

In the world of e-commerce, how you organize your products online can make or break the shopping experience. While retailers may focus heavily on their inventory and internal classifications, the reality is that **customer mental models** wield far greater influence on how shoppers navigate and find what they want. Understanding and designing around these mental models is key to effective *information architecture* and category taxonomy.

Drawing from insights by companies like MrQ, the research featured in the Harvard Business Review, and tools like CookieDatabase, this post explores how e-commerce sites can align categories with customer minds instead of just system inventories.

Inventory Is Not the Experience

Many e-commerce teams start with the products themselves—listing every SKU and attribute—and let that inventory dictate their site's category structure. This often results in sprawling, complex taxonomies that reflect backend systems rather than frontline interactions. The problem? Your customer doesn't think like your inventory management system.

Take MrQ, for example. As an online gaming and betting platform with diverse offerings, they realized that listing every game type or betting option in technical, internal categories confused users and increased drop-offs. Instead, they focused on grouping products and experiences in ways customers naturally understand, such as "Popular Games," "New Releases," or curated theme sections, which match how users think before they browse.

This disconnect between inventory and experience leads to *decision friction*. Shoppers become overwhelmed by choice, causing "choice overload," a cognitive phenomenon that reduces the likelihood of conversion.

Choice Overload Causes Decision Friction

"Choice overload" is a well-documented behavioral pattern where too many options create anxiety, leading shoppers to delay or abandon decisions. Research from the Harvard Business Review shows that simplifying choices and organizing products according to customers' mental models can significantly improve conversion rates and site satisfaction.

Imagine a user lands on an electronics store page with 5,000 smartphone models categorized by every possible attribute: brand, screen size, processor, camera specs, release date, and so on. Without any guidance, shoppers may feel overwhelmed.

Instead, a better approach is to create curated and intuitive category sections:

- **By user intent:** "Best for Photography," "Budget-Friendly," "Flagship Phones"
- **By customer type:** "For Teens," "For Professionals," "For Gamers"
- **By use case:** "Travel-Friendly Phones," "Social Media Ready"

These categories reflect how customers approach decisions mentally—through needs, preferences, and goals—rather than simply reflecting the exhaustive backend inventory.

Customer Mental Models Beat Internal Taxonomies

A **customer mental model** is the way shoppers internally organize and interpret information as they search for a product. Unlike internal taxonomies that reflect company logic and database schemas, mental models focus on how customers think, group, and prioritize information.

Aligning your site's category taxonomy with these mental models makes it easier for users to find products intuitively, reducing friction and cognitive load.



How to Identify Customer Mental Models

Developing a taxonomy aligned to mental models involves research and testing:

1. **User Interviews and Surveys:** Ask customers how they conceptualize your product range. What words and categories do they use?
2. **Card Sorting:** Use this UX technique to let users organize products or concepts themselves. This reveals their natural grouping preferences.
3. **Analytics Review:** Study onsite search queries, navigation paths, and bounce rates to identify common user intents and pain points.
4. **Competitive Analysis:** See how top retailers organize categories and identify what resonates based on customer feedback.

Once you understand these mental models, reflect them in your *information architecture* by creating categories and subcategories that use familiar language and logical hierarchies.

Curated Sections Help People Start

A common obstacle for online shoppers is the “blank page syndrome”—too many options and no clear starting point. Curated sections and thematic grouping reduce cognitive load and gently guide customers down productive shopping paths.

These curated areas serve as entry points aligned with customer goals, such as:

- “Top Picks for Summer”
- “Gifts Under \$50”
- “Best Sellers”
- “New Arrivals”

By spotlighting relevant subsets, e-commerce sites help users narrow choice overload and feel confident moving forward.

Example: Cookie Consent Managers and EU Cookie Policies

An interesting parallel exists in the design of *cookie consent manager UI* seen across many EU-based sites, a topic covered by resources like CookieDatabase. These interfaces display:

- **Manage Options:** Letting users control cookie preferences
- **Manage Services:** Transparency about which vendors collect data
- **Vendor Count:** Showing how many third parties are involved

Here, the complex “inventory” of vendors and fulcharmednames.com cookie types is distilled into categories and controls matching user concerns and mental models around privacy and consent. Instead of overwhelming users with technical details, they see simplified groupings focused on tangible choices and trust. This design philosophy mirrors effective e-commerce category approaches: simplify complexity to align with how users process information.

Building Category Taxonomies That Work: Best Practices

Best Practice Description Impact Use Customer Language Choose category labels and descriptions that reflect how your customers naturally describe products and needs. Improves findability and reduces confusion Limit Category Depth Keep category hierarchies shallow (2-3 levels) to minimize navigation friction. Simplifies browsing and avoids overwhelm Create Curated Sections Feature specialized collections or “shop by” themes that address common user intents. Supports decision making and reduces choice overload Use Analytics & Feedback Continuously monitor search queries and navigation metrics to uncover taxonomy gaps. Keeps categories relevant and user-focused Test with Real Users Validate category labels and structure with card sorting and A/B testing before full rollout. Ensures alignment with customer mental models

Conclusion

For e-commerce merchants, understanding the **customer mental model** is a foundational step toward optimizing *information architecture* and category taxonomy. Moving beyond simply mirroring inventory to creating categories that align with how users think reduces decision friction caused by choice overload and improves overall site usability.



Whether you're running a platform like MrQ, managing cookie consent options inspired by best practices cataloged on CookieDatabase, or applying behavioral insights from studies published by the Harvard Business Review, remember: customer-centric taxonomies are not just nice-to-have, they're business-critical.

Invest in understanding your customers' minds, craft intuitive categories using their language, and provide curated entry points to help them start. This customer-first approach to category design will turn browsing into buying — creating happier customers and stronger sales.