PLURALSIGHT

Technology Skill Development:

THE STRATEGY FOR BUILDING BETTER TEAMS

Drive innovation and digital transformation with the velocity of a startup

Are you a leader at a rapidly growing or large company committed to embracing new technologies as they emerge? Are you part of a team that wants to be at the forefront of innovation and disruption? Are you looking to meet and adapt to customer demands faster, and with more agility, so you can be the first to market? Is your company concerned about other agile startups gaining market share in your space?

If yes, this playbook is for you.

Especially if you're looking for ways to diversify, build skills and develop talent in-house, and if you recognize:

- Your employees are your number one asset and strategic priority.
- Retaining and developing employees can add to your bottom line.
- Adopting—and maximizing—new technologies is critical to being disruptive.
- Developing internal talent allows you to respond to business and market needs faster than hiring externally does.

This guide is designed to show you how leading companies use Technology Skill Development (TSD) to efficiently build a bigger talent pool of engaged and skilled technologists that drive faster innovation—and how you can apply the same strategy and practices in your organization. This playbook will help you:

Understand the critical need for TSD by giving you a deep dive into the direct impact it has on your organization's ability to stay competitive and reach goals.

Implement TSD tailored to your org by detailing the components of a successful program and identifying the key players, tools and milestones that will engage your teams with continual upskilling.

Make TSD your competitive advantage by showing you which levers to pull in order to optimize skill development across your org while avoiding the potential barriers to success.

Measure the impact of TSD by discovering the metrics that will indicate progress, efficiencies and insights gained across each initiative.

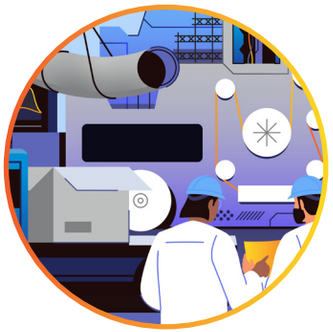
"The pace of change is phenomenal. 'This is the fastest that change has ever been, and it will never be this slow again,' is something we say to our teams day in and day out."

Anwen Owen, Head of UK Public Sector Delivery, Digital Transformation Services, Fujitsu

Table of contents

PAGES 4-17

Section 1.
Understand the critical need for Technology Skill Development



PAGES 18-37

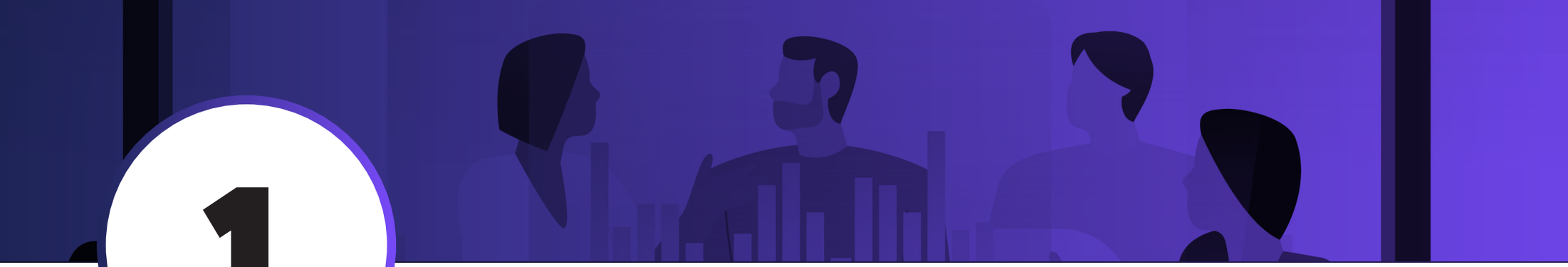
Section 2.
Implement Technology Skill Development tailored to your org

PAGES 38-50

Section 3.
Make Technology Skill Development your competitive advantage

PAGES 51-55

Section 4.
Measure the impact of your Technology Skill Development



1

Understand the critical need for Technology Skill Development

Discover how the limitations of traditional training may be holding your organization back from the bottom-line benefits of greater skill agility.

"When we look at talent in Silicon Valley, we know there's a war for talent. So how do we take the talent that we have and evolve them so they can learn these new skills?"

Kathy Chou, Vice President, R&D Operations, VMware

What is Technology Skill Development?

Technology Skill Development (TSD) is the most efficient strategy for developing the technology skills your organization needs to drive business outcomes—with confidence and predictability, with less effort and in less time.

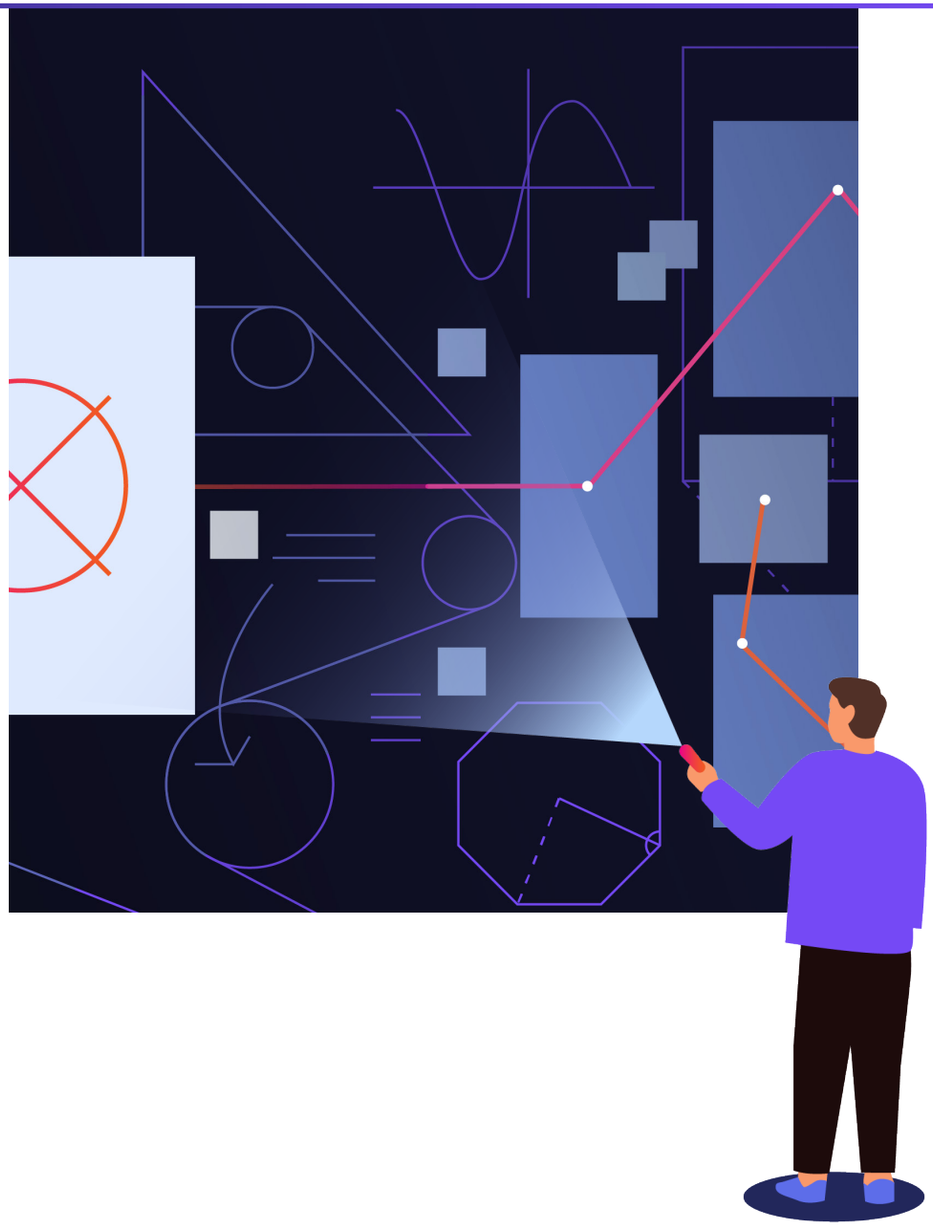
An organization's ability to regularly and repeatedly build technology skills through individualized upskilling, reskilling and onboarding drives competitive advantage. TSD focuses specifically on helping organizations build the required technology skills so you can maintain the velocity to innovate and disrupt the market.

TSD is not like traditional, company-wide required Human Resources (HR) and Learning and Development (L&D) programs, which often deliver one-size-fits-all training. TSD provides personalized upskilling, which is much more efficient and effective.

Unlike traditional training, which is siloed from business objectives or is a one-and-done course or curriculum, TSD is:

- A strategy that fuels continuous and intentional upskilling
- A personalized and guided training experience that's scalable
- Budget-friendly and cost-efficient
- Measured and optimized
- Aligned with business goals

Based on ongoing assessment of skills, TSD determines individual learner (technologist and engineer) needs and skill gaps, then recommends the best way to dispense the right resources at the right time in order to close those gaps. TSD helps your organization better align learning paths based on your departmental and team needs.



The companies winning are the companies investing in upskilling

The most innovative and disruptive companies already understand the value of upskilling.

Amazon recently invested **$700 million** in upskilling.[1] And Google is pushing the needle even further with a **$1 billion** upskilling fund.[2] These companies are investing heavily in upskilling because they understand it delivers a powerful ROI.

