



Digital Asset Management to Re-imagine Project Delivery

Using digital asset information management supporting modularisation & digital custody transfer

Authors: Colum Lynch / Jeremy Freeman, PM Group

Collaboration Portal



Digitally Enabled Lean Transformation

Collaboration portal giving access to the tiered agility process and visualisation of project information in the appropriate format at the appropriate time

Information Governance across the project lifecycle

Clear Information Requirements EIR
Digital Execution Plan BEP
Data Management Plan
Technology Framework Standards
ISO 19650 / ISO 15926 / ISO 55000

Clear Information Flow

Tag Naming Convention
Integrated Intelligent Software
Specification of Equipment
Data, Documents & Models
Clarity on Modules
Clarity on Interfaces

Stakeholder Clarity

Training
Mentoring
On-Boarding

Project Digital Asset

Unique Tags Federated
3D - LOD
Federated Data - LOI
Linked Documents
Data Visualization
AR/VR
4D / 5D / 6D

End to End Information Lifecycle Visibility

Area and System Boundaries on P&IDs
Data Visualization
Digital RV
Digital Turnover
Digital Verification
Mobile devices

Digital Transfer to Operating Systems

Maintenance
Calibration
Inspection
Performance Monitoring
etc

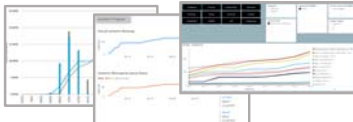
Advanced Work Package Planning



Digitally Enabled Planning and forecasting

Integrated data sources support interactive planning and 4D visualisation of schedule. Work packages as per work breakdown structure including modularization

Engineering Data



Progress visualisation

Visualisation of the documents, data and models through the lifecycle based on hierarchies of system, construction area, module & Tag. Supporting measurement of off-site fabrication, testing, delivery, installation, commissioning and handover.

Work Breakdown Structure

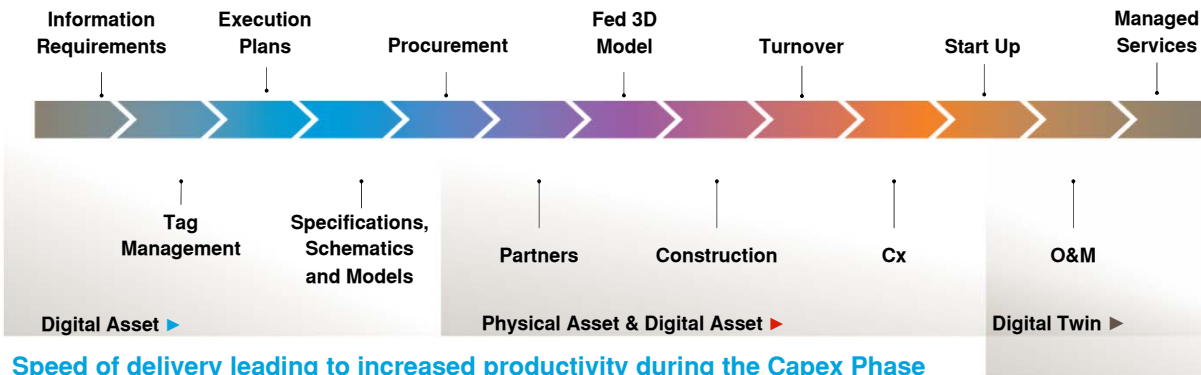
Modularisation

By identifying the requirement to tag modules on the 'Smart' schematics support the ability to manage off-site fabrication, testing and delivery of modules. The module tag is monitored from the identification through the 3D process, data verification and off-site fabrication digitally. The on module tags are tested off-site and are delivered to site pre-tested as part of the delivered module tag. The module is installed and verified on site.

Appoint Program Information Manager

Clear Roles & Responsibilities regarding information governance for all stakeholders

Select & deploy connected technology for the project lifecycle



Speed of delivery leading to increased productivity during the Capex Phase

Scope defined by Tagging
Systems, Packages, Modules, interfaces & tags identified and managed by 'Smart' Schematics

Federated Managed 3D Model
Flow of model development linked to the schematics and the information hierarchy. Systems, Construction Zones, Interfaces, Modules and Tags

Supply Chain Management
Vendor data collection and project information federation. Digital FAT & Inspection off-site. Digital & mobile receipt verification. Quality & Flow enabled by appropriate digital processes

Virtual Digital Construction
Modules Constructed off-site, digitally tested for completeness and correctness. Digital installation confirmation on-site. Using digital inspection forms & PM Group's Augmented Reality for Quality process (ARQ)

