

Project Controls Expo, Australia – 26th November 2019

Melbourne Cricket Ground, Melbourne

Field Notes: Transforming Integrated Project Controls Platform by Engaging Disruptive Opportunities

Vergheese Kochummen

Solutions Architect,
Insynchro Australia Pty Ltd

inSynchro

 **Project Controls**
EXPO
Melbourne, Australia

About the Speaker

Verghese Kochummen

Solutions Architect at InSynchro Australia Pty Ltd

- Degrees in Electronics Engineering and Computer Science
- Working in Software Development for over 25 years
- With over 15 years with a Project Controls focus
- PMP, Principal Architect of Executive-Eye

inSynchro

 **Project Controls**
EXPO
Melbourne, Australia

Presentation Outline

Topic outline

- Traditional Project Controls Platform
- Field Experience for Property Development
- Opportunities for Disruptions
- Roadmap

inSynchro



Project Controls
EXPO
Melbourne, Australia

Traditional Project Controls Platform

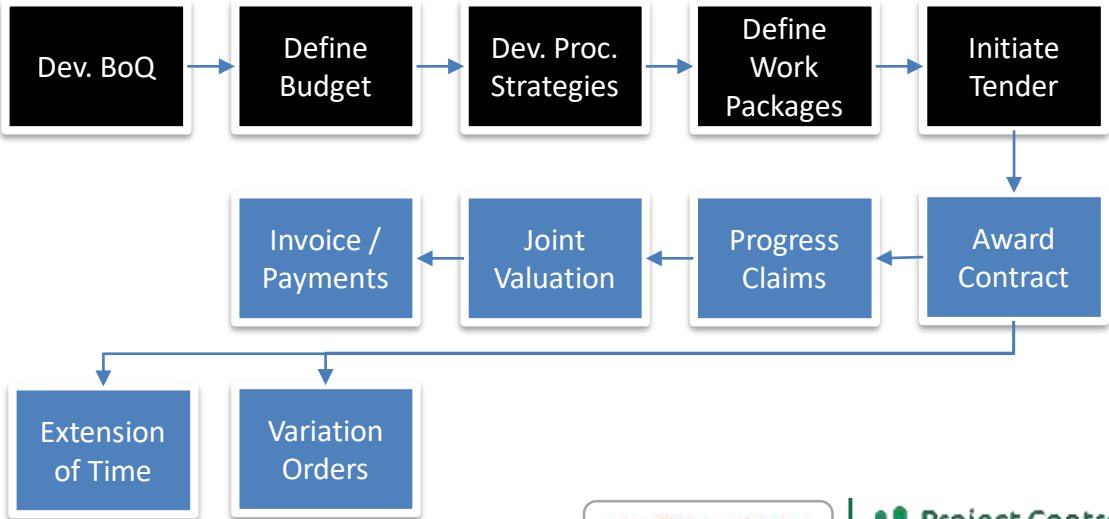
A Systems Overview

inSynchro

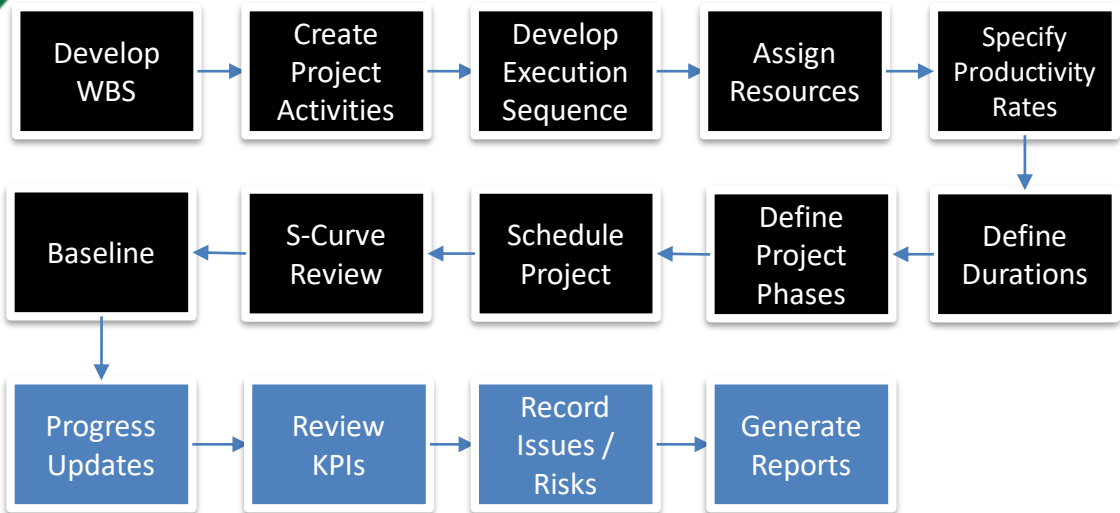


Project Controls
EXPO
Melbourne, Australia

Project Controls Platform (Contracts)



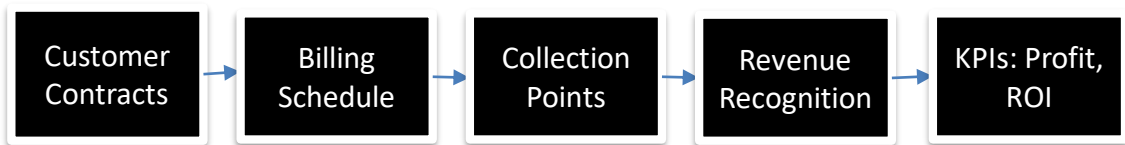
Project Controls Platform (Schedule)



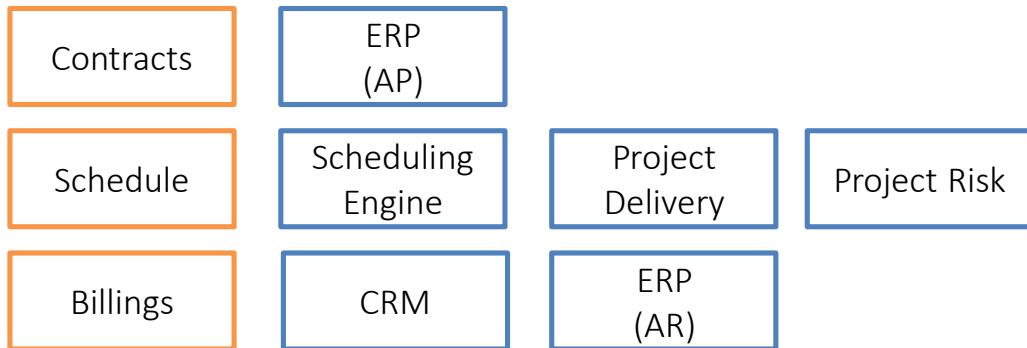
inSynchro

Project Controls
EXPO
Melbourne, Australia

Project Controls Platform (Revenue)



Function to Application Mapping



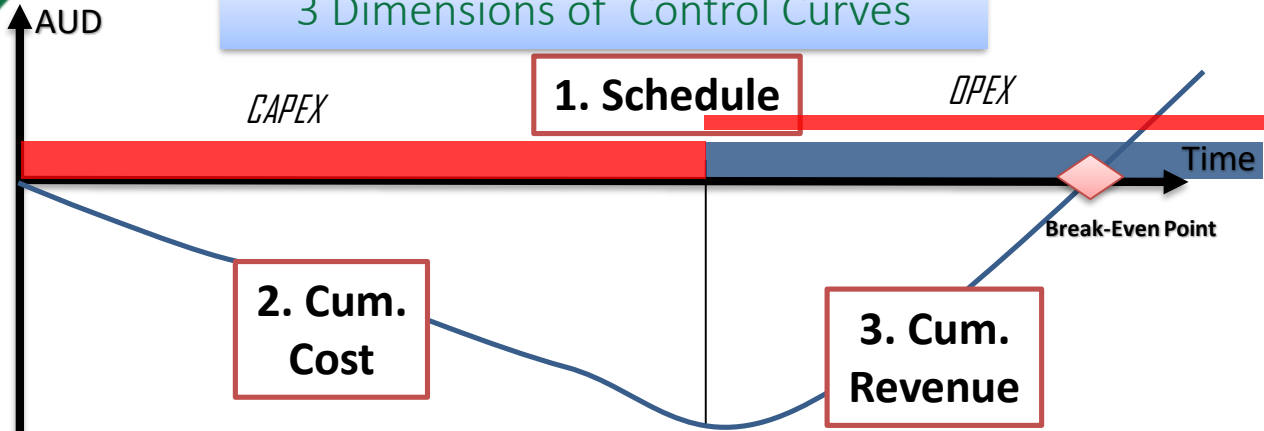
What is the End Game?

