



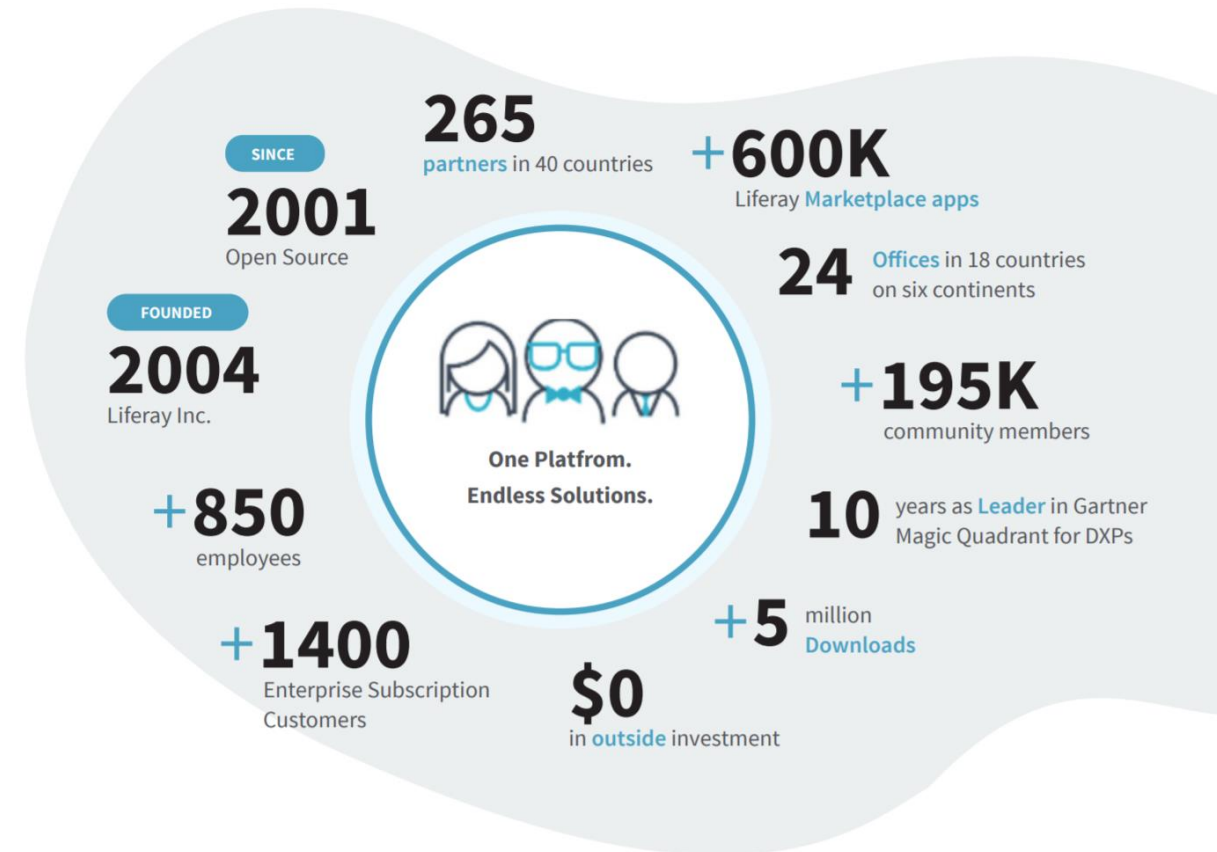
Liferay DXP e Open Banking: Experience API per il futuro cliente del settore bancario



Liferay as a Company

Founded in 2004 and with our HQ in Diamond Bar, California, Liferay today is a truly global company:

- 24 offices in 18 countries
- More than 1800 Enterprise Subscription customers
- More than 150 partners in 40 countries
- 6 million worldwide downloads
- 100% owned capital





Liferay is a Leader for the Tenth Year

in the 2020 Gartner Magic Quadrant for
Digital Experience Platforms

Figure 1. Magic Quadrant for Digital Experience Platforms



Source: Gartner (January 2020)



Over 2000 enterprises choose Liferay



Banking



Healthcare



Government



Retail



Manufacturing



Insurance

Allianz 

 **AutoZone**

 **BOSCH**

COACH INC.

