



**customer
summit**

The Low Code/No Code Evolution: Citizen Developers Unite

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Experiences Matter

No Experience = Poor Experience

- Lack of Clarity and Guidance
- Unintuitive Interfaces
- Missed Expectations = Lost Trust
- Increased Support Burden
- Negative Word of Mouth



Personalized Content and Experiences





Rise of Low Code Application Platforms

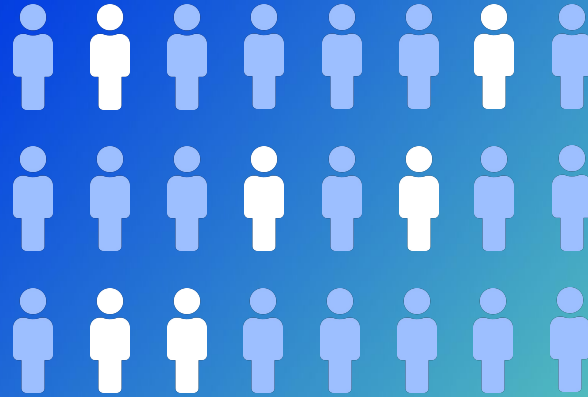
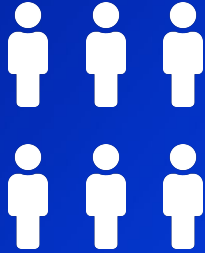
Unleashing an army of Citizen Developers

“

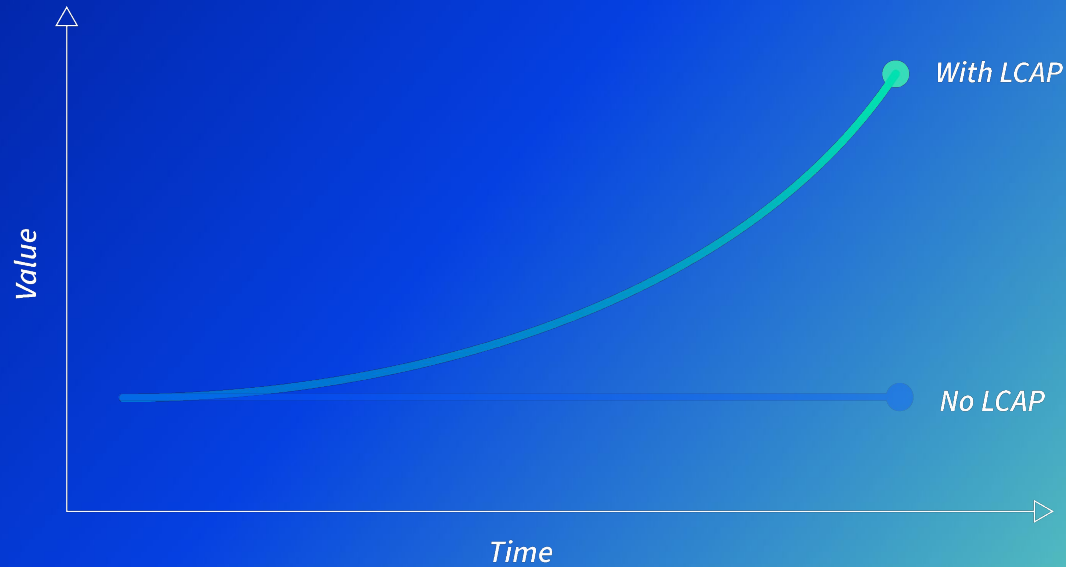
What we need, and what the business world needs, is an
**easy way to deploy capabilities against specific
problems.** That's one of the key ways we're using
low-code ...

Forrester

Workforce Multiplier



Impact of Low Code



Higher Returns = More Value



Pre-LCAP



Post-LCAP

Low-Code and No-Code Capabilities

Flexibility for Custom Solutions



Data Modeling and Low Code Apps

New field types, Validations, Custom Views, Extend Native Objects, “Proxy” Objects , Access Control, Relationships, “on-the-fly” headless APIs



Experience Management

Unified experience management, auto-populate custom object fields, widgets customization , composable product details



Discovery and Personalization

Promote and bury search results, Predictive search, Optimize product recommendation strategy and model



Process Automation

Triggered actions on data entry and changes, notifications, internal and external actions