Upskilling your tech teams allows your organization to:

Build faster and more innovative products

You can't ship innovative products and features faster—agile or not—if your technologists are using outdated language and programming skills. This is why **70%** of tech leaders, directors and C-levels believe success in the next three years depends on their ability to use technology to drive business outcomes and on having the right people with the right skills to deliver innovations to market faster. [3]

Retain top talent

One of the top reasons technologists seek new opportunities is for growth. In fact, employees who don't believe they can achieve their career goals are **12x** more likely to consider leaving.[4]

Close the skills gap

In a McKinsey Global Survey on future workforce needs, nearly **9 in 10** executives and managers say their organizations either already face skill gaps or expect gaps to develop within the next five years.[5] Data from a Pluralsight report supports this assessment, noting that **54%** of organizations feel their tech skills approach is unstructured, one-size-fits-all or reactive.[6]

Empower employees and grow the bottom line

The Pluralsight State of Upskilling report shows that technologists want to develop their skills. They simply lack opportunities to do so. By giving your employees the ability to upskill and reskill, you empower them to grow their careers and increase their desire to stick around. You also add **12%** to your bottom line.[7]

Gain the competitive advantage

Investing in upskilling and reskilling will put your organization ahead of the pack when it comes to having the right skills at the right time. Currently, only half of organizations provide their teams with in-person or online learning upskilling opportunities.[8] When it comes to a formal upskilling program, **67%** of organizations say they are either working on implementing one (**21%**), don't have one (**38%**) or don't know if they have one (**8%**).[9]

How companies are winning with TSD

An organization's aspirations for where it wants to be in 3-5 years hinges on having the roles and skill sets required to fast-track the journey.

TSD helps organizations get to market faster, improve customer satisfaction, boost employee engagement and increase bottom-line revenue. We've found this to be true for any organization we've worked with, whether they're a multi-billion dollar company or a small startup. At the end of the day, every organization is trying to be the fastest to market, the easiest to do business with and the most profitable to investors—and TSD helps companies do that.

Here are a few of the successes our customers have experienced by using TSD to reach their most important KPIs:

1-800 Contacts: Upskilling to disrupt vision care

While 1-800 Contacts has spent 25 years working to make vision care simple and affordable, they also want to be innovative and build first-to-market vision technologies. But they had a tech talent shortage. Discovering that many of their IT gurus had started in the call center, the company decided to foster more homegrown tech talent. 1-800 Contacts created a formalized path from the call center to a career in technology called CTAC University, a skills bootcamp powered by Pluralsight. The company's recent telehealth product, ExpressExam, which allows customers to renew vision prescriptions online, "at home, in your sweatpants, without talking to anybody," is just one example of how upskilling has enabled them to further disrupt the market.

"I see that our relationship with Pluralsight will just continue to evolve. We see tremendous benefits from having this pipeline of talent of people who are really, really passionate about the business and about making sure the business succeeds."
—**Amy Larson,** Chief Technology Officer, 1-800 Contacts

The Home Depot: Empowering and engaging employees

Behind the scenes of this home improvement retailer is a massive organization powered by technology. To stay competitive, The Home Depot needed in-house software engineers, security experts, UX pros, merchandising and data scientists who could innovate on behalf of their customers and colleagues.

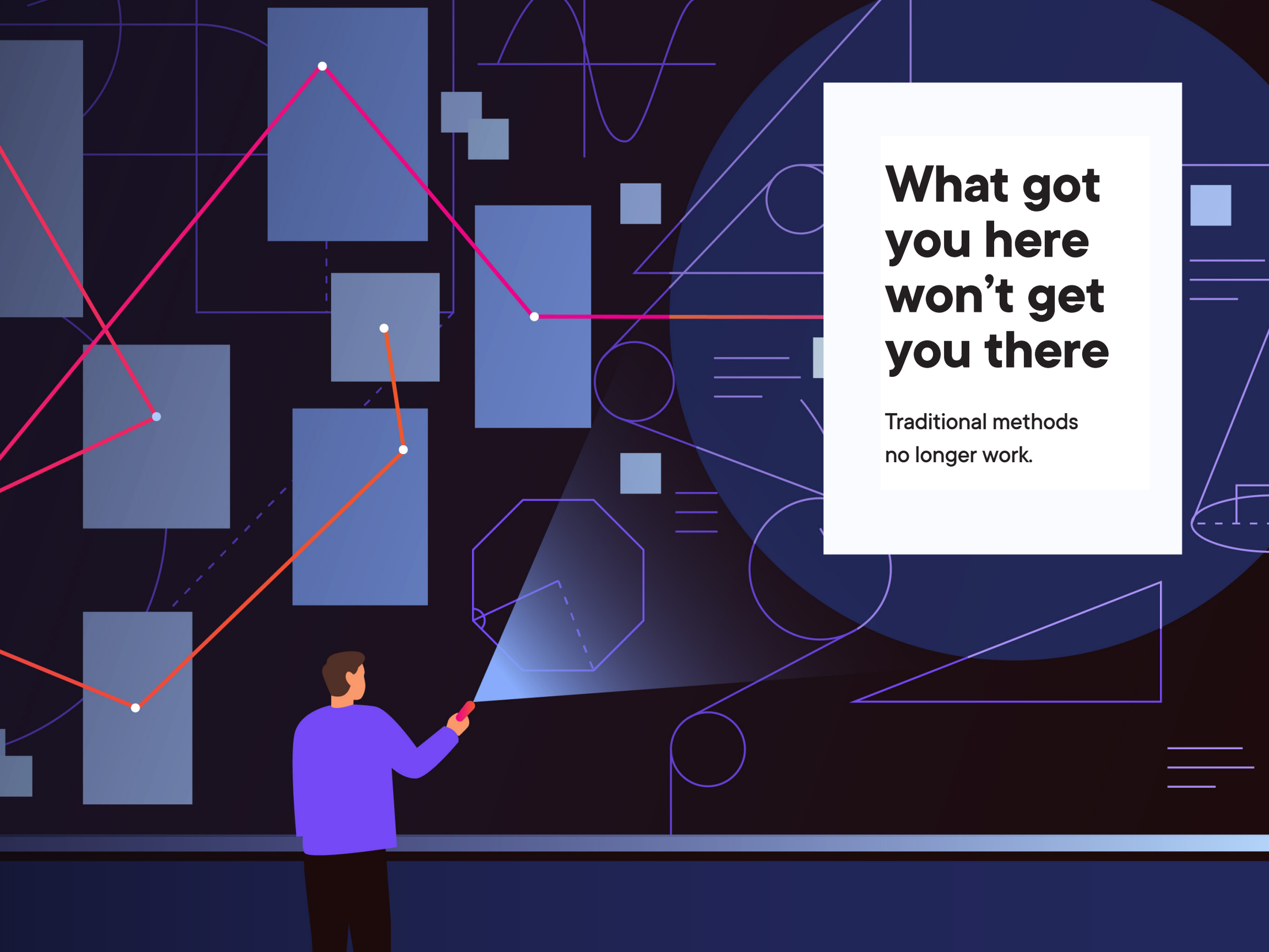
The Home Depot has created a pipeline of tech talent by rolling out an immersive skills bootcamp dubbed "OrangeMethod," with each of its cohorts upleveling from hourly associates to salaried technologists.

"Orange Method and Pluralsight have empowered me, which helps customers. They're trying to get back to their work site or the project they're working on. To not have our technology impeding that process is crucial."
—**Jennifer Oberstadt,** Cashier turned Engineer, The Home Depot

Acxiom: Building and releasing products faster

Acxiom, which offers data connectivity services, is a complex business. Their work encompasses everything from selling data to clients and enhancing data to implementing full-blown marketing stacks and ecosystems. Acxiom needed a skills strategy that would allow them to move as quickly as the companies they serve.

"Pluralsight has opened up opportunities to bring on new clients who were thirsty for Acxiom, thirsty for what we do, but because we weren't in a particular cloud or because we didn't have a particular speed to bring data to use or to activate data, we couldn't have gotten those clients. Now we can."
—**John Riewerts,** Senior Director of Engineering, Acxiom



What got you here won’t get you there

Traditional methods no longer work.

Informal learning doesn’t track to business goals

Informal, ad hoc learning often doesn’t closely align with your business goals. You may have employees put a lot of time and effort into learning new skills by visiting sites like YouTube or MOOCs, but what you get in return is:

Inconsistent quality

The quality of content from most online course creators, who rely on different instructors and independent uploaders, is often inconsistent since they lack a deep vetting process. There’s no way to know if a course is any good until your team takes it, and the instructors may or may not cover all the content or have the appropriate expertise. Even then, it doesn’t mean that the next course will meet those same standards.

