

BLUE CODING

AN ENGAGEMENT MODEL GUIDE

Who Manages the Work?

How Engineering Leaders Choose Between Staff Augmentation, Dedicated Teams, and Build, Operate, Transfer (BOT)

75%
Of Employers Struggle to Fill Roles

42%
Outsource for Talent, Now Ahead of Cost

70%
Have Brought Some Work Back In-House

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WHAT'S INSIDE

Adding outside engineers is the easy part. The harder question is who directs their work day to day, and who owns the team in the end. This guide walks through staff augmentation, dedicated teams, and Build, Operate, Transfer so you can pick the model that fits your team today and where it is headed.

01 **Three Ways to Work With Outside Engineers**
The three models and why each one exists

02 **Why This Decision Matters More Than Which Vendor You Pick**
Get the structure right before you compare partners

03 **The Real Variable: Who Manages the Work**
Where the management load lands in each model

04 **Staff Augmentation: When It Works and When It Backfires**
Fast capacity for teams with leadership to spare

05 **Dedicated Teams: Continuity Without the Hiring Machine**
A long-term team that keeps its product knowledge

06 **Build, Operate, Transfer: A Team You Eventually Own**
A partner builds and runs it, then hands it over

07 **Questions Before You Choose**
Four questions that point to the right model

08 **Mixing Models: How Mature Engineering Orgs Actually Operate**
Running more than one model with clear owners

09 **Bringing Work In-House: Planned Ownership vs. Pulling Back**
Taking work back without losing momentum

10 **About Blue Coding**
Who we are and how to take the next step

INTRODUCTION

Three Ways to Work With Outside Engineers

Most software teams reach a point where they need more engineering capacity than they have in-house. The question is how to get it. There are three proven ways to work with outside engineers, and picking the wrong one for your situation costs more than money. It costs momentum.



These three approaches are staff augmentation, dedicated teams, and Build, Operate, Transfer (BOT). They are not interchangeable. Each one puts responsibility, control, and long-term ownership in a different place. Before you choose between them, it helps to understand what each one looks like in practice.

Staff augmentation means bringing individual engineers into your existing team, usually through a partner who handles recruiting and employment. The engineers work inside your processes, use your tools, attend your standups, and report to your leads. You stay in the driver's seat. The partner simply finds the people and keeps them on payroll. Think of it as hiring without building a hiring department.

Dedicated teams take that idea one step further. Instead of placing one or two engineers into your structure, the partner assembles a complete, self-contained team: developers, a quality assurance engineer, sometimes a project manager or tech lead. That group works exclusively on your product, often for months or years at a time. You set the direction, but the team has its own rhythm and internal coordination. The result sits somewhere between hiring contractors and acquiring a small studio.

Build, Operate, Transfer works on a different timeline from both. A partner builds a team for you, operates it on your behalf for an agreed period, and then transfers it to you. During the build and operate phases, the partner handles recruiting, employment, payroll, and the operational side of running the team. At the transfer point, the engineers become your employees, along with the processes and knowledge they have built. It is the only one of the three models designed from the start to end with you owning the team outright.

Each model exists because a different kind of problem called for it. Staff augmentation grew from the need to move fast without long hiring cycles. Dedicated teams emerged when companies realized that cycling contractors in and out was destroying institutional knowledge. Build, Operate, Transfer answered a different question: how do you establish a permanent engineering presence in a new market without taking on all the setup risk on day one?

> The conversation has moved past whether to use outside engineering capacity. The real question is which model fits which situation.

THE DECISION

Why This Decision Matters More Than Which Vendor You Pick

Most engineering leaders spend the bulk of their evaluation time comparing vendors: reviewing portfolios, checking references, negotiating rates. That scrutiny is reasonable, but it often comes too late. The structural choice made before the vendor conversation, which engagement model you use, shapes cost, speed, and risk more than any single supplier can.

Think of it this way. A great vendor running the wrong model will still produce the wrong outcomes. A staff augmentation arrangement with a strong partner still puts daily management, knowledge retention, and delivery risk squarely on your team. If your team does not have the bandwidth to absorb that, the vendor's talent quality becomes a secondary concern.

The talent market makes this even more consequential.

