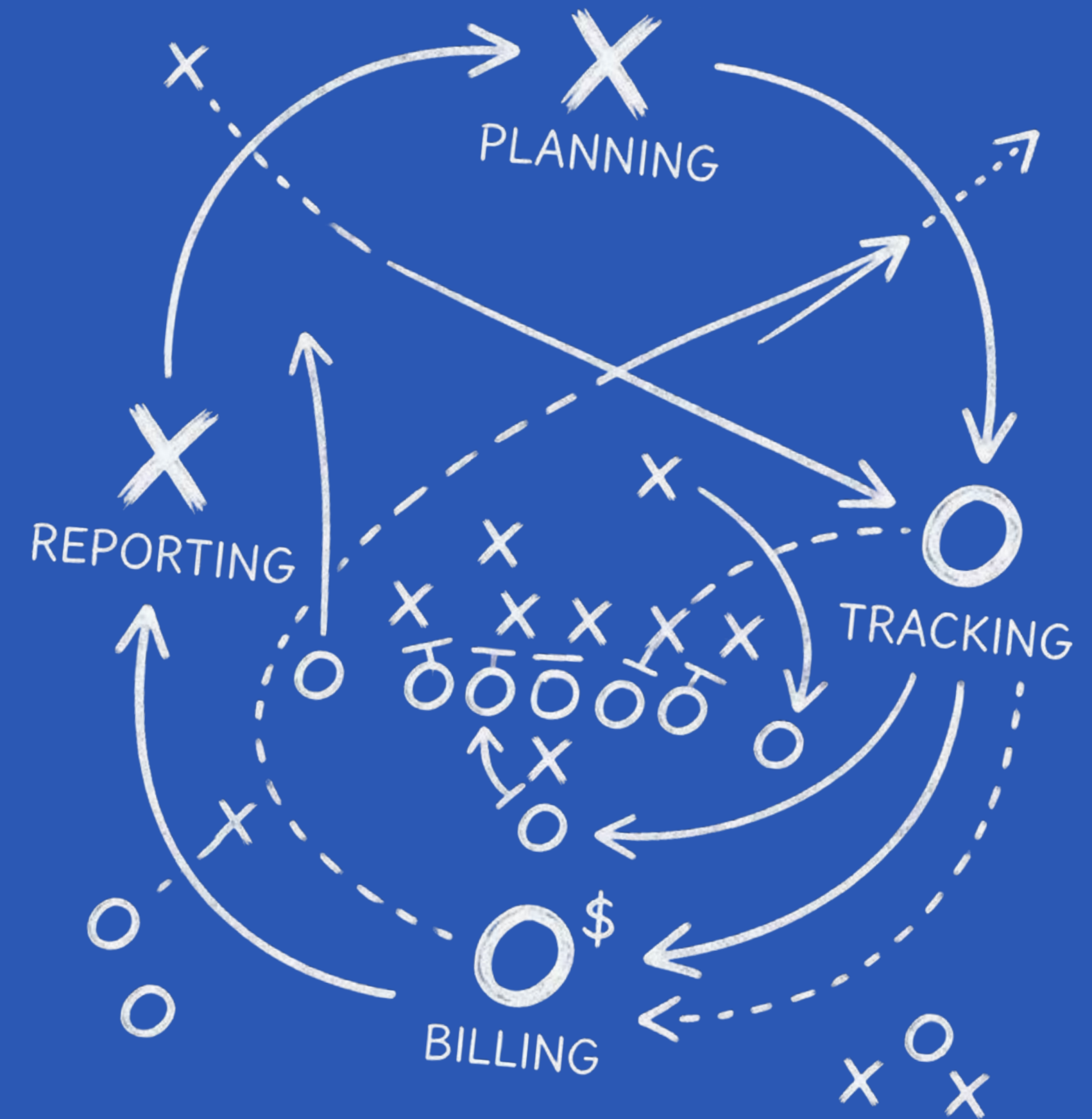


The A&E Project Delivery Playbook

From Proposal to Closeout: A 4-Step Framework to Standardize Workflows, Prevent Scope Creep, and Protect Project Margins.



The Profit Gap in Modern Architecture and Engineering

Most A&E firms don't lose money on bad design. They lose it on bad delivery.

You hire brilliant architects and engineers to solve complex problems. However, to manage the business side of those projects, many firms are still relying on a patchwork of spreadsheets, disconnected apps, and manual data entry.

