In planning user research, we first identified our stakeholders. The direct stakeholders of our solution were those who would employ it: prospective buyers of electronic technology. Our indirect stakeholders included: their friends and family, who might also use the device they purchase; their bosses and coworkers, who might need to work with them through the device they purchase; and the companies who make the devices being purchased.

We decided the most efficient way to research these groups was to perform observations and interviews at retail tech stores, since lots of people there would be shopping for new technological devices. We picked two locations: The Microsoft Store and The Apple Store in the University Village. We conducted the interviews on Friday, January 26th, and the observations on Friday, February 2nd. Since shoppers tended to be in groups, we were able to obtain perspectives from some indirect stakeholders: their friends and family. We also asked questions about the user’s job to get information about coworkers and bosses who might interact with them through the device they purchase. The interviews gave us a perspective on how the users *felt* about shopping for technology, while the observations gave us insight on how the users *shopped* for technology.

Most people exiting the stores refused to be interviewed; they told us did not have time to talk. We were, however, able to get five extended interviews from customers exiting the two stores; three from outside The Microsoft Store, and two from outside The Apple Store. All of the people we interviewed had slightly different needs and each represented a different type of potential user for our solution. The two outside The Apple Store were: Robert, a retired, sixty-year-old Caucasian man; and Frank Chang, a nineteen-year-old Chinese student at UW. The three outside The Microsoft Store were: Sarah McCarthy, a forty-two-year-old Caucasian mother; Yiqian Qi, a twenty-eight-year-old Chinese grad-student at UW; and Shawn Warren, a thirty-year-old Caucasian insurance agent.

These interviews lasted five to ten minutes, and fourteen questions were asked each time. The questions focused on the user; their job or schooling, the tech devices they owned, what they used the devices for, and their experience shopping for technology. The interviews were recorded and later transcribed. We also observed the behaviors of shoppers for around two hours at each store. During this time, we took several pages of notes on a variety of different customers and groups at each store.

Each interview gave us a unique perspective on the issues a prospective buyer might face when shopping for technology.

Our first interviewee was Robert, who self-identified as technologically illiterate, and was taken to The Apple Store by his daughter who wanted to buy him a device to watch videos and read news. Robert was convinced that he did not want a computer; it was too expensive and frustrating. He showed us that many users need to be pointed towards low-cost options to be encouraged to get into technology. His daughter’s concerns were also an indicator that many technologically illiterate people have support groups that can help them adapt to technology they buy.

Our next interviewee, Frank Chang, was a freshman at UW and was looking for a new laptop to use in class. He told us about his conversation with an employee in the Apple Store: “He didn’t listen to me… He gave me the same spiel every college kid gets.” Frank’s interview pointed out to us that our solution needs to listen to a user’s specific needs, and avoid placing them in broad categories such as ‘student’.

Our first interview at The Microsoft Store was with Sarah McCarthy, a mother that loved to draw. She came to look at Microsoft’s new Surface Studio, an artist-oriented tablet workstation. She told us the salesperson was “speaking a different language” to her, and she ended up leaving empty-handed because the tablet was too pricey. Her interview showed technical jargon might need to be hidden from a user unless they ask for it, and also that most users need to be given low-cost alternatives if they are going to adopt new, exciting technology into their lives.

Our second interview outside The Microsoft Store was with Yiqian Qi, a CS graduate student going to UW. Since he was very technologically literate, he only came into the store to physically use a computer to test it. He showed us the necessity for a user to go to a store and try out a device themselves when they are thinking about purchasing it. We could incorporate this into our solution by directing users to a store to try out the computer recommended for them.

Our last interview was with Shawn Warren, an insurance agent. He was “overwhelmed by the selection” of devices at The Microsoft Store. He also complained that he “didn't feel like the employee was listening” to his wants and needs. His interview showed us that our solution needs to make the user feel in control of their shopping experience while also not giving them too many devices to select from.

Our observations of shoppers at the store also gave us key insights on how we can improve our solution to suit its user’s needs. We noticed what made users the happiest; feeling their wants were heard. Phrases like “we want to make sure you get the right device" brought a smile to customers, and showed us that our solution needs to incorporate a lot of user interaction and feedback so users feel involved throughout. We also noticed that users cared about storage space a lot, and hated the thought of not having enough space on their device. It made us realize that a solution needs to incorporate many questions about storage to make sure a user has space for everything they need now, and in the future especially.