Content-focused, not application-focused, learning

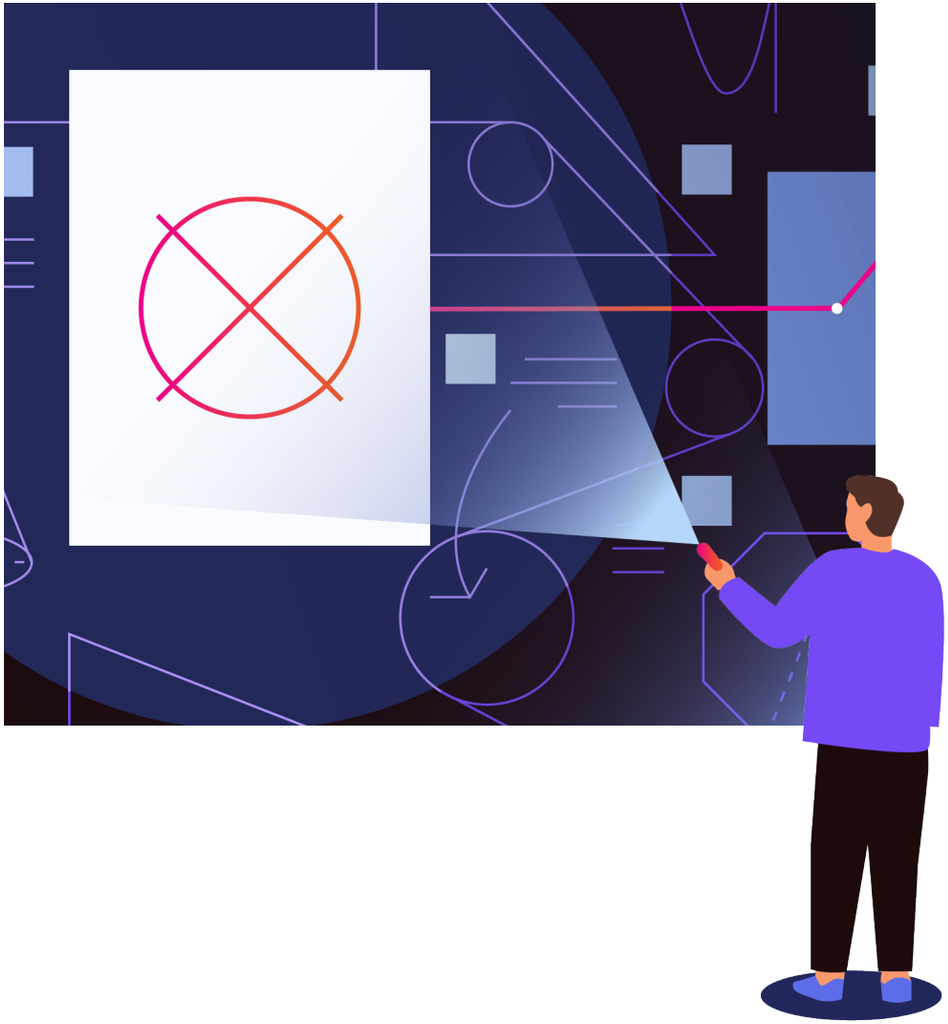
Informal learning can surface content focused on the skill your team needs to learn. However, there is no focus on applying what they’ve learned or assessing their proficiency in that technology, which means you still won’t know if they’ve mastered the requisite skills.

Lack of curated content

For most online training, there is no way to curate useful, tried and tested content for engineers, other than manually. Even if you put in the time and effort to track useful content, there’s no guarantee that the content will be there 3 or 6 months later for your team to access, as the uploader (not the platform) controls whether to make the course available or not.

Lack of business-led goal setting

With ad hoc learning, no one is running the show. Engineers and technologists are largely identifying the courses they feel are relevant and wasting time to determine that. Managers might say yes or no to those courses, but there is no centralized view of the courses employees are taking and no way to track whether those skills are relevant to the organization’s business goals.



In-class training alone may not support skill agility

Virtual or in-person instructor-led training is frequently part of a well-designed Technology Skill Development strategy. However, here are issues to watch for:

One-size-fits-all approaches

Some course providers use a single curriculum for everyone and every business, which is ineffective and inefficient. If you use instructor-led training, you want to tailor it to your tech stack, team culture and business goals.

Disruption

Managers want their teams solving problems for the business, and they may feel it's hard to justify time away for classroom learning. When considering instructor-led training, opt for cases where it can boost velocity, shorten time to full productivity, build team cohesiveness or produce another important business outcome. Use it strategically and in combination with self-paced resources.

Return on investment

When you add up the cost of paying the trainer, purchasing training materials and employees' time away from work, in-class training may seem more expensive than other upskilling options. Many companies, however, view instructor-led training as a way to get products to market faster and expand market share, while boosting employee engagement and retention. It's vital to do a cost-benefit analysis before selecting your training mix to determine what's going to deliver the best ROI.

Failure to stick

Studies on the Ebbinghaus Forgetting Curve show that, if new information isn't applied, a person forgets about 75% of what they learn after just six days. [10] To ensure knowledge retention, technologists need opportunities to practice their new skills in ways that mirror the specific tasks they'll be doing on the job. This is true for both instructor-led and self-paced courses.

Skill assessments are often static, costly and unobjective

Measuring and indexing skills is critical to Technology Skill Development. Many of the methods for assessing skills today are time-consuming and often don't provide enough context to be useful. This leaves organizations struggling with:

A lack of clarity around what assessment is best

Different types of skill assessments—and there are many—measure different soft and technical skills. The type of assessment that you choose depends on the role you're interested in. For an organization, this can get costly and complicated as you must purchase skill assessments by role, which can mean you need different skill assessment tools for each team.

A high time and labor investment

Many technology skill assessments take a long time to complete because they typically have hundreds of questions for a person to answer in order to prove they've reached a certain proficiency level. Taking this much time away from work just to assess skills interrupts productivity.

On the flip side, some assessment providers only measure retention of knowledge from a course vs. true skill proficiency, and this comes with its own set of problems. Someone can excel at taking tests and answering questions correctly without being able to apply the skill.

Little insight into how to improve skills

Many assessments can tell you your team's proficiency levels, but little else. They don't provide insight into the specific content they should consume next, only the category of content, such as beginner or advanced. This leaves your engineer and manager responsible for finding content based on your engineer's proficiency score.

No dynamic way to assess skills

Skill assessments are often static. This means they can't be used to reassess your team's skill proficiency too often or else they will remember the right answers, making the assessment no longer an objective test of their skills. And because technology is always changing, your team's relative knowledge of technology is always changing. Unfortunately, static scores (or certifications) don't communicate those changes.

Traditional skill development myths

If your organization is still holding on to the belief that it doesn't "need" Technology Skill Development and that traditional training is good enough, these common misperceptions could be why.

Myth	Busted
With the right budget, you can easily hire cybersecurity talent	Cybersecurity has taken the lead as being the most difficult role for IT leaders to fill, according to CIO.[11] But even if you have the budget to lure in top security talent, the complexities and varying regulations for each industry will almost assuredly mean that some training and reskilling are necessary.
There are plenty of out-of-the-box full-stack developers	There is no ready-made software engineer. An engineer doesn't graduate ready to program anything. An engineer graduates ready to learn anything. In fact, **51%** of newer technologists know only one or no programming languages.[12]
Any developer can pick up on any other developer's code	Writing code is like writing music—you may be able to read what someone else wrote, but adding to or attempting to improve it (or fix it) requires an incredible level of mastery.
Employees know what skills they need	It's true that engineers and technologists upskill on their own, with or without a strategy. But no strategy means the upskilling resources that they turn to may or may not align with your organizational priorities.
It's more cost-effective and efficient to acquire new skills as needed	Learning on an as-needed and often urgent basis is known as hostage training. It's like learning on a hamster wheel, where your team is always racing to keep up with leader and project requests. The companies taking this approach will get left behind, as they won't be able to capture the skill shifts in the market.
Skill assessments are "too strict"	With the right framing, engineers and technologists come to appreciate the value of knowing where they benchmark on a particular skill. Clarity in skill proficiency helps them strive toward building the skills they want and using that point of reference to set their own career goals.
Hiring a consultant can fix everything	Many organizations tasked with conducting skill inventories and building skill programs outsource it. This is not only a costly endeavor, but it also doesn't solve for skills long-term. With how fast technology changes, you need a repeatable program and a skill platform that is consistently publishing new content and offers dynamic assessments.

A new way to level up your teams

Technology changes too quickly to rely solely on external hiring, outdated training models and point-in-time, instructor-led events. The Fourth Industrial Revolution demands continuous iteration, agility and the opportunity to learn in the flow of work.

To succeed in workforce transformation, companies must be able to keep pace. They must be able to increase production efficiency by embracing new and emerging technologies. They must also have the agility and capability to expand into new markets and compete effectively in a global marketplace that is increasingly made up of digital natives.

L&D teams are upskilling and reskilling employees as quickly and effectively as possible to keep up with this rapid pace of change. And many are already in the process of digitally transforming their L&D strategies and tooling. Yet, with these measures, organizations are challenged to keep up. This is true of their technologists too.

Companies need to transform the skills of their workforce through upskilling and reskilling. They must be able to do this in a reliable and productive manner that ensures they are training their technologists to develop the right skills at the right time to meet key business goals.

L&D remains crucial in helping to upskill and reskill employees. Making the transition from the old ways of training to new methods that are far more effective requires a strong business partnership between technology leaders and L&D—as well as other departments such as Product, Design and Marketing—and the right tools and strategy to get the job done more efficiently.

The risks of delaying or failing to implement TSD

Companies that wait to invest in upskilling their employees are taking a big gamble. Unfortunately, the gamble is unlikely to pay off.

If you roll the dice and decide to stick with less dynamic and more traditional methods of training, you'll be facing the same risks as most organizations:

92%

of organizations see an inability to define the new skills or capabilities needed in the near future as a significant risk.[13]

80%

of organizations see business leaders and HR teams that can't work effectively together to manage talent as a risk.[14]

72%

of organizations say they can't make effective decisions about how to close the skills gap.[15]

The cost of not implementing TSD

Sticking with the status quo limits your ability to cultivate talent and can significantly impact your bottom line. Without clarity on the technology skills you have in-house, you cannot chart out a path to identify and fill skill gaps.

Hiring vs. upskilling: $52,500 vs. $1,286 per employee

Without TSD, your default becomes to hire out—which is costly both in money and morale. You pay higher salaries and must endure the time and costs of onboarding. Meanwhile, existing employees feel overlooked, and word may spread that your organization has a "no promoting from within" culture, which is the last thing you want a highly talented prospective engineer to see on Glassdoor.

