



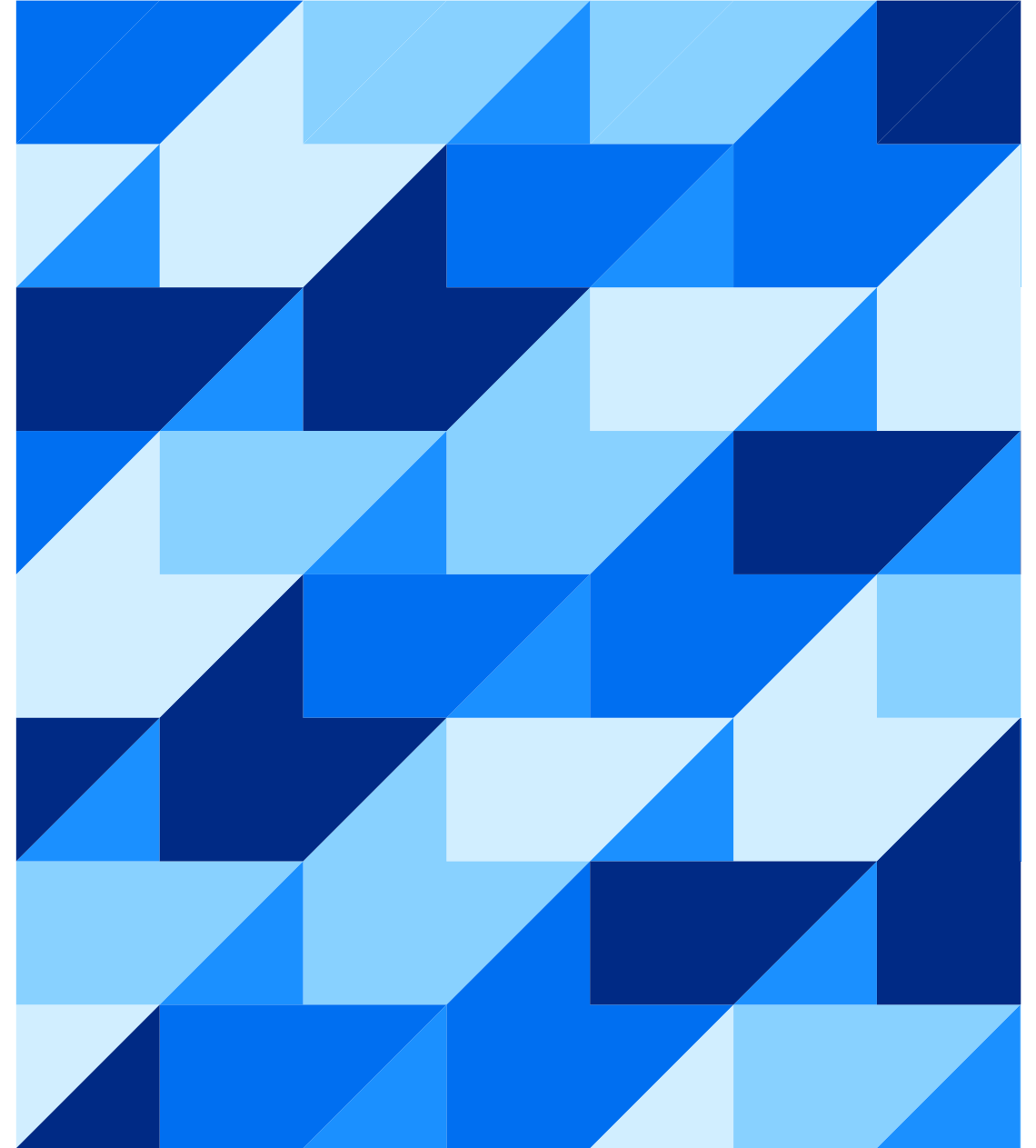
Entry Pitch Deck

Scaling performance & agility with composable commerce

Balsam Hill & Vercel Inc.

