

PROJECT MANAGEMENT SOLUTIONS THAT SIMPLY WORK SINCE 1989.

# **Cost Estimating and Budget Forecasting in Primavera P6**

Eric Costantino, Senior Consultant February 20, 2019



# **DRMcNatty & Associates, Inc.**

- 12 Years Estimating and Scheduling
- Certified P6 and Contract
  Management Instructor
- P6 is my favorite video game
- Ham Radio technician KM6GQK





# Thank you for joining today's webinar

- Mute all call in phones are automatically muted in order to preserve the quality of the audio for all attendees.
- Questions during the session, questions can be submitted through the Questions Box on the right side of the screen. We will try to address your questions at the end of the presentation, time permitting.
- Follow up all registrants will receive an Excel file listing all questions and responses along with a link to the recorded webinar.



# Safe Harbor



- The statements made in this technical presentation are based on our current knowledge of the tools.
- Our statements should not be construed to be an official "Vendor perspective", but are intended to be the sharing of technical and user knowledge gained as we explore new paths and technologies, usually in advance of our clients.
- You need to make your own judgments as to the application of our shared ideas in your own, unique environment.



#### **Tool Matrix**

Business Process	PRIMAVERA		Deltek.   ACUMEN	ORACLE' + aconex	ProjectStatus
Portfolio Management	P6, Unifier			Aconex	View
Planning & Budgeting	Unifier	G2		Aconex	Collaborate
Estimating		Estimating		Aconex	
CPM Scheduling	P6	Scheduling	Fuse		Status
Cost Management & Reporting	P6, Unifier	G2	Fuse	Aconex	Collaborate
Document Management	Unifier	Prism Docs		Aconex	
Change Management	Unifier	G2		Aconex	
Engineering Forms	Unifier	G2		Aconex	
BIM/Schedule Integration				Aconex	
Risk Analysis	P6 Risk		Risk		Collaborate
Risk Management & Mitigation	P6		Risk	Aconex	Collaborate
Role Based Cloud Dashboard	Dashboard	Dashboard		Aconex	View
Earned Value	P6	Earned Value		Aconex	
Claims Support & Analysis	P6		Fuse	Aconex	
Facility Management/Work Orders	Unifier			Aconex	
Mobile online/offline support	Mobile			Aconex	Browser
Integration with Finance/ERP	Gateway	Integrator		Aconex	Gateway

DRMcNatty supports these project controls tools as an authorized partner, trainer and implementer as well as providing trained and supported project staffing resources.



#### **Design & Engineer your Database**

Standardize everything or it can get messy





# What P6 is Not!

- Does not have bolt on cost databases (RS Means, Richardsons)
- Does not have plan reviews or a design component
- Does not handle Finance, Accounting, Contract Management



#### **Program vs. Project Estimating**

#### What are the differences?





# **Cost Loading and Resource Loading?**

- Spend time to build your database
- Standardize EVERYTHING (To an extent)
  - Processes, Prefixes & Suffixes, Proper ID Coding, Settings (Duration Types, % Complete Types)
- Using Roles vs Resources or both!
  - P6 Functionality depends on it
- Expense Assignments
- Cost Accounts for Accounting Alignment



### Estimates always come first

- Estimate Type Depends on Industry
  - AACEi Cost Estimate Classification defines level of detail (*Recommended Practice 18R-97*)
- Data can come from multiple sources and spreadsheets or
- Material Take-Off's and Specification Estimating



# Estimates always come first

- Developing Production Rates
  - Built into actual amount
  - Total Rate of \$100
  - Assign a Rate of \$150 if the production rate is 50%
- Developing Escalation Factors on Resources
  - Determine what the annual % rate Increase is
  - Average 3% 5% Inflation Costs
  - System Calculates automatically based on start date
- Set your Resource Max Units/Time
  - 1 Resource can represent an entire crew



### Schedules come next...

- Build your logic to your estimate methodology
  - Adjust your template logic; Not everything is cookie cutter
- Adjust the schedule, Refine your estimates, Double Check your work



#### What's the Process?



### **Live Demo - Preliminary Developments**

1. Develop Template Node EPS

Create your cost assemblies based on overall general work types Build-out the EPS Node appropriately and set your process standards for template management

Project Code Standards, Template Nomenclature, Project IDs, Notebook Topics (Version Control) and other company standards

2. Develop your standards!

Your "Cost Breakdown Structure" is your "Work Breakdown Structure" Your WBS Should be standardized to a certain level for EVERY project.

Are there existing template requirements to incorporate?

3. Develop Role and Resource Dictionary, Expense Categories, Resource Codes and cost accounts to company standards



## **Live Demo - Primary Developments**

- 1. Add Project(s) and name appropriately
  - i. Place into Proper EPS
  - ii. Assign Appropriate Project Status and Responsible Manager
- 2. Perform a MTO and begin identifying costs from specifications
  - i. Not all estimates may be done the same way (Public vs. Private)
  - ii. May be simply compiling budgeted cost estimates and Labor rates
  - iii. This may be completely adjusted from your cost assemblies templates
- 3. Build WBS to Company Standards
- 4. Compile all estimate information and begin adding activities into project
  - i. The level of detail is based off of your cost estimate detail requirements
  - ii. Fine line between what should be an activity vs. resource assignment (We may not need to have "Install Bolt A" as an activity)



# **Reporting & Output**

- Is there output requirements?
  - Excel? PDF?
- Transform Raw Data Output into a masterpiece
- Multiple Reporting methods directly out of the box
- Setup Layouts for Budget Forecasting



# **Benefits**

- 1. Silo reduction via centrally located information
- 2. Cradle to Grave Cost Engineering
  - Earned-Value Ready
- 3. Accounting Systems Alignment Fundamentally in place



# Summary

- P6 can be used as a estimate development tool
- Budget Forecasting is simple in P6
- Data is Earned Value Ready
- Layout Reports vs System Reports
- Always keep a clean environment



• Answers are based on our own experiences using the products covered in this presentation

**Questions & Comments** 

#### Thank you for participating

Contact - dbeck@drmcnatty.com



# **Upcoming Events**



#### 2019 AACE International Conference & Expo



June 16 - 19, 2019 Sheraton New Orleans New Orleans, LA, USA

AA@E

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