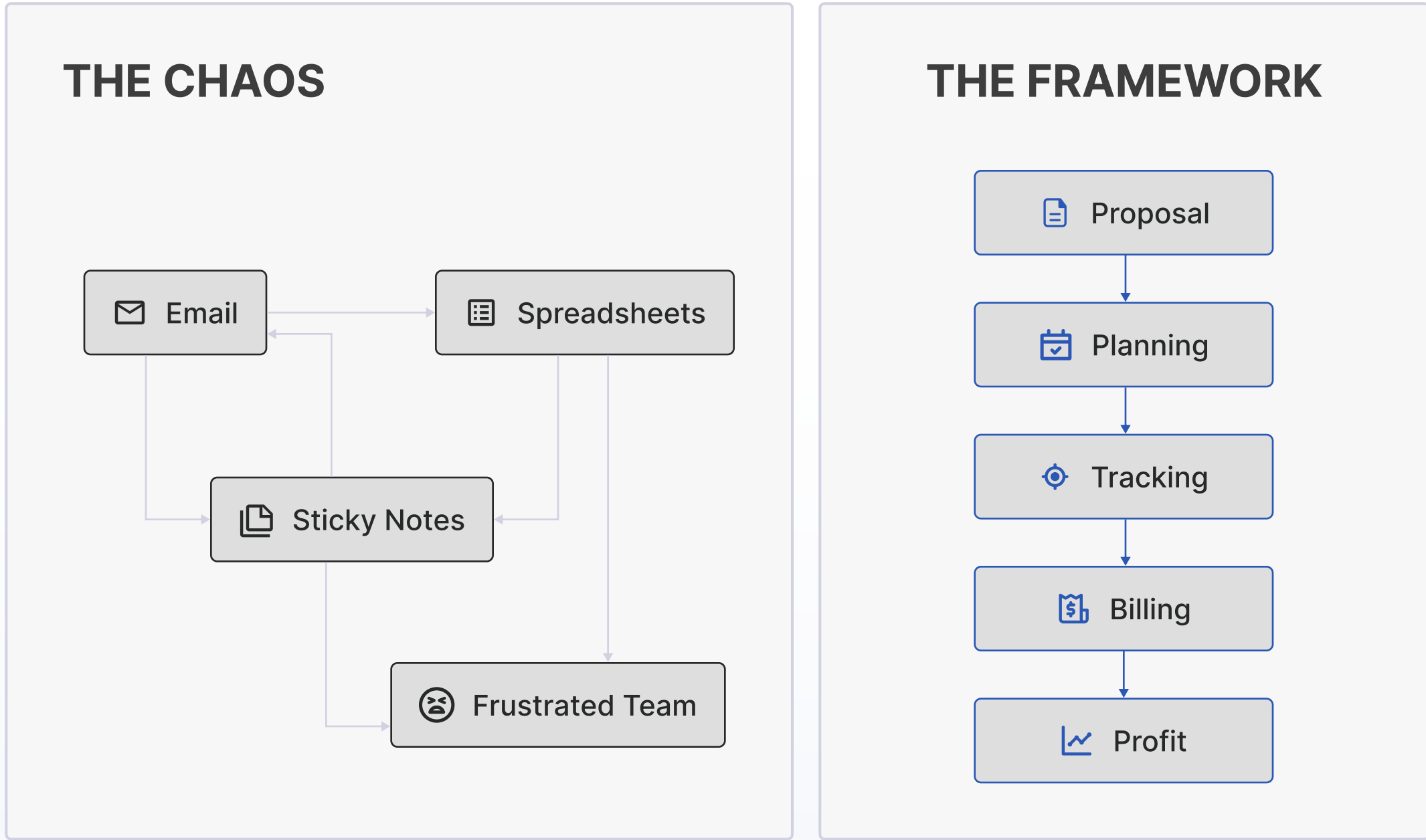
The result is a **profit gap**: the difference between the fee you proposed and the margin you actually keep. It's caused by scope creep that goes untracked, subconsultant invoices that get missed, and invoicing workflows that take days instead of hours.

This playbook is your bridge across that gap.

We analyzed the day-to-day workflows of high-performing A&E firms to create a practical project delivery framework. Rather than prescribing rigid steps, this playbook focuses on best practices for designing efficient workflows across the four core stages of the A&E project lifecycle. Whether you use Factor or not, implementing these practices will help your firm move from reactive firefighting to proactive management.

WHO THIS IS FOR:

This playbook is for A&E firm principals, project managers, and operations leaders at firms with 5–50 employees who are ready to move beyond spreadsheets but don't want the complexity of enterprise software.



The High Cost of the Patchwork Quilt

Why disconnected tools create inconsistency, inaccuracy, and inefficiency.

When your project management system is actually just three different spreadsheets and an email thread, you pay a hidden tax on every project.