Companies need to:

1. Develop and Work a Business Plan
2. Make Money
3. Pay for Overheads
4. Make Profit
5. Grow

Project "Economics"

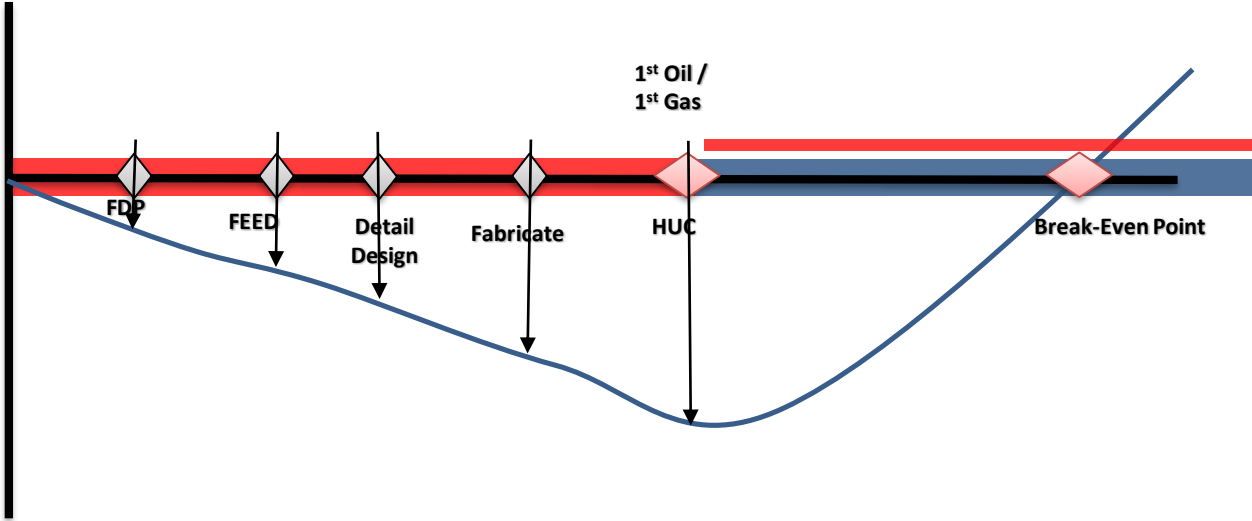
3 Dimensions of Control Curves



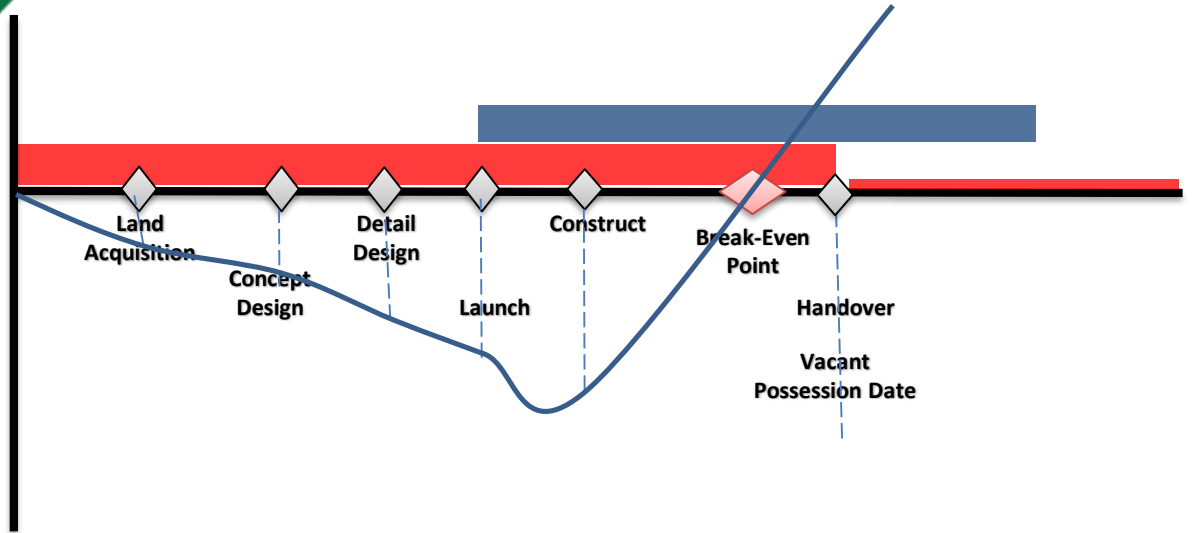
 Cost
 Revenue



Break-even Curve for Oil & Gas Upstream



Break-even Curve for Property Development



Land Acquisition

Concept Design

Detail Design

Launch

Construct

Break-Even Point

Handover

