



Learning Paths - Level 01

Search

#LIFERAYENABLEMENT

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Some features may not be available in earlier releases.*

Session Breakdown

05 min	01	Introduction + Case Study Recap
10 min	02	Understanding Search
05 min	03	Building out Search Pages
10 min	04	Filtering with Facets
05 min	05	Working with Blueprints
05 min	06	Headless Search



Part 01

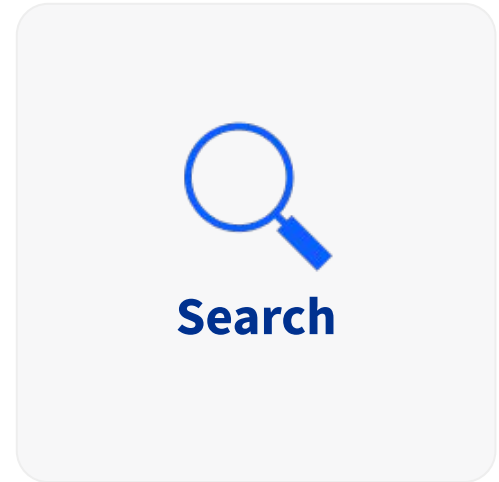
Introduction and Session Scope



Understanding why search matters

Introduction to Search

- Modern businesses generate and store vast amounts of data in various formats (documents, emails, databases, applications)
- Effective search empowers employees to access relevant information promptly
- Time wasted searching for information translates to lost productivity
- Search fosters collaboration by making it easier for employees to find and share expertise within the organization
- Effective search allows for self-service (autonomy)



What we are planning to cover in this session

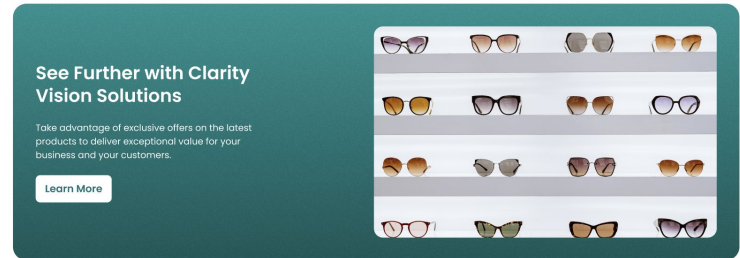
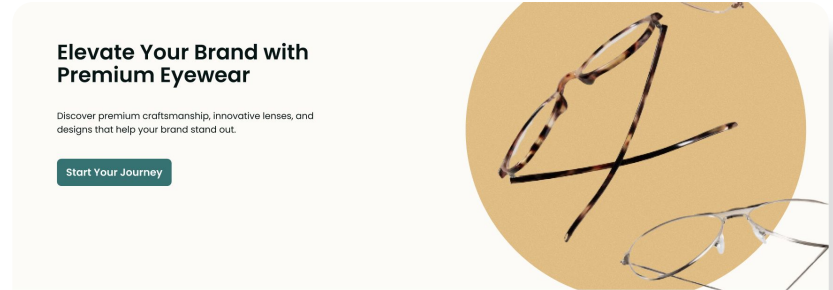
Session Scope

- What *Search* means and translates to in Liferay
- Identify when *Search* can be used to solve problems
- Apply *Search* principles for *Clarity*
- Check a traditional *Search* solution
- Check creative uses for *Search*
- Liferay best practices



Clarity Vision Solutions Background

- Global leader in optical technology
- Over 500 employees and 300+ million in revenues
- Traditional retail and online commerce
- Modern, stylish and comfortable products
- International Distribution via Partners
- Overnight success has led to growing pains
- Complex and fragmented infrastructure
- Expensive maintenance and licensing costs
- Increased operational costs by requiring costly resources (experts and consultants)
- Highly technical tools limit pool of contributors and increase the time to market required or new initiatives



Clarity's Critical Success Factors

1. Non-technical participation
2. Simplified maintenance (and evolution)
3. Future proofed and flexible
4. Increase engagement and user experience through personalization
5. Risk mitigation with better governance
6. Lower investment / total cost of ownership



