, but nothing matched your search terms. Please try again with some different keywords.



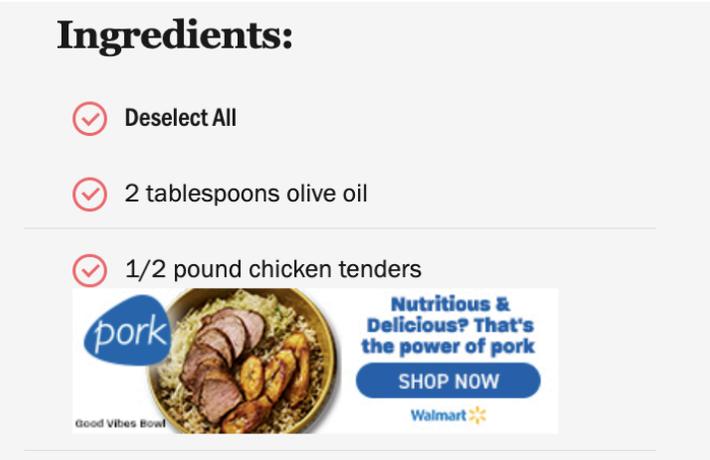
(Figure 10 - Budget Bytes search error message for "barbecue chicken pizza")



(Figure 11 - Food Network search results for “barbecue chicken pizza”)

INTERFACE DESIGN

In the post-test survey, the interface was well-received by users with both websites earning an average score of 6 out of 7 rating for “I like using the interface of this website.” Soegaard (2023) states that “streamlining content presentation and prioritizing user needs over ads can create a harmonious balance.” Soegaard (2023) suggested that ads should be placed on the side and remain as discreet as possible. Food Network and Budget Bytes both did not make their ads discreet. On Budget Bytes, the pop-up ads would open on the home page causing User B to express frustration. On Food Network, the ad was literally integrated within the ingredient list of a recipe that User B found which they mentioned in their post-test survey (figure 12).



(Figure 12 - Ad placement on Food Network)

Dannaway (2024) mentioned that user elements should work in a consistent, predictable manner to reduce error. During Task 1 on the Budget Bytes website, User B saw a yellow arrow, which they thought would have operated as a carousel on the homepage by showing more images and categories while remaining on the homepage. Instead the yellow arrow was a clickable link that took them to another page. They said the yellow arrow “didn’t match [their] expectations.”



(Figure 13 - Budget Bytes Yellow Arrow)

Despite these concerns, User A made sure to mention that they really liked the images throughout the home and search result pages of both websites “so you’re not fooled by things.” The images on the interface made it easier to make quick decisions about recipes that looked enticing to User A because they were able to quickly recognize the types of meal they could create.

SUMMARY

The overall satisfaction of both websites was a 6 out of 7 and both users shared that they would use both websites again for their needs. However, through analyzing the think aloud activities during each usability task a more nuanced picture is painted about how effective, pleasant, and efficient the user experience with regards to the 3 I’s: information, interactive, and interface design. Users appreciated the visual hierarchy of the websites. There were clearly defined sections for ingredients and directions that made it easy for the users to navigate through. On the Budget Bytes website, there were extensive notes and recipe information placed above the recipe bothering one user, but the “jump to recipe” button made the user’s interaction more pleasant when users may feel like there is an overload of information. Each website has its own interactive elements that stand out to users as well as drawbacks. The food network gave users more flexibility to make mistakes when using the search engine on their site, while Budget Bytes reduced cognitive load by automatically calculating ingredient measurement changes by allowing users to type or toggle the amount of servings

in the recipe. Finally, pop-up ads took away focus from users achieving the goals of the tasks making the interface design frustrating at times, but images proved to be an easy way to create a pleasant and quick way for users to recognize recipes that were interesting to them.

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