



Enabling SAP Analytics Technology with S/4HANA

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Agenda



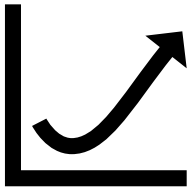
Overview of CHS

- Purpose and Values
- Key Facts and Core Businesses



Journey to S/4HANA

- Implementation Overview, Timeline



CHS Analytics Transformation

- Analytics Overview - Pre and Post Implementation
- Analytics Architecture and Decision Tree
- Self Service Initiatives
- Future Efforts



Lessons Learned

CHS Overview



**Leading farmer-owned
energy, agronomy, grains
and foods cooperative**

**Our footprint spans
50 states and
65 countries**

Our purpose

Creating connections to empower agriculture



Our values

Integrity

We set high standards and hold ourselves accountable.

Safety

We put the well-being of our people, customers and communities first every day.

Inclusion

We believe excellence and growth stem from diverse thinking.

Cooperative Spirit

We work together for shared success and to strengthen our communities.

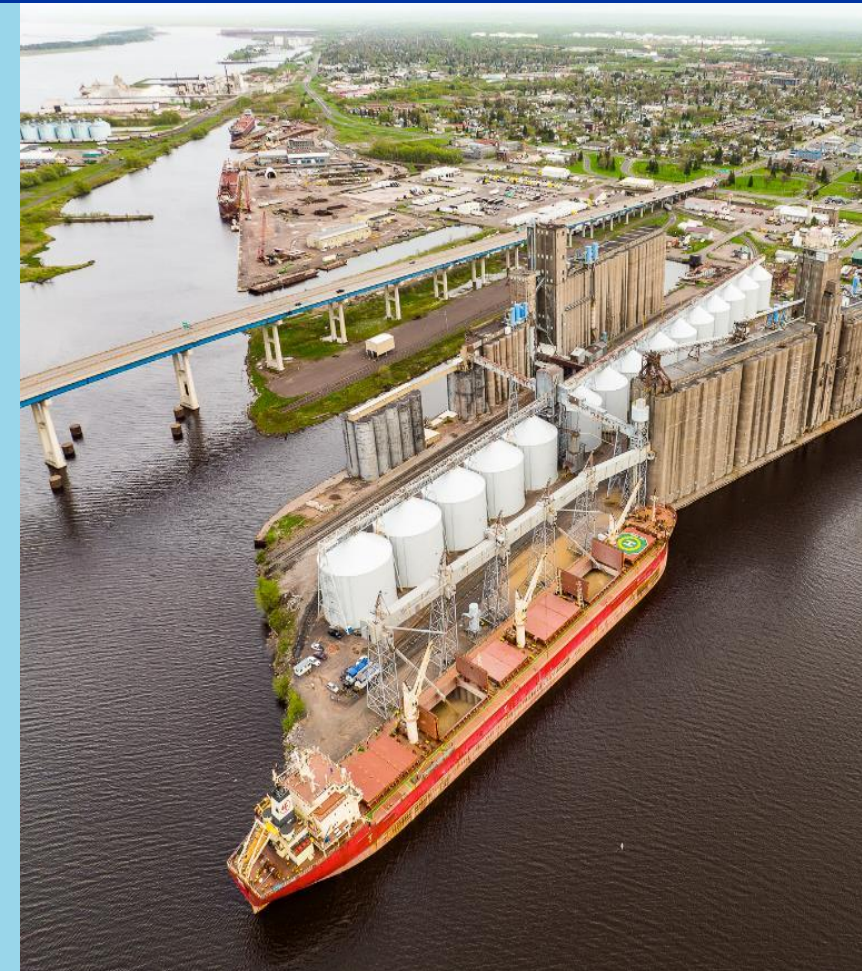
CHS core businesses



Energy



Agronomy



Global Grain & Processing



Facts at a glance

Who we are

CHS Inc. (chsinc.com) is a leading global agribusiness owned by farmers, ranchers and cooperatives across the United States. Diversified in energy, agronomy, grains and foods, CHS is committed to creating connections to empower