

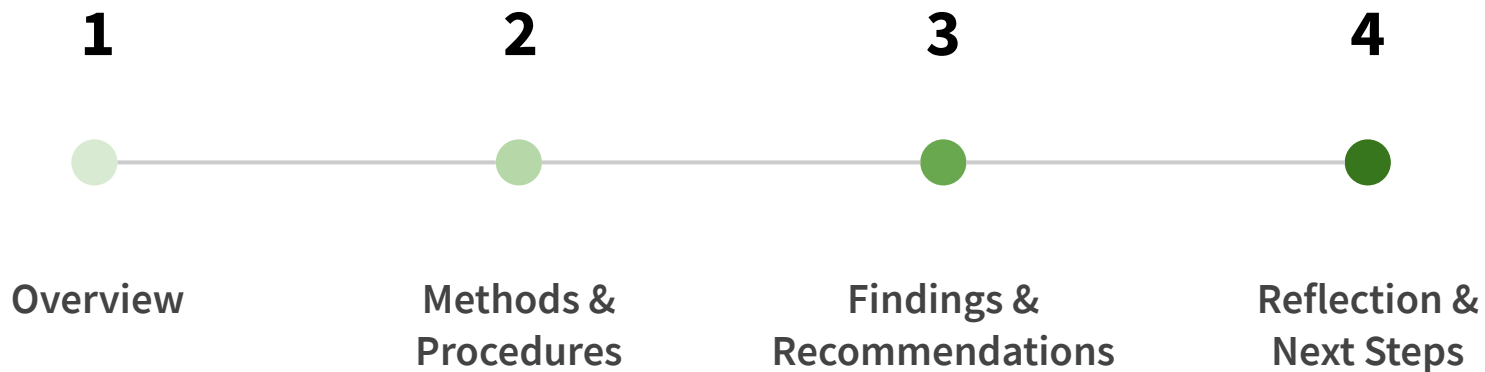


Usability Study Report

HCDE 417, Oct – Dec 2020
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Agenda



Overview

The purpose of this usability study was to explore **the end-to-end online grocery shopping experience** with Amazon Fresh.

More specifically,

We focused on evaluating the **discoverability**, **learnability** and **satisfaction** of AmazonFresh for new users.



Research Questions

Discoverability

- How do users **navigate** to AmazonFresh from the Amazon.com homepage?

Learnability

- How do users **find grocery items** that fit their needs?
- What obstacles do users face when they **remove/edit items in the cart**?
- What obstacles do users face when they **set their delivery preferences**, including address, date, and time?
- Are users able to complete all of the above **successfully on the first try**?

Satisfaction

- How satisfied are users with the **AmazonFresh online grocery shopping experience**?
- Are users able to meet all of their grocery shopping needs with **minimal confusion and frustration**?



Methodology & Process

Before

Heuristic evaluations
Cognitive walkthroughs
Screening survey

During

Welcome
Pre-test interview
Tasks (think aloud)
Post-task questions
Post-test interview
Post-test questionnaire

After

Data analysis
Report of findings

Participant Profile



New Users (5)

- First time **AmazonFresh** user
- AmazonPrime member
- English speaking
- Familiar with online shopping
- Reside in a city that supports AmazonFresh delivery service
- Have access to technology that allows them to online shop & join a Zoom call

Testing Logistics



Team Roles

Moderator (1)

Observer/Notetaker (2)



5

Participants

4

Tasks (think aloud protocol)

1

Grocery list

60

Minute remote Zoom sessions

Data Collected



| | Definition | Type | Collection | Analysis |
|---------------|--|----------------------------|---|---|
| Effectiveness | Task success – binary Assists from moderator | Quantitative, objective | Observation: count (yes/no) | Descriptive stats |
| Satisfaction | Perceived ease of use Emotional satisfaction Overall user experience | Qualitative, subjective | Likert scale, interview & observation | Descriptive stats Content analysis Affinity diagram |