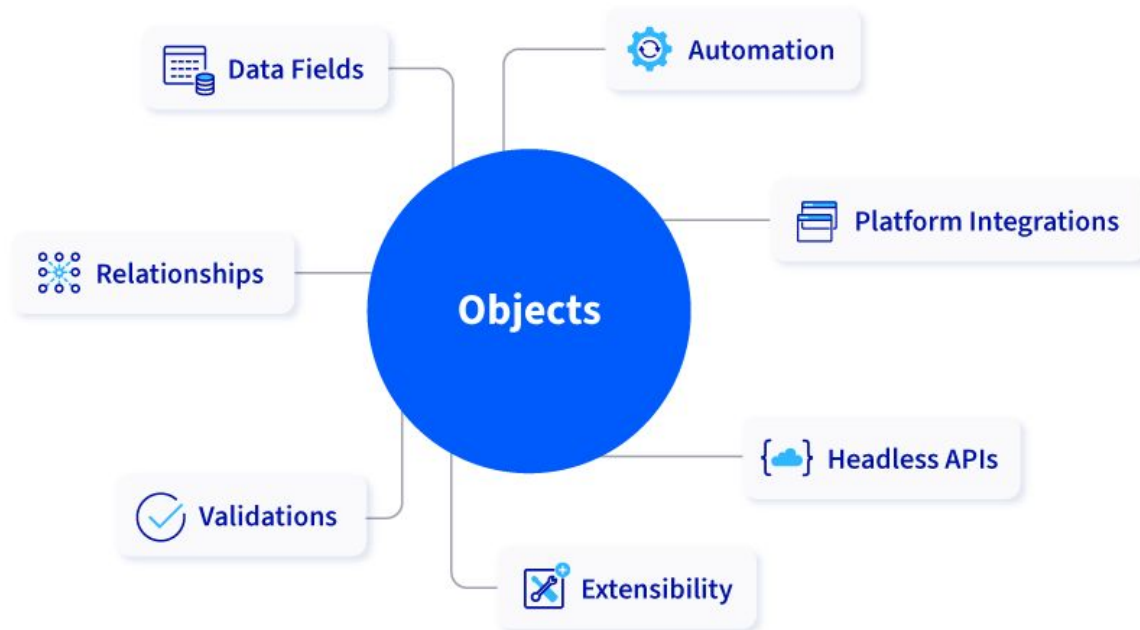
Styling and Layout

No code styling and fragments, integration with design tools (Figma)

The Liferay Perspective

Liferay's Low-Code capabilities make it possible for non-developers to quickly and effectively build pages, modify look and feel, and create business applications, forms and workflows.

Rapid App Building w/ Objects



Low Code Liferay Objects

Ticket System App

Saved Create New Schema Export as PDF Save Publish Schema

Objects Model Builder

Search

Create New Object

- Ticket System App
 - Ticket
 - User
 - Employee ID
 - Related Ticket
- PTO Request App
 - Department
 - Request
 - Category
 - Employee
- Objects
 - Postal Address
 - User
 - Account
 - Commerce Product Group
 - Commerce Product
 - Commerce Order

Ticket (CUSTOM APPROVED)

ID LONG INTEGER

External Reference Code TEXT

Title TEXT

Assignee RELATIONSHIP

Add Field or Relationship

Show All Fields

User (SYSTEM APPROVED)

ID LONG INTEGER

External Reference Code TEXT

Email Address TEXT

First Name TEXT

Middle Name TEXT

Add Field or Relationship

Show All Fields

Employee ID (CUSTOM APPROVED)

ID LONG INTEGER

External Reference Code LONG INTEGER

User ID RELATIONSHIP

Add Field or Relationship

Show All Fields

Related Ticket (CUSTOM APPROVED)