Vacant Possession Date



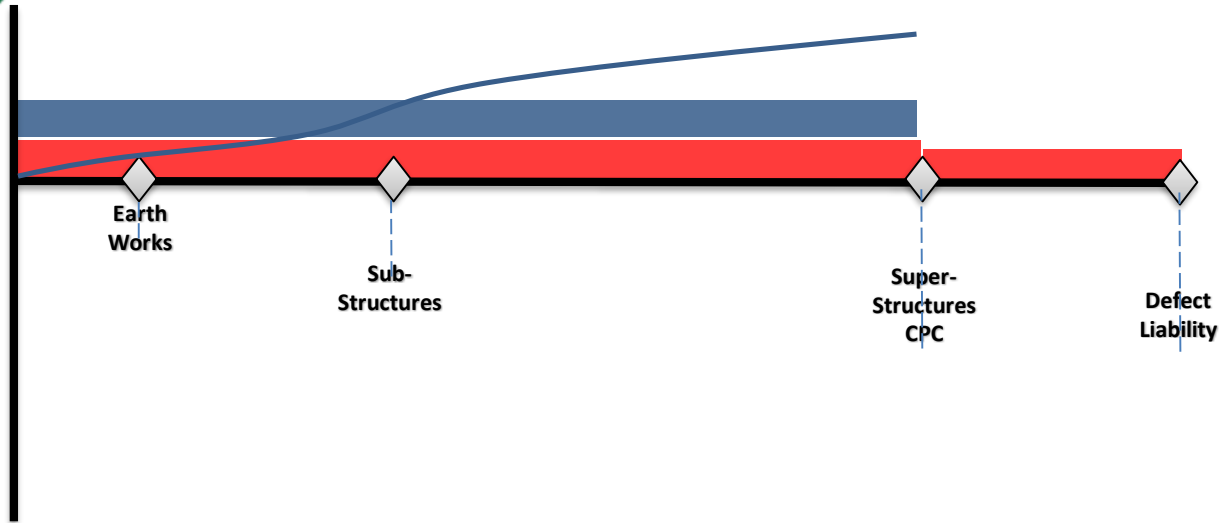
Cost



Revenue



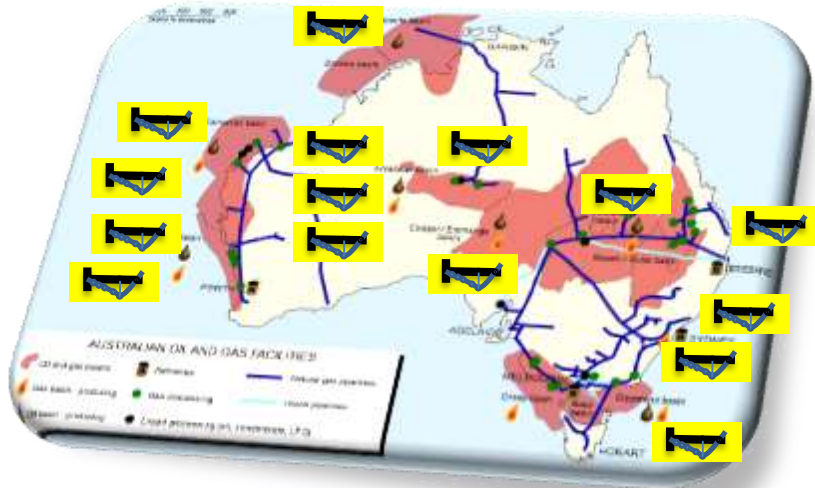
Break-even Curve for Main Contractor



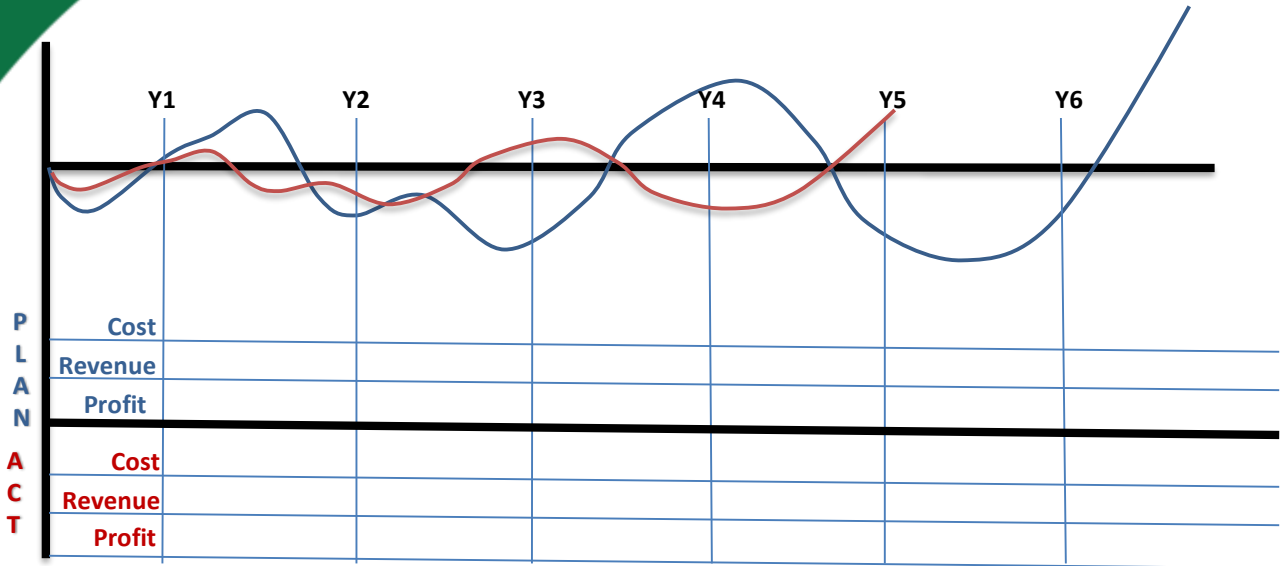
inSynchro

Project Controls
EXPO
Melbourne, Australia

What is the End Game?



What is the End Game?



inSynchro



Project Controls
EXPO
Melbourne, Australia

A Property Development Use Case

- Larger Corporations
 - Heavy Overheads
 - Need Constant Pipeline of Projects
 - Sequenced for Sustainable Growth
 - Replenishment of Pipeline
- “Fuel” Bank
 - Property Development → Land Bank
 - Oil & Gas → Oil and Gas Fields

Land Bank Planning



- Each parcel treated as a project
 - Schedule: Start / Finish
 - Product: Double Storey / Bungalow / Single Storey
 - Cost: CBS, Estimates, Commits, Cost Distribution*, Payments
 - Revenue: Revenue Estimates, Revenue Distribution*, Billings

