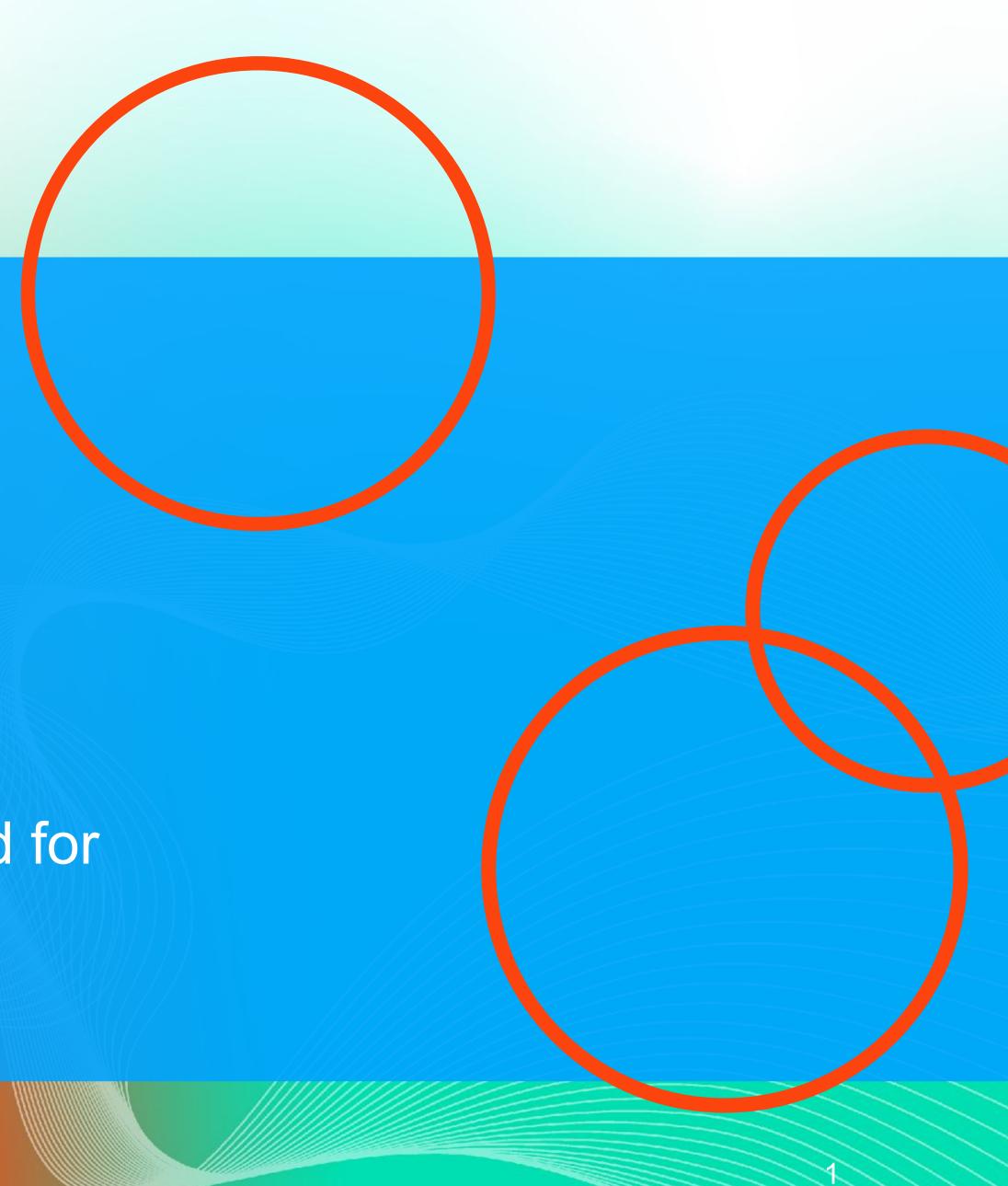


Portal for Hub Operators

An overview of the various Portals envisioned for the Hub



