IPA

Independent Project Analysis Newsletter

Independent Project Analysis, Inc. is the preeminent organization for quantitative analysis of capital project effectiveness worldwide. At IPA, we identify Best Practices to drive successful project outcomes.

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In this issue:

IPA Hosts Inaugural Offshore Leadership Forum

Improving and sustaining the capital efficiency of major oil and gas projects was the focus of the Offshore Leadership Forum, an event organized by Independent Project Analysis (IPA) Inc. and *Offshore Magazine* on December 6, 2016. Agreeing that "lower oil prices for longer" may in fact be a "lower prices forever" situation, senior exploration & production (E&P) industry leaders at the forum said owner companies must engage in serious debate about fundamental changes to how large and small capital assets are developed and executed.

The aim of the Offshore Leadership Forum is to facilitate discussion among project leaders on the state of the E&P industry. Attendees benefit from actionable data-driven solutions and insights made available through IPA research. At the inaugural event at the Norris Center in Houston, Texas, 16 executives from nine E&P owner companies participated in a closed-door breakfast roundtable discussion. Following the roundtable, the event opened to approximately 100 participants, with presentations from five offshore oil & gas industry executives.

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Improving Infrastructure Project Outcomes

Some of the largest and most complex projects IPA, Inc. evaluates are infrastructure projects. In fact, prior to forming IPA in 1987, some of the very first large projects IPA Founder and President Edward Merrow analyzed were major infrastructure projects, including the construction of airports, hydroelectric dams, pipelines, and nuclear power plants.

Building on this body of civilian sector projects research, Merrow developed quantitative models used to identify planning factors that are critical to project success. That initial set of project data, research, and metrics has been continuously added to and improved upon. Today, IPA has more than 18,000 capital projects in its database and is widely viewed as the world's leading firm for research, benchmarking, and consulting on capital projects and project systems in several industry sectors.

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IBC 2017 Overview

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IBC
2017 INDUSTRY BENCHMARKING CONSORTIUM

Visit IPA's website at:
http://www.ipaglobal.com

IPA Taps Astor E. Luft to Lead Its Latin America Office

Independent Project Analysis (IPA), Inc., the premiere global consultancy for capital project benchmarking, evaluations, and research, announces that Astor Ernesto Luft will lead IPA's Latin America regional activities beginning in 2017. Luft will lead a team of analysts, researchers, and support staff based in Curitiba, Brazil, and will be responsible for maintaining IPA's strong relationships with its existing global and local clients in the region and for forging new partnerships with owner companies in the mining, oil and gas, chemicals, consumer goods, power, and infrastructure industries. Luft succeeds Carlos Flesch, who led IPA operations in the region for the prior 3.5 years.

Luft has conducted capital project evaluations for IPA clients in the Americas, Europe, and the Middle East since 2008. His area of expertise is petroleum exploration and production (E&P) project system evaluations. For the past 2 years, Luft has worked out of IPA's office in Reading, UK, managing day-to-day activities involving one of IPA's major E&P clients in Europe, including the implementation of an IPA-designed capital effectiveness improvement plan for the client.

Prior to moving to Europe, Luft coordinated the activities involving a major E&P client in Brazil. Luft has also conducted many megaproject evaluations for IPA clients in the oil and mining industries, guiding efforts to manage the risk on those projects. In addition to his concentration in project risk evaluation, he is an expert in capital project portfolio management improvement and the implementation of gated work processes. Luft has conducted research for clients and participated in several project system benchmarkings. He has also taught courses for the IPA Institute.

Astor Luft

Prior to joining IPA in 2008, Luft worked for ExxonMobil Corp., as a procurement quality assurance analyst. Before working for ExxonMobil, he, as an intern, developed computational methods for structural engineering modeling for the Civil Engineering Research Center at the Federal University of Paraná in Brazil. Luft has a BS in Civil Engineering from the Civil Engineering Research Center at the Federal University of Paraná and is a post-graduate in Project Management at the FAE Business School in Curitiba, Brazil.

