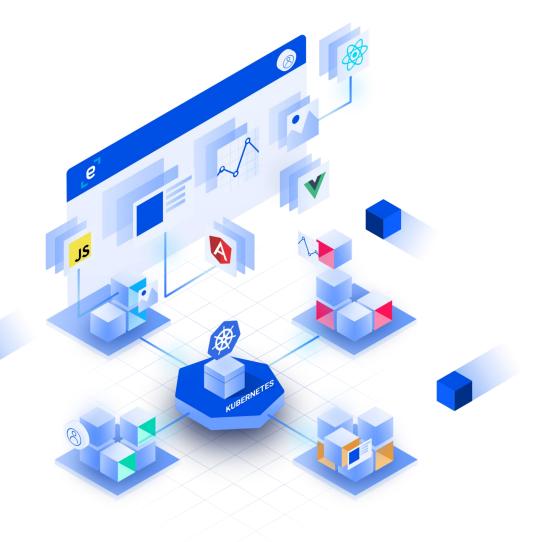


# Reduce Cloud Costs and Accelerate Development

With the leading Open Source
Application Composition Platform





# Top Strategic Technology Trends for 2023-2026



#### **Cloud-native Modernization**

Applications moved to the cloud as lift-and-shift are now being transformed to better utilize the benefits of the cloud.



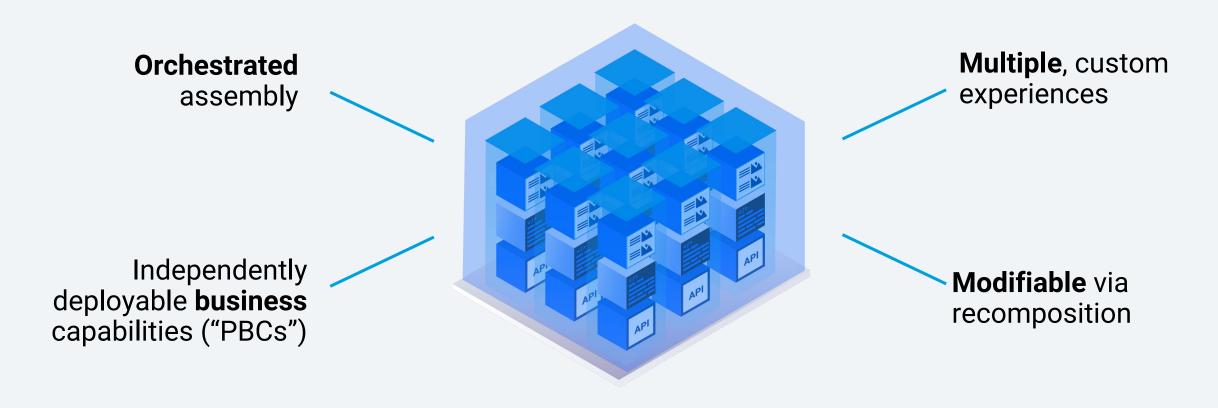
#### **Composable Apps**

Modernization is focusing on the composable architectural style to gain multiple cloud benefits to accelerate time to market, reduce costs, and streamline devops.



### What is a Composable Business Application?

An orchestrated assembly of independently deployable business capabilities.

