Project Controls Expo – 13th Oct 2015
Emirates Stadium, London

Best Practice Project Controls with

EcoSys™

About the Team

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12 yrs Enterprise Software

SAP functional lead and consultant trainer

Data automation, governance and UI replacement technologies

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EMEA Senior Sales Director

30 yrs Enterprise Software

EMEA Senior Sales Director at Oracle Primavera GBU and Primavera Systems

Senior leadership roles at Sage, CGI, QAD

Federico Rota

EMEA Inside Sales Manager

30 yrs Enterprise Software

Extensive sales and marketing experience with IBM, Meridium, AirWatch, GBM and Dasit

Managing Director Zauber

About the Topic

More than just cost reporting, effective project controls help to deliver success throughout the entire project lifecycle, from the very earliest stages of project selection and planning through project execution.

In this presentation, we discuss the best practices in project controls that drive improved project performance.

Through standardisation of processes, integration of data, and automation of reporting, organisations realize a greater ability to:

- Improve efficiency, accuracy, and effectiveness of project controls
- Achieve visibility into project cost performance across an enterprise
- Predict outcomes and take corrective action sooner

Agenda

- Brief Company Introduction
- The State of Projects Today
- Leveraging Technology for Best Practices
- Live Demonstration
- Where to find us

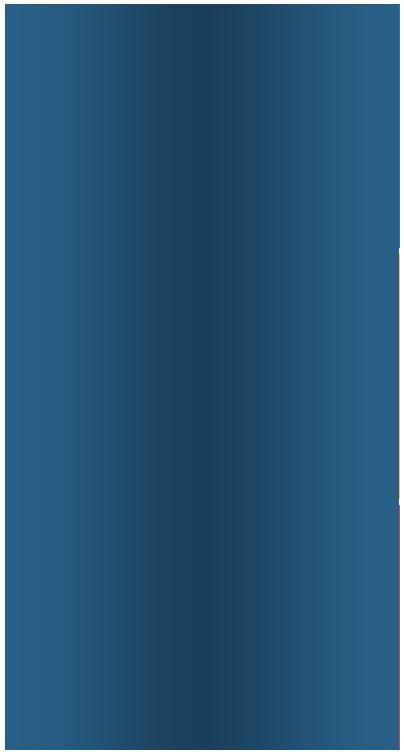
Project Controls EXPO

Company Background

- **Founded in 2000 – Enterprise Control Systems**
- **Enterprise Project Controls Software Experts**
  Designers & Developers of original Primavera P6
  and EcoSys EPC
- **Implementation of Project Controls Best Practices**
- **Strong Technology and Implementation Partner Networks** including SAP, Oracle, Microsoft, GSI (Accenture, Wipro, PWC, DT..) and local partners
- **Enterprise Standard for EPC Leaders in our key Industries:** O&G, natural resources, petrochemicals, EPC, Utilities, Aerospace & Defense, Transportation & Public sector
- **Acquired in 2015 – Intergraph**

Process, Power & Marine

Leading global provider of engineering and plant design tools



No. 1 provider of design and data management software

High customer satisfaction and best-of-class solutions

HEXAGON

Leading global provider of integrated design, measurement and visualization technologies

Comprehensive Suite

- Leading 3D Modelling & Visualization
- Engineering & Schematics
- Detailed Analysis
- Procurement, Fabrication, Construction
- Data & Document Management
- Flexible, Seamless, and Integrated Workflows
- Cloud Computing for Anywhere Access

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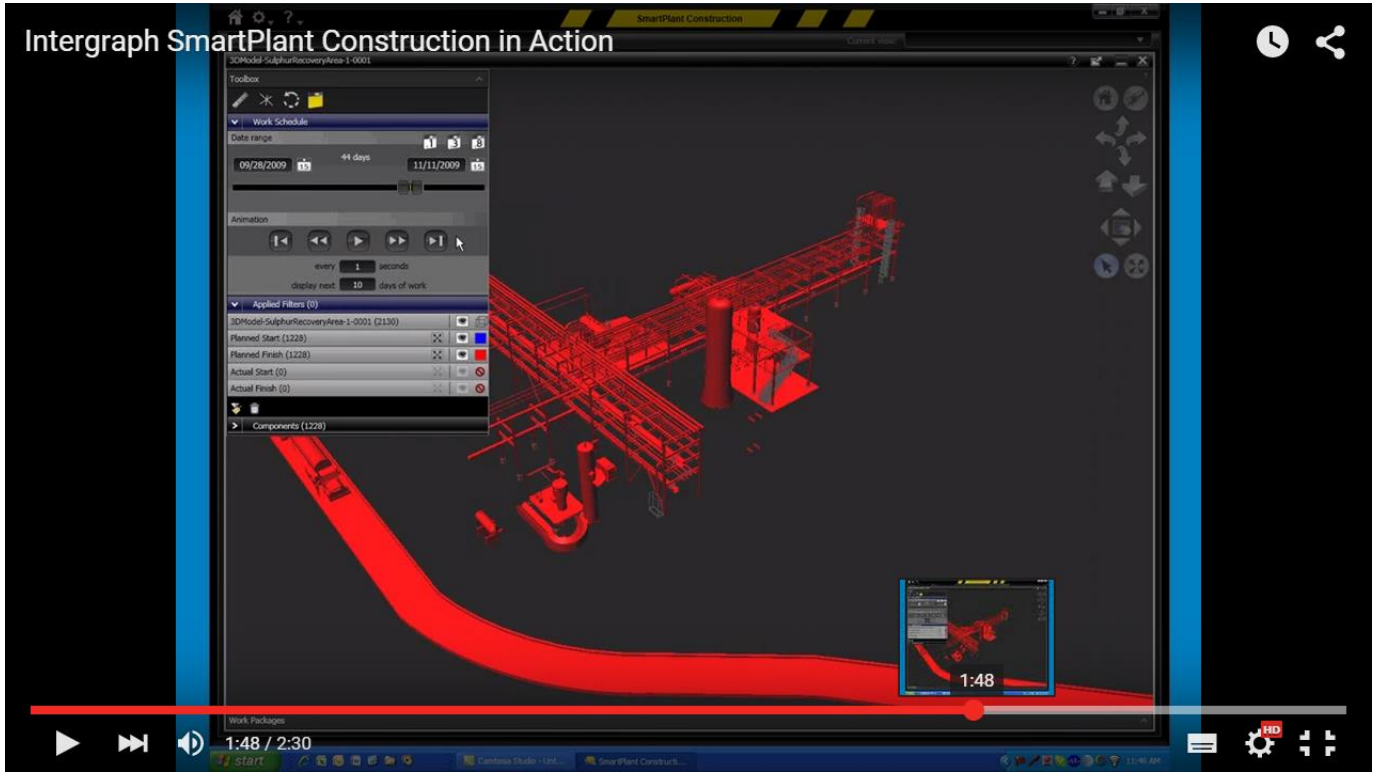
Extending the 3D model