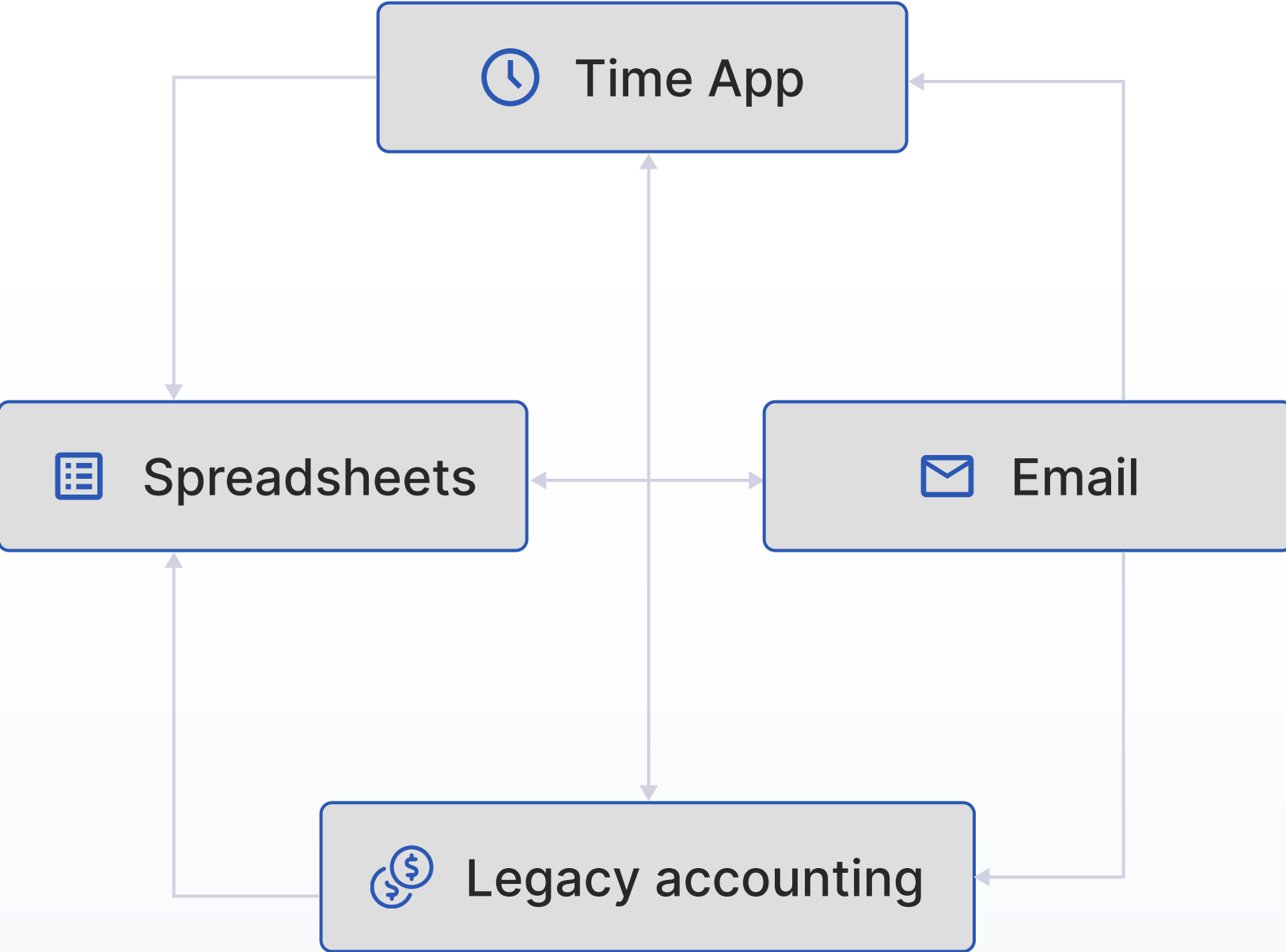
- 1 The tax of inconsistency**

Without a single source of truth, every project manager tracks budgets differently. One uses a complex Excel model; another uses a notebook. Firm leadership has no way to benchmark performance across the portfolio.
- 2 The tax of inaccuracy**

Every time you manually transfer data (moving hours from a time app to an invoice, or expenses from a receipt to a spreadsheet), data slips through the cracks. You end up making hiring and scheduling decisions based on numbers that are weeks old or simply wrong.
- 3 The tax of inefficiency**

Your most expensive talent is wasting billable hours building bridges between systems. They chase down subcontractor invoices via email or manually re-enter time logs, instead of designing or engineering.

PATCHWORK QUILT DIAGRAM



Tangled. Confusing. Expensive.

The Profitability Blind Spot

You can't hit a goal if you don't understand the why behind the numbers.

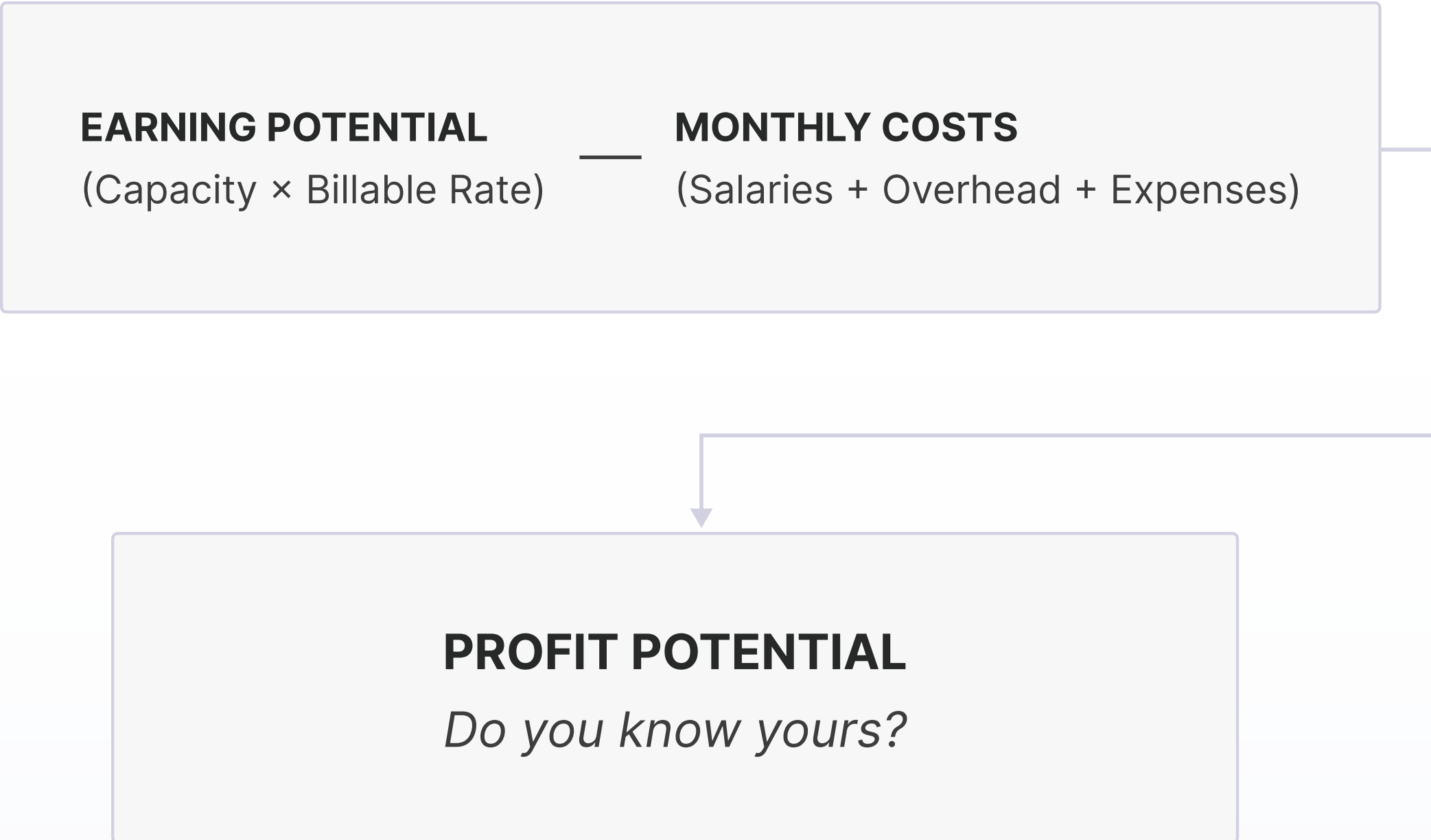
Many firms know their profit goal, but they lack the prerequisite data to calculate their profit potential. When your actual revenue falls short of your target at the end of the month, do you know why?

