LUMEN

THE PLATFORM FOR AMAZING THINGS

25 Oct 2022

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Agenda

- Who is Lumen?
- Why SAP?
- Business Problem
  - Meet our ~30 ERPs and Billing Systems acquired since 1999.
- Solution: SAP RISE RFP issued Sept 2022
  - How we are approaching the project
  - How we are staffing the project
  - How we use partners with seats at the table
- Q&A
- Thank you

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Who is Lumen?

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Who is Lumen

- NYSE - **LUMN**
- Fortune 139 (2021)
- Member of the S&P 500 Index
- SAP Platinum Partner #10 of 10
- 38,000 Global Employees
- Founded 1968 in Monroe, LA
- Corporate Leadership in Broomfield, CO
- Enterprise value: $46.57B (3/31/2021)
- $20B in revenues
- $354M in Cash
- Annual Dividend Yield 14.93%
- SAP Customer since 1999
- ~1,300 SAP / ~3,200 Managed Services
- Industry recognized for Veteran Employment record
- *Runs ~70% of world's internet and Co-Runs the World's internet*
- *New CEO in November 2022.*

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Lumen Cool facts

1. Lumen runs ~70% of the world's internet
2. Lumen and our partner AT&T *run Idaho's net*
3. Lumen protects .GOV and .MIL
4. Lumen runs the network for NASA, DISA, Army,
5. Lumen runs Idaho's 911 (managed services)
6. Boise Airport Crash phone daily test – Lumen
7. There is a Microwave connection between Bogus Basin and the primary CO in Boise
8. Lumen segments colors of the rainbow. We split, encrypt and transport the color spectrum of our Fiber Optics. We call that WAV.
9. There are actually (2) major Internets running through Idaho. Green and Red.
10. Lumen has ~1,000 employees in Idaho; all use SAP

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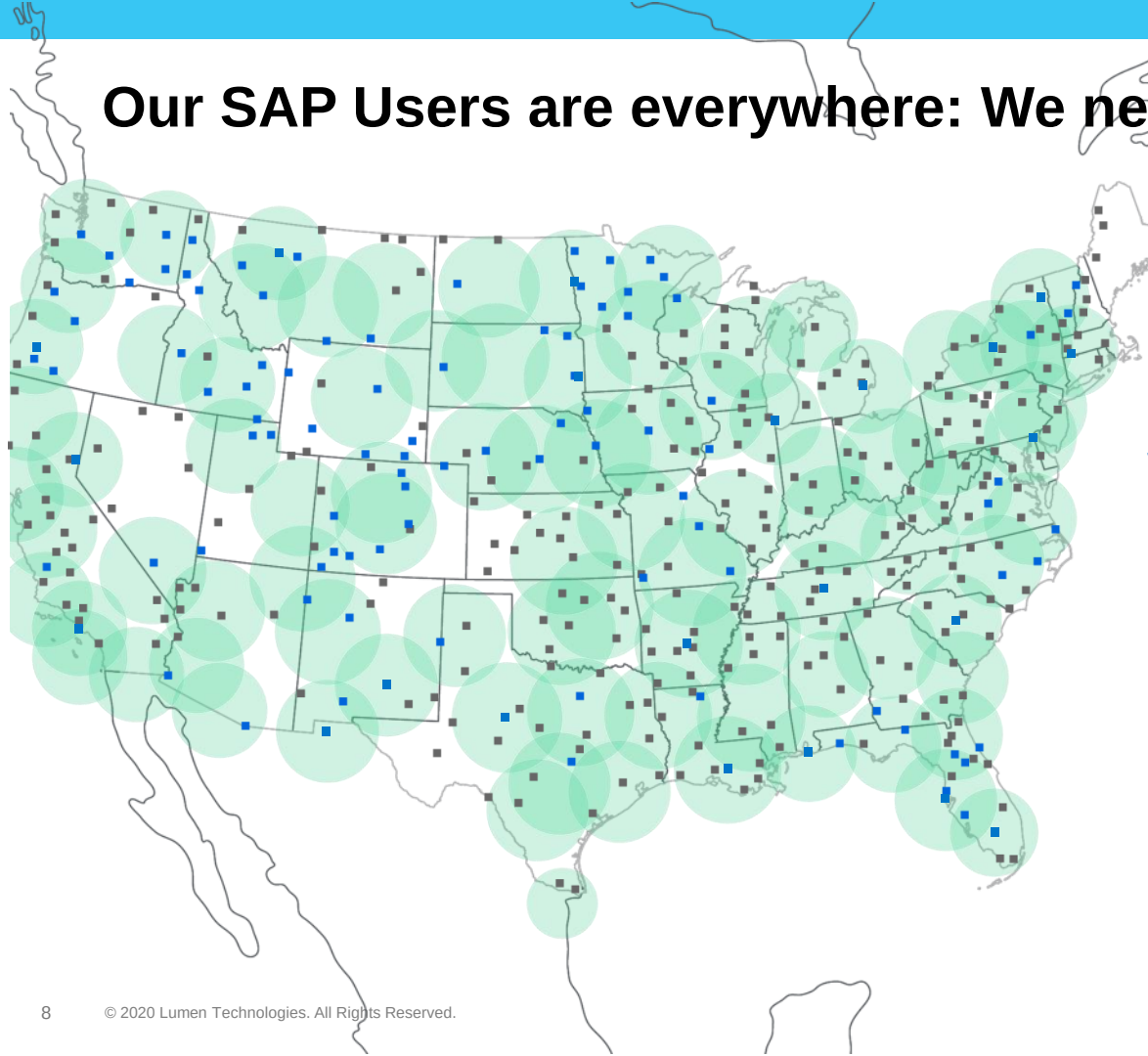
North America