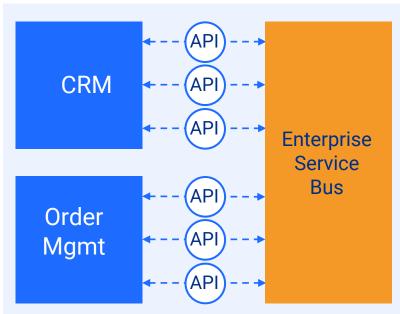




## **Evolution of Enterprise Architectures**

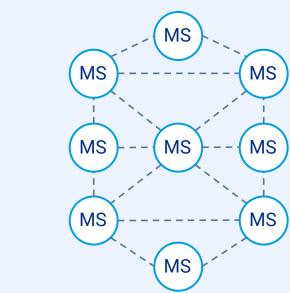
**From Monolith to Composed** 

2000's ----- 2010's ----- 2020's



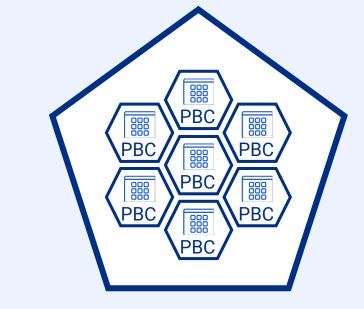
Packaged Monolithic Applications

Easy to manage, Hard to change



Packaged Microservicebased Applications

Hard to manage, Easy to change

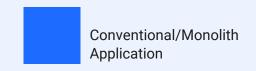


**Composed Applications** 

(PBCs & Components Marketplace)

Easy to manage, Easy to change











# Entando as a Platform Provides a Consistent Approach to Building Modular Apps

Model the Modular Business Architecture



#### **Enterprise Architect**

Selecting, implementing, and designing new applications alongside existing applications for a flexible business architecture Design, Create the Business Modular Building Blocks



#### **Creators**

Developers use the Component Generator and CLI to build, package and deploy components to the central hub. Manage the Marketplace of Building Blocks



#### **Curators**

Curators manage the central repository for components and business capabilities including content, versioning and metadata.

**Use Building Blocks to compose Applications** 



#### Composers

Developers and Business IT use low-code application composition tools and/or UI development frameworks to assemble applications from components.

Use Applications to Achieve Business Goals



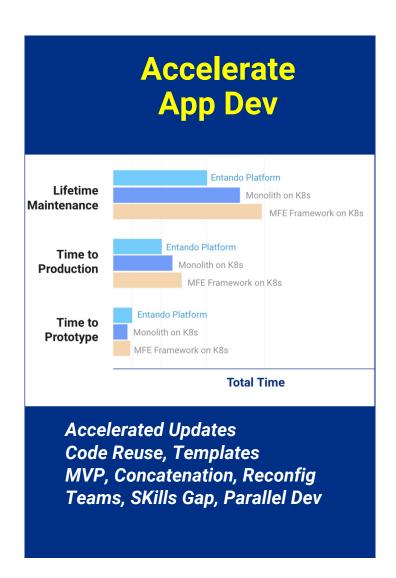
#### **Consumers**

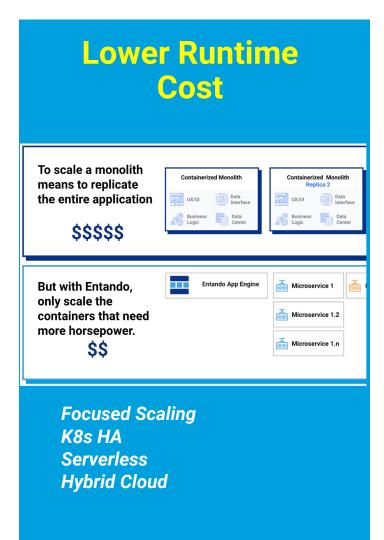
Business owners and users have the ability to use, monitor, analyze, update content/roles/users/rules and provide feedback to Creators/ Composers.