agriculture, helping its farmer-owners, customers and other stakeholders grow their businesses through its domestic and global operations. CHS supplies energy, crop nutrients, seed, crop protection products, grain marketing services, production and agricultural services, animal nutrition products, foods and food ingredients, and risk management services. The company operates petroleum refineries and pipelines and manufactures, markets and distributes Cenex® brand refined fuels, lubricants, propane and renewable energy products. Our preferred stock trades on the NASDAQ exchange under CHSCP, CHSCO, CHSCN, CHSCM and CHSCL.

Key facts

Net income for fiscal year ending Aug. 31, 2021:
\$554 MILLION

Revenues for fiscal year ending Aug. 31, 2021:
\$38.4 BILLION

Owners:
900 cooperatives
75,000 producers
20,000 preferred stockholders

Employees:
More than **10,000**

Governance:
17-MEMBER board of directors consisting of farmers and ranchers elected by owners

Cash returns:
\$2.7 BILLION returned to owners in the past 10 years

CHS Journey to S/4HANA

CHS S/4 Implementation

Implementing a standardized
SAP technology platform
across CHS to:



**build a stronger
control environment**



drive efficiency



**create a platform for
growth**

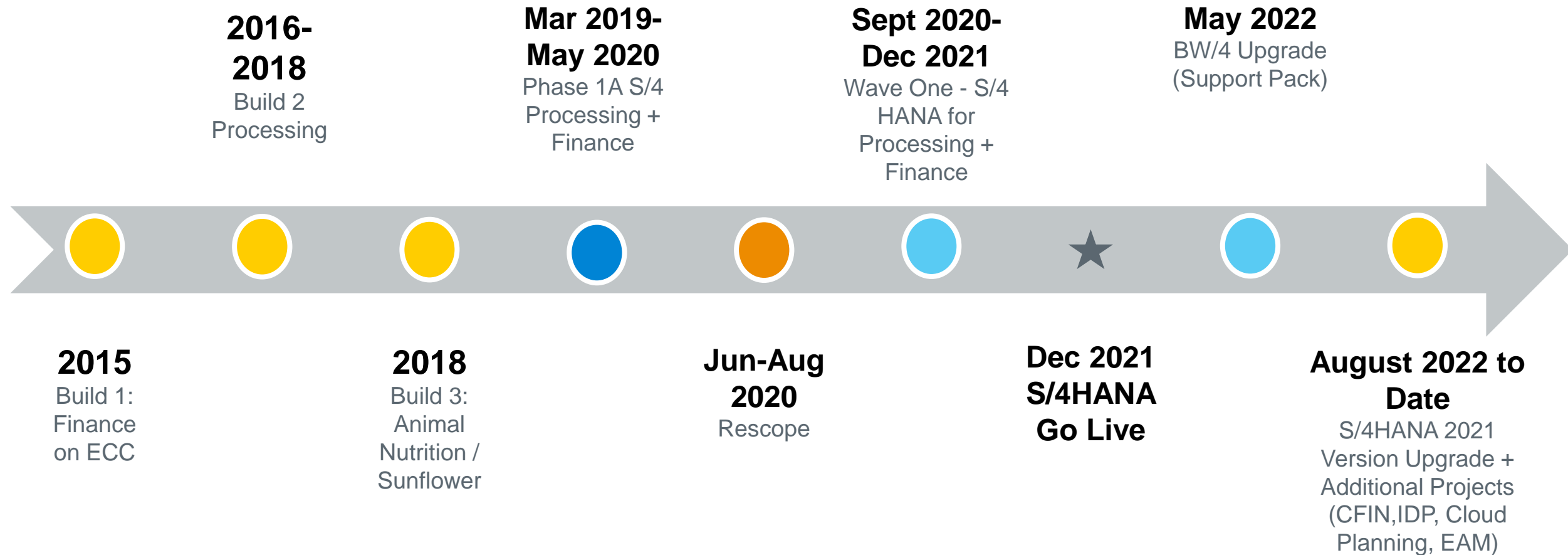
CHS United Team

- More than 180 team members
- Business Resources, Compliance, IT, Business Readiness