Clarity Business Requirements

- Allow users to enter keywords which the system can use to match against relevant data
- Allow marketing team to design both layout and final rendering of various aspects of the search experience
- Provide a self-service platform for customers to search product documentation, manuals, and troubleshooting guides
- Enable searching content stored in legacy systems that may not be readily accessible within Liferay
- Deliver personalized search results based on user roles, departments, or previous search history
- Users can refine their searches with filters, facets, and keyword operators



Clarity Business Requirements

- Allow for users to enter keywords that can be used by the system to try to match against relevant data
- Deliver a solution that allows the marketing team to design both layout and final rendering of various aspects of the search experience
- Provide a self-service platform for customers to search product documentation, manuals, and troubleshooting guides
- Enable searching of content stored in legacy systems that may not be readily accessible within Liferay
- Deliver personalized search results based on user roles, departments, or previous search history
- Allow users to refine their searches with filters, facets, and keyword operators for targeted results



Part 02

Understanding Search



Search in Liferay

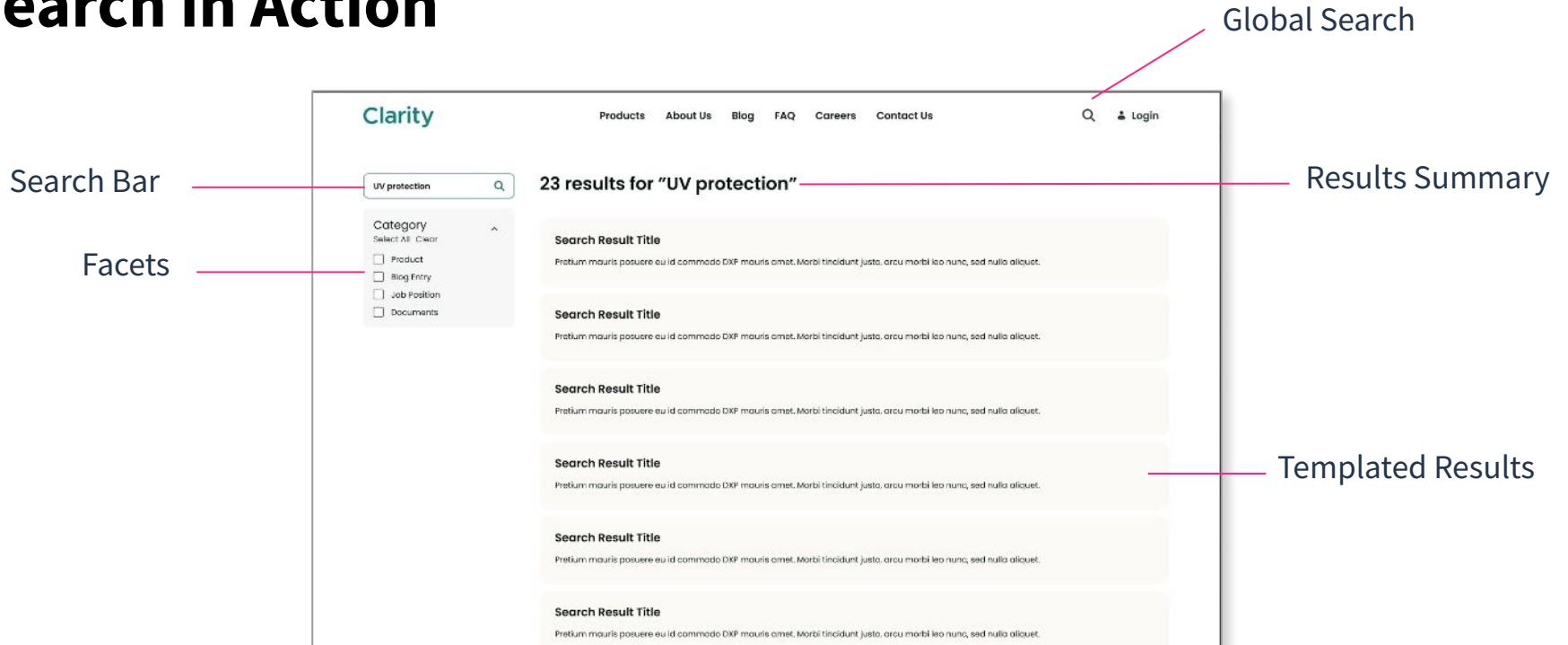
- API driven feature for more than one “Search Engine” implementation (or developed as customization)
 - Powerful internal and extensible API used to alter the behavior of indexing actions, queries...
- Comprehensive Indexing supporting wide range of content types
- Filters, facets and keyword operators for highly targeted results
- Multiple internal (functional) indexes to ensure fast results (even with large data sets)
- Low-Level Search with Alternate Indexes to query external indexes residing in the same cluster and Liferay index
- Synonyms and Result Rankings to configure different terms used to find results and prioritize certain records in result set
- Flexible and Template driven UI:
 - With individual components represent search capabilities to easily design pages
 - Component by component basis to build whatever the business needs
- Blueprints to create personalized search results based on user segments

