EXPERTS WITH IMPACT

FTI Consulting's Asset Lifecycle Management Services
Asset-intensive industries rely on their investments in capital assets to deliver value to shareholders and usually represent the largest items on a company’s balance sheet. Optimizing and proper management of these resources over time can have a huge impact on the organization’s overall success. Managing the related risk, time, quality, cost, safety, and reliability of projects and portfolios is a delicate balancing act for all parties involved.
Our ALM Services

Our global network of multidisciplinary professionals can support every business aspect and function required to manage valuable capital assets, from planning and construction to maintenance and retirement.

FTI Consulting’s Asset Lifecycle Management (ALM) practice streamlines the construction, maintenance, operations, and retirement of your assets, helping to deliver optimal lifecycle return on investment. Our seasoned professionals, well-proven processes, and state-of-the-art tools and technology optimize performance, reduce risk, and improve collaboration among stakeholders across countless industries. We advise owner/operators, equity partners, and EPC firms on the diverse challenges faced throughout the ALM process.

WHY FTI CONSULTING?

FTI Consulting’s Asset Lifecycle Management team offers an unparalleled breadth of services focused on improving the lifecycle value for critical capital assets. In addition to partnering with our clients to transform their approach to ALM, we regularly fulfill project and operations management roles for clients around the world, leveraging the strength of FTI Consulting’s best practices and technology.

Our services and tools improve every aspect of the asset management lifecycle – shortening time to value and increasing capital efficiency.
KEYS TO SUCCESSFUL CAPITAL ASSET MANAGEMENT

- Selecting the right projects
- Optimizing cost allocation
- Getting the plan right and executing to schedule, quality goals, and budget
- Balancing risk and compensations for EPCs and other suppliers
- Integrating data from different disciplines and stakeholders
- Managing complex contracts with robust controls

BENEFITS OF WORKING WITH FTI’S ASSET LIFECYCLE MANAGEMENT PRACTICE

- Embedded key learnings and leading practices in processes and procedures
- Pre-configured tools and hosted solutions to expedite implementation
- End-to-end integrated view across company functions
- Independent third party, providing assurance and transparent information flow between owner and contractor(s)
- Scalable resources capacity
- Improved capital efficiency and rate of return
- Data intelligence and predictive analytics to improve decision confidence
CASE STUDY

Capability and Maturity Assessment Model Application

THE SITUATION

An American multinational EPC has spent multiple years on Process Kaizens, none of which have had sustainable benefit. The organization does not operate consistently across its three business models and therefore has defined a three-year strategic goal of operational excellence focused on:

- Sales growth through improved service and delivery;
- Gross margin improvement;
- Overhead efficiency and profitable growth; and,
- Improve cash flow.

THE SOLUTION

FTI was engaged to utilize our proven Capability and Maturity Assessment Model to measure the organization’s As-Is state, define the To-Be state, and develop an Implementation Roadmap to achieve the desired state for the defined business functions/capabilities.

THE RESULT

FTI brought visibility to issues affecting the organization’s P&L while making prioritized recommendations to improve areas of opportunity and demonstrating what high performance looks like. The next phase of work includes implementation of the opportunities identified on the roadmap to close gaps addressing key challenges.
Enabling Transformation

Our approach to business transformation puts the business at the forefront of digital transformation through consideration of four key elements: people, process, technology, and data. This transformation disrupts the areas of the business that drive significant value and deliver meaningful results against critical KPIs.

People
We assemble a multidisciplinary team that includes executives, engineers, data scientists, project technologists, and construction and project managers with the requisite skills and experience to support and enable your people during transformation.

Process
We’ve developed a suite of processes that are based upon industry best practices and FTI’s years of experience with hundreds of projects in numerous industries. That broad experience allows us to bring solutions to your challenges on day one.

Technology
Technology is viewed as an enabler and a tool for your teams to leverage as part of a successful operating model for managing assets. In support of this vision, FTI has established strategic partnerships with market leading technology vendors and has turned our experience into digital tools that communicate information in a way that enables rapid decision-making.

Data
Data is the lifeblood of business processes – providing transparency and a critical foundation for better decision-making. Our analytical tools leverage data you already have to provide new insights, develop predictive models, and build KPI pyramids with leading indicators.
Making Sense of Project Data

**Project Data** serves as the backbone for many critical decisions our clients face, from project execution to reporting to shareholders. Therefore collecting, organizing, and presenting data clearly and effectively is no longer an option but an imperative.
We provide a comprehensive suite of services and tools to help organizations achieve optimal efficiency and return on investment from their capital portfolios, programs and projects across the entire lifecycle.

FTI Consulting effectively minimizes exposure to cost and schedule risks by targeting their root causes, thereby unlocking substantial benefits. Our team is well-equipped to advise on the diverse challenges that may occur during project planning, execution, and close out.

TRANSFORMATION OF CONSTRUCTION PROJECT DELIVERY
Select, design, implement, and manage the tools to support portfolio and project management with enhanced analytics, data standardization, and governance at the program level.

BEST PRACTICE ADVISORY
Provide strategic advice and improve business processes to enable the efficient and predictable delivery of construction portfolios.

ENHANCED PROJECT DELIVERY
Project organization, execution, and construction leveraging FTI’s best practices and technology; including estimating, schedule management, and cost support for small assets through large-scale programs.
CASE STUDY

Billion-dollar Turnaround

THE SITUATION
FTI was hired to perform a turnaround on a troubled $1.1 billion Concentrated Solar Power Plant. FTI took over the owner management roles and started with an in-depth review of the current project status from an EPC and O&M contracts, cost, scope and schedule perspective.

THE SOLUTION
FTI took an active on-site role in leadership and performed various actions as follows:
- Established clear communications and governance
- Set up segregation of duties
- Established a PMO
- Set up a clear path towards completion of outstanding items
- Developed processes and procedures for the O&M phase

THE RESULT
FTI’s involvement produced results very quickly and plant performance went from zero (0) to within 70%-75% of maximum DNI-based performance within 6 months and holding strong while tracking towards meeting PPA requirements. Morale has drastically increased and all parties are working together in a very positive manner.

TRANSFORMATION OF ASSET MANAGEMENT
Select, design, implement, and manage the tools to support Asset Management/Work Order Management.

STRATEGIC ASSET MANAGEMENT
Implement strategies to enable predictive maintenance, asset integrity management, and workforce productivity.

STRATEGIC FACILITY MANAGEMENT
Strategy and planning of facility processes to effectively administer assets over their entire lifecycle.

EQUITY ASSET MANAGEMENT
Provide required corporate and regulatory services to project developers and Joint Ventures. Optimize operational asset performance by reducing operating cost, increasing risk visibility, predicting and overseeing maintenance needs, and determining when and how to decommission an asset, including residual risk exposure.
Asset Lifecycle Management Overview

We maintain a focus on our client’s business goals throughout the entire asset lifecycle.

FTI Consulting uses state-of-the-art Enterprise Project Portfolio Management (EPPM), Enhanced Project Delivery (EPD), Enterprise Asset Management (EAM), and Asset Management Services (AMS) solutions that address the diverse challenges of the largest and most difficult projects.
<table>
<thead>
<tr>
<th>WHAT WE DO</th>
<th>HOW WE DO IT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enterprise Portfolio &amp; Project Management</strong></td>
<td>Provide insights and leading practices for the implementation of project delivery processes powered by leading technologies to enable the efficient and predictable delivery of construction project portfolios.</td>
</tr>
<tr>
<td><strong>Enterprise Asset Management</strong></td>
<td>Partner with clients to implement solutions to enable predictive maintenance, asset integrity management, and workforce productivity by integrating asset management and work order management into everyday processes, tools, and execution strategies.</td>
</tr>
<tr>
<td><strong>Enhanced Project Delivery</strong></td>
<td>Using our multi-disciplined industry experts, we deliver robust processes and preconfigured solutions to assure oversight of complex projects and programs.</td>
</tr>
<tr>
<td><strong>Asset Management Services</strong></td>
<td>Provide required corporate and regulatory services to project developers and Joint Ventures to optimize operational asset performance, set key cost-reduction strategies, and manage the overall asset lifecycle to reduce risk exposure.</td>
</tr>
</tbody>
</table>
A Roadmap For Success

<table>
<thead>
<tr>
<th>CAPABILITY ASSESSMENT</th>
<th>BUSINESS PROCESS IMPROVEMENT</th>
<th>TECHNOLOGY ENABLEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>6–16 Weeks</td>
<td>6–12 Weeks</td>
<td>1–3 years</td>
</tr>
<tr>
<td>• Define project goals</td>
<td>• Develop detailed plan to implement approved business case and measure benefits</td>
<td>• Develop business, technical &amp; functional requirements and architecture</td>
</tr>
<tr>
<td>• Assess capital project environment and operation context</td>
<td>• Process improvement</td>
<td>• Plan technology implementation</td>
</tr>
<tr>
<td>• Conduct gap analysis across people, process, technology, and data</td>
<td>• Workshops</td>
<td>• Develop custom solutions</td>
</tr>
<tr>
<td>• Create implementation roadmap</td>
<td>• Develop definitions for policies, processes &amp; procedures</td>
<td>• Business Intelligence: develop reporting and dashboards</td>
</tr>
<tr>
<td>• Develop business case and ROM cost</td>
<td>• Governance</td>
<td>• Data Intelligence: predictive analytics</td>
</tr>
<tr>
<td></td>
<td>• Change Management</td>
<td>• Deploy and train end users</td>
</tr>
</tbody>
</table>
CASE STUDY

Enterprise Cost Management Solution

THE SITUATION
An international Fortune 100 company selected a Cost Management Solution for all of their Downstream Projects. This international Fortune 100 company built its presence in different regions through a strategy of acquiring smaller firms. Unfortunately, this often leads to inconsistent processes, systems, and cultures making it challenging to consolidate processes, terminology, and systems to develop a common way of operating.

THE SOLUTION
Upon engagement, our team provided a host of recommendations, strategies, and deliverables by leveraging our expertise in multiple disciplines including Project Management & Controls, Refining, System Integration, and the CMS technology to help the different sites align on their processes and a common solution design.

THE RESULT
FTI successfully leveraged our expertise in partnership with our Client’s integrated team to complete the design and configuration of the common, enterprise Cost Management Solution. To foster adoption across the first two sites and to prepare for rollouts to future sites, FTI was also engaged to develop robust training content including a training program, test scripts, user guides, quick reference guides, and video tutorials.
Our team has worked on public and private construction projects of all sizes around the world. Our wide industry-specific experience is supplemented by colleagues from across FTI Consulting.
CASE STUDY

Enterprise Business Transformation

THE SITUATION
As part of an enterprise business transformation, FTI Consulting was engaged by a Fortune 500 multinational petroleum and natural gas exploration and production company to support the optimization and execution efforts in delivering their Drilling and Completion, and Facilities and Construction projects.

THE SOLUTION
FTI assessed the Client’s current operations to identify areas of opportunity and delivered future-state recommendations and implementation roadmap to guide the Client on the path to achieve their vision. The Client leveraged FTI’s expertise to review, analyze, and optimize business processes and guidelines across multiple disciplines including Project Management & Controls, Field Cost and Progress Tracking, and Demand Management.

THE RESULT
The optimization efforts set the foundation for the design, configuration, and deployment of a standardized project management solution. In addition to upscaling existing practices and tools, FTI is providing additional benefit by transitioning the Client from manual reporting practices to automated self-serve reporting and building the digital platform for advanced analytics capabilities.
Our Global Reach

With more than 4,700 employees and offices in 27 countries on six continents, FTI Consulting’s breadth and depth extends across every major social, political and economic hub around the globe.

230
construction solutions advisory employees globally, including the ALM practice

27
professionals named in Who’s Who Legal’s Construction Expert Witnesses list (2019)

$3.1 BLN
Number of total shares outstanding as of March 31, 2019, times the closing share price as of April 25, 2019.
A Leader Among Leaders

Every year, FTI Consulting helps more than 6,100 organizations globally transform the way they anticipate and respond to events, both at critical moments and for the long haul.

Advisor to
97/100 of world’s top law firms

Advisor to the world’s
Top 10 bank holding companies

Publicly traded
NYSE:FCN

56/100 of Fortune Global 100 corporations are clients

43/100 of FTSE 100 companies are clients
FTI Consulting's Definitive Expertise

Forbes

For the fourth consecutive year, Forbes magazine recognized FTI Consulting in 20 sectors and functional areas in their annual America's Best Management Consulting Firms list (2019)

WHO'S WHO LEGAL

Led the Who’s Who Legal Arbitration 2019: Expert Witnesses list for the ninth consecutive year, with 54 experts named (2019)

CONSULTING

Named a Best Firm to Work For by Consulting magazine (2018)

ACQ Global Awards 2017

Named International E-Discovery Solutions Advisory of the Year, ACQ Global Awards (2017)

Corporate Counsel

#1 Provider for Cybersecurity in the Best of Corporate Counsel survey (2017), #1 Provider for Crisis Management in the Best of Corporate Counsel survey (2016)

The Deal

#1 Restructuring Advisor by The Deal Pipeline for the last 11 years (2007-2018)
About FTI Consulting

FTI Consulting, Inc. is an independent global business advisory firm dedicated to helping organizations manage change and mitigate risk: financial, legal, operational, political & regulatory, reputational and transactional. FTI Consulting professionals, located in all major business centers throughout the world, work closely with clients to anticipate, illuminate and overcome complex business challenges and opportunities. Connect with us on Twitter (@FTIConsulting), Facebook and LinkedIn.

FTI Consulting, Inc., including its subsidiaries and affiliates, is a consulting firm and is not a certified public accounting firm or a law firm.

The views expressed herein are those of the author and not necessarily the views of FTI Consulting, Inc., its management, its subsidiaries, its affiliates, or its other professionals.