3D model

+ schedule / time

+ cost

+ project lifecycle

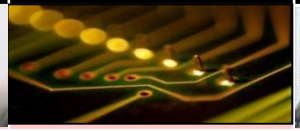
250+ deployments of EPC

EcoSys

Project Controls EXPO

250+ deployments of EPC

EcoSys™

EPC	Oil & Gas Utilities	Chemicals Mining	Manufacturing A&D	Transportation Public Sector
				
• **Bechtel** • **KBR** • **CH2Mhill** • **Black & Veatch** • **Burns and McDonald** • **Worley Parsons** • **Technip** • **SBM Offshore** • Quanta Services • B&W • Parsons • SNC Lavallin • Areva • MWH	• Conoco Philips • Exxon Mobil • **Cameron** • Tesoro • Ameren • Apache • **Enbridge** • Maersk O&G • Suncore Energy • Noble • Flint Hill resources • **Williams** • **Spectra** • GDF Suez • EDF Energy • American Electrical Power • Thames Water • Bruce Power	• LyondellBasell • Dow Chemicals • **Air Products** • **Koch Fertilizer Company** • Freeport LNG • BHP Billiton • Anglo American • Gold Corp • **Tahoe Resources Inc** • JDS Energy & Mining • African Minerals • Minera Penasquito	• Sikorsky • **Los Alamos** • **Ball Aerospace and Technology** • **Sandia National Laboratories** • Alstom	• **FAA** • **TVA** • **LA Metro** • **Washington State DOT** • **Houston Airport** • SFMTA • HNTB • **Harvard University**

The State of Projects Today

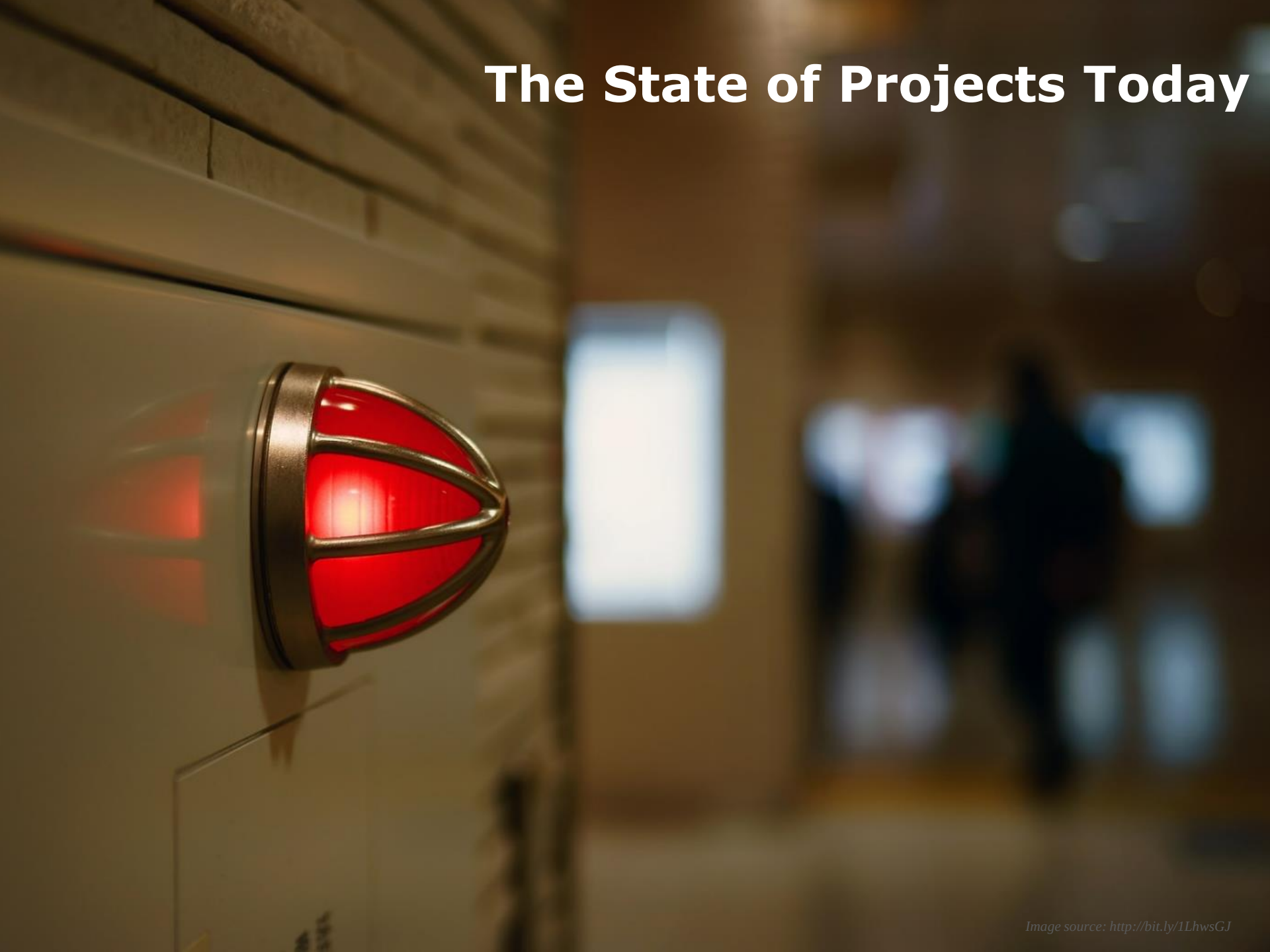


Image source: http://bit.ly/1LhwsGJ

What's driving the industry?