Retail

PUBLIC



Company information

COMPANY NAME:

Balsam Hill

HEADQUARTERS:

Redwood City, CA

INDUSTRY:

Retail

WEBSITE:

www.balsamhill.com

There are 5 other websites for UK,
AU, DE, FR & CA

NUMBER OF EMPLOYEES:

300

Since 2006, Balsam Hill has been bringing joy into the homes of our customers during the holidays. With over 3M customers in six countries, Balsam Hill has been helping people decorate their homes with highly realistic artificial Christmas trees and seasonal decor. Our customers look to us for inspiration and to be the backdrop for their traditions and memories.

Composable Commerce at Scale

Balsam Hill



CHALLENGE:

Our eCommerce platform faced significant challenges due to a monolithic system, resulting in **long deployment cycles** that took months to execute. Each deployment required **site downtime**, disrupting business operations and limiting our ability to move at the speed the business demanded. Technology became a bottleneck, preventing agility, rapid innovation, and seamless customer experiences.

SOLUTION:

To modernize our eCommerce platform, we upgraded to the latest SAP Commerce Cloud version, adopting a composable architecture with a headless storefront and CMS.

Our storefront was hosted on Vercel's Front End Cloud and utilizing Vercel's world class next.js front end framework. MuleSoft was deployed as middleware, ensuring seamless integrations while maintaining a truly composable solution. We leveraged SAP's OCC V2 architecture, unlocking the full capabilities of the commerce engine for optimized performance, scalability, and agility.

OUTCOME:

Our transformation enabled faster deployments with zero downtime, eliminating blockers and critical incidents while optimizing digital performance. During peak season, our SAP & Vercel powered architecture seamlessly handled **21M+ visitors** and **90M+ page views**, all while maintaining **sub-5-second page load** times. This performance boost drove a **+54% YoY conversion rate**, category-wide sales growth, and increased new and returning customers. Our agility enabled rapid expansion into Canada as a standalone geography. This modernization has positioned us for sustained scalability, ensuring an exceptional and high-performing eCommerce experience.

54%

Conversion rate improvement compared to last year

40%

Page performance improvement

0

Downtime

“ SAP's innovative platform empowered Balsam Hill to achieve composable commerce at scale. The modernized architecture, utilizing Vercel's Front End Cloud, enabled zero-downtime deployments, rapid market expansion, and exceptional performance during our peak season. This transformation drove significant increases in conversion rates and sales growth, positioning us for sustained scalability and customer satisfaction. ”

France D Roy
CTO, Balsam Brands



Participating partner information

Vercel's Front End Cloud empowers Balsam's development ecosystem with enterprise-grade deployment infrastructure, seamless feature flag integration, world class developer experience and edge caching architecture.

Their Speed Insights Analytics and Web Application Firewall provide mission-critical performance optimization and security, establishing the **foundation for our digital experience excellence**.



COMPANY NAME:

Vercel

“

Vercel's cutting-edge front end cloud platform revolutionized our development velocity and site performance metrics.

Their edge caching and Speed Insights capabilities have been transformative, while V0.dev AI-powered design system promises to redefine our product development workflow, accelerating our innovation pipeline exponentially.

Setu Garg - Sr. Manager, Engineering”

Challenges



GLOBAL CHALLENGES

- **Site Performance & Scalability:** Legacy systems struggle with peak-season traffic, leading to slow load times and lost revenue.
- **Cybersecurity Threats:** Rising eCommerce fraud and data breaches require robust security measures to protect customer data and transactions.
- **Time to Market & Agility:** Monolithic architectures slow down innovation, delaying feature releases and global expansion.
- **Customer Expectations:** Shoppers demand fast, seamless, and personalized digital experiences, requiring advanced AI-driven commerce solutions.