 **Domino's**

FUJITSU



usbank

T-Mobile

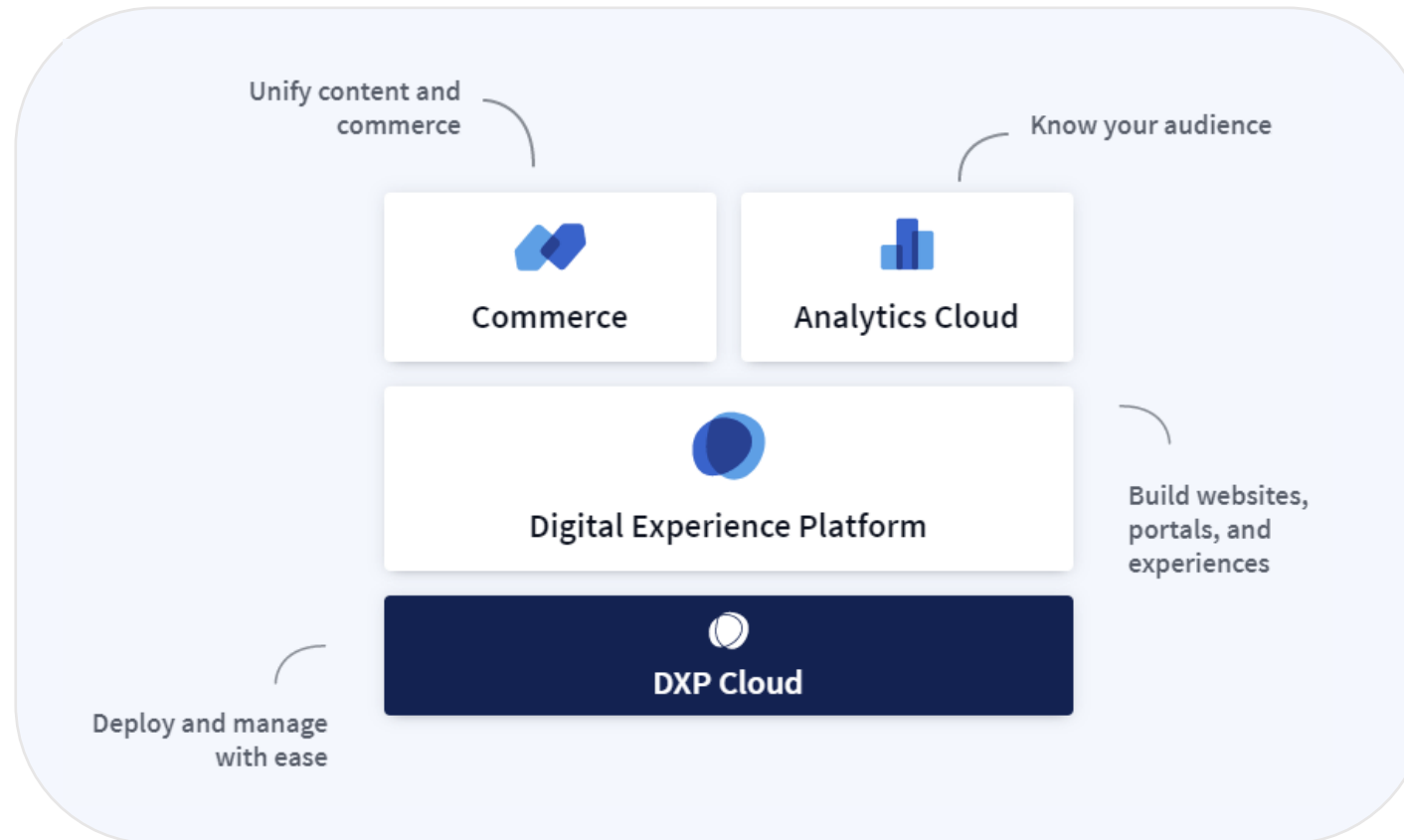


Digital Experience Platforms





Liferay Solution



What is Open Banking?

Open banking is a banking practice that provides third-party financial service providers open access to consumer banking, transaction and other financial data from banks and non-bank financial institutions through the use of application programming interfaces (APIs).

- The use of open **APIs** that enable third-party developers to build applications and services around the financial institution.
- Greater **financial transparency options** for account holders ranging from open data to private data.
- The use of **open source technology** to achieve the above.

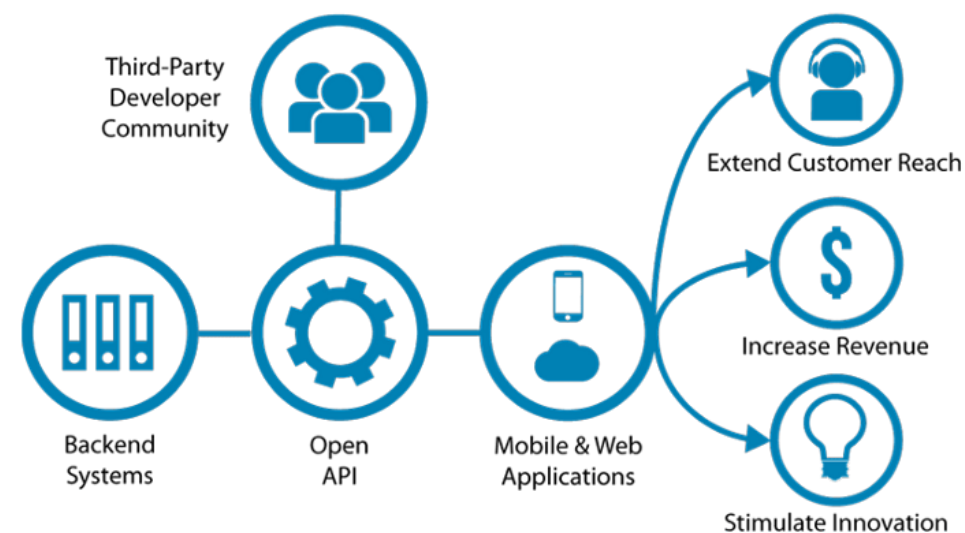


PSD2, APIs and Their Impact on Traditional Banking

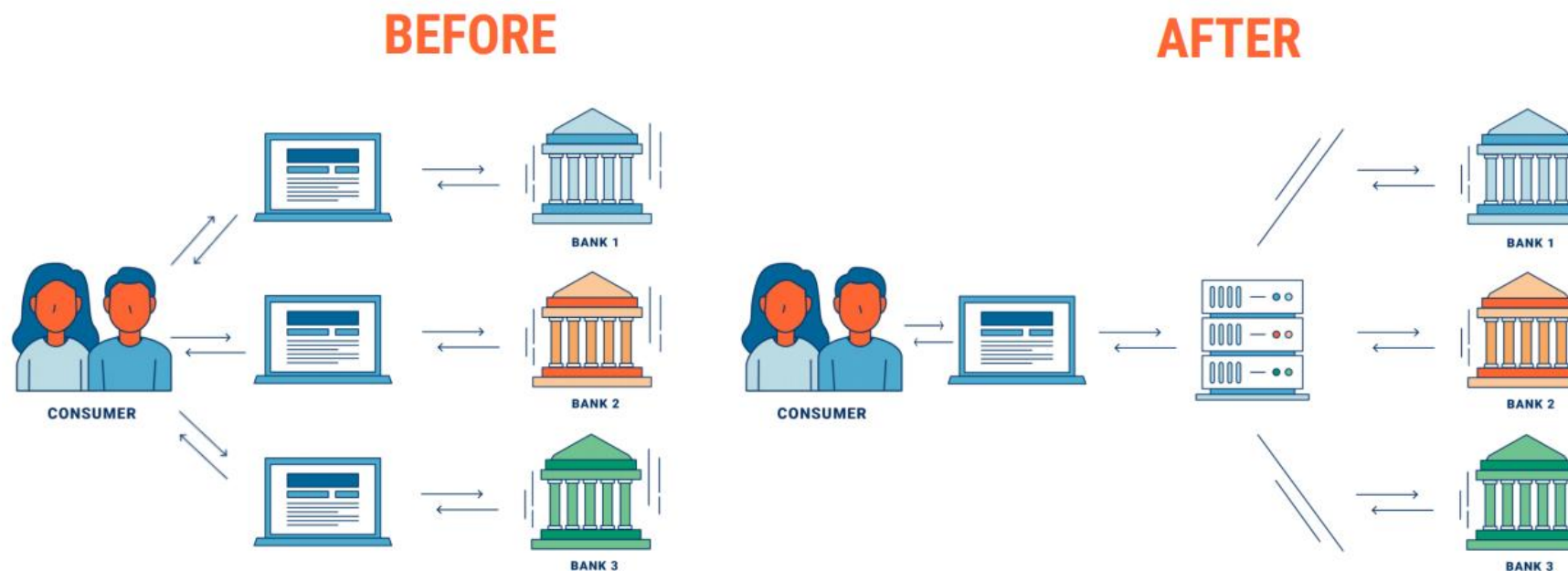
The **PSD2** is an **EU Directive**, administered by the European Commission to regulate payment services and payment service providers throughout the European Union (EU) and European Economic Area (EEA).