- Globalization of competition
- Projects getting bigger
- Project complexity increasing
- Acquisitions and joint ventures requiring collaboration and integration of management approaches

The struggle to control projects continues

- < 6% of projects deliver planned financial returns (CII)
  - Almost 70% fail to deliver within +/- 10%
- Soaring budgets of megaprojects/capital spending at O&G Majors impacting underlying corporate financials (WSJ)
- 2013 PwC study found:
  - 6 nuclear plants had average cost overrun of 157%
  - 47 mega-projects reviewed had average cost overrun of 88%
  - One refinery budgeted at $4B; final forecast at $12B
  - Litigation counts too: project owner seeking €2.4B in damages for 3 year delay on turnkey €3B power project

Challenge to effective Project Controls

- Poor Planning
- Rigid systems and processes
- Information silos / Lack of integration
- Manual processes
- Poor visibility and reporting
- Poor communication
- Inability to act on the information
- Insufficient Project Controls resources and knowledge

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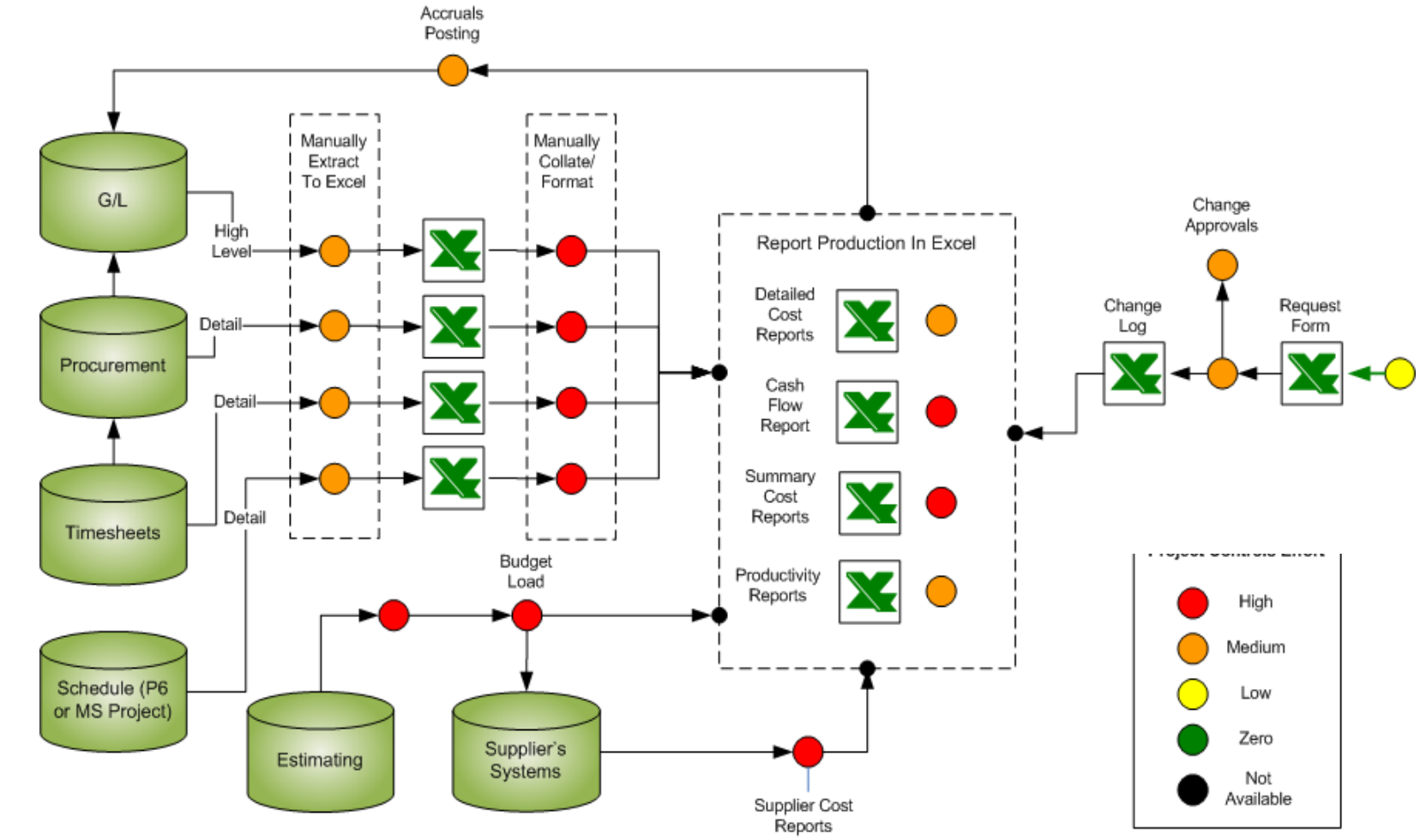
Non-integrated Project Controls