75% 75% of employers globally report difficulty filling roles, with IT and data skills ranking among the top three hardest to fill across every region surveyed[1].



When hiring is this difficult, the model you choose determines whether you can reach the skills you need, how quickly, and whether you get to keep them. Staff augmentation is usually the fastest way to add one skilled person to a team. A BOT engagement takes longer to stand up, but it ends with a team that belongs to you.

What organizations want from outside engineering capacity has also shifted.

42%

Access to specialized talent, at 42%, now outranks cost reduction, at 34%, as the primary driver for outsourcing.

70%

That is a significant reversal from 2020, when 70% of organizations cited cost as their main reason[2].

The implication is direct: if your goal is speed to specialized capability, not just a lower hourly rate, then a model optimized purely around cost efficiency may not serve you. You need an engagement structure that gets the right engineers working on your problem fast, with the right accountability sitting in the right place.

Each model carries a different distribution of control, overhead, and commitment. Staff augmentation puts control and day-to-day management with you. Dedicated teams share that responsibility with your partner. Build, Operate, Transfer starts with the partner carrying most of the operational load and hands it to you on a planned schedule. None of these is inherently better. The question is which one matches your organization's actual capacity to manage, how long you need the capability, and whether you want to own it in the end.

Choosing the wrong model does not mean a bad vendor relationship. It means a structurally misaligned one, where expectations, incentives, and accountabilities do not line up, no matter how talented the engineers involved. Getting the model right first is what makes vendor quality matter. The next sections break down exactly how each model works and where it performs best.

The Real Variable: Who Manages the Work

Every engagement model looks similar on a slide deck. You get engineers, they write code, software gets shipped. The real difference sits one layer up: who is responsible for directing that work day to day, and who absorbs the cost when that responsibility is heavier than expected.

That question has a concrete answer for each model, and getting it wrong is expensive in ways that rarely show up on a vendor invoice.

With staff augmentation, the engineers join your team and your team leads manage them. That sounds straightforward until you count the hours.

20–30%

Managing two to three augmented developers can consume 20 to 30% of a senior engineer's week in coordination overhead alone, real capacity that is not building product[3].

Multiply that across several augmented hires and you have quietly removed a significant portion of your most expensive people from the work they were hired to do.

The organizational pressure underneath that math is already building. 71% of engineering leaders say their scope increased in the last 12 months[4]. Staff augmentation, at scale, piles onto managers who are already stretched. The engineers you added may be excellent. The hidden cost is the management bandwidth you consume to absorb them.



Dedicated teams shift that equation. A dedicated team operates as a self-contained unit with its own technical lead and internal coordination. Your side sets direction and reviews outcomes. Day-to-day management stays on the vendor's side of the fence. That boundary is not a convenience feature. It is the structural reason dedicated teams can scale without proportionally loading your internal managers.

Build, Operate, Transfer changes the answer over time. During the build and operate phases, the partner runs recruiting, employment, and the operational side of the team, while your side sets product direction. As the transfer date approaches, management responsibility moves to you deliberately and in stages. After the transfer, the team reports to you like any other internal group. The overhead does not disappear. It arrives on a schedule you agreed to, instead of all at once.

None of these arrangements is inherently better. Each one makes sense depending on how much control you need, how much management capacity you have today, and how much you expect to have later. The mistake most teams make is treating the management question as a detail to sort out after the contract is signed. By then, the structure is set.

> Think of it this way: the delivery model is a management architecture decision first, and a hiring decision second. Choosing the right model means being honest about where your team has genuine capacity to lead, and where it does not yet.

MODEL 1

Staff Augmentation: When It Works and When It Backfires

Staff augmentation is the simplest of the three models to explain: you bring in engineers from an outside partner, those engineers work inside your team, and you manage them the same way you manage your own people. No new management layer. No separate project team. Just additional hands reporting to your existing leads.

That simplicity is the point. When your team already has clear direction, a defined workflow, and enough leadership capacity to absorb new members, augmentation is the fastest way to add skilled engineers without rebuilding your hiring process from scratch.

68% More than 68% of tech companies spend a month or more recruiting a single developer, and one in five new hires has to be replaced anyway[5].

