Selecting software for project-based service companies





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Companies that deliver complex projects as a service, operate in disruptive and unpredictable environments. This is exacerbated if the business system architecture used is a patchwork of disjointed software solutions and disconnected spreadsheets that can't provide end-to-end operational visibility.

Meeting requirements is not as simple as it seems.

The key reason that many project-based service providers (PBSPs) find themselves in this situation is that they struggle to find a software solution that meets their demanding requirements. A typical PBSP offering will include elements of project management, service, construction, manufacturing and asset maintenance—in this complex, hybrid environment most software solutions are unable to match their needs.

Additionally, PBSPs cut across multiple industries. Projects could be onshore or offshore—both have complex project lifecycle requirements, with offshore initiatives having the added challenge of requiring specialty equipment and specialist skills for successful completion, on time and on budget.

PBSPs arguably are the most diverse of companies in terms of their day-to-day operations, they complete complex project lifecycles and work in disconnected and disruptive environments and provide a wide range of services that include a range of specialty functions. However, does this mean a PBSP is stuck with a patchwork business system architecture that hampers true business value?

In a word, no.

Let's examine the software requirements driven by the demanding nature of operating in a world that is both project-intensive and asset-management heavy, and the challenges and opportunities that combining the two modes presents for your enterprise software.



Companies like us, supporting our clients in managing their complex project lifecycles, are often forced to use separate software products to manage different stages of the project, creating multiple disconnects between data, people and time."

Mark Heine, Chief Executive Officer, Fugro

Project-Based Service-An Ongoing Conundrum

The ongoing challenges faced by PBSPs to find a software solution right for them has led many into one of the following directions:

- Create a highly bespoke system at huge expense that requires continuous development and maintenance
- Use only the finance module of an enterprise resource planning (ERP) suite, and allow commercial and project managers to rely on spreadsheets to manage their day-to-day operations

Neither of these are desirable, robust, efficient solutions. The software must, in the early stages, help a project pursuit team set an accurate scope and price. This is best done with full access to historical information on past and similar projects, and visibility into change order history so that these experiences can inform future bids, estimates and projects.

Regardless of whether there is a previous template to draw on, the team will need to translate the client brief and scope into an executable project through a work breakdown structure (WBS). Once work commences against the scope, software will need to help optimize task and resource scheduling in the face of multiple interdependencies and constraints.

The WBS and scheduling functionality must exchange data freely with the human resources, subcontracting, equipment rental and purchasing functionality so you can get the right people, with the right skills, at the right time, on-site with the right tools and materials.

PBSPs leverage large, multi-skilled mobile workforces to execute against deliverables with a fixed end date. Typical complex projects would be to install a turbine for an energy customer, undertake maintenance and repairs of a sub-marine communications cable or execute against an electrical systems contract for an institutional or industrial building.

A project is considered successful if the company delivers the project on time, on scope, and within budget.

Completing a project profitably and to the project owner's satisfaction is easier if the software tools used to manage all the different resources required are part of a unified enterprise system where the elements are designed to work together. This prevents revenue and value leakage if tasks and processes breakdown between departments, which in turn enables PBSPs to extract maximum value from each project by improving quotations, scope management, revenue management, resource management and ensure delivery tracks to what has been promised.



The Ideal ERP solution for PBSPs

Rather than traditional ERP software, PBSPs need a combined project lifecycle and asset management solution—a combination rarely found in one single solution. From finance, human resources, document management, procurement, supply chain and subcontract management to quality, health safety and environmental (QHSE) and equipment management—the requirements are vast. A strong project management solution is essential to manage contracts successfully and should include features such as project cost control, planning and progress tracking, risk management and project accounting.



IFS Cloud's dedicated solution for Project Based Service Providers include core business processes such as CRM, Contract Management and Project Management all displayed in an easy to raying tell polyv.