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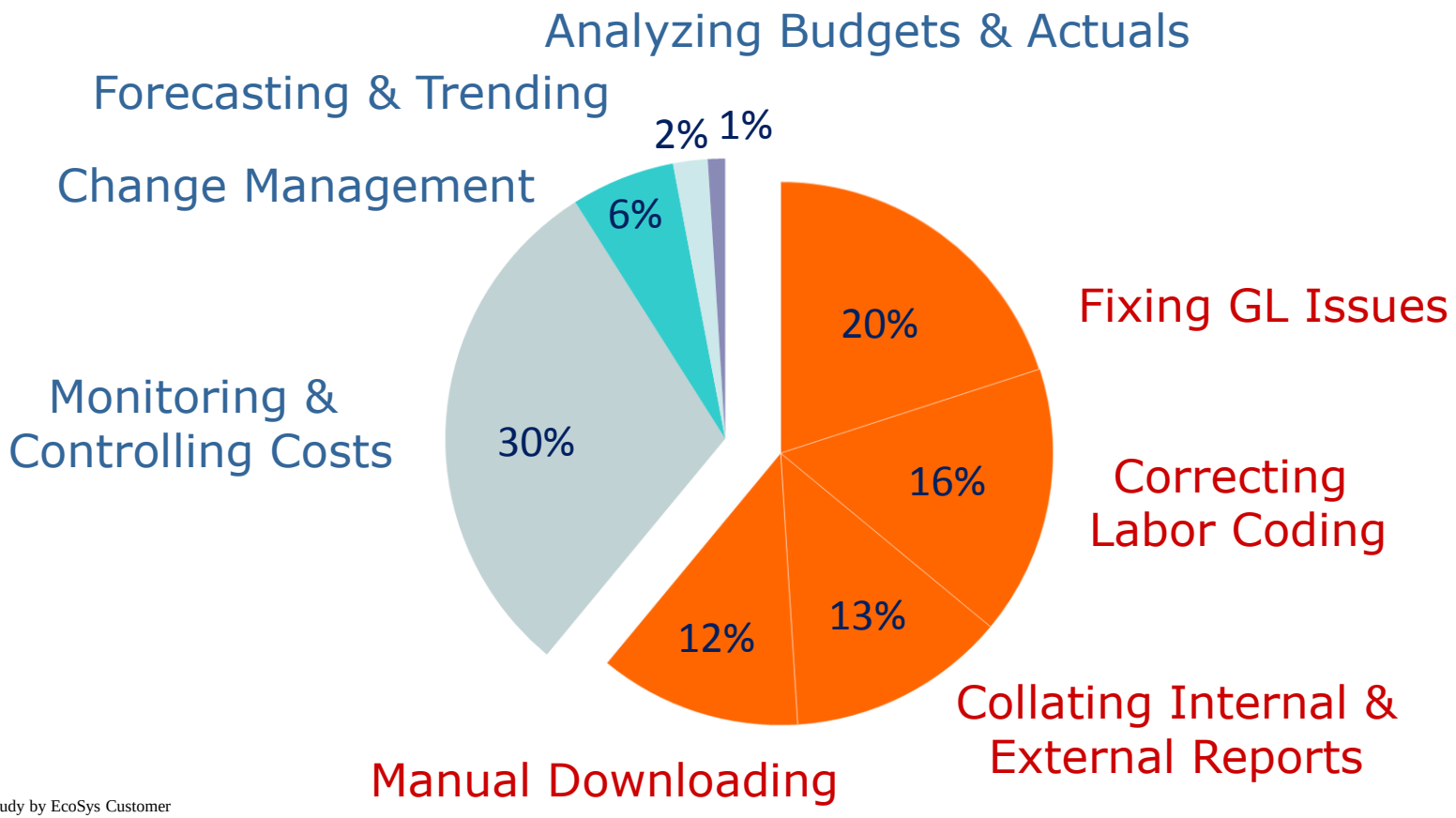
61% of cost analysts' time is "Wasteful"



Source: Internal Study by EcoSys Customer

Leveraging Technology for Best Practice Project Controls

Image source: http://bit.ly/1MdsHD2

System is the linchpin

The Project Controls System is much more than simply a “tool” or “data”.

- It keeps the wheels on
- It is vital

Key system considerations

EcoSys™


Standardization/
Best Practices

Adoption

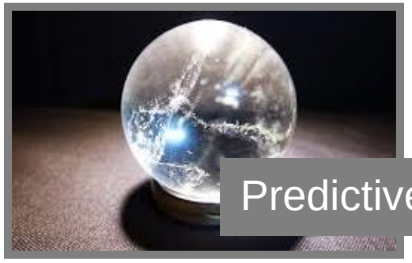

Visibility


Controlled
Flexibility


Automation


Integration


Scalability


Predictive


Full Lifecycle

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High performance approach

1. Get the entire company seeing and acting on the same information
2. Adopt and standardize project controls best practices across lifecycle
3. Align and integrate disparate processes, data to eliminate silos and disconnects
4. Evolve with the business