The key objectives of the PSD2 directive are creating a more integrated European payments market, making payments safer and more secure and protecting consumers.

- **Banks opening their payment services to other companies**, the so-called Third Party Payment Services Providers (TPPs)
- Account Information Services (AIS) include the **collection and storage of information** from a customer's different bank accounts in a single place
- Payment Initiation Services (PIS) other providers facilitate the use of online banking to make payments online
- An important element of PSD2 is the requirement for **strong customer authentication** on the majority of electronic payments



Open Banking and Consumer





Traditional Banking Must Compete with Fintechs to Provide a Satisfying User Experience



As customers demand better services with better experiences, technology must be equipped to aid moments of truth in the customer journey.

- Extract existing corporate information from outdated computer systems, or connect these systems, to put the customer in the center and offer better service.
- Innovate quickly by launching new products and services to the market.
- Release corporate information to the market efficiently by different web or mobile channels, through an omnichannel experience.
- Customize the content and services depending on the type of user.



Deliver personalized experiences at scale

Create Experiences

Enable your business users to create engaging content pages.

Personalize Experiences

Make meaningful connections with your customers.

Manage Digital Assets

Equip your business users with the tools to manage their digital assets.

Think Headless

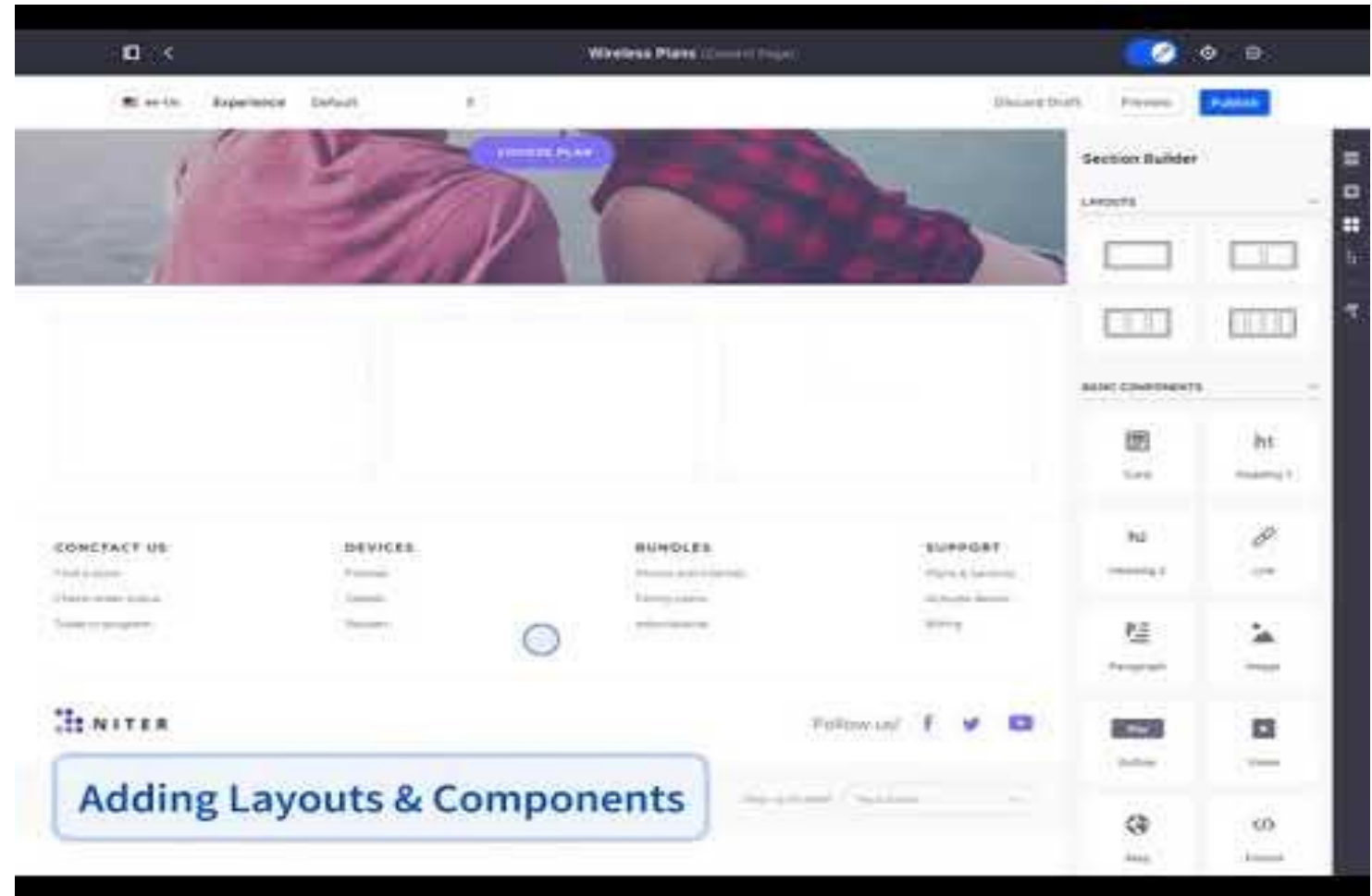
Enable your developers to create experiences with the flexibility of a decoupled CMS architecture.

Creating Experiences

Content Pages

Empower marketers and other business users to **create stunning pages with a minimal IT intervention.**

- Out of the box fragment sections and components provided – these can be copied to create custom fragments
- Includes: Banners, Headers, Footers, Buttons, Cards, Images, Videos, HTML, Text, etc.
- Visual creation of content from these pre-defined fragments
- Visual creation of pages by adding fragments to sections – resizable, reformattable etc.