Part 03

Building out Search Pages



Search in Action



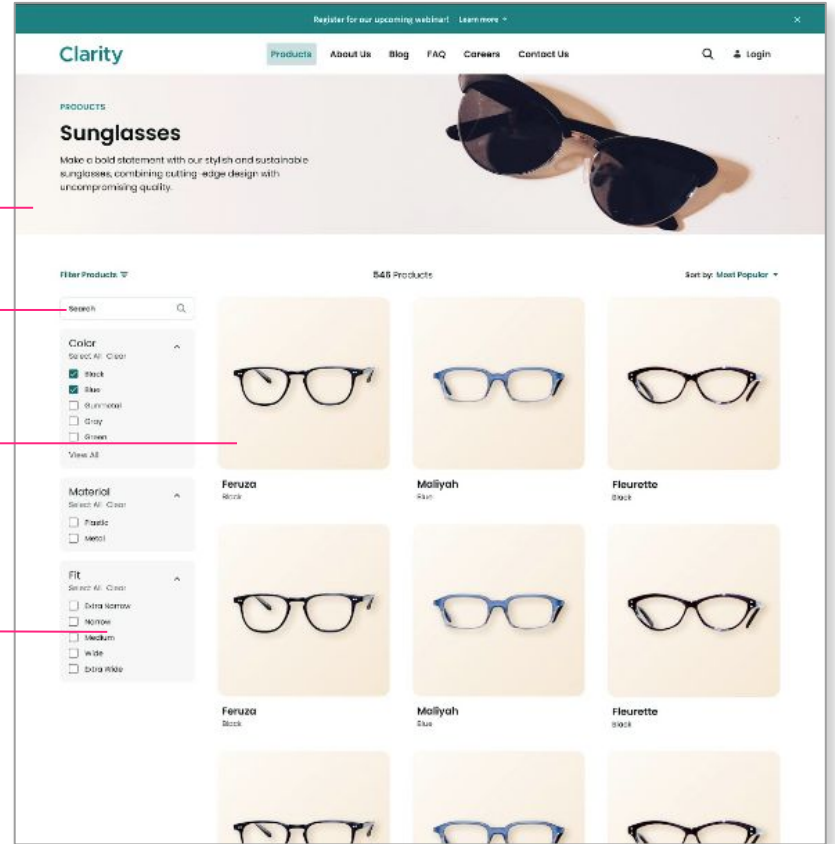
Search Pages in Action

Content Placement

Search Bar

Search Results

Facets



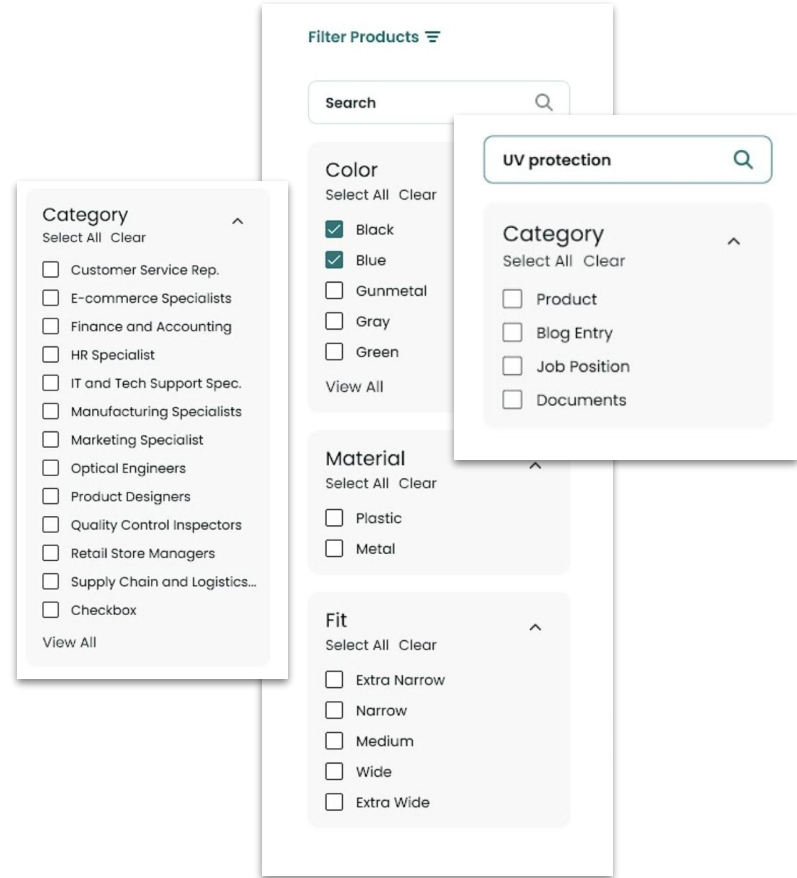
Part 05

Filtering with Facets



Facets

- More than 10 out of the box facets
- Covers most of the common “facet use cases”
 - Eg. Categories, Tags, Dates, Type of Content
- Include several facets related to commerce
- Use Widget configurations to fine tune the values based on business needs
- Support templating engine to allow for custom views



Filtering with Facets

Custom Facets

- Provide a “catch-all” for filters that are not provided out of the box
- Allow Administrators to use advanced configurations to create facets on the fly
- Work with almost any field in the index
- Support templating engine for custom views

ADVANCED CONFIGURATION

Aggregation Field [?]