The Society for Human Research Management (SHRM) estimates that replacing an employee can cost as much as **50%-60%** of their annual salary, which is an average of **$105,000** or more for a technologist. [16] This means hiring new talent could cost **$52,500** at the low end. However, the average cost of upskilling or reskilling an employee is only about **$1,286** per employee, with the average spanning from **$829** to **$1,886** per employee depending on the size of your organization and your skill needs.[17]

Traditional training: $19.7 million

When you invest in traditional training (informal or structured), outside of TSD, there's a high cost in paying for tools, instructors, materials and disruption to work. TSD, which not only provides more targeted and relevant training, is more cost effective and less disruptive.

The average annual training expenditure for large companies is **$19.7 million**.[18]

Training without a roadmap: 75% loss of investment

Lack of skill metrics or ability to identify knowledge gaps can cause organizations to waste money and valuable technologist time by forcing employees to take irrelevant training.

According to a McKinsey study, only **25%** of respondents found that training improved employees' performance.[19]

$52.5K

Average cost to hire new technologist

$19.7M

Average annual training expenditure for large companies

75%

Loss of investment with training without a roadmap

Why your organization needs TSD

To compete where talent is limited and the skills gap is wide, you need Technology Skill Development to provide the momentum, confidence and predictability to execute on company goals. This doesn't start by hiring new technologists; it starts with upskilling and reskilling the talent you have.

The competition for tech talent is fierce

According to Gartner, **90%** or more of S&P organizations are recruiting for the same 39 roles, which make up almost half (49%) of all job postings. Many of these roles require in-demand and expensive-to-buy skills, critical to digital business.[20] This makes it either very expensive or very unlikely for you to hire what little talent is out there.

The skill sets you need don't exist or are hard to find

Organizations are struggling to hire quality talent, as only **16%** of new hires possess the needed skills for both their current role and the future, according to Gartner, Inc.[21] Upskilling and reskilling is the best—and often only—way to keep your employees' skills in line with the pace of change today.

In a post-pandemic world, you'll need even more tech skills to adapt

COVID has put digital transformation, and the skills needed to support it, on hyper-growth. In a survey from Twilio, **97%** of companies say they've sped up their transformation.[22] However, only **31%** of companies say they have the skills to adapt to the post-COVID-19 world.[23]

Hiring to fill the talent gap is costly

66% of CFOs agree that the cost of people is outpacing productivity gains.[24] This is especially true when salaries average around $180,000 for experienced tech talent.

It's less costly to reskill than to hire new talent

The Society for Human Research Management (SHRM) estimates that replacing an employee can cost as much as **50% to 60%** of their annual salary. However, the average cost of upskilling or reskilling is about **$1,208** per employee.[25]

Searching for talent wastes time and slows speed to market

According to IDC, **90%** of organizations will have to delay product or service releases due to a lack of IT skills.[26] This amounts to **$775 billion** in lost revenue for those unable to keep up with the pace of change.[27]

2

Implement Technology Skill Development tailored to your org

The most efficient and effective way to upskill technologists and give your organization a competitive advantage.

"It's about getting concepts and ideas to market quickly. In the past, we could have taken years... Now—literally in weeks—our business is asking for features that they believe will meet customers' needs."

Barbara Sanders, Vice President and Chief Architect, The Home Depot

Start upskilling more efficiently and effectively

TSD has a series of connected processes. When applied correctly to each technology initiative, like a system of levers and pulleys, it helps you upskill your teams with less effort and see greater positive results.

TSD springs from Agile methodologies. It gives companies a competitive advantage by finding the fastest and most efficient ways to increase skill proficiency that align with business priorities and integrate with existing project management methodologies practiced by technology teams, specifically software development teams.

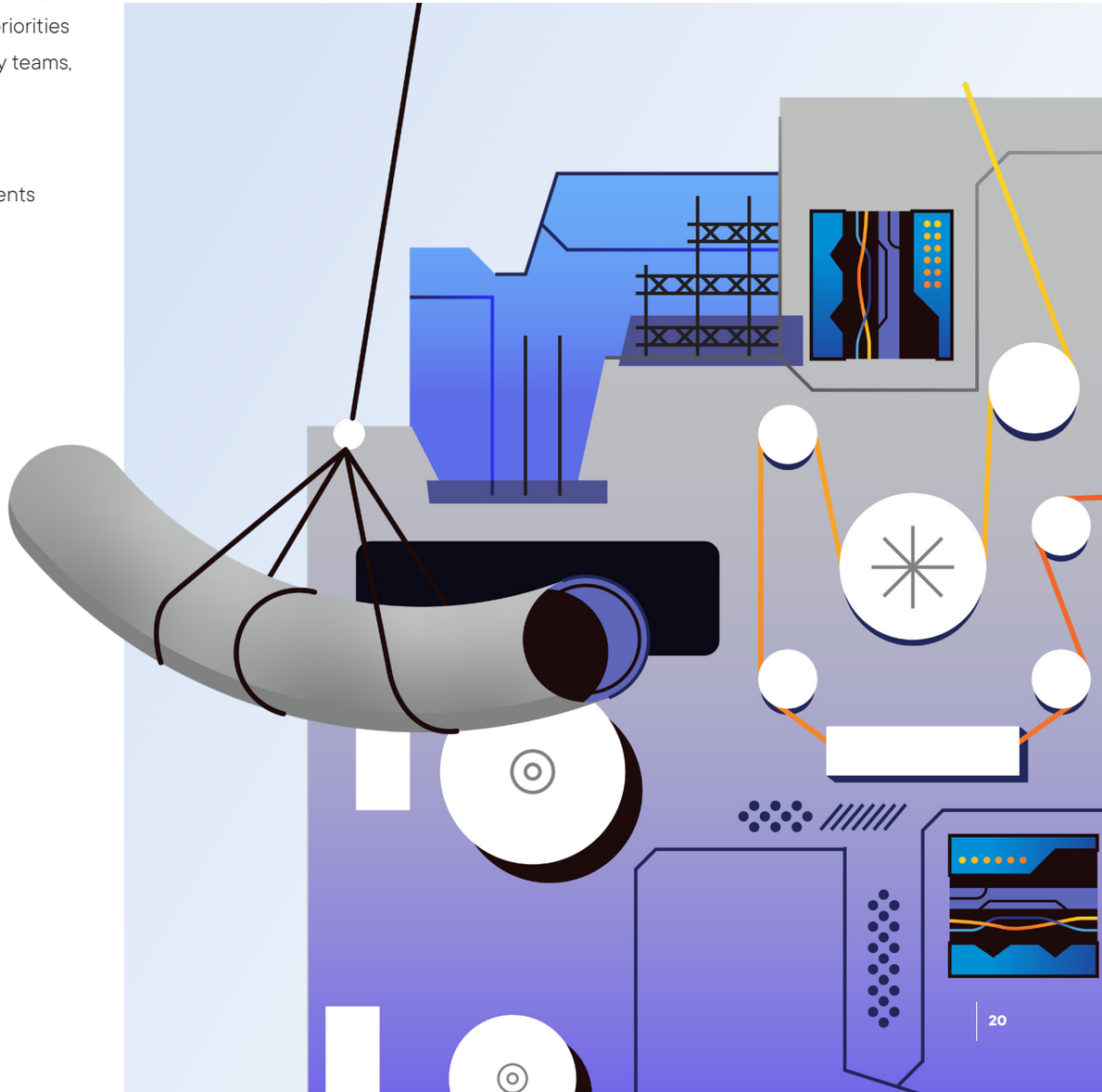
Like Agile, TSD is implemented through both long-term, quarterly check-ins and weekly sprints. And, like Agile, TSD consists of teams and their associated roles, events, assessments and recognition.

Team roles
Each TSD team usually includes an executive sponsor, a dedicated TSD champion, a manager or team lead, a mentor and learners (the technologists who are upskilling).

Assessments
Skill assessments are essential to identify company and individual learners' skills gaps to ensure that organizations aren't upskilling and hiring blindly.

Events
TSD events allow teams to apply their skills in a variety of environments that can help motivate learners and reinforce the skills they are learning.