Without a unified system, you're in the dark. You cannot easily answer:

- i** **Is it a people problem?** Did the team work the scheduled hours?
- i** **Is it a scope problem?** Did we hit a not-to-exceed limit without realizing it?
- i** **Is it a billing problem?** Is the PM afraid to bill the full work in progress because they aren't confident in the data?

THE FIX:
You need a system that links scheduling (what we planned) to time entry (what we did) to invoicing (what we billed).

THE PROFIT LOGIC DIAGRAM



STEP 1 OF 4: PLANNING

Stop Guessing and Start Engineering Your Fees.

The best practice: bottom-up budgeting

Never quote a lump sum fee based solely on construction cost percentages. Instead, calculate your fee from the bottom up:

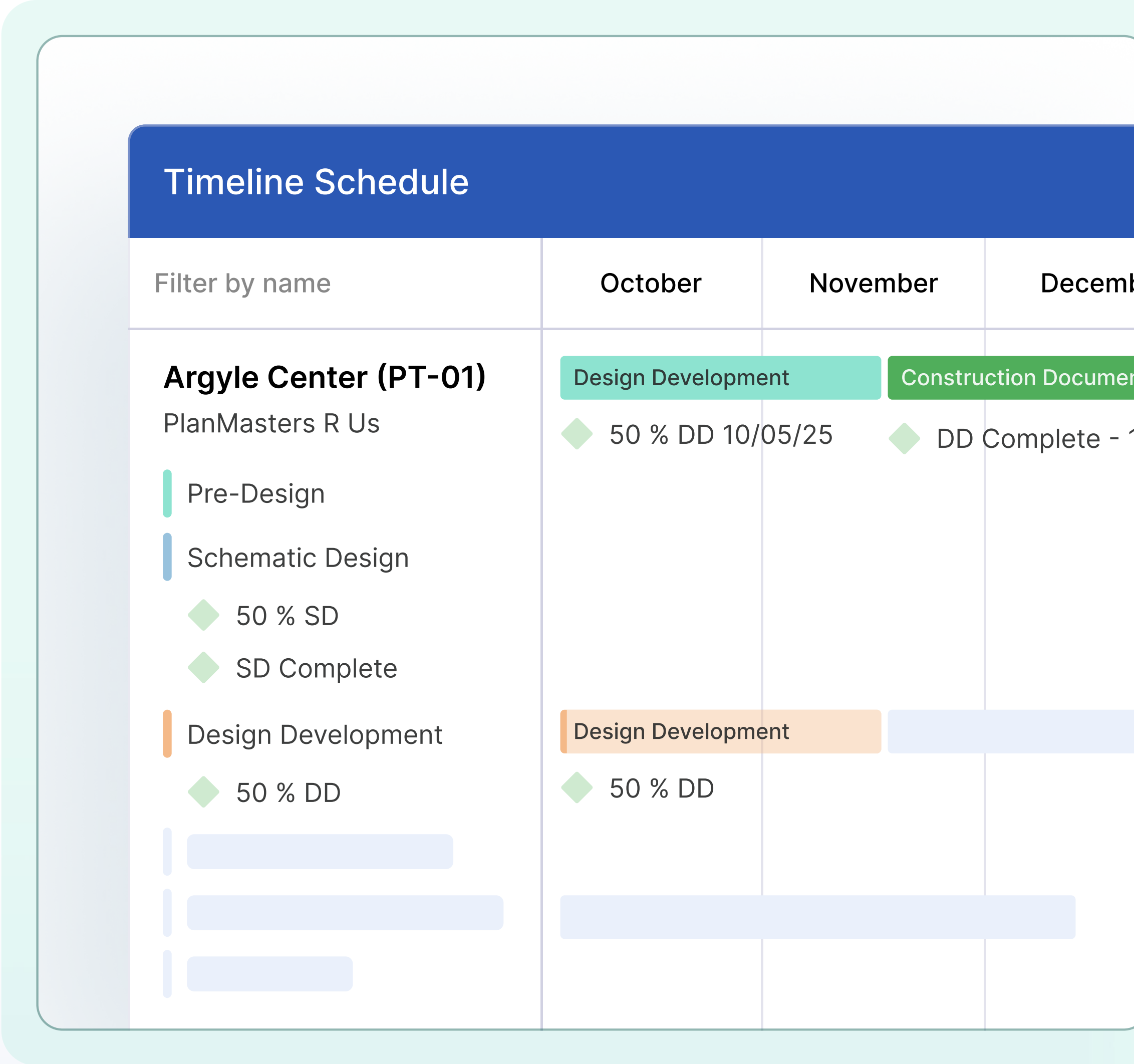
- **Labor Cost:** Hours Required × Cost Rate
- **Overhead:** Your firm's multiplier
- **Profit Target:** Add a standard 20% margin

The strategy: phase blocking

Don't just set a total project budget. You must lock in fee percentages or calculated budgets per phase (SD, DD, CD, CA). This prevents the common trap of borrowing budget from future phases to cover overages in schematic design.