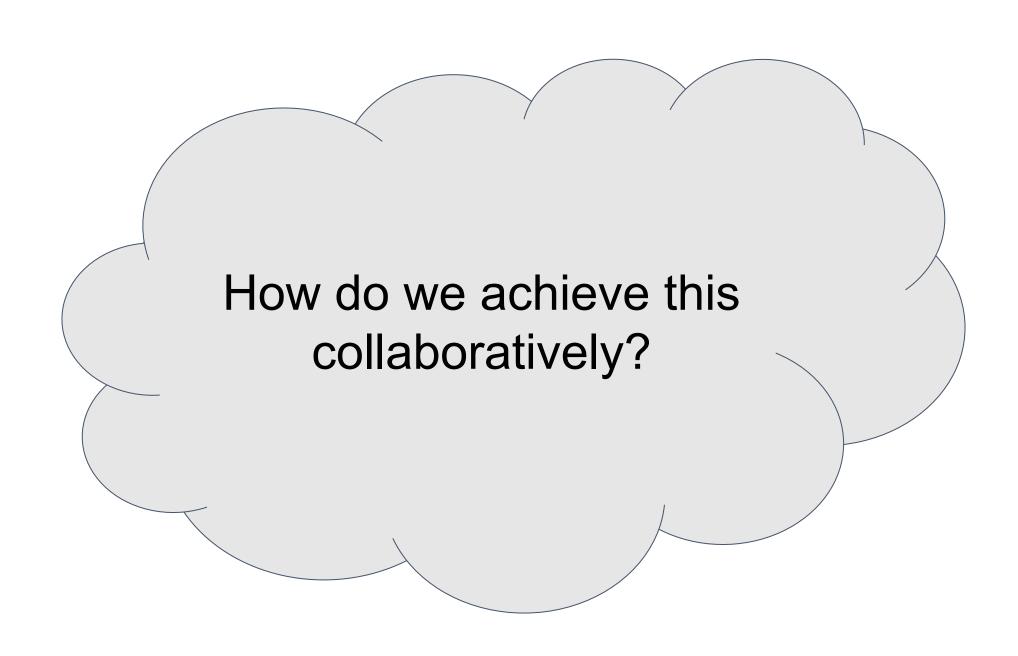
Portal Hierarchy



Portal User Experience

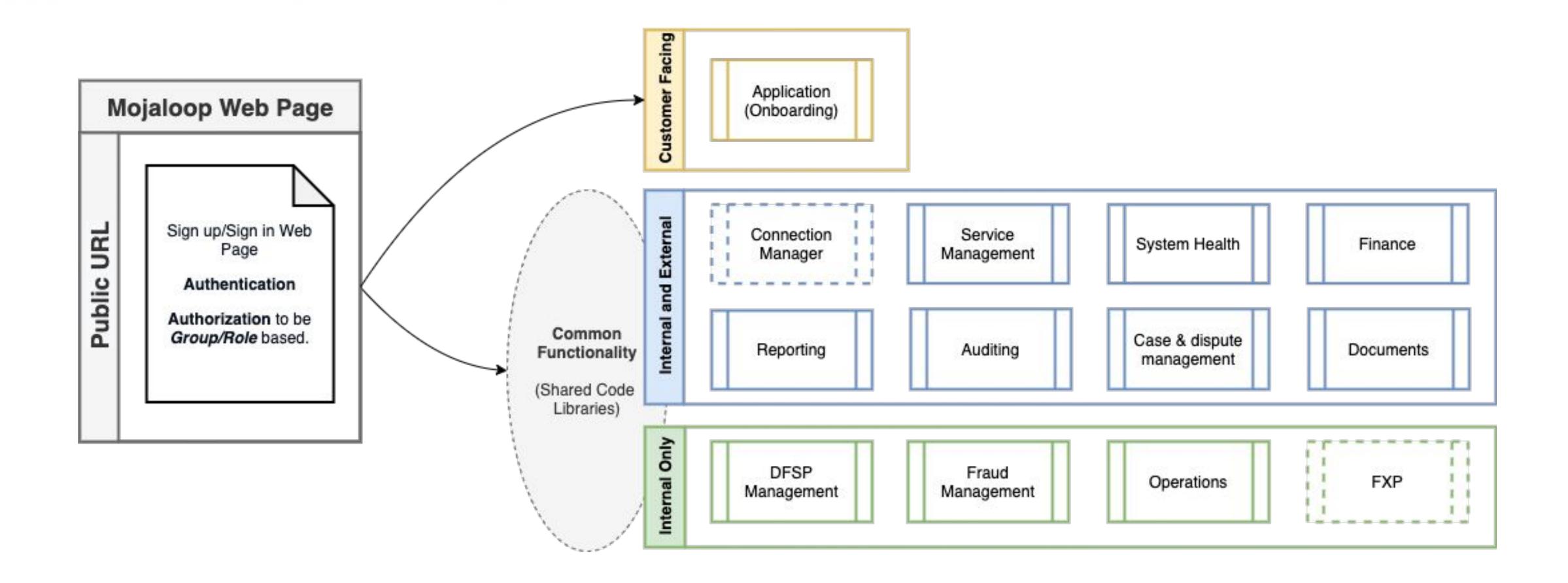
Key considerations of the Portal Design:

- Simple to Use
- Guides a user to complete actions
 - Task Based Dashboards
 - Clear steps in long processes
 - Easy collaboration
- Great looking



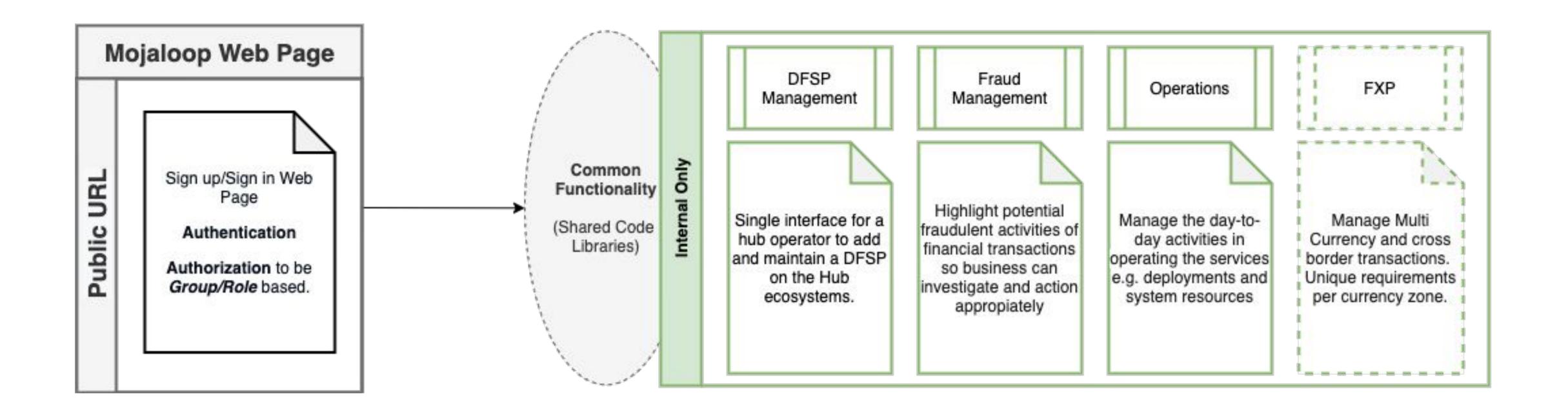


Overview



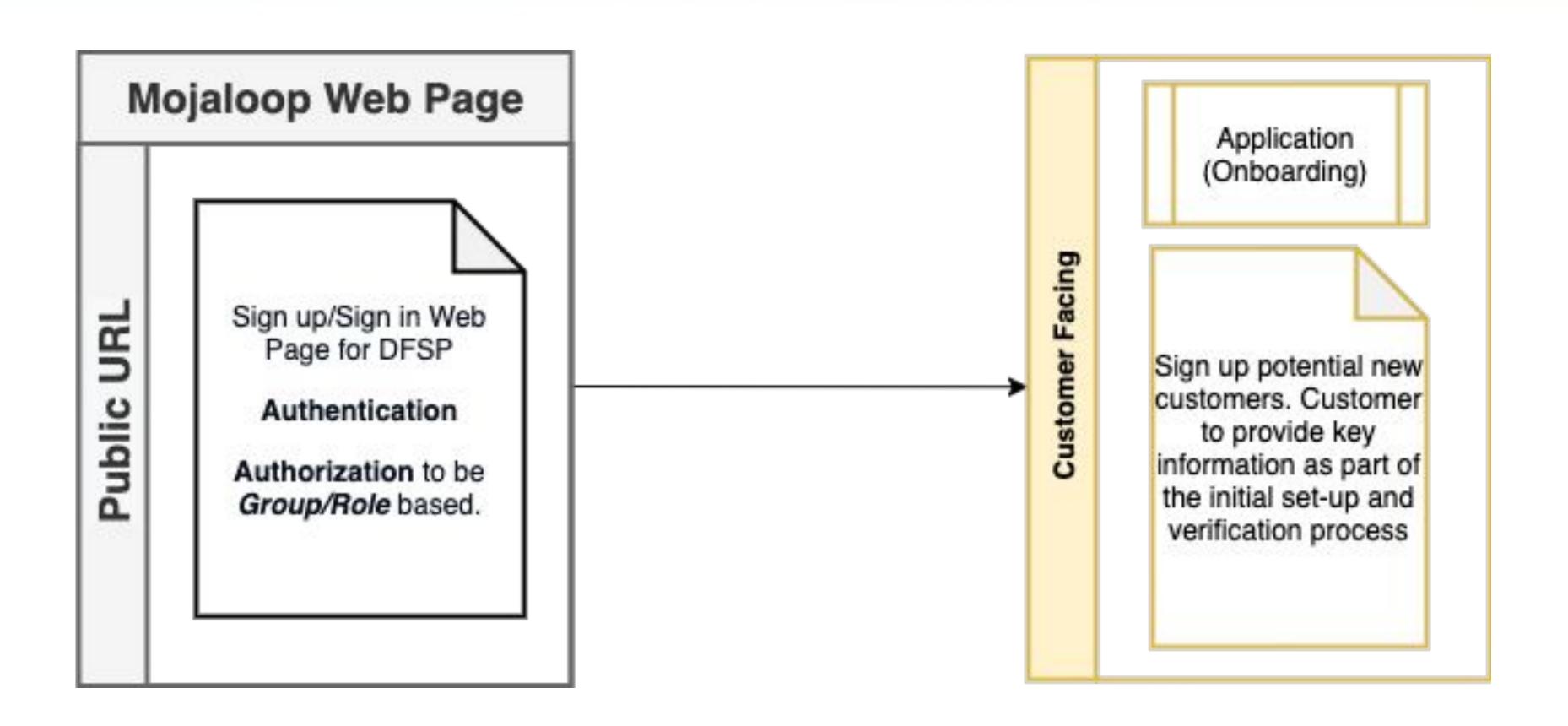


Internal



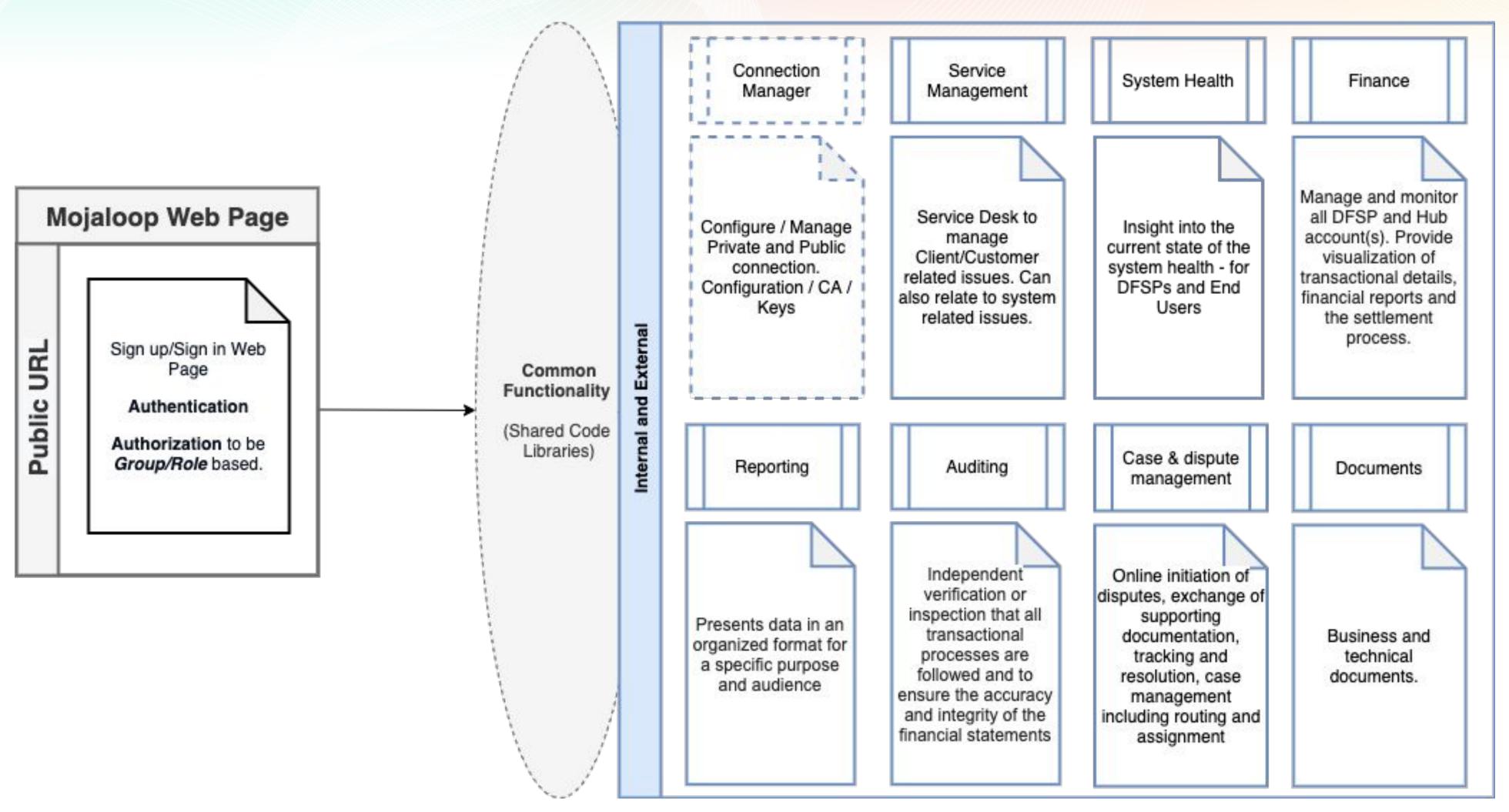


Customer Facing



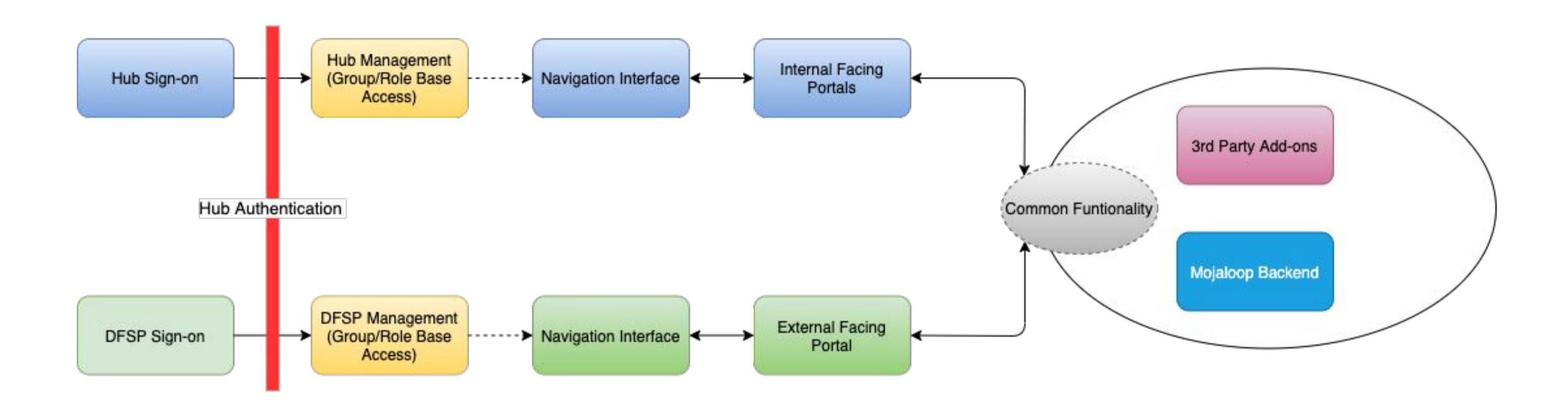


Internal and External



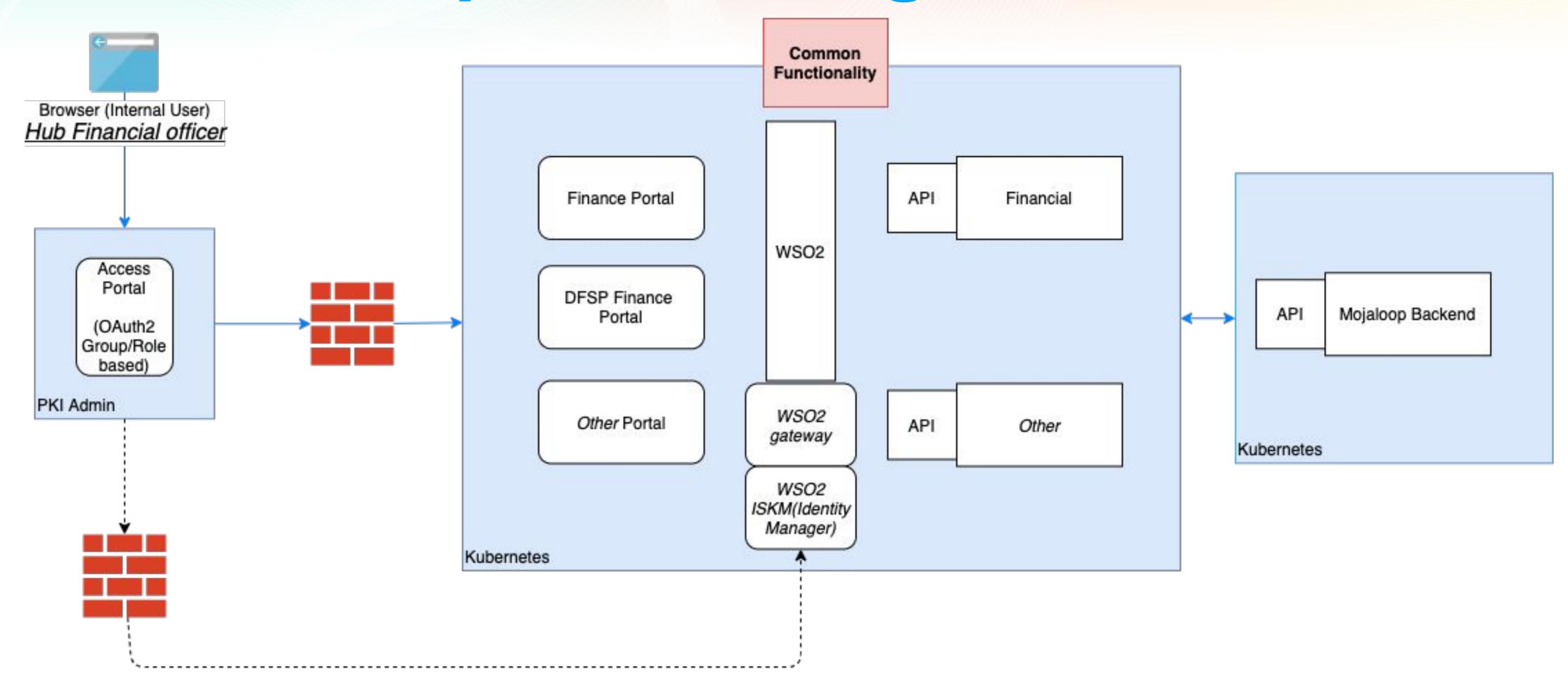


Portal Architecture





Portal Component Diagram





Portal Framework

Key considerations of the Portal Framework:

- Multiple implementations that are easily maintained and reusable
- Configurable and flexible implementations