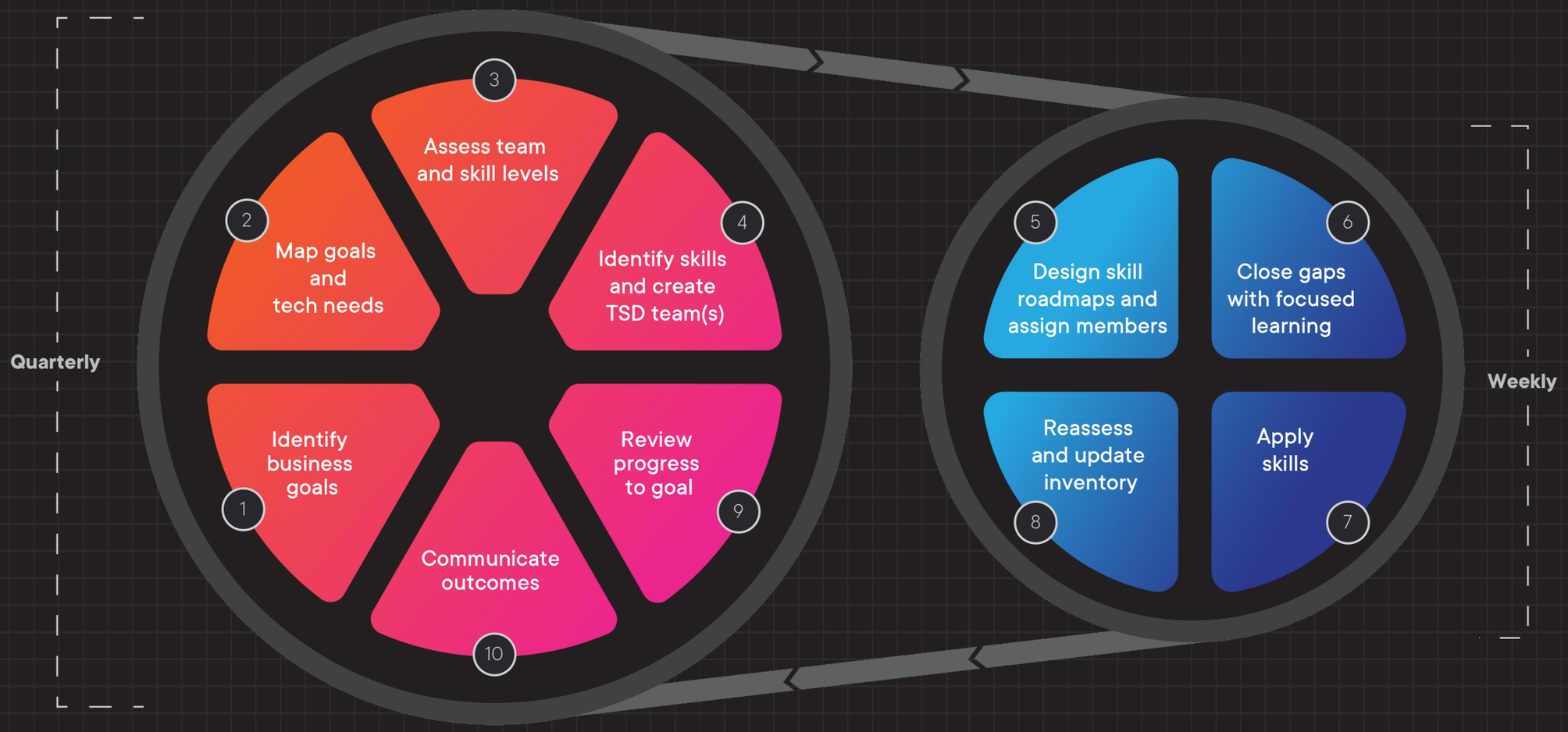
Recognitions
Recognition or rewards may vary in size and frequency of delivery and are an essential component of motivating learners to invest time and energy into upskilling.



Technology Skill Development

Agile upskilling sits at the core of business strategy.

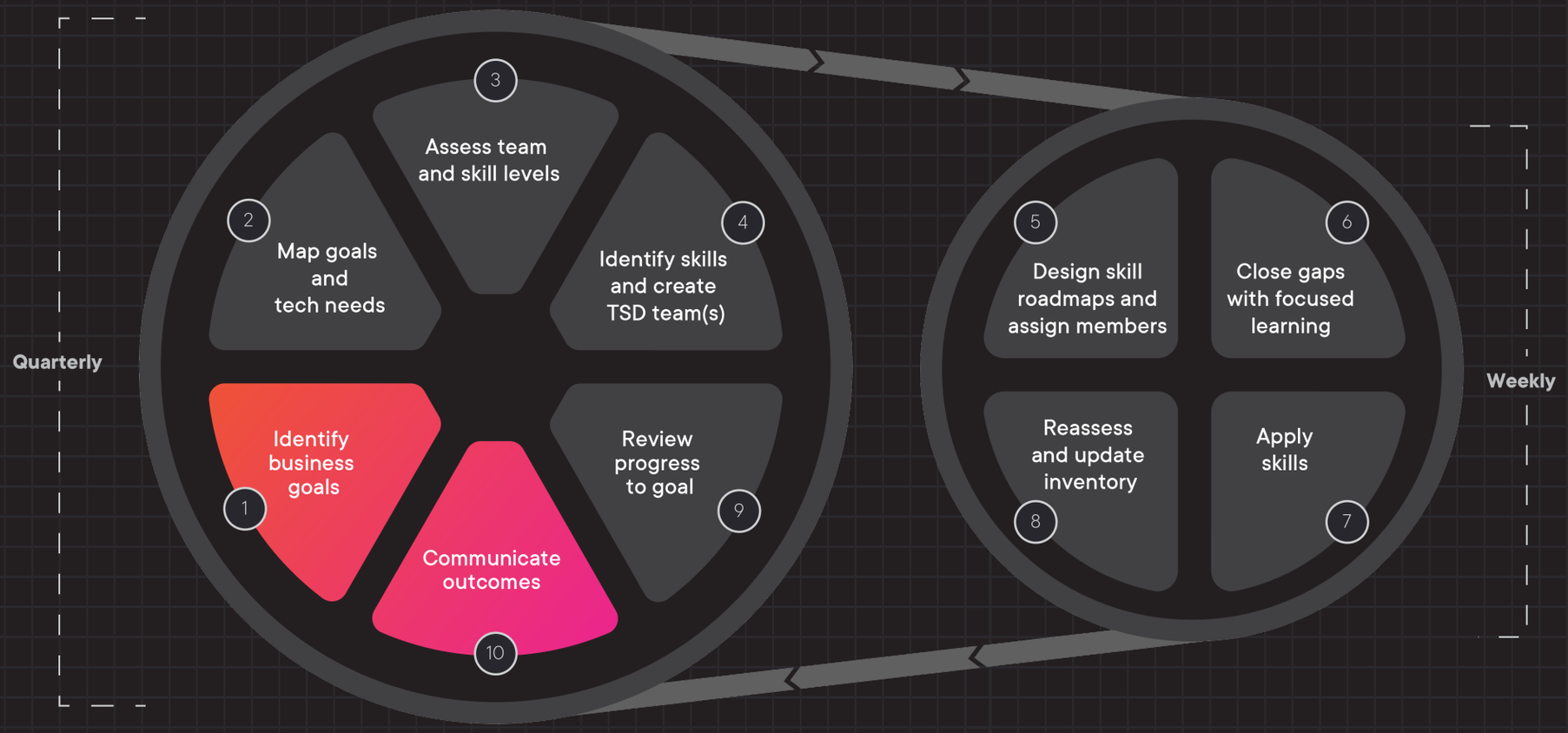
Technology Skill Development unleashes tech teams from old and ineffective ways of training and empowers them to upskill and reskill with startup velocity and aligned to business priorities. While each team is unique and may need to remove or reorder steps, this strategy will work for the majority of organizations.



Executive sponsor (DIRECTOR LEVEL OR HIGHER)

The executive sponsor's role in TSD is to identify and communicate your organization's objectives, oversee the creation of projects to reach those goals and clearly articulate how reaching these goals translates into outcomes and rewards.

- Affirm TSD as a strategic priority.
- Establish TSD as part of the organization's commitment to its mission and employees.
- Communicate that TSD is not about testing or penalizing employees based on proficiency, but rather about helping them grow toward their goals.
- Identify business objectives as they relate to TSD.
- Drive pilot project.

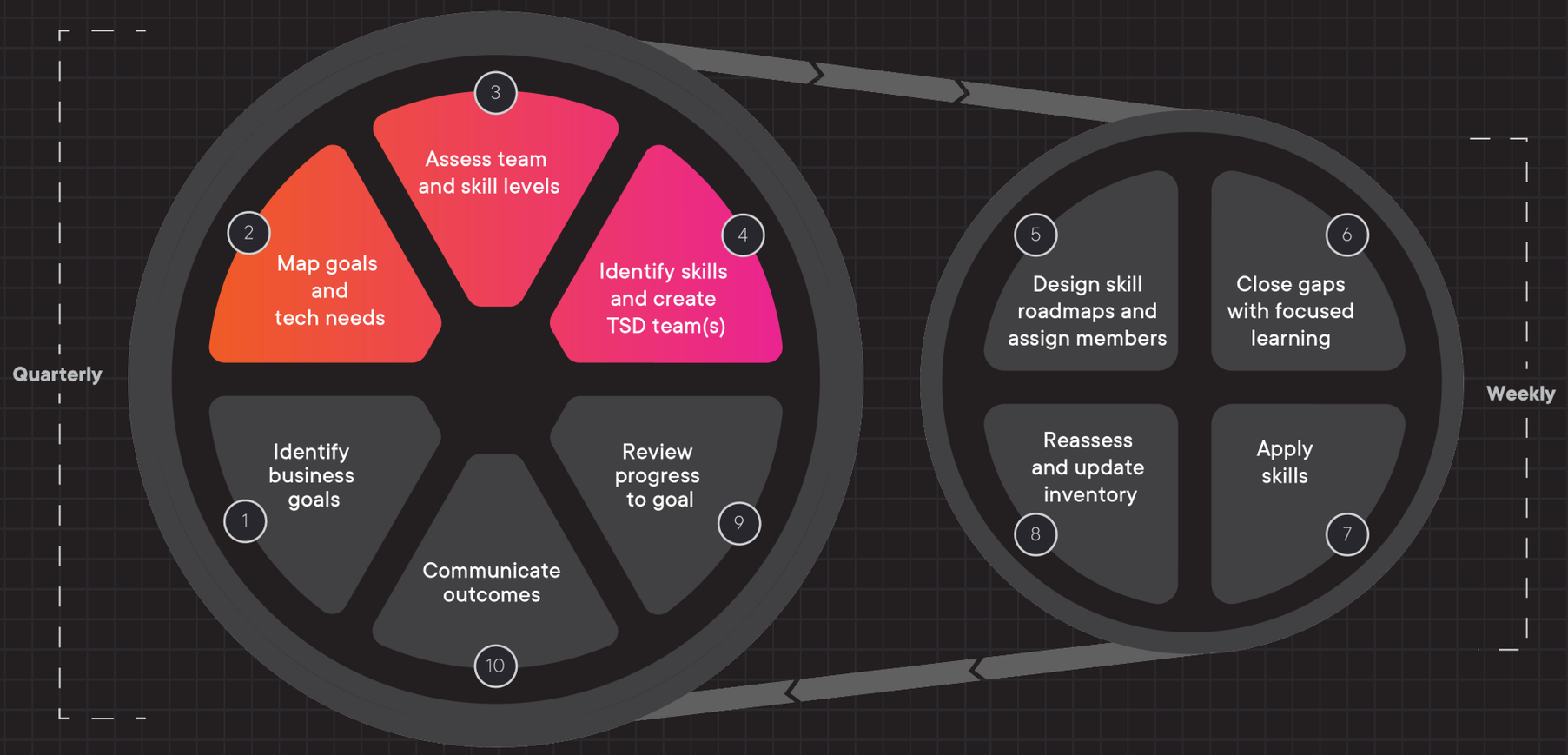


Champion

(DIRECTOR LEVEL)