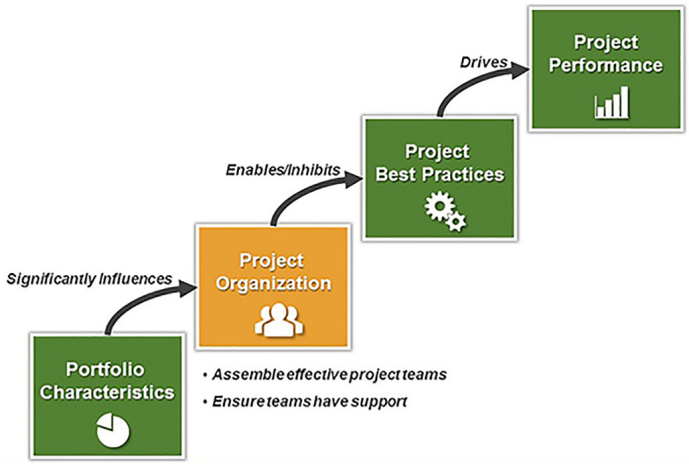
Successful Pharma & Biotech Capital Project System Organization – Call for Study Participation

How can pharmaceutical (pharma) and biotech companies successfully organize their capital project systems in an environment with lean talent resources? A recently announced IPA study intended to identify Best Practices for confronting project organization challenges faced by pharma and biotech companies will provide answers.

Pharmaceutical and biotech companies are in a period of significant capital spend, giving rise to capital project portfolio growth across the industry. Organizations are striving to be more competitive in the market by streamlining their global supply chains. Meanwhile, engineering organizations are the leanest they have been in recent history. As a consequence, many pharma and biotech companies are struggling to meet project cost, schedule, and quality objectives.

Hiring additional resources is rarely an option, and in some cases, leadership is pushing to further reduce the engineering organization in the midst of this growth period. This recent era in industry gives rise to a new concerted effort: reduce pharma and biotech capital project cost while still delivering a quality product quickly to market.

Optimizing Pharma & Biotech Project Organizations. Developing and executing successful capital projects in this strained resource environment has become a major challenge within the pharmaceutical and biotech industry. Companies must look for ways to strengthen their capital project organizations within this lean environment, so they can effectively support project Best Practices implementation.



Pharmaceutical and biotech capital effectiveness is rooted in the project organization. Assembling effective project teams and ensuring they have support enables the use of project Best Practices, which in turn drives project performance.

IPA's research study aims to identify ways to optimize pharmaceutical and biotech capital project organizations in this era of constrained talent resources.

Key Pharma & Biotech Project Organization Questions. Pharmaceutical and biotech companies will receive answers to these key questions from the research study:

- What capital project owner resources are critical to keep in-house and which functions can be effectively performed by contractors?
- What is the optimal ratio of owner to agency (third-party contractor) staff?
- What is the best way to partner with contractors throughout the overall supply chain?
- How are companies in the pharma and biotech industry structuring their organizations with respect to capital cycle and the resources available to the system?
- How are onboarding and training programs developed and implemented to effectively prepare capital project owner personnel and contractors?

How Pharma & Biotech Companies Can Participate. This IPA research study is open to all pharma & biotech companies seeking to successfully organize their capital project organizations to compete in a lean environment. Each participating company will be asked to complete a survey about staffing, organizational structure, and onboarding/training programs.

The survey and interviews, in conjunction with organizational data already included in IPA's Organizations & Teams databases, will be used to address the research questions. General industry findings and company-specific findings (such as staffing benchmarks, or deviations from industry norms) will be delivered by presentation. To join the study or receive more information, contact Sarah Sparks, Organizations & Teams Product Champion, at ssparks@ipaglobal.com.

Continued from page 1

Many oil and gas project executives in attendance called for a bold leadership approach, citing the need for an end to what some described as "arrogant thinking" and the importance of "getting back to basics" with respect to choosing the right projects and implementing asset development Best Practices. With respect to selecting the right projects in a portfolio, owner companies must shift their focus to long-term health rather than short-term gains.

Offshore capital project organizations have the opportunity to help the business make the right investment decisions, forum attendees said. For instance, project organizations can help the business function select the right projects by strengthening work processes and identifying and mitigating risks earlier. Other attendees suggested that exploration teams could spend more time performing well tests. Spending more money and time up front to better understand the reservoir will pay dividends in the long run, they said.

Lessons From Low-Margin Commodity Industries. The oil and gas industry is once again a low-margin commodity industry. That was a common theme at the forum. As such, executives discussed how owner companies should now focus on cost of goods sold in facilities design and the development of simple and reliable assets. Inspiration can be drawn from other industries, such as chemicals and mining.

Much can be learned from the chemicals industry, where simple, high-quality facilities are frequently designed to run with high up-time for about 20 years, a forum participant noted. In-house expertise is stressed to avoid overreliance on contractors. Echoing the sentiments of the "back to basics" theme, capital project practices in the chemicals industry are simply much better and more consistent than in E&P.

