

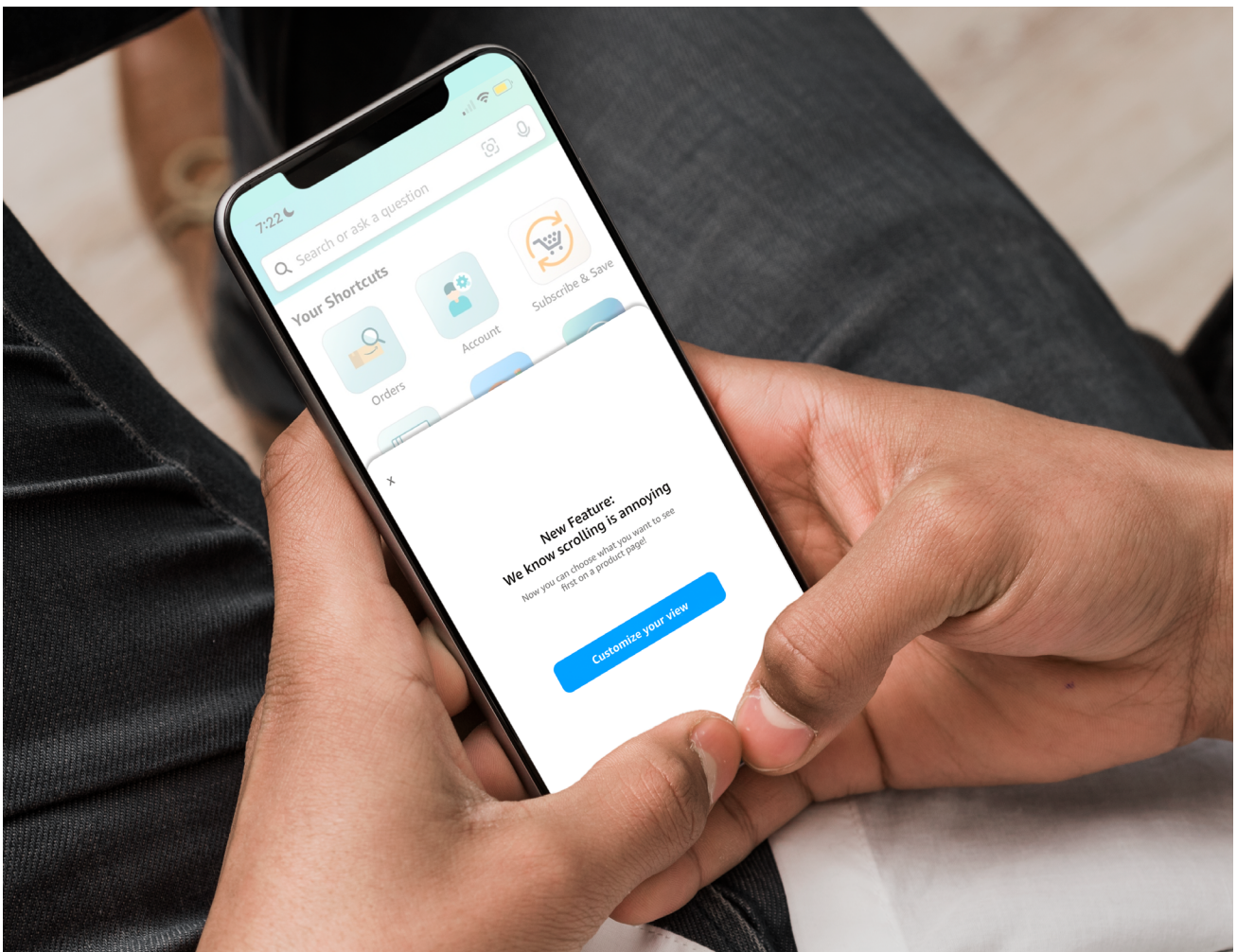
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QUICKNAV

JUNE 2024 TEAM JADE

E-commerce

Seamless navigation instills loyalty and confidence into older adults, empowering them to buy with conviction.



WELCOME TO OUR WHITE PAPER



According to the Population Reference Bureau, the number of Americans aged 65 and older is projected to increase from 58 million in 2022 to 82 million by 2050, but only 26% of internet users age 65+ feel confident using smart electronic devices, underlining the urgency of addressing their unique needs in the digital landscape.

Designing more intuitive and accessible interfaces is crucial to narrowing this gap. Technology developers should prioritize simplicity and clarity in their designs, including older adults in the development and testing phases of new products to ensure their specific challenges and preferences are addressed.

QuickNav, developed by Team JADE at Northwestern University, is a solution designed to empower older adults' navigation in e-commerce. As the US population ages, the need to bridge the digital divide for older adults becomes increasingly pressing, leading to digital marginalization. QuickNav aims to tackle challenges like declining dexterity abilities and tech discomfort by seamless navigation and reducing negative interactions with a difficult platform. In this summary, we explore QuickNav's design rationale, strategic direction, and future potential, highlighting its role in fostering inclusivity and confidence for older adults in the digital marketplace.