Augmentation sidesteps much of that friction. Gallup estimates that replacing an employee costs between 50% and 200% of annual salary[6]. When a recruitment partner is doing the sourcing and vetting, you avoid the bulk of that exposure.

It also keeps you in control. The augmented engineer joins your Slack channels, attends your standups, uses your tools, and follows your code review process. If your culture and engineering standards are strong, that person integrates quickly and the model works well. The work stays yours. The decisions stay yours.

The backfire scenario is just as clear, even if it is less often discussed up front. Augmentation requires your team to have genuine management capacity available, not just nominal capacity. Every augmented engineer needs onboarding, feedback, code review, and day-to-day direction. If your leads are already stretched, adding headcount does not solve the throughput problem. It creates a new one.



There is also a coordination tax that compounds over time. One augmented engineer adds some overhead. Three or four, spread across two different time zones or two different workstreams, can quietly consume the attention of the people who were supposed to be freed up by the additional help. This is not a failure of the model. It is the model working exactly as designed, in a context where the design does not fit.

The honest diagnostic question is this: do your engineering leads have the bandwidth to actively manage more people, or are they already managing at their ceiling? If the answer is the latter, augmentation will feel slow to deliver and harder to justify than expected. The problem will look like the engineers, but the architecture of the engagement is the real culprit.

> Staff augmentation is a strong model for teams that are well-led, well-organized, and simply need more execution capacity. **It is the wrong model when the bottleneck is leadership, not labor.**

MODEL 2

Dedicated Teams: Continuity Without the Hiring Machine

A dedicated team is a group of engineers hired and managed on your behalf by an external partner, but structured to work exclusively for you, long term, as if they were internal staff. They attend your standups, follow your roadmap, and build institutional knowledge about your product. The difference from staff augmentation is subtle but important: where augmentation fills specific seats in a team you already run, a dedicated team is a self-contained unit that can be handed a product area and left to own it.

This is the most common way companies work with external engineering partners, and for good reason.

61% Dedicated team contracts account for 61% of all outsourcing engagements globally, compared to 28% for time-and-materials arrangements and just 11% for fixed-price contracts[7].

The volume alone tells you something: when engineering leaders have done this before and had time to reflect, this is the structure they keep coming back to.

The reason is continuity. A team that stays together across quarters builds context that no amount of documentation fully replaces. They understand why a particular API was designed the way it was, which technical shortcuts exist, and where the bodies are buried. Rebuilding that understanding every time you rotate contractors is expensive and slow, even when the new contractors are excellent.



Dedicated teams fit best when you have a product or platform that needs sustained engineering effort over a meaningful period of time, typically six months or longer. They also suit situations where you want external capacity without the overhead of full-time recruiting, employment administration, and benefits management in a new geography. You get the depth of an internal team without building the hiring infrastructure to support one.

The tradeoff is that this model requires a real working relationship. A dedicated team is not a service you switch on and ignore. You still need to set direction, prioritize work, and maintain enough communication that the team stays aligned with your business goals. The management burden is lower than with raw staff augmentation, because the team has internal cohesion and, often, a tech lead or delivery manager embedded within it. But it is not zero.

It also takes longer to assemble than a single augmentation hire. Matching a full team, ensuring complementary skills, and running through onboarding means you should expect weeks, not days, before they are fully productive. For teams facing an immediate deadline, that timeline matters.

> Where staff augmentation asks you to lead well, a dedicated team asks you to communicate well. The engineers will carry the execution. Your job is to give them enough clarity about where the product is going that they can make good decisions without a ticket for every judgment call.

MODEL 3

Build, Operate, Transfer: A Team You Eventually Own

Build, Operate, Transfer (BOT) is the model for companies that want a long-term engineering presence in a new region but do not want to work out recruiting, employment, and local operations from scratch. The partner builds the team, runs it while it matures, and then hands it over. You end up with an established, productive team that you own, instead of a vendor relationship you keep renewing.

Each of the three phases does a specific job. In the build phase, the partner recruits engineers to your specifications and sets up the working environment around them. In the operate phase, the partner employs the team and handles payroll, benefits, retention, and daily operations, while the engineers work on your product and your roadmap. In the transfer phase, the engineers move onto your payroll, along with the processes, documentation, and working habits the team built along the way. The timing and terms of that transfer are agreed at the start, not negotiated at the end.



