The Great Project Profitability Debate

How to choose the best project costing methodology and drive profitability with a modern, flexible ERP

Unanet

ERP AE

THE BOTTOM LINE IS THE BOTTOM LINE

In the architecture and engineering (A/E) industry, the difference between a profitable project and barely breaking even is often a razor-thin margin. How well firms and their individual teams can manage the various costs associated with every project is usually the determining factor between a rousing success or a waste of time.

Median profit on net service revenue for architecture, engineering and construction (AEC) firms was almost 14% in 2019, up from 12.7% the previous year.[1]

Yet, for many A/E firms, accurately measuring profitability so they can better manage their operations is a time-consuming, inefficient, error-prone process because their legacy ERPs lack the flexibility and agility to account for project costs beyond basic time and materials.

They're realizing that having air-tight overhead accounting practices is vital to their long-term success and is especially important in times of dramatic change, such as during a global health crisis, or in times of economic uncertainty when they absolutely need to make smart, data-driven, strategic decisions.

As a result, project and accounting leaders are increasingly rethinking whether it's time to update their enterprise resource planning (ERP) technologies to create more transparency, assert greater control over variable project costs like overhead, and improve profitability on every project they complete.

The revenue of architectural, engineering, and related services in the U.S. will reach approximately $355 billion by 2023.[2] Profit generated per AEC employee was just over $19,000 in 2019.[3]

A DECADE LATE AND (MANY) DOLLARS SHORT

Typically, A/E firms employ two approaches for calculating project profitability: job costing and overhead allocation. Both methods offer a way to determine overhead costs, either through labor or as a shared cost across all projects, and give firms the information they need to manage profitability.

However, most project leaders operate in information silos. They're often working from Excel spreadsheets to perform basic calculations without visibility into anyone else's work or relying on their firm's decades-old legacy ERP system that makes gaining a comprehensive project perspective extremely difficult.

[1] "Zweig Group Reports Strong Financial Outlook for AEC Industry." Globe Newswire. May 20, 2019.

[2] "Industry revenue of "architectural, engineering, and related services" in the U.S. from 2011 to 2023. Statista.

[3] Ibid.

Worse, most legacy ERPs are tuned to handle one method of calculating profits or the other but rarely both, which dramatically limits the business's flexibility and profitability.

While many firms have learned to live with this inconvenience, they're also finding out it's no longer sustainable. Today's A/E project leaders increasingly need modern, flexible, and agile ERP software that delivers real-time, deep-dive insights and enables their team to choose and support the best calculating methodology for their business and accounting practices.

Nearly 50% of companies are planning to or have already acquired or upgraded an ERP system.[4]

COMPETING METHODOLOGIES: WHICH ONE TO USE?

Generally, A/E firms apply one of two overhead calculation methodologies: job costing or overhead allocation. Each has its own benefits and drawbacks, but as with many aspects of business, there is no one-size-fits-all approach, and many firms are finding that they actually might need each at different times depending on individual business practices.

Here's a closer look at each:

Job costing:

What it is:
Job costing assigns expenses for materials, labor, and overhead to specific jobs, with overhead calculated at a predetermined rate, or the job cost rate. This rate, also referred to as a burdened pay rate, is usually a standard multiplier based on the firm's direct labor and overhead costs at the financial statement level.

Who it benefits:
Job costing is most important to a project manager, project accountant, or line of business owner because the cost numbers – job costs and overhead – impact profitability. Factoring in operating costs and overhead through labor gives a more complete picture of the cost of a project, making job costing a key metric in overall project performance.

Project managers may place additional importance on job costing if their bonus structure and performance are tied to profitability.