Only 26% of internet users age 65+ feel confident using smart electronic devices.

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SETTING GOALS

OUR PRIMARY GOALS INCLUDE:

- 1 Reducing digital exclusion by making the platform more accessible.
- 2 Tailoring the interface to evolving user needs,
- 3 Increasing membership conversion among older adults to make the platform *the* go-to e-commerce site for all shopping needs.

SUCCESS WILL BE MEASURED THROUGH:

- 1 First-time customer growth
LEADING KPI
- 2 Customer lifetime value (LTV)
LEADING KPI
- 3 Purchasing frequency
LAGGING KPI
- 4 Order size
LAGGING KPI
- 5 Customer retention
LEADING KPI

BECOMING THE USER

To better understand the current research space, we conducted both primary and secondary research.

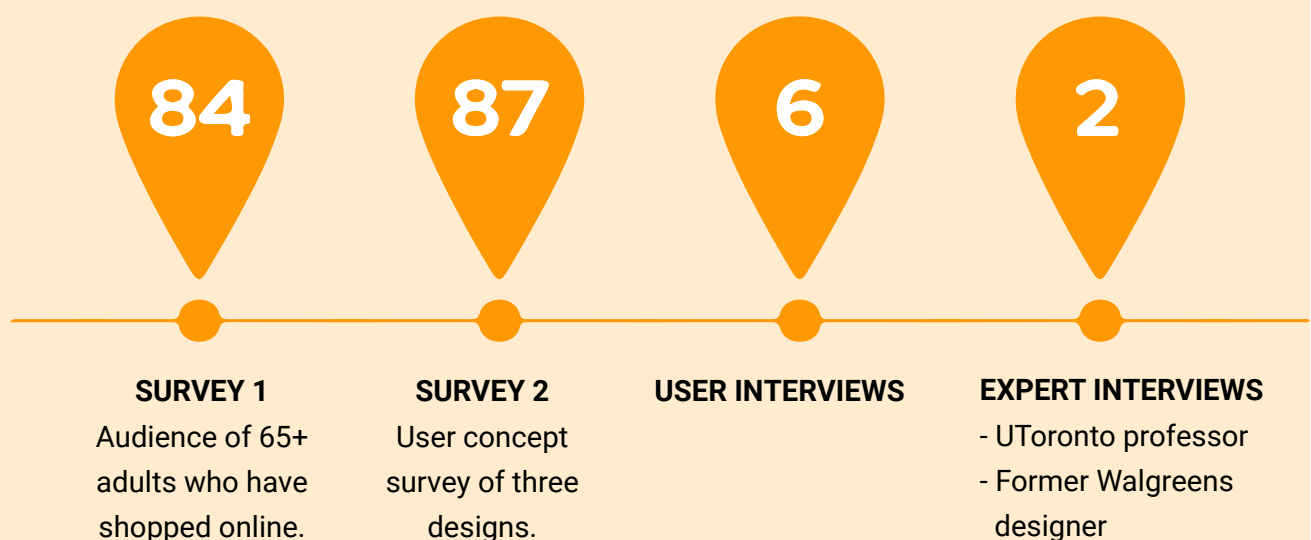
Older adults form a highly heterogeneous group. Instead of categorizing them by ages or life stages, we aimed to group users based on shared goals. This approach appreciates that while older adults may be at different life stages, they are united by common objectives. Our research aimed to find shared concerns and frustration of utilizing e-commerce sites.

We've identified five common themes that resonate with older adults:

- **Independence** - Older adults want to maintain their ability to manage daily activities without reliance on others.
- **Socialization** - Older adults want to nurture connections within local and digital communities.
- **Distrust in Technology** - Privacy and security concerns loom over older adults
 - *"I'm worried about how websites are collecting my data."*
 - *"With so much fraud online today, I am skeptical about putting my personal data out there."*
- **Self Identity** - Older adults do not want to feel old or as if applications have been "dumbed down" for seniors.
- **Effort and Adaptation** - Humans are "creatures of habit" and older adults do not want to constantly learn new technology.

Our key persona is an adult who has the ability to use information communication technology but tends to opt out as they see no need or purpose to engage.

PRIMARY RESEARCH METHODOLOGY



KEY INSIGHTS

After conducting our research, we have identified four key points about how older adults shop online. **Generally speaking, older adults:**