BUSINESS CHALLENGES

- **Slow Deployments & Downtime:** Monolithic architecture required months for deployments, causing downtime and disrupting sales.
- **Technology Bottleneck:** Outdated systems slowed innovation, making it hard to respond to market trends.
- **Scalability & Performance Issues:** Peak-season traffic strained infrastructure, leading to slow load times and revenue loss.
- **Workforce Frustration:** Long development cycles affected IT teams, while business teams faced missed opportunities, impacting morale.
- **Global Expansion Challenges:** Expanding to markets like Canada was difficult due to rigid, inflexible systems.

These issues led to high abandonment rates and low conversion, directly impacting business growth.

Objectives

PROJECT OBJECTIVES

- **Zero Downtime Deployments:** Enable seamless deployments without disrupting site operations or sales by utilizing Vercel's Front End Cloud.
- **Agile & Scalable Architecture:** Shift to a composable, headless framework using SAP Commerce, Vercel, and MuleSoft to improve flexibility and speed.
- **Performance Optimization:** Ensure fast load times (<5s) even during peak traffic periods to enhance user experience and conversion rates.
- **Rapid Time-to-Market:** Reduce deployment cycles from months to days, accelerating business responsiveness.
- **Global Expansion Readiness:** Build a modular system that allows easy entry into new markets like Canada.
- **Security & Compliance:** Strengthen cybersecurity to protect customer data and ensure compliance with industry standards.

WHY SAP

- **Composable & Headless Commerce:** SAP Commerce Cloud integrates well with Vercel's Front End Cloud, MuleSoft, and other modern technologies for a flexible, future-ready stack.
- **Long-Term SAP Customer:** We have been using SAP Commerce Cloud for over 8 years now, leveraging its robust eCommerce capabilities.
- **Scalability & Reliability:** SAP's enterprise-grade platform ensures our ability to handle high traffic volumes during peak seasons.
- **Seamless Upgrade Path:** Upgrading from SAP Commerce 6.6 to 2205 allowed us to modernize while retaining business continuity.
- **Advanced eCommerce Capabilities:** SAP's OCC V2 architecture unlocked the full power of the commerce engine, improving agility and performance.

Project or use case



OVERALL USE CASE

Our legacy SAP Commerce 6.6 system was slow, rigid, and hindered business agility. Deployments took months, required downtime, and blocked innovation. We upgraded to SAP Commerce Cloud 2205, adopting a composable, headless architecture with Vercel for the storefront and MuleSoft as middleware. This enabled zero-downtime deployments, faster time-to-market, and peak performance handling 21M+ visitors with less than 5 second page load times. The project, completed in under a year, was driven by IT leadership and business teams, ensuring seamless adoption. SAP's scalability, OCC V2 capabilities, and enterprise support made it the best choice for long-term growth.