This model fits a specific kind of company. You expect to need the capability for years, not months. You want the engineers to be your own employees eventually, whether for culture, intellectual property, retention, or long-term cost. And you would rather not carry the risk of building a team in a new country before you know how it will perform. BOT lets you prove out the setup while a partner carries the operational weight, then take full control once the team has shown what it can do.

BOT is not new, but the reasons companies choose it have changed. Deloitte describes an early-2000s wave driven by market entry and lower labor costs, and a current wave centered on access to talent and higher-value capabilities[8]. Adoption reflects that shift.

50%

Half of the organizations in Deloitte's 2024 survey have used or are using a BOT model, or its Build, Operate, Transform, Transfer variation, to set up their own global in-house centers, and 71% of those that have not are interested in exploring it[2].

Those figures come from companies building full offshore capability centers, a larger version of the decision than adding one engineering team, but the reasoning is the same: get the talent now, and own it later.

It also solves a problem many engineering leaders run into with other models. A dedicated team builds deep product knowledge, but that knowledge stays tied to the vendor relationship. With BOT, continuity is the whole point. The people who learned your codebase are the same people who stay with it after the transfer.

The tradeoffs are real. BOT asks for a longer commitment than staff augmentation or a dedicated team, and it takes longer to stand up than placing a single engineer. It also requires you to be ready for what comes after the transfer: managing the team directly, handling employment in a new country or through an employer of record, and keeping the people who are now yours. If your company is still unsure whether it needs this capability long term, BOT is probably too big a commitment to start with.

> The honest question before choosing this model is whether you are ready to own a team, not just use one. If the answer is yes, or will be by the end of the operating period, BOT gives you a structured path to get there with less risk than building alone. If the answer is not yet, starting with a dedicated team and revisiting ownership later is often the better sequence.

YOUR DECISION

Questions Before You Choose

Most engineering leaders pick a delivery model based on what feels familiar, or what a vendor happens to be selling. A cleaner approach is to answer four questions honestly before any conversation with a provider. Your answers will point to the right model more reliably than any sales deck.

1 **Question one: Do you want to own this team eventually?**

If the goal is a permanent engineering group on your own payroll, Build, Operate, Transfer is designed for exactly that. If you need capacity but have no plans to bring the engineers in-house, staff augmentation or a dedicated team gives you the skills without the employment commitment. Decide this early. Switching to an ownership model halfway through is harder than starting with one.

2 **Question two: Who will manage the day-to-day work?**

This is the question most teams skip, and it is the one that causes the most pain. Staff augmentation assumes you have a capable internal lead who can direct external engineers the same way they direct your own employees. If that person does not exist, or is already stretched, the model breaks down quickly. A dedicated team comes with its own delivery structure, so the management burden on your side is lighter. Build, Operate, Transfer starts with the partner carrying the operational load and moves it to you over time, so the real question is whether you will have the management capacity at the transfer point, not just today.

3 **Question three: How long does this work last?**

A temporary skills gap on a running team fits staff augmentation. Ongoing product development with no clear end date fits a dedicated team. A capability you expect to need for the foreseeable future, and want to own, fits BOT. Using a short-term model for long-term work leads to repeated re-engagement cycles, lost knowledge, and higher total cost than choosing the right structure from the start.

4 **Question four: What is the cost of getting this wrong?**

A missed deadline on a client-facing product launch carries different consequences than a delayed internal tool. Higher stakes justify more structure. A dedicated team gives you continuity and predictability on critical work. BOT adds long-term ownership on top of that, which matters most when the capability is central to how your product competes. When the risk is low and speed matters, augmentation is often the pragmatic choice.

Once you have answered all four, look at where the answers cluster. Most teams find they fit one model clearly, with one or two edge cases that point toward a hybrid. That is normal. The framework is not meant to produce a perfect answer on the first pass. It is meant to stop you from choosing a model before you understand your own situation well enough to choose wisely.

> If your answers still feel mixed, the next section covers how mature engineering organizations run more than one model at the same time without creating chaos.