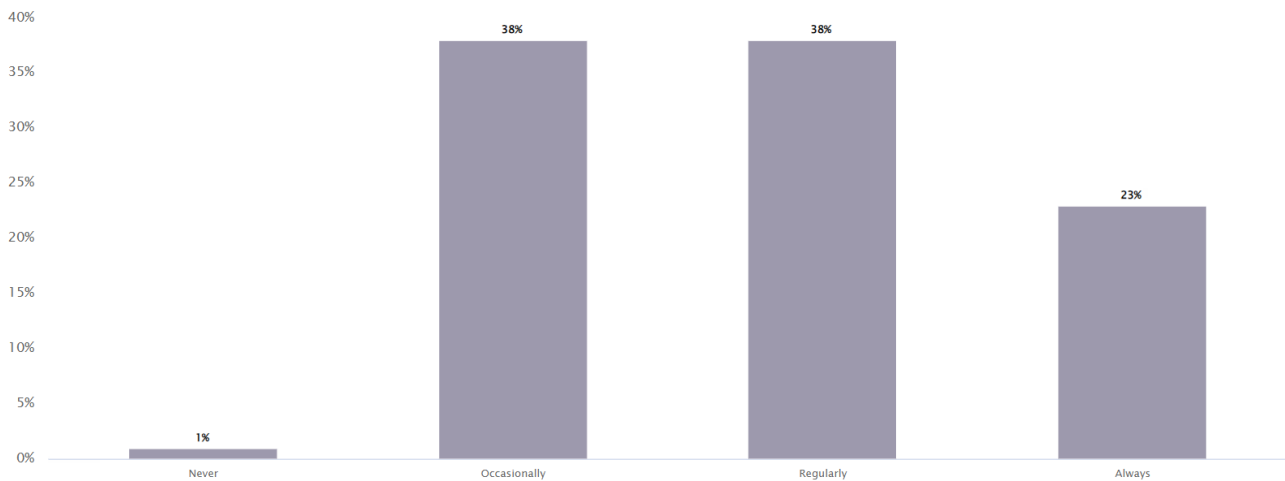
HAVE LESS FREQUENT PURCHASE NEEDS AND HAVE A PREFERRED SHOPPING ROUTINE.

Understanding the mental schema of older adults would allow businesses to adopt solutions to increase subscription and retention, such as automated subscriptions and advertising the financial benefits of bulk buying. **This population is a loyal customer base.**

- ***"I don't buy that much, nor in bulk"***

ARE CAUTIOUS BUYERS.

Our target audience, more often than not, reads reviews when buying a product.



Oftentimes, users have specific preferences for the additional information they would like to see before making a purchase, such as reviews, product photos, and similar products. One user stated that he looked at reviews 100% of the time before deciding to buy the product. Knowing what information older adults need to make decisions before purchasing could help designers prioritize information on web pages.

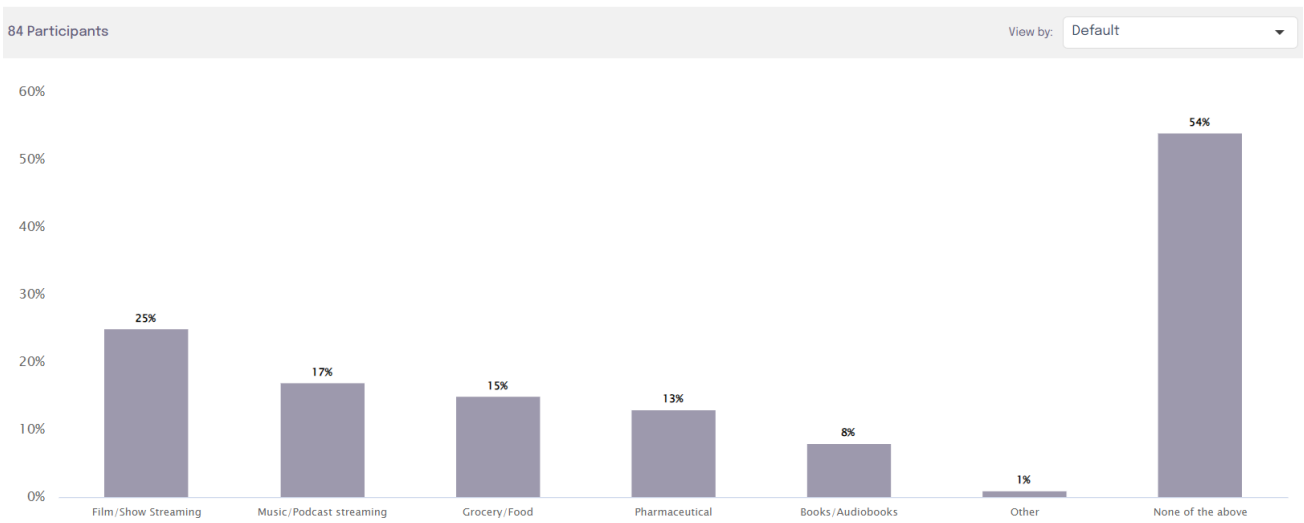
- ***"I read reviews 100% of the time."***
- ***"If there are less than 20 reviews, I will not buy the product."***
- ***"I needed a collar clamp, but the only way to see the diameter is in the product description, I don't want the wrong size so that is what I go to first."***

HAVE LIMITED SUBSCRIPTION USE, OR ARE UNAWARE OF THEIR SUBSCRIPTIONS.

It does not matter if e-commerce sites have a variety of offerings if the target base does not know about them. The older adults seem to be unaware of available services offered by e-commerce retail, or the things marketed are not appealing. As this age group will increase in the future, this could be a larger market for businesses to target and market for subscriptions.