The champion's role in a TSD initiative is to bring their deep set of technology knowledge to TSD conversations, helping executives and team leads determine where there are skill gaps and create TSD teams that align with each project and technology need.

- Provide a deep understanding of the business priorities and tech strategy.
- Share best practices to help the organization develop a skill strategy that aligns with its business goals.

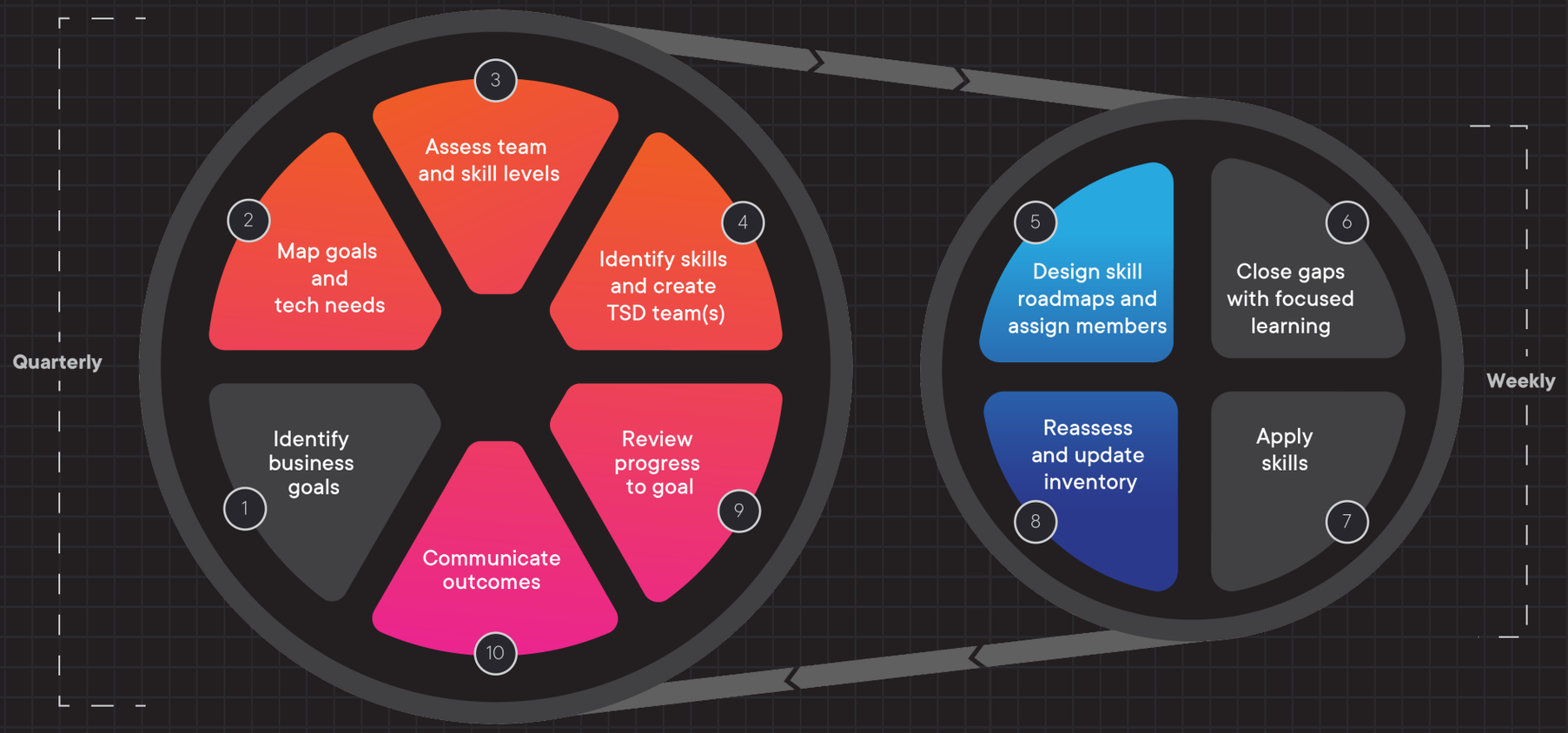


Managers/Team leads

(IT OR ENGINEERING MANAGER OR MENTOR)

Team leads are responsible for identifying skill gaps, mapping the skills needed for projects, creating teams, and coordinating with mentors and learners to ensure that team and individual upskilling roadmaps align with project needs.

- Provide skill clarity to align skills with business/project goals.
- Help individual engineers set career/growth goals.
- Empower engineers by creating space in their schedules for TSD.
- Create regular dialogue around TSD in one-on-ones and TSD initiative retrospectives.

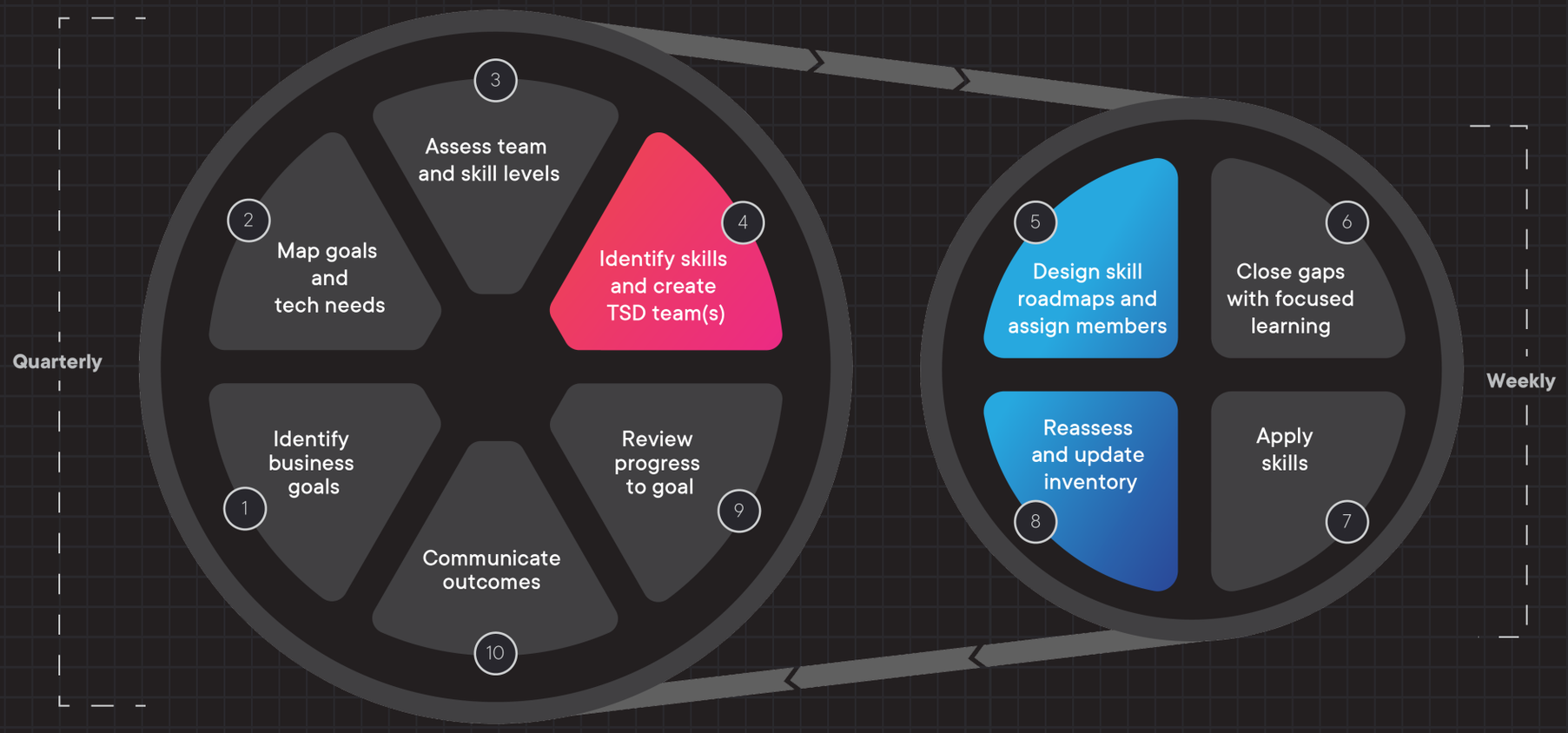


Mentors

(HIGH-PERFORMING OR STAR TECHNOLOGISTS)

Each TSD team is assigned at least one mentor who can help coach the team and the individuals on it, roadmap the skills they need, re-assess skill proficiency and revise skill roadmaps as needed.