IN PRACTICE

Mixing Models: How Mature Engineering Orgs Actually Operate

Most experienced engineering leaders do not pick one delivery model and stick with it. They run two or three at once, each doing a different job. The question is not which model is right, but which combination fits the work you have right now.

A common pattern looks like this: augmented engineers fill specific gaps on the core product team, a dedicated team owns a platform that needs continuity and deep context, and a BOT engagement builds a permanent engineering group that will join the company once it is established. Each layer has a clear owner, a defined scope, and a clear end state. None of them compete for the same oversight bandwidth.

This is not just theory.

80% 80% of executives plan to maintain or increase their investment in third-party outsourcing, yet 70% have also selectively pulled previously outsourced work back in-house[2].



Those two facts sit together comfortably once you accept that the goal is fit, not consistency. The organizations making both moves are adjusting their delivery mix as their product and team evolve, not reversing a failed strategy.

The risk in mixing models is not complexity. It is blurry ownership. When two external teams touch the same codebase without a clear boundary, or when an augmented engineer and a BOT team share a sprint board without a named internal lead, accountability disappears fast. The fix is simple in principle: draw the line before work starts, not after confusion sets in.

A few practices keep blended setups clean. (1) Assign one internal owner per model, not per vendor. That person is responsible for integration points and escalation, so external teams always know who resolves ambiguity. (2) Keep each engagement's success metric distinct. A staff augmentation hire is measured against sprint delivery. A dedicated team is measured against the outcomes of the product area it owns. A BOT team is measured on delivery too,

but also on transfer readiness: retention, documentation, and how well it runs without the partner's support. Mixing those metrics creates noise for everyone.

The results that come from getting this right are meaningful.

93%

In a survey of 360 C-suite leaders, 93% of organizations that outsourced reported a positive experience, pointing to time and cost savings alongside sharper focus on strategic work[9].

That number is high because the organizations in that group had learned, often the hard way, which work to hand out and which to hold.

> Running a blended model is a management discipline, not a procurement strategy. The teams that do it well treat the delivery mix as a live decision they revisit when product priorities shift, not a contract structure they set once and forget. The next section covers the other side of that discipline: deciding which work you want to own, and how to bring it in-house without losing momentum.

OWNERSHIP

Bringing Work In-House: Planned Ownership vs. Pulling Back

Working with external engineers is not a one-way door.

70% 70% of executives have selectively brought previously outsourced work back in-house over the last five years. The top reasons were better control over service quality and performance (68%) and building strategic capabilities in-house (64%)[2].

Those numbers are not a criticism of external delivery models. They show that companies are getting more deliberate about what they want to own.

What matters is whether bringing work in-house is planned or reactive. A reactive move, made because a contract ended badly or friction piled up, usually means rebuilding a team under pressure. A planned move, where ownership is part of the arrangement from day one, is exactly what Build, Operate, Transfer was built for. Deloitte's survey makes the same point: organizations that want an owned center but lack the resources or experience to set one up alone are turning to BOT as their path there[2].

There are genuine cases where insourcing is the right call. If a capability has become central to how your product competes, keeping it at arm's length creates real risk. When the people building a feature have no stake in its long-term performance, institutional knowledge leaks out every time a contract ends. If your external team has become a black box that your engineers can no longer reason about or extend, that is a structural problem, not a staffing one.

Cost is rarely the clean argument it appears to be. Hiring, onboarding, benefits, management overhead, and the time it takes a new internal team to reach full productivity all carry price tags that rarely show up in the initial comparison.

50% By 2027, in most industries 50% more will be spent on IT contractors than internal IT staff, driven by the difficulty organizations face retaining higher-skilled employees[10].

The market for senior engineering talent is not getting easier to navigate from the inside.



A more useful frame than "in-house or external" is: what does this function need to become? Some work genuinely needs to sit inside the organization because it shapes product direction, requires deep customer context, or carries regulatory accountability that cannot be delegated. Other work is better delivered externally because the skill set is narrow, the demand is cyclical, or the pace of hiring would slow you down more than the model itself.