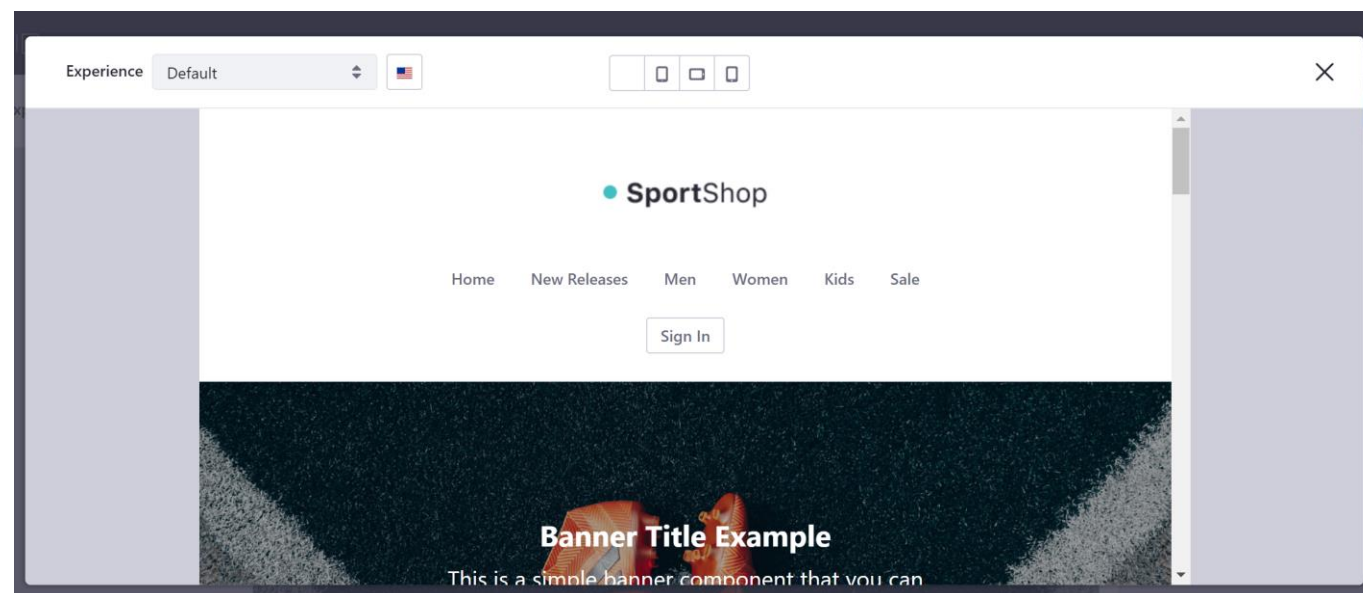


Creating Experiences

Content Preview

Preview your content in context to see the final result of your work.

- Makes use of Display Pages feature
- Allows Web Content to be previewed as it will appear in a Display Page – even if it has not yet been deployed to the site
- Supports preview of Draft content
- Supports preview during Workflow

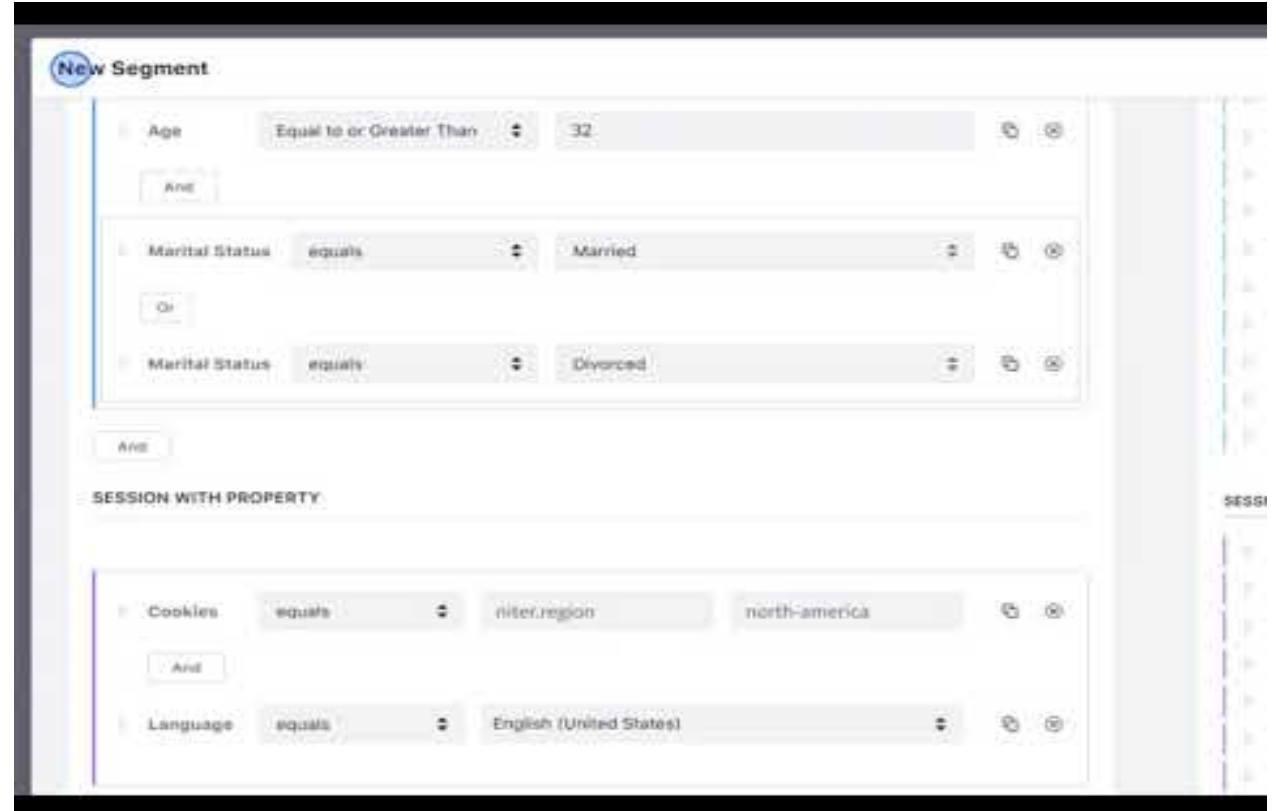


Personalizing Experiences

Content Pages

Personalized Page “Experiences”

- Personalize pages by creating an “Experience” for each Segment
- Supports full Page Element personalization – e.g.:
 - Text and Images
 - Fragments
 - Navigation
 - Widgets