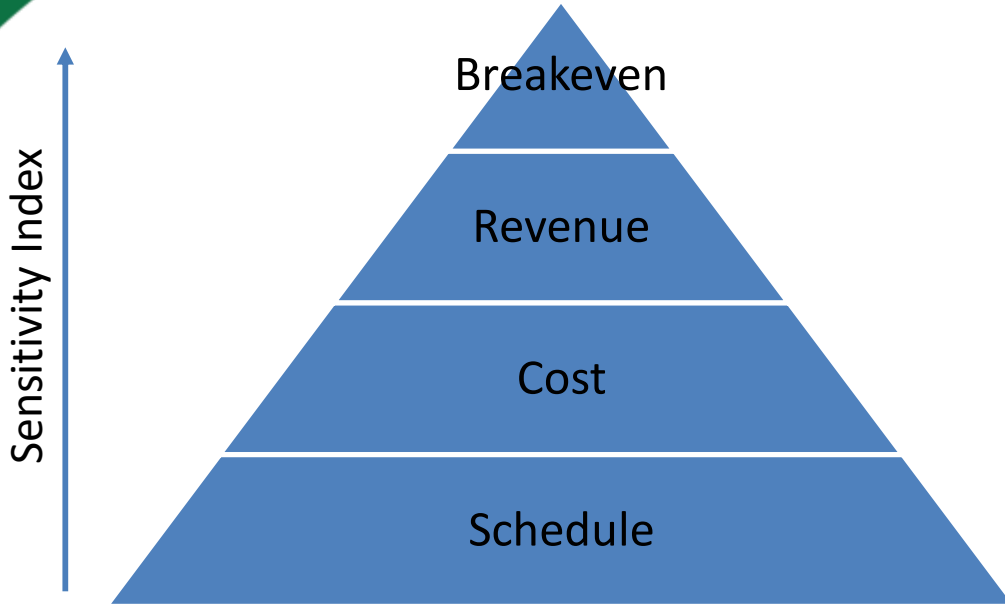
What are the Challenges?

- Non-Integrated Solution Footprint
 - Information “Lock-In”
 - Extraction from Control Application
 - Transformation to Common Data Format
 - Loading to BI Tool

Common Challenge for “Best-Of-Breed” IT Procurement Strategy

What are the Challenges?

- Sensitivity / Confidentiality
 - Schedule Delay
 - 1st Oil / 1st Gas / Vacant Possession Date
 - Impacts: LAD, Breakeven Point, ROI, ...etc
 - Cost Overrun / Budget Shortfall
 - Poor Estimation, Plan with Revenue “Rolled-In”
 - Impacts: Source for “Bridging” Fund, LAD, Breakeven Point, ROI, ...etc
 - Revenue Shortfall
 - Poor Estimation, Bad Market
 - Impact: Loan Repayment, Breakeven Point, ROI, ...etc



Solution Stack

EXECUTIVE 



ORACLE
Primavera Unifier

ERP



iM
CLOUD



ORACLE
Primavera P6 EPPM

CRM



inSynchro



Project Controls
EXPO
Melbourne, Australia

Solution Stack – P6, Unifier, BI Publisher



Enabling Technology

Oracle Primavera Unifier

- Workflows
- Cost Breakdown Structure
- Cost Sheet
- Cash Flows

Oracle Primavera BI Publisher

- Report Authoring
- Reporting via P6 and Unifier
- Custom Reporting
- Highly Formattable Reports

Oracle Primavera P6 EPPM

- WBS, Activities, Relationships,
- Resource Assignments, Cost Loaded
- Scheduling Engine
- Baseline & Progress Updates
- Performance Analysis

Solution Highlights: Schedule Dimension



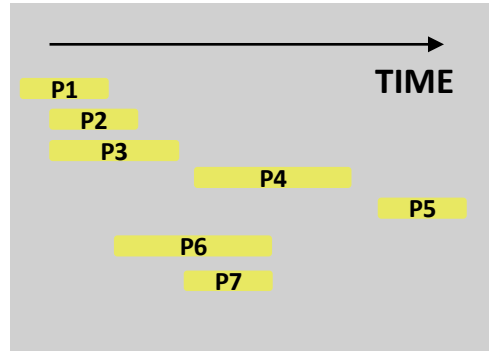
Primavera P6 EPPM



Region 1

- Project 1
- Project 2
- Project 3
- Project 4
- Project 5
- Project 6
- Project 7