Technology

- Software: SAP
- Version: S/4HANA 1909
- Additional Implementations: Success Factors, BW/4HANA, SAP Analytics Cloud
- Implementation Methodology: SAP Activate
- Greenfield Approach

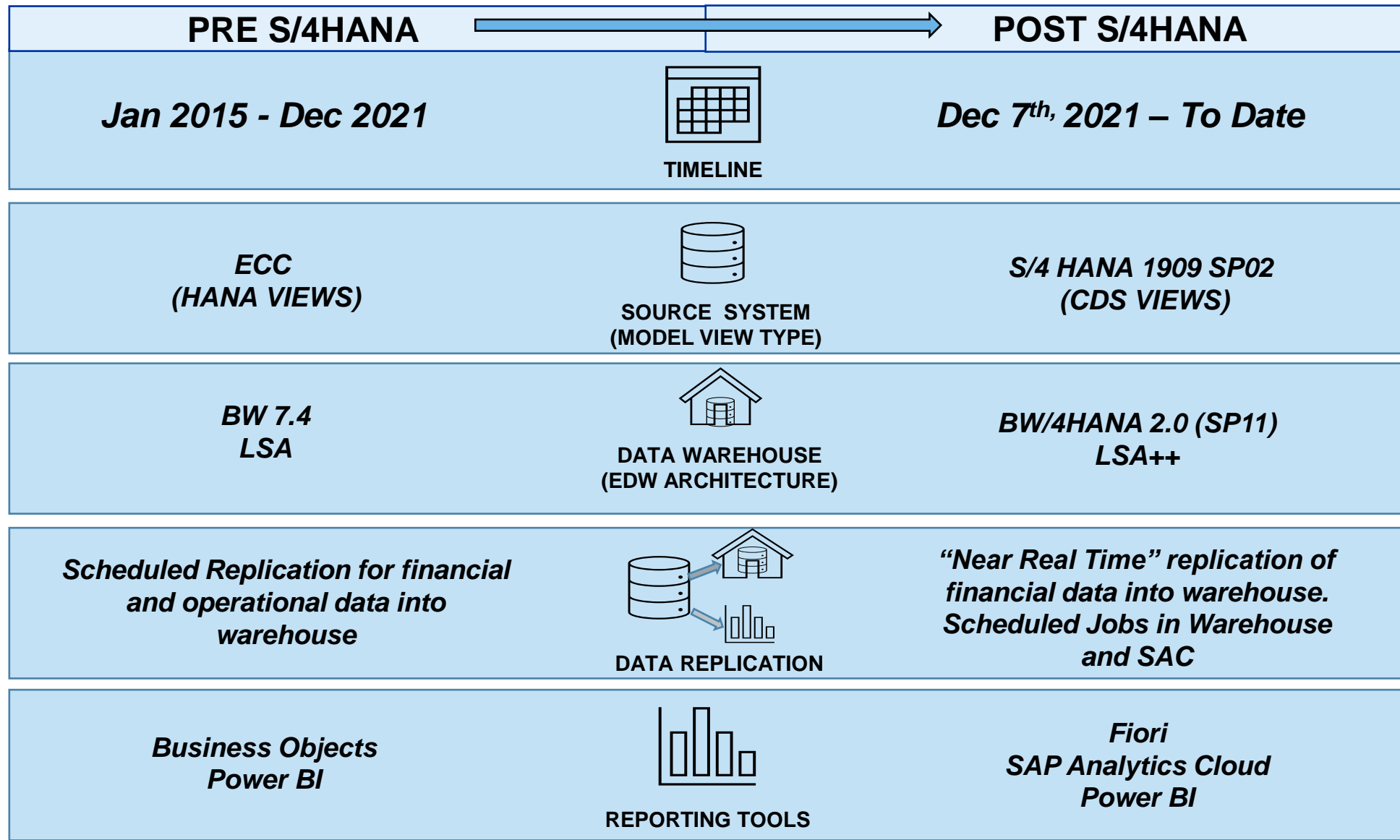
CHS Journey to S/4HANA

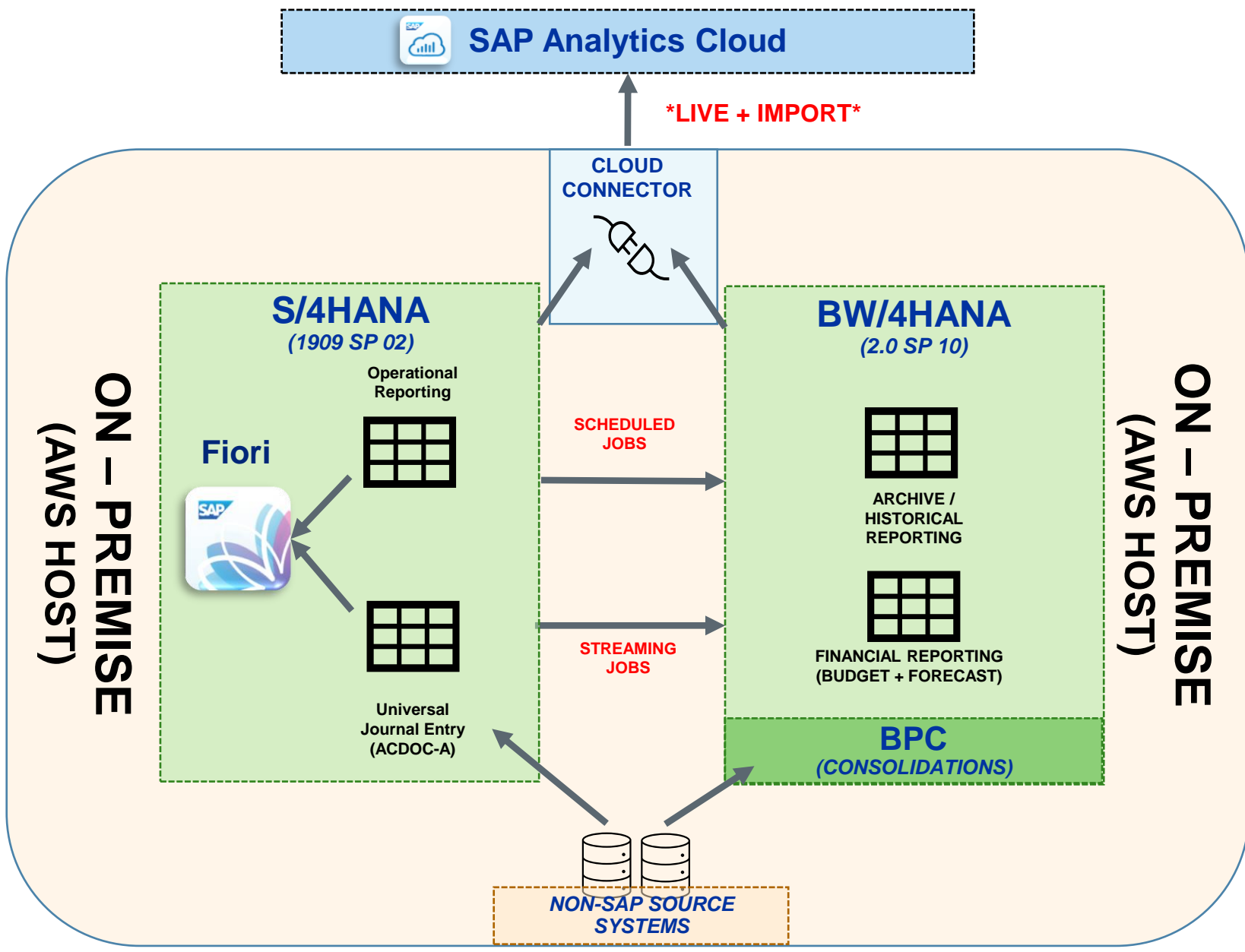