New Segment

Age Equal to or Greater Than 32

And

Marital Status equals Married

Or

Marital Status equals Divorced

And

SESSION WITH PROPERTY

Cookies equals niter.region north-america

And

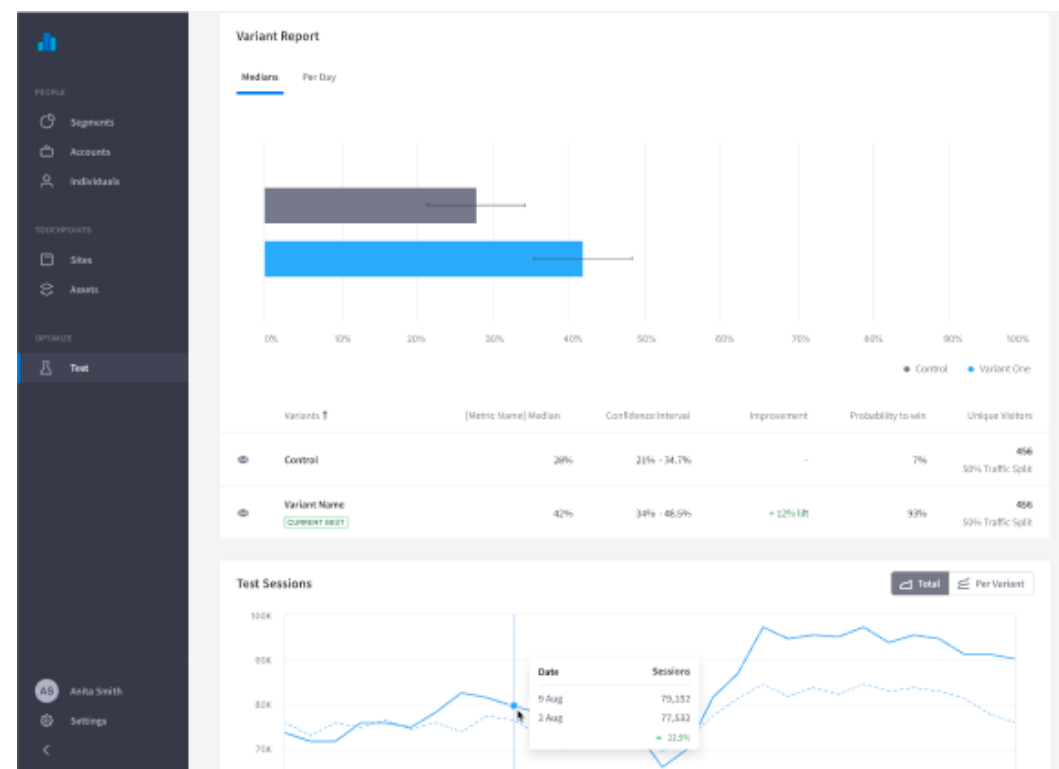
Language equals English (United States)

Personalizing Experiences

Content Pages

A/B Testing

- A/B tests can be created and run for any Content Page *Experience*
- Tests are run against bounce rate or clicks on a target element
- Tests are defined and run in DXP
- Results and reporting are in Analytics Cloud
- Uses Bayesian statistics to identify *probable values of lift* for a variant – enabling more informed business decisions to be made

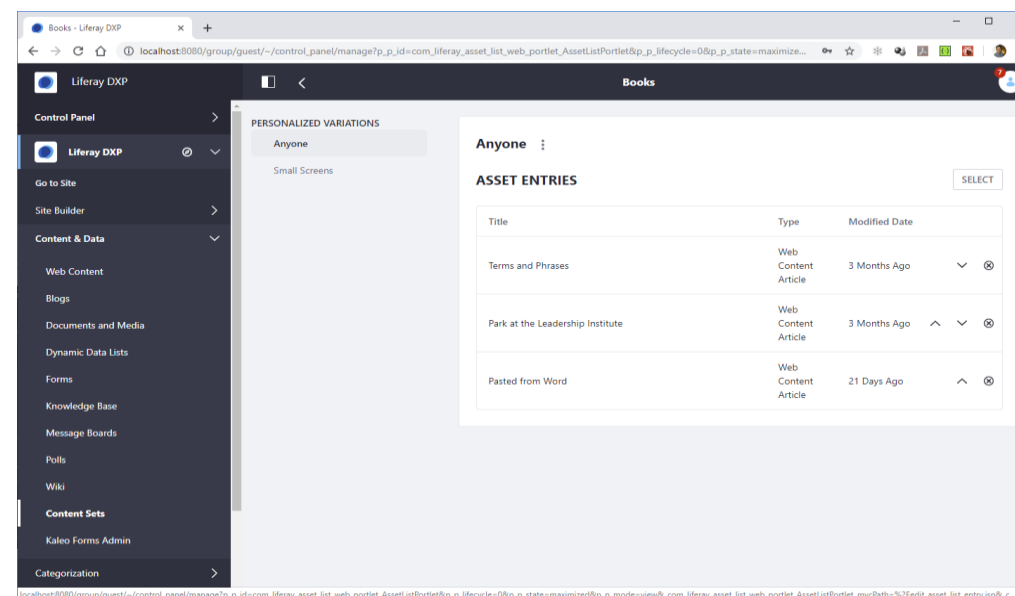


Personalizing Experiences

Content Recommendations

Incorporate AI-driven interest models from Analytics Cloud to recommend content to users

- Analytics Cloud uses AI to cluster topics and model long-term interests
- Supports known and anonymous users
- Presented through Content Sets in DXP to filter content based on interest keywords
- Keywords taken from Categories, Tags and content Keywords