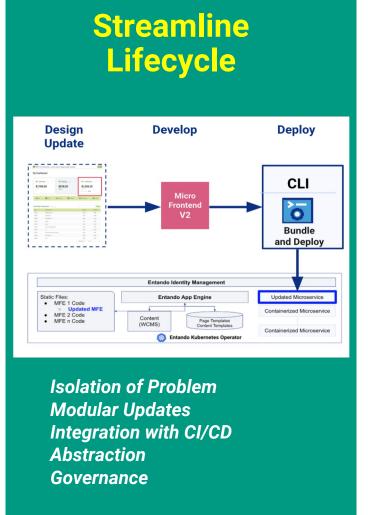


# **Unique Selling Proposition**













#### 1. Entando Accelerates App Dev

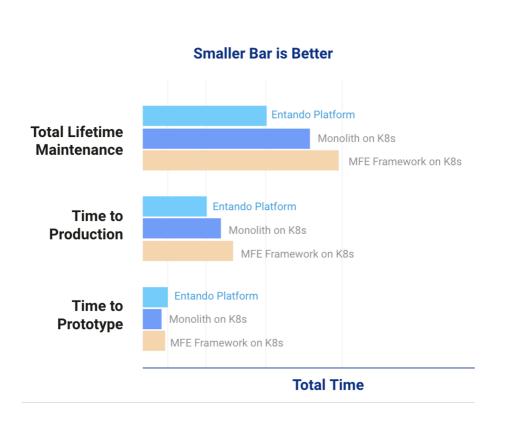
Faster Updates, Code Reuse, MVP, Teams







# Entando Accelerates Time to Production Faster Updates



- Entando applications can take longer to build a prototype vs applications that are monolithic or built with MFE frameworks
- However, they can be updated much faster
  - Updates are faster, more reliable, and easier to automate
  - Given most applications require 100's to 1,000's of updates before production, total time to production is greatly reduced using Entando
  - Entando also provides a <u>consistent approach</u> to modularity across an enterprise
- While MVPs accelerate all design styles, Entando simplifies the update of MVPs over time.

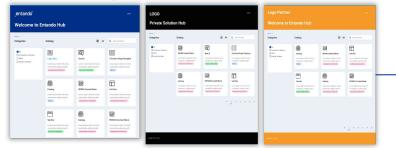




## Entando Accelerates Time to Production Code Reuse & Templates

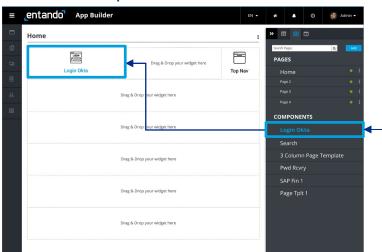
#### **Entando Hub:**

Library to store, discovery, access Pro Code Modules



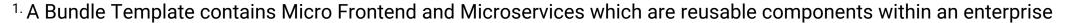
#### **Entando App Builder:**

**Low Code Interface for Composition** 



- Build applications from existing PBC Libraries
- Methods to reuse Entando Bundle Templates (PBCs)<sup>1</sup>:
  - As Is
  - Configure and use
  - Extend and inherit updates to core
  - Fork
  - Update any of above, and redeploy to Hub
- Standardize Integration with existing Content Libraries

