



Simplifying the user experience of an e-commerce website

Team
MATOKIJO

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Project Scope

- Form a team with 3 other students.
- Imagine that Kmart has asked the team to help redesign their website.
- Focusing on information architecture and GUI concepts, perform the following phases:
 1. Analyze the current state of Kmart.com.
 2. Perform a card sort of product categories.
 3. Restructure the site.
 4. Design the revised site mockups/wireframes.

Phase 1: Current State of Kmart.com

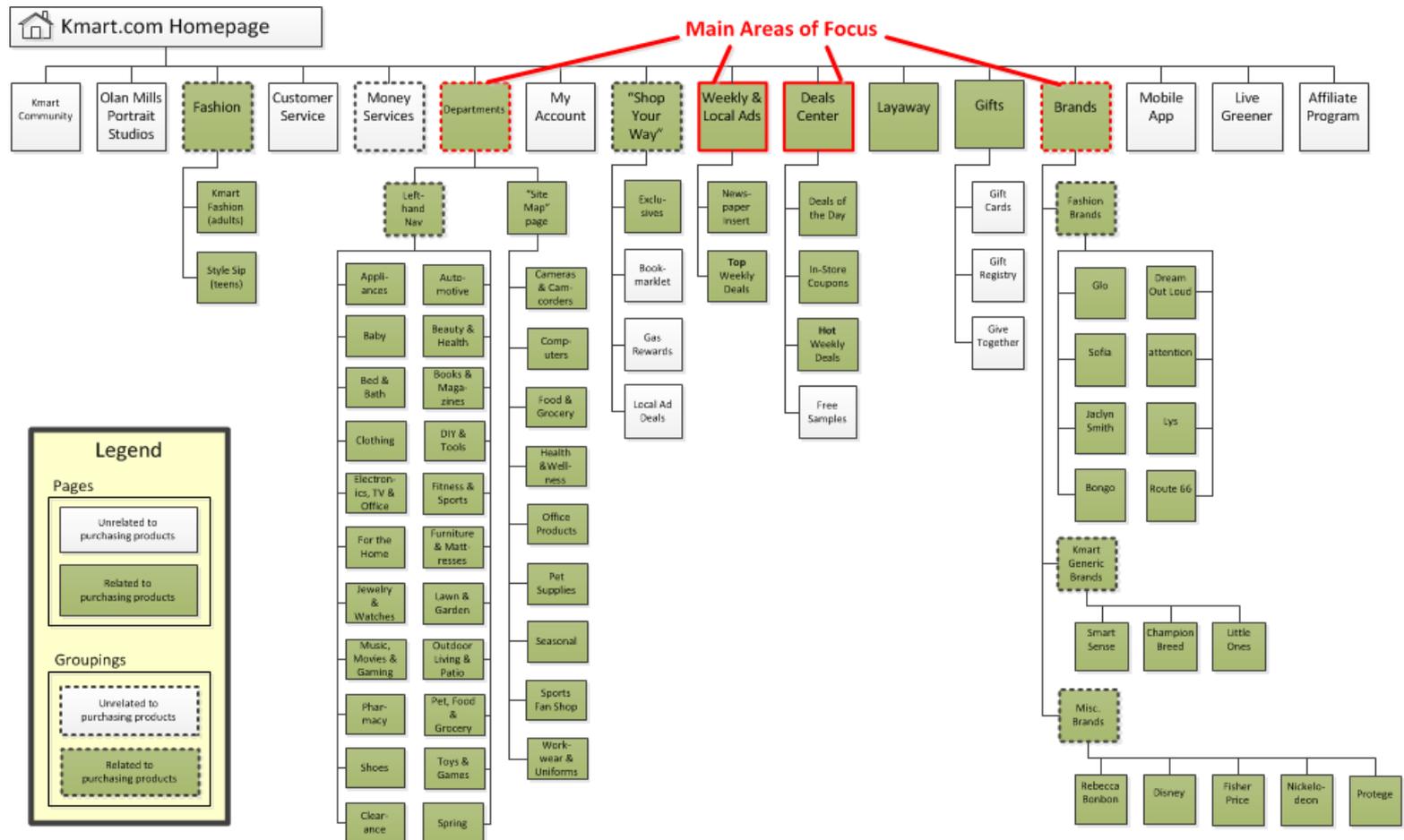
Define the scope of the project.