Manage Digital Assets as Scale

Auto-tagging

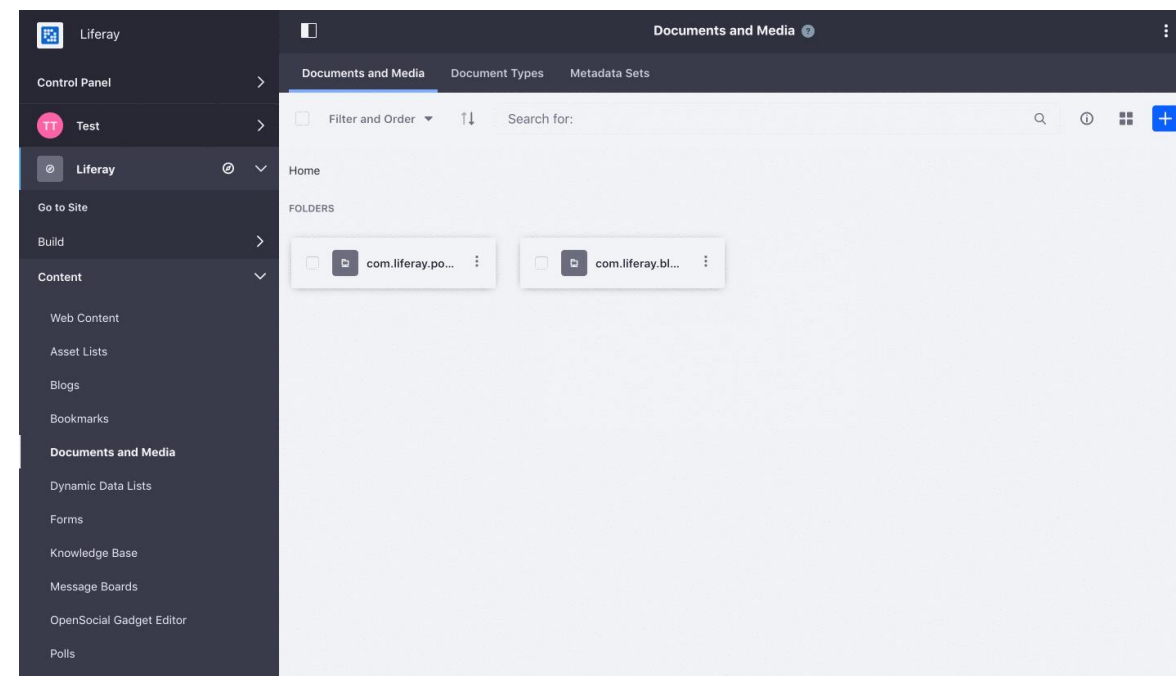
Tag **Images**, **Text Documents** and **Web Content**
using AI/ML tools

For **Business Users**

- Images: Bundled with TensorFlow*, configuration for Google Cloud Vision and Microsoft Cognitive Services
- Text Documents and Web Content: Bundled with Open NLP*, configuration for Google Cloud Natural Language
- Control at site or instance levels

For **Developers**

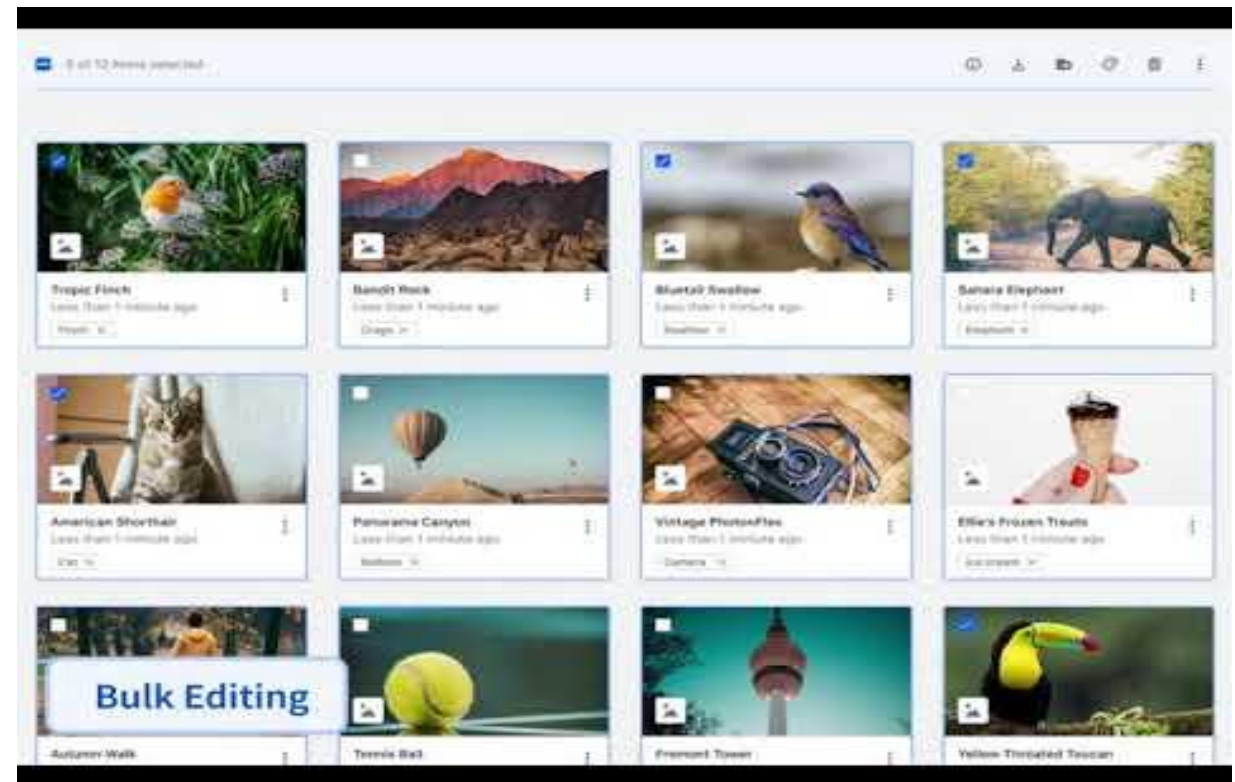
- API to support auto-tagging of any asset (including custom assets)
- API to connect with additional external services



