

Product: Menu-based Grocery Shopper Assistant

The product is a web-based, multi-device software application that uses data from National Nutrient Database (NBD API), to help make grocery shopping easier and cheaper through weekly menu planning. The app auto-generates grocery lists based on the shopper's recipes, preferred meals, staples, and weekly menu plans.

Off the bat, I had ideas and assumptions about who would use this app – people like me who made a weekly meal plan menu based on my own recipes, cooked, and shopped once a week. But before starting the design process, I wanted to test my assumptions. So I drilled down on my hypothetical target audience user groups, documenting them and their assumed needs, so I'd have something to research against, to refine my assumptions.

I attend a monthly meeting typically attended by 60-100 people that begins with an appetizers social. I only know a handful of those people by name, though I do recognize many repeat faces. I decided to quickly interview people I didn't know about their grocery shopping habits.

I came up with a list of questions, in an order that would allow me to end the interview early on, if they were folks who never grocery shopped.

Grocery Shopper User Research

31 people's grocery shopping habits were researched using a semi-structured interview protocol.

- 9 were single without children: 5 male, 4 female.
Of those, 6 were under the age of 30.
- 22 were married or a partnered.
All were over 30.
14 had kids living with them.

Questions:

- How often do you grocery shop?
- How often do you cook?
- Do you cook from recipes?
- Do you buy most of your food during one big trip, or do you go to the store more often and buy just the items you need?
- Do you typically shop to feed yourself, or yourself and others?
- Do you share grocery shopping responsibilities?
- Would you say you're the primary shopper?
- How do you decide what to buy?
- Can you describe how you make your grocery list? The decisions that go into it?
- Do you have staples – staple items you buy each week?
- Do you check the sales circulars?

- How long does it take you to make your shopping list?
- How long does your grocery shopping take?
- Do you forget things while you're shopping, and have to go back for items in aisles you've already visited?
- How often, would you say that happens?
- Do you forget to put things on your list, and remember them after you come home from shopping?
- How often, would you say that happens?
- Have you ever come home and realized you purchased something you didn't need to buy?
- How often, would you say that happens?
- Partnered or single? Kids? Age?

Results:

Partnered people, single people over 30, and people with kids:

- Shopped more regularly.
- Bought most of their groceries during a single weekly trip to the store, running back if they needed additional items, or tapping a partner to make quick trips to the store.
- Did more planning – 3/4ths said they made a list from a weekly menu or meal plan, based on items featured in the sales circulars.
- Cook regularly, and kept a stash of recipes.
- Occasionally bought things they didn't need.
- Occasionally came home and realized they hadn't bought something.
- Often had to return to aisles they'd already visited to find things they didn't pick up.

Single people under 30:

- More likely to shop infrequently or sporadically, when the need arose.
- Did less planning. While they all crafted shopping lists, only 1 of the 6 based their list on a weekly menu plan.
- 2 read the sales circulars.
- Half said they cooked regularly.
- Often bought things they didn't need.
- Often came home and realized they hadn't bought something.
- Often had to return to aisles they'd already visited to find things they didn't pick up.

Generally:

- People who did meal planning before shopping said their pre-shopping planning process (reviewing the circular, checking what they had on hand, picking recipes, and crafting a list) spent 30-minutes to 1 hour on this task.
- People who did not do much pre-shopping planning before shopping were more likely to forget things or buy things they didn't need to buy.
- People who did not do much pre-shopping planning cooked less.

Based on my interview results, I decided to poke around online to see if there was published data available that might confirm or add granularity to what I'd learned. I hoped to find trending, or other survey results done with a larger sampling of people.

I ended up at the Food Marketing Institute's website.

2015 FMI.org (Food Marketing Institute) Trends:

- 43% of grocery shoppers are primary shoppers, doing most or all of the shopping for a multi-person household
- 70% of primary shoppers are women. 52% are men.
- 25% of shoppers shop only for themselves.
- 10% are secondary shoppers responsible for some of the shopping.
- 25% of meals consumed by 20-somethings include items purchased the same day.
- Shoppers over age 50 maintain and build grocery lists over the week.
- Shoppers under 50 use a list, but write it prior to their actual shopping.
- The Average consumer makes 1.6 trips per week to the grocery store
- 67% of consumers indicate that cheaper prices determined their choice of retailers
- 66% in 2012, used coupons to save money. 93% took advantage of Buy One Get One Free offers.

I found it interesting that many of these trends fit nicely with information I discovered in my interviews.

Looking at FMI's info and my interview data narrowed down who I was designing for:

My primary shopper is:

- female, and the primary shopper responsible for a multi-person family.
- More likely to have kids and be a little older.
- Cost-conscious, read circulars and plans around sale items and coupons.
- Starts a shopping list with a weekly meal plan.
- Cooks, likely.
- Currently spends 30-minutes to an hour on pre-shopping planning.
- Might tap a partner to pick up items during the week – this is my secondary shopper.

My haphazard shopper is:

- Younger, and single without kids
- Shops for themselves
- Shops with a list, but does little meal or weekly planning.
- Is likely to go out to eat or buy something for that day's meal at the store.
- Goes to the store more frequently for fewer items.
- Is a less experienced cook.

- Less concerned about sales, coupons.
- More likely to forget things or buy things they didn't need/had at home

My secondary shopper is:

- Likely married or partnered
- Shops with a list, but does little meal or weekly planning.
- Goes to the store more frequently for fewer items.
- Often buying something the primary needs

Based on what I'd learned, I started mapping out my the different types of users I expected to make up my target audience, concentrating on their distinguishing variables, which I would expect might yield different needs for the product.