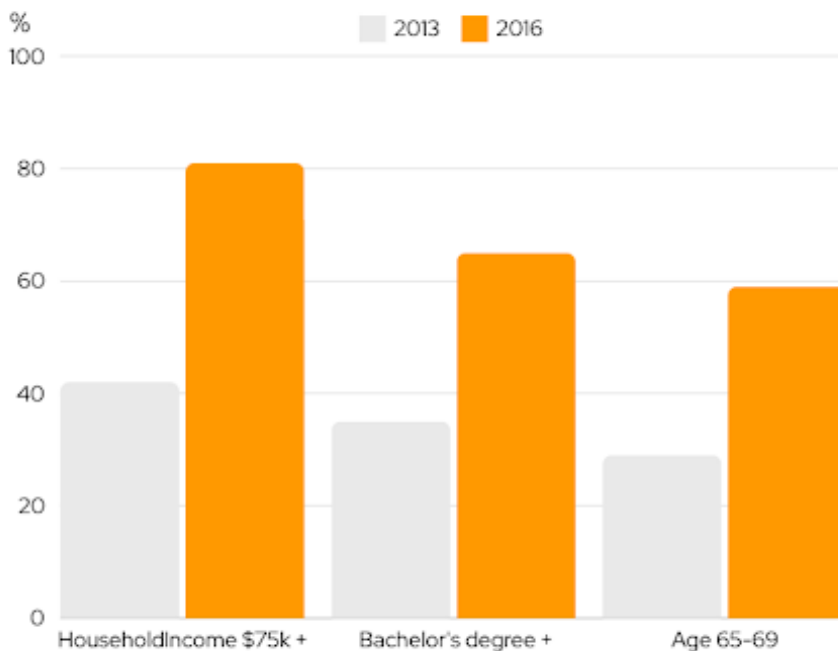
- ***"I have time! I don't care if my package arrives tomorrow or the day after."***

What digital subscriptions do you have?



USE BOTH LAPTOPS AND CELLPHONES, BUT STRUGGLE TO USE MOBILE APPS.

Creating an interface that is easy to navigate – especially on mobile devices – would increase accessibility to e-commerce retail websites for older adults.



Large increase in smartphone ownership

- ***"I use both a laptop and mobile. But mobile sometimes confuses me."***
 - There has been a significant decrease in those who use a desktop computer as their primary device (45.2% to 28.3%) between 2016 and 2019.

This information tells us that subscription marketing does not hit this population. Knowing these insights would allow us to design and increase e-commerce retail usage for older adults.

USER PERSONA: MEET NON-SUPER USER, ALEX



ABOUT

Alex lives alone with his dog, Bowser. He loves to take strolls around the neighborhood and usually stops at his favorite cafe to order a tea. He tries to stay physically active, as he does not want to feel old. He does not feel the need to shop online as he can just walk to his local retail store. He occasionally utilizes e-commerce sites, but does not hold any subscriptions.

GOALS

- **Independence:** He does not want to ask for help when shopping online.
- **Simplicity:** He does not want to have to scroll to find relevant information for decision-making.

NEEDS

- More **seamless integration** of e-commerce into his life.
- **Convenience**

PAIN POINTS

- He does not have full **trust in buying/receiving quality items online**.
- He does not have the **time to fully explore subscription benefits**, such as voice-activated personal assistants or streaming services.

OPPORTUNITIES

- Senior-specific marketing, personalized shopping experiences, e-commerce-specific products.

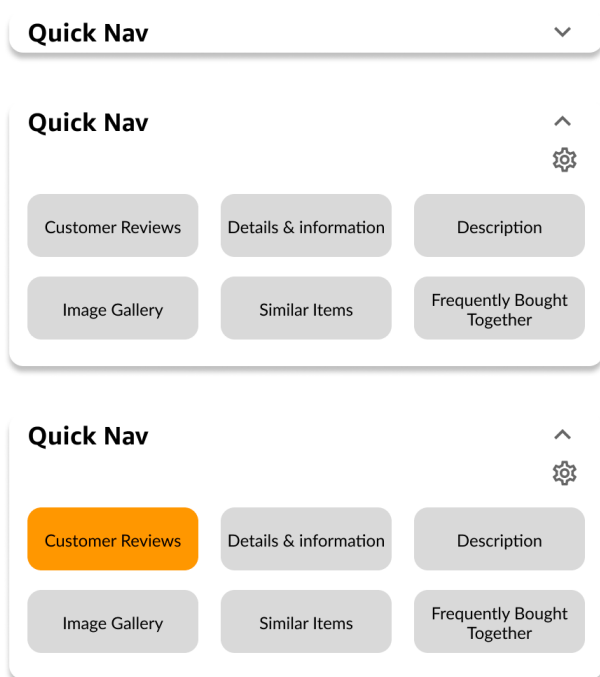
STRATEGIC DIRECTION & PRODUCT DESIGN

Based on our research, we recommend the following direction to empower older adults to navigate e-commerce sites, strengthen subscription loyalty, and increase subscription profit margins.

DOOMSCROLL TO RAGE QUIT PIPELINE

Users expressed that increased scrolling on e-commerce pages led them to quit before buying the product. Oftentimes, users have specific preferences for the additional information they would like to see before making a decision such as reviews, photos of the product, and similar products.