★ Live

CHS SAP Analytics Transformation

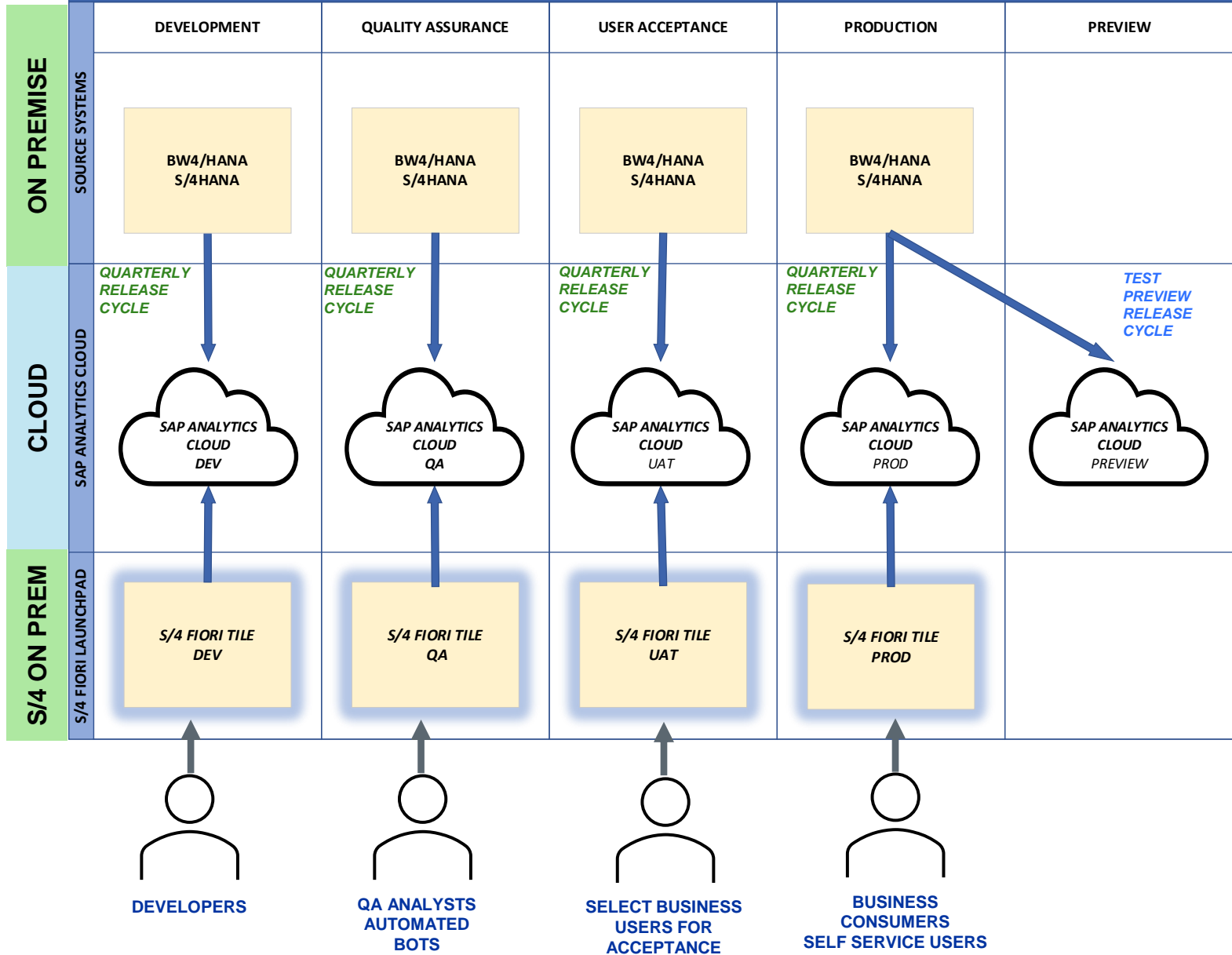
CHS ANALYTICS TRANSFORMATION | PRE AND POST S/4HANA





