



Value plus efficiency: Where project delivery and execution matter most

Why understanding the client's view of value is critical for effective project outcomes.



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Whether you are a consultant, designer, contractor or operator, successful project delivery and execution is generally defined the same way; your goal is to complete projects on-time and on-budget, while also maximizing profit through efficient resource utilization.

But equally, success in the longer term is about maintaining satisfied and loyal clients. That means delivering value for their investment, thus ensuring that they come back to you with their next project.

Conventional wisdom would suggest that key to achieving client value is driving efficiency through project delivery and execution. And, of course, delivering this high value to the client should equate to higher fees to the consultant. But simply delivering a project on-time and within budget does not always result in the highest value for the client.

On the contrary, a relentless focus on efficiency during project delivery without reference to the actual desired outcome for the end user can significantly undermine the value delivered to the client.

The question for construction professionals, therefore, is how to translate this desire for efficient, cost effective project delivery into the all-important value for the client. How do we ensure that engineers really understand what drives value for the client and then continue to think out of the box beyond the project delivery phase.

Up-front investment is key, but real value can come later

Too often in project development and planning we inadequately assess the problem we need to solve. We commonly look at clients' problems in insulated technology-focused silos rather than from the wider, holistic, customer-focused perspective which could boost both the value and efficiency outcome.

The result is that clients are constantly reminded, quite correctly, that spending money and investing early in the planning stage has incrementally higher return on investment than spending in construction and operations. The message is that to deliver efficient project outcomes, up-front investment is essential on early planning, followed by careful monitoring of progress while making necessary corrections.

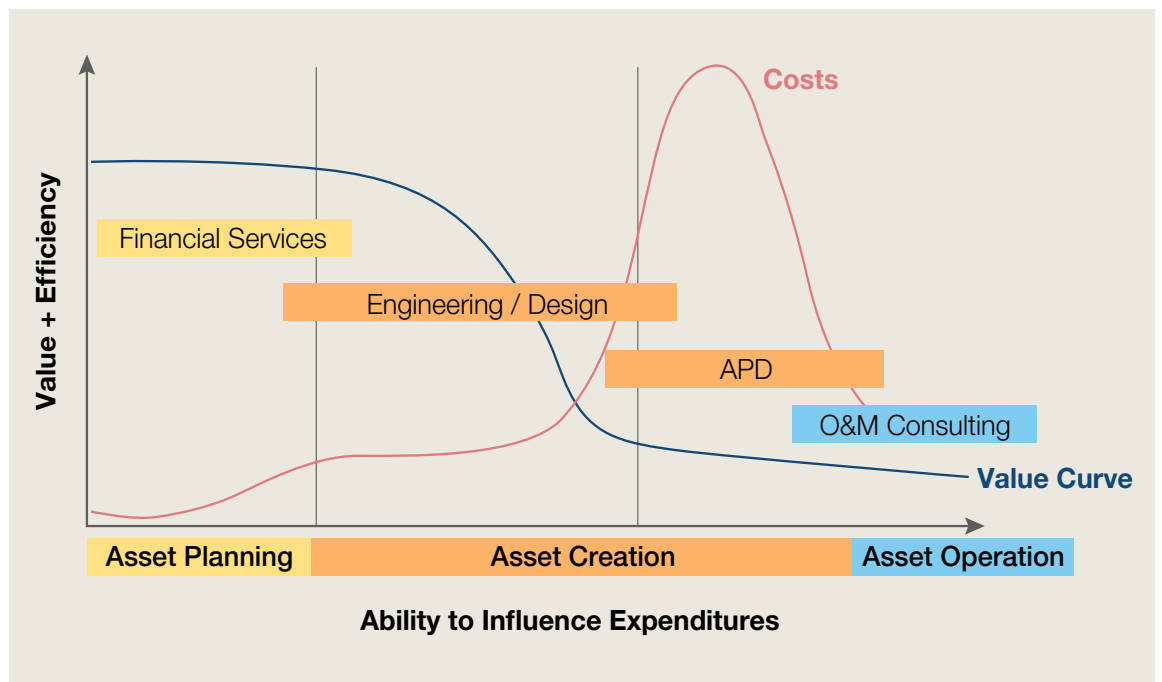
As such, the value proposition for clients is commonly defined simply by the success of the project delivery and execution process and leads to management consultants, engineers and planners arguing that the greatest value is always created in the early stages of development. This argument relies on the principle that planning is cheap when considered in the context of the entire project lifecycle, including construction and operations where investment capital is greatest.

