



Project Controls

E X P O

Project Controls Expo – 17th Nov 2017 Emirates Stadium, London

Enterprise Projects Performance: Going Beyond Project Controls

Mark White – SVP, EcoSys Global Business
Development



EcoSys Overview

Market Leadership



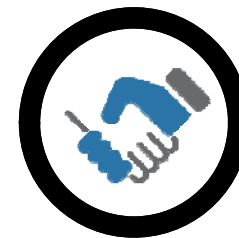
- EcoSys founders were the original developers of Primavera P6
- First to market and industry leader in enterprise project controls
- Deep portfolio & project management expertise

Business Momentum



- Largest user adoption in project controls industry
- Global presence – users in 20+ countries
- A part of Hexagon PPM (formerly Intergraph Process Power & Marine) since 2015.

Loyal & Growing Customer Base



- 500+ clients globally
- Strong partnerships: SAP, Oracle, SAP, Microsoft, Accenture, IBM, and more

Global Customers from Across Industries

Engineering & Construction



Oil, Gas & Chemicals



Utilities



Aerospace & Defense



Transportation

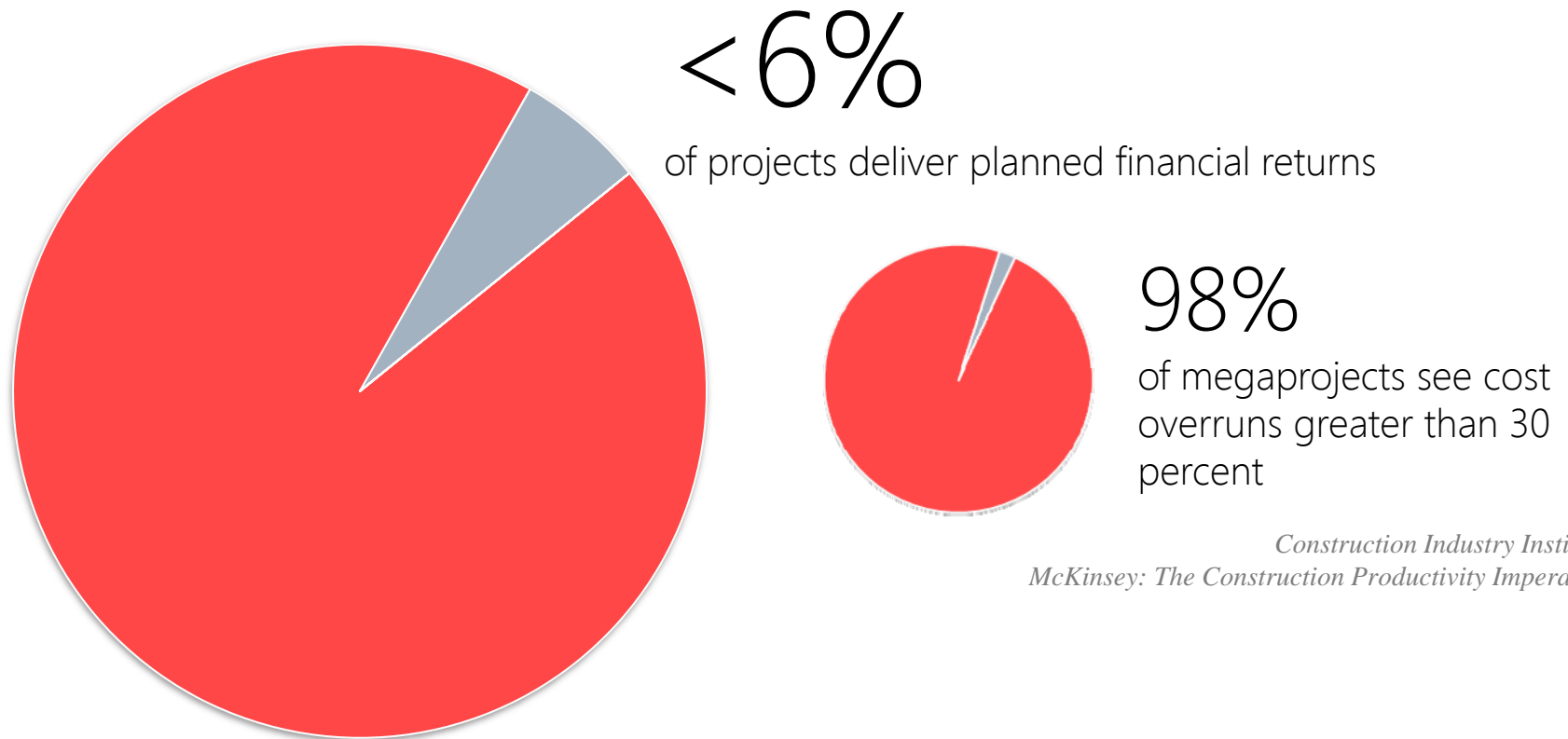


Mining

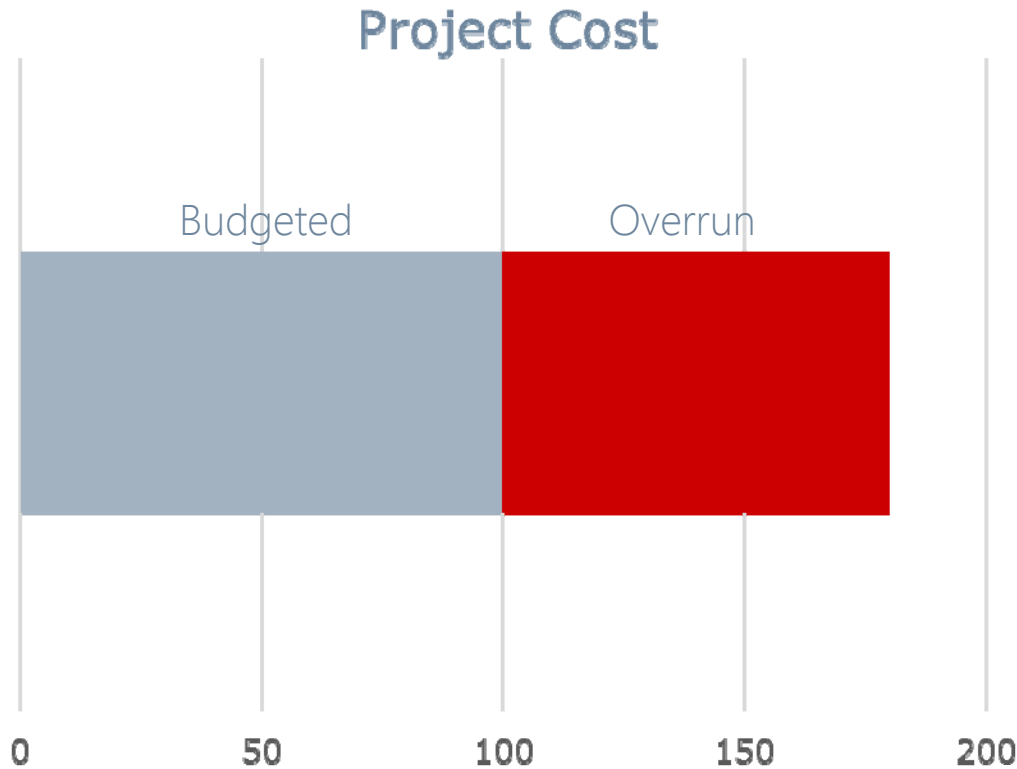


Why Enterprise Projects Performance?

Projects out of Control



Projects out of Control



Average megaproject cost overrun:

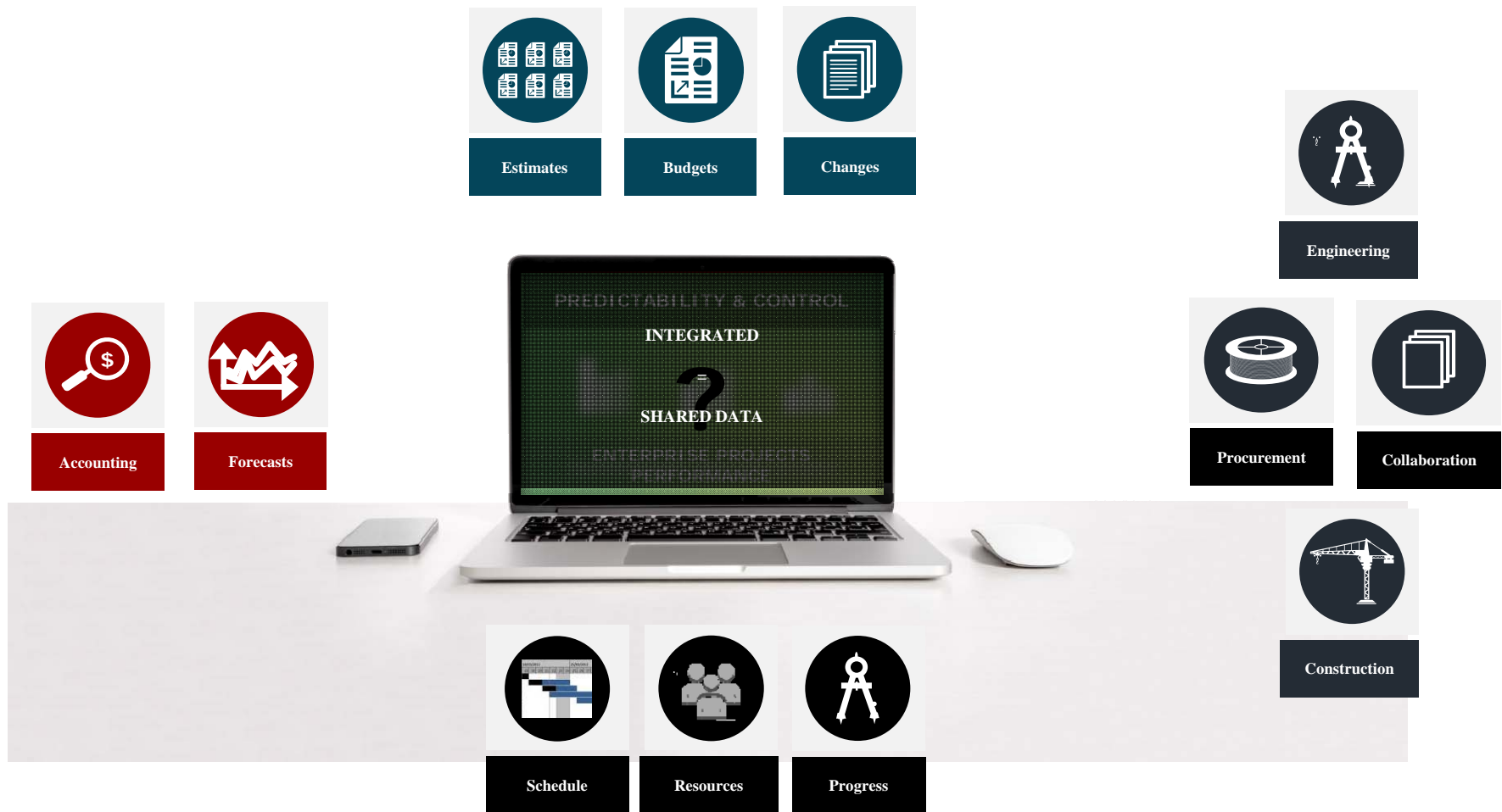
80%

Average megaproject schedule slippage:

20 months

McKinsey: The Construction Productivity Imperative

Information Silos



Resultant Issues



LOW
EFFICIENCY



POOR
VISIBILITY



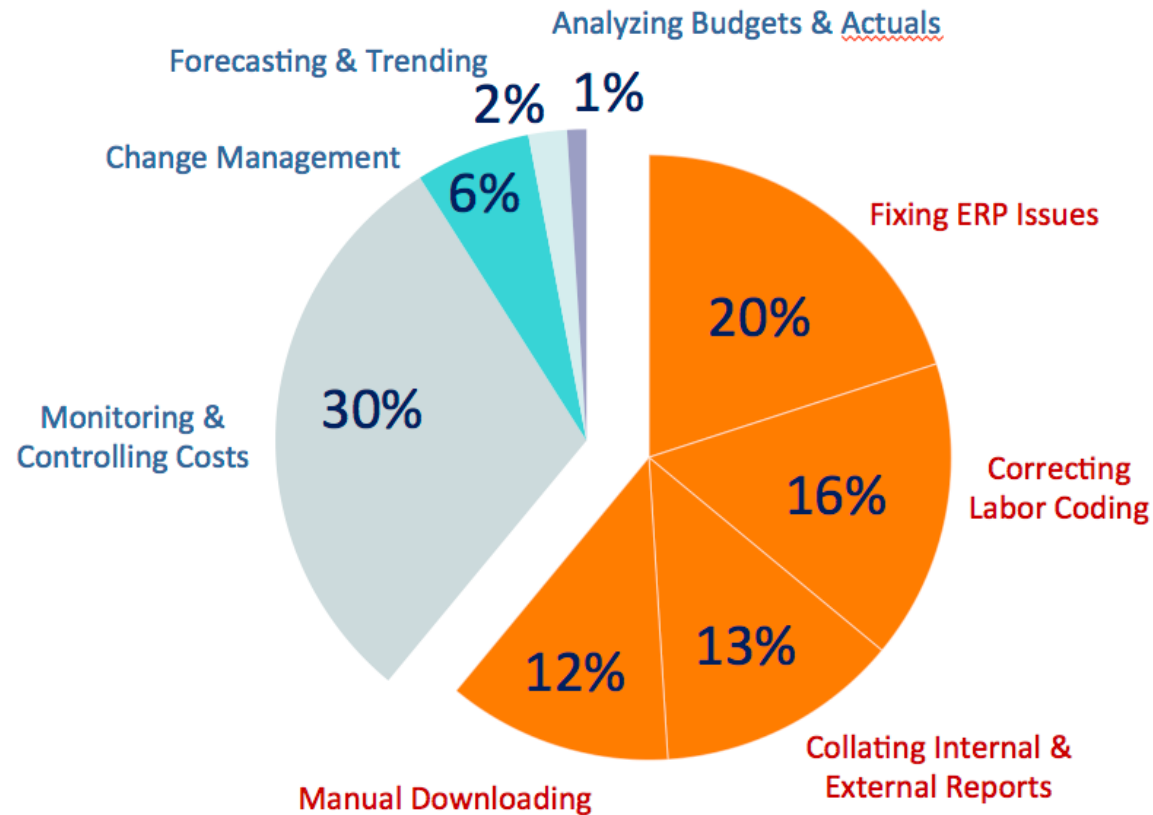
LACK OF
ACCOUNTABILITY



INCONSISTENCY

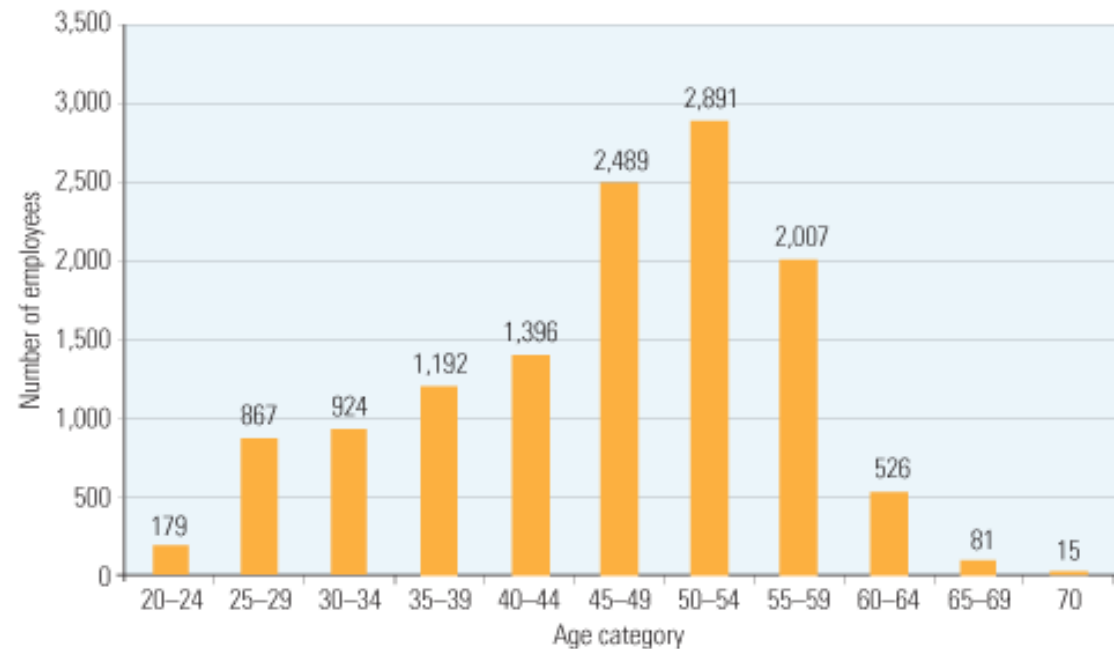
Inefficient Execution

Client before implementing EcoSys



Knowledge Retention vs Aging Workforce

- Expertise is disappearing
- Project management teams losing institutional knowledge
- Skillsets are becoming outdated