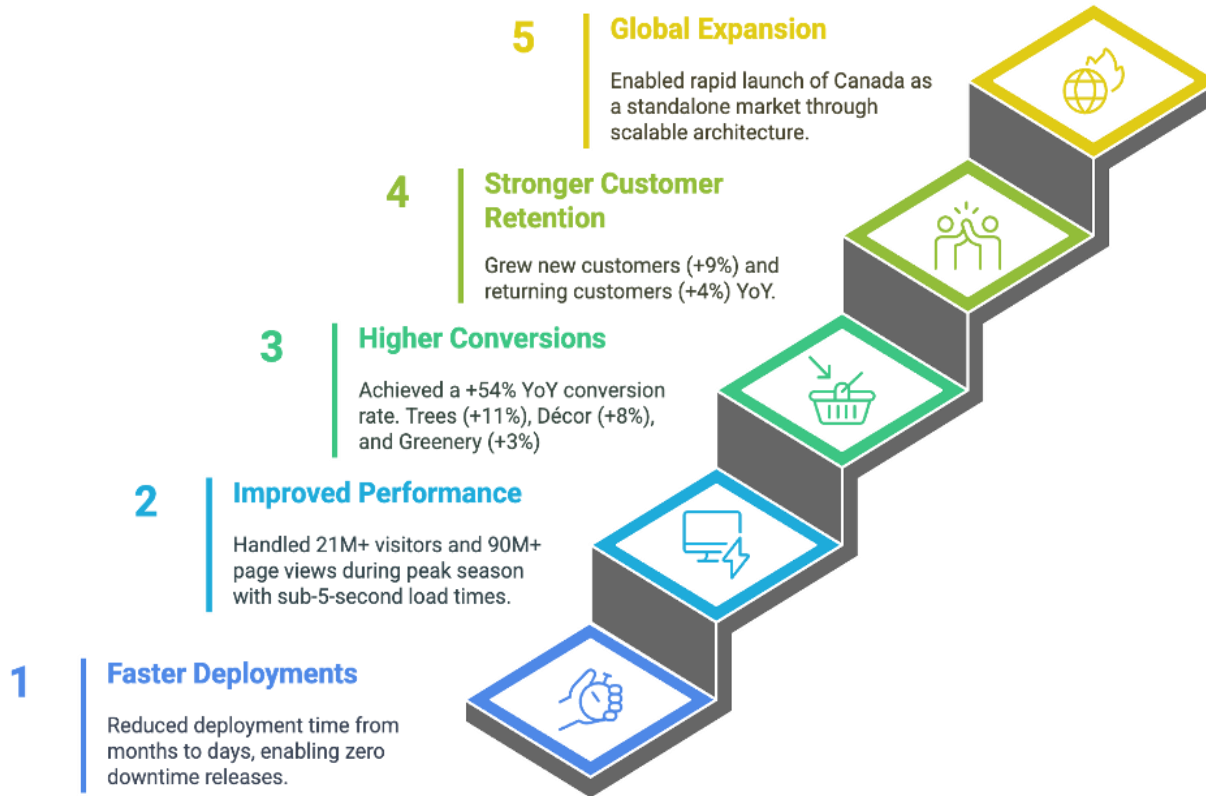


USE OF ARTIFICIAL INTELLIGENCE IN THE PROJECT

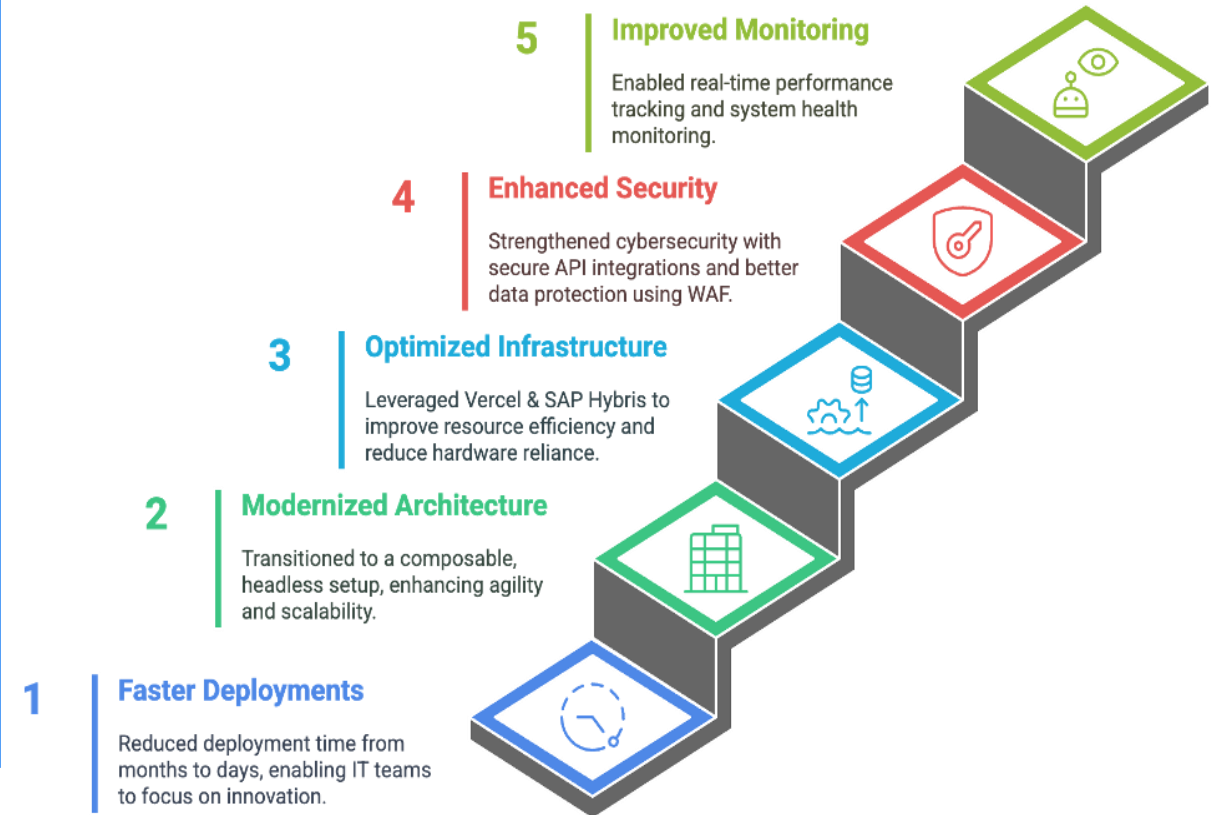
Our SAP Commerce Cloud 2205 implementation provided a flexible, composable architecture that seamlessly integrates with AI-powered solutions. We leveraged Constructor.io for AI-driven search and browse optimization, improving product discovery and relevance. Additionally, SessionAI enhanced user conversion through real-time behavior analysis. SAP's open API framework and OCC V2 architecture enabled smooth integration, allowing us to adopt best-in-class AI tools without disrupting core commerce operations. This approach delivered personalized experiences, improved engagement, and increased conversions, showcasing SAP's ability to power an adaptable, AI-enhanced eCommerce ecosystem.