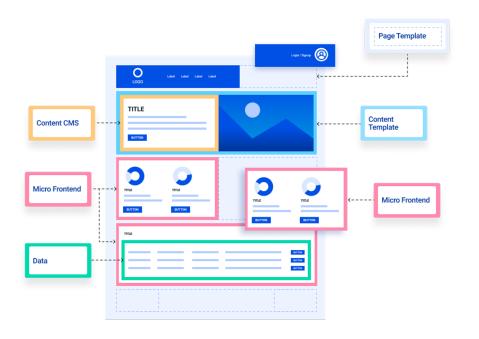








# Entando Accelerates Time to Production MVP, Concatenation, & Reconfiguration



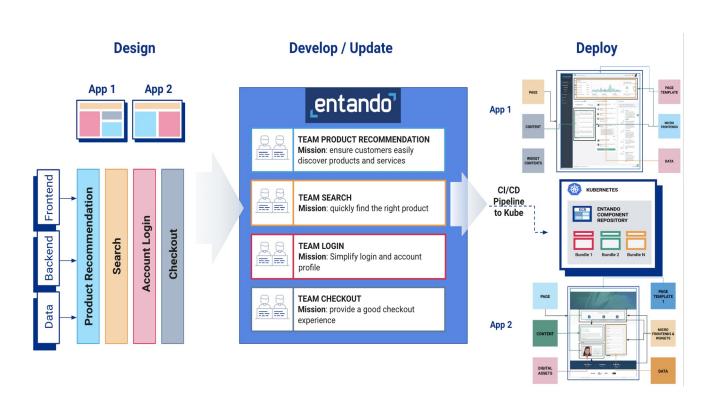
- Modular applications accelerate the time to an MVP
- Build based on initial requirements
- Review and update requirements
- Update initial modules or add new modules
- Projects that are deployed waiting for agreement on complex requirements can be accelerated by starting with requirements for the MVP, then modified over time
- Accelerating time-to-value and time-to-production





#### **Entando Accelerates Time to Production**

### Parallel Development with Teams, Break down the Skills Gap



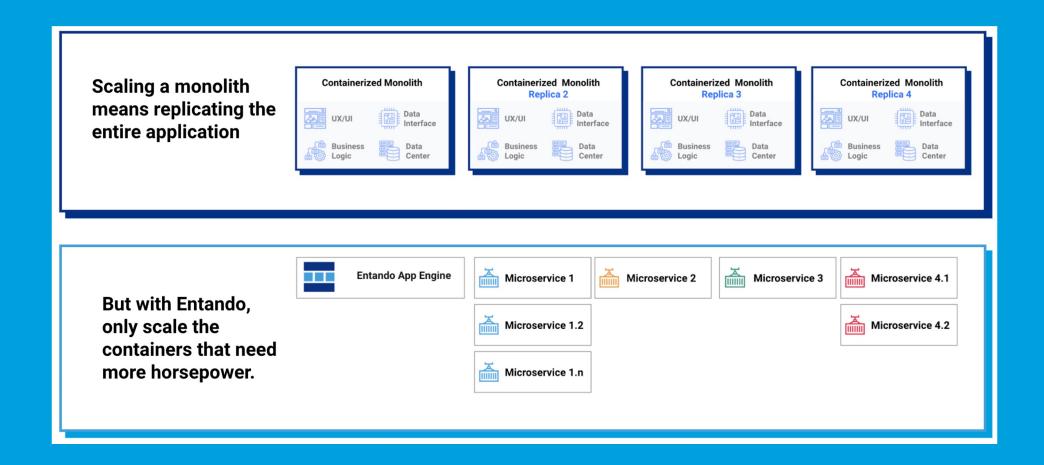
- Modular applications can be built using parallel teams
- Each team can leverage the skills they have (reduce skills gap)
- Specialized teams can focus on the tools, frameworks required
- Teams can release separately
- Faster times to MVP
- Faster times to update each module





### 2.) Entando Lowers Runtime Costs

Focused Scaling, K8s HA, Serverless, Hybrid Cloud







# **Entando Lowers Runtime Costs Focused Scaling**

Scaling a monolith means replicating the entire application









But with Entando, only scale the containers that need more horsepower.



- Traditional scaling requires the entire application, platform, and ancillary components to be duplicated
- Duplications costs

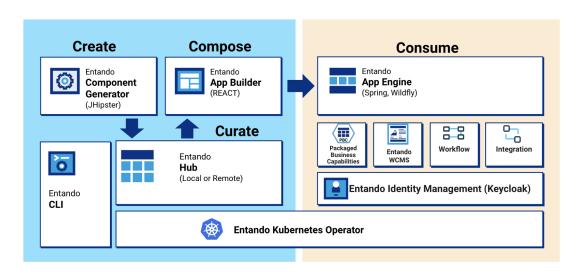
   a tremendous
   amount for
   software and cloud
   / server costs

- However most applications, have only specific components that need to be scaled (e.g., microservice 1 and 4)
- Scaling only the components needing more horsepower greatly reduces costs