⚡ How Factor Helps

Factor's flexible project setup lets you assign specific dollar amounts or hours to phases and sub-phases. The system tracks budget consumed in real time, so you can always see your exact progress.



STEP 2 OF 4: TRACKING (INTERNAL SCOPE)

Killing Scope Creep Before it Kills Your Margin

The best practice: the decision log

Scope creep often happens in quick email threads. Implement a firm-wide rule: every client request that falls outside the original contract must be tagged as an additional service with a signed change order from the client.

The strategy: the burn rate check

Project managers should not wait for the monthly invoice to check the budget. Review earned value weekly. Compare your percent complete against the budget spent.

If you have spent 50% of the budget but are only 30% complete with the drawings, a crisis is brewing.

⚡ How Factor Helps

Use [The Pulse](#) dashboard to see real-time earned value. It graphs your planned progress against actual spend, so you can spot scope creep weeks before it impacts the invoice.

Timeline Schedule				
Filter by name			October	November
Houndstooth (PT-03) PlanMasters R Us	24%	11.5%	Construction Documents ◆ 50 % CD 02/02/25	
Plaid Plaza (PT-02) PlanMasters R Us	11%	0%	Schematic Design ◆ 50 % CD 02...	
Argyle Center (PT-01) PlanMasters R Us	20%	6.2%	Design Development ◆ 50 % DD 10/05/25	
Pre-Design	64%	50%		
Schematic Design	14%	13.3%		
◆ 50 % SD				
◆ SD Complete				
Design Development	99%	9.17%	Design Development	

STEP 2 OF 4: TRACKING CONT'D (EXTERNAL COSTS)

Mastering the Subconsultant Shuffle

The best practice: pay-when-paid

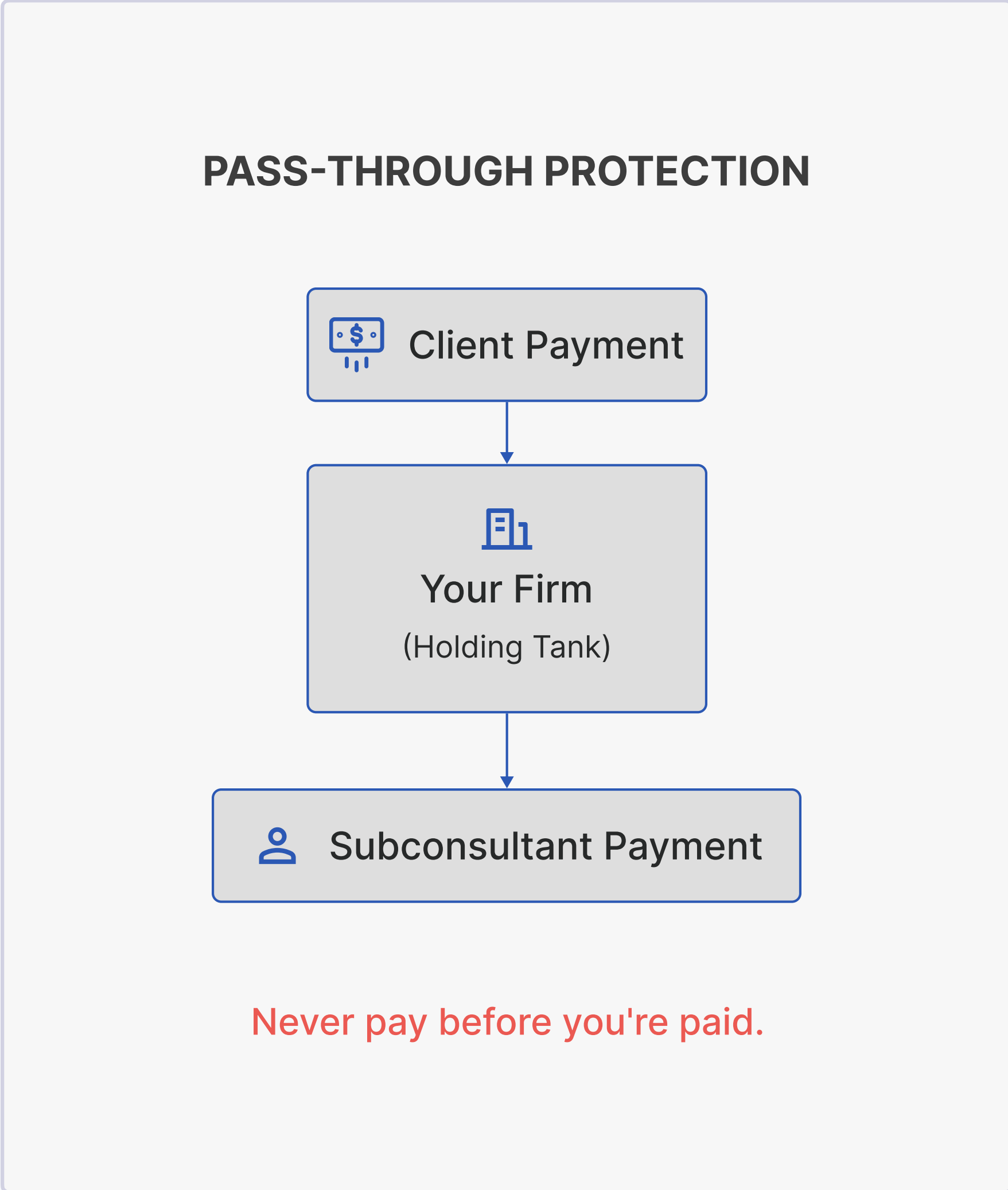
Vicarious liability is a risk, but cash flow risk is immediate. Align your subconsultant payment terms with your client contracts. Ensure your agreements stipulate that subconsultants are paid only after you have received payment from the client.