Benefits and outcomes 1 of 2

BUSINESS OR SOCIAL



IT*



Benefits and outcomes 2 of 2

We were rated **number 1** online shop by **newsweek** under Home Décor and Textiles Category [Number 1 in Home Decor & Textiles](#)

PEOPLE RELATED: PERSONAL PERSPECTIVE



IT Teams

Deploy without downtime and focus on innovation



eCommerce Operations

Update content and run A/B tests seamlessly



Customers

Experience faster site performance and seamless shopping



Before the transformation, **every site update felt like a bottleneck**—we had to rely on engineering for even minor changes.

Now, with **Vercel's Front End Cloud**, our **Headless CMS** and **A/B Testing Platform** integration, we can launch promotions, update content, and run A/B tests in real time without tech delays. IT teams are no longer tied up with deployments, and business teams can move at the speed of retail.

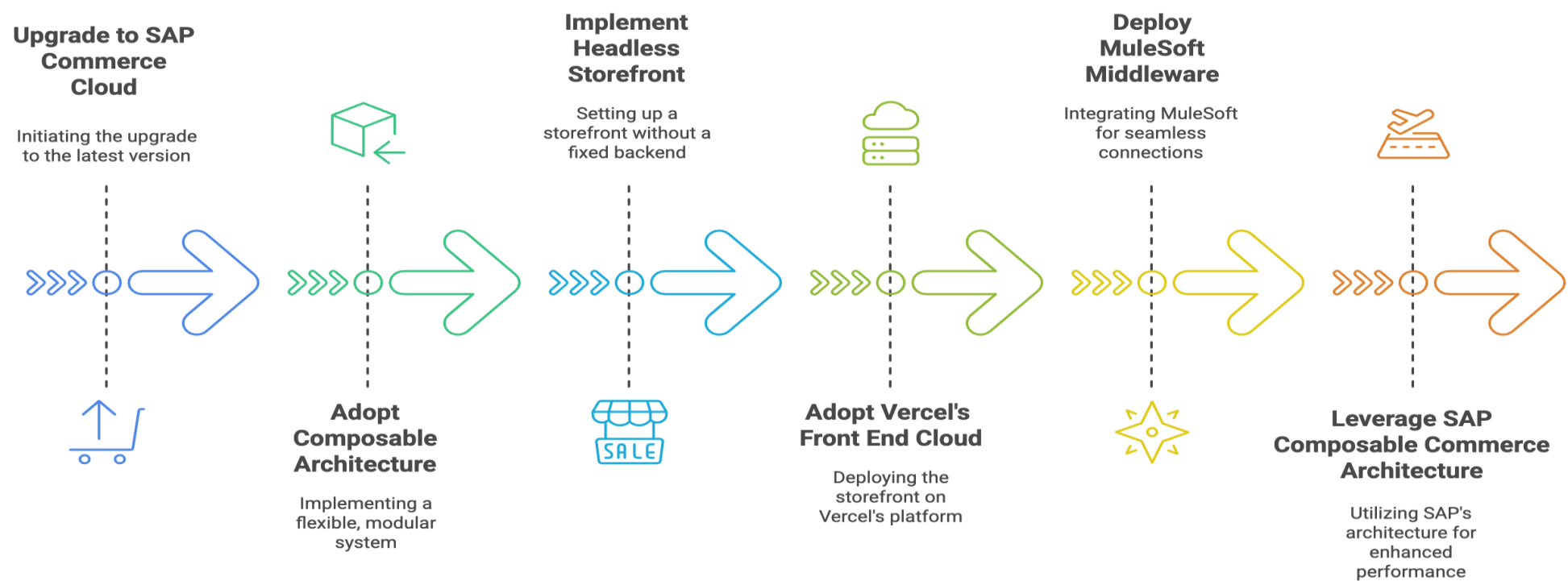
It's a game-changer for agility and customer experience.