Key Highlights

- Finance + Select Business Units on S/4 HANA
 - Non-SAP ERPs integrated with S/4HANA and BPC (via BW) for Financial Reporting and Consolidation
- Streaming enabled for financial data replication into BW/4. Approx E2E Source to Consumption is 3-5 mins
- Live and Import connections to SAP Analytics Cloud from both S/4HANA and BW/4HANA Systems



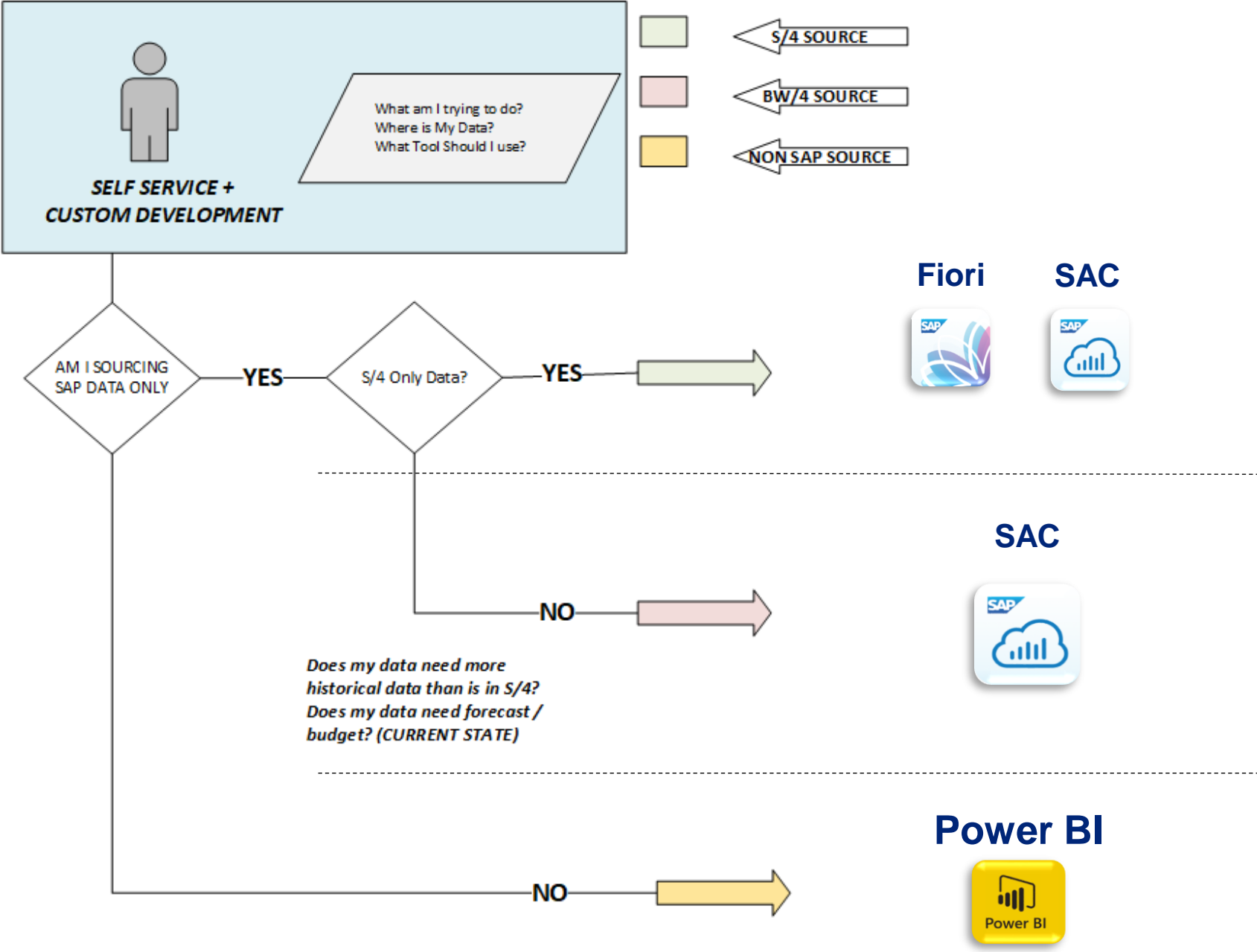
SAP ANALYTICS CLOUD

CURRENT STATE ARCHITECTURE

- 5 SAC Tenants (4-Tier + Preview)
- Fiori is used as “Launchpad” into SAC reports and Custom Fiori Reports
- SAC Consumes from S/4 HANA and BW/4HANA (including BPC)
- Preview Tenant is replica of prod tenant used for Quarterly Feature Release Testing (Preview is not of transport lifecycle)
- Architecture allows for concurrent work on same object across multiple environments – critical in project type settings

BI TOOL DECISION TREE

CHS ANALYTICS



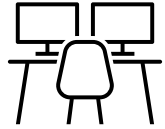
- Standard and Custom Apps and Tiles
- Fiori Launchpad into SAC Stories
- Tabular with basic visualizations (Embedded)
- KPIs and Snapshot analytics
- Summary Level Trend Analysis

- Compatible with S/4 and BW/4 sources
- Dashboarding, Advanced Analytics + Tabular
- Historical Reporting and Analytics
- SAC Analysis for Office for finite use cases and one-off analysis

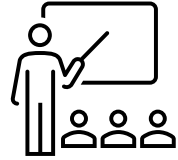
- Primarily used against Non-SAP data (Legacy)
- Multiple source datasets
- Dashboarding, Advanced Analytics, & Tabular

Self Service Analytics