The strategy: single source of truth

Never mix subconsultant fees with your internal labor budget. Track them in a separate bucket. Require subs to submit percent complete reports weekly, not just when they send an invoice, so you don't get hit with a surprise bill at the end of the month.

⚡ How Factor Helps

Factor's [Subconsultant management](#) tracks exactly what you've been billed by consultants vs. what you've paid out. It keeps these costs distinct from your fee, protecting your cash flow.



STEP 3 OF 4: BILLING & CLOSEOUT

The No-Leakage Closeout

The best practice: the leakage audit.

Firms often rush to archive a project once the final deliverable is sent, leaving money on the table. Before archiving, run a work in progress report to identify:

- Unbilled time entries
- Unbilled expense receipts (printing, travel)
- Outstanding subconsultant invoices

The strategy: simplified invoicing

Stop manually building invoices in Word or Excel. This invites human error and delays. Utilize data-driven templates that extract information directly from your time logs.

⚡ How Factor Helps

Turn time entries into invoices in minutes with guided [invoicing](#) and unlimited, custom template formats. Factor automatically flags unbilled items and syncs everything to QuickBooks, so you never close a project with revenue left behind.

Preparing Invoice

Fixed Fee Sub-Consultant / Budgets

Budget	Amount	Remaining
Civil Engineer	\$55,000.00	\$55,000.00

Fixed Fee Amount(s) to Bill Edit Budget

Info	09/30/2025	Total	Expenses
Fixed fee	\$0.00	\$47,000.00	\$0.00
Hourly	\$0.00	<input style="width: 80%; border: 1px solid #ccc;" type="text"/>	<input style="width: 80%; border: 1px solid #ccc;" type="text"/>
Expenses	\$0.00	<input style="width: 80%; border: 1px solid #ccc;" type="text"/>	<input style="width: 80%; border: 1px solid #ccc;" type="text"/>

STEP 4 OF 4: REPORTING

Turning Project Data into Firm-Wide Intelligence

The best practice: the project post-mortem

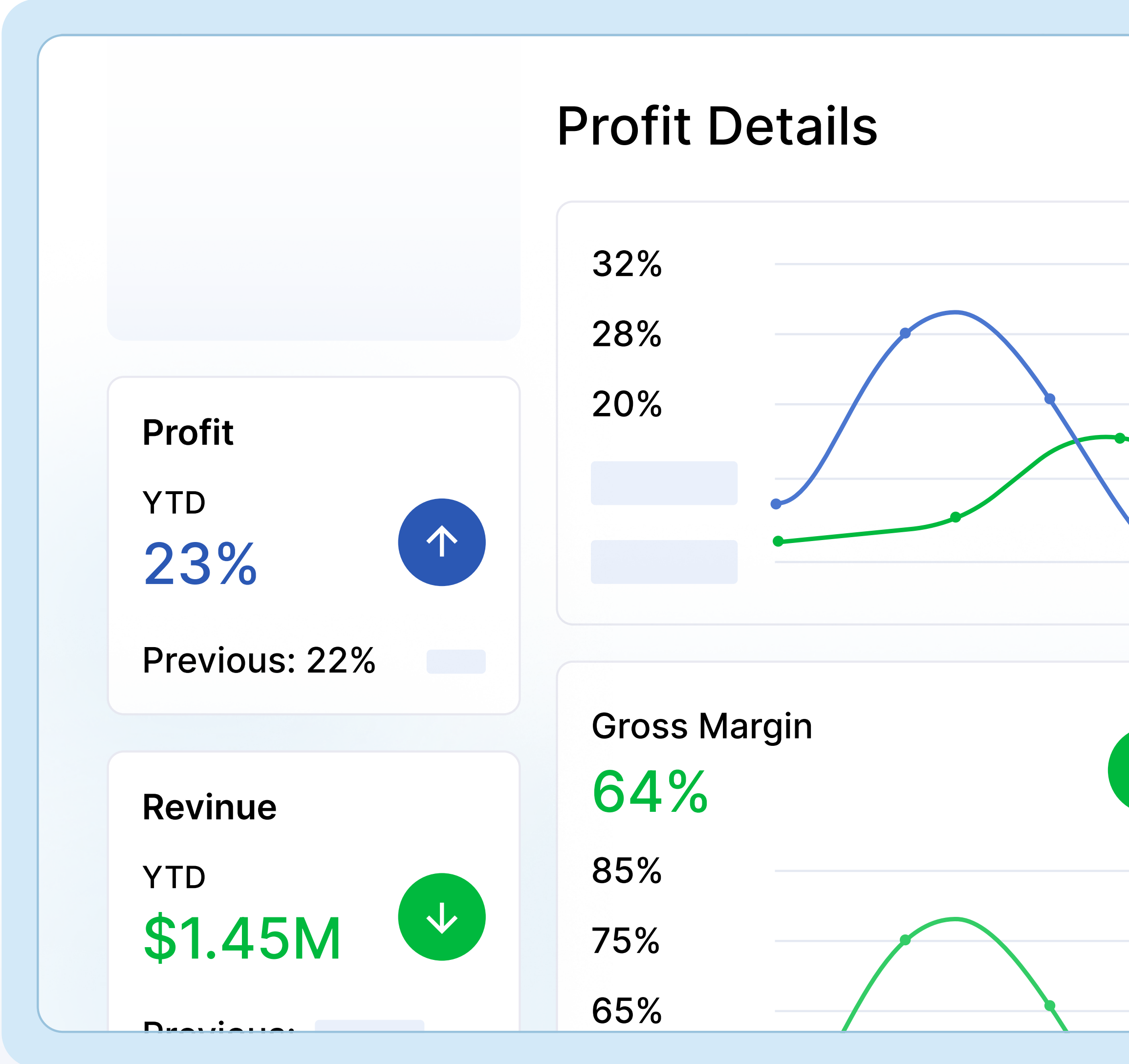
Don't just archive a project when the final deliverable ships. Before closing it out, compare planned to actual hours, fees, and utilization for every phase and role. Document what caused discrepancies so your next proposal can be built with real data, not gut feel.

