

# Search

Guide users in finding and discovering the information they need quickly.

Liferay DXP allows you to build digital experiences with dynamic navigation, categories, and search results that can change depending on your audience. The result is a user experience that makes it easy for customers, partners, or employees to locate what they're looking for and discover other highly relevant services, products, or content you can offer them.

### **Benefits**



Guide users to relevant content faster.



Easily group content more effectively so your users can find all related content in one place.



Provide users more relevant search listings, suggestions, and filtering options (similar to B2C shopping experiences) that allow them to find what they're looking for quickly.Leverage Liferay's Search Capabilities to:

#### **Accelerate Search**

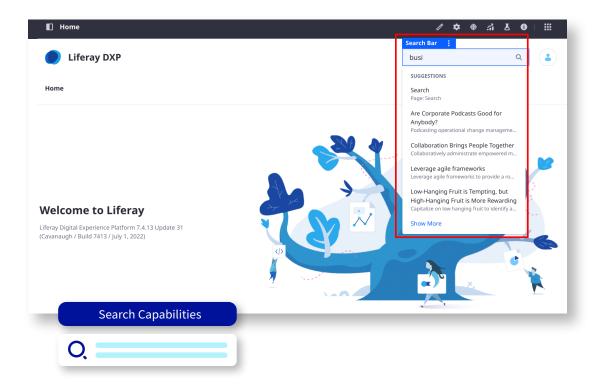
Elasticsearch is the highly scalable, full-text search engine Liferay uses by default. This allows you to provide your users with more relevant search results so they can find what they're looking for faster. Some of the core features of our search engine include:

- Full-text search that provides search results that match or partially match a user's search query.
- Granular search tuning through synonyms so that users can still access search results
  with equivalent meaning. Cross-site search, which enables visitors to search for
  information across multiple websites in one place. Users can also perform federated
  search to search across a wide range of integrated sources, such as databases, external
  APIs, or third-party repositories.

- Multi-language search that will search across all languages across multi-language sites.
- Indexing of all content types so users can get results for web pages, blogs, PDF documents, videos and anything else that is relevant to them.
- Display suggestions for similar content related to a user's initial search query.
- Automatic index synchronization for added, updated, and deleted content, so that search results are always current.
- Low-level search APIs to interact with Elasticsearch. Developers can call the search engine without writing or using models or indexers and allows access to most aggregation and query types of Elasticsearch.
- Search Headless APIs that can search the company index for matching content through a single endpoint and build custom search experiences.

When building pages, Liferay provides a library of customizable search widgets that can be used together to build sophisticated search experiences. These widgets include Search Bar, Search Results, Sort, Category Facet, and more.

Liferay also organizes and prioritizes search results to help users get the results they're looking for faster.





- Faceted search to narrow down searches using filters or facets, such as categories, tags, and other metadata attributes. Search results can also be filtered by roles and permissions that allow you to customize search results for different users.
- Personalized search based on user profiles, preferences, and past search interactions.
- Search results can be prioritized by relevance based on keyword match, popularity, recency, and user behavior.

### **Improve Site Navigation**

Liferay provides powerful tools for creating and organizing pages. You can build everything from a simple, flat site navigation to a complex hierarchical tree of sub-pages nested down many levels deep to help your users get to the information they need faster.

By default, there is a defined page hierarchy to organize pages on your site. However, you can also create menus that are separate from your page hierarchy. This allows you to create special menus for different landing pages or multiple menus that help your users easily navigate to secondary pages or pages that are deeper in your site. You can also generate menus for other elements such as headers, footers, social media links, and custom navigation options.

Liferay's menu creation system is flexible so you don't have to build any pages before creating navigation menus. You can create a navigation menu first and then assign pages to it later after you've created them. Alternatively, you can build your pages first and then create the menus.