- On-net Market
- Lumen Network

© 2022 Lumen Technologies. All Rights Reserved. Map information above is current as of Oct. 2021. Information is subject to change. Contact Lumen for updates or details. The Lumen global network is made up of owned, leased access and IRU segments, which are not distinguished on this map. Lumen engages in-region carriers to provide services in some markets.

Our SAP Users are everywhere: We need a SAP Network



SAP Engineered Network

- Customer Facility - Dynamic Capacity Connected
- Customer Facility - Dynamic Connections Connected
- Lumen Private Cloud Location (Proposed)
- 5ms Radius from Lumen Private Cloud

Designed for 5ms or Better Latency with 60+ Lumen Private Cloud Nodes as an Edge Computing Solution

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Networks become more important with SAP Rise (Cloud)

Next-gen applications require →

- Highly distributed compute
- High performance networking
- Multi-cloud orchestration and connectivity
- Embedded security
- Cloud-native digital experience

~450K

Global fiber route miles

Low-latency connectivity with broad reach

6400+

Internet AS's connected

Deepest peered IP network in the world

2200+

Public and Private data centers on-net globally

Dynamic connections to cloud providers

100+

Edge compute nodes underway

Designed to cover > 98% of U.S. enterprise demand within 5ms of latency

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WELCOME TO THE 4TH INDUSTRIAL REVOLUTION

WELCOME TO LUMEN

Why SAP?

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Lumen's mission statement:

Our core purpose is to further human progress through technology, and nowhere is this opportunity more apparent than amid the 4th Industrial Revolution. We believe humanity is always at its best when it produces innovative technologies that advance the ways we live and work..

SAP's mission statement:

To help the world run better and improve people's lives. Our promise is to innovate to help our customers run at their best. SAP is committed to helping every customer become a best-run business. Run Simple.

SAP + Lumen mission statement:

We help humanity progress and improve through the use of technology to be the best.

Contrast that to SAP's top competitors:

1. Oracle: *"We foster an inclusive environment that leverages the diverse backgrounds and perspectives of all our employees, suppliers, customers, and partners to drive a sustainable global competitive advantage."*
2. Infor: "*We are committed to quality—our consultants have completed over 1200 major go-lives on time and on budget in just the last 12 months. We also are committed to service—we currently work with companies in 168 countries, so we can meet our customers' needs wherever they are".*
3. *At Workday, we're committed to bringing passion and customer focus to the business of enterprise applications. We work hard, and we're serious about what we do. ... In fact, we run our company with that principle in mind every day: One of our core values is fun.*

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Leverage our SAP investments and Strategic Alliance

25 years of experience deploying, managing and supporting SAP applications

1300 + Associates Globally

1 of only 10 **global platinum partners**

SAP Platinum Partner

SAP Certified
in **Global** SAP HANA Operations

SAP Global Partner

SAP Certified
in **Global** SAP S/4HANA Solutions Operations

RISE WITH SAP

SAP Certified
Seller & Services Partner

SAP Certified
10Steps2S4
Installed Base Conversion Program

SAP Center of Excellence Powered by SAP HANA

Winner of SAP America Award of Excellence

Customer Awards of Excellence

Customer Global Implementation Awards

SAP S/4HANA MOVE

Authorized SAP Move Partner

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Leverage our own talent where it makes sense