- *“If I can’t find what section I am looking for after I will just go to a different site”*



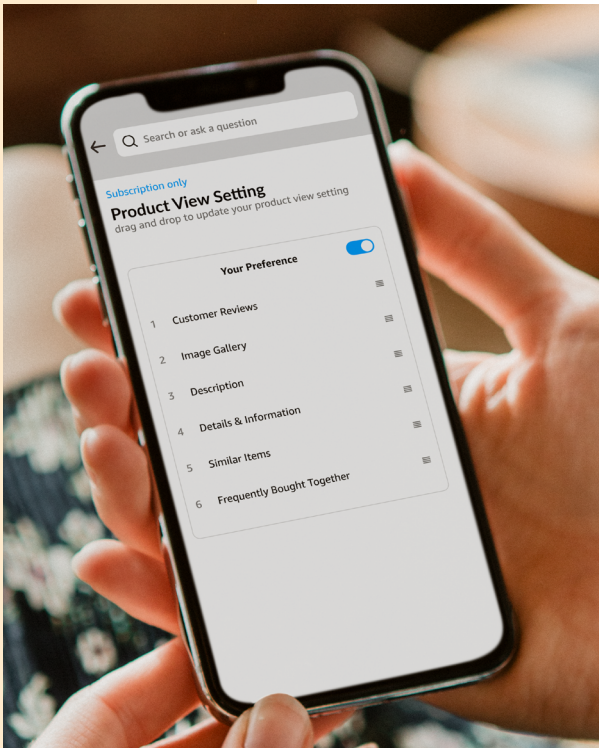
There’s an enormous mental load of information processing prior to product purchase, and mobile scrolling fatigue could be a big obstacle to the experience. The QuickNav feature minimizes scrolling by introducing quick navigation, which is implemented by memorizing jump points to all product sections. After researching the current interface design, we have chosen six common section titles for products listed on the e-commerce site. Taking the demo use cases as an example, customer ratings are located at the bottom of the page in the current interface. By clicking on the QuickNav component, the customer ratings will appear at the top. Double-clicking on the button returns the section to its original position. This design reduces the mental load of filtering and searching for information, a challenge identified by our user groups to give up on the site.

I'M NOT LIKE OTHER USERS

Users desire a quick way to interpret whether an item will satisfy their needs before buying. American culture emphasizes individualism, forcing brands to meet an array of user needs while ensuring brand resonance. When interviewing older adults, we found that they had a variety of desires: from reading reviews to only viewing the product description, they ignored other information entirely. Looking at the word cloud, you can see multiple different preferences, all unique.

What product information do you consider before purchasing?

Product Details Reviews
Seller Information
Related Products **Price** Videos
Availability Product Description
Images Recommended Products



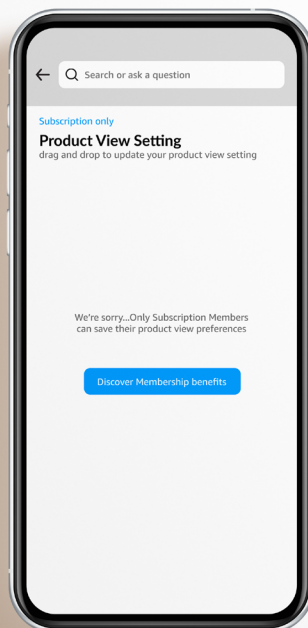
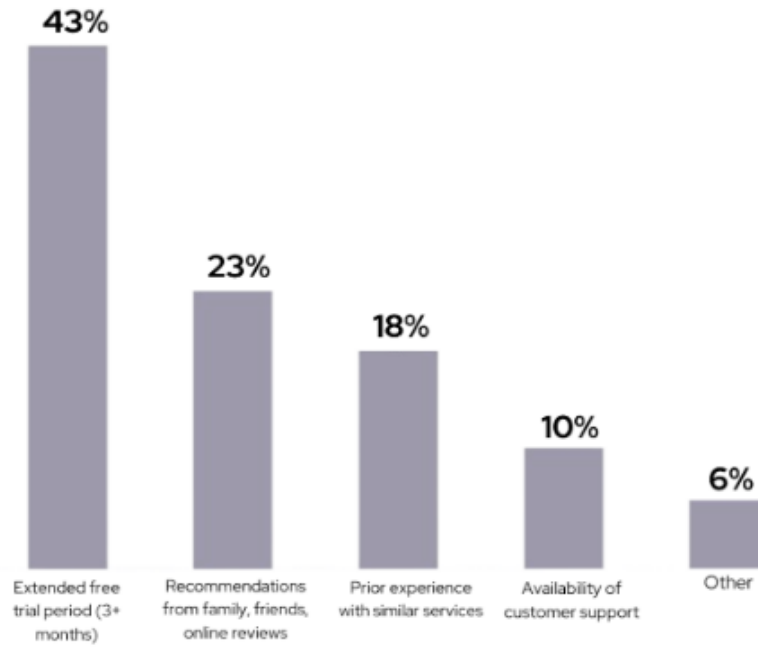
Recognizing that everyone has unique preferences, we are introducing more personalization to our feature. Subscribers can save their preferred page layout settings in their accounts, accessible from the product page icon or general settings. This setting defines the default view for each product the user encounters, but can still be overridden locally.