User Groups

Important and Distinguishing Variables	User Group 1 Primary Weekly Shopper (shops one set day once per week)	User Group 2 Haphazard shopper (shops whenever they're going to cook or needs basics)	User Group 3 Secondary shopper (shops for suddenly needed items, or sometimes for another)
Married	yes	no	yes
Cooks for self	yes	yes	no
Cooks for others	yes	sometimes	no
Responsible for grocery shopping	yes	yes	no
Has a recipe book/box	yes	maybe	no
Tries new recipes	yes	yes	no
Plans a weekly menu	yes	no	no
Monitors/maintains a cache of grocery staples in the home	yes	yes	no
Eats majority of meals at home	yes	no	yes
Buys grocery items in bulk to save \$	yes	no	yes

Looking at the table, I saw 3 primary user groups emerging – a primary shopper, a haphazard shopper and a secondary shopper.

Based on what I'd learned and documented thus far, I crafted personas – fake people each representing one of the 3 groups of shoppers.

Personas

Mindy

Primary weekly shopper



“Grocery shopping. Ugh. I spend more time planning our meals than actually shopping. How can I do it quicker?”

Profile

Mindy is a teacher and busy mother of 2, who does most of the cooking for her family. She plans her weekly menu around sale items and coupons, and shops in bulk to stretch the family dollar further. She does most of the family's shopping, though her husband will pick up things at the store for her on his way home from work.

User Goals

Wants to reduce the amount of meal planning and grocery shopping time.

A way to share shopping lists.

Business Goals

Create the app worthy of Mindy's 99 cents by simplifying her meal planning and saving her time.

Reduce the time it takes Mindy to plan a weekly menu of meals and create a grocery list.

Make it easier for Mindy to take advantage of bulk-item purchasing prices.

Make it easier for Mindy to communicate grocery lists and coordinate shared shopping with her husband.

Demographics

36

Married

Two sons, ages 9 and 7

Teacher

Framingham MA

\$115k per year (family)

Thoughts/feelings

Feels responsible for making sure her family eats well, while keeping within their budget.

Would rather invest 2.5-3 hours per week on quality time with her family, instead of grocery shopping and meal planning.

Feels grocery shopping is a burden, and wishes she and her husband could share this responsibility.

Zach

Haphazard shopper



“I waste money buying things I don’t need, and time picking up things I forget. How can I keep track of what I have and what I need?”

Profile

Zach is a project manager who works in Boston and lives alone in a small apartment in Waltham. He eats at cheap hole-in-the-wall eateries with friends frequently. He has basic feed-myself cooking skills, and occasionally tries out a new recipe. Zac’s fridge and cabinets overflow with duplicate condiments, spices and packaged goods. He finds himself running to the store for things he forgot to buy because he left his shopping list on the table.

User Goals

Wants a fool-proof way to make a list he won’t forget on the kitchen table.

Needs a way to keep track of his staples, and things he already has, and doesn’t need to buy.

Business Goals

Create the app worthy of Zach’s 99 cents by providing a way for him to manage his staples.

Make it easy for Zach to make and not forget his grocery list by using his phone.

Encourage Zach to do more cooking by giving him a way to store his new recipes and automatically generate grocery lists from them.

Demographics

28
Single
Project Manager
Waltham MA
\$72k per year

Thoughts/feelings

Feels he could make better budget choices by eating out less and cooking at home more.

Feels like an idiot when he comes home from the store with something he already has 4 of, or realizes he didn’t pick something up.

Thinks cooking is a hassle because he’s always running to the grocery store because he tends to forget his shopping list.

Michael

Secondary shopper



"I shop a couple of times per week when my wife calls me with a detailed list at work. Can I minimize those calls and still get those items?"

Profile

Michael is a police officer, married with 2 kids. His wife does most of the grocery shopping and he picks up things as needed. His schedule is crazy and when his wife calls, his attention is focused elsewhere. His wife often complains that he's bought the wrong amount or brand.

User Goals

Wants a less-intrusive way to be asked to pick things up.

Wishes the lists he gets from his wife didn't require him having an extensive conversation about brands and amounts - given he forgets them anyway.

Business Goals

Create the app worthy of Michael's 99 cents by providing a way for him to more easily manage his wife's shopping list requests with less interruption.

Make it easy for Michael to know what brand and amount to buy.

Demographics

33
Married
Police officer
Arlington MA
\$62k per year

Thoughts/feelings

Likes his home to be a "nice" place, but his wife gripes about what he buys when he walks in the door.

Loves his wife and wants to be helpful, and hates it when she's not happy.

Hates getting to store and realizing he's forgotten what brand his wife told him to buy, and how many.

Looking at FMI's info, I reconsidered my design focus

- 43% of grocery shoppers are primary shoppers, doing most or all of the shopping for a multi-person household
- 70% of primary shoppers are women. 52% are men.
- 25% of shoppers shop only for themselves.
- 10% are secondary shoppers responsible for some of the shopping.

Primary and secondary shoppers together account for 53% of shoppers, while only 25% only shop for themselves.

People in my interviews who were single, typically did less organized shopping, didn't do as much planning – these are likely represented in that 25% who shop for only themselves. These are folks who are less likely to use a product geared around menu planning to make grocery shopping easier.

Wanting to maximize my design and development budget, I decided to focus first on the needs of the primary & secondary shoppers – they are more likely to use the product, and represent a higher ROI.

If I were to do phased development, I'd consider adding features specific to the haphazard shopper as a second phase.

All that said, I made a mental note to keep the needs of the haphazard shopper in mind as I designed for the primary and secondary shopper.