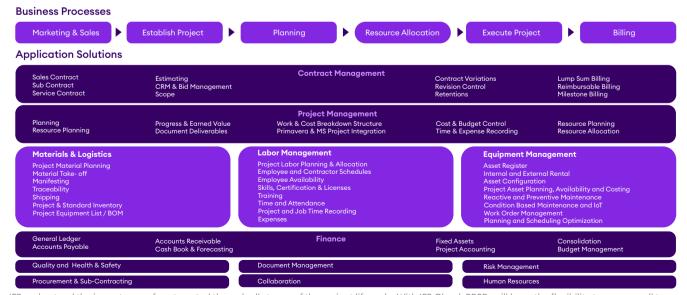
From the start of the project lifecycle, a solution designed for PBSPs will enable a project pursuit team to forecast based on trusted data rather than on spreadsheets that can easily be inaccurate, out of date or irrelevant. The solution should be proven to have successfully run multi-year projects with hundreds of subcontractors, including the effective management of project variations that impact the client contract and any linked subcontracts.

Another key success factor is for the software to automatically update the profit and loss forecast with each change order and record deviation from plan through to the end of the project. You need to be able to effectively plan resources and handle changes efficiently while preserving margin and avoiding any surprises. As change orders are issued, it must be impossible to miss or obscure the resulting financial impact, which lets you engineer risk out of your operation.



IFS's Project Portfolio Management lobby provides an immediate snapshot of the overall health of current projects; highlighting potential dangers, project milestones and outstanding tasks it can help users mitigate risk and ensure project delivery times.

Specifically, these core areas need to be in a single solution that is built for PBSPs so that it will seamlessly integrate with other best-of-breed solutions if required.



IFS understand the importance of cost control through all stages of the project lifecycle. With IFS Cloud, PBSPs will have the flexibility to manage all types of contracts and service types within a unified application architecture.

6 Fundamental ERP Requirements

1. Cash is King

While cost, revenue and margin are important, you must also ensure that you have sufficient cash to support your project operations between liquidity events. A good deal of the risk involved in your project may result from imbalance between the inflow of cash at payment milestones or progress claims and the outlay of cash for subcontractors, materials, equipment and labor.

Appropriate software will enable you to forecast your cash position over the project lifecycle. During estimating, and in the initial negotiations with the project owner, you should be able to establish tie-ins between risk and opportunity. As the project definition changes, you can quickly place a value against risk in terms of cost, cash and impact on the expense and cash flow timeline. For example, holistic treasury management tools that let you control and hedge your cash position in multiple currencies will ensure that your cash flow is properly managed, putting your company in a strong position always.

2. Proactively Manage Risk

Your software should also provide an embedded and dedicated risk management module to identify and mitigate against risks. Just like the project forecast, PBSPs often handle risk management in Excel, and that spreadsheet is often not consulted or altered once the project is underway. Managing risk continuously lets you identify the necessary contingencies within the forecasting process and ensure that your risks are consistent with your forecast. Most importantly it allows actions to be assigned and tracked to mitigate those risks.



3. Indemnity and Insurance Management

Questions you need to be able to answer include:

- If there are project delays, what are the resulting penalties?
- Do your subcontractors have insurance?
- Do they have the insurance amount required by the contract?
- When does it expire?
- Have you confirmed it is active and not lapsed at the expiration date?

Enterprise software needs to include specialized tools for indemnities and insurance that track the expiration and documentation around bank guarantees and insurance.



IFS's Project Financial Control Module can accurately track the financial health of a project, showing budget utilization, forecasts and comprehensive project financials.

4. Cost Breakdown Structure versus Work Breakdown Structure

Most PBSPs think about cost in terms of cost code structures tied to account numbers in a general ledger. A cost breakdown structure (CBS) enables you to categorize cost (labor, equipment, materials, subcontract) in a granular fashion without resulting in an overly complex general ledger. You can also opt to create a consistent CBS across projects so you will be able to easily template costs from one project to the next, and get a consistent management view and cost reporting coding structure to rollup project performance across your entire enterprise.

A work breakdown structure (WBS) meanwhile is unique to each project according to the project owner's requirements. You will want to connect your WBS and CBS to enable you to meet customer expectations while preserving a consistent approach across multiple projects. The WBS is integrated with the project plan (which may be held in Primavera or Microsoft Project for example) so this means that the official project timeline will now be used to drive the financial forecasting as well. Software for PBSPs require the flexibility to manage the project budgeting and monthly project forecasting process at any level of the cost or work breakdown structure. This means that large projects will be run using a top down cost control methodology driven from a CBS while smaller projects might be run using a bottom up WBS methodology.