Kmart.com is a rather large site with multiple facets. Since the main (and original) intent of Kmart is to sell products, this project focused on analyzing and restructuring mainly the e-commerce areas of the site.



Phase 1: Current State of Kmart.com

Plot out the current site map of Kmart.com.



Phase 1: Current State of Kmart.com

Identify pertinent content types used.

The image shows a screenshot of the Kmart.com website with several key elements annotated with callouts:

- Product Search:** A search bar at the top left with the placeholder text "Find something great..." and a "Search" button.
- Account Navigation:** A navigation area at the top right containing links for "sign in", "register", "60290", and a "Cart" icon.
- Department Breakdown:** A vertical sidebar on the left listing various departments such as "Appliances", "Automotive", "Baby", "Beauty & Health", "Bed & Bath", "Books & Magazines", "Clothing", "DIY & Tools", "Electronics, TVs & Office", "Fitness & Sports", "For the Home", "Furniture & Mattresses", "Jewelry & Watches", "Lawn & Garden", "Music, Movies & Gaming", "Outdoor Living & Patio", and "Pharmacy".
- Banner Image:** A large promotional banner on the right side featuring a woman in a floral top, a rice cooker, and the text "MOM" and "up to 30% OFF small kitchen appliances".

Other visible website elements include the Kmart logo, a navigation menu with links like "Store Locator", "Customer Service", and "Money Services", and a "SHOP MAX" logo.

Phase 1: Current State of Kmart.com

Identify pertinent design principles applied.

The image shows a screenshot of the Kmart.com homepage with several design principles annotated with callouts:

- Five Hat Racks:** Points to the top navigation bar containing various service links like SHOP MAX, SEGFS, myorder, etc.
- Iconic representation:** Points to the search bar and the cart icon.
- Chunking:** Points to the 'SHOP APPLIANCES' section, which is organized into sub-sections like CUSTOMER PICKS, KITCHEN, HOME, and LAUNDRY & GARMENT CARE.
- Attractiveness Bias:** Points to a promotional banner for 'MOM' featuring a woman and a rice cooker, with a 'up to 30% OFF' offer.

The screenshot also shows a left-hand navigation menu with categories like Mother's Day / Spring, Appliances, Automotive, Baby, Beauty & Health, Bed & Bath, Books & Magazines, Clothing, DIY & Tools, Electronics, TVs & Office, Fitness & Sports, For the Home, Furniture & Mattresses, Jewelry & Watches, Lawn & Garden, Music, Movies & Gaming, Outdoor Living & Patio, and Pharmacy.

Phase 1: Current State of Kmart.com

Identify the main organizational problems.

The screenshot shows the Kmart.com website interface. At the top, there is a navigation bar with various brand logos (SHOP, segis, mycolor, FRIGIDAIRE, Kenmore, PartsDirect, LANDFEND, Sears, Sears Outlet, Sell on Sears, See all). Below this is the Kmart logo and a search bar with the text "Find something great...". To the right of the search bar are links for "Stores Locator", "Customer Service", "Money Services", and "Gift Cards". Further right are links for "sign in", "register", "60290", and a "Cart 1" button. A "Feedback" link is also present.

On the left side, there is a "Departments" dropdown menu. The "Appliances" department is selected, and a list of sub-departments is shown, including Automotive, Baby, Beauty & Health, Bed & Bath, Books & Magazines, Clothing, DIY & Tools, Electronics, TVs & Office, Fitness & Sports, For the Home, Furniture & Mattresses, Jewelry & Watches, Lawn & Garden, Music, Movies & Gaming, Outdoor Living & Patio, and Pharmacy.