TODAY

YESTERDAY



Project Controls
EXPO

Copyright @ 2011. All rights reserved

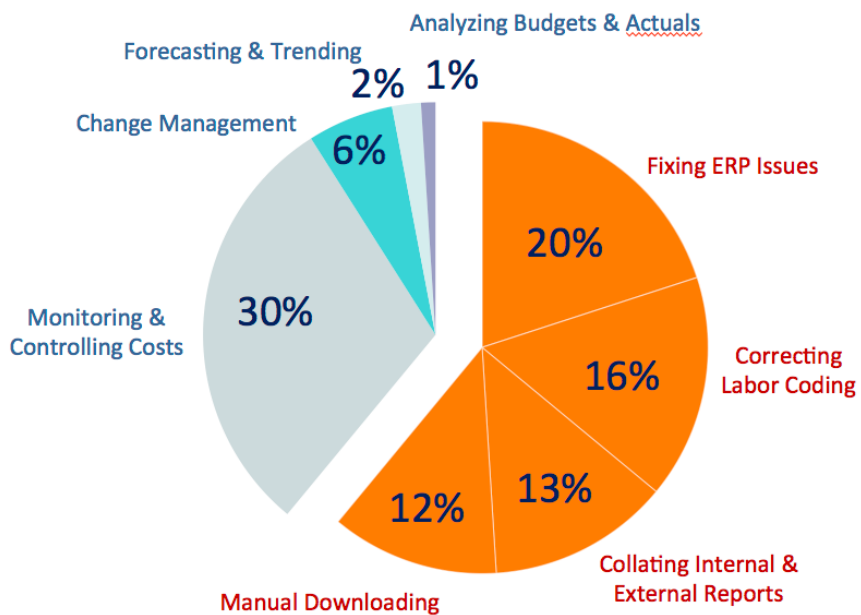


HEXAGON
PPM

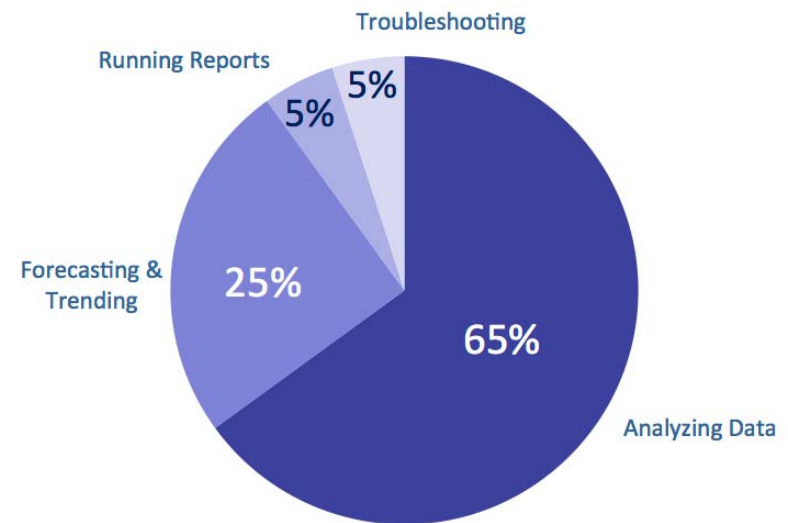
EcoSys

Optimized Execution

Client before implementing EcoSys



Client after implementing EcoSys



But Execution Isn't Everything!



On Time Delivery



On Budget



Strategic Alignment



How to Achieve Enterprise Projects Performance?

Compounding The Problem

- Projects and capital spending are long term
- Changes in market conditions occur in the interim:
 - Volatility in commodity prices
 - Change in workforce composition
 - Increase in interest rates
 - Rapid currency shifts
 - Changes in political climate (regulation, instability)
 - Natural disasters
- How can organizations address the inherent problem of change?



Enterprise Projects Performance Across the Digital Lifecycle

- **Proper prioritization, selection, and management** of project portfolios from inception through execution to close out;
- Controlling projects and contracts through **standardization** based on best practices;
- **Real-time decision analytics**, increasing visibility into forecasts and trends, including drill-down into underlying causes

Enterprise Projects Performance

Expands
Perspective

Demands
Visibility

Commands
Action

GOAL: Maximize Returns and Margins across Digital Lifecycle

Portfolio Selection Isn't Enough

Selection alone gives
only a partial picture

You must track performance too!