3,200+ Global IT Professionals

Application/Data Consulting & Implementation Services	Cloud Consulting & Implementation Services	Network Consulting & Implementation Services	Smart Solutions	Tailored Managed Services & Custom Solutions
• SAP Consulting • Application Services • Data Consulting	• Cloud Consulting • Cloud Implementation • Contact Center/UCC Consulting	• NCIS (former Network Professional Services) • Transformation Consulting • Equipment Relocation Services	• Smart Venue • Smart Community/City • Smart Campus • Smart Retail • Smart Manufacturing • Smart Building	• MNS Tailored Experience • Tailored Application & Infrastructure Management (aka RIM)

SAP Consulting: Advisory | Implementation Services | Quality Assurance | Custom Application Modernization | Application Management Services

Application Services: Architecture and Development Consulting | QA Testing and Automation | Modernization and Implementation Services

Data Consulting: Strategy Consulting | Advisory Services | Projects | AMS

Focus Areas: **Data Management | Cloud Analytics (AWS, Azure, Google) | Upgrade & Migration Services | RPA Implementation & Support | Advanced Analytics**

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Meet some of our ERPs

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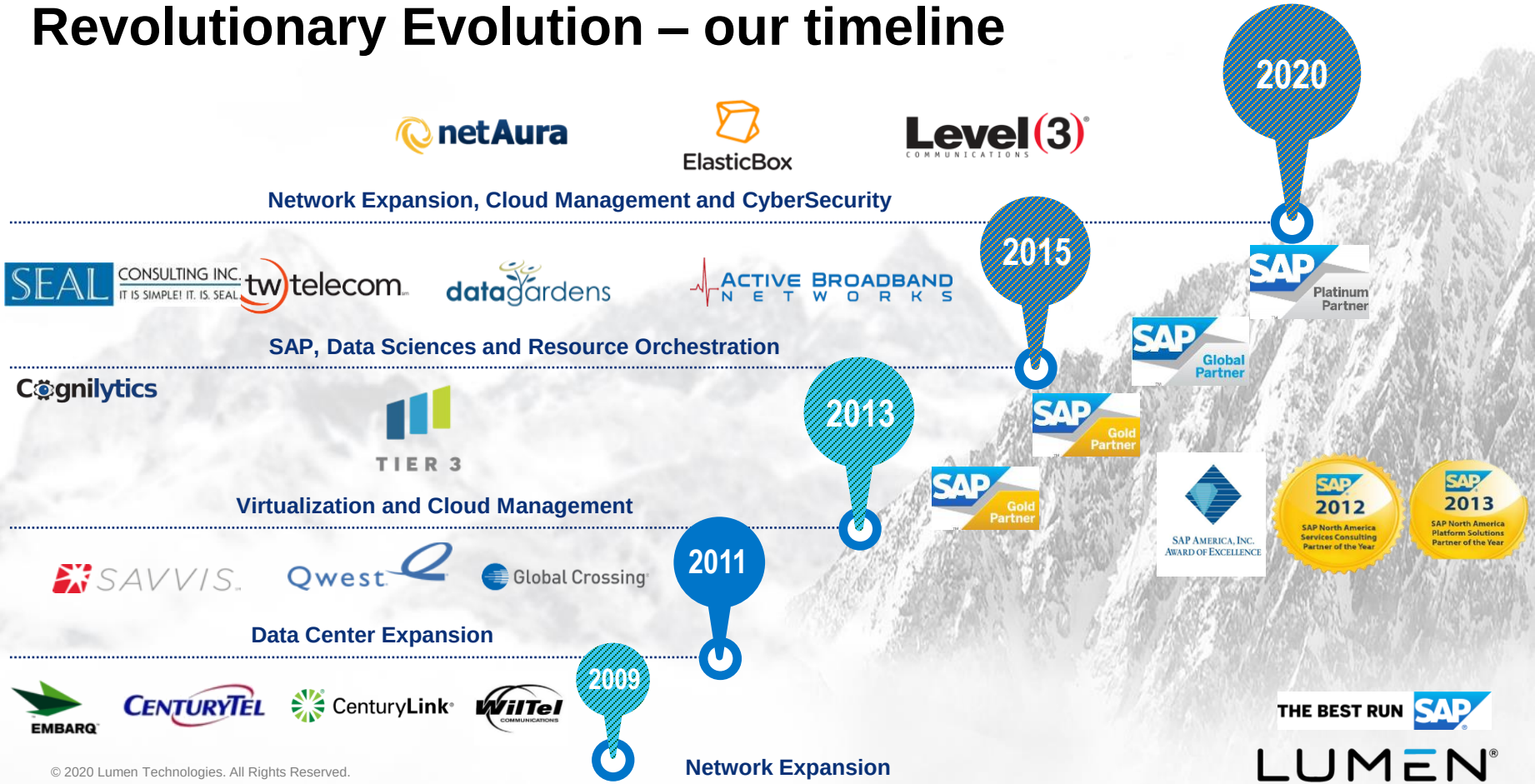
Revolutionary Evolution – our timeline