Follow the steps in the documentation to use object and web content structure fields. [Learn more.](#)

Custom Heading [?]

Custom Parameter Name [?]

Max Terms

Frequency Threshold

Order Terms By

Display Frequencies

Federated Search Key [?]



Clarity

Vision Solutions

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Type and
Tag facets

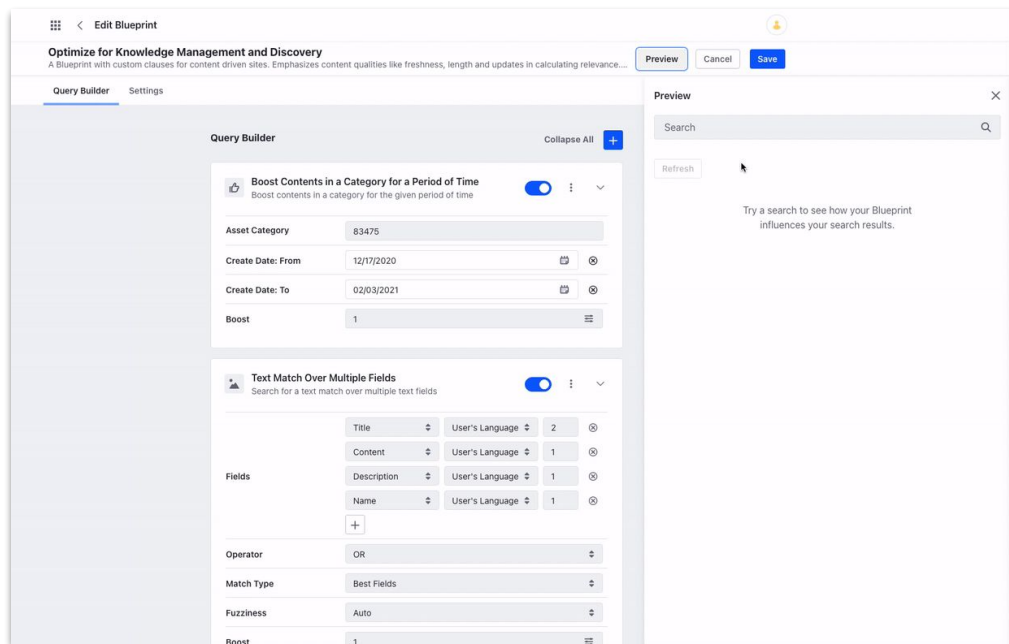
Part 06

Working with Blueprints



Personalized Search Results

- Visual Query Builder provide accelerated workflow for blueprint development
- Boost, filter, hide, and match results on any indexed property allows fine tuned queries based on business needs / strategies
- Define your own custom query elements from scratch or use out-of-the-box element as a starter
- Personalisation - context variables allow personalised search based on role, segment, location, user profile information, etc.
- Supports segmentation capabilities to allow for dynamic blueprints based on user context