Caroline Tuan, COO - Balsam Brands

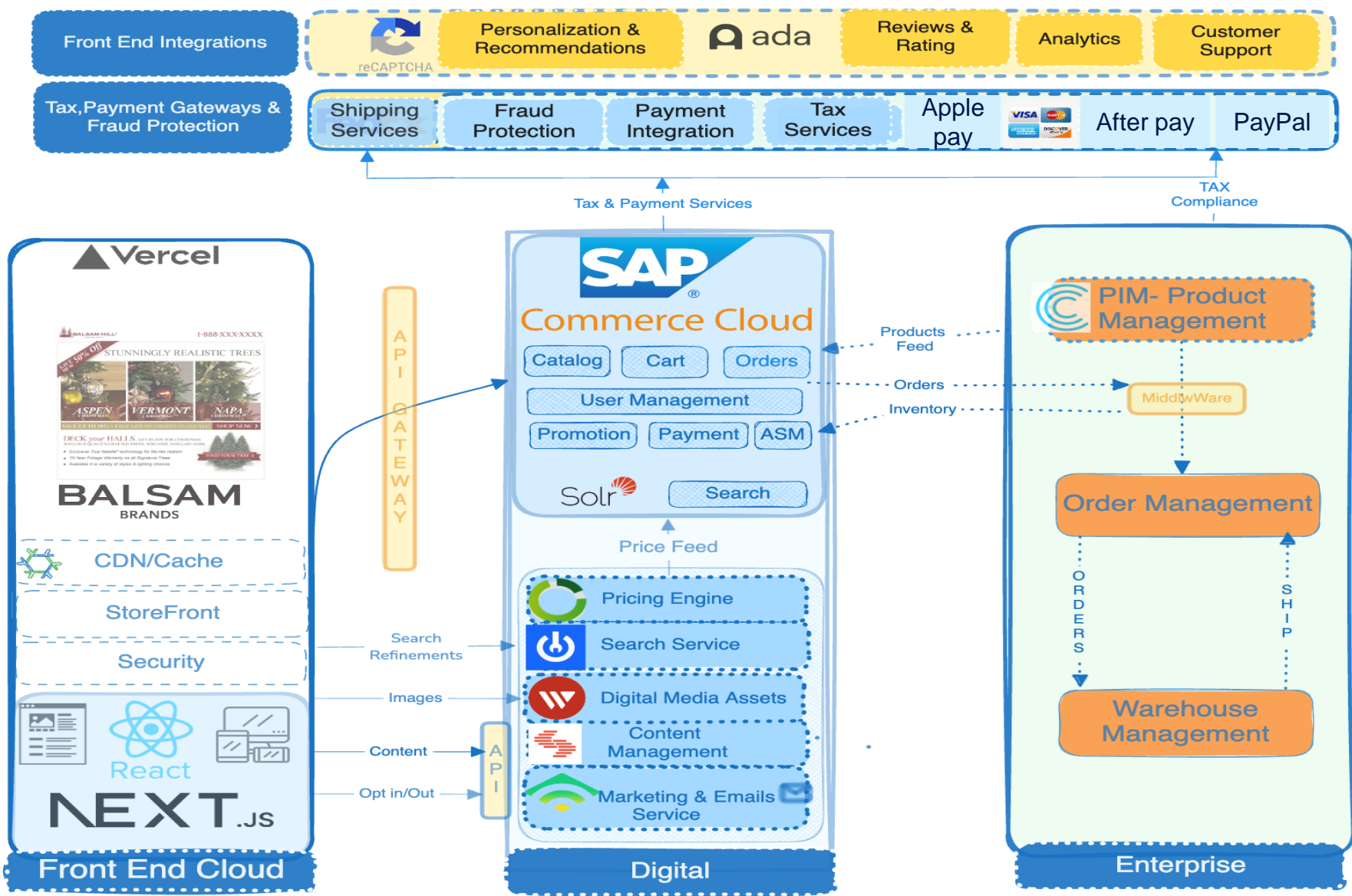


Architecture

Balsam Brand's digital transformation journey and how our architecture evolved to enable scaled performance and agility with composable commerce



Architecture



Deployment details 1 of 3

SAP TECHNOLOGIES USED

	SAP Offerings	DEPLOYMENT STATUS LIVE Proof of Concept	SAP Business AI SCENARIO (if applicable)	CONTRIBUTION TO PROJECT
1	SAP Commerce Cloud	LIVE	N/A	Faster page load times, quick deployments, ability to do quick A/B tests. All leading to higher conversion.
2				
3				
4				
5				

DEPLOYMENT STATUS:

LIVE

DEPLOYMENT COUNTRY:

US, CA, DE, FR, UK, AUS

DATE:

June 2023

NUMBER OF END USERS:

3M+

TRANSACTION VOLUME:

Upwards of 600,000 orders per year

Deployment details 2 of 3

The following SAP Business Technology Platform (SAP BTP) solutions are part of the project:

	TECHNOLOGY	SAP BTP SOLUTION	CONTRIBUTION TO PROJECT
1	Application Development and Automation	N/A	
2	Extended Planning and Analysis	N/A	
3	Data and Analytics	N/A	
4	Integration	N/A	
5	Artificial Intelligence	N/A	

*For partners only

*LICENSED THROUGH THE SAP BUILD/TECH ADOPTION PROGRAM:

*LISTED ON SAP STORE:

*MONETIZED (SOLD TO YOUR CUSTOMERS):

*CO-INNOVATION WITH SAP:

*NUMBER OF CUSTOMERS USING THE SOLUTION/APP:

Deployment details 3 of 3

The following offerings from SAP services or application packages were utilized during the implementation or deployment phase.

	SAP SERVICE OR APPLICATION PACKAGE	CONTRIBUTION TO THE PROJECT
1	Enter the SAP Service or Application Package	N/A
2		
3		
4		
5		

Other Packages

☐ SAP DISCOVERY CENTER MISSION:

Additional information