The main content area is titled "SHOP APPLIANCES" and features a "CUSTOMER PICKS" section with sub-sections for "HOME" and "ADDITIONAL PRODUCTS". The "HOME" section lists items like Air Conditioners, Fans, Heating, Thermostats & Accessories, Air Purifiers & Dehumidifiers, Humidifiers, Vacuums & Floor Care, Water Heaters, Water Coolers & Filter Systems, and Water Softeners. The "ADDITIONAL PRODUCTS" section lists items like Appliance Accessories & Parts, As Seen on TV, Replacement Parts, Water Filters, Appliance Repair/Maintenance, Heating & A/C Repair, Furnace Maintenance, A/C Maintenance, and Kitchen Remodeling.

Below the product listings, there is a promotional banner for "MOM" featuring a woman and a slow cooker. The banner includes the text "up to 30% OFF small kitchen appliances" and a "shop all gifts" button.

Annotations on the screenshot highlight organizational problems:

- Dominant navigation leads away from Kmart.com site**: Points to the top navigation bar with various brand logos.
- Large number of departments, compared to competitors**: Points to the "Departments" dropdown menu.
- Further product breakdowns are overly complex**: Points to the "CUSTOMER PICKS" section, which lists numerous sub-categories and products.

At the bottom left, the URL "www.kmart.com/appliances/jv-200027adCell=WH" is visible.

Phase 2: Card Sort of Products

Design a **card sort** with participants.

A **card sort** is a procedure in which a group of users are guided to generate a folksonomy based on a list of object descriptors or “cards”. This type of experiment can be conducted in person or via the web and will serve as a valuable input to a determining a final redesigned information architecture. In our case, we were interested in simplifying the numerous product categories on Kmart.com

The team's card sort procedure was structured as follows:

- Use an open source tool called **ConceptCodify** to be able to conduct the card sort online and automatically provide statistics.
- Use an “open” card sort approach, where users invent their own categories (departments) based on the existing product types in the card deck.

Phase 2: Card Sort of Products

Create the cards (Kmart product categories).