Successes

5/5 participants able to get all grocery list items

4/5 Satisfied or Very Satisfied with overall experience using AmazonFresh

Amazon.com experience translated to AmazonFresh

4/5 Agree or Strongly Agree that they can locate the content they need

“ *It was a lot like the regular Amazon website, it is pretty easy to access.*

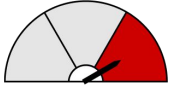
P3 ”

“ *Finding the food was pretty straightforward and narrowing it down was pretty straightforward as well.*

P5 ”

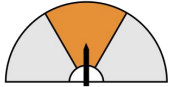
Severity Ratings

Severity ratings help us prioritize and address issues with a higher impact on the usability of a design and therefore the user's experience.



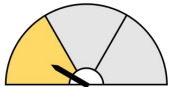
High

Causes user extreme confusion or frustration, incites errors during task



Medium

Causes user some confusion or frustration, may cause delay of task



Low

Has minor effect on usability experience, causes some hesitation

User Journey

A short, solid green horizontal bar.

Summary of Findings

AmazonFresh not clearly differentiated on Amazon.com

Search results sparked confusion and could be unreliable

Struggles with discoverability and usability of filter sidebar

Despite minor delay, address change success

Helpful checkout process with minor frustration



AmazonFresh not clearly differentiated on Amazon.com



Participants were able to navigate from Amazon.com to the AmazonFresh page through the Navigation Bar. However, some participants felt that the process could have been simplified and the button could have been more distinguishable.

AmazonFresh not clearly differentiated on Amazon.com



3/5 participants had

difficulties navigating to AmazonFresh

Recommendation

- Differentiate the “Fresh” button on the Amazon.com page to increase visibility and maintain consistent branding (consider using green color)
- Redirect users a new AmazonFresh webpage directly after clicking “Fresh”

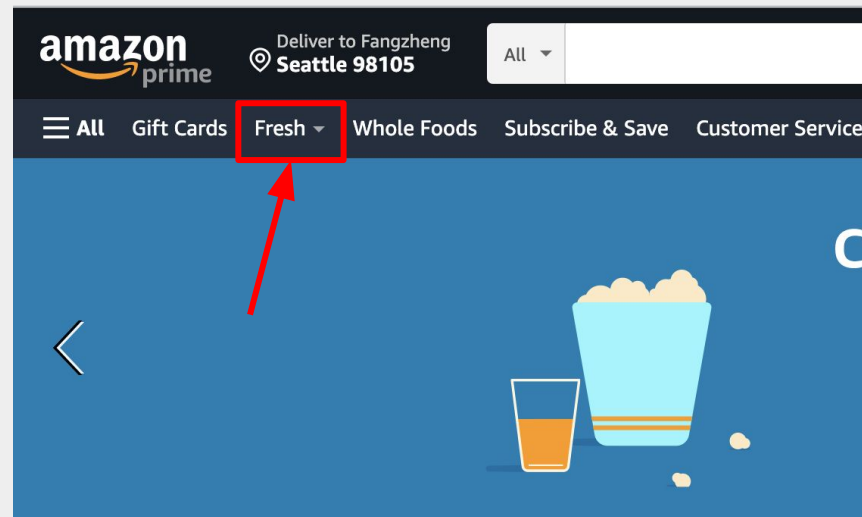
amazonfresh

“ Fresh button is so small, it could be easy to miss. It’s not obvious.

P1 ”

“ Wow, I do feel dumb for not seeing that.

P2 ”



Search results sparked confusion and could be unreliable



Participants added all grocery list items to the cart eventually but mentioned search results were unreliable or confusing.

Search results sparked confusion and could be unreliable



4/5 participants mentioned search results were unreliable or confusing

Recommendation

- Incorporate more complex searching options to improve the accuracy of search results

“

Why is there an onion... weird.

P1 ”

“

There shouldn't be a lemon when I search for organic apples.

P5 ”

Struggles with discoverability and usability of filter sidebar



Some participants struggled with the usability of the filter sidebar while others missed the feature all together.