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THE BEST RUN SAP

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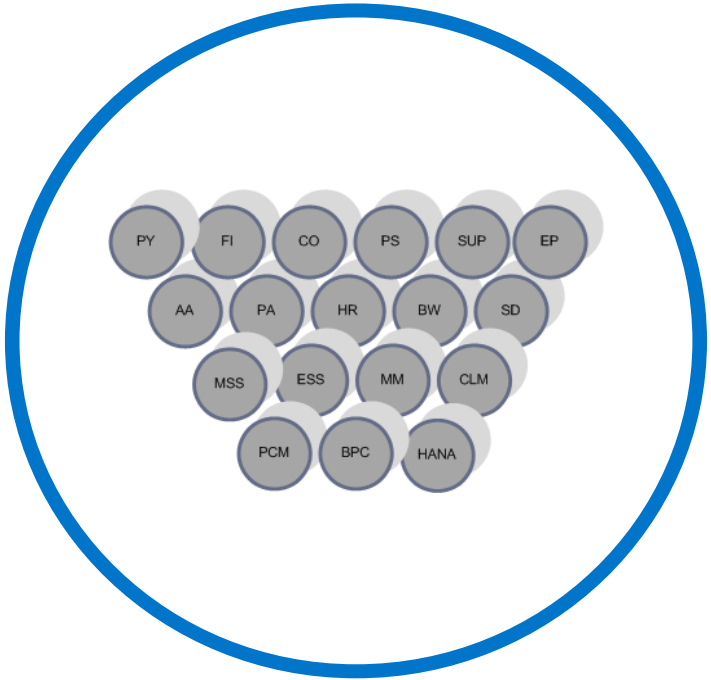
Our SAP Footprint – We are one of the largest SAP customers.. and SAP Reference!

CenturyLink implemented SAP in 1999..

Modules

Payroll (PY)
Finance (FI)
Controlling (CO)
Project Systems (PS)
Supplier Portal (SUS)
Enterprise Portal (EP)
Asset Accounting (AA)
Profitability Analysis (PA)
Human Resources (HR)
Business Warehouse (BW)
Sales and Distribution (SD)
Manager Self Service (MSS)
Employee Self Service (ESS)
Materials Management (MM)
Contract Lifecycle Management (CLM)
Profitability Cost Management (PCM)
Business Planning and Consolidation (BPC)
HANA (ECC Sidecar)
SAP Success Factors (SF)
SAP Concur



Our SAP “family of products” ☺

Past Projects

- Upgrades in 2004 and 2009
- Integration of Embarq (from PeopleSoft)
- Integration of Qwest (from PeopleSoft)
- Integration of Savvis (from SAP)
- Federal CPE (from Oracle ERP to SAP)

Current Projects

SAP RISE RFP issued Sep 2022 invitation only
SAP Qualtrics and SAP Concur upgrades 2022
EWM and APO
SAP Fieldglass
SAP RAR
L3 Oracle migration to CTL SAP 2020
SAP Hybris Billing & SAP Mobility
SuccessFactors (Recruiting Marketing, Recruiting Management and Onboarding)

2018 Projects

S/4HANA Public Cloud / CPM

Internal Support Team

~100 employees with various SAP experience (onshore and offshore)

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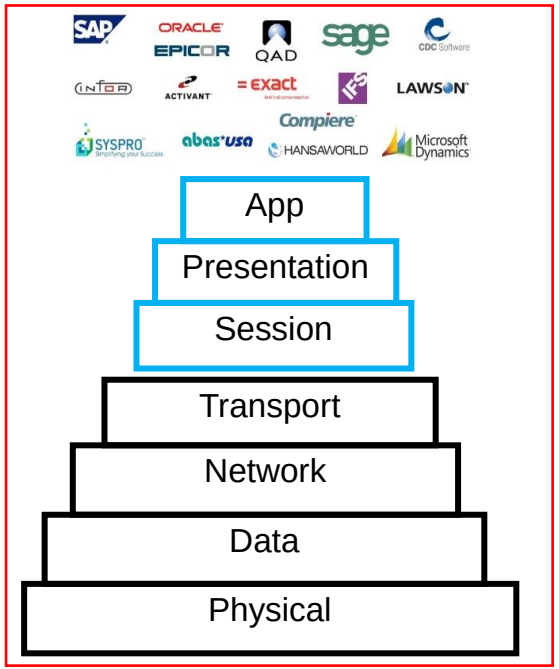
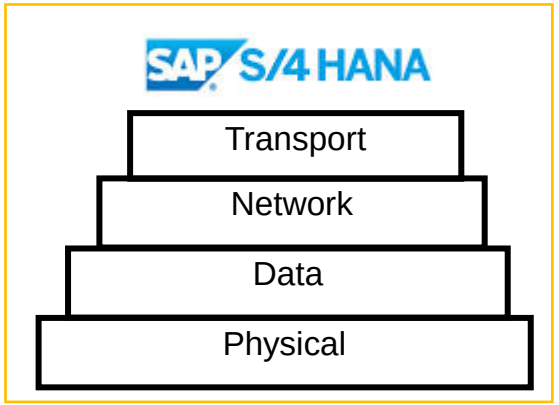
The five “S’s’ of DIGITAL TRANSFORMATION from ECC to SAP RISE