The teams that get this right treat insourcing as a deliberate transition, not an escape hatch. They identify which capabilities they want to own, plan the knowledge transfer before they exit any external arrangement, and give themselves a realistic runway. A BOT engagement builds that runway into the contract from the start. Cutting an external team loose without that groundwork usually means rebuilding under pressure six months later.

> The honest answer is that most mature engineering organizations will always carry some mix of internal staff and external partners. The proportions will shift as the product evolves. What matters is that the shift is intentional, that it is based on where the work is going rather than where it has been, and that the decision is revisited regularly rather than locked in place by inertia or by contract.

ABOUT US

About Blue Coding

Blue Coding has been building nearshore engineering teams from Latin America since 2014. Through our dedicated recruitment team, we help engineering and product leaders scale capacity without building hiring infrastructure from scratch. Our clients span fintech, real estate, e-commerce, and GIS, and other software agencies trust us to extend their own delivery teams when demand outpaces their bench.

The three models this ebook covers, staff augmentation, dedicated teams, and Build, Operate, Transfer, each put management responsibility and long-term ownership in different hands. Blue Coding supports all three.

If you need individual engineers who slot into your existing team, we provide staff augmentation.

If you need a self-contained team that owns a product area over the long run, we build and support dedicated teams.

And if you want a permanent engineering group in Latin America that eventually becomes your own, our BOT model lets us build and run the team first, then transfer it to you on a timeline we agree on together.

We start by understanding your situation and match the structure to it, rather than defaulting to a single offering.



What makes that match reliable is experience and time zone alignment. More than a decade of nearshore placements means we have seen how each engagement model performs under real conditions: shifting priorities, tight timelines, and teams that grow mid-project. Latin American talent works in your hours, not around them, so collaboration stays tight whichever model you choose. And because other agencies bring us in when they need to scale their own delivery, we understand the pressures on both sides of an engineering partnership.

Choosing the wrong engagement model costs time you cannot recover. Getting it right means your team leads what it should lead, your partner carries what it should carry, and ownership ends up where you want it. That clarity is exactly what a good partner should help you reach before a contract is signed.

> Book a call with us to talk through which model fits your team and how we can support you.

SOURCES

1 ManpowerGroup, 2024 Global Talent Shortage Survey, 2024
https://go.manpowergroup.com/hubfs/Talent%20Shortage/Talent%20Shortage%202024/MPG_TS_2024_GLOBAL_Infographic.pdf

2 Deloitte Global Outsourcing Survey 2024, 2024
https://www.deloitte.com/ca/en/services/consulting/perspectives/global-outsourcing-survey-2024.html

3 Scala Teams, Staff Augmentation vs. Dedicated Team vs. Project-Based Outsourcing, 2026
https://www.scalateams.com/blog/staff-augmentation-vs-dedicated-team-vs-project-outsourcing

4 LeadDev Engineering Management Report 2024, 2024
https://leaddev.com/the-engineering-leadership-report-2024

5 Commit 2022 State of Tech Staffing Report, via Business Wire, 2022
https://www.businesswire.com/news/home/20220316005360/en

6 Gallup, This Fixable Problem Costs U.S. Businesses $1 Trillion, 2019
https://www.gallup.com/workplace/247391/fixable-problem-costs-businesses-trillion.aspx

7 Nearshore Business Solutions, Software Development Outsourcing Guide 2026, citing a 2022 industry survey, 2026
https://nearshorebusinesssolutions.com/news/software-development-outsourcing-guide/

8 Deloitte, Today's Wave of Build-Operate-Transfer Models
https://www.deloitte.com/us/en/services/consulting/articles/bot-models.html

9 Wipfli, 2024 Enterprise Outsourcing Trends Report, 2024
https://www.wipfli.com/news/2024/wipfli-releases-2024-enterprise-outsourcing-trends-report

10 Gartner, reported by Computer Weekly, 2024
https://www.computerweekly.com/news/366566714/Gartner-The-big-IT-outsouncing-contract-returns

BLUE CODING

Find the model that fits your team.

Blue Coding builds engineering teams from Latin America through staff augmentation, dedicated teams, and Build, Operate, Transfer, with recruiting, vetting, and employment handled on our side.

Tell us how your team runs today and where you want it to go. We'll help you decide who should manage the work, and who should own it in the end.

Book your call →

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