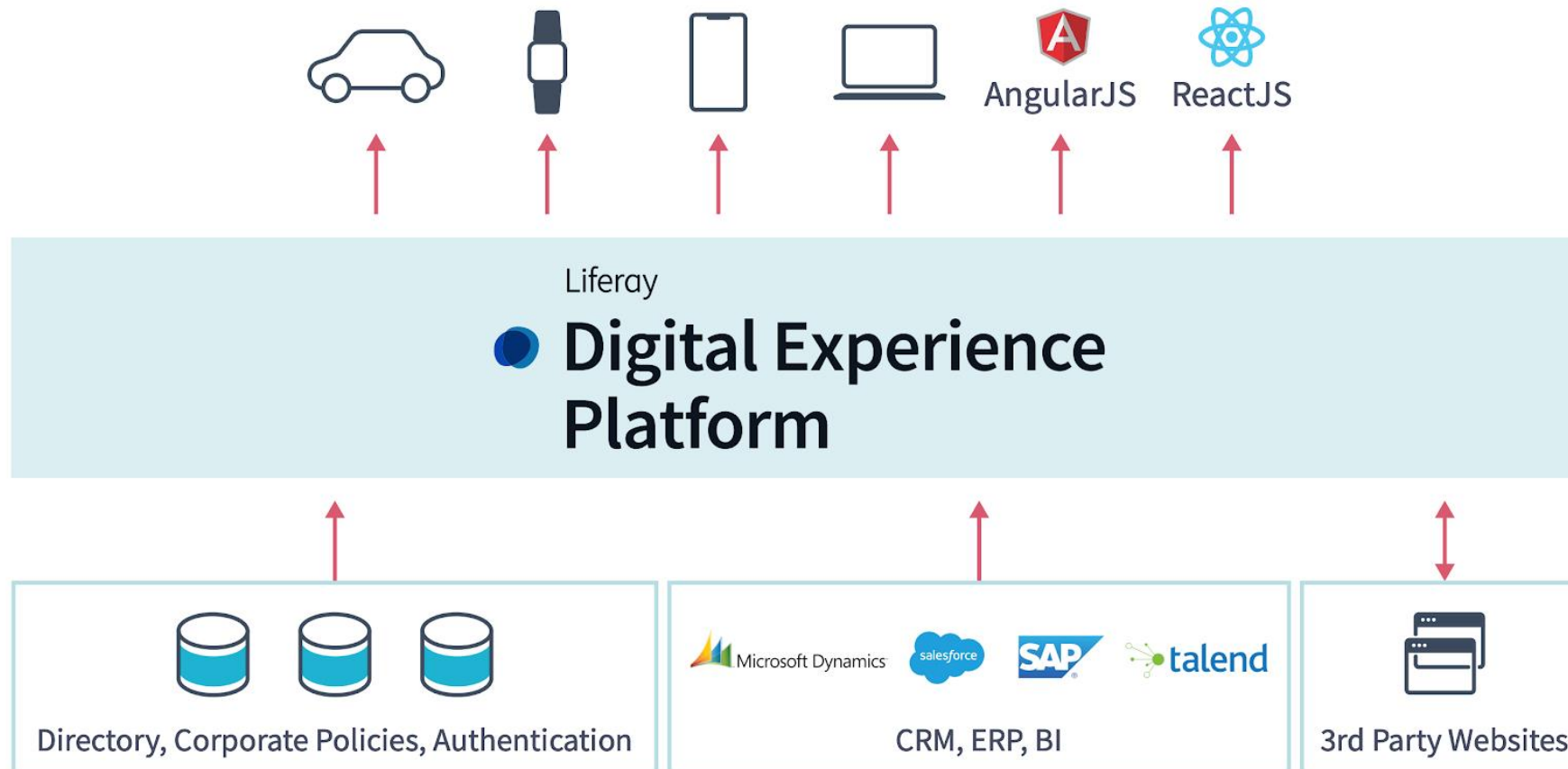
Manage Digital Assets as Scale

UX Improvements

- Improved category and tag management
- Bulk actions for large data sets:
 - Tag
 - Category
- Can select and move all assets in a folder with single click