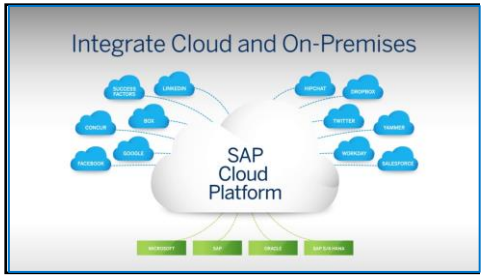
Legacy ERP/MRP Models



Top Stack Digital Transformation



Full Stack Digital Transformation



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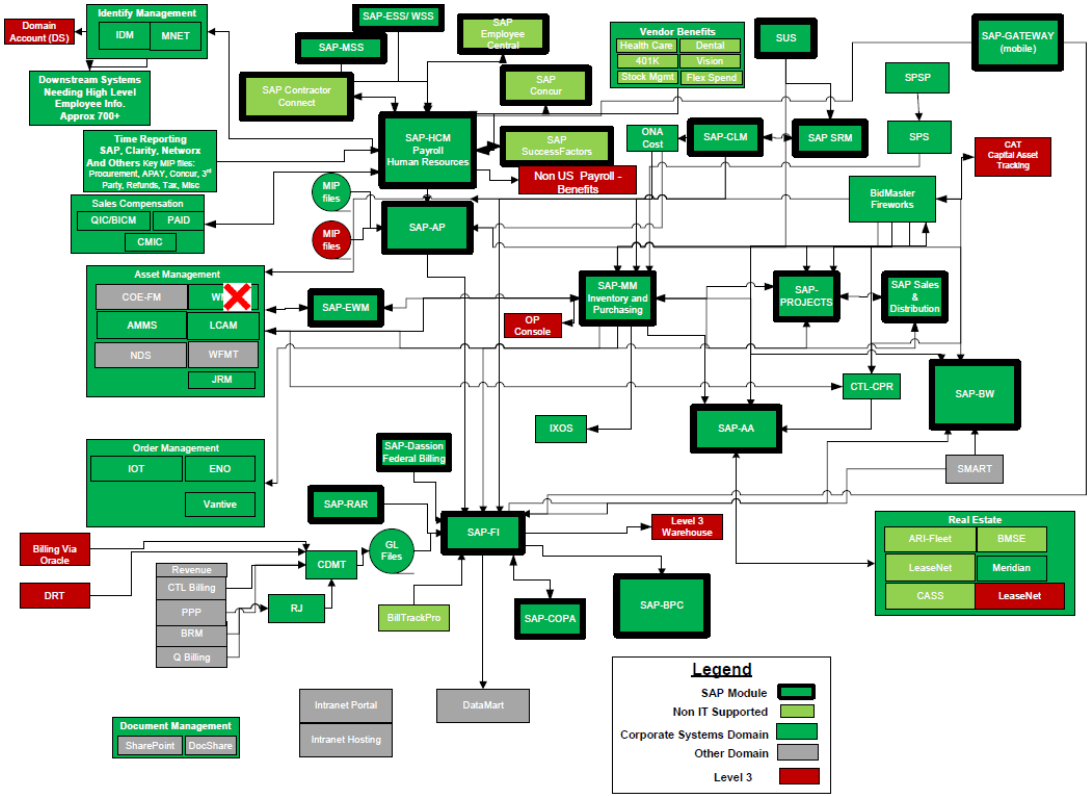
Lumen's Internal ECC SAP Footprint



