

# Agentic Shopping and How It Shapes Consumer Behavior

PSYC 6023 (Research Methods for Human-Computer Interaction)

R1 - Proposal



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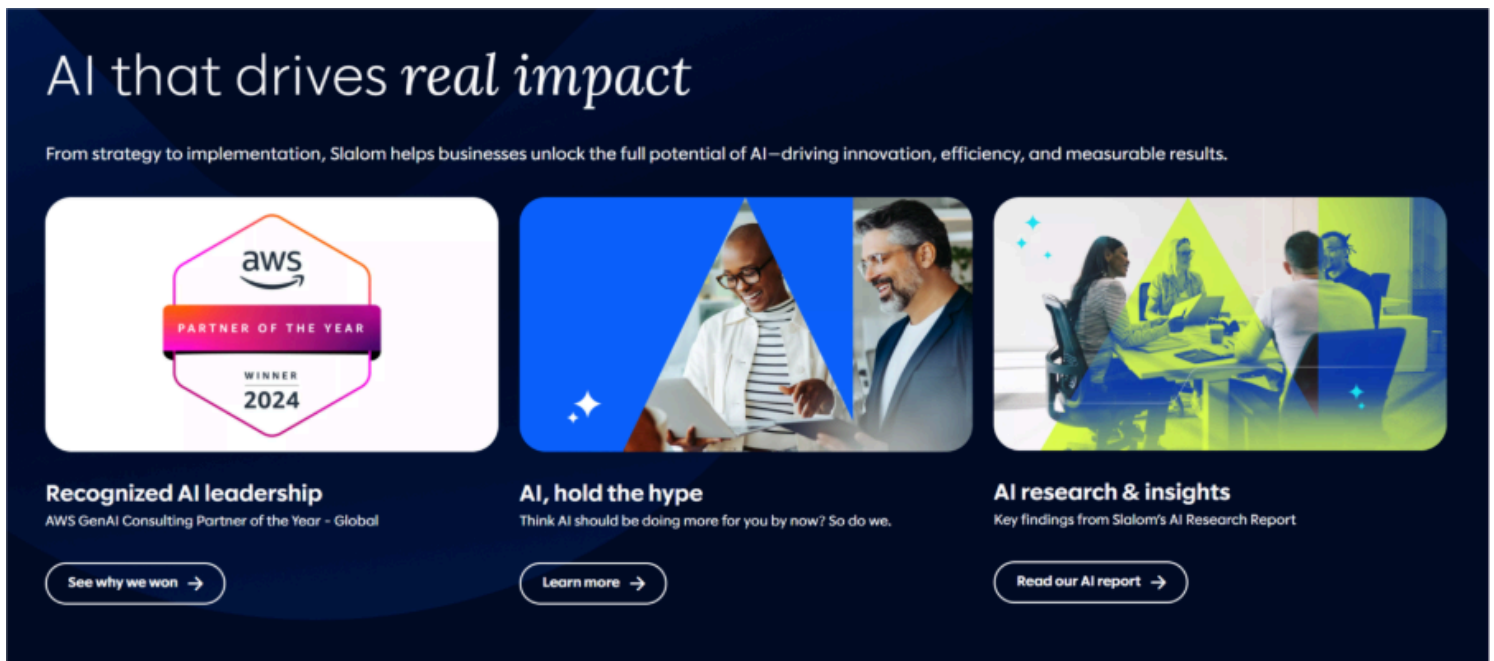
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# Background

## About Slalom

Slalom is a business and technology consulting firm recognized for its human-centered approach to digital transformation. They focus on the “why” of a problem, helping clients uncover the deeper purpose and reasoning behind a project or transformation before jumping into it. Rather than coming up with predetermined processes, Slalom delivers practical, end-to-end solutions in partnership with their clients. The firm offers services in strategy, data, cloud, AI, and organizational change across various industries. These industries include Financial Services, Healthcare, Retail & Consumer Goods, and Technology.