Enterprise Projects Performance

An Integrated System of Three Disciplines



Breaking Down Silos



Technology's Role in Achieving Enterprise Projects Performance

- Integrate critical sources of data
- Greater efficiency and effectiveness through automation
- Provide visibility into program performance across an enterprise
- Structure for defining and enforcing standards and best practices
- Predict outcomes and inform corrective action



What is EcoSys?

Enterprise Projects Performance



EcoSys ▶ Portfolios

- Capital Planning
- Funding
- Scoring and Prioritization
- Stage Gates Workflow
- Portfolio Project Selection
- Resource Management
- Program Management
- Benchmarking and Parametric Estimating
- Organizational Budgeting



EcoSys ▶ Projects

- Estimating and Budgeting
- Changes and Trends
- Commitments and Actuals
- Progress and Earned Value
- Stage Gates Workflow
- Risk Management
- Forecasting
- Cash Flows
- Currency Management



EcoSys ▶ Contracts

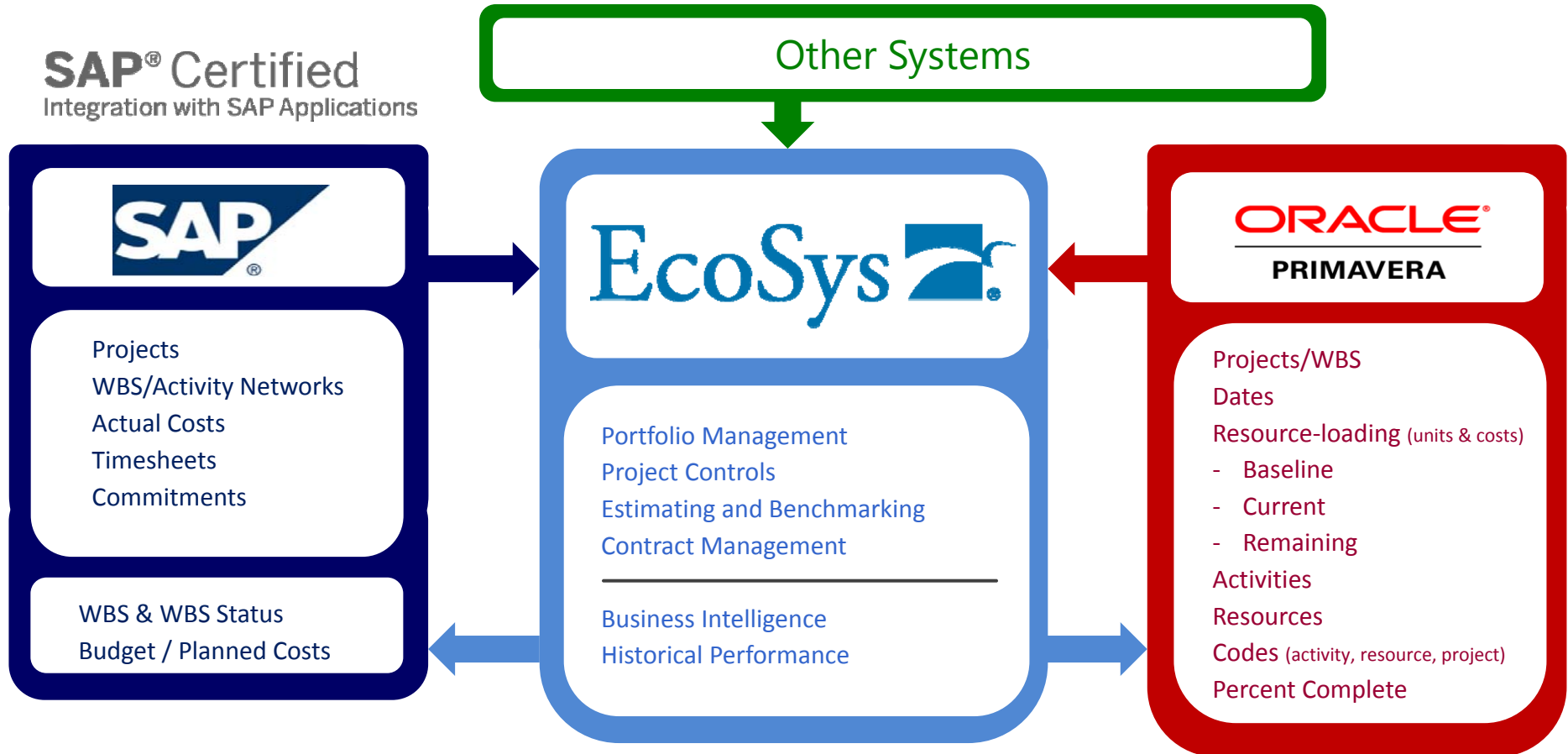
- Contract Cost Control
- Contract Change Control
- Requests for Information (RFIs)
- Submittals and Transmittals
- Payment Applications
- Safety Items
- Punch Lists
- Meeting Minutes
- Lessons Learned