Effective job costing requires capturing a variety of costs, including:

- Direct labor costs: the cost of employing people to work on the project, excluding the cost of administrative labor or management

- Direct material costs: the cost of materials that are only used for one project, such as the wood or bricks used to build a house

- Overhead costs:
    - Travel to and from the job site
    - Administrative, managerial, and supervisory work
    - Materials used across a variety of projects, including materials purchased in bulk, such as nails
    - Tools and equipments, such as ladders, nail guns, and levels
    - Gas and vehicle maintenance
    - General administrative and operating costs, such as rent and office expenses
    - Fringe benefits

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[4] Technology Evaluation Centers. March 3, 2020.

Advantages:

One big advantage of job costing is that it allows project leaders to calculate the profit earned on individual jobs at a transactional level (per project/employee/hour), helping them to better determine whether specific types of jobs are desirable to pursue in the future.

Job costing works best for A/E businesses that engage in highly intellectual and/or labor-intensive work where labor hours drive projects forward. It also makes it easier to compare the cost of a job to its profit at a granular level, simplifying productivity calculations that lead to better, more informed bids and proposals for future work.

From a resource perspective, firms are able to use the information to determine which employees are best suited for which jobs, or tasks within jobs, based on the employee's overall cost. Job costing allows firms to understand the relative cost of their resources, and is scalable as the business grows.

Overhead allocation:

What it is:

The overhead allocation method in the A/E industry is a way to share costs across multiple jobs. Overhead allocation can be calculated in one of two ways. The first is using an established rate to estimate overhead for each job. For example, architects and engineers could calculate that their overhead for a job generally represents a specific portion of project revenues or of its direct labor costs, which is added to the baseline job costs.

Alternatively, project teams may also track a pool of overhead costs in their general ledger and distribute them proportionally across all jobs.

Who it benefits:

Overhead allocation benefits a variety of teams and roles in an A/E organization. Leadership, finance, and accounting teams can gain a better understanding of overhead across the organization, particularly for financial reporting across different profit centers or segments.

With a more accurate picture of project costs, finance and accounting teams are able to proportionately spread overhead in a simpler way and project managers can view and evaluate project costs more easily.

Advantages:

Overhead allocation is often easier than job costing because it's equally applied across projects based on a calculated overhead rate, which can be determined annually or intermittently. It's also a repeatable method that only needs to be done periodically, such as monthly, quarterly, or annually.

INHERENT CHALLENGES MADE WORSE BY OUTDATED ERP

Regardless of methodology, project leaders face inherent challenges that can derail even the most focused and dedicated teams. For example, job costing requires extensive documentation of a litany of line items like hours worked, supplies purchased, and equipment used. The more complicated the job, the more documentation is needed, and the more time is required from project leaders to sort through it all.

Similarly, overhead allocation is often a victim of its own fluid nature. It's based on variations and can be calculated in different ways, such as through direct

labor hours which can make it difficult to allocate indirect costs accurately.

In both cases, those issues are exacerbated by outdated ERPs that simply lack the functionality or the flexibility to capture all relevant information, leaving project leaders unable to report with precision on the fruits of their own labor and know with certainty how to drive profitability.

To use both methodologies effectively, project leaders need:

- A fast, simple way to synthesize information
- Automated rates and calculations at their fingertips that can be updated to reflect changing business needs or practices
- Up-to-date reporting to make smart decisions

MODERN A/E ENTERPRISES NEED AGILE ERP

Instead of being locked into a particular overhead costing approach, today's A/E firms should have the freedom and flexibility to choose the calculating methodology that works best for them. They should have the ability and freedom to mix and match by team or department based on the unique demands of the work or even to switch methodologies mid-year if it makes sense.

However, to achieve that level of agility and flexibility, firms need to replace their siloed legacy ERPs with flexible, efficient, and scalable cloud-based ERP that can support both methodologies with a high level of visibility and insights.

An ERP that provides richly detailed reporting and dashboards helps project leaders quickly and easily visualize the specific information they need. They can also rely on automated calculations and data updates to reduce data entry errors and bring both greater simplicity and time savings to daily workflows.