Region 2



Solution Highlights: Cost Dimension



Primavera Unifier



Project 1

Land

Architect

Earth Works

Construction

Marketing

Budget

Commit

Actual

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

inSynchro



Project Controls
EXPO
Melbourne, Australia

Solution Highlights: Revenue Dimension

EXECUTIVE 



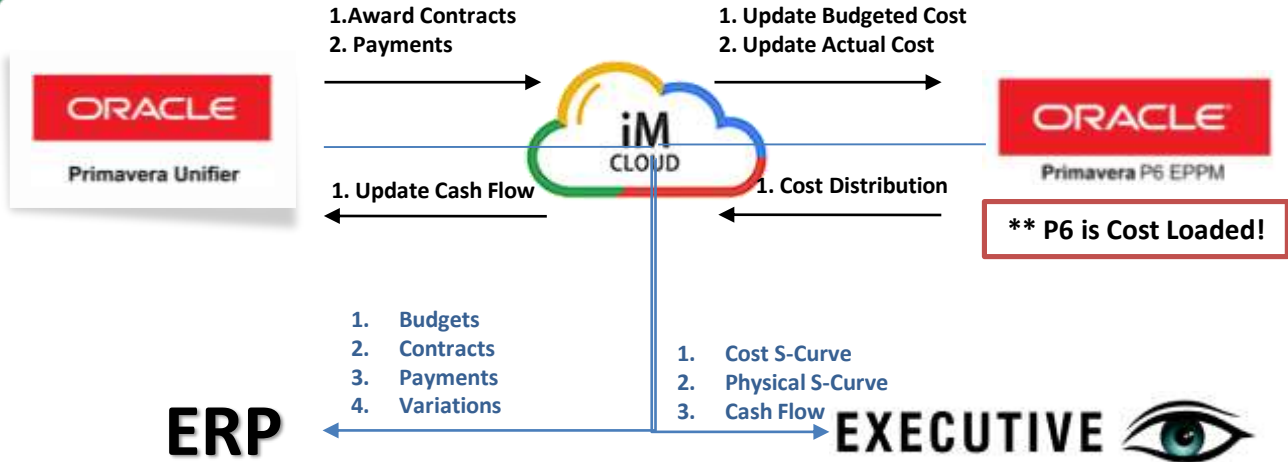
Project 1

Revenue
Billings

	Plan	Billings
Revenue	_____	_____
Billings	_____	_____



Solution Highlights: Integration Manager (Cloud)



Solution Highlights: Revenue Dimension

EXECUTIVE 



Project 1

Revenue

Billings

Plan

Billings

Budget

Commit

Actual

Land

Architect

Project 1

P1

TIME

inSynchro

 Project Controls
EXPO
Melbourne, Australia

Demonstration

inSynchro



Project Controls
EXPO
Melbourne, Australia

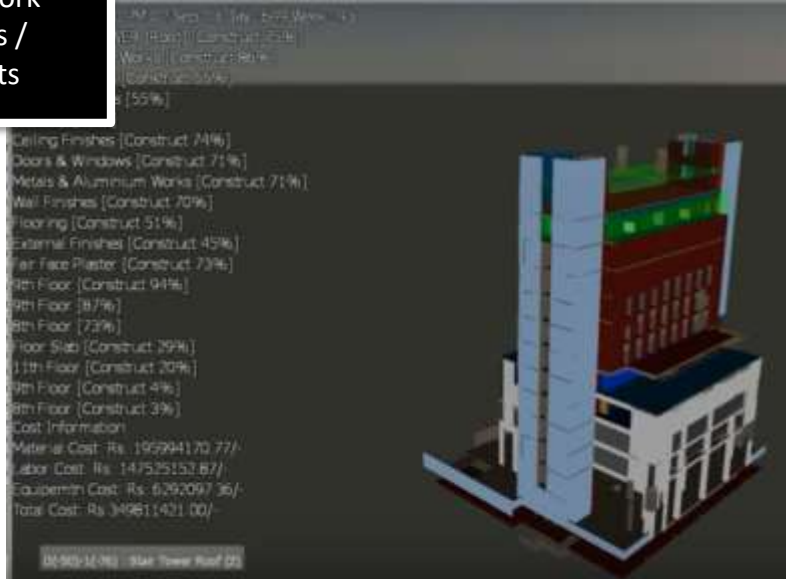
Towards 5D

P6 Project Schedule

Unifier Work Packages / Contracts

Define Construction Sequence (Navisworks)

Develop 3D Model (Revit)



Call Us If You Are Looking To ...

1. Establish an **Integrated** Project Controls Platform
2. Review / **Transform** present Project Delivery Practices
3. Explore **Ideas** on extending present technology investments
4. Proof of Concept to manage business / project challenges

www.insynchro.net

inSynchro



Project Controls
EXPO
Melbourne, Australia

Q & A



Insert company
Logo here