

Joint Industry Collaboration (JIC) For AWP & PPM



JIC Program Objectives



Be a **platform for collaboration & information sharing** for adoption of AWP & PPM within Oil & Gas industry in Malaysia



Gather **feedbacks on challenges & constraints** in implementation of AWP/PPM; deliberate best approach to **mitigate** each challenges



Establish **industry guideline & standardise implementation** approach which are most effective for local industry context



To optimise value deliver

- Improve efficiency
- Improve productivity
- Improve profitability

Through adoption of

AWP & PPM

Joint Industry Collaboration (JIC) for AWP & PPM adoption within Malaysia Oil & Gas
Project players to facilitate transformation of the industry

Phase 1:

**Establish Platform –
“Moving Forward Together”**

- Connect relevant stakeholders & key industry players
- Promote awareness & gather industry feedbacks
- Discover collaboration areas

Phase 2:

**Shaping the Industry –
“Collaborative Adoption”**

- Streamline approach based on best practice & lessons learnt
- Collective advancement journey e.g. capability building & work process improvement

Phase 3:

**Continuous Improvement –
“Community of Practice (COP)”**

- Exchange ideas, research & development towards enhanced productivity, efficiency & maximize value



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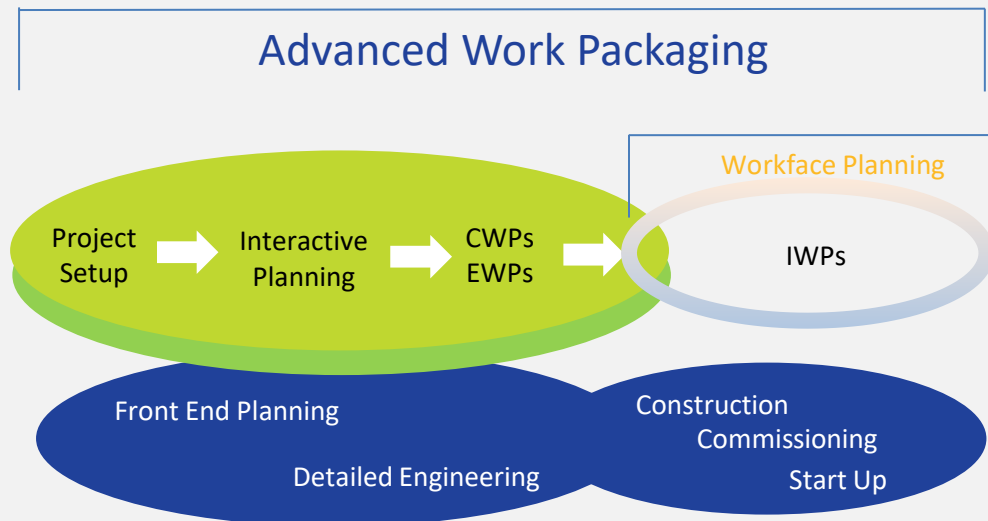
For any enquiries, reach us at pmof.gpd@petronas.com

What Is AWP? Advanced Work Packaging



Advanced Work Packaging is a methodology created by CII for **construction-driven planning** and collaboration system

for building capital projects that is sharply focused on creating a constraint-free work environment in the field



Project Execution Methodology



Industry Best Practice

Key Principles



Thinking with the “**end in mind**” – Construction leadership & involvement in early stages i.e Front-End Engineering



Construction-driven “Integrated Planning” with Engineering & Procurement to establish the “Path of Construction”



Logical & **standardized WBS** approach



Workface Planning & **Constraint Management**

Some Benefits Of AWP

- ✓ Improved **safety planning**, awareness and performance
- ✓ Reduced cost through **improved labor productivity and reduced rework**
- ✓ Improved overall project predictability for cost and schedule
- ✓ Better alignment among stakeholders from **planning through construction**
- ✓ Improved quality of reporting from **planning through construction**
- ✓ Improved quality of reporting from **effective progress tracking**
- ✓ Improved construction quality
- ✓ Enhanced turnover

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WHAT IS PPM? PROJECT PRODUCTION MANAGEMENT

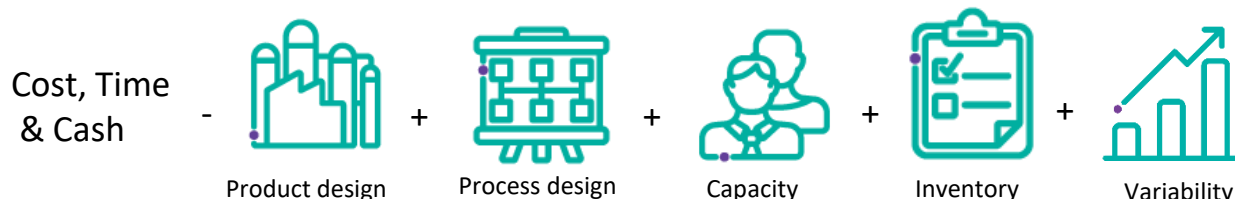


“Strategic approach created by Project Production Institute that applies theories and principles of **Operations Science** to optimise project delivery”

PROJECT MANAGEMENT - cost, time and cash as a function of trade-off between scope/quality, schedule and use of resources (Iron Triangle)

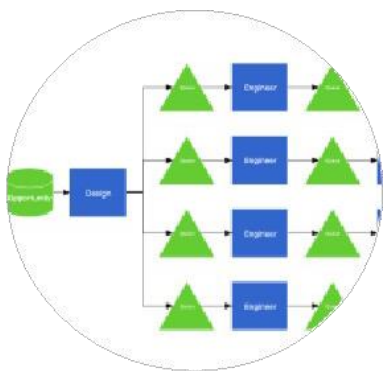


PROJECT PRODUCTION MANAGEMENT - cost, time and cash as a function of interrelationships between product design, process design, capacity, inventory and variability

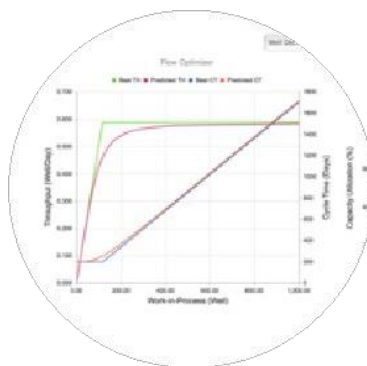


Main Difference

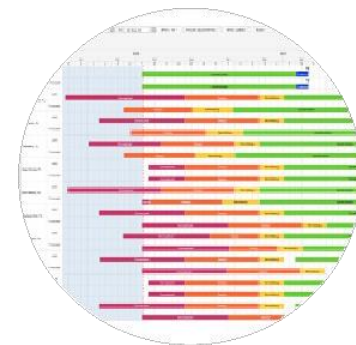
Project Production Management (PPM) views **project** as **production system**. Use of a production system framework allows for the applications of **Operation Science** as the technical basis to map, model, analyse, optimise, control and improve project production system performance



Map & Model



Simulate, Analyse & Optimise



Control & Improve

Production System Optimisation (PSO)

Project Production Control (PPC)

Main Benefits Of Project Production Management

- Schedule is accelerated
- Direct and indirect costs
- Benefits are amplified as complexity increases

What Needs To Be In Place

- Production scheduling and planning system needs to be in place to help manage the flow of production through the production process

Management Infrastructure Needs To Be In

- Place and specific mindsets/ behaviors need to be established to support Project Production Management