Maximising the Benefits of Advanced Work Packaging
Introductions

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- CII AWP Performance & Benchmarking Co-Chair
- CII Technology Committee Member
- Former SVP Product & Market Strategy for Materials Management / RFID Software
- 12 Technology Patents
- BSE Mechanical Engineering
O3 Solutions

OWNERSHIP
- Set the conditions for success: Own the process & own the data

OVERSIGHT
- Measure and monitor the health and adoption of AWP best practices

OPTIMIZATION
- Identify challenges and take actions to course correct
O3’s Experience

2,500+ Users across the world’s largest Oil & Gas Project

$70B Project with 25 Contractors

8 Project SDTA Portfolio with Major Chemical Company

AWP Program Across Portfolio

AWP Program Management with Super Major in Oil & Gas

Enterprise AWP Program

Managing AWP Collaboration Major Chemical Company

Accelerated SDTA Timeline

$10B Lump Sum Project

Assessing AWP Maturity of Contractors, Oil & Gas Super Major

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AWP Implementation Challenges

- Multiple Stakeholders
- Varying Process Definitions
- Different Tech Stacks
- Lack of Data Standards
- Time Consuming Manual Processes
Solutions for AWP Challenges

- Multiple Stakeholders: Role-Specific Accountability
- Varying Process Definitions: Clearly Defined Expectations
- Different Tech Stacks: System Agnostic Data Mgmt
- Lack of Data Standards: Documented Data Requirements

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More Powerful than Generic BI Tools

- Based on Library of 400+ AWP Best Practices
- Leading Indicators Correlated with Target Outcomes & AWP Benefits
- Contextual Views (Role, Company, Project, Portfolio, Enterprise)
- Default, out-of-the-box Dashboards & Scorecards

Purpose-Built For AWP
Zero to AWP – Realise AWP Benefits with 3 Best Practices:

1. Constraint Management
2. Data Management
3. Leading Indicators
Constraint Management
Proactively remove barriers preventing productivity & predictability

Constraint Management

Constraints are any information, tool, material, access issue or barrier that prevents or delays the safe and successful execution of work.

- People
- Tools
- Documents
- Materials
- Information

Work Package

Not Ready for Release
Limited Data (Binary - Yes / No)
Limited Access (Planners)
Limited Disciplines (Pipe & Steel)
Limited Package Types (IWPs)

Consolidated, detailed constraint tracking across all package types, disciplines, and contractors
Accessible by those resolving the issues not just the WorkFace Planner

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Most project teams and existing tools only identify constraints. O3 helps **identify, assign, and manage constraints** across multiple stakeholders – inside and outside your organization.

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Constraint Management Experience

O3 is battle-tested and can support projects as small as $500k and as large as $70B.

Example Project Profile

- Gigaproject in Oil & Gas
- 25 Contractors
- 2,500+ Users
- 16,000+ Constraints
- Weekly Constraint Review Meetings
- 2,200+ Trained in AWP / Constraint Management in 4 Languages
Data Management
Work packages have interdependencies across multiple tools and stakeholders throughout the lifecycle of a project.

A single storage database with a unique identifier for each package type to present one single record for each package.
Unique identifiers for each package to track and manage across multiple stakeholders and systems

- Visibility Across the Project
- Avoid Duplication
- Avoid Sequencing / Dependency Issues
- Easy Data Collection
- Simple Work Package Input
Scalable AWP requires visibility and accountability of the data collected from tools across the project lifecycle

- AWP contract data deliverable language
- Direct integration via RESTful APIs for sophisticated tools
- Data imports from Excel for interfacing with less sophisticated contractors
- Configurable templates for collecting manual, unstructured data
O3 is System Aware – recognizes all project systems and tools that contain AWP information, knows the data and frequency expected, and sends alerts when expectations are not met.
AWP-based Leading Indicators
Managing AWP across the project lifecycle requires multiple stakeholders and disparate systems that often do not communicate.

Example Tools Across the Project Lifecycle
Leading vs. Lagging Indicators

Traditional KPIs are rear-facing and are only available once work is complete. AWP process and data standards enable performance forecasting and predictive analytics.
Dashboards & Scorecards provide personalized views for functional groups or role in the AWP process.

**EXAMPLE GROUPS**
- Early Planning
- Engineering
- Procurement
- Construction
- Installation
- Testing
- Supply Chain
- Commissioning / Startup

**EXAMPLE ROLES**
- AWP Champion
- Project Manager
- WorkFace Planner
- AWP Sponsor / Executive
- Data Management / IT
- Education & Training Manager
- Contractors / Subcontractors
Built Upon
AWP Best Practices
AWP Across Every Phase of the Project

- Is the project setup for success?
- Do design tools and processes support AWP?
- Does Engineering support the path of construction?
- Does Procurement support the path of construction?
- Will CM complete on time for Startup?
- Will contractors deliver everything for craft?
- Is Startup able to finish on time?
O3 is built upon 400+ best practice metrics based on CII publications, AWP Subject Matter Expert Recommendations, and Client Feedback.
Simple, Straightforward

- Start with a Library of Best Practices
- Select Your Best Practices in Each Phase
- Identify an Owner to Set Clear Expectations & Accountability
- Measure & Monitor Performance
- Automate Updates and Recommend Corrective Actions
- Automatically Escalate Issues as Needed
Benefits Realised
Proven Results

- Avoided Scaffolding Rework by Coordinating Across Work Packages
- Provided Better Visibility of Material Readiness by Work Package
- Removed Constructability Bottlenecks for Fabrication
- Streamlined Turnovers by Collaborating Early on Work Package Development
- Made Cost-Saving Decisions Based on Complete Information
- Decreased Quality Control & Inspections Time by Closing Out Work Packages

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Where do you start?
FASTForward your AWP Program
From Zero to AWP in 3 Months

1. **Constraint Management**
   Proactively remove barriers preventing work from moving forward with dashboards, meeting tools, alerts & notifications

2. **Data Management**
   Provide visibility and accountability for the data collected from tools across the project lifecycle

3. **AWP-based Leading Indicators**
   Out-of-the-box Dashboards & Scorecards with personalized views for functional groups or roles
Next Steps

▪ Understand where your organization is on your AWP journey
▪ Determine which projects or facilities are good candidates for launching or accelerating AWP implementation
▪ Map out the current AWP systems and data available and understand what’s needed
▪ **Reach out to O3 to get started**
Questions?