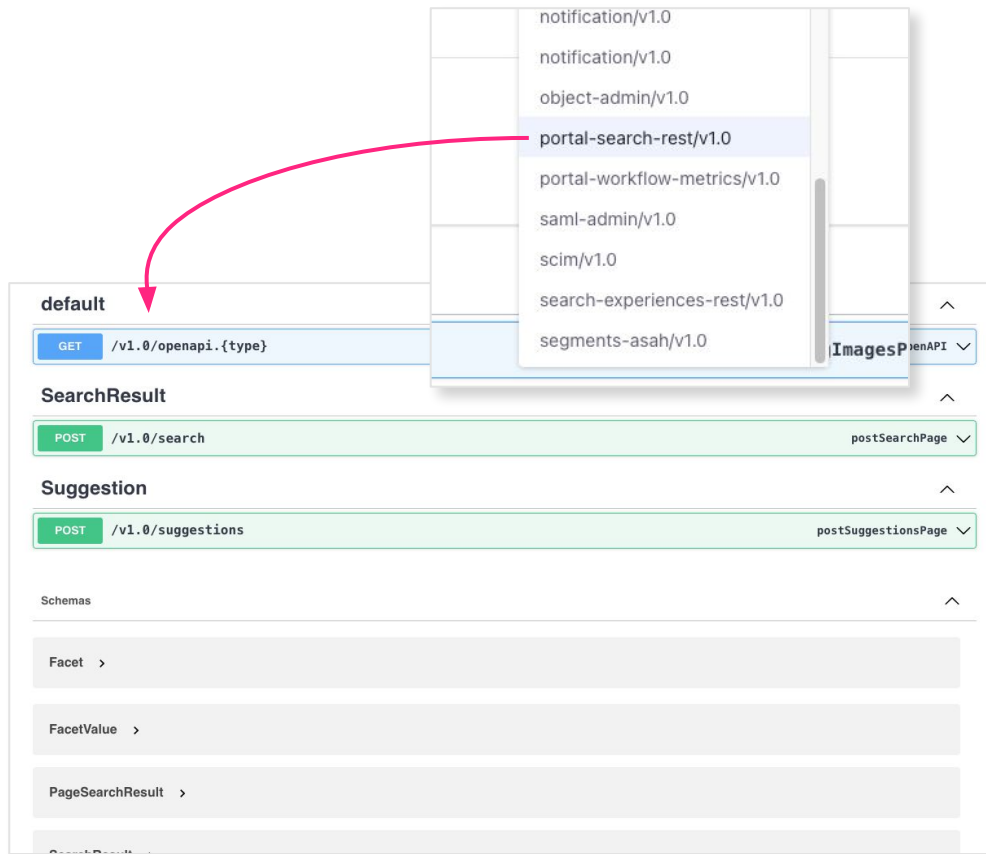
Part 04

Headless Search



Search Unleashed

- Endpoints included right out of the box
- Follows Open API standards and best practices
- Promotes interconnectivity between disparate systems and sharing of data (rather than duplication)
- Supports the inclusion of a Blueprint as part of the request criteria
- Separate endpoint can be used for managing Blueprints (create, update, delete, ...)



Users and Organizations



Users Organizations

Filter and Order ▾



Search for



Name	Screen Name	Job Title	Organizations	User Groups
<input type="checkbox"/> Alexander Brown	alexander.brown	Marketing Manager		⋮
<input type="checkbox"/> Olivia Davis	olivia.davis	Project Manager		⋮
<input type="checkbox"/> Michael Johnson	michael.johnson	Software Engineer		⋮
<input type="checkbox"/> Christopher Miller	christopher.miller	Financial Analyst		⋮
<input type="checkbox"/> Test Test	test			⋮
<input type="checkbox"/> Emily Williams	emily.williams	Data Analyst		⋮

20 Entries ▾ Showing 1 to 6 of 6 entries.

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Unlock the power of knowledge: Empower every search with Liferay

Thank you