5. Equipment in- and out-rental

On many projects, equipment is a critical resource from both a cost and a constraint standpoint. Regardless of whether equipment is owned, rented in from another company or rented to external parties, your enterprise software must provide full visibility of when equipment is required at which site and for what duration, with the time envelopes for equipment demand shifting dynamically as the project timeline evolves.

Equipment management capabilities in software for PBSPs must enable equipment to be maintained, configured, tracked and rented on and off projects and small jobs. This means equipment can be viewed globally even when assets belong to multiple legal entities. The procurement solution should also support the rental purchase order process when the equipment is supplied by external suppliers.

6. The right tools for the job

Companies that create and support complex assets face a daunting set of challenges more complex than perhaps any other industry. Finding an enterprise software partner that understands these challenges and has global customers successfully operating in both land and marine settings is a first step towards putting your complex operation on a more solid footing. Ensuring that software vendor can fulfil all the requirements of your business, with the above material as a starting point, is the next.

Managing Beyond the Project Lifecycle

Once a project is complete, PBSPs may transition directly into a lifecycle support contract to maintain or even operate the asset. In this situation, enterprise software must seamlessly turn equipment objects, asset documentation, recommended maintenance regimes and other asset data over to an enterprise asset management (EAM) software solution.

In the event that a PBSP did not design or build the asset, they will still need an EAM or service management solution capable of helping them intelligently support the asset and share digital insights with the asset owner on how the as-maintained or updated asset differs from the as-built state. Proven ability to deliver this insight can make you more valuable to the asset owner than your competitors.

In offshore environments, sharing data with either your own land-based operations or a customer is a challenge due to the issues experienced around communications bandwidth and reliability.. Enterprise software solutions used in these projects and their ongoing support should therefore include, as standard, satellite data replication with an onshore instance of the software.

The precise nature of what files or processes must be replicated will vary for each setting. Basic data like parts, equipment structures and suppliers will typically be carried over. Procurement is usually handled onshore, so demand signals based on consumption or anticipated demand for spares and repairs will generally be communicated to a land-based instance, while insights on parts received at each location should be shared with all those affected.

Insights on completed maintenance work orders contribute to an accurate as maintained record, and should be replicated not only to ensure a common view of the current state of the asset but to document that the asset is being operated safely. Preventive and scheduled maintenance activities must be replicated to shore side in part so human resources can ensure adequate capacity to complete them.



The IFS solution will standardize and harmonize our project-oriented processes in one highly intuitive ERP platform. Having all of our people accessing the same data and working in the same way will be faster and more enjoyable for our teams. We look forward to working with IFS to usher in the next phase of our company's business transformation journey."

Fugro Chief Executive Officer Mark Heine



Delivering Project Excellence with IFS Cloud

IFS Cloud delivers a dedicated solution for PBSPs, built with core project excellence functionality as standard–designed to allow PBSPs to operate in disconnected and unpredictable environments by providing the agility and flexibility to do so. IFS Cloud is an ERP backbone that can handle both complex projects and large data volumes with no compromise, integrating with other best-of-breed solutions.

A Dedicated PBSP Solution

PBSPs require ERP software designed for their unique and demanding needs. Without the right ERP software, you will be unable to confidently manage projects and deliver on time, on budget and at the correct quality. You will struggle to ensure that you meet customer requirements, accurately track profitability, and mitigate risk – all of which put immense pressure on stakeholders.

IFS Cloud has a dedicated solution for PBSPs and is your reliable partner in enterprise software designed to meet these challenges and more. To learn more about IFS visit ifs.com and speak to an expert today.

About IFS

IFS develops and delivers enterprise software for companies around the world who manufacture and distribute goods, build and maintain assets, and manage service-focused operations. Within our single platform, our industry specific products are innately connected to a single data model and use embedded digital innovation so that our customers can be their best when it really matters to their customers—at the Moment of Service.

The industry expertise of our people and of our growing ecosystem, together with a commitment to deliver value at every single step, has made IFS a recognized leader and the most recommended supplier in our sector. Our team of 4,000 employees every day live our values of agility, trustworthiness and collaboration in how we support our 10,000+customers.

Learn more about how our enterprise software solutions can help your business today at ifs.com.

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