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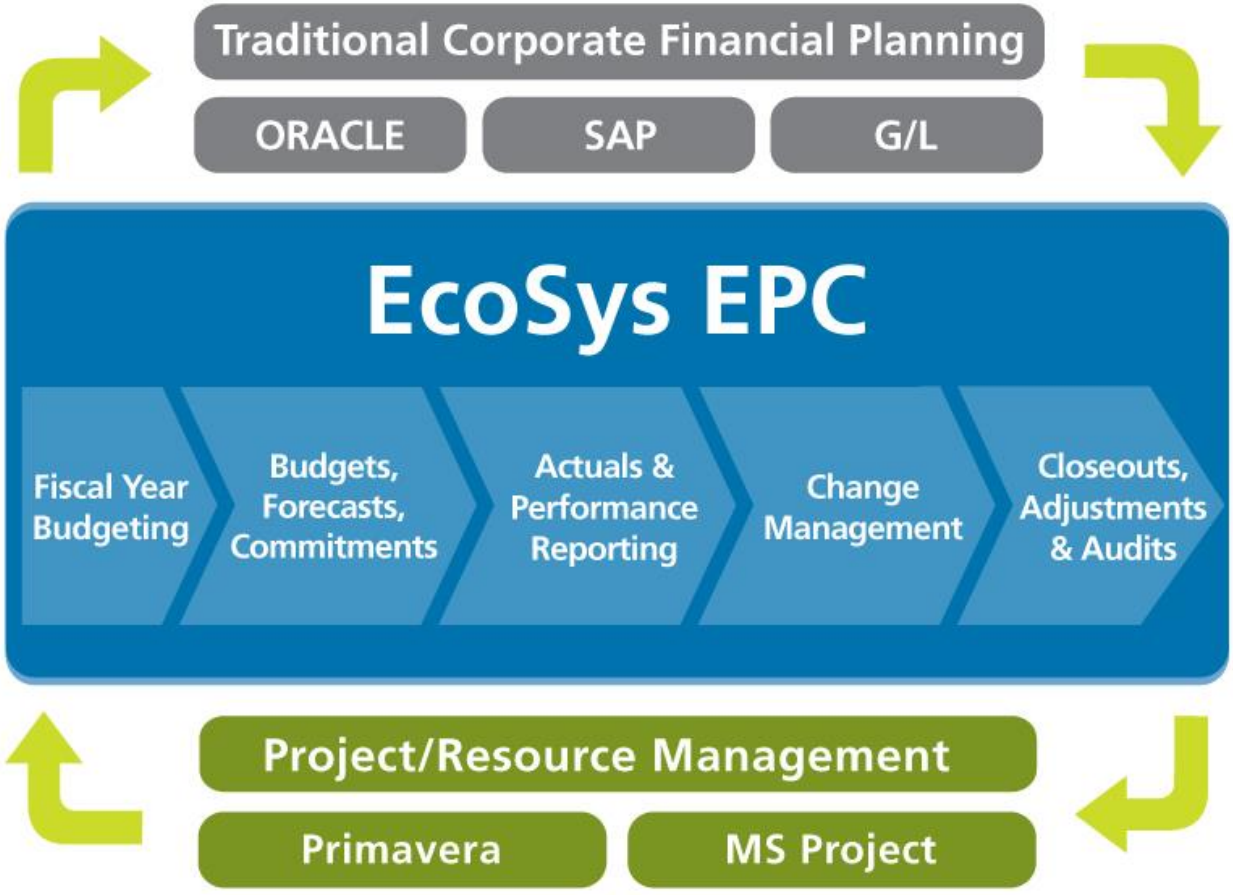
EPC Platform

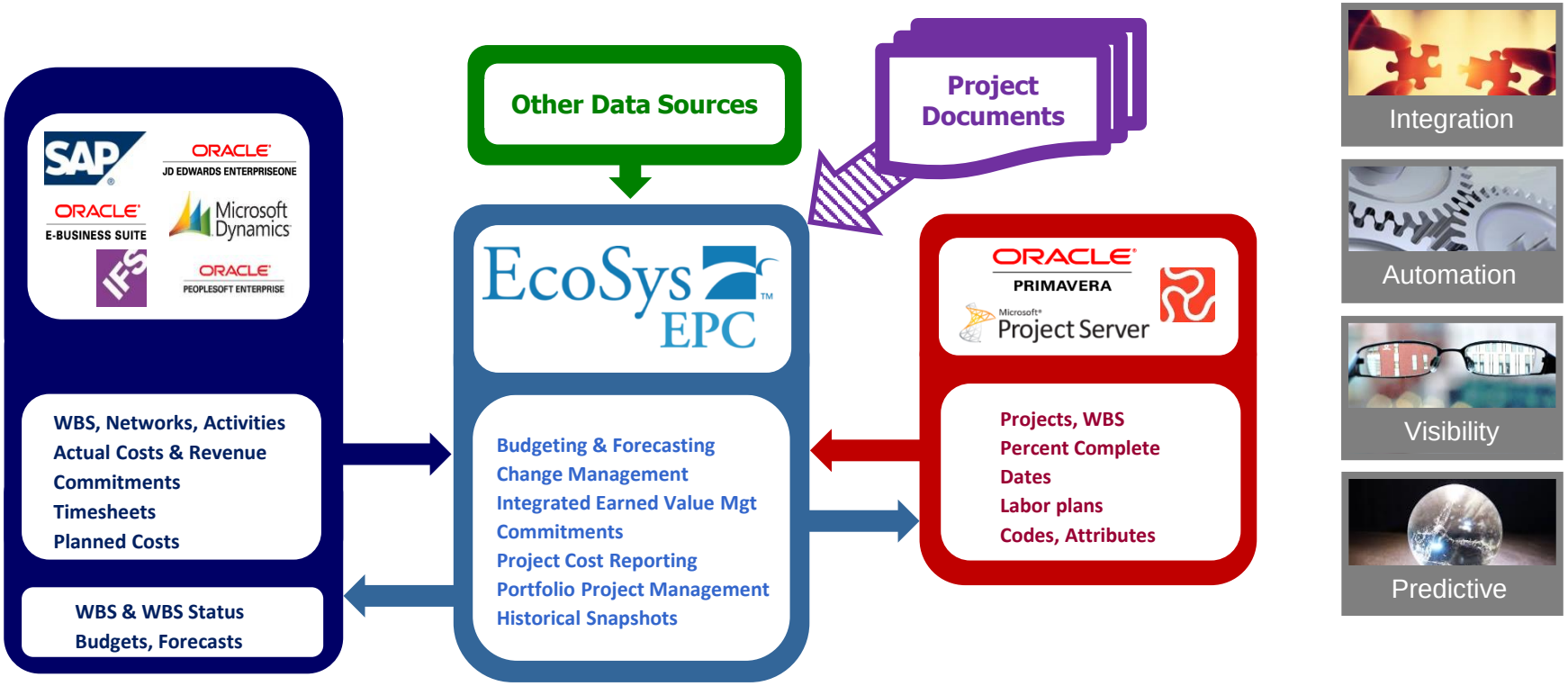
- Capital Planning
- Project Portfolio Management
- Project Cost Controls
- Progress Measurement
- Earned Value Management
- Estimating
- Workforce Planning
- Shutdown / Turnaround / Outage Management