Most of the interviews we did helped us form important personas for our user base and will aid us in keeping our solution user-focused rather than being too fixated on the technology it offers. Here are a few personas that we were able to make with knowledge from this research:

 **John Wilkins**

*60, retired*

*“The only thing the Internet does is frustrate me. It seems impossible to get into the world of technology.”*

**Education**

Associate Degree in Business

**Family**

Married for 35 years to 64-year-old wife, with two daughters (ages 29 and 32)

**Income**

High

**Description**

* Recently retired from construction management
* Lives with his wife in Bellevue, WA

**User Goals**

* Use the Internet without getting frustrated
* Stop relying on his daughters when buying/using technology
* Buy a device that is not too expensive (seems worthy of its price)
* Be able to easily read e-books and watch videos

**Behaviors and Habits**

* Usually spends his time reading books and newspapers
* Watches a lot of TV, especially sports and food channels
* Plays golf with his friends on weekends

**Technology and Skills**

John is not much of a technology user. He never uses the Internet because it only makes him frustrated. The only device he carries around is his old flip-phone. He uses it to call his wife, daughters, and grandchildren.



**Chloe Liu**

*17, High School Student*

*“It seems like employees at tech stores only care about making me buy the most popular and expensive devices.”*

**Education**

High School

**Family**

Mother (33), father (35), and brothers (13 and 15)

**Income**

Low to Medium

**Description**

* Senior in high school preparing for college
* Works part time as a cashier at Target

**User Goals:**

* Find a device she could use for college with limited amount of money

**Behaviors and Habits:**

* Spends most of her time doing school work
* Draws and paints in her free time
* Often cooks dinner for her family

**Technology and Skills:**

Chloe is familiar with using technology. She uses her smartphone to communicate with her family and friends and check social media. At home, she shares a desktop with her brothers. She only uses the desktop for her homework and printing things out because everything else can be done on her phone and her brothers use the desktop a lot to play video games.

**Dana Johnson**

*6, Elementary School Student*

*“I wanna play games and watch videos when I get home!”*

**Education**

Elementary School

**Family**

Mother (43), Father (45)

**Income**

Low to Medium

**Description**

* Loves to draw
* Is very bright, learns easily
* Likes watching YouTube Kids

**User Goals:**

* Wants parents to get a device she can use too
* Wants to be able to use it after school

**Behaviors and Habits:**

* Spends time doing school work, and drawing
* Loves watching educational shows and using educational apps

**Technology and Skills:**

Dana is great at using technology for her age. Her parents say she has almost surpassed them in technical knowledge! There are no family computers, so all she uses are her parent’s smartphones, though they are typically using them in the afternoon. Her parents are looking for a new device for home, and she is excited that she might be able to use it after school.

**Robert Daniels**

*32, Small business owner*

*“I need reliable, powerful, but cost-effective laptops for my team. I don’t care about RAM or size, I just want something that works and works well”*

**Education**

Associate degree in economics

**Family**

Mother (56), Father (58)

**Income**

Medium to High

**Description**

* Run small online shopping website
* Has workers on-the-go often

**User Goals:**

* Needs a way to connect to workers reliably and give them the ability to work anywhere
* Needs to cut corners to save money wh

**Behaviors and Habits:**

* Loves his job
* Travels often
* Is open to suggestion

**Technology and Skills:**

Robert runs an online shop, so he is fairly adept with technology. He however, does not know too much about computer hardware and always spent the extra dollar to have a good laptop. He now needs laptops for his workers, and he must save as much as possible to keep his business running well. He wants laptops that he will not have to repair anytime soon.

**Tim Patterson**

*28, Web developer*

*“I need to upgrade and I’m willing to spend a lot, but I want to get my money’s worth!”*

**Education**

Bachelor's degree in CS

**Family**

Mother (49), Father (50), Sister (21)

**Income**

High

**Description**

* Loves to go outdoors
* Is always willing to spend more if it’s worth it
* Has a dog and loves his family

**User Goals:**

* Needs to upgrade the desktop he personally uses and develops on
* Wants something new that performs very well
* While spending a lot, wants to get performance for every dollar he puts into his computer

**Behaviors and Habits:**

* Spend a lot of his time away from work hiking
* Loves to learn new programming languages

**Technology and Skills:**

Tim knows a computer inside and out - but he still feels there is a huge technology market and would love to get steered in the right direction when it comes to picking out a desktop.