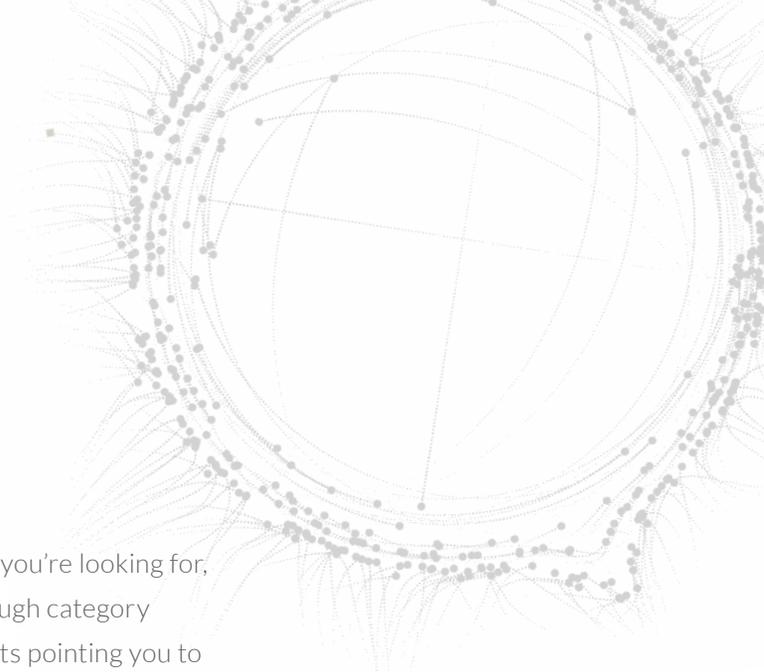


If They Can't Find It, They Can't Buy It

12 must-have query types for ecommerce search



If they can't find it, it doesn't exist.

Online search functionality should feel seamless. Type what you're looking for, and watch it appear instantly—like magic. No stumbling through category hierarchies or landing pages; just fast, accurate, search results pointing you to exactly what you want. Unfortunately, ecommerce search isn't quite there yet.

A recent large-scale ecommerce survey observing users' search functionality shopping experience found that:



31% of all product-finding tasks ended in vain, with users annoyed and turned off to the overall buying process.



70% of ecommerce search engines couldn't return relevant results for simple product synonyms, requiring users to type the exact same jargon as used on the site for a success search result.



34% of the top 50 ecommerce sites don't allow users to search via model number or assist in redirecting misspelled product or brand name search queries.

One of the study's more startling findings was how customers perceive a lack of search results. If they can't find the results they're searching for, most users conclude that a site doesn't carry a particular product. Along with the immediately lost sales opportunity, this gives customers a bad impression; they're likely never to return to the site again.

Assumed Relevancy

Users assume that the results they see are all you have and that all relevant products appear in the returned search, and they will leave if they don't see exactly what they're looking for.

Shoppers Expect Powerful, Helpful Search

They want it to be sophisticated and friendly to use. Failing to invest in a good search experience costs your company sales and hurts your brand. Clunky search functionality means a clunky experience for shoppers who may never come back.

The 12 Queries

Usability researchers observed subjects in a controlled lab setting, executing search tasks on 19 of the top-grossing ecommerce sites. Researchers observed how users looked for products, reacted to various qualities of search results, and proceeded with using low-relevance results.

Results revealed behavioral patterns for 12 commonly expected query types, which ecommerce sites should support as a step toward ensuring a helpful, positive search and shopping experience that improves conversions and increases units per transaction.

The 12 query types:

1. Exact Search
2. Product Type Search
3. Feature Search
4. Thematic Search
5. Relational Search
6. Compatibility Search
7. Slang, Abbreviation, and Symbol Search
8. Subjective Search
9. Symptom Search
10. Implicit Search
11. Non-Product Search
12. Natural Language Search

1

QUERY TYPE

Exact Search

ISSUE

If a product doesn't appear in searches for the exact title, name, or ID, the customer assumes the store doesn't carry the item.

EXAMPLES

- keurig k45
- stuhrling 879.03 mens watch
- nikon coolpix s2800

SUPPORT

Nearly all surveyed ecommerce sites supported Exact search.