Enterprise Projects Performance



- Uniquely, all three EcoSys products are accessed from the same web browser, fully integrated on one database, sharing common features like:
 - **Enterprise Data Structures:** portfolios, programs, projects, contracts, WBS, CBS, etc.
 - **Configurable Business Intelligence (BI):** dashboards, screens, spreadsheets and charts, each with drill down capabilities
 - **Configurable Processes:** screens, spreadsheets, forms and workflows
 - **Flexible Integration APIs and Adapters:** supporting data exchange with many ERPs and project systems
 - **Mobile Apps:** fully integrated configurable apps for iOS and Android devices

Fully Integrated Project Data



New Features of EcoSys Version 8

- **Revamped GUI** – cleaner, modern look and feel
- **New Gantt Charts** – this new Gantt chart has more aesthetic appeal and offers additional functionality
- **New Dashboards** dimension allowing for a single dashboard with multiple dynamic panels and ability to scroll throughout the page
- Enhancements to **Charts, Forms, and Reports**
- Additional options for **management and automation of security**
- **Performance** enhancements

Current Month			Previous Month							
Project Manager Mathias Sandersen	Project Type Mandatory	BAC \$16,116,860	EAC \$16,116,860	VAC \$0	Previous BAC \$14,946,860	BAC Change \$1,170,000	Previous EAC \$14,946,860	EAC Change \$1,170,000	Previous VAC \$0	VAC Change \$0
Cost Narrative Current Period Overall EAC remains unchanged from February report. Material takeoffs will be completed mid April and will most likely result in an EAC change on the next report. Electrical continues to do well and is expected to come in at about \$50K under budget.	Schedule Narrative Current Period Material delivery delays continue to impact timelines. Confined space unit 1 are also resulting in decreased productivity. Looking to add trend continues.	Cost Narrative Previous Period Recent scope changes have been approved and fully funded, resource plans approved, which all has resulted in an increased EAC for January. Exiting the Engineering phase and commencing construction will bring a much larger scale of expenditure impact over the next few months.				Schedule Narrative Previous Period Final engineering deliverable have indicated little to suggest need to schedule or it's critical path, which remains on target. Initial co productivity metrics indicated strong performance across most co disciplines.				
Risk Summary Current Period R00019 - Labor shortage resulting from increased demand in pipefitters and ironworkers. Probability of impact has been updated to 5. Final cost and schedule impact is still under review.	Management Notes Current Period 1. Started work on site framing 2. Piping hangers continue to be planned 3. Labor shortage will significantly impact cost & schedule	Risk Summary Previous Period No major risks are open or new for January.				Management Notes Previous Period Engineering milestones are in the process of final delivery and close. Construction activities are initiating and resource teams are gear up. Provisions have been placed on site and material deliveries began				



* Project: PRJ-000001 - New Construction Project Level: _____ Filter: [] Timescale Unit: Quarter [x] Show subscale Timescale Subunit: Month [v]

Start Date	End Date	% Complete	ep 2016	Oct 2016	Jan 2017	Apr 2017	Jul 2017	Oct 2017	Jan 2018