Offshore executives can also look to the mining industry for ideas. In terms of implementing new technology, mining is anywhere from 10 to 15 years ahead of oil and gas. Mining sites are consistently run well with few humans on-site. In fact, some key operations personnel may be hundreds of miles away from the site. Many in attendance agreed that innovative solutions and technology are key to sustainability in this new USD$50/bbl reality, citing the potential for cost reductions through new technology advancements.

One executive voiced how the oil and gas industry can learn much from how the medical industry uses technology. Medical personnel use technology to collaborate with one another over long distances to make quick decisions. The oil and gas industry should treat the well as its patient and find ways to use technology to view well data in real-time. Many shared the feeling that industry-wide collaboration involving all stakeholders will be necessary in identifying new technologies for the future.

Attracting the Millennial Generation. An important question arose toward the end of the gathering. Who will do all of this innovative and creative work after industry-wide staff cuts in response to the oil price drop? Is it fair to assume staff who have been laid off will come back into the fold? The argument can be made that many will retire rather than return to the workforce.

While most executives in attendance addressed the need to embrace the millennial generation, the consensus in the room was that millennials simply do not believe in pursuing careers in the oil and gas industry. One executive asked everyone to "take a look around the room" to further drive home this opinion. The challenge for offshore project executives is to find ways to reach the millennial generation and to make adjustments so the industry is more attractive to them.

Offshore Leadership Forum Continues in 2017. The 2016 Offshore Leadership Forum was the first of what IPA and *Offshore Magazine* expect to become a regular gathering for top oil and gas executives to discuss and share ideas for improved oil and gas decision-making. The next meeting is slated to take place in 2017. For more Offshore Leadership Forum coverage, see the February issue of *Offshore Magazine*, or visit www.offshore-mag.com (search "IPA").

–By Tony Nicholson

IBC 2017 Showcases Capital Projects Best Practices and New Research

2017 INDUSTRY BENCHMARKING CONSORTIUM

The annual meeting of the Industry Benchmarking Consortium (IBC) is being held March 20-23, 2017, at the Lansdowne Resort in Leesburg, Virginia. A voluntary association of owner firms in the capital intensive industries, the IBC fosters improved effectiveness of its members' project systems, resulting in more competitive capital project outcomes. Pharmaceuticals, commodity chemicals, refining, pipeline, mining, power, and infrastructure industries will all be in attendance at this year's meeting.

During the annual meeting, attendees representing business and project professionals of IBC member companies will review their overall performance in project cost, schedule, and other project metrics, as well as industry-contractor safety performance. In addition, one entire day is dedicated to examining site-based project performance and practices. Sessions focusing on issues of interest to business professionals will be held. Networking breakouts will also take place.

"Owner companies recognize the value of belonging to a professional association committed to improving the effectiveness and competitiveness of their capital project systems," IBC Director Andrew Griffith said. "Owner companies not belonging to the IBC are less likely to deliver projects effectively, which is especially important for tight margin industries." The following new research is set to be delivered at IBC 2017.

Competency Series: The Construction Manager. In the wake of the demographic cliff, Industry can no longer use experience as a viable way to select and staff personnel to projects. Other attributes must be considered. The purpose of this study is to identify the characteristics that drive better performance in the owner construction manager role. The study identifies specific qualities associated with better performing construction managers and provides context for how companies can use the findings to better staff their projects.

Making Project System Change Efforts Successful. Companies periodically initiate change efforts to drive better results from their capital projects. The goal of this study is to identify the drivers of successful and unsuccessful change efforts to improve capital project performance.

Controlling the Overestimation of Project Cost. IPA has observed that project cost overestimating is endemic. This study guides project system managers in how to eliminate overestimates and reviews the types of projects and circumstances that make overestimating more likely.

Customer Focus. One basic tenet of any project improvement program is focusing on the customer, whether internal or external to the project organization. The objective of the study is to learn how owners apply the basic practices related to developing and maintaining an internal and external customer focus and share examples, tools, processes, and procedures of companies that do it well.

Site Organizations. This study identifies the primary types of site-based project organizations, in what locations and markets they are present, and what the apparent motivations are for organizing them. The study then addresses how the strategic organization and staffing of a site affects its ability to achieve the practices necessary to manage and maintain an effective project system.

IPA has facilitated the IBC for more than 25 years. The industry outcomes and trends discussed during the IBC are representative of projects IPA has evaluated, and the research findings are derived from IPA databases with detailed information from more than 18,000 projects. For more information, contact Andrew Griffith at agriffith@ipaglobal.com.