One of the most common query types and the easiest to technically implement, Exact search requires the most customer knowledge. If the product doesn't return in search, shoppers will look for an alternative or simply abandon the site.

- Users often cut and paste other sites' product titles directly into the search box. Support alternate spellings, title translations, international brand and model names, and other variations.
- Include secondary product data attributes for users who search a manufacturer or country-specific model number instead of the product title.

GUIDELINE

Include multiple title spellings, variations with other query types, and intelligent handling of misspellings.

2

QUERY TYPE

Product Type Search

ISSUE

If users don't see relevant results when searching by product type, they have difficulty finding those types of products on the site.

EXAMPLES

- sandals
- sofas
- barstools

SUPPORT

Nearly all surveyed ecommerce sites supported Product Type search.

Second most popular, readers often use Product Type searches to easily access a particular category of products or as a shortcut around category-based navigation.

- Support Product Type searches for categories that are part of your hierarchy (e.g., "gas grills" searches will go directly to the Gas Grills category on the site).
- Include all product attributes in the search; they might indicate other product groups or sub-categories.
- Support product type synonyms as categories to guide users to the right place (e.g., "copy machines"/"all-in-one printers," "blow dryer"/"hair dryer," or "flip flops"/"sandals.")
- Present users with category-specific filtering options that combine free-form text search with structured filtering and sorting.

GUIDELINE

Include categories that are and aren't part of the site's hierarchy, ideally suggesting them as search scopes.

3

QUERY TYPE

Feature Search

ISSUE

Many users submit search queries with one or more product features, expecting the site to apply these as filters to their search results.

EXAMPLES

- red knit sweaters
- ceramic coffee grinders
- manual espresso machine
- 10gb ssd
- waterproof bluetoothspeaker

SUPPORT

Most surveyed ecommerce sites supported Feature search.

Users anticipate their noted product features to be included in their search results.

- They assume a site's search results will filter out products without the queried feature.
- Search engines must intelligently parse product attributes, then detect when to use those features in search queries.
- Ideally, product attributes are stored as structured information to use as filters, such as price target (“\$30 shampoo”), category (“manual espresso machines”), color (“green dresses”), performance specifications (“USB 3.0 hard drive”), material (“fabric cushioned chairs”), format (“hobbit dvd”), or brand (“puma running shorts”).
- Users often try Feature search after an initial generic search returns overwhelming results.

GUIDELINE

Filter the search results across one or more product attribute by supporting Feature searches together with other query types.

4

QUERY TYPE

Thematic Search

ISSUE

Some users search for thematic product categories with ambiguous factors or by intended usage.

EXAMPLES

- living room rug
- extreme weather sleeping bag
- spring coat women

SUPPORT

Most surveyed ecommerce sites supported Thematic searches.

Somewhat difficult to define, Thematic search queries are vague in nature and often include fuzzy boundaries (e.g., “living room”) or categories of intended usage (e.g., “spring”/“cold weather”). Although easy to recognize, defining these concepts’ exact boundaries for a search engine is challenging but worth getting right.

- Typical Thematic searches include seasons of the year, intended usage, occasions or holidays, events, etc.
- Users might submit Thematic queries expecting to see all related products or the relevant category page, (e.g., searching “olympics” for everything related to upcoming Olympic Games).
- Thematic search is commonly used as a qualifier with other query types (e.g., Product Type, “winter mens jacket”).

GUIDELINE

Help users find products by intended usage, despite conceptually unclear boundaries.

5

QUERY TYPE

Relational Search

ISSUE

Users who only know of a product through other entities involved are only able to search based on those relations.

EXAMPLES

- new tom hanks movie
- new anne rice novel
- second matrix dvd

SUPPORT

Several surveyed ecommerce sites supported Relational searches.

Some users only know of a product based on other involved or related entities, sometimes even specifically interested in that product because of the affiliation.

- Relational search helps users find products based on the things they love and follow—from people to companies, publishers, events, or even animals.
- Suggest combined Relational search capability as additional elements to encourage deeper search.
- Contextual search snippet texts, highlighting the search terms in the results are particularly important for Relational searches, since the associated element(person, company, event, etc.) isn't always included in the title of the product or any of its most common attributes.