- 53% of CIOs are investing in intelligent ERP systems with robust analytics to gain a competitive advantage. [5]
- Businesses can make strategic decisions up 36% faster with modern ERP solutions. [6]
- On-premise systems are generally 30% more expensive than cloud technology. [7]

FLEXIBILITY, AGILITY, AND EFFICIENCY WITH A MODERN ERP

Unanet A/E, powered by Clearview, is leading the charge for A/E firms to improve project and overall profitability with a next-generation ERP that enables greater flexibility, agility, and efficiency in their overhead calculation operations.

The cloud-native, hosted platform provides project managers, accountants, and principals with a comprehensive, modern, project-based ERP solution that provides in-depth business intelligence and real-time reporting across the enterprise, spanning time and expense, projects and financials, and can even integrate data from third-party systems.

[5] Ellingsen, John Erik. "Unleashing Exponential Evolution. 2019 ERP Trends." Accenture.com. January, 2019.

[6] "Simplify Life at Work." Aberdeen Group. 2014.

[7] Schultz, Debbie; Johnson, Michael. "The Case for Cloud-Based ERP." CFO.com. March 25, 2015.

Unanet A/E is purpose-built to provide complete visibility into project costs and rates to increase efficiency, eliminate wasted time, and support various chosen methodologies of cost accounting. Project data across the organization is captured and stored in a secure, central database that's easily accessible by authorized users from any connected device to eliminate wasting hours updating and managing individual spreadsheets or hunting for information.

Project management controls

Unanet A/E gives A/E project leaders the ability to control project data and manage projects in a familiar planning style, breaking down information silos in the process and enabling real-time insights.

Project leaders can manage budgets and schedules at the project and/or resource level, using a Gantt chart view to understand dependency relationships and critical paths. The system captures job costing at the resource and hours level and can automatically apply overhead costs proportionally across projects.

Flexible time and expenses

Unanet A/E's web-based time and expense software enables the collection of project cost and effort from any employee, anytime, and anywhere. It eliminates administrative overhead with efficient time and expense tracking that allows employees to be more productive and makes projects more profitable.

These features integrate with support systems for project management, invoicing, project accounting, payroll, resource management, job cost accounting and analytics.

On-demand insights and intelligence

Project leaders gain visibility and control with the ability to interact with data at all levels of the organization. Unlike other tools that only offer a single, isolated snapshot of data, Unanet A/E's interactive dashboards combine information from across the organization to enable project leaders to:

- Filter and drill into key insights at the transactional level based on a date range, period, project, project manager, organization, or any other data point

- Compare projects in different geographic locations or between different project teams with the click of a button

- Conduct real-time, interactive analysis and research, down to the detailed level, eliminating the need to manually compile reports

Project leaders can review the entire year or a specific date and time to understand how certain events impacted their overhead and costs as well as perform retrospective calculations.

NEW BUSINESS PRESSURES REQUIRE NEW SOLUTIONS

While the fundamentals of designing and executing architectural and engineering projects don't change much over time, the expectations and demands on a business's bottom line do. A/E firms today face industry changes and market forces that require them to revamp their processes for accounting for the full cost of a project as accurately as possible to boost and sustain long-term profitability.

Replacing outdated manual processes and inflexible legacy ERPs with modern, cloud-based solutions is key to providing project leaders the transparency, efficiency, and accuracy they need to make smarter, more data-driven decisions that maximize productivity and profitability, while enabling greater flexibility to address the changing needs of their business today and into the future.

Contact us today for a free, personalized demo to see how a project-centered ERP helps simplify cost accounting and supports project profitability.

Unanet serves more than 3,600 businesses with its ERP software solutions purpose-built for professional service organizations. Unanet's software helps project-driven organizations reliably plan, track and manage projects, people and financials. Unanet's customer-centric culture means we strive to deliver insights with personal service.

Unanet
ERP AE

ADDRESS
22970 Indian Creek Drive
Suite 200
Dulles, VA 20166

PHONE
Phone: 703 689 9440

ONLINE
Email: info@unanet.com
Web: unanet.com