IBC 2017 EMEA 'Roadshow'

IBC EMEA 2017 will take place May 11-12, 2017, at the World Trade Center in The Hague, The Netherlands. This day and a half conference is an opportunity to meet with companies that execute projects in Europe, the Middle East, Africa, and Russia.

Like IBC 2017 in Leesburg, Virginia, USA, the IBC 2017 EMEA "Roadshow" will present project performance metrics for large and small projects across the region. New IPA capital projects research presentations and project professional development sessions will be held.

For more information about the event, please contact Elke Skwirblies at eskwirblies@ipaglobal.com, or Nathalie van der Hoek at IBCEMEA@ipaglobal.com.

Pipelines

Offshore Brownfields & Maintenance

Subsea Systems

Onshore Brownfields & Maintenance

Short-Cycle Projects: New Focus for E&P Operators

By Ifunanya Onwumere, IPA Associate Project Analyst

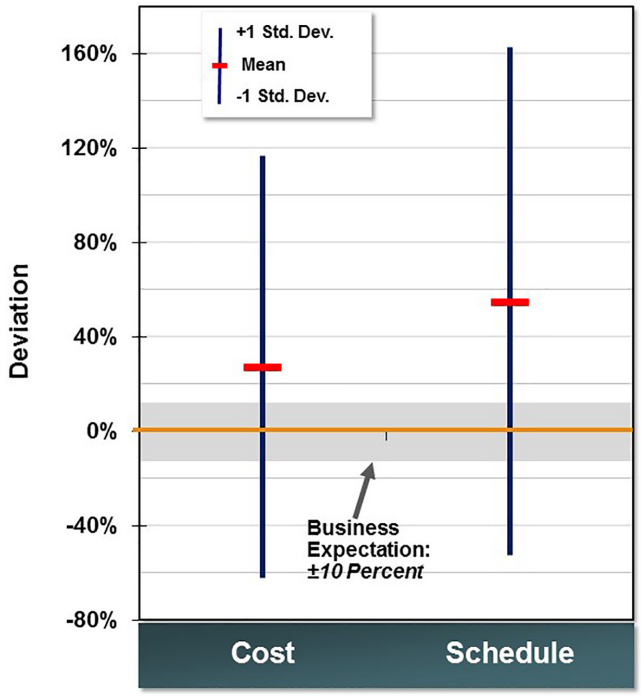
The exploration and production (E&P) industry, forced by market context, is shifting its focus and capital investment priorities. Starting with the downturn in oil prices in 2014, oil and gas companies have been generally cutting back on capital investments in large, high risk/high reward, long-cycle projects—the projects often referred to as megaprojects. Now that oil prices are levelling off in the mid-$50s/bbl with the real possibility of a "lower forever" state, owner companies are investing increasing proportions of their overall capital spend—almost 40 percent and more—on small and medium-sized "short-cycle projects." While the term and focus may be new and "catchy," the fact is that these projects, known throughout industry by their less catchy name, sustaining capital projects, have always been around.

For large oil and gas owner companies, these short-cycle projects to sustain existing site production and operations help maintain business cash flow and keep company shareholders happy. But for smaller owner companies, short-cycle projects are critical for their financial survival. Fast-track subsea tie-backs, onshore brownfield production/maintenance, offshore facilities modifications, and add-ons are among the project types that help to maintain production levels and keep E&P business units from falling off a cash flow cliff. However, many owners are using a flawed approach to delivering short-cycle projects, resulting in millions in wasted capital. In fact, while the industry spent the better part of last decade doing megaprojects, it did not pay much attention to these short-cycle projects. The industry cannot simply pivot and expect superior delivery on short-cycle projects without a concerted, well-thought-out, and holistic approach. Although owners usually regard smaller, short-cycle projects as being less demanding on their project organizations and easier to accomplish, IPA upstream project data indicate that effective capital spending on short-cycle projects eludes owners—more than many would care to admit. In fact, some short-cycle project outcomes are worse than outcomes on larger projects that owners regularly struggle to deliver effectively.

What Is the Stake for Business Leaders? Business leaders expect short-cycle projects to be delivered on time and on budget and to attain the required functionality. Unfortunately, the cost outcomes for short-cycle capital projects are, on average, 20 percent more expensive than the industry benchmark for the given scope of work, according to IPA's most recent study of over 300 projects delivered by 18 companies.* That means for a given portfolio of US$2 billion, the lost opportunity cost is approximately US$400 million. That is enough money to fund another larger project.