The strategy: the feedback loop

Make reporting a habit, not just a one-time task at closeout. Evaluate the margin by phase. Review subconsultant delivery against the contracts. Capture what you learned and feed those insights directly into future estimates and staffing decisions.

⚡ How Factor Helps

Factor's reporting tools let you analyze planned amounts against actual performance across hours, fees, and utilization in a single view. Review margin by phase, evaluate team productivity, and ensure every completed project makes the next one more profitable.



How Fusion Design Transformed Their Project Management in Weeks, Not Years

From a legacy system everyone had given up on to a platform the whole team has mastered

The Challenge

Fusion Design had spent years struggling with Deltek Ajera, a legacy tool that was powerful on paper but lacking in practice. The team had essentially resigned themselves to working around the system rather than with it. They couldn't learn it any better, couldn't go any faster with it, and couldn't obtain the data they needed quickly enough.

The Solution

They switched to Factor to unify their project management and billing. Unlike previous software transitions that took several months with constant speed bumps and stops, Fusion Design became more productive the minute they started using Factor.

The Result: A 20-Day Billing Cycle Cut Down to 4 Hours

- The setup time was dramatically shorter than any previous system transition
- Team members mastered Factor in days and weeks rather than the years they spent struggling with legacy software
- The firm now spends far less time managing the tool and more time having the tool serve them

“

Every time we got into something deeper than the demo, it's been, 'Wow, this is great.' We are spending way less time managing the tool and way more time having the tool serve us and allow us to do our jobs better.

— Ken Dixon, COO, Fusion Design



[Read the Full Fusion Design Case Study.](#) →

Diagnosing Your Firm: Pipeline vs. Performance

If you're looking to simplify project delivery and protect your margins, you've probably faced a scenario like this...

The scenario

You review your forecast and see that your scheduled revenue (what you planned to earn) is significantly lower than your target (what you need to earn to stay profitable).

The diagnosis

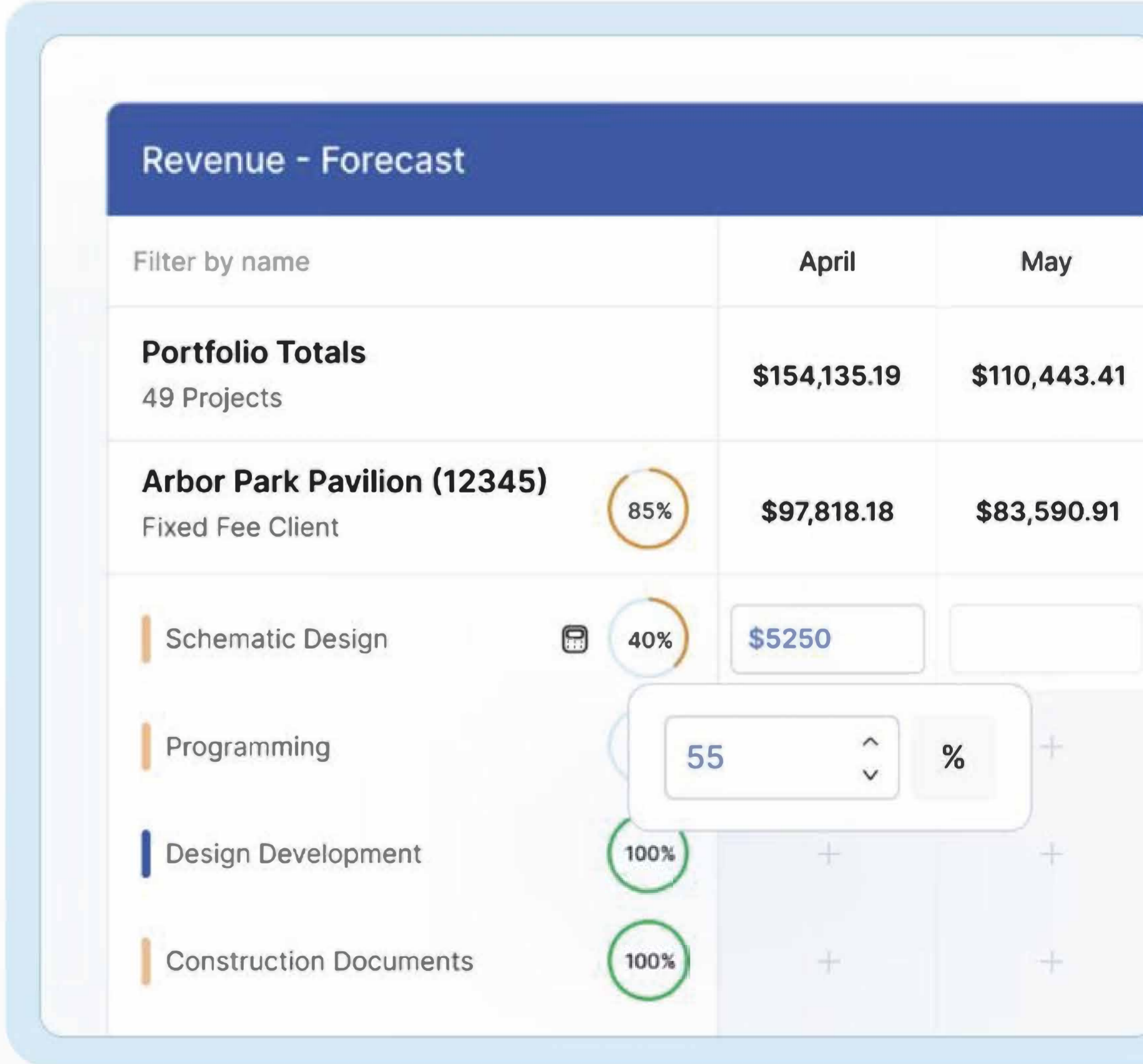
In spreadsheets, this appears as a typical bad month. With Factor, you can instantly see the root cause:

Is it a pipeline problem? You simply don't have enough work scheduled to fill your team's capacity.