ID LONG INTEGER

External Reference Code TEXT

Add Field or Relationship

Show All Fields

Relationship Details

Label *
User ID

Name *
userID

Type *
One To One

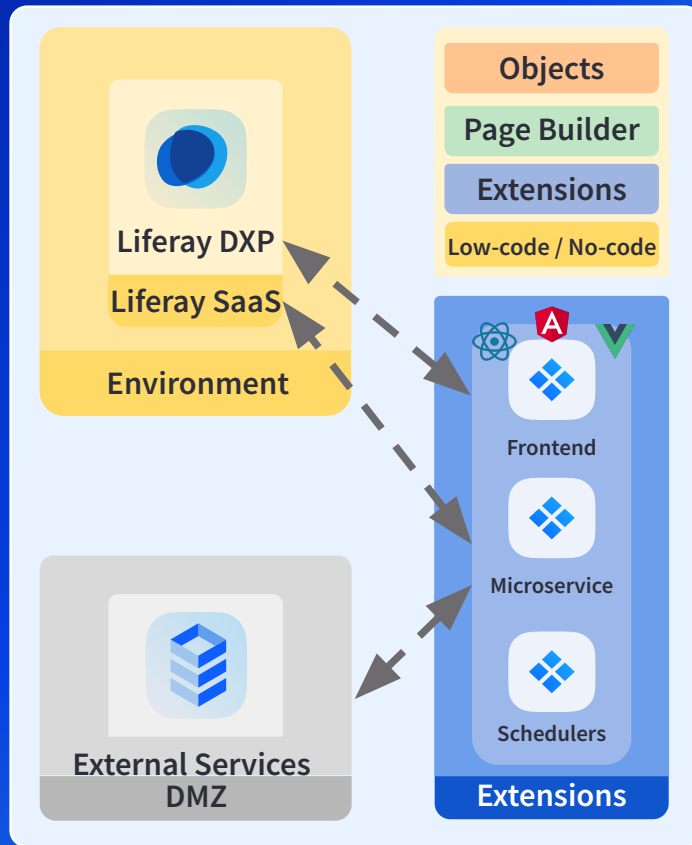
Parent Object *
User

Child Object *
Employee ID

Deletion Type *
Prevent

Liferay Objects Differentiators

Object Actions



Liferay Objects Differentiators

Headless APIs

The screenshot displays the Liferay API Explorer interface. At the top, the title 'Liferay API Explorer' is visible. Below it, the 'Object' section is highlighted, showing 'v1.0 OAS3' and the URL 'http://localhost:8080/o/c/contactuses/openapi.json'. A 'Servers' dropdown menu is set to 'http://localhost:8080/o/c/contactuses/'. The main section, 'ContactUs', lists various REST endpoints with their methods (GET, PUT, DELETE, PATCH) and corresponding actions. A dropdown menu on the right, titled 'REST Applications', lists several applications, with 'c/applicationevaluations' currently selected. The list of applications includes: analytics-reports-rest/v1.0, analytics-settings-rest/v1.0, batch-planner/v1.0, bulk/v1.0, c/applicationevaluations, c/contactuses, c/distributorapplications, c/distributorkycverifications, captcha/v1.0, change-tracking-rest/v1.0, clarity-kyc-proxy/v1.0, data-engine/v2.0, data-set-admin/data-sets, data-set-admin/data-sets/actions, and data-set-admin/data-sets.

Liferay API Explorer

Object v1.0 OAS3
<http://localhost:8080/o/c/contactuses/openapi.json>

Servers
<http://localhost:8080/o/c/contactuses/>

ContactUs

Method	Endpoint	Action
GET	/scopes/{scopeKey}/by-external-reference-code/{externalReferenceCode}	
PUT	/scopes/{scopeKey}/by-external-reference-code/{externalReferenceCode}	
DELETE	/scopes/{scopeKey}/by-external-reference-code/{externalReferenceCode}	deleteScopeScopeKeyByExternalReferenceCode
PATCH	/scopes/{scopeKey}/by-external-reference-code/{externalReferenceCode}	patchScopeScopeKeyByExternalReferenceCode
GET	/scopes/{scopeKey}	getScopeScopeKeyPage
POST	/scopes/{scopeKey}	postScopeScopeKey
GET	/contactUsId	getContactUs
PUT	/contactUsId	putContactUs
DELETE	/contactUsId	deleteContactUs
PATCH	/contactUsId	patchContactUs