Cost and schedule predictability for E&P short-cycle projects is also problematic for many companies. Although most sustaining capital project portfolios have business expectations of ±10 percent predictability at authorization, IPA research shows just how large these deviations from business expectations are. As the figure on page 7 shows, E&P short-cycle projects are overrunning their cost targets by up to 120 percent in some instances. Schedule performance is even worse. The volatility of cost and

*Vincent Mouraï and Ray Rui, "The Neglected State of SSC Projects", UIBC 2016, IPA, November 2016.



Disappointing Outcomes: Poor E&P short-cycle project performance can no longer be ignored.

schedule outcomes on these projects cannot be ignored. Short-cycle projects comprise 80 percent of the projects in most E&P business unit portfolios for the near future. And yet, despite the huge amount of capital and critical nature of these sustaining capital projects, business leaders do not pay half as much attention to short-cycle projects as they do to large projects and career-defining megaprojects.

Why Are E&P Short-Cycle Projects Failing? As a manager of a mid-size IOC told IPA: "Corporate has been too preoccupied by flagship projects in the past 5 years and does not pay attention to smaller investments, so at the moment, these projects are a joyful mess." In a separate interview, a portfolio manager of a major IOC said, "Every business unit has its own recipe for the small ones, which drives inconsistent results." Both observations speak to why many E&P short-cycle projects miss cost and schedule targets by a wide margin.

Some owners are guilty of turning over too much responsibility for scoping and defining projects in their sustaining project portfolios to contractor teams while keeping a single owner project manager as the primary interface with business during execution. With the contractor playing significant roles on projects, owner involvement is not sufficient to ensure effective delivery of the short-cycle project portfolio. Business leaders need to be more involved with how their sustaining project portfolios are managed.

IPA's recent work with its clients shows that three overarching decisions made by the business and portfolio leaders drive the volatility—or success—of these small- to medium-sized, short-cycle return projects. These decisions were made in response to the following portfolio management questions:

1. What criteria are we using to differentiate and separate short-cycle, sustaining capital projects from major projects?
2. How do we modify our work processes to specifically cater to these short-cycle projects?
3. How should the organizational structure and approach evolve to support a portfolio tilted toward short cycle projects?

Categorization—Short-cycle projects, given their relatively smaller size and scope, are usually ranked within an entire capital projects portfolio as less complex and "easier" to execute. This is the first and most common misstep. Short-cycle projects, not unlike larger projects, may indeed involve unique complexity factors that must be considered during front-end planning and the development phases. During our work with several clients, IPA identified 18 complexity elements unique to short-cycle projects that if ignored can severely erode company profitability because decision makers too often fail to create a holistic complexity-based ranking for differentiating between "major" and "non-major" projects; they also fail to organize and execute the "non-major" projects with the right amount of attention and discipline.

Work Process and Organization—Across industry, project organizations lack critical resources when making short-cycle project categorization decisions. Further, vital project team functions are missing, and work processes are over-simplified (using Lite and Ultra-Lite work processes versions is common, if a process is followed at all). Teams are set up to be acutely lean and multiple functions are consistently lacking. Hence, by applying these "simplifications," we create chaos.

Even if companies are unwilling to dedicate more resources to delivering short-cycle projects, appropriate work process adaptations are necessary to drive effective and predictable results. So the question becomes: How can business decisions be made to give the right amount of attention to short-cycle projects, without

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eroding value from these projects? In delivering work process modifications for our clients, IPA discovered a unique way a company's work process can largely be kept intact while substantially reducing the "bureaucracy" and "burden" on short-cycle projects.

The Solution: Dynamic Portfolio Management Matrix. The dynamic interactions of the three business decisions mentioned above are crucial to delivering successful short-cycle project portfolios. Painstaking effort would be necessary to find just the right point in which a system designed for delivering short-cycle projects is properly balanced. However, therein lies the solution.

The call for action is for business leaders and decision makers to assess their portfolios to identify how these three business decisions interact to affect short-cycle project outcomes. The importance of these projects cannot be over emphasized. Industry must begin to improve how these project portfolios are executed—the current state of the business is not sustainable.

There is no single silver bullet for every portfolio. Business leaders and decision makers have to realize that the pivot from delivering large projects to delivering smaller projects requires a thoughtful approach. By first assessing the project system's health in context with the organizational effectiveness and capabilities, project classification, and organization structure, decision makers can seek targeted solutions. IPA has developed expertise through research to help business leaders and decision makers create an effective portfolio management matrix for sustainable short-cycle project delivery.

For more information on IPA E&P portfolio management and capital solutions, please contact Neeraj Nandurdikar, Director, IPA Oil & Gas Practice, at nnandurdikar@ipaglobal.com.