Washers

Dryers

Microwaves

Air Conditioners

Vacuums

Auto Batteries

Tires

Roof Racks

Vehicle Covers

Seat Covers

Cribs

Toddler Furniture

Nursery Décor

Swings & Bouncers

Car Seats

Electric Shavers

Bath & Body

Hair Care

Family Planning

Skin Care

Juniors

Petites

Girls

Women's

Handbags

Men's

Young Men's

Boy's

Hosiery

Televisions

Cameras

Computers

Stereos

Headphones

Gaming Systems

Bikes

Fishing

Yoga & Pilates

Baseball

Soccer

Cookware

Silverware

Closet Storage

Living Room

Mattresses

Home Security

Lawnmowers

Lighting

Tools

Storage

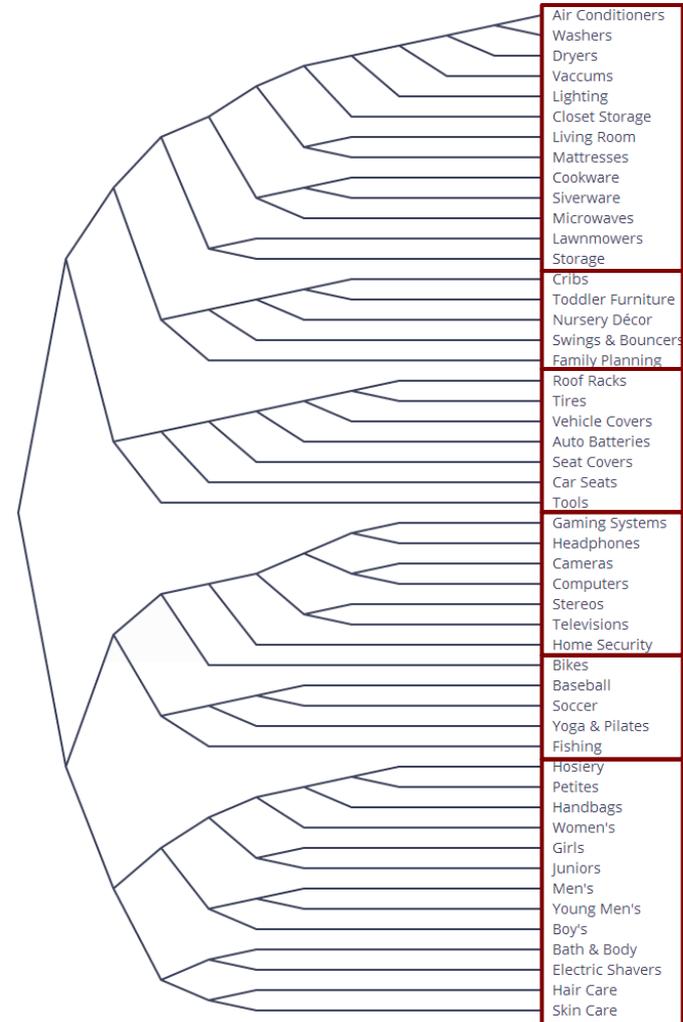
Phase 2: Card Sort of Products

Analyze the results.

After the card sort, ConceptCodify produced a **dendrogram** of the findings. This chart clusters together similar departments based on all of the results of the study.

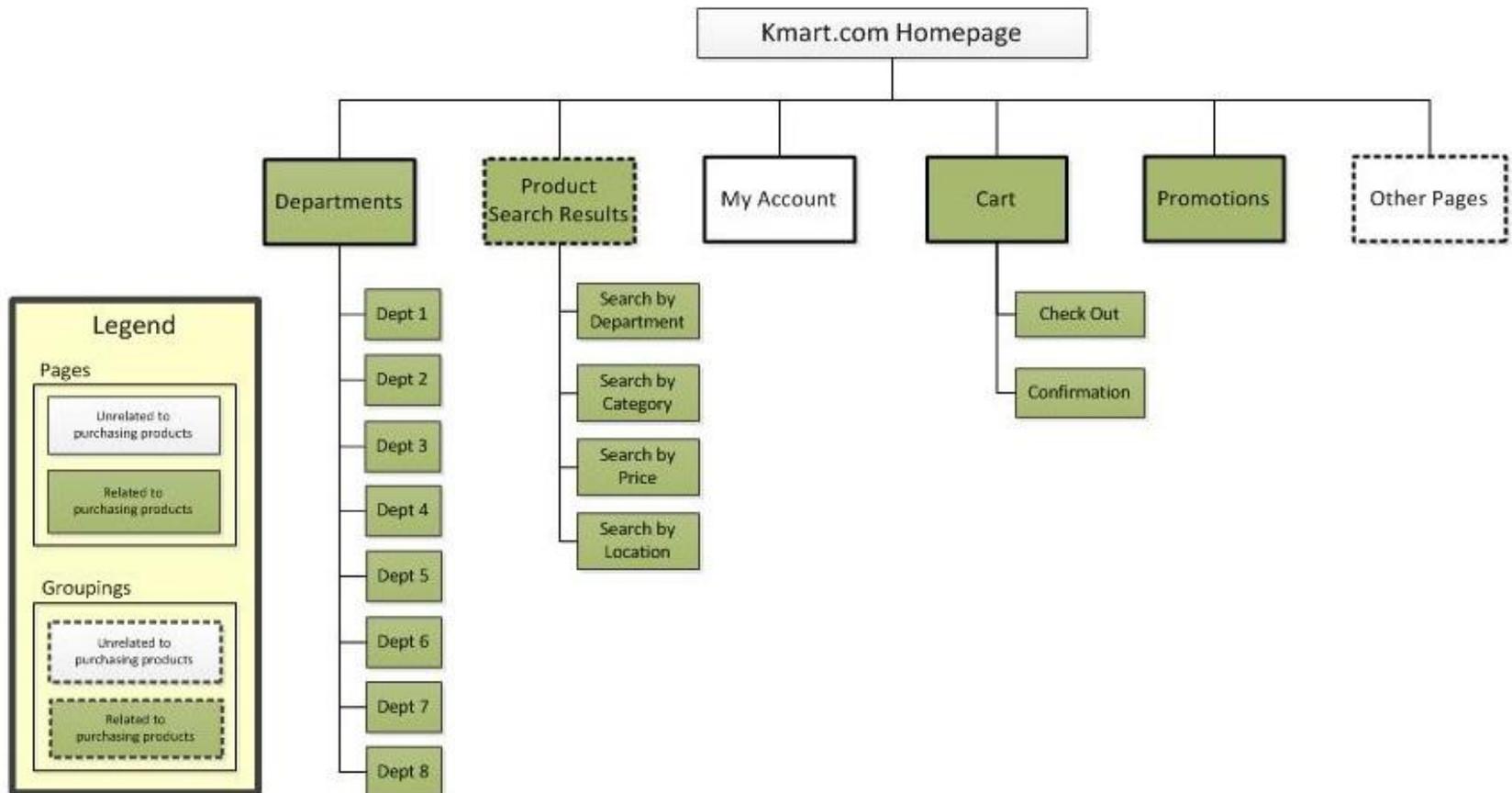
Based on the dendrogram, we found that Kmart's list of 15+ Departments could be simplified into broader categories, such as:

- Housewares & Appliances
- Baby Products
- Hardware & Automotive
- Electronics
- Sporting Goods
- Clothing & Accessories



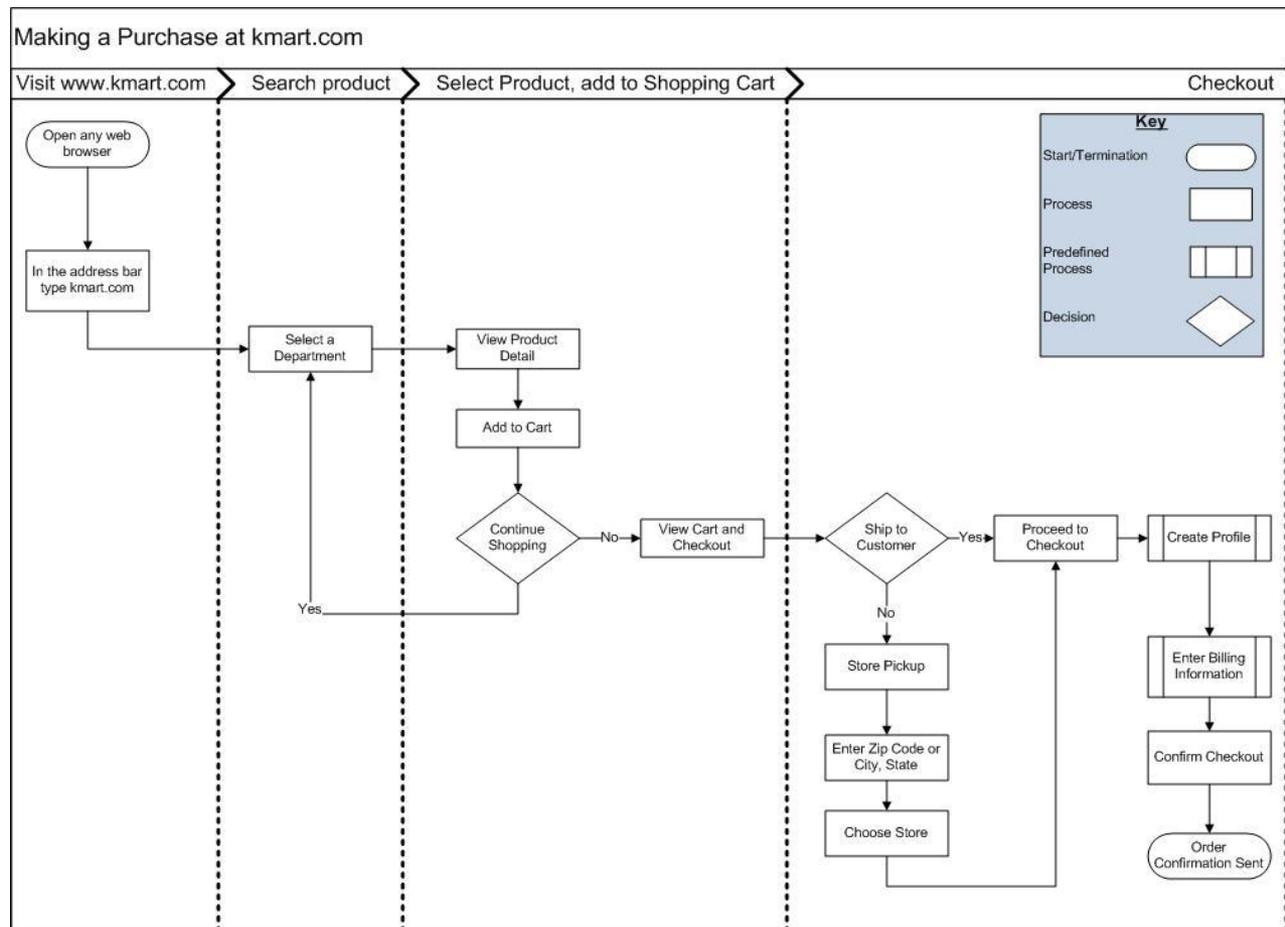
Phase 3: Restructure the Site

Lay out the new, simplified site map.