### Entando Lowers Runtime Costs K8s HA



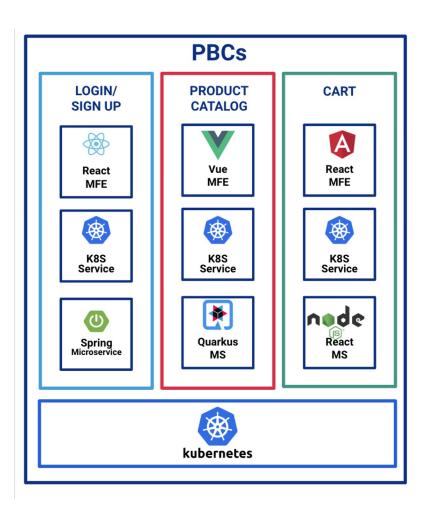
- Scale application based on the requirements application design
- Design applications for K8s pods
- Leverage K8s to automate DevOps for multiple operations across multiple components

- Leverage the Entando Kubernetes Operator to manage the deployment and day 2 operations of the applications
- Reduce cost of HA and complexity of the deployment of applications into K8s and the cloud





## Entando Lowers Runtime Costs Serverless

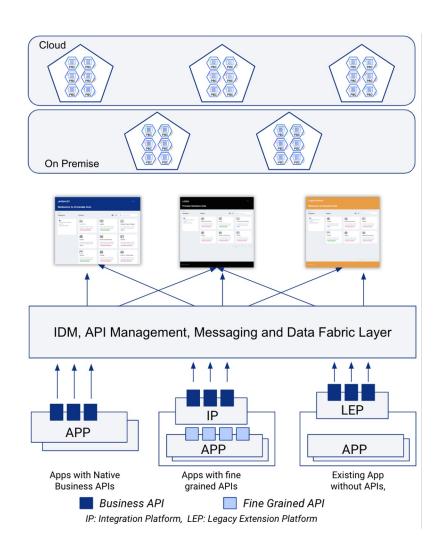


- Build server-side components as serverless
- Leverage serverless for components that have infrequent usage
- Modularity allows flexibility, where not all components must be serverless
- Build, or modify components to or from serverless as necessary (note some serverless providers are more costly than traditional cloud)
- Design and build components to optimize costs for the application over time





# Entando Lowers Runtime Costs Support the Hybrid Cloud

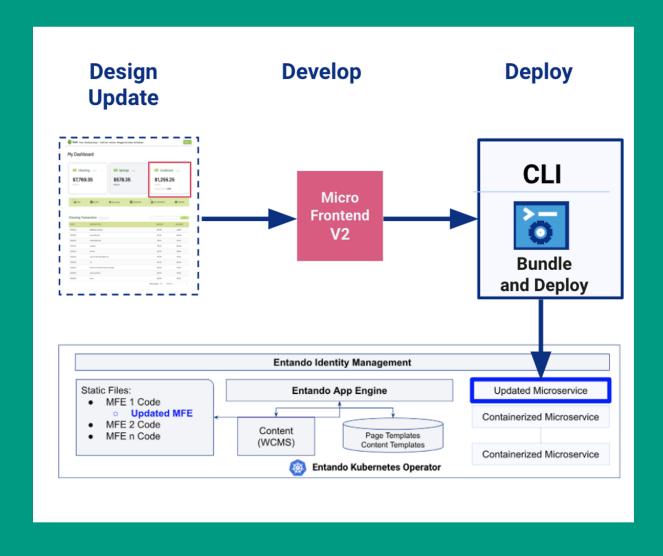


- Develop as modules without limitation of on premise or specific cloud provider
- Develop on premise and deploy to the cloud
- or vice versa
- Deploy and/or Scale across a hybrid cloud based on optimized cost over time based on configuration, usage, infrastructure costs