Aligning perspectives



Project Controls hub

EcoSys™



SAP® Certified
Integration with SAP Applications

ORACLE Validated Integration
Primavera

Microsoft CERTIFIED Partner

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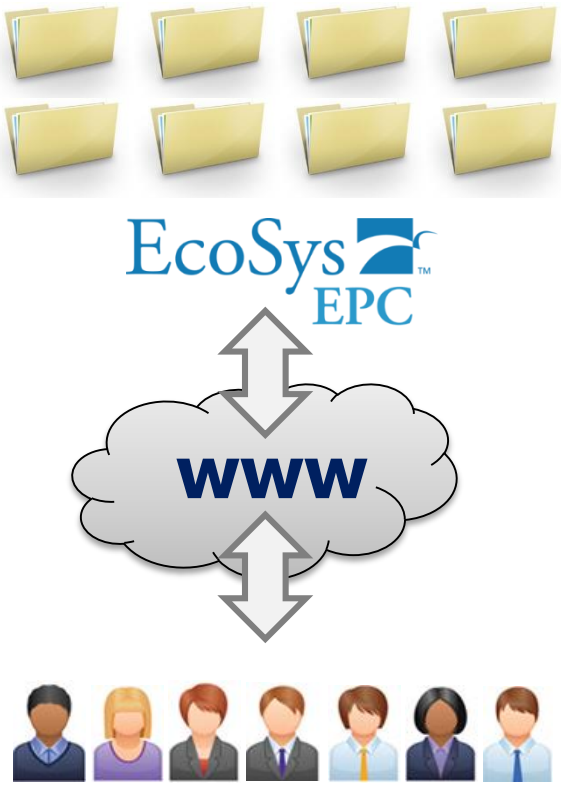
Web-based advantage



- 100% Web Based
- Scalable
- Multi-User
- Multi-Project
- Run from Browser
- No Client Software to Install

High performance approach

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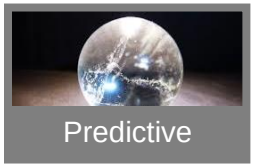
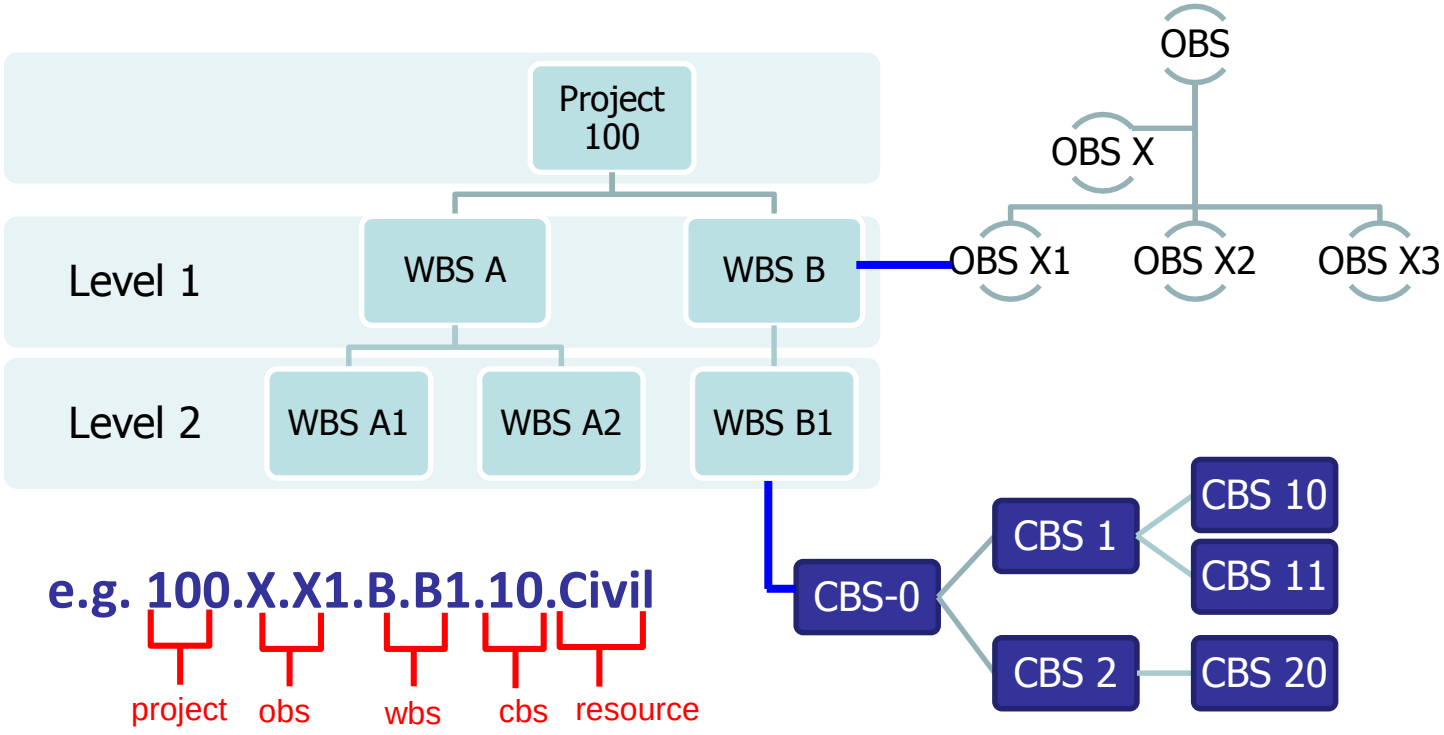
Adopt best practices