GUIDELINE

Combine Relational and Product Type searches, as well as ideally any query type. Improve their usefulness by suggesting product types, displaying contextual search snippet texts, and teaching your search engine associated spellings.

6

QUERY TYPE

Compatibility Search

ISSUE

Finding accessories and spare parts for products becomes needlessly difficult when a site doesn't support Compatibility search.

EXAMPLES

- sony cybershot camera case
- sleeve mac 15
- lenovo laptop adapters

SUPPORT

Several surveyed ecommerce sites supported Relational searches.

Users often know the details of a product they already own but not the name of the accessory or spare part they need. There are two types of Compatibility searches that accompany the type of accessory a user is trying to find:

1. Brand name and product type ("lenovo laptop adapters")
2. Specific model ("lenovo x 615 adapter")

- Support both brand and model searches, since shoppers don't always know what model they have.
- Help these searchers easily access compatible products by displaying an option to see accessory products on product listings.
- Users whose Compatibility searches return bad results immediately turn to another search engine, where competing retailers quickly get their attention, resulting in lost sales.
- Auto-enable or suggest those filters on the search results page to help users find products they're looking for without complex interfaces or guides.

GUIDELINE

Enable users to find accessories and spare parts by searching for compatible products.



QUERY TYPE

Slang, Abbreviation, and Symbol Search

ISSUE

Many users routinely include slang, abbreviations, and symbols in their queries—with little sensitivity to the site’s failure to deliver on such terms.

EXAMPLES

- rayban shades
- hp printer
- boutin 3” heels

SUPPORT

Several ecommerce sites surveyed supported Slang, Abbreviation, and Symbol searches.

Users sometimes use slang, abbreviations, and symbols in their search queries, which many sites handle poorly.

- Accounting for use of slang and abbreviations typically just requires mapping between terms (e.g., map “fixie” to “fixed-gear bike” and “bike” to “bicycle,” and consider alternative terminology for: measurements, “ml” vs. “milliliter;” brands, “HP” vs. “Hewlett-Packard;” and programming languages, “JS” vs. “JavaScript”).
- Slang is constantly evolving. Mine your search logs to reveal what your users are actually searching for.
- Enlist employees who are members of different audiences, demographic groups, and subcultures to help add and adjust slang entries to your dictionary and synonym files.

GUIDELINE

Support these linguistic shortcuts so users can find relevant products when using slang, abbreviations, and symbols in their queries.



QUERY TYPE

Subjective Search

ISSUE

Users often include subjective adjectives (quality, beauty, value, etc.) in their queries, requiring the search engine to venture past accuracy into interpretation and opinion.

EXAMPLES

- high quality tea kettle
- cheap wine
- lightweight tent

SUPPORT

Several surveyed ecommerce sites supported Subjective search.

Subjective searches can be broken into three rough categories, each requiring unique functions:

1. Interpretive attributes: Qualifiers require combining multiple attributes in order to approximate whether a result is relevant or not (e.g., “high-quality” and “value for money”).
2. Single-attribute degree: This evaluation relies on a single attribute, and the subjectivity lies in the range or degree of that attribute (e.g., “lightweight” and “cheap”).
3. Taste-based: The qualifier is based on non-quantifiable attributes, such as emotion or experience. Taste-based Subjective searches are the trickiest to program for response (e.g., “beautiful tables” may be difficult to pinpoint on a furniture site, but users could be asked to select from different styles of tables available, such as modern, antique, glass, Asian, etc.).

A solid data foundation for these subjective approximations and proxies is crucial. Typically, these approximations become more accurate as more proxy attributes are added.

GUIDELINE

Intelligently treat interpretive attribute mix, single-attribute degree, and taste-based searches.

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QUERY TYPE

Symptom Search

ISSUE

Without Symptom search, users who are searching based on awareness of a problem are unable to search for solutions.

EXAMPLES

- yellow teeth
- carpet stain
- dog fleas

SUPPORT

Several surveyed ecommerce sites supported Symptom search.

With Symptom search, users can find solutions (i.e., products) by searching based on their problems or experienced symptom. They typically adopt this query type when they don't already know the solution.

