

Building an Omnichannel Personalization Solution





Deliver the right content to the right people

- A solution offered by Technopolis
- Build on top of Liferay DXP



Objective

Common Content Hub

To serve personalized experiences across touchpoints

- Simple and extensible CMS for content variations
- Powerful admin UI for the definition of Segments
- Inclusion of BI data
- Identify user sessions and segment membership
- Serve content via headless API
- Transparently used by any digital channel





CMS for content variations

Used Liferay's powerful CMS features

- Content model defined with Structures
- Added predefined structures for common elements
 e.g. Banners, CTAs
- Add content variations as Web Contents. e.g.
 Banner_A, Banner_B
- Define also a default variation, e.g. Banner_All
- Prepare a Collection assigned to the hotspot you wish to personalize, e.g. Hero_Banner







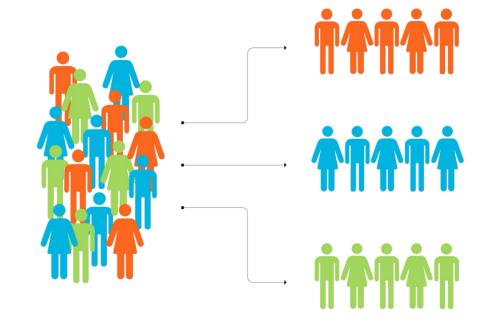




Definition of Segments

Used Liferay's Segments and User Custom Fields

- Create Segments using rules
- Use user model attributes e.g. gender, role, org
- Use session attributes e.g. desktop/mobile
- Add custom fields to match business attributes
- Segments may overlap, this is quite normal





Bring in BI data

Business domain data are crucial for effective targeting

- BI data may be huge
- API integrations may not be applicable
- Sync from blob storage and parquet files
- Use of a fast in-process data management transformation tool that supports multiple data lake formats
- Compute segment membership for active users only and without blocking login flow
- Avoid PII data, just use an ID





Identify User Session

Create a logged in session and identify the visitor

- Support common SSO protocols (OIDC or SAML)
- Create a Liferay session identifier
- A javascript widget initiates the session from any client channel
- Channels must use the same Identity Provider
- A post login process handles the additional segmentation attributes (from BI data and/or from the user info request)





Serve Personalized Content

Used Liferay's Headless Delivery

- The user session defines segment membership
- Personalized variations are assigned to segments
- A headless request with a session identifier returns the correct content variation
- If a user matches multiple segments, priorities are used
- If a user matches none, a default variation is served
- The consuming channel renders the personalized content

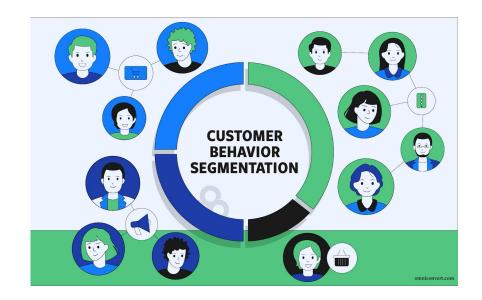




Extend the solution

Optional additional features

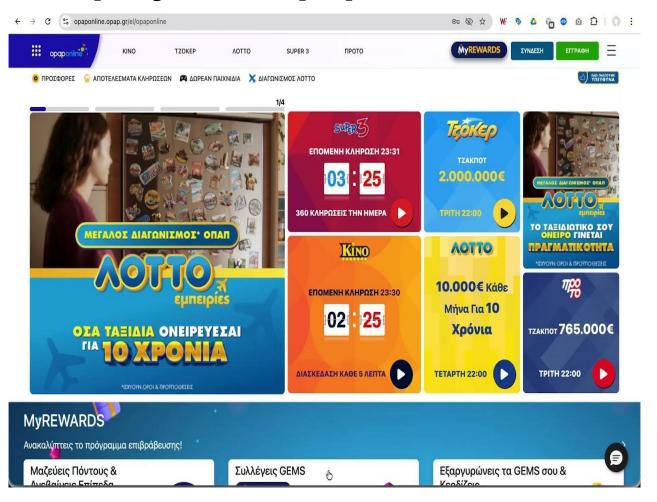
- The same Liferay instance can also be a consuming channel
- And also serve Personalized Landing Pages
- Add analytics events to monitor usage
- Behavioural segments based on visit path
- A/B testing on variation





Demo

Solution as deployed in opaponline



Liferay*



A solution made possible by using and extending Liferay DXP



Sum up

Key Features

- All-in-one system: logic, setup and delivery
- Touchpoints handles only rendering
- Personas attributes both from APIs and from Data lakes
- User modelling need not use any PII data
- Intuitive and Flexible admin UI
- Personalized Landing Pages can also be supported
- A single instance can scale to million users and tens of millions of personalized responses





and any Questions please!