Is it a project management problem? You have the work, but PMs aren't assigning tasks to hit the firm's capacity targets.

The fix

Because Factor tracks capacity, utilization, and projected revenue in one place, you can take corrective action (hire staff, chase leads, or adjust scope) before the month ends.



Trusted by 400+ A&E Firms

Run Your Firm on the Platform Built for This Playbook

Project name

Last Invoiced date:

Earned Value for Services

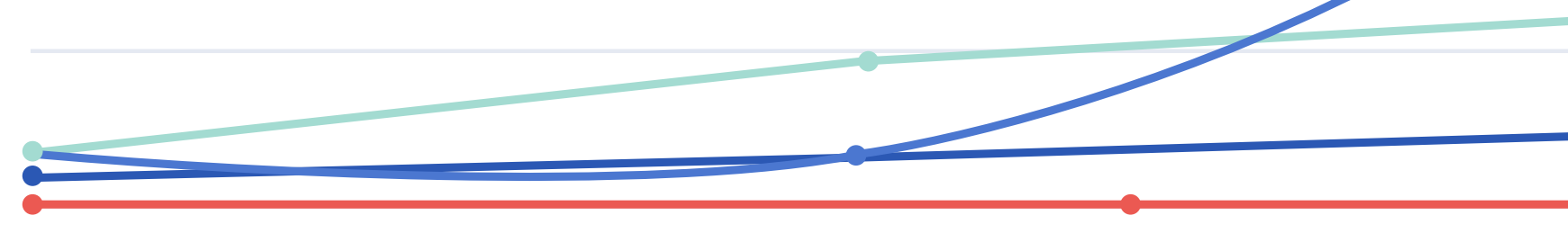
\$60.00K

\$50.00K

\$40.00K

[Redacted]

[Redacted]



Budgeted

\$85,000.00

Logged

\$42,825.00

[Redacted]

[Redacted]

[Redacted]



Flexible Fee Structures

Structure phases exactly how you work



The Pulse Dashboard

See real-time earned value and profitability



Subconsultant Tracking

Protect your cash flow and liability



Customized Invoicing & QuickBooks Integration

Seamless 2-way sync for accurate financials

The Project Delivery Checklist

PHASE 1: PLANNING

- Project scope defined**
Scope is clearly defined, documented, and aligned with the fee
- Phases established**
Project is broken into phases according to tracking and invoicing requirements
- Budgets and timelines assigned**
Budgets and timelines are assigned per phase
- Fee structure confirmed**
Fee structure (fixed fee, hourly, or hybrid) is confirmed and tied to phases
- Subconsultants set up**
Subconsultants are identified, contracted, and set up within project phases (if applicable)
- Work breakdown complete**
Work is broken down by task and delivery milestones when applicable
- Staff scheduled**
Staff is scheduled on the resource schedule according to phase budgets, timelines, and target utilizations
- Firm-level conflicts checked**
Project timelines, milestones, and scheduled hours are compared to other project needs at the firm level
- Success metrics defined**
Budget targets, margin goals, and delivery milestones are defined

PHASE 2: TRACKING

- Time entered consistently**
Time is being entered and tasks are marked complete consistently and accurately
- Hours tracked by phase**
Actual hours are tracked against planned hours by phase
- Percent complete updated**
Percent complete is entered and compared to budget burn weekly
- Scope changes documented**
Scope changes are identified and documented when they occur
- Subconsultant costs tracked**
Subconsultant progress and costs are being tracked alongside internal work
- Project health reviewed**
Project managers review project health in The Pulse and discuss next actions in weekly meetings
- Variances addressed**
Variances are addressed early with corrective actions
- Team has visibility**
Team has visibility into tasks, deadlines, priorities, and remaining effort by phase

The Project Delivery Checklist

PHASE 3: BILLING

- Billing method aligned**
Billing method aligns with contract terms and fee structure
- Hours reviewed before invoicing**
Percent complete and/or billable hours are reviewed and approved before invoicing
- Invoices reflect progress**
Invoices reflect phase progress, approved scope, and any other client requirements
- Subconsultant costs included**
Subconsultant costs are included accurately and on time
- Change orders approved**
Change orders are approved and included on the project as additional services
- Invoices reviewed**
Invoices are reviewed for clarity, accuracy, and consistency before finalized
- Billing on schedule**
Billing is completed on a predictable, repeatable schedule
- AR monitored**
Outstanding invoices and AR are monitored

PHASE 4: REPORTING

- Project close review**
Project financials and overall performance are reviewed at project close: what went well, what didn't?
- Planned vs. actual analyzed**
Planned vs. actual hours, fees, and employee/team utilization are analyzed
- Margin performance evaluated**
Margin performance is evaluated by phase and role
- Scope changes documented**
Initial estimates, scope changes, and their financial impact are documented
- Subconsultant performance reviewed**
Subconsultant performance is reviewed
- Lessons learned captured**
Lessons learned are captured and shared with defined future action plans
- Forecast accuracy reviewed**
Forecast accuracy is reviewed and adjusted for future projects
- Insights fed back**
Insights are fed back into future estimates, planning and staffing decisions

Ready to Deliver Projects More Profitably?

See how Factor helps you implement every step of this playbook, from planning through closeout.

[Get a 15-Minute Product Walkthrough](#) →

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