A dark blue banner with white and light blue text. The main headline is 'AI that drives real impact'. Below it is a sub-headline: 'From strategy to implementation, Slalom helps businesses unlock the full potential of AI—driving innovation, efficiency, and measurable results.' The banner features three columns of content. The first column has a white box with the AWS logo and 'PARTNER OF THE YEAR WINNER 2024'. Below it is the text 'Recognized AI leadership' and 'AWS GenAI Consulting Partner of the Year - Global', with a button 'See why we won →'. The second column has a photo of two men looking at a tablet, with the text 'AI, hold the hype' and 'Think AI should be doing more for you by now? So do we.', with a button 'Learn more →'. The third column has a photo of people working at a table, with the text 'AI research & insights' and 'Key findings from Slalom's AI Research Report', with a button 'Read our AI report →'.

source: <https://www.slalom.com/us/en>

Founded in 2001 and headquartered in Seattle, Slalom works with partners like Salesforce, Google Cloud, Microsoft, Alaska Airlines, Allstate, eBay, Hyatt, REI etc. to help them drive growth and create value through actionable results and long-term impact. They focus on Strategy and transformation—guiding organizations through digital transformations, cultural evolution, and innovative business models; technology implementation—building solutions in the cloud, AI and machine learning, data

architecture, and product engineering; and customer experience—creating impactful customer experiences through technology and data-driven insights.

# Introduction

Artificial Intelligence (AI) is transforming the way consumers interact with brands, and retail companies are eager to explore innovative ways to enhance the shopping experience. Working with our project sponsor, Slalom, we are tasked with exploring how agentic shopping influences both consumer behavior and retail strategy. Slalom is particularly interested in understanding the emerging role of agentic shopping and identifying actionable, evidence-based recommendations that will help retailers to remain competitive as AI agents increasingly mediate shopping decisions. Our project aims to explore the potential solutions for AI-powered agentic shopping in the retail industry. By examining current existing solutions and gathering user data, we expect to gain valuable insights to support retailers in developing more accessible and user-friendly agentic shopping experiences for customers. Over the past two weeks, we have connected with sponsor representatives to discuss and align project expectations. Additionally, we have conducted initial background research regarding AI agentic shopping applications in the retail industry. This has led to the framing of our problem statement:

**“How might we create an AI shopping assistant that helps**

**customers seamlessly discover, compare, and purchase products in**

**a user-friendly and accessible way?”**

## Current Situations & History of the Problem

The retail industry is one of the most dynamically evolving and has undergone significant transformation since the rise of e-commerce and the widespread adoption of artificial intelligence.

Liss (2025) states, “In 2024 alone, U.S. store closures amounted to 7,325, the highest since 2020, and it's only getting worse.” Traditional retailers are now on high alert and face intense competition from major e-commerce platforms like Amazon, eBay, AliExpress, etc., which changed the fundamentals of user expectation for personalization and convenience. Consumers did not have the luxury of choosing different shopping methods before e-commerce emerged, and only through comparison are the inefficiencies and pain points of traditional physical retail methods exposed to them. Now customers have a faster, more effortless shopping option; they want their shopping experience to be as simple as possible, and the recommendations they see to be relevant as well.

Even more, the e-commerce giants are bringing AI to the game that elevates user experience to the next level. Technological advancements in AI and machine learning enabled highly personalized shopping experiences, though this raises data privacy concerns that companies must carefully navigate (Singh, 2025). The significant customer shift is pushing traditional retailers to search for ways to keep up with the e-commerce retailers and stay competitive in the current market. However, the physical nature of traditional retailers sets a natural barrier between themselves and the e-commerce retailers. E-commerce retailers can easily collect and analyze user data through web tools, leading them to evolve with data-driven personalization. They would process this data and use it to support the development of a more effective user journey that goes beyond the recommendation itself (Adobe, 2022). On the other hand, traditional retailers face operational and technical difficulties that prevent them from scaling data-driven personalization (Journal, 2023), which defines the modern retail industry. Traditional retailers rely heavily on store traffic and massive amounts of very costly advertising (Locus, n.d.), which fails to perform a 1-on-1 level of personalization that makes customers feel disconnected. Basically, they're passively accepting their customers instead of actively and effectively drawing their attention. Which leaves them in a vulnerable position in today's market.

Our research aims to enhance the modern-day customer shopping experience by elevating traditional retailers' advantages and incorporating agentic AI shopping assistance to provide personalized shopping experiences that feel both relevant and authentic. Although traditional

retailers currently have shortcomings, they also have their unique advantages compared to online shopping or e-commerce retailers, particularly the ability to physically examine products and engage in interpersonal communication (D. Jigyasha & J. Kaur, 2017; Sarkar & Das, 2017). The next wave of retail differentiation will likely be defined by the integration of physical and digital channels with AI. Research shows AI-driven personalization technologies can help traditional retailers create tailored customer experiences and gain a competitive advantage (Maddala, 2025). AI and machine learning are not only enhancing shopping experiences, but they're also enabling physical stores to bring digital intelligence into purely physical shopping journeys. As demonstrated by successful implementations at Nike, Nordstrom, and Best Buy, AI-driven personalization enables "small batch" deals through hyper-personalization, dynamic pricing, and contextual relevance (Adanyin, 2024). Thus, we believe the change is essential and will be effective in improving customer experience and sales.