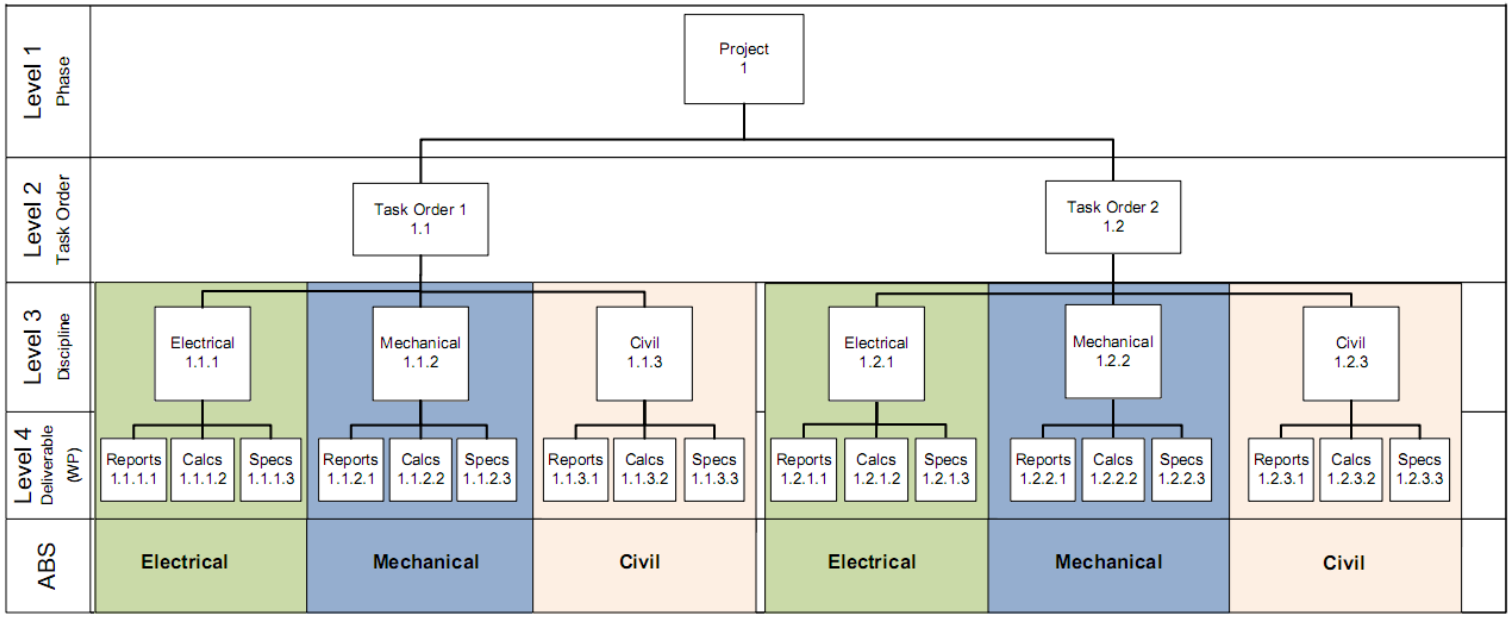
Adopt and standardize best practices incrementally:

- Standardization of Project Structures
- Estimating, Budgeting based on history, comparisons
- Risk Management
- Contract and Commitments Management
- Progress Measurement
- Productivity Analysis
- Forecasting techniques
- Standardized Reporting
- Management of Change

OBS, WBS and CBS



WBS and ABS



WBS	Planned Value A	Earned Value B	Actual Cost C	CPI D=B/C	Cost Var E=B-C	SPI F=B/A	Sch Var G=B-A	TCPI H
1.1.1.1 Reports								
1.1.1.2 Calcs								
1.1.1.3 Specs								
1.2.1.1 Reports								
1.2.1.2 Calcs								

ABS	Planned Value A	Earned Value B	Actual Cost C	CPI D=B/C	Cost Var E=B-C	SPI F=B/A	Sch Var G=B-A	TCPI H
Electrical								
Mechanical								
Civil								

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Forecasting best practices

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Method	How it Works	When Used
Budget	Forecast equal to budget	At start of work package
Prior	Forecast equal to prior EACs, estimates	Leveraging historical trends
Manual	Specify total EAC/ETC	Early phases, Experience based
Time Phased	Remaining cost from cash flow/schedule	When detailed scheduling, analysis available
Indices	Projections based on Performance/Productivity	Most accurate approach during execution
Corporate Standard	Consistent business wide rules applied	Independent litmus test Combines multiple approaches
Forecasting can be applied to cost, hours, and rates for analysis of various scenarios		


Standardization/ Best Practices


Predictive

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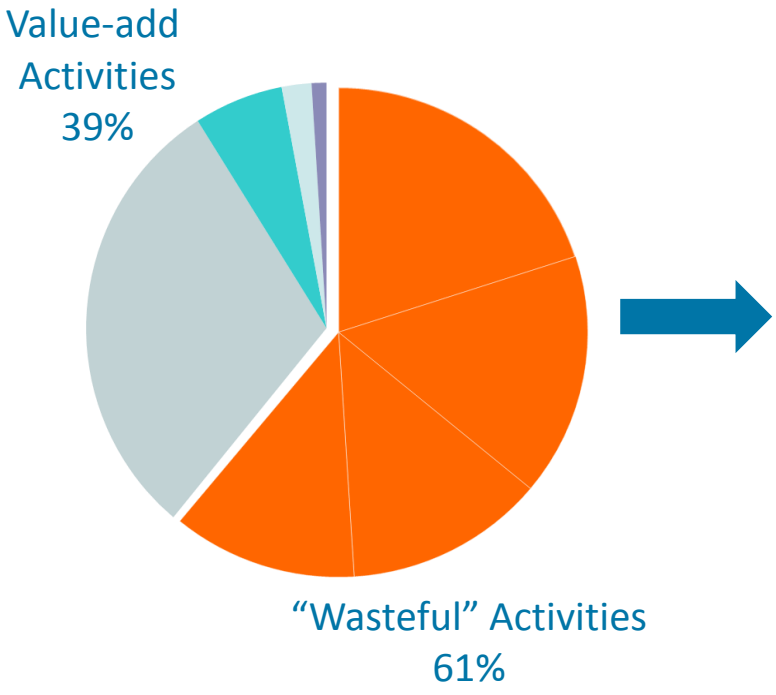
Test Drive