Business Friendly Design

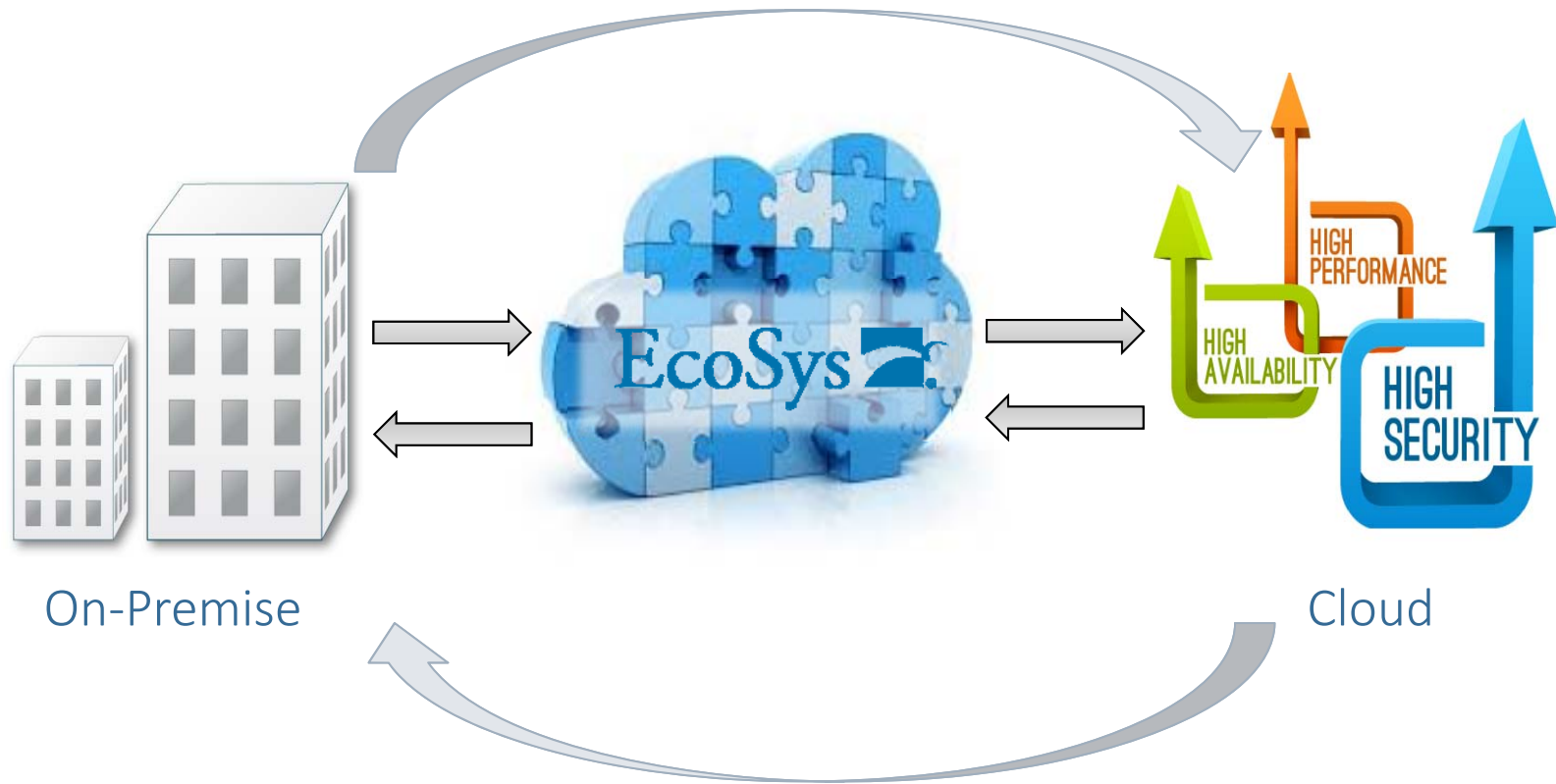


Cost Control
Strategic



Tailored User Experience
Collaboration
Filtered Information

Flexible Software Deployment Methods



Native Integrations Between Intergraph Smart[®] Products and EcoSys[™] Begin Rollout

ROADMAP:

- **Available today** – Integration of Intergraph Smart Materials and EcoSys
 - Inclusive of requisitions, orders impacting budgets and commitments, actual expenditures based on approved invoices
- **Q1 2018** – Integration of Intergraph Smart Construction and EcoSys
 - Scheduled or on-demand field progress updates
- **June 2018** – Integration of Intergraph Smart 3D and EcoSys
 - Model progress feeding into project controls – an exciting new paradigm for the industry!

System Demo

Thank you!

www.ecosys.net

info@ecosys.net