For example, if a user sets their preference to always show the image gallery before customer reviews, the image gallery will appear first on the product page. However, on a product page, if the customer clicks on the QuickNav component and chooses another option, such as "Frequently bought together," they can navigate to that jump point locally. This change will not be saved for all products and will be a one-time front-end re-rendering.

A TASTE OF SUBSCRIBING

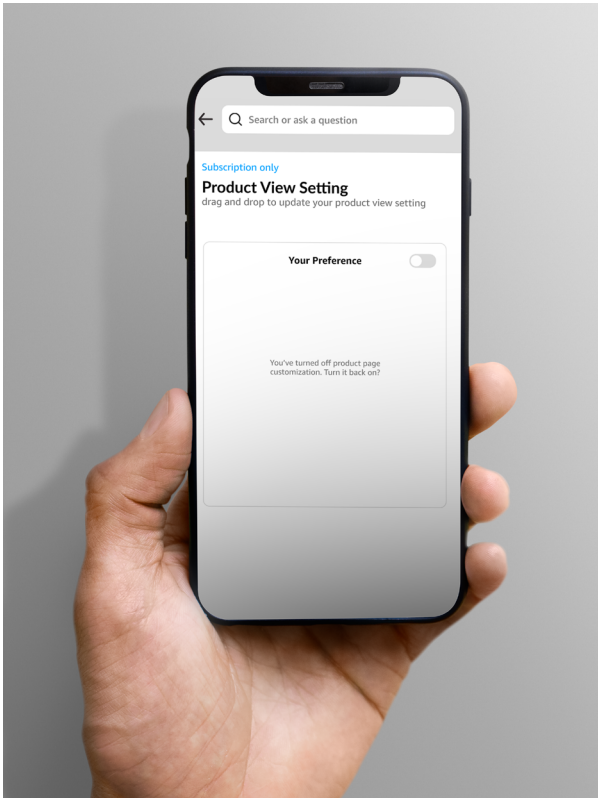
In our second survey, we found that **43% of people are more willing to join a subscription if they have a free trial**. Therefore, by allowing QuickNav to be utilized by all users, we encourage our consumers to consider the other features within the subscription. We have also shown how our personalized view feature is subscriber-only to entice users who enjoy QuickNav to be able to save their personalized view.

Which of the following would increase your willingness to buy a new subscription?



Non-subscription members can still use QuickNav to navigate to their desired sections locally, but they must do so manually each time. The customization through each account setting is only available to subscription members. If non-subscribers click on “Save?”, it will direct them to the navigation settings, where an alternative screen will display the message, “We’re sorry... Only subscription Members can save their product view preferences.” – providing another subscription entry point for non-subscribers.

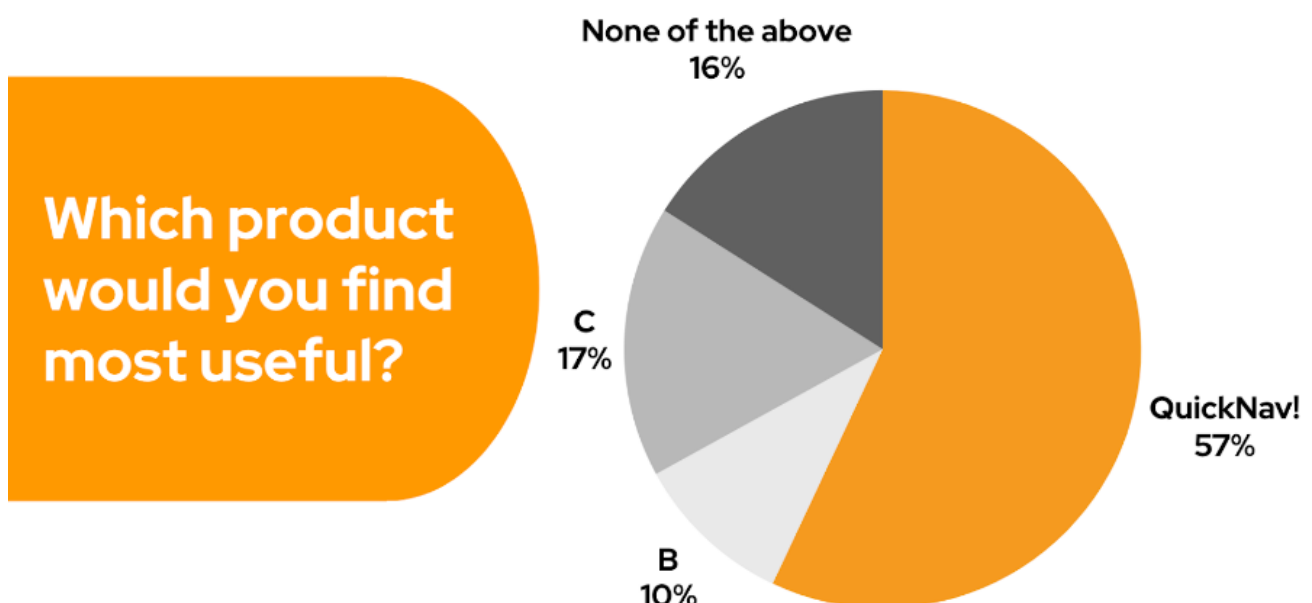
SENSITIVITY TO MENTAL MODELS



During a conversation with Professor Cosmin Munteanu from the Toronto Technologies for Aging Gracefully Lab, he shared research with us on mental models that older adults may have. Older adults who have gotten used to the shopping experience may not want to accept our product. Aligning with the customer-obsession model adopted by various e-commerce sites, we have created options both to hide QuickNav for a singular page or remove it altogether.