- Customer-centric configurable setup options
- Easy customisation to accommodate customer specific requirements and specifications
- White label capability
- Micro frontends to be usable within the same Portals



Modular Approach

- Capable of adding or removing components based on Hub Configuration
 - Continuous Gross Settlement vs Multi-Lateral Net Settlement
- Capable of adapting to the business logic, user specific context and permissions
- From investigations and research to incorporate micro *User Interface (UI)* technologies and applications, and we have identified possible candidate options.



Technology Investigation

- Heavy-weight portals running with a server application vs all-frontend frameworks
 - Quickly settled on all-frontend frameworks.
- Survey of current approaches
- Narrowed down to a few candidates
 - Micro frontend frameworks
 - Different approaches for a custom implementation.



Technology - Short List

- Frameworks
 - Next.js
 - Luigi
- Custom implementations
 - Native React
 - React Workspaces



Short List - Feedback

- React Workspaces unsuitable.
- Luigi allowed multiple frontend frameworks to coexist, but required iFrames and extensive Luigi-specific API calls.
- Next.js remains a candidate as a mix-in for navigation and some other capabilities, but didn't do much to solve the core micro frontend composition problem
- Webpack Module Federation, a new feature of Webpack 5, as a candidate approach



In Closing

- It is desirable to show the best face of the Mojaloop foundation in these highly visible parts of the products.
- Need to adopt a particular direction that can be used on multiple implementation sites.
- The ultimate goal is to further extend the reach of such high quality interface design and effort, reduce technical overhead and maximise resource productivity.
- The recommendation is to adopt an approach that is modular, configurable and encourage flexible multiple site implementations and support a reusable Portal Framework.





Questions?

Thank You