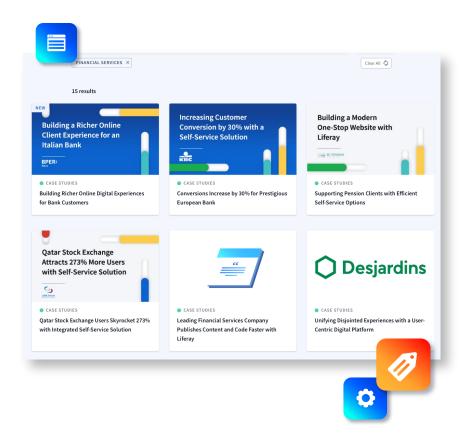
## **Define Tags and Categories**

Categories and Tags are two essential tools for helping users find content through search or navigation.

Categories allow you to group similar assets so you can organize your content more
effectively. For example, you can create a Success Stories category and group all
customer success articles under this category. You can even create subcategories for
different topics to help refine the organization of your content further.

You can group categories using vocabularies, which can be either internal or public. For example, a marketing team might want to use categories based on different customer segments, while the human resources department would be more interested in categories based on their internal company structure.





Tags are keywords for organizing your assets. Tags tell visitors of your website what the
content is about, so they can find relevant information through search or navigation. For
example, a kitchenware store might have different tags describing the store items, like
glass, clay, or dishwasher-safe. With these Tags in your content, visitors can easily search
and identify the information most relevant to their needs.

### **Advancing Search with Liferay Enterprise Search**

While Liferay comes with Elasticsearch out-of-the-box, an additional Liferay Enterprise Search (LES) subscription can be added on to provide access to additional search features.

To see a detailed description of the services and features included with LES on your version of Liferay DXP, refer to the official description of LES in the Liferay DXP Components resource.

With LES you gain access to Search Blueprints. Using Search Blueprints, you can personalize search results by:

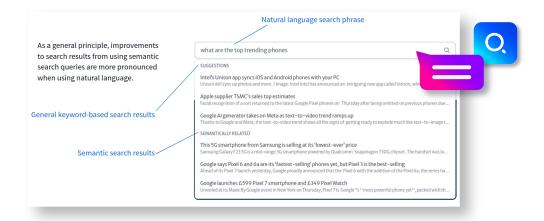
- Make minor tweaks to Liferay's default search page behavior
- Override the search page behavior completely
- Configure context-aware search results based on attributes of the search user
- Boost, hide, or filter results by various factors like proximity, categories, tags, and user segment



This in turn increases the chance of your site's success, by keeping users engaged with your content. Some examples include:

- Prioritizing certain results if they are near in proximity to the user's IP Address
- · Prioritizing certain content if the user is new
- Hiding certain content if the user isn't authenticated

LES also gives users access to Semantic Search, which evaluates the intent behind a searched phrase. A keyword search matches a searched phrase to the indexed text fields, but cannot produce a match based on meaning. Semantic search enables an additional content processing pipeline. When enabled, the platform produces a vector representation of the input text called a text embedding, and stores it in the index document in Elasticsearch. At search time, the search keywords entered by users go through the same vectorization and embedding process, making it possible to perform similarity searches that provide more meaningfully relevant search results for users.



## **Next Steps**

Search is just one of the out-of-the-box features that Liferay DXP provides. On a single platform, you can leverage search alongside many other native capabilities to build current solutions and future ones, as your business needs expand. To view all of Liferay's capabilities, visit: liferay.com/capabilities.

Ready to see how you can begin delivering powerful search experiences to help your users find what they need with Liferay DXP? Get your demo at liferay.com/request-a-demo.

Liferay helps organizations build for the future by enabling them to create, manage, and scale powerful solutions on the world's most flexible Digital Experience Platform (DXP). Trusted globally by over a thousand companies spanning multiple industries, Liferay's open-source DXP facilitates the development of marketing and commerce websites, customer portals, intranets, and more. Learn how we can use technology to change the world together at liferay.com.