****Collapsed QuickNav on the product page can be seen on page 8.***

But don't just take our word for it... During our User Concept Survey, almost 60% of users chose QuickNav over our other concepts.



TAKING THE NEXT STEP

WHAT'S ON THE HORIZON?

REALITY CHECK

Senior software engineers confirmed the feature's technical feasibility, provided the data model is consistent across all products on e-commerce's database or can be made consistent.

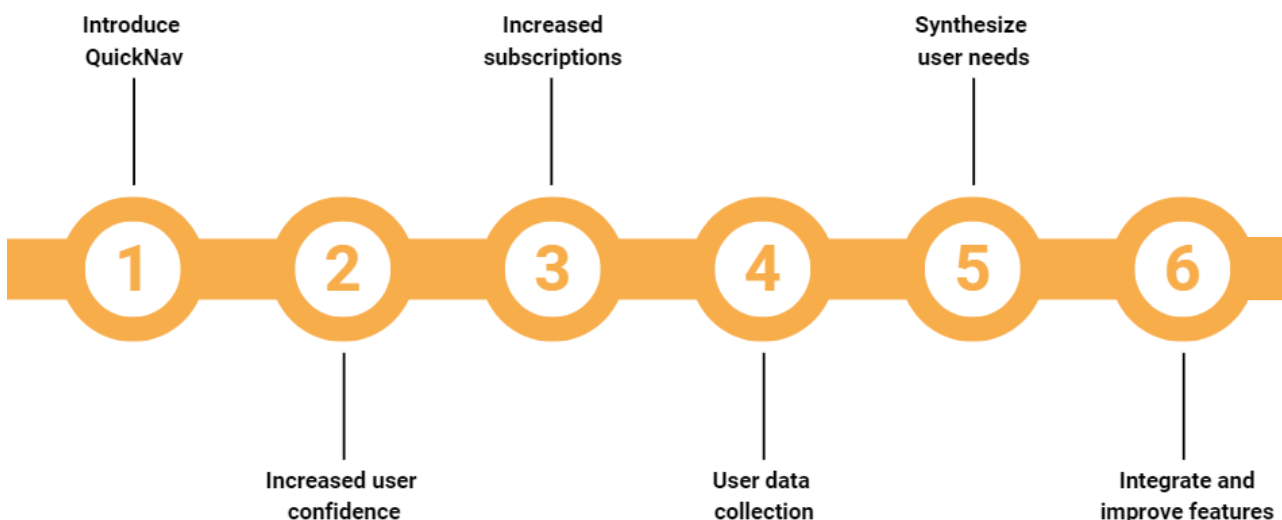
- *"This is pretty straightforward. Once you get the data state on initial fetching, it's just a matter of rearranging."*