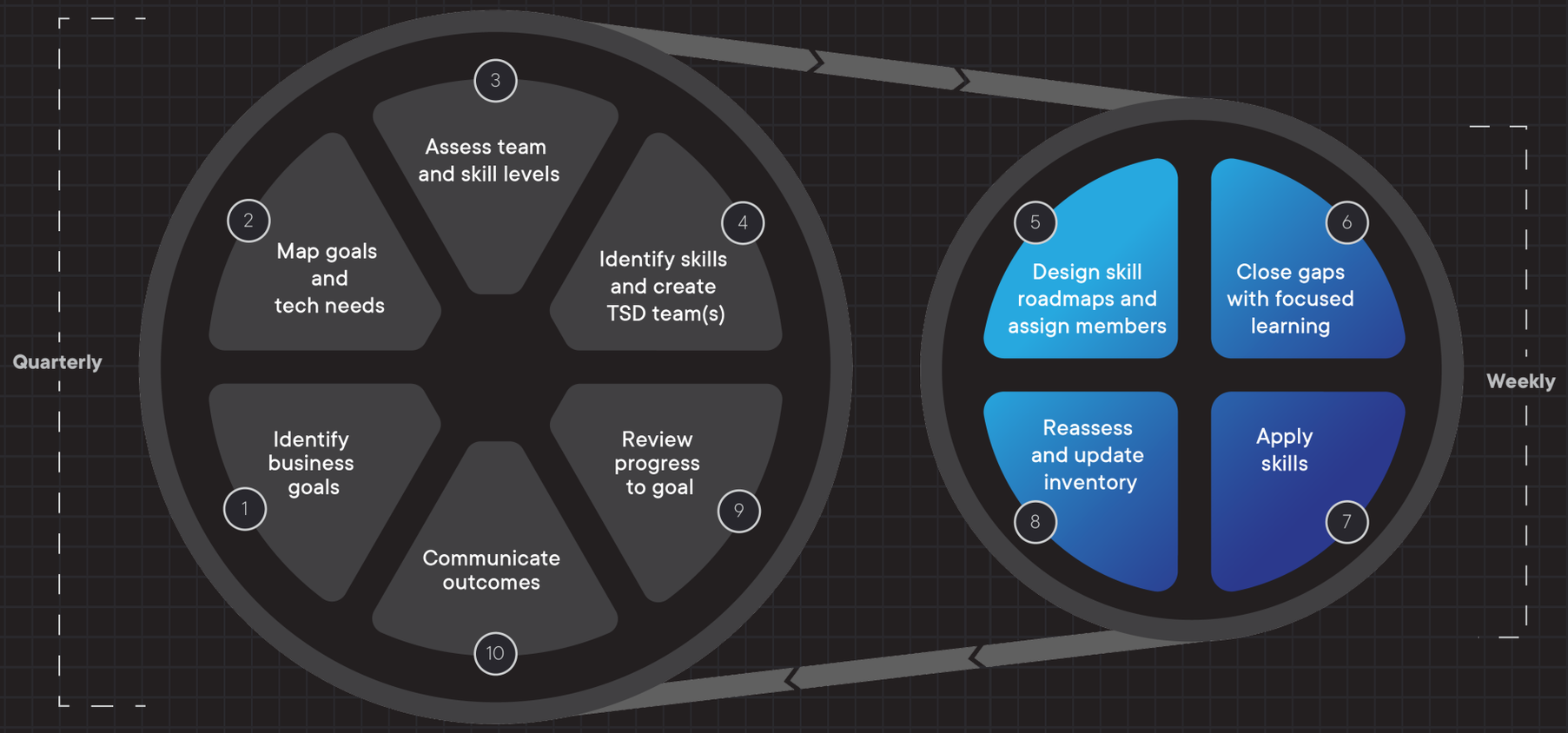
- Help set learning roadmaps.
- Participate in early ideation and decision-making as advocates for the technologists.
- Coach learners and provide context for assessments and rewards.



Learners (TECHNOLOGISTS)

The learner can volunteer or be placed on a TSD team. They work with team leads and mentors to roadmap the skills they need to develop and spend time each week actively learning and applying these skills.

- Spend a dedicated amount of time per week upskilling, reskilling or onboarding to fill the skill gap.
- Take skill reassessments and evolve skill roadmaps as skill proficiency changes.



Assessments

Skill assessments are the cornerstone of successful Technology Skill Development. Without an objective measure of skill proficiency and clear insight into the skills and gaps in-house, technologists and companies are upskilling and hiring blindly.

Traditional assessments;

- **Labor intensive:** Common skill assessments are extremely long, sometimes asking upwards of a hundred questions. The cost of time to complete an assessment of this size is tremendously interruptive and detracts from core work.
- **Subjective:** Managers often rely on technologists to list their skills and self-assess their proficiency. This approach is quick but laden with self-bias and subjectivity as the definition of "expert" can vary from person to person.
- **Not dynamic:** Skill assessments are often a static reflection of an individual's understanding of a technology—not accounting for when their proficiency may change as the technology evolves.
- **Divorced from content:** Skill assessments exist in a silo. None are tied to a content platform to drive meaningful recommendations about level-appropriate content the user should consume.

TSD assessments;

- **Speedy:** A single assessment can be completed in as little as 10 minutes.
- **Objective:** Assessments provide an objective proficiency score that managers can view and compare across their team.
- **Dynamic:** Assessments are dynamic, so technologists can use the same assessment to reassess their skills and measure new proficiencies or changes in proficiency over time.
- **Tied to content:** Learners are guided to content based on their skill gaps, ensuring that content is not redundant with what they already have mastered. Because of this, technologists spend less time determining what to learn next.
- **Hands-on:** Assessments can include an opportunity for more hands-on, project-based skill application.

Events

Hosting upskilling events to support each technology initiative allows teams to hone their skills, reinforces learning and builds team collaboration. Recurring events and meetings are essential for ensuring teams and team members stay on track and continue to progress. Most companies have the greatest success choosing one or two events per technology initiative.

Examples of upskilling, reskilling and onboarding events;

- In-house university
- Bootcamps
- Learning communities of practice
- Skills assessments
- Personalized or individualized learning plans
- Online technology skills platform launch
- Hackathons
- Mini-hackathons
- Beat your boss assessments
- Engineering or Tech Skills Awareness Day
- Summer of learning
- Skill up or coding challenges
- Stretch assignments
- Mentor-run coffee hours/fireside chats
- Town hall/all hands meetings

Meetings and recurring events;

- Have executive sponsors run a quarterly meeting to introduce or provide updates on TSD progress to technologists.
- Schedule dedicated time to learn during each weekly sprint.
- Hold weekly/biweekly one-on-one meetings with team lead or mentor and learner that addresses TSD progress, assessments and career goals.
- Run quarterly TSD initiative retrospectives that review successes and recognize wins.

Recognitions

A lack of recognition is one of the biggest deterrents to successful TSD. For employees who say they are unmotivated at work, almost a quarter (24%) say it's due to not receiving regular rewards or recognition from their organization.[28] Rewards may vary in size and frequency of delivery and should be delivered upon successful completion of assessments, events and on reaching larger business goals. Your TSD champion should oversee the consistent, appropriate use of rewards to celebrate and recognize each team member's progress.

Frequent or regular recognitions;

Swag
Create and distribute simple rewards, like laptop stickers and mugs, to give learners after they successfully complete a task or event.

Credits
Recognize learners, mentors and managers with credits to use with your Employee Rewards Program. For example, credits convert to gift cards, allowances for the cafeteria and days off.

Stretch assignments
Keep engagement high by having managers proactively invite learners to apply a new skill in new types of projects.

Perks
Give away fun and "free" perks like a mentoring session with an executive, a dedicated parking spot or a custom Zoom background.

Quarterly or annual recognitions;

Job rescoping
Incentivize learners by rescoping their job to incorporate new skills. For example, if a technologist learns Angular, allow her to start developing single-page applications as part of her job.

Promotions or raises
Have managers, mentors and the TSD champion work with HR to match skill progress to new opportunities. Proactively invite successful learners to apply for jobs and/or identify more appropriate pay grades to recognize them for filling skill gaps.

Badges
Provide a validated indicator of a skill earned or skill proficiency improvements. This type of recognition is surprisingly impactful.