- **CenturyLink has been live on SAP since 2000.**
- Implemented additional functionality and completed multiple upgrades and integrations projects globally supporting ~43K SAP users world-wide.
- **Footprint of SAP systems and applications**
  - ECC, Suite on HANA
  - RAR on S/4HANA
  - Success Factors
  - Fieldglass
  - Concur
  - BPC
  - PCM
  - BW
  - EWM
  - Ariba (current project)

❖ *AspireHR (SAP Ecosystem partner)*
❖ *Sodales (SAP Ecosystem partner)*
❖ *SherpaBudget (SAP Ecosystem partner)*

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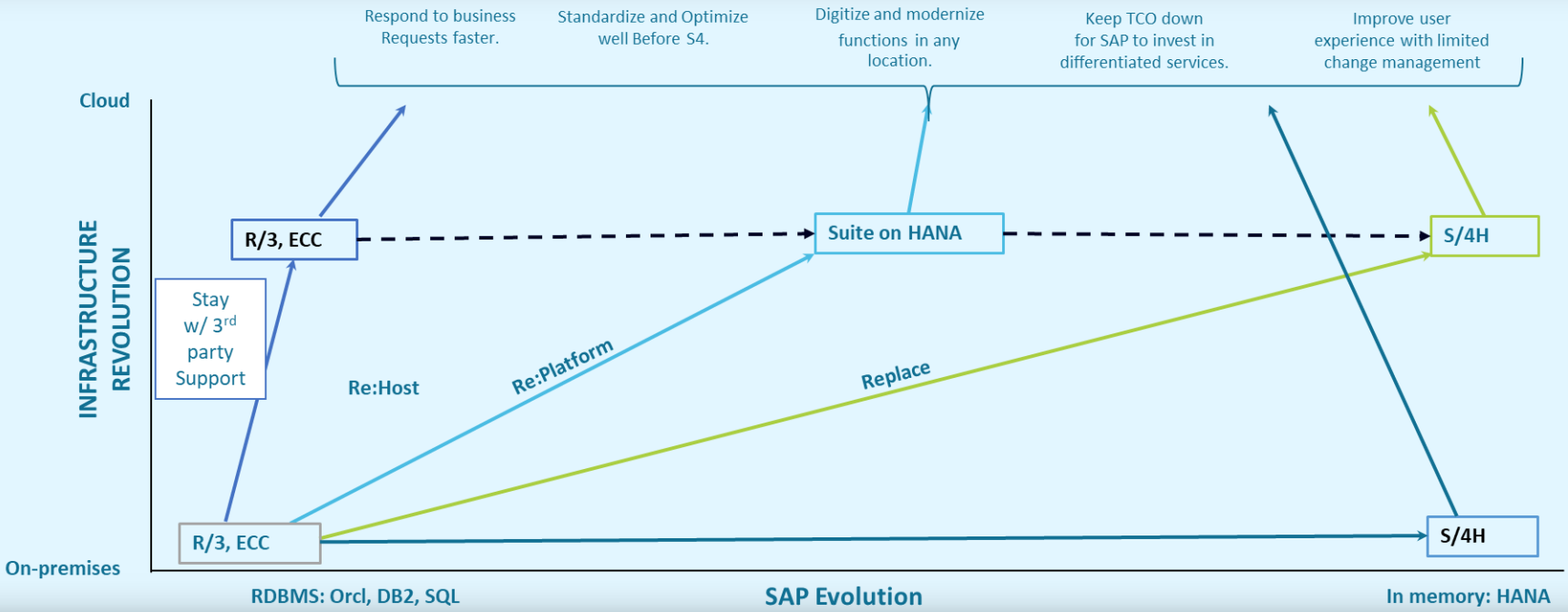
Lumen | Used Pillir to first remove $30M in SAP Technical Debt



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*2019

USE CASE | BEFORE & AFTER = Simple Business Case

	Today
Analysis	2 week/1 people
Enhancement & migration	14 weeks/ 3 people
Testing	6 weeks/ 3 people
Rollout & go-live	2 weeks/ 1 people
Product	Legacy GUI Require connectivity

	Pillir
Analysis	2 week /1 people
Model & Design	2 weeks / 1 people
Build & Integrate	3 weeks / 1 people
Test & Deploy	2 weeks / 1 people
Product	Modern interface Always-on

	Today
Time To Market	6 months/2560 Man Hours
Additional Costs	Change management Incident management Operations
New Changes	6-8 weeks

	Pillir
Time To Market/Resources	2 months/320 Man Hours
Additional Costs	Monthly active users Guaranteed SLA No operational costs
New Changes	Hours to days