FURTHER PERSONALIZED LAYOUT: ML EDITION

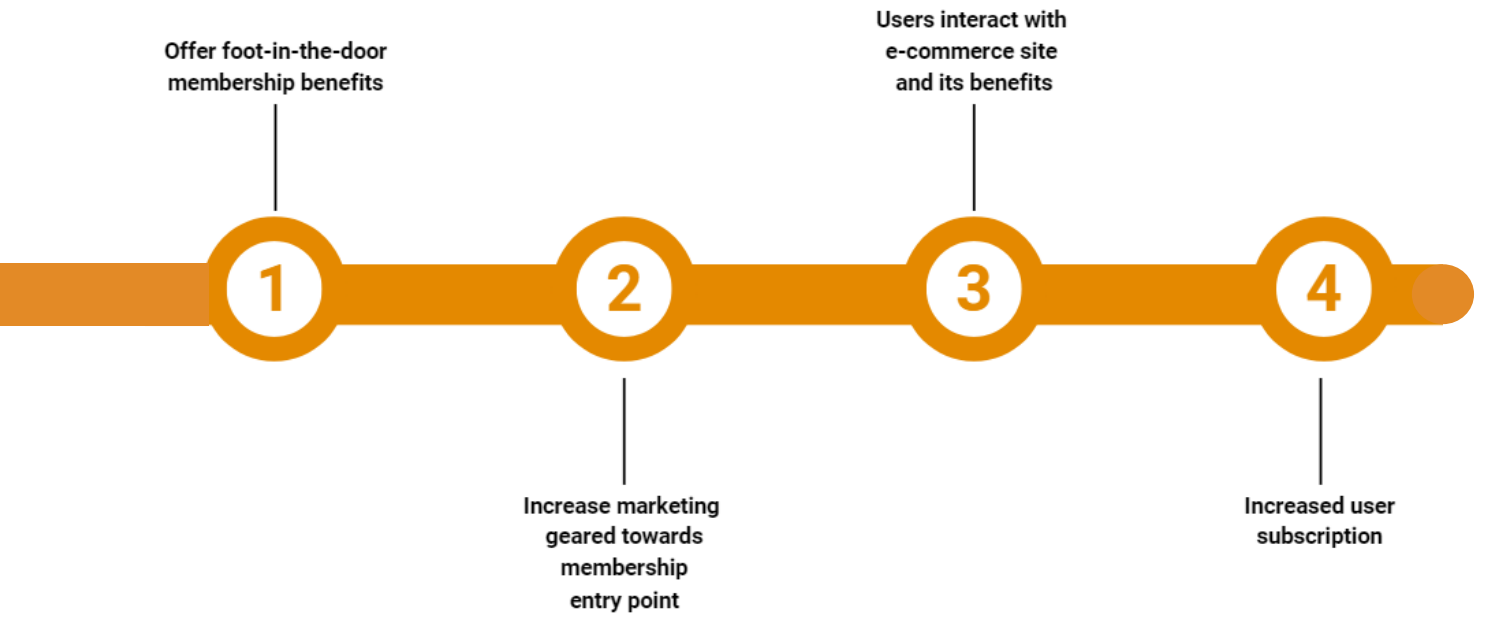
If market feedback validates the design and its popularity, future ML recommendations can leverage user interaction data to suggest layout settings changes, enhancing user experiences and driving business goals. By using A/B testing and metrics such as purchase time, the business team can confirm if these customizations are effective.

WHAT'S THE IMPACT?

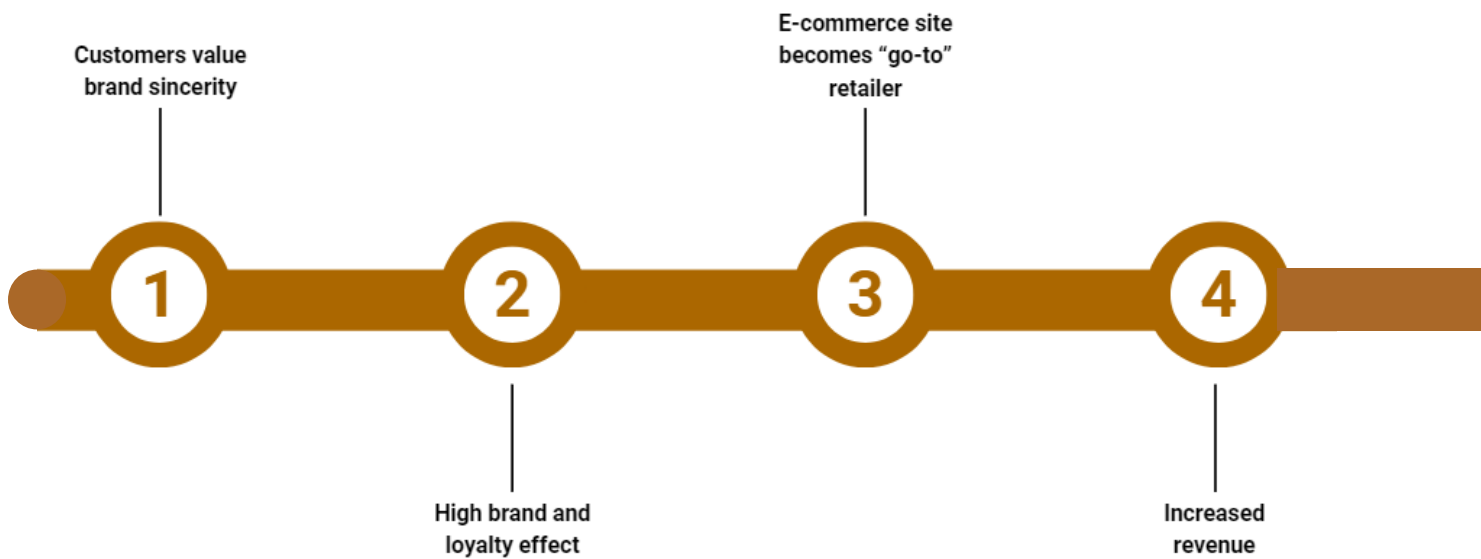
BRAND CONFIDENCE



SUBSCRIPTION MODEL



IDEAL TIMELINE



OUR CONCLUSIONS

E-commerce sites should not rely on older adults to join their platform solely based on subscription perks, as many older adults do not know the full extent of subscriptions and are rarely prompted to explore the benefits. Rather, center the user's pain points by creating a simple navigation and personalizing the site. As shown in our insights, older adults are a loyal customer base – making them a prime audience. Through QuickNav, e-commerce sites can take their first step towards being the go-to platform for older adults by strengthening the brand effect while growing profit margins.



MEET THE TEAM MEMBERS



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THANK YOU
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