- Symptom search is a powerful way to help users find relevant products. It helps guide users to solutions based on the problem or symptom they input.
- Guide users in Symptom search by pointing out the option.
- Interlink any help content related to the symptom, so the user can learn more about available solutions and their differences, as opposed to simply seeing a product list with solutions they may not fully understand.

GUIDELINE

Support Symptom searches to enable users to find relevant products by entering the problem or symptom they are experiencing.

10

QUERY TYPE

Implicit Search

ISSUE

Some users submit partial search queries with certain aspects implied.

EXAMPLES

- pants (from a Women's Apparel category page)
- charger cable (from an iOS Devices landing page)

SUPPORT

Several surveyed ecommerce sites supported Implicit search.

Environmental variables can help infer any implied meanings in a search query.

- Variables can include past page visits on the site, profile information, purchase history, products in the shopping cart, demographic information, how the user entered the site, duration since last visit, duration of current visit, etc.
- Suggesting relevant search refinements or automatically refining the query are common ways to alter the Implicit search experience.
- Subtly direct users toward content they are most likely to want by placing it higher in the results and suggesting search refinements with prompts.
- Auto-correct queries when it aligns with the user's intent and includes the implied components. But be sure to tell the user that the query has been corrected and offer a way to force through the original query.

GUIDELINE

Use all available environmental data to infer any implied components of the user's search query, and adjust the search experience accordingly.

11

QUERY TYPE

Non-Product Search

ISSUE

Some users expect search to include all content on the site, beyond the product catalog to auxiliary content such as help pages and store information.

EXAMPLES

- return policy
- shipping options
- previous orders

SUPPORT

A few surveyed ecommerce sites supported Non-Product search.

Customers often search for other types of content such as help sections, store information, and policies. Without support for Non-Product queries, they aren't able to find that content via search.

- Non-Product search is especially helpful to users who are unable to find this content using conventional navigation.
- Include it as part of the regular search results list, including products, or take the user directly to the relevant content.
- Non-Product search is a helpful shortcut to the exact content a user is looking for.

GUIDELINE

Include auxiliary content in your search results (e.g., help sections, store information, etc.).

12

QUERY TYPE

Natural Language Search

ISSUE

Some users type their search queries in full sentences. Many search engines have trouble parsing these advanced queries and returning results.

EXAMPLES

- men's sneakers that are red and available in size 7.5

SUPPORT

Few surveyed ecommerce sites supported Natural Language search.

With Natural Language search, the search engine accounts for typical spoken language, ideally interpreting the meaning of a query and returning highly relevant results beyond simple keyword matching.

- If done well, applying simple question filters rather than relying on sliders and checkboxes holds significant potential.
- All recent iOS and Android devices support speech input, enabling users to literally speak their queries aloud.
- Natural Language search requires advanced technology to work well, but enabling users to find relevant products simply by typing in phrases and questions removes one of ecommerce's biggest weaknesses compared to the in-store experience.

GUIDELINE

Deliver a next-generation search experience; Natural Language search enables users to submit questions or requests in regular spoken language.

If They Can Find It, They'll Buy It

Consumer expectations for search have never been more demanding. The more you understand your users' behavioral patterns, the easier you can make their shopping and purchasing experience. Help them find what they want—and present options beyond what they're immediately searching—by accounting for the myriad ways they seek out your products. A robust ecommerce search engine will keep customers on your site, earn their trust to return, and boost your conversion rate.

Get Started or Learn More

For more information or to start using Lucidworks Fusion, contact us today to learn more at <http://lucidworks.com/contact> or call **415-329-6515**.

"If They Can't Find It, They Can't Buy It" is based on the ecommerce search usability research of The Baymard Institute. The usability study consisted of 20 test subjects observed in a lab setting completing simple product-finding tasks on 19 of the largest ecommerce sites: Amazon, Best Buy, Blue Nile, Chemist Direct, Drugstore.com, eBags, Gilt, Go Outdoors, H&M, IKEA, Macy's, Newegg, Pixmania, Pottery Barn, REI, Tesco, Toys"R"Us, The Entertainer/TheToyShop.com, and Zappos.

Source: "E-Commerce Usability: Search," Baymard Institute