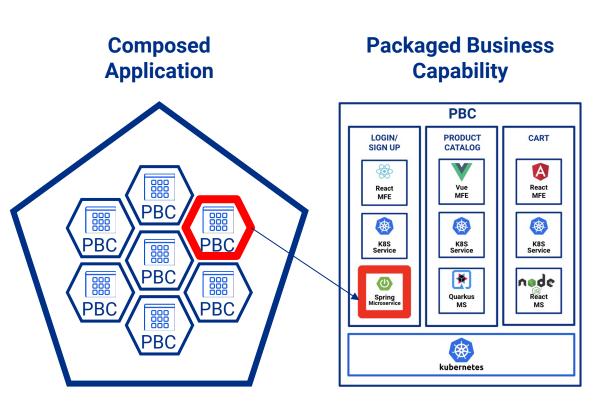


# 3.) Streamlines Lifecycle Security & Reliability Isolation, Modular Updates, CI/CD, Abstraction, Governance





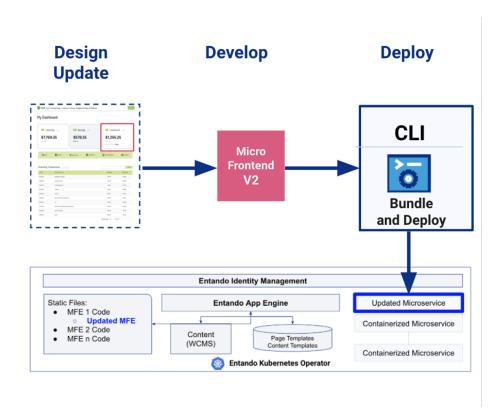
## Streamline Lifecycle Security & Reliability **Faster Problem Isolation**



- Isolate problems and security design by individual modules
- Isolate to specific PBC
- Isolate to specific frontend or backend
- Patch and test at the module level
- Automate push to production



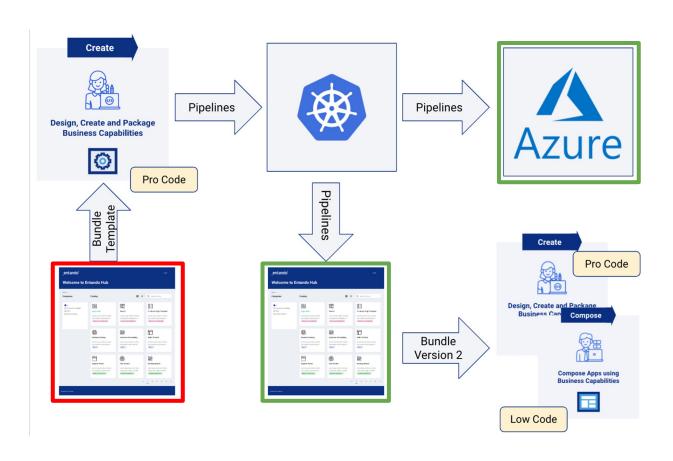
## Streamline Lifecycle Security & Reliability **Modular Updates and Security**



- Streamline the complexity of modularity
  - K8s Operator
  - Low Code App Builder
  - Alignment of FE / BE updates
- Increasing app security and reliability
  - All services on the same domain
  - Java code is in its own microservice
  - A broken microservice does not break the app



# Streamline Lifecycle Security & Reliability Integration with CI/CD



- Start with pro code templates in the hub
  - Use as is
  - Configure
  - Use as a template and extend
  - Use as a template and fork
  - Or build new
- Deploy into CI/CD pipelines
- Leverage DevOps Automation to deploy updates into production and into Hub





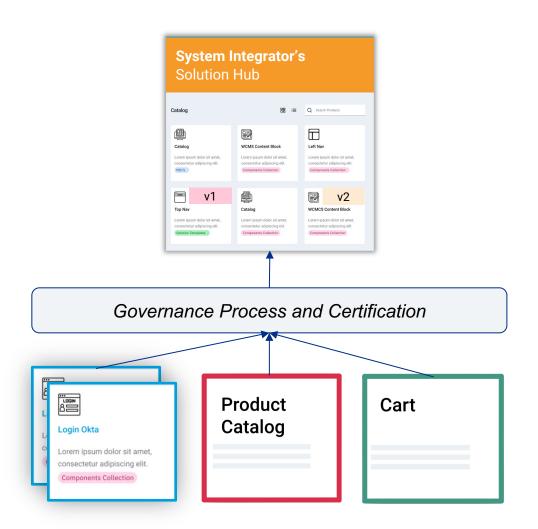
# Streamline Lifecycle Security & Reliability Enterprise Abstraction