Thinking Headless

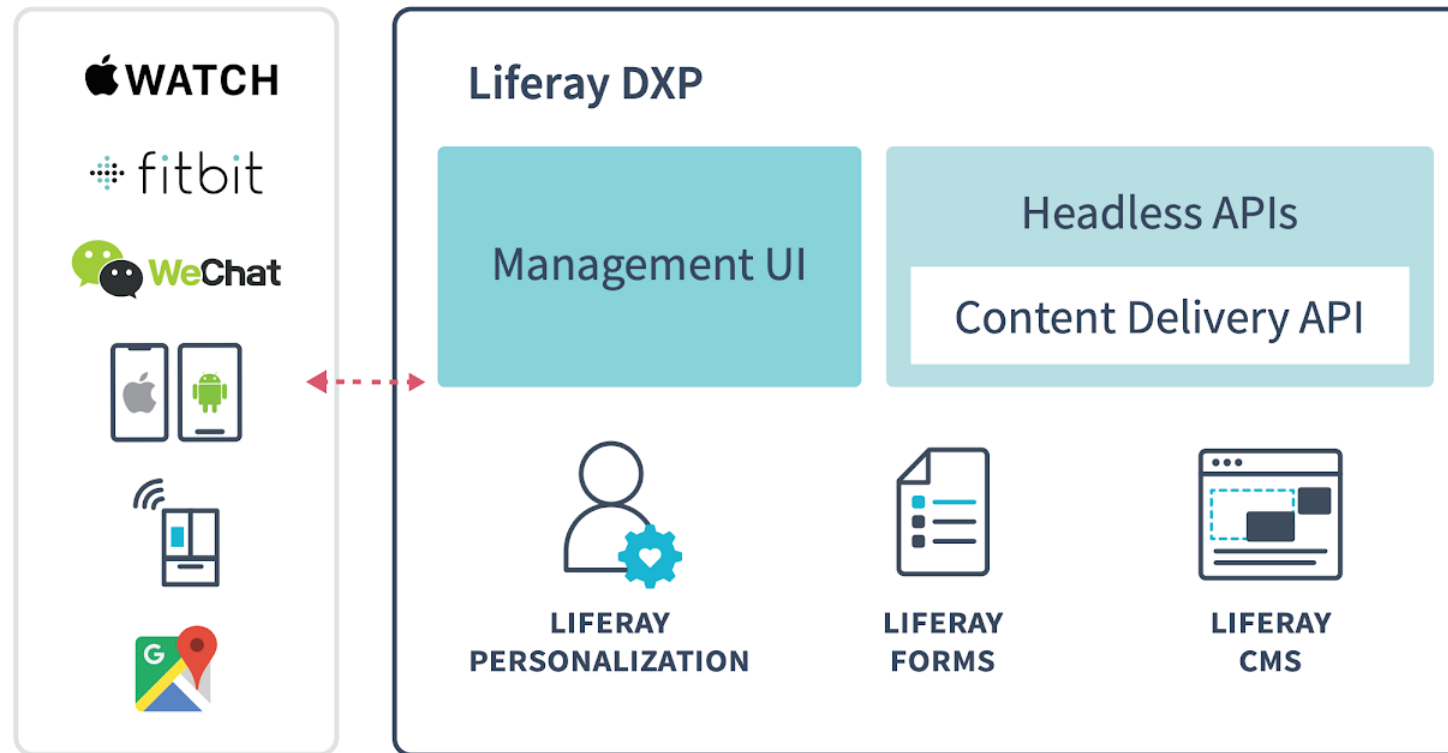


Liferay DXP as a backend of custom frontends



Figure 5 - Example of using alternative UI frameworks such as React or Angular

Liferay DXP as enabler of omnichannel experiences



Bi-directional integrations with external applications

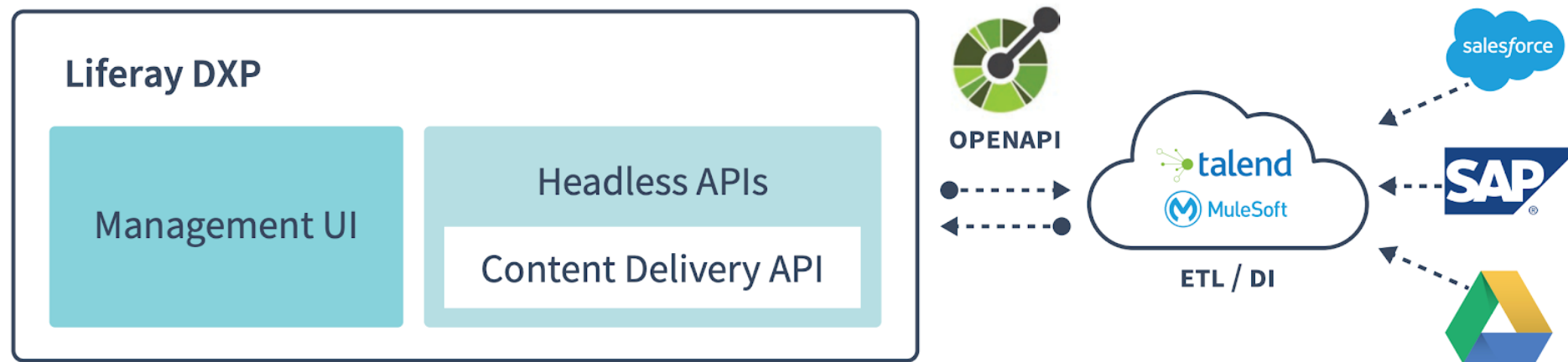


Figure 7 - Example of back end system integration with other enterprise systems



Headless CMS Can Improve CX

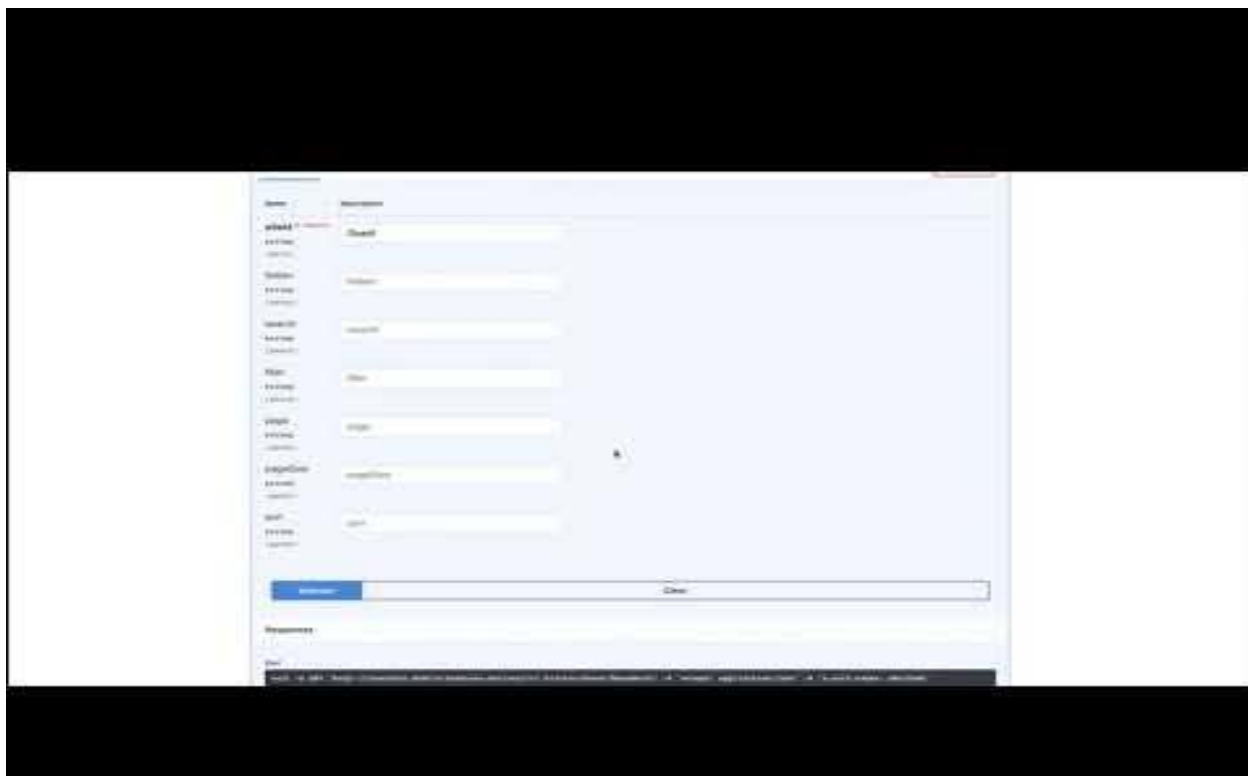
Seamless Information with Multi-Channel Publishing

Getting your content to the channels where your customers are spending their time is critical. Headless CMS enables your content to live on any number of connected devices, from customer's homes to their mobile devices.

Consistent Customer Experiences with Content Aggregation

Does your content exist across multiple websites, applications or content management systems? Do you pull content from external sources such as other sites, RSS feeds, or APIs? Content aggregation will help you manage all of this content regardless of the channel.

API Documentation



API explorer

- Integrated OpenAPI and GraphQL clients to explore the available APIs, check documentation and test live during development.
- Supports managing headers for authentication, multi-language or personalization.
- Access `/o/api` of your server logged.



Two-Factor Authentication (2FA)

Multi-Factor Authentication (MFA) provides better security by requiring users to prove their identity in multiple ways, or factors. The basic user name/password combination is augmented with one or more further, configurable factors.

- The **OTP** sends the one-time password to users via email
- Time-Based One-Time Password MFA Checker based on the “**Google App Authenticator**”

<

Press the button below to obtain your one-time password. It will be sent to t***@liferay.com.

Send

Enter the one-time password from the email.

Submit

Account Settings

General Contact Preferences **Multi-Factor Authentication**


Time-Based One-Time Password

Configure the time-based one-time password in your account. You must introduce the shared secret or scan the QRCode with a software based authenticator to obtain the one-time password.

Time-Based One-Time Password

Shared Secret

5HZTTZVHVSNHQG45LSNUV2LILXK76GF4



Submit



Demo



Headless
& API date

Grazie

Lorenzo Carbone

LIFERAY PRESALES ENGINEER ITALY

Intesys

 Liferay