Filter sidebar discoverability struggles



2/5 did not find or use filter sidebar

2/3 who used the filter sidebar required moderator assistance

Recommendation

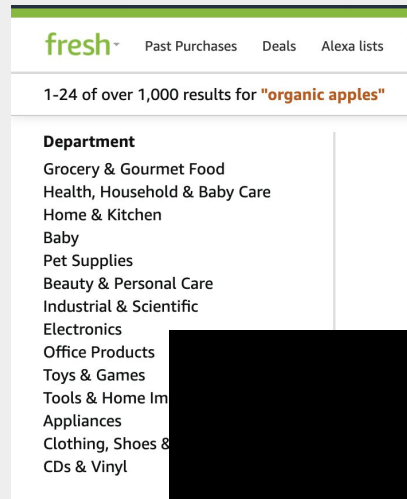
- Improve the visibility of the filter sidebar
- If in Fresh, the sidebar should automatically select “Grocery & Gourmet Food” department to avoid participant confusion

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“

I assume that nobody is going to notice this feature without previous experience.

P4 ”



“

I like the sidebar option. I wish I looked at that earlier.

P3 ”

To sort, select a department from the sidebar

PARTICIPANT 2

Filter sidebar usability struggles



2/3 participants who found
the filter sidebar had difficulty using the
built-in sorting features

Recommendation

- Allow users to customize order of filters, so that the ones they prefer are shown at the top
- Consider incorporating separate scrolling for filter sidebar and the search results

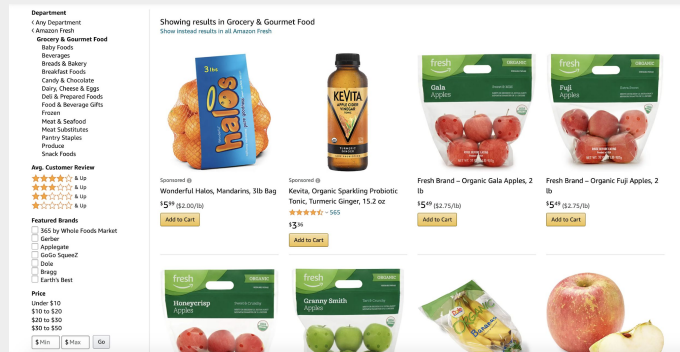
“

*Did I do something that made it
go back to the department list?*

Was that my fault?

P2 ”

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PARTICIPANT 4

Despite minor delay, address change success



Although participants were able to change the delivery address successfully, they initially struggled locating where to make the change.

Despite minor delay, address change success



2/5 had difficulty finding the “Your addresses” button, mentioned it is not visible and takes some time to find

1 participant mentioned they just changed their address last week. At first, said “I don’t remember” before finding it soon after.

Recommendation

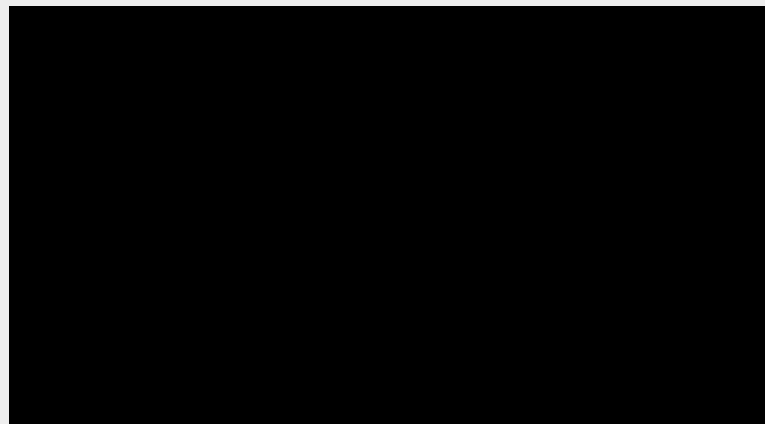
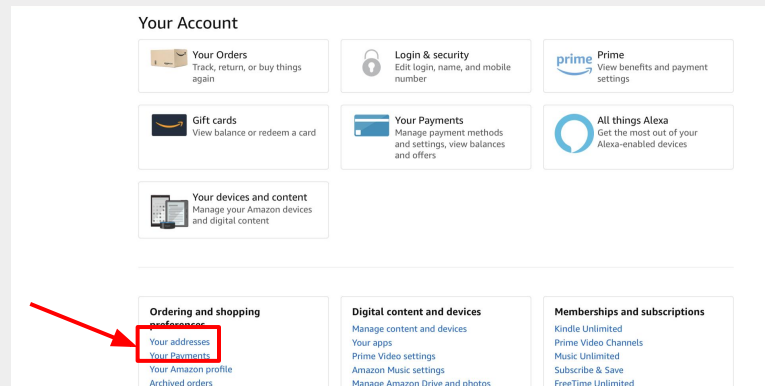
- Improve visibility of “Your Addresses”, potentially using an icon
- Allow users to add a new address during the checkout process