- From K8s
  - PBCs are containerized and can run on multiple K8s platforms
- From Cloud Provider
  - Each application can be deployed to any cloud provider
- From SI Supplier
  - Composed applications built by one SI, can be updated in parts (or in whole) by a different SI
- From Infrastructure Components
  - PBCs using hexagonal architecture can abstract the infrastructure layers to further enable recomposability and resilience



## Streamline Lifecycle Security & Reliability Governance



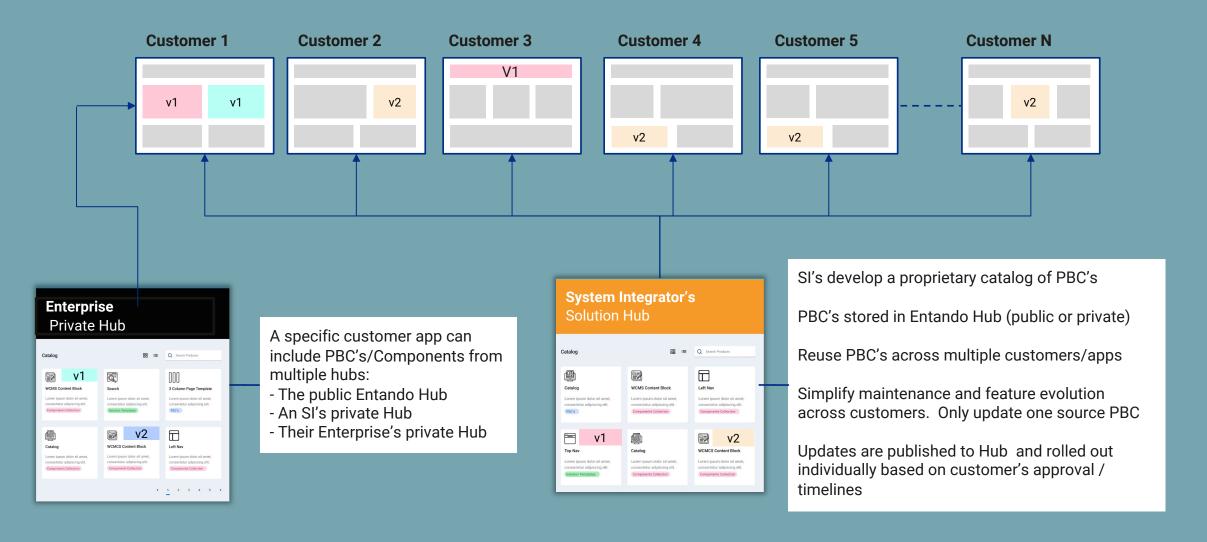
- Use Hub as a central point to enforce governance
- Manage internal or external teams
- Segment apps into PBCs, parallelize development
- But control delivery at the hub
- Manage new PBCs and their updates in Hub





## **Additional Benefits for SI and Enterprise**

#### **Code Reuse and Maintenance Across Multiple Customers**





# entando

## What's Next?

- Watch video with industry experts
  - a. Massimo Pezzini, formerly VP Distinguished Analyst with Gartner
  - b. With Luca Mezzalira, Serverless Solutions Specialists at Amazon Web Services
  - c. With James Governor Red Monk Analyst and Co-founder
- Try the live "Test Drive"
- Download the "What is an Application Composition Platform" whitepaper
- Book a Guided Demo
- Start developing now with developer resources, forums, tutorials