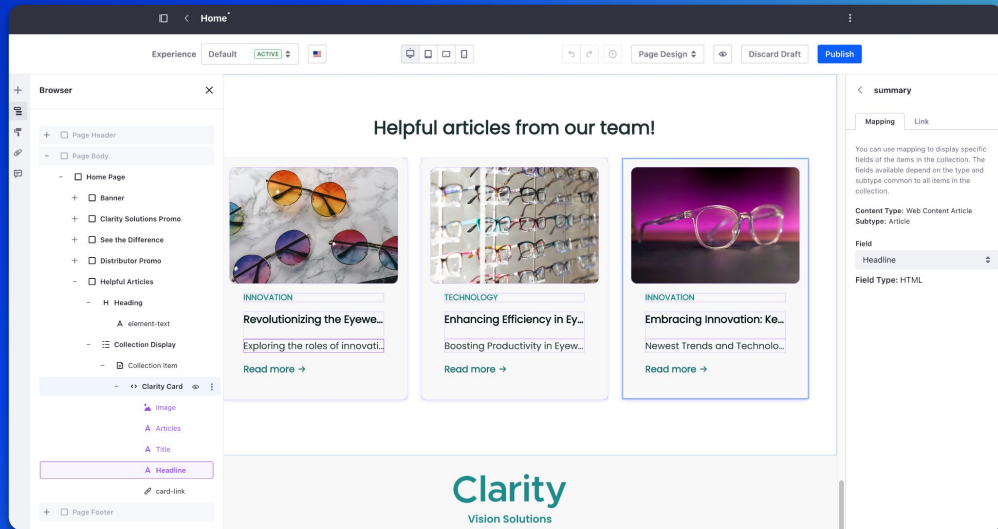
REST Applications

- analytics-reports-rest/v1.0
- analytics-settings-rest/v1.0
- batch-planner/v1.0
- bulk/v1.0
- c/applicationevaluations**
- c/contactuses
- c/distributorapplications
- c/distributorkycverifications
- captcha/v1.0
- change-tracking-rest/v1.0
- clarity-kyc-proxy/v1.0
- data-engine/v2.0
- data-set-admin/data-sets
- data-set-admin/data-sets/actions
- data-set-admin/data-

Liferay Objects Differentiators

Front-End Integration

- Forms
- Collections
- Collection Providers
- Navigation Menus
- Display Page Templates



Liferay Objects Differentiators

Frameworks Integration with Liferay Objects

Framework	Description
Asset	Use the Attachment field to upload files to Documents and Media.
Audit	Enable and audit entry history for custom object definitions using the Audit application or REST APIs.
Categorization	Add categorization tools to custom object layouts so users can add tags and categories to entries.
Headless	Liferay generates a headless endpoint for each published object, to allow REST calls to be made against the object and its entries.
Info	Use object data with Display Page Templates, Fragments, Navigation Menus. Liferay also automatically creates a Collection Provider for displaying its entries.
Localization	Localize fields for object definitions to better serve your global users.
Permissions	Manage application and resource permissions to control access to object definitions and their data.
User Associated Data	Manage user-associated data in object definitions and entries to support GDPR requirements.
Workflow	Enable custom workflows for objects to direct the creation, review, and publishing of object entries.

Liferay Data Sets

Data set views provide a no-code approach to organize and manage related data in Liferay for presenting this data to users

What is a Data Set?

Retrieve



Compatible
Headless API



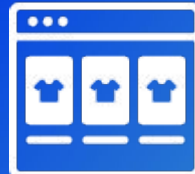
Admin-Users

Manage



Choose content
and tooling

Visualize

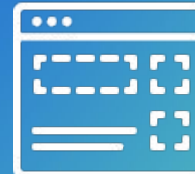


Change between
visualizations



End-Users

Manage



Interact with
the data

Liferay Objects

Data Set Manager

Organize, View + Manage Data

< **Products Data Set View** ⋮ 👤

Details

Visualization Modes

Filters

Sorting

Actions

Pagination

Settings

Settings

FRAGMENT DEFAULTS

Default Visualization Mode ?

Customize which visualization mode will be shown by default for this Data Set.

Cards

⬆️⬆️

Save

Cancel

Use Case - Clarity Customer Service

Tasks App requirements:

- Visualizations
- Ticket creation
- Ticket management and assignments
- Ticket comments
- Different views & permissions for users
- Filtering and Sorting capabilities
- Extensibility



Recap: Use Cases

- Employee/client lists
- Reports and form response management
- E-commerce order listings and management
- Lead lists
- Event registration management
- Task lists
- Insurance/financial agent management
- Customer data (contracts, policies, etc.)
- Supplier and distributor management
- Cases/tickets
- Etc.

UCI

[Home](#) [Blog](#)[Filter](#)[Order](#)

- ✓ Ranking
- Height
- Weight
- Name
- Team
- UCI Points
- Total Kilometers
- Competition Days
- ✓ Ascending
- Descending

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Ready, set, build.

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