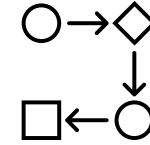
Self-Service Enablers



Office Hours



Training



Process Maps



Governance



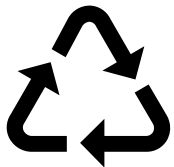
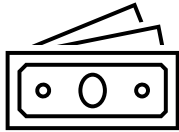
Security and
User Personas



Documentation

Lessons Learned + Roadmap

Lessons Learned/ Challenges Faced



General

- Ideal SAC Landscape Architecture aligns with Source Side Architecture
- Use of standard content drastically simplifies reporting requirements while reducing maintenance and maximizing ROI of S/4HANA
- Discipline is required when determining source vs reporting logic in order to achieve live sourced reports.

SAP Analytics Cloud











- SAC Models sourced from live connections should be prioritized
- SAC Architecture needs to incorporate a preview release cycle instance

S/4 + Fiori

- Understanding Transport Path for Fiori Technical Catalogs
- Reusability is key for agile CDS view development, but cross dependencies need to be considered as well

REPORTING AND ANALYTICS STRATEGY FOR SAP INITIATIVES

REPORTING TOOLS

PLANNING AND EXECUTION TECHNOLOGY	NATIVE IBP EMBEDDED SAC SAP ANALYTICS CLOUD			
CENTRAL FINANCE	FIORI SAP ANALYTICS CLOUD			
ENTERPRISE TRANSPORTATION	SAP ANALYTICS CLOUD FIORI POWER BI			
ENTERPRISE ASSET MANAGEMENT	FIORI SAP ANALYTICS CLOUD POWER BI			

Other Notable Efforts

- Implementation of S/4HANA to additional CHS Business Units
- S/4HANA Upgrade (2021)
- Realization of N+1 Landscape
- Bolstering AI/ML Capabilities and Use Cases



Q&A

Appendix