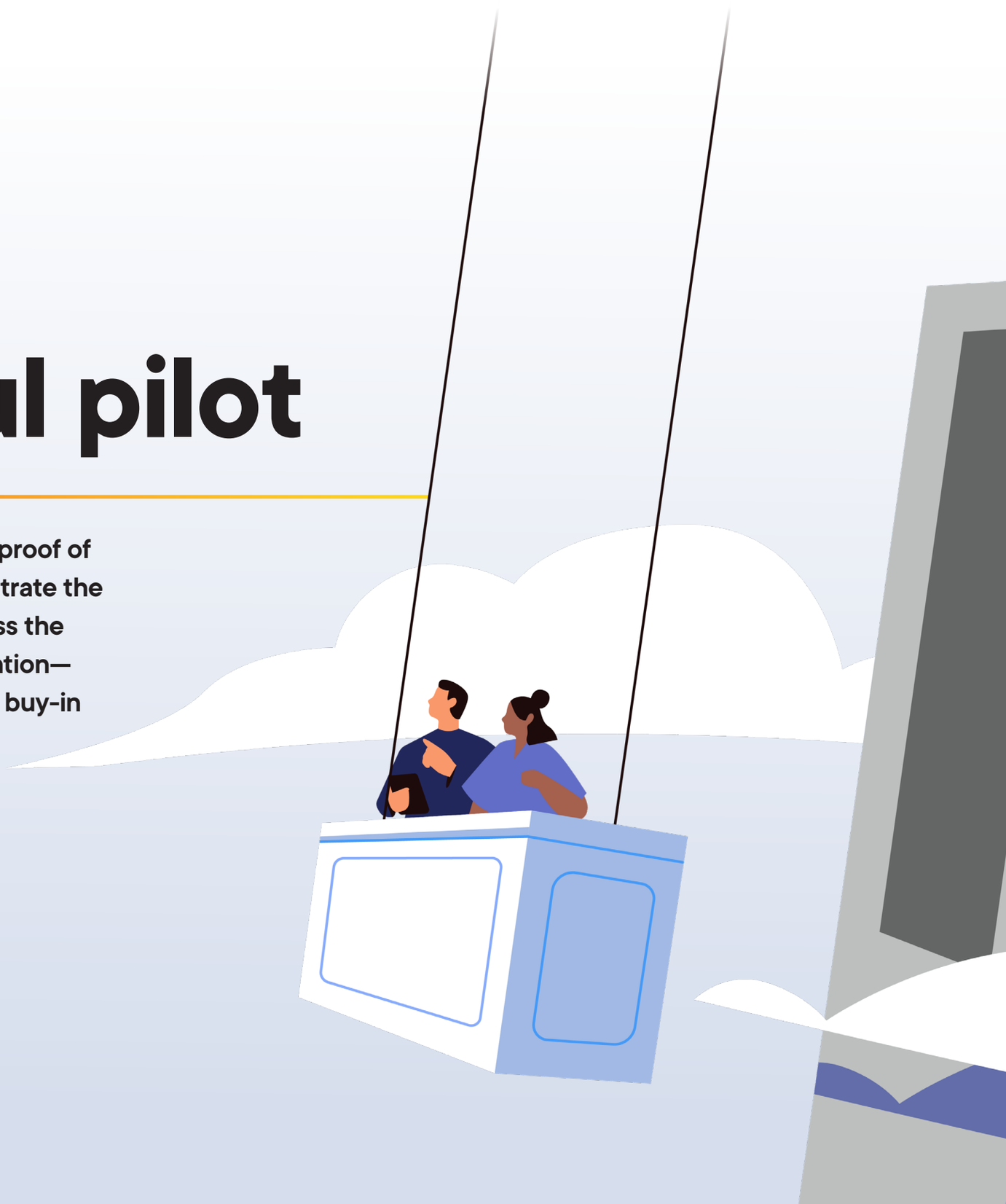
TSD at a glance

Technology Skill Development requires order and process.

When	Who	What
Annually	Executives	• Review business goals achieved due to the previous year's technology skill development. • Meet with executive sponsor and team leads to review business goals (for the next 6-12 months) and map technology needs to achieve the goal. • Communicate to the organization during an annual all-hands or related team summit regarding past successes and future goals.
Quarterly	Executive sponsor Team leads Mentors	• Use a technology skills platform to assess team and individual skills. • Identify skill gaps that could impact business goals. • Create a TSD team to develop technology skills to fill each identified skill gap; teams can be cross-functional and of varying sizes. • Assign mentors to each TSD team. • Involve team leads and managers. • Have learners drive creation of own personal skill development roadmap. • Refine the roadmap with input from mentors and share the roadmap with team leads. • Conduct a review of the successes and opportunities for the completed initiatives dependent on TSD. • Communicate outcomes to leadership and to learners. • Provide recognition with rewards. • Assess progress using a skills platform and modify the skill development roadmap, if needed.
Weekly	Learners Team leads Mentors	• Use a selected skill platform to fill skill gaps. • Spend dedicated time learning every week to fill skill gaps. • Apply new skills on staging or as part of a TSD event (e.g., practice challenges, mini-hackathons or stretch assignments).

Run a successful pilot

Start by developing a lean pilot project or proof of concept that is 90 days in length. Demonstrate the impact of TSD and share pilot results across the three levels of people within your organization—leadership, managers and learners—to get buy-in to scale TSD.



A. Identify key tech skills for proof of concept	
1. Identify an executive sponsor (i.e., Director or VP).	**2 weeks**
2. With executive sponsor, identify the technologies you are invested in or that you are planning to adopt to help execute on business priorities.	
3. Select up to five tech skills that align with the above to focus on in your proof of concept. Each skill will require its own TSD team.	
B. Prepare for proof of concept	
4. Align on pilot goals.	**2 weeks**
5. Align on success criteria.	
6. Identify the right platform to provide metrics as per your TSD success criteria.	
7. Have the executive sponsor identify and recruit two or three mentors and managers/team leads to participate.	
8. Have managers/team leads identify up to 10 learners (technologists) on their teams to participate on each TSD team.	
9. Align on executive briefing date and pilot end date.	
10. Have managers work with learners to carve out dedicated time in their schedules for TSD.	
11. Align on regular TSD events as learner touchpoints.	
C. Run proof of concept	**90 days minimum**
12. Have executive sponsor send communication to managers and learners involved to formally kickstart pilot project.	**Launch date**
13. Have managers hold a same-day kick-off call with learners and mentors.	**Launch date**
14. Have technologists complete skills assessments.	**In week 1**
15. Have mentors create individualized learning plans with each learner.	**In week 1**
16. Initiate 12-week upskilling program.	**In week 1**
17. With the input of mentors, have managers engage in weekly communications with participants to highlight success stories and TSD wins.	**Ongoing**
D. End pilot and collect results	
18. End pilot with congratulatory communications from executive sponsor to pilot participants.	**2 weeks**
19. Send survey to mentors, managers and learners involved in pilot.	
20. Analyze feedback and pilot results according to success criteria.	

Wegmans: Running a successful TSD pilot

Wegmans is a family-owned company that employs about 50,000 people across more than 1,000 grocery stores and uses technology to meet customers' needs in innovative ways. To support this tech-focused innovation, Wegmans chose to implement TSD and invest in a technology skills platform.

Here's how Wegmans successfully built their powerhouse of in-house tech talent:

Step 1. Develop organization-wide buy-in and a strong mission statement

"Through partnerships with our knowledgeable people, we will provide learnings when and where our employees need it most—just enough, just in time and just for them."
–The Wegmans Learning Mission

Step 2. Create a TSD brand

Wegmans named their TSD program Developer Fitness Program with the idea that by exercising their "skill" muscles, developers would become more "fit" developers.

Step 3. Develop a tech skills inventory

Using Pluralsight Skills, Wegmans took stock of the technical skill and role proficiency it had across the organization to get the insight it needed to identify skill gaps and align those to project needs.

Step 4. Align skills to roles

Wegmans created four different roles and aligned the skills needed for each role. Learners could then sign up for a role, assess their skills and then work toward filling in the gaps.

Step 5. Invest in customized learning content

Customized learning content through Pluralsight Skills has allowed Wegmans to keep skills up to date across the organization. This is because Pluralsight allows for better coaching, facilitates faster onboarding than traditional ways of learning and allows for a laser focus on key areas of need.

Step 6. Incorporate TSD events and rewards into every TSD initiative

Wegmans has created high levels of learner engagement by hosting monthly coffee hours, mentor Q&A sessions and hackathons. They frequently awarded learners with stickers and badges to keep motivation high.

Step 7. Communicate strategically and frequently

Technology leaders and HR were closely aligned and communicated frequently to learners. They emphasized that skill assessments were only for individual growth and would not be held against them or used to stack rank learners against peers. They also tracked upskilling efforts and celebrated successes with the team.

The Home Depot: Developing innovators

Reskilling with TSD offers a career path for employees to move from their current role as store associates into new, more advanced technology roles.

Highlights

- 400,000 store associates to draw from to upskill to technology positions
- 1,000 technology roles to fill
- Hourly employees can become salaried technologists
- Multiple avenues to upskill
- Wide breadth of content
- Leaders can track and measure learners progress and apply insights to future initiatives

Challenge

As the world's largest home improvement retailer, The Home Depot runs a sophisticated technological operation that allows them to maintain a competitive hold on the marketplace. However, to be able to build and support everything from supply chain systems and planning and forecasting to cash registers and an extensive digital e-commerce website, The Home Depot needs software engineers, security experts, UX pros and data scientists at an increasingly rapid pace.

Solution

The Home Depot saw an opportunity to tap into their current workforce of **400,000** store associates to create a pipeline of skilled talent that could fill upwards of **1,000** technology roles. To achieve this goal, The Home Depot rolled out an immersive skills bootcamp dubbed "OrangeMethod."

The OrangeMethod bootcamp uses a combination of classroom learning and Pluralsight's technology skills platform. Since OrangeMethod is very fast-paced, having Pluralsight allows store associates to slow down, delve deep into everything and reaffirm what they are learning in class.

Results

The Home Depot is transforming store associates from hourly employees into salaried technologists, which has allowed the company to keep pace with technology demands. Having everything together in one platform that's simple to use lets leaders and learners save time and get right to the content they need. In addition, leaders can track learner progress and see the interests of their new technologists, as well as incorporate these insights into upcoming curriculum