## Existing Solutions & Related Work

As AI-powered shopping becomes more prevalent, retailers and AI companies alike are developing and releasing agentic solutions. These solutions can be grouped into several major categories: agents created by and used within the context of the retailer, agents created by a retailer that can make purchases outside of the retailer itself, and agents created by non-retailers that can make purchases at many retailers.

# Agentic Commerce Framework

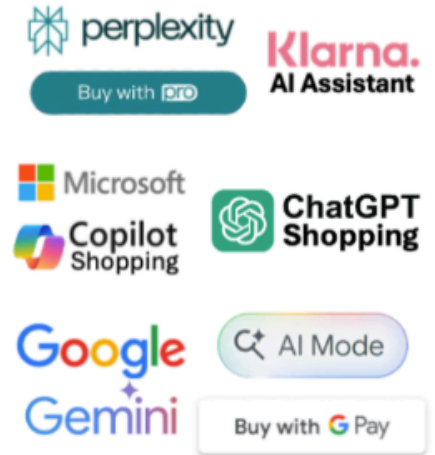
## Agents Inside



## Agents Inside Out



## Agents Outside In



source: <https://www.linkedin.com/pulse/agentic-shopping-new-front-door-commerce-roger-dunn-didgc/>

Some solutions have additionally proposed classifying agents by degree of automation using levels, not dissimilar to the classification of self-driving vehicles.

# Agentic Shopping Levels of Autonomy



source: <https://www.retailgentic.com/p/introducing-the-5-levels-of-agentic>

Building on the increasing AI integration of physical and digital retail channels, recent research highlights the existing AI-powered solutions in customizing retail shopping experiences. AI-driven techniques such as collaborative filtering, dynamic price optimization, and real-time analysis of client preferences enable individualized product recommendations and competitive pricing, leading to increased customer satisfaction and loyalty (Gambhir et al., 2024). Notable examples include Nike and Sephora's integration of AI for context-aware immersive shopping, as well as the use of smart mirrors and geofenced alerts to create an uninterrupted shopping experience (Pandit et al., 2025). In the e-commerce sector, retailers such as Myntra use AI chatbots to personalize product suggestions, including style consultations and visual discovery, to enhance user engagement and brand loyalty (M. Suruthika et al., 2025). Additionally, AI technologies such as predictive analytics and computer vision further optimize customer service, driving operational efficiency and improved customer experiences (Ahamed, 2025).

Researching existing solutions and frameworks in our secondary research will help us better utilize our research findings to isolate a concrete design direction. By understanding the currently available



product offerings, we can better target our research to understanding what options are working best for consumers, and what aren't. Understanding which solutions are most effective or desirable will allow us to inform our stakeholders on what works and what doesn't and guide us on how we design our final product. For example, distinguishing between retailer-owned agents, retailer-created cross-platform agents, and non-retailer multipurpose agents, can help us to map our problem space more clearly. Our research focuses on understanding where consumers derive the most trust and value when using agentic shopping tools. This matters because the success of a design will depend not just on technical capability, but also on consumer perceptions of trust, convenience, and autonomy. Through our study, we will analyze and isolate which level of agentic intervention to pursue in our final product.

Additionally, while current research shows strong adoption of AI-powered recommendation and advisory systems (lower automation levels), we are particularly interested in exploring higher-level purchase agents that can move from suggestions toward partial or full transaction execution. This helps us position our design exploration within the transition from advisory to autonomous shopping assistance.

## **Target Users, Stakeholders & Market Significance**

Agentic AI shopping assistance covers diverse user groups facing complex purchasing decisions, particularly in subjective domains like gifting and event-based shopping (Dammu et al., 2025). Customers often struggle with subjective product needs that involve personal perception and taste, where traditional catalog data proves insufficient (Dammu et al., 2025).

We have identified a number of stakeholders for this project. Exploring their needs, behaviors, perceptions and experiences will guide us to design agentic shopping tools that will be valuable for all stakeholders in the retail ecosystem.

### **Primary Stakeholders**

- **Customers (Shoppers)**

The customers are the ones who will ultimately discover, compare, and purchase items with the use of the AI agent. They have a primary interest in our research as they will be using these systems directly and integrating them into their everyday shopping habits. They will need to be able to trust and adopt these AI shopping systems for them to be successful. Additionally, customers are the ones who generate the data that trains and improves these systems and are directly affected by issues such as data privacy and transparency.