“

I didn’t realize there were choices under, I just saw the icons at the top.

amazonfresh

P4 ”



PARTICIPANT 3

Helpful checkout process with minor frustration



While participants seamlessly checked out and found the delivery sections helpful, some found the item suggestion page was unnecessary and were confused why there was no “back” button on the page.

Helpful checkout process with minor frustration



3/5 found the “Before Checkout” page which advertises additional items unnecessary

Recommendation

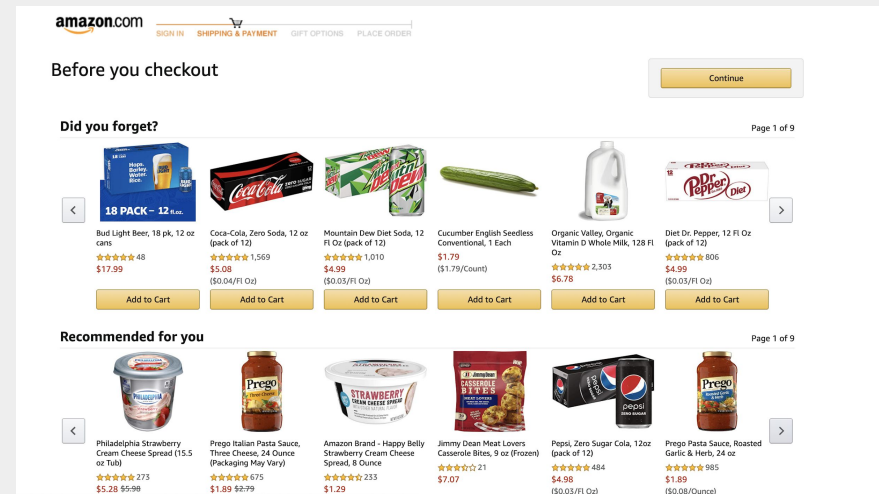
- Integrate the item suggestions into the checkout page (not its own page) or remove it altogether
- Add a back button during the checkout process to allow users to seamlessly recover from mistakes

“Kind of annoying to read it every time during checkout.”

P4 ”

“[after selecting the wrong date] Looks like I have to go back. Oh, there’s no back button on the page.”

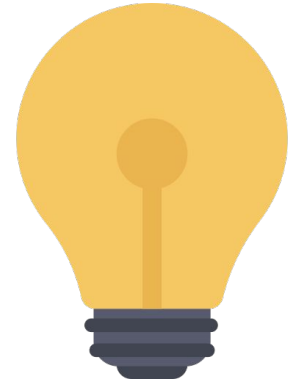
P3 ”



Reflection

What could have been improved

- Use a demo account so purchases could be fully completed
- Include participants of more diverse ages



If we had more time...

A solid green horizontal bar.

Run through the tasks with the same participants after a specific timeframe



To better understand learnability

Conduct another round of usability tests with an open-ended grocery list, rather than a provided one



To understand how participants would naturally grocery shop, rather than an artificial shopping experience

Thank you!

Q&A