However, if we assume a wider, holistic, customer-focused perspective, it is typically only after planning is complete that significant investment occurs. The project moves from concept to engineering design, asset creation actually starts, and real value begins to be

generated for the client. Unfortunately, under traditional delivery models, it is at this point that the ability to add value begins to diminish. As the project moves into construction and ultimately asset operation, the ability to bring further value is limited.

Exhibit

Asset/Project Life Cycle



The Exhibit above illustrates how the asset planning phase of a construction project presents the greatest opportunity to both generate value and influence expenditure. It also shows how the ability to create value falls away despite the actual rate of expenditure climbing rapidly throughout the asset creation phase.

Thus in reality, while we understand that value is very often created early in the lifecycle of a project, the greatest investment—and so the greatest potential for generating real client value—is always expended during the construction and long-term operation of the asset. And too often there is little consideration given to innovation or value in this phase.

This condition is emphasized in hard-bid contracts in which the client tenders to a prescribed specification and shifts risk to the contractor. Under these conditions there is little time, interest or ability for that contractor to embrace deviations from the design or contract terms

which may generate long-term value. In fact, the introduction of innovation will generally result in non-conforming bids that are ruled out by the client.

Innovation as a driver for true client value

So what is the solution? Project delivery and execution only drives value plus efficiency if the drive for innovation is religiously applied across the full spectrum of the project lifecycle. That means embracing a “blank sheet of paper” approach to identify not only the client’s needs but also what actually constitutes value to them and for their customers.

This approach can present the client with an opportunity to reconsider their original scope and to rethink the longer-term implications or opportunities from the investment. Throughout such a process stakeholders should recognize that compromises are essential—however, these will be explicit rather than hidden, creating better opportunities for value across the lifecycle to be assessed by all.

Of course, the approach must start during the asset planning phase where costs are relatively low compared to later phases of construction and operations. The parameters around project delivery in this phase should be free-form and out-of-the-box with an emphasis on monetizing and commercializing innovation over the whole life of the asset.

It means investing in key knowledgeable and skilled staff such as program and project managers, project control specialists, schedulers, and technical leads. Among their primary strengths should be calculating earned value, developing accurate estimates to completion of a project, and assessing and quantifying risk exposure and how it ultimately impacts project delivery.

The process can be made more challenging by legacy assets, organizational blind spots, and the desire to maintain status quo, which can often constrain project definition and reduce the long-term value of a solution. The blind spots can even take the form of self-perpetuated myths about what might work and what might not.

But as the project moves into asset creation—from preliminary design to final design—the “blank sheet” project delivery and execution process can be redefined with more rigidity. Innovation is always encouraged but contained within the engineering “envelope” so that the engineering design is delivered to budget without spiraling out of scope. Most importantly, the whole supply chain must be engaged throughout to ensure efficient constructability.

Finally, as a project moves from asset creation to asset construction and operation, innovation shifts from engineering and design to delivery, which may include innovative approaches to supply chain management and offsite fabrication to create repeatable processes. These processes can improve quality and reduce flaws and introduce different approaches to risk management and risk transfer mechanisms including bonding, but must be discussed early in the project delivery.

Communication is crucial

Design engineers, contractors and system operators often communicate poorly. This early engagement of all stakeholders—internal and external—through a disciplined “gateway” process provides an opportunity for value to be constantly assessed and for customer expectations to be managed around what value will or will not be delivered. Too often the client is surprised about what value was intended at the end of the project.

Consultants, engineers, contractors, and operators commonly dwell exclusively on the need to boost efficiency in project delivery and execution when in fact, the client is really expecting value plus efficiency.

Achieving this combination is possible but made difficult if we do not first invest to understand precisely what the client is trying to achieve and then apply the sound project delivery and execution principles across the entire project lifecycle—all the time keeping efficiency plus value top of mind. 🌐

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