- **Retailers**

Retailers, both big and small, in-store or online, will be directly impacted by the customers' use of AI agents. Their products are what the agent will recommend, and sales will depend on both how the agents aid and affect the shopping process and how consumers choose to engage with them. The visibility and discoverability of the retailer's products will be influenced by the agent's algorithms and direct customer contact could diminish with the use of the agent becoming a buffer. Additionally, the adoption of agentic shopping may shift supply chain, pricing, and marketing.

## Other Stakeholders

- **Brands & Manufacturers**

Like retailers, brands and manufacturers will be directly affected by which products AI agents decide to recommend. Again, the visibility and discoverability of their products are their main concerns in this emergent era of agentic shopping. Unlike retailers, who just want the agent to recommend their store, brands will want their specific product to stand out. Mistakes or misrepresentations made by the AI agent will reflect more so on the brand or manufacture than on the retailers. This will make the accuracy of the AI agent especially critical for them.

- **Payment Providers & Financial Institutions**

Payment providers and financial institutions are uniquely positioned in terms of their relationship with shopping agents. They are directly affected by how transactions are initiated,

authorized and processed in these systems. The use of agentic shopping methods may also influence the user's purchasing behavior, including payment method preference. They are also concerned with the trust and liability of the AI agent, as financial situations are very sensitive.

- **Legal & Compliance Teams**

Legal and compliance teams are tasked with ensuring that the AI agents are in line with consumer privacy, protection, and anti-bias regulations. They are particularly concerned with how these systems collect, store, and use data, as well as the level of transparency provided to both regulators and customers. Additionally, they must deal with ever-changing standards around AI regulation.

## **TARGET USER**

From these stakeholders, we have identified customers as our primary target user group. Our research aims to provide the consumers with a more immersive and less intimidating experience with agentic AI shopping assistance in their daily lives. We will focus on individuals who already use AI users for shopping, as this is the population with the evolving shopping habits and behaviors.

Behaviors of interest include:

- Frequency and extent of reliance on AI for product discovery and purchasing
- The stages of the shopping process where AI is used the most or the least
- Levels of trust in AI-generated outputs
- Awareness of when and how AI is influencing shopping decisions

Our research aims to provide the consumers with a more immersive and less intimidating approach with agentic AI shopping assistance in their daily lives by extracting data-driven insights. On the other hand, it intends to help retailers remain competitive in today's market by identifying agentic AI solutions that work best for them.

## Context of Use

Agentic AI shopping assistance can be helpful across multiple shopping environments. We will be focusing on the context of an omni-channel shopping experience, where customers can move between physical and online channels, interacting with the same retailer. Focusing on a single retailer allows us to design holistically, ensuring that we cover both online and offline experiences, making our recommendations and designs consistent and integrated.

Customers may engage in different patterns of shopping:

- Fully online shopping: browsing, selecting, and purchasing products through the retailer's website or mobile app
- Fully offline shopping: browsing, selecting, and purchasing products during a visit to the offline store.
- Online search, offline purchase: Researching and comparing products online, then completing the purchase in-store
- Offline search, online purchase: Researching and comparing products online, then placing the order later through the retailer's website or app

## Significance of the Problem

The retail industry is rapidly transforming, driven by the rise of e-commerce and the widespread adoption of artificial intelligence. Given the growing comfort users have with the utilization of agentic shopping, the ways in which addressing this approach can be beneficial, innovative, and valuable become clear. One case study in the fashion retail sector documented a 28% increase in conversation rates, a 32% higher order value, a 42% reduction in cart abandonment, and a 2.5-fold increase in email engagement following the deployment of an AI recommendation engine. The retail chain additionally experienced more efficient inventory management, increased customer loyalty, and an enhanced ability to identify and capitalize on emerging fashion trends (Your AI Business Strategy, n.d.). On a broader scale, Adobe reported that generative AI users that land on a retail

website browse 12% more pages per visit when coming from a generative AI source. Additionally, online shoppers expressed that using AI-powered chat interfaces benefits them by shortening the time it takes for them to receive personalized information. (Pandya, 2025)

In terms of customer experience, it can provide personalized recommendations, predict consumer needs, and help customers make informed decisions more quickly and easily with less cognitive load (Heartland Business Systems, 2023). Agentic shopping also supports users who are less technologically savvy, with AI assistants guiding users through product discovery and reducing the technical effort required to follow all the steps and make a purchase (Lopes et al., 2024). For retailers, the study of agentic shopping systems can help them stay competitive in the market. Retailers who adopt agentic shopping tools can differentiate themselves, keeping up with the evolving consumer demands and desires. It also aids in operational efficiency, with AI assisting retailers to optimize backend processes such as inventory management and customer support (Pavion, n.d.).