IPA Capital Projects Market Intelligence

Over the past three decades IPA has amassed a database containing detailed information on more than 18,000 capital projects spanning the globe. IPA is continually adding to its global capital projects database as it conducts project evaluations and industry research. As a result, IPA can perform regional cost studies, prepare labor productivity reports, and conduct market assessments to help companies gain a deeper understanding of the current labor market or regional trends.

Regional Cost Studies. The goal of these studies centers on answering one question: "What is the true cost of executing capital projects in this part of the world?" Past IPA regional cost studies have examined project market conditions in Alaska, Brazil, Chile, China, India, the Middle East, Western Australia, Western Canada, and the U.S. Gulf Coast.

Regional Labor Market Intelligence. IPA provides capital projects intelligence to owner companies on regional construction labor demand and prevailing construction wages and productivity data. Trends are forecast for the next five years for total capital investment, labor demand, and construction wages.

Labor Productivity Analysis. IPA provides capital project- and craft-level labor productivity assessments across any set of project characteristics of interest to the client including industry sector, time period, location, project size, etc. Craft-level productivity assessments can also be produced for crafts such as piping, concrete, steel, and instrumentation based on labor hours per unit material.

For more information about IPA's market intelligence reports, please contact Aditya Munshi, Deputy Director, IPA Cost Analysis Group, at amunshi@ipaglobal.com.

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Infrastructure Clients. IPA's infrastructure clients have different roles. We have worked with governments, developers, and investors in the United States, United Kingdom, Brazil, Canada, Australia, and other countries.

Infrastructure Project Types. IPA has evaluated hundreds of infrastructure projects with diverse scopes, including buildings (labs, hangars, warehouses, residential complexes, hospitals, and university buildings); transportation assets (airports, terminals, ports, pipelines, and rail); and utilities/power/public service assets (gas/coal/nuclear plants, electrical distribution, offshore and onshore wind, solar, waste management, and fire prevention/fighting).

Infrastructure Project Research. IPA's infrastructure project research is current and addresses critical topics.

Contracting Approaches—Most infrastructure projects use a design-bid or design-bid-build approach. Our body of research studies on contracting approaches can help developers determine which approach is optimal, based on market conditions, scope, location, and project risk.

Sustainability Practices—Demonstrating good sustainability practices is often critical for infrastructure projects to gain public support. IPA's research has identified those sustainability practices most critical to project success and common pitfalls for projects that do not apply those practices at the right time.

Alignment With Stakeholders—Alignment with stakeholders is essential for all projects, and infrastructure project stakeholders can include diverse groups such as landowners, financial backers, community leaders, and business and project functions. IPA tools and workshops can help establish and document project priorities and trade-offs in ways proven to reduce conflict and changes in execution.

IPA Cost Metrics—IPA cost metrics help confirm whether a particular infrastructure project is a "good deal" or not—whether its capital cost is competitive. In the current low-growth economic climate, public infrastructure projects are increasingly challenged to show strong cost governance. In particular, government entities that depend heavily on oil revenues are focused on improving portfolio management such that only the best projects move forward, ensuring those projects are executed as cost effectively as possible.

Contact Jovan Giaimuccio at jgiaimuccio@ipaglobal.com if you are interested in learning more about IPA's infrastructure projects evaluation and research services.

Solar Project Cost Improvements

The cost associated with solar projects has declined significantly over the past few years. The cost improvements come from several sources. First, the price of materials that go into producing a solar panel (e.g., crystalline silicon) has declined, leading to the greatest source of savings, but further savings in this area are not expected to be substantial. Second, panel and inverter production efficiencies are likely the next most important savings category.

Third, the size of orders through large supply deals is driving quantity discounts with improved production rates. Finally, economies of scale are improving installation costs. Utility-scale installations are driving down costs. Increased competition, improved productivity, and optimized system configurations are key developments.

As our clients show increasing interest in pursuing solar projects, our solar projects database has expanded. The database contains two categories of solar projects: solar concentrator projects and solar photovoltaic projects.

IPA continues to expand its databases and tools to help clients improve the cost effectiveness of their power projects. For more information, contact IPA Power Business Area Manager Dean Findley at dfindley@ipaglobal.com.

THE IPA INSTITUTE
ADVANCING PROJECT KNOWLEDGE

2017 Public Course Schedule

- **Shorter course durations, lower registration fees introduced for 2017**
- **Additional courses on PM and small project Best Practices**

The IPA Institute has announced its full 2017 public course schedule. Based on participant feedback, the IPA Institute has reduced the durations of these courses from three days to just two days, resulting in lower registration fees and less time required out of the office.

