Progressive organizations are adopting modern methods of construction across the value chain to become world-class manufacturing and construction businesses. Here, we examine the value chain and what modern methods of construction (MMC) you can use to increase efficiency in your operations.

How to adopt modern methods of construction Across the five stages of the value chain

Stage 1 Design

MMC methods for greater accuracy and quality?
• Think standardized components and processes

Choosing your method of construction is critical, so the asset is easy to build and maintain. Another key consideration is accuracy—whether it's designs or estimates, getting things right now can save you time and money.

Tools such as Building Information Modelling (BIM) are used to generate numerous models to map out the design and construction of an asset.

Stage 2 Manufacturing

MMC methods to improve quality and gain greater control?
• Precast concrete and foundations
• Modular construction and tunnel form

At the second stage, manufacturing, modern construction methods aim to decrease onsite construction work and create a controlled offsite work environment.

Stage 3 Shipping & Logistics

MMC methods to support structured best practice supply chain processes?
• Use of part numbers
• Warehouse codes
• Optimized transport management systems

Shipping and logistics are under constant pressure. Getting inventory to the right place at the right time is vital.

Stage 4 Construction & Execution

MMC methods to enhance productivity, efficiency, and quality?
• Well managed work packages delivered effectively
• Platform Design for Assembly and Manufacturing

At the penultimate stage, the focus is on the job site execution. Jobsites are increasingly becoming assembly lines to save time, reduce costs and increase efficiencies.

Stage 5 Operation & Maintenance

Regain control of the Engineering and Construction value chain

Technologies to gain intelligent insights and make maintenance easier to perform?
• IoT
• Sensors
• Wireless and edge-based analytics

The final stage in the value chain is the continuous operation and maintenance of an asset after completion. Typically completed by a specialist company, more and more engineering and construction companies are now providing these services over the asset's entire lifecycle.

Whether you're a design specialist or a general contractor spanning the entire value chain, IFS Cloud provides an industry-specific solution that contains the core functionality for your business that allows you to differentiate in these 3 areas:
1. A comprehensive ERP Backbone supporting the entire value chain
2. Continuous innovation in line with modern methods of construction
3. Complete control that ensures projects are delivered on time, on budget and at a high quality