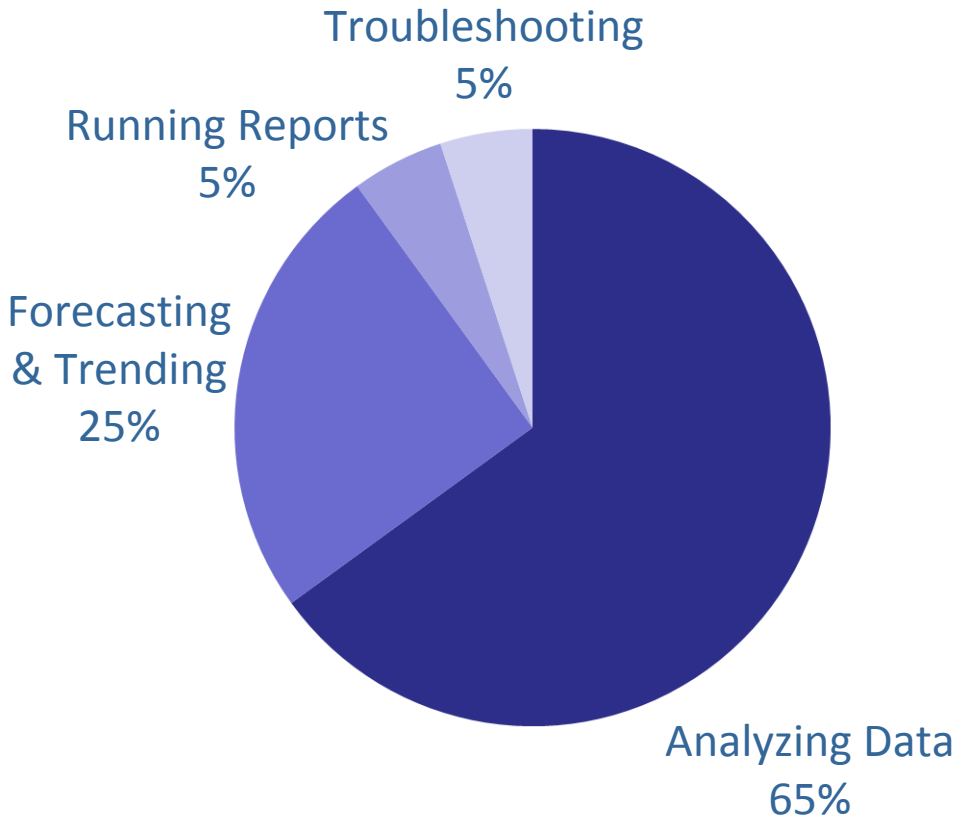
EPC benefits

- ✓ Project Controls best practices used by industry leaders
- ✓ Browser-based, intuitive UI, Excel-like familiarity
- ✓ Fully configurable views and business rules
- ✓ Vendor certified, pre-packaged, configurable integrations
- ✓ Unlimited versioning and snapshots of enterprise data
- ✓ Management by non-technical resources, low TCO

Image source: http://bit.ly/1CXMDFm

Greater value-add for cost analysts





Source: Internal Study by EcoSys Customer

Image source: http://bit.ly/1MZgfVT

EcoSys

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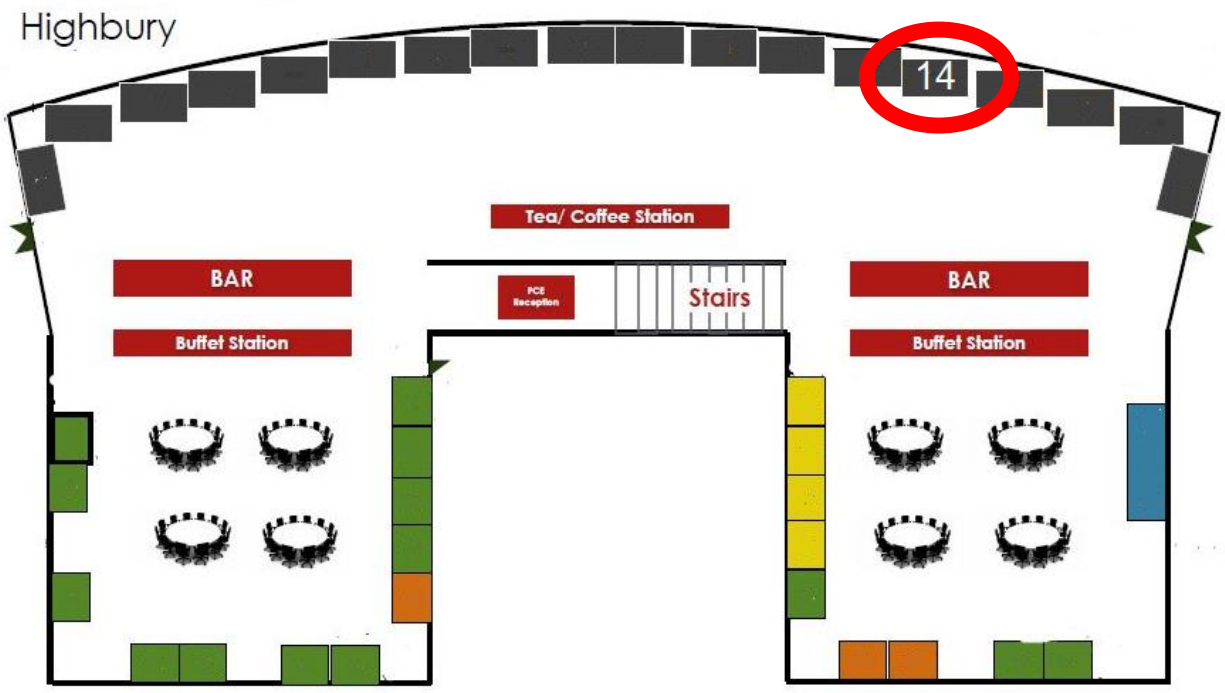
www.EcoSys.net



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