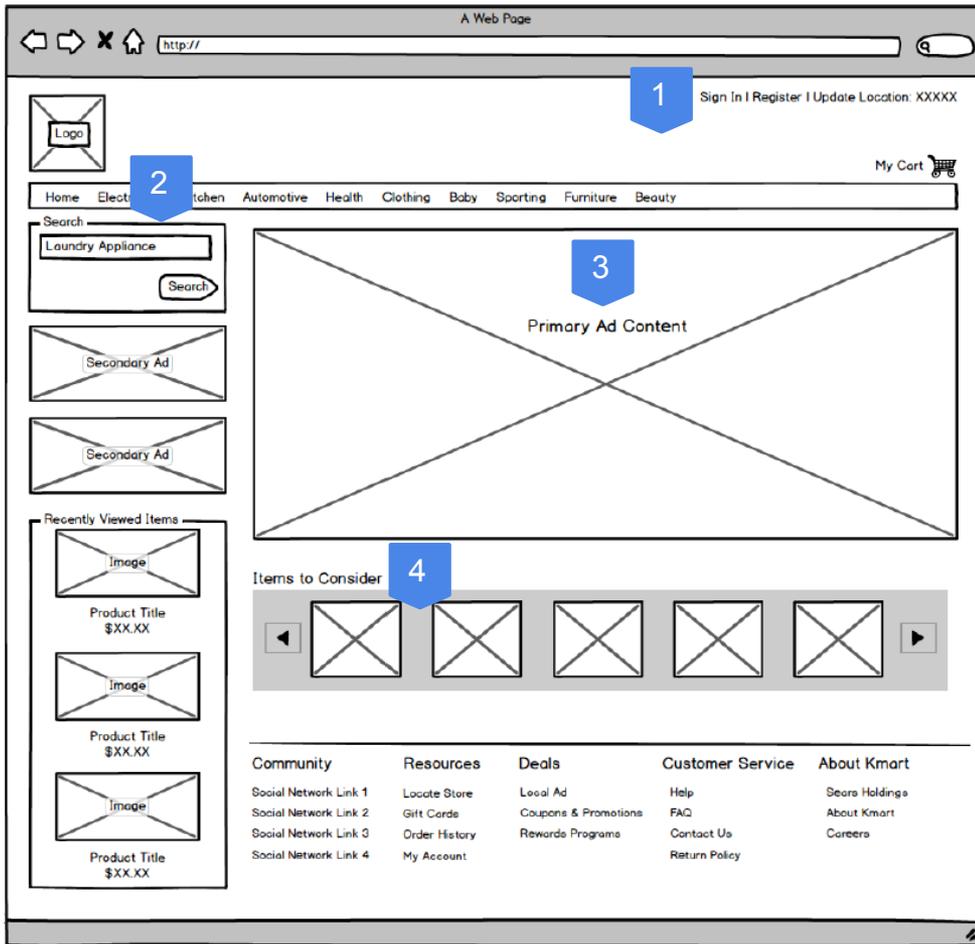
Phase 3: Restructure the Site

Map out the process flow of a checkout.



Phase 4: Design the Revised Site

Home Page

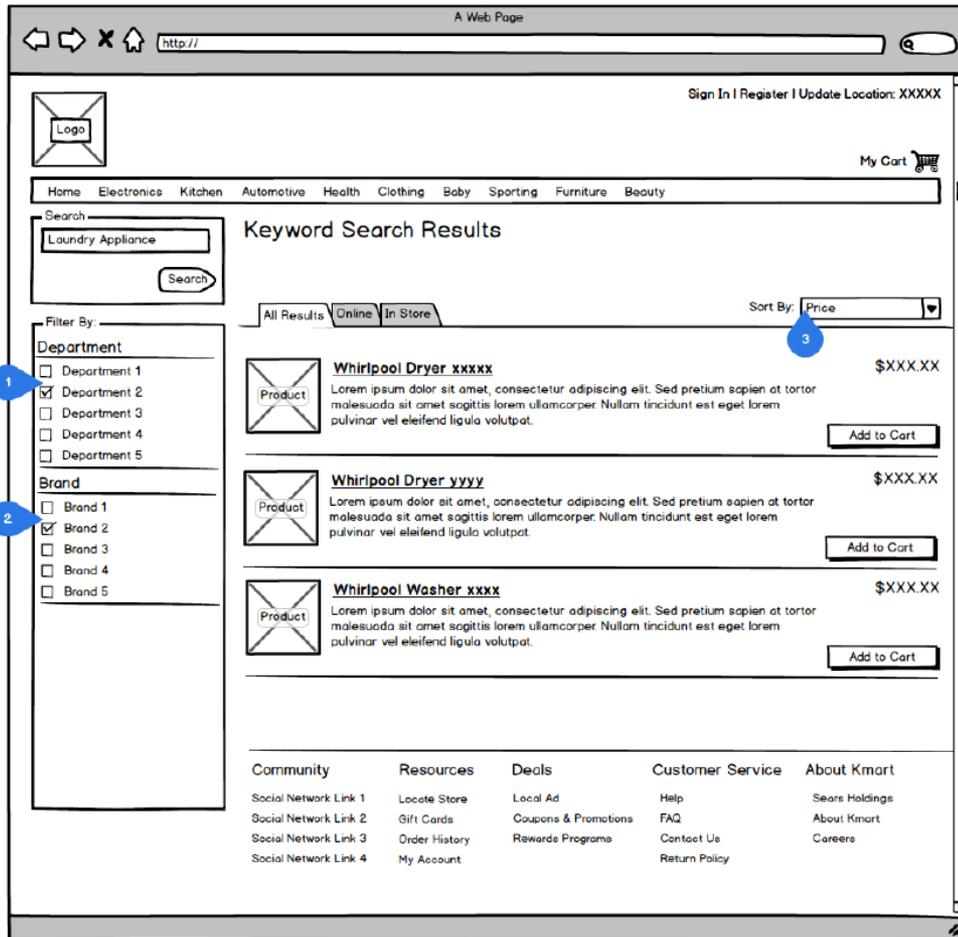


There is still a heavy amount of focus on ad space on the redesigned Home Page since this is very important to Kmart, as exhibited by their current site.