There is also a broader significance in exploring this problem when it comes to industry transformation. That is, how does agentic shopping affect the wider retail ecosystem, such as what happened with the rise of influencers? Additionally, this project could shed light on challenges related to data privacy, algorithmic bias, and consumer trust.

# Potential Goals and Opportunities

## Project Goals

**Problem Statement:** “How might we create an AI shopping assistant that helps customers seamlessly discover, compare, and purchase products in a user-friendly and accessible way?”

Our focus is to leverage the efficiency of generative AI tools to create better shopping experiences. We will design a personalized, transparent and trustworthy AI shopping assistant interface that can be efficiently accessed and utilized by agentic shoppers and retailers. We also see the opportunities for benefiting additional stakeholders such as brands and manufacturers, payment providers, and legal and compliance teams.

Our work will address the following goals:

- **Understand** how **current AI** users currently shop using AI-assisted shopping and identify the level of agentification (which stage of the journey such as discovery, comparison, purchase do they engage with AI).
- **Identify** both **positive** aspects (for example, efficiency, personalization) and **negative** experiences (for example, lack of trust, poor recommendations)
- **Identify unmet needs** across the shopping journey (discovery, evaluation, purchase) where AI could offer meaningful support.
- **Analyze** customer **perceptions** of AI influence in making decisions, including their level of comfort with AI-driven purchases and the degree of control they expect to retain.
- **Triangulate data** obtained from primary and secondary research and ideate on possible solutions.
- **Define key tasks** our AI shopping assistant should support for customers (for example, personalized product discovery, comparisons, automated purchase recommendations)
- **Design** an **interactive prototype** of an AI shopping assistant for current Agentic shopping users that demonstrates these capabilities.
- **Evaluate** it with users to identify **usability issues** and areas for improvement.

## Research Questions

**Research Goal:** Understanding Customer Behavior and Experience with AI-assisted shopping

- How are customers currently using AI to shop during different stages of the shopping journey? (discovery, comparison, purchase)?
- What are consumers' experiences of AI-assisted shopping?
  - What aspects of AI-assisted shopping do they enjoy ?
  - What challenges/concerns do customers face when using AI to shop (for example, data privacy, transparency of recommendations, limited personalization) ?
- How do customers perceive and feel about AI influencing or make purchase decisions (for example, trust, willingness to delegate purchases, autonomy)?
- What are their unmet needs from current AI shopping tools?

# Expected Methods

Our project will be divided into two main phases: the research phase, where we seek to best understand our users, and the design phase, where we develop a solution and validate its efficacy.

## Phase 1: Understanding Users and Existing Solutions

### Secondary Research

#### *Literature Review*

We will review existing literature on agentic shopping, such as academic papers, industry reports, and consumer behavior study reports, to better understand the landscape of agentic shopping, existing research, and potential patterns for expansion in this area.

### *Comparative Analysis*

We will also look at existing agentic shopping solutions and their role in the market through a comparative analysis. We will evaluate strengths, weaknesses, and differentiators across

different solutions. This will allow us to identify weak areas that a new approach can address.

## Recruitment

We will focus on two primary segments to capture perspectives across the ecosystem of agentic shopping:

### Customers

- **AI Users:** Individuals who use AI to shop (ranging from those who use it just for recommendations/browsing to those who use it for the entire end-to-end purchase journey). This group will help us understand how shoppers integrate AI into decision-making, what their experiences are, and what gaps remain.
- **Non-AI Users:** Individuals who rely on traditional methods and may be skeptical about using AI to shop. This group will help us identify the concerns or barriers to adoption and opportunities for designing more desirable, trustworthy solutions.

### Retailers

- **Retail Employees:** Individuals who are familiar with the operations and observe and interact with consumers daily. This group will help us understand how agentic shopping affects sales and customer service as well as the concerns retailers have regarding AI.
- **Retail Stakeholders:** Individuals who oversee decision-making and business strategies in retail corporations. Their insights can highlight the strategic considerations that drive retail success, providing valuable industry perspectives to inform and inspire our research.

Participants will be recruited through a combination of purposive sampling (to ensure representation across AI familiarity, demographics, and retail contexts) and snowball sampling (to extend reach into networks of users who are difficult to recruit). We will make use of outreach via social media channels like Instagram, LinkedIn, Reddit, retail outlets, and online recruitment channels.



## **Primary Research**

### **Surveys**

We will distribute a survey to shoppers at our chosen retail service. Through this survey, we will understand how often shoppers use AI in the purchasing process and their attitudes on different levels of agentic shopping. Our questions will focus on the shopping preferences and habits of these shoppers, how much they trust automation and AI, which pain points they experience in their current retail journey, and how open they are to agentic shopping tools. These surveys will provide a baseline understanding of customer behaviors across diverse demographics. The survey will also help inform our questions for the next data collection stage, semi-structured interviews.

### **Semi-Structured Interviews**

We will conduct semi-structured interviews with a targeted group of shoppers, which will allow us to explore more qualitative aspects of the shopping experience. We seek to understand what shoppers' motivations are, what their typical decision-making looks like, and what challenges and frustrations they may face. We will also conduct semi-structured interviews with retail employees to understand how AI affects their workload, understand their operational needs, and understand the impact of agentic shopping on their sales. The semi-structured format gives us an opportunity to capture more unique and in-depth insights that the survey might miss.

### **Contextual Inquiries**

We will conduct contextual inquiries of shoppers as they shop to understand their actions and feelings at each step of the process. During this process, we will follow the customers around as they are shopping, whether online or in person. We will ask them questions about their actions, decisions, and opinions. In doing so, we aim to understand why they are doing what they do and how their needs and desires are reflected in their actions.

## **Data Analysis and Synthesis**

### **Task Analysis**

We will begin analyzing and synthesizing our data by performing task analyses based on the data from contextual inquiries. Each task will be broken down into granular sub-tasks, making notes of inputs, outputs, and decisions. This will allow us to understand existing obstacles and inefficiencies and help us develop a foundation for exploring improved workflows.

### **Affinity Diagramming**

We will triangulate across methods such as surveys, interviews, and task analysis to validate findings across different research methods. We will undergo an affinity diagramming process to distill our raw data into actionable design insights. We will begin by writing the data we gathered onto physical or virtual notes. Then, we will come together to organize our notes by category to form more generalized thoughts supported by our research. These generalized thoughts will be further organized and generalized into larger themes. Affinity diagramming will allow us to derive high-level insights that will help guide our design process.

### **User Personas**

User personas will help us contextualize and personify the shoppers' needs and desires using evidence-based fictional personas. These personas will be used to represent different aspects of our research subjects, including demographic details such as age and gender, as well as their respective needs, wants, pain points, and use contexts. These user personas will give us a reference point to ground our ideation and design process.

### **Journey Mapping**

Using the user personas we've derived, we will undergo a process of journey mapping to more clearly represent their process and their thoughts at each step. Doing so provides us with an end-to-end interpretation of their current journey, highlighting objectives and obstacles, while

also giving us space to explore potential solutions and design directions. Journey mapping will also allow us to better empathize with the needs and emotions of the shoppers.

These methods will also allow us to develop actionable insights and solidify our design direction and criteria. We will present the personas and journey maps to our sponsors to receive feedback and refine our approach before moving to the design phase.

## **Phase 2: Prototyping and Evaluation**

### **Storyboarding**

To begin developing our insights into a larger flow, we will use storyboarding to visualize potential solutions in the context of our user personas. We will map out tasks and how shoppers might approach those solutions in different ways. This provides a realistic context for the exploratory phase of our design.

### **User Flow**

Building from the basis provided by our storyboarding, we will create concrete user flows guided by our gathered insights. User flows allow us to outline the logical steps shoppers will take while interacting with our solution, as well as understand how our solution will fit into their existing routines and needs.

### **Low-Fidelity and Mid-Fidelity Wireframes**

Guided by our research insights, we will develop our user flow into low-fidelity design concepts using sketches, low-fidelity wireframes, and other techniques as needed. These "quick and dirty" solutions will allow us to quickly explore different ideas and rapidly test and iterate through them. Along the way, more concrete ideas will be refined into medium-fidelity wireframes using tools like Figma. At this point, we will focus on core interactions between the shopper, agent, and retailer. Iteration will be a central part of this process, allowing us to quickly

refine things like the usability, clarity, and desirability of our solution through small-scale user testing. Feedback from these tests will be used to guide the refinements in our solution.

### **High-Fidelity Prototype and Usability Testing**

We will lastly develop our wireframes into a polished, high-fidelity prototype in Figma. We will rigorously test the prototype with real users to assess usability, effectiveness, and satisfaction. In this phase of testing, we aim to collect both quantitative data in the form of objective metrics and qualitative data in the form of perceived usefulness, satisfaction, and trust. These evaluations will help us understand how our solution fits in with the user's needs and perceptions.

### **Method of Receiving Feedback**

To receive feedback on our work, we will conduct weekly check-in meetings with the sponsors. In these meetings, we will update them with our progress, our thinking behind the processes, and the outcomes. This will help us incorporate any changes early in the process and ensure we are aligned with the business goals.

# **Expected Resources**

Throughout the two main phases of our project, our team will require certain resources for communication, data collection, research, and ideation.

### **Communication and Documentation Resources**

Our team will mainly utilize [Slack](#) and [iMessage](#) for communication purposes. These resources will be used for updates, conducting short check-ins to ensure work and progress throughout the week, and scheduling needed meetings. They will allow us quick access to each other and help us to keep up-to-date with any changes that might occur along the way.

Our check-ins with our industry partners will be conducted virtually via [Google Meets](#). Our team aims to meet in person (this schedule is outlined below); however, when necessary, Google Meets will also be utilized to conduct team meetings. This allows for more flexibility in meeting times if perhaps an extra meeting is needed.

[Microsoft OneDrive](#) will be used to store team documents. This includes meeting notes, discovered papers and existing resource documents, and working assignment drafts. Resources here will be organized in such a way that it is simple to find what is needed. Using OneDrive will allow for the team to have access to the same information regarding the project and keep us organized.

Finally, the team will also utilize Microsoft OneDrive for team planning. Items such as our schedule and to-do list will be kept here in order to have a “one-stop-shop” for everyone to understand their weekly tasks. This will ensure that the team has access to accurate information about weekly tasks and accountability as to what they are expected to achieve during the week.

Our Slalom partners, Julie Foster and Christian Wayne, have stated that there are not many resources that Slalom itself can provide our team, such as data or existing solutions. Thus, our team has established multiple means of collecting what we need.

During Phase 1 of this project (Research), our team will be conducting secondary research to understand the problem space, explore existing solutions, and best grasp our users’ needs and desires through primary research. In order to do so, our team will require the following resources.

## **Hardware**

To test and observe various agentic shopping methods, our team will require the use of either personal computers or mobile devices based on the nature and method of user shopping. For

instance, an in-person shopping experience would likely require a mobile device, while online shopping varies from user to user and is based on context.

## Software

Our team will also make use of the available existing agentic shopping tools both as an exploration device for ourselves and as a part of our observational study. This includes, but is not limited to, [Amazon's Buy For Me](#), [Perplexity](#), [Microsoft](#), and [OpenAI](#).

## People

Since the main goal of our project is to understand how agentic shopping shapes consumer behavior and retail strategy, people will likely be our main resource. We will be recruiting and interviewing both everyday users and retailers to better understand the problem space from different points of view. Everyday users will be our main target as we aim to understand their knowledge and perception. However, we want to talk with retailers in hopes of receiving any insights they may have in regard to patterns, use cases, trends, etc.

## Data

In addition to the data collected from individuals and interviews, our team will utilize publicly available data on agentic shopping as well as AI usage in general. This will help us better grasp current patterns and understand how big this phenomenon is. We will also be internet and social media mining, utilizing sites such as [Reddit](#) to examine public opinion on the matter.

Phase 2 of this project (Design) will focus on prototyping and evaluation. Most of the required resources are the same as above—we will utilize the same resources to evaluate the design solutions we will develop. However, we will additionally need resources to create prototypes and wireframes. For this, we will use Figma, allowing us to easily iterate on our designs and conduct effective usability testing using their wireframing feature.

# Schedule

## Weekly

[Team Meetings](#) → Tuesdays from 2:00-4:00 pm and Fridays from 2:30-3:30 pm in the HCI Lounge. These are our regular scheduled meetings. Additional meetings will be added throughout the week if necessary.

[Sponsor Meetings](#) → Julie and Christian have expressed that their schedules are not consistent from week to week and thus we will be scheduling these on a weekly basis.

[TA Check-Ins](#) → During our Friday meetings, we will send Elaine a weekly update.

## Deadlines

[Monday, September 8, 2025](#) → R1: Proposal

[Friday, October 17, 2025](#) → R2: User Needs and Design Implications

[Friday, November 7, 2025](#) → R3: Design Ideas and Feedback

[Tuesday, December 9, 2025](#) → R4: Presentation

## Schedule

[September: Phase 1 - Understanding Users and Existing Solutions](#)

- **Week of 09/08**
  - Internet and social media mining
  - Reach out to possible interviewees
  - Continue to research the problem space through papers and articles

- **Goal:** have a list of annotated sources and a good understanding of research and online perception
- **Week of 09/15**
  - Contextual inquiry & affinity mapping
  - Distribute survey
  - Construct interview questions
  - **Goal:** collect initial data to inform more targeted questioning
- **Week of 09/22**
  - Semi-Structured Interviews
  - Begin data analysis => thematic coding, affinity mapping, journey mapping, user personas
  - **Goal:** have a good understanding of current use cases and what users are doing
- **Week of 09/29**
  - Complete data analysis
  - Assess whether follow ups are needed or if more questions have arisen and how to get the answers to those questions.
  - **Goal:** wrap initial research and clarify missing gaps
- **2<sup>nd</sup> year panel:** between 9/22 and 10/6

#### October: End Phase 1 & Start Phase 2

- **Week of 10/06 (FALL BREAK)**
  - Continue to fill in missing gaps
  - Prepare materials for R2
  - **Goal:** be well prepared to start work on R2 the next week
- **Week of 10/13 (R2 DUE 10/17)**
  - Work on putting together R2
  - **Goal:** write and submit R2 by 10/16
- **Week of 10/20**
  - Come up with design solutions



- Complete a few low fidelity prototypes and wireframe to iterate in the next week
- Get feedback on current ideas
- **Goal:** have a specific design idea to move forward with
- **Week of 10/27**
  - Work on mid-fidelity prototypes and wireframes
  - Get feedback on current ideas
  - **Goal:** be able to start user testing at the beginning of the next week
- **2<sup>nd</sup> year panel:** between 10/17 and 11/7

## November: Phase 2

- **Week of 11/3**
  - Create high-fidelity prototype and wireframe to do usability testing
  - Start user usability testing recruitment
  - **Goal:** be able to do usability test as the beginning of the next week
- **Week of 11/10**
  - Complete usability testing for high-fidelity prototype and wireframe
  - **Goal:** complete a majority of the needed usability test and understand if any immediate gaps need to be filled
- **Week of 11/17**
  - Complete usability testing for high-fidelity prototype and wireframe
  - Analysis of usability testing results
  - Begin putting together white paper for Slalom
- **Week of 11/24 (THANKSGIVING)**
  - Break

## December: Wrap Up & Presentation

- **Week of 12/1**
  - Prepare for presentation

- Complete white paper
- **Goal:** everything wrapped up and ready to present by the end of this week, turn in R4 deliverables
- **Week of 12/8**
  - Presentation!
  - On 12/8 @ 8:00 am
  - **Goal:** have completed a project we are happy with and have great start to the winter break!

# Lessons Learned

Working as a team taught us the importance of dividing responsibilities clearly while still maintaining collaboration. Our team did a great job of finishing each individual task and coming together to make refinements based on our opinions as a team.

After conducting secondary research, we had a better idea of our problem space and the existing literature, which helped frame our project direction. We were able to identify our target users and the methods we plan to employ. As a team, we were communicative and open to listening to diverse viewpoints, even if they were contrasting. We ensured every voice was heard.

Our first major challenge presented itself in the broad and unstructured prompt provided by our sponsor. It took us a lot of time to figure out what exactly they were expecting, which led to us taking more time to create a plan of action. While it was difficult, real-world projects often lack the clarity and structure one might expect from an academic setting; therefore, we take this as a valuable experience for taking on future projects that may even have less defined scopes. Additionally, this constraint forced us to practice taking initiative and ownership of the project and to be more independent leaders and contributors. It also helped to remember that there is

no one path for any project to take and that our progress won't always be linear. This made decision-making less difficult, as it leaves us room for recourse and readjustment as time goes on.

Another challenging aspect of forming this research proposal was ensuring everything aligns perfectly with each other and the topics are consistent throughout. This required careful communication and frequent revision to avoid drifting away from our theme.

In the future, we will aim to be more proactive with our work to prevent last-minute pressures. We also plan to come up with clearer decision-making strategies to help us choose a direction more quickly and efficiently. Additionally, we will hold team meetings more frequently so we are aligned on the tasks and can provide more frequent feedback to each other.

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