Technical Debt Index = Value

- 2200 Objects – for 4 years
- Annual EHP's + S4 Remediation
- Less Hours for Conversion
- Less Hours to Maintain

$$\frac{\text{[\$88,000 + (\$44,000 x 4)]}}{\text{[\$44,500 + (\$25,000 x 4)]}} = \frac{\$264,000}{\$144,500} = 182\%$$

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SAP RISE RFP issued!
Sept 2022

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Lumen's Corporate SAP Leadership Team

Andrea Ricker

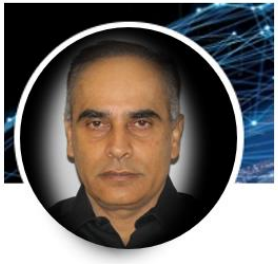
VP, Assistant Controller

Becky McClure

Senior Director, Accounting Transformation

Molly Proctor

VP, Billing & ERP



Amin Jiwani

Principal Solution Architect

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SAP ERP is the core back-office platform that supports all Financial, Supply Chain, Procurement, Inventory Management, HR, and Payroll functions for Lumen.

Lumen's ERP: SAP

- The ERP ecosystem (4 ERP's and ~50 satellite systems including Billers) is 20+ years old and our fragmented architecture consists of numerous custom legacy applications.
- The legacy SAP data model does not support Lumen's needs for fast, efficient and complete reporting, analysis and operations.
  - US GAAP is *not* the Primary ledger
  - Redundancy in profitability reporting dimensions
  - "Serialized" financial structure vs. "Matrix" based

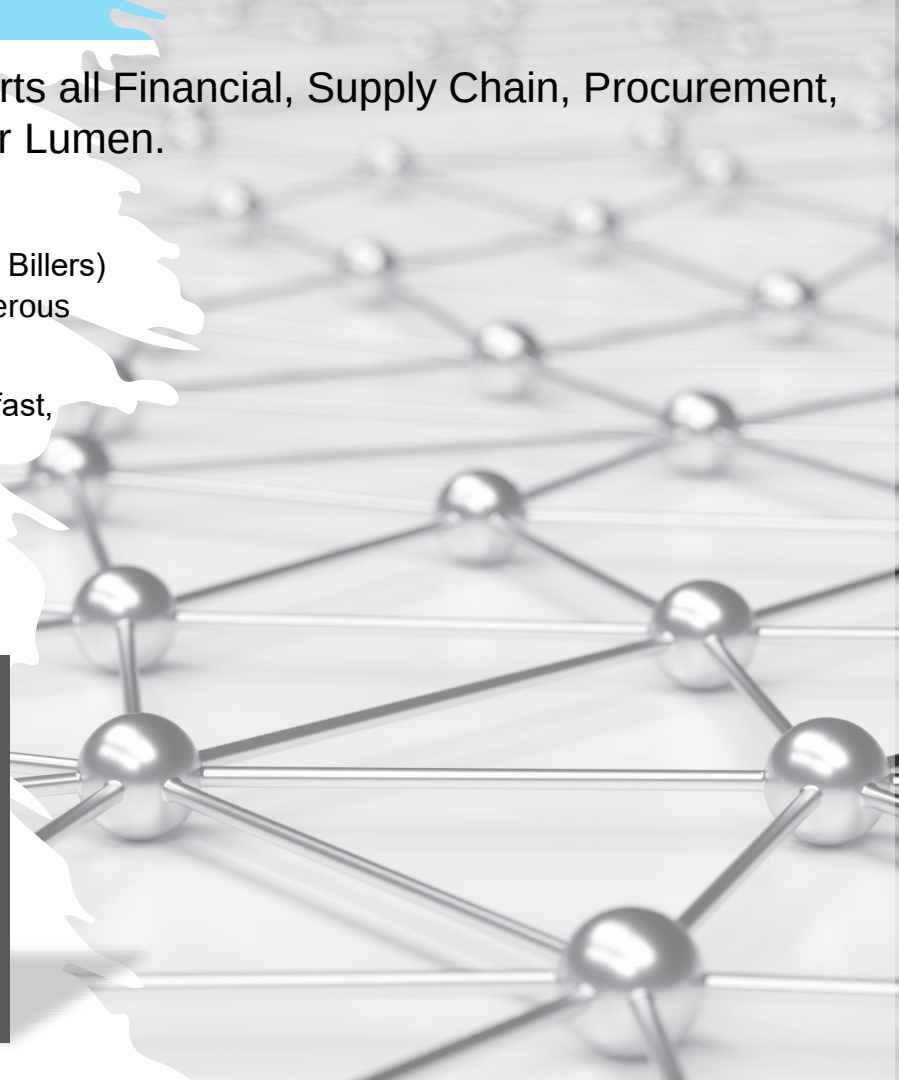
Proposal

Reimplement SAP to SAP's S/4 HANA version and retire ~30 satellite and supporting systems over ~3 years in 2 Phases:

1. Financials, Consolidated Accounts Receivables & Collections
2. Supply Chain, Procurement, Inventory Management

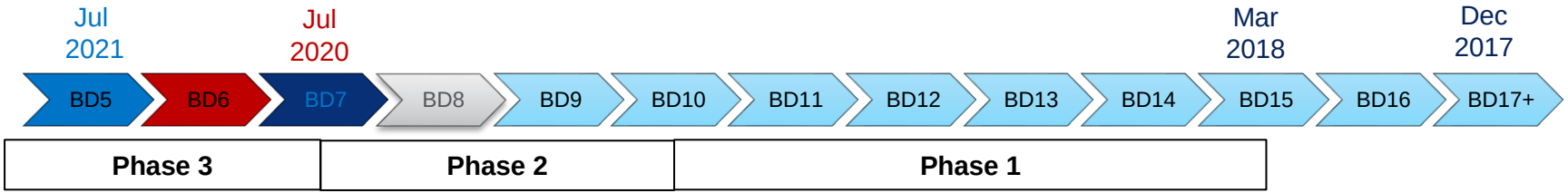
   HR & Payroll

Deployment for each Phase is assumed to be 'Big Bang' (both NA & EMEA in a single deployment)



Lumen's Monthly Financial Close Journey

- **Objectives:**
  - **Phase 1:** Accelerate the monthly financial close cycle time by 5+ business days (BD10 goal)
  - **Phase 2:** Accelerate the monthly financial close cycle time by 3 additional business days (BD7 goal)
  - **Phase 3:** Accelerate the monthly financial close cycle time by 2 additional business days (BD5 goal)



Current Close

BD3- Ledger Close
BD4- Controller/FP&A Review
BD5- CFO Review and Flash Distribution to SLT

Focus Areas: Culture & Communication, Close Process Management, Manual Processes & Journal Entries, System Efficiency, Optimize Data & Reporting

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Business Benefits of SAP RISE

Finance

- Consolidate and streamline financial reporting to enable insights (one source of truth with no adjustments or transformation, full drilldown)
- Consolidate credit monitoring (reduce bad debt)
- Consolidate billing systems, A/R and cash application (1/2 day DSO acceleration/$25M)
- Reduce MISR reconciliation/gaps
- Financial master data optimization (reduced manual work)

Operations / Capital Spend

- Moving from Customer/Vendor to Business partner relationships allows clear analysis on buy/sell interactions and revenue and expense trends
- Full end-to-end visibility and ability to implement financial controls of all capital spend (Capital Approval to Asset)

Procurement / Supply Chain

- Universal Inventory Management model leading to reduced inventory levels, inventory loss/obsolescence, and improved ability to support customers in a challenging global supply chain environment
- Streamline inventory planning process under one ERP and one planning platform, driving improved service levels and reduced capital spend

Sales / Customer Success

- Consolidated invoice presentation in the portal driving
  - Improved NPS score (21% of satisfied customers will increase spend 10% over 2 years)
  - Ability to reduce print vendor costs ($200k customer/ $100k a month)
- New Product Satisfaction metrics and Profitability by Customer/by Product in ERP allows improved sales strategy implementation, tracking and design by integrating with Gainsight

SP&T

- Lower operational costs through reduction of 30 applications
- Improving data issues through close life-cycle through systems simplification by minimizing points of failure/hops
- Redesign of user roles and access will improve security and SOX compliance

HR

- Simplification of the Cost Center structure and out of the box payroll data analytics reports will improve visibility and reduce operational expenses required for reporting.
- Increased functionality and more frequent updates to enable and incorporate changes due to new laws and regulations

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Project Status

Our Approach

1. Clean house first- Finance/Billings
2. Lumen will be on both sides of the table
   A. Increases transparency both ways
   B. Reduces risks/unknowns by having an open team
   C. Best of the best. Each organization does something better than others. We want to leverage those bests.
3. The key vendors will all be in the room (SAP, AZURE, Lumen's SAP team, VM Ware)
   A. Solutions vs. Excuses
   B. Everyone is at the table, ownership is complete
   C. All resources are available to team

Project Details that can be shared

- SAP RISE! Goodbye ECC!
- Greenfields
- Starting with FICO
- Big Bang vs. Iterative
- 2-year project vs. 4-year
- CFO wants faster value
- Agile Approach
- Azure likely

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Questions?

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