1. In the user navigation area, when no zip code has been entered, the site will use the user's IP address to determine the location of the user.
2. The user starts a keyword search for products in this box.
3. The main "hero banner" is still displayed in the main area.
4. A product carousel is displayed, based on the user's purchase history. If no purchase history is present, then this will display a list of current highlighted specials.

Phase 4: Design the Revised Site

Search Results

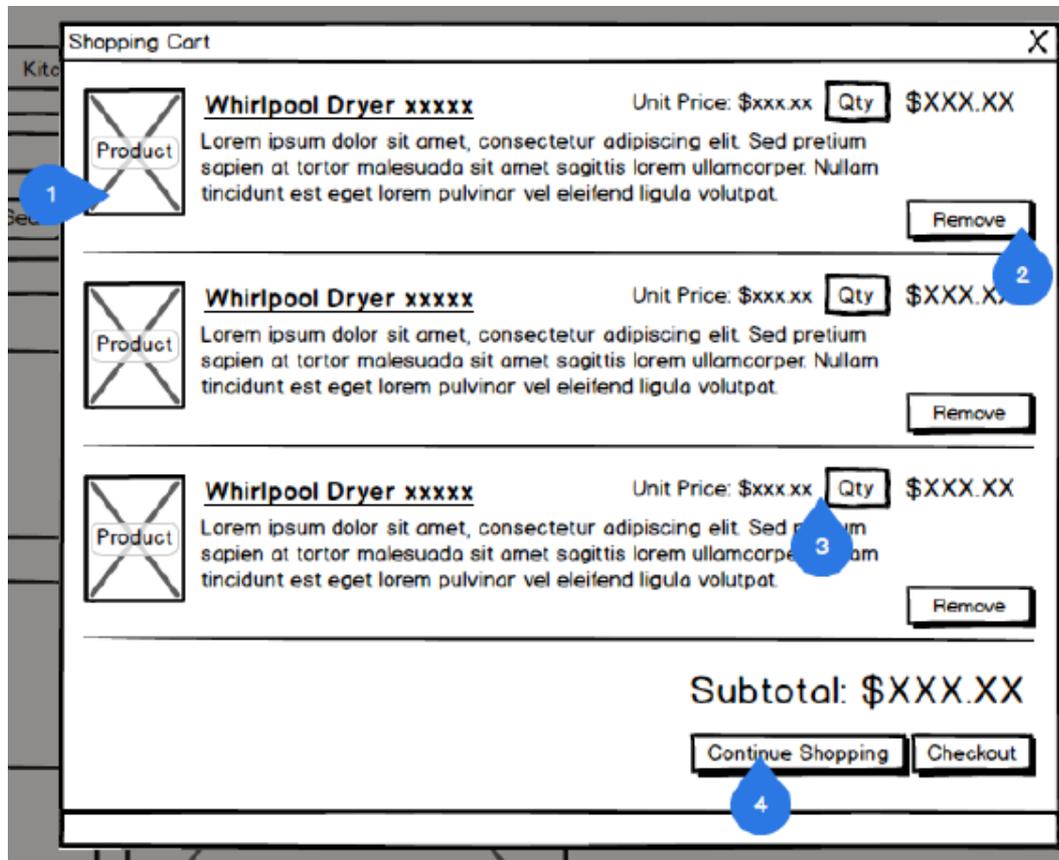


Once the user has entered a term in the search bar, they are taken to this page which displays relevant items based on their search term.

1. The user can select and de-select departments. The result set will be filtered to match only products in the checked departments. It is possible for products to reside in more than one department in an online store.
2. By selecting a specific brand, the result set will be filtered to only reflect those products of the brand selected.
3. The product result set has been updated to reflect a sort by price.

Phase 4: Design the Revised Site

Shopping Cart



The shopping cart will be in the format of a modal, so that the user can continue to their previous page, uninterrupted.

1. Product Image and description are shown.
2. The user is given the option to remove an item from the cart at any time.
3. The user can enter a number in the "Quantity" box to directly make changes within the cart.
4. Clicking "Continue Shopping" closes the modal so the user can return to their previous page (shown underneath).