Visit www.ipaglobal.com/public-courses to view the full schedule.

Project Management Best Practices (16 PDUs)

September 26-27 Houston, Texas	October 10-11: Paris, France
October 10-11: Bangkok, Thailand	November 28-29: São Paulo, Brazil

Best Practices for Small Projects (16 PDUs)

April 11-12: Las Vegas, Nevada	April 11-12: Marseille, France
April 18-19: Singapore	May 16-17: Brisbane, Australia
June 27-28: São Paulo, Brazil	September 12-13: Perth, Australia
September 19-20: The Hague, Netherlands	October 17-18: Orlando, Florida
November 7-8: Kuala Lumpur, Malaysia	

Megaprojects – Concepts, Strategies, and Practices for Success (24 PDUs)

May 2-4: Houston, Texas

Delivering Value Growth Through Effective Oil & Gas Asset Developments (16 PDUs)

July 11-12: Jakarta, Indonesia

Gatekeeping for Capital Project Governance (16 PDUs)

August 29-30: Santiago, Chile

PMI Registered Education Provider

The IPA Institute is a Registered Education Provider (REP) of the Project Management Institute (PMI). All IPA Institute seminars align with current PMBOK standards, enabling PMI credential holders (PMP, PgMP, PMI-SP, PfMP, etc.) to claim Professional Development Units (PDUs) upon completion of each IPA Institute course.

Registered Education Provider
Project Management Institute

Upcoming IPA Events & Presentations

March 14

Astor Luft and Fez Nasir Speaking at DecomWorld GoM 2017

Astor Luft, IPA Regional Director for Latin America, and Fez Nasir, IPA Associate Research Analyst, will speak at DecomWorld GoM 2017, in Houston, Texas. They will deliver remarks and participate in a panel discussion during a conference session titled "Are Project Systems Ready to Deliver Their Decommissioning Portfolio? Lessons From a Global Study." More information about the conference is available at http://www.decomworld.com/gom.

April 6

Manoj Prabhakar to Present at SPE Oil and Gas India Conference and Exhibition

IPA's business development lead for India, Manoj Prabhakar, will deliver a presentation and participate in a panel discussion on "Project Management Throughout the Field Lifecycle" during the SPE Oil and Gas India Conference and Exhibition, in Mumbai, India. More information about the event is available at: http://www.spe.org/events/ogic.

April 26

IPA Capital Solutions Director Allison Aschman to Present at Breakbulk Europe

Allison Aschman, Director, IPA Capital Solutions, will speak at Breakbulk Europe 2017, in Antwerp, Belgium. Aschman will provide a quantitative outlook for capital investment over the next few years, by global region and industrial sector. The presentation will also address the important roles procurement and logistics play in capital project success. More information about the event is available at: http://www.breakbulk.com/events/breakbulk-europe/breakbulk-europe-2017/.

June 20

Upstream Cost Engineering Committee (UCEC) 2017

The annual UCEC meeting will be held in The Woodlands, Texas. The UCEC strives to improve upstream project and business results by providing metrics for better cost engineering. Member company representatives gather once a year to learn about and review new UCEC metrics packages prepared by IPA. The upstream metrics packages are used by companies to compare their upstream project cost and schedule outcomes with industry cost and schedule norms and, in general, boost business project estimate assurance and evaluation quality.

September 26-27

Cost Engineering Committee (CEC) 2017

The CEC is a working subcommittee under the Industry Benchmarking Consortium (IBC) that assists cost engineers by providing metrics and tools that offer an unbiased snapshot of Industry cost and schedule estimates and trends. The CEC focuses on all aspects of cost (or investment) engineering, including cost estimating, scheduling, and project control practices and metrics, with the goal of expanding the owner cost engineer's capabilities. The primary vehicles for accomplishing these objectives are validation metrics, Best Practices research, and practice sharing. For more information, contact IBC Director Andrew Griffith at agriffith@ipaglobal.com.

November 13-15

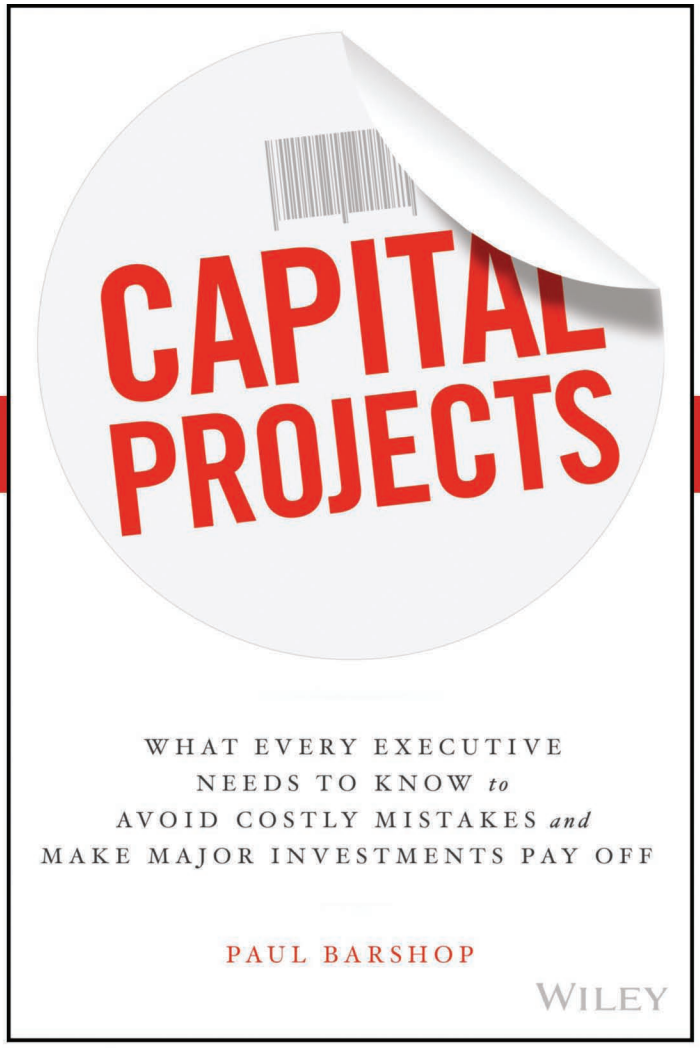
Upstream Industry Benchmarking Consortium (UIBC) 2017

The UIBC is solely dedicated to the exploration and production (E&P) industry. It provides an independent forum for each participating company to view key metrics of its project system performance such as cost and schedule, Front-End Loading (FEL), and many others against the performance of other companies and share pointed and detailed information about their practices. The consortium highlights Best Practices, reinforcing their importance in driving improvements in asset development and capital effectiveness. Consortium attendees learn how to improve specific elements of capital project execution through presentations and other more interactive discussions. For more information, contact IBC Director Andrew Griffith at agriffith@ipaglobal.com.

To subscribe to the *IPA Newsletter*, please visit our website at: http://www.ipaglobal.com/knowledge-ideas/subscribe. Past issues can be viewed at: http://www.ipaglobal.com/newsletter-archive.

IPA also publishes select news and announcements on LinkedIn. Follow IPA's company page on LinkedIn – https://www.linkedin.com/company/independent-project-analysis.

A REAL-WORLD FRAMEWORK FOR DRIVING CAPITAL PROJECT SUCCESS



Executives often start out with high hopes for their capital projects, only to have them fall short of expectations. Only 60 percent of projects actually meet all their objectives after they are completed and the asset is put into service. The success rate is not much better than a coin-flip.

Executives responsible for delivering capital projects do not have to accept these results. Success or failure is not random. Although most of the work to develop and deliver a project is done by others, executives must provide the leadership, guidance, and support necessary to produce a successful business result from the project. Capital Projects explains the essential concepts executives need to know to increase the probability of a successful project and, critically, reduce the chances of disaster projects—ones that lose all the capital investment and get executives fired.

978-1-119-11921-0 *** Hardcover**

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The information in Capital Projects is derived from the histories of over 20,000 capital projects ranging from $50,000 to $40 billion contained in the detailed, carefully normalized database at preeminent project consultancy Independent Project Analysis, Inc. This book presents a framework that is applicable to all types of capital investment projects, large and small, in any sector of commerce, including technology, life sciences, petroleum, consumer products, and more.

Although grounded in empirical research and rigorous data analysis, this book is not an academic discussion or a conceptual dissertation; it's a practical, actionable, on-the-ground guide to making capital projects succeed.

- Learn the specific practices that drive project success
- Avoid the missteps that make capital projects fail
- Understand the role of executives in making a project a success

PAUL BARSHOP is a Director of IPA Capital Solutions, a new IPA business initiative to provide hands-on support to clients implementing changes to their capital project development and delivery systems to improve performance.

IPA evaluates capital intensive projects of national and international oil, chemical, pharmaceutical, and major mineral companies, benchmarking their cost, schedules, safety, startup and operational performance. With 5 offices in different regions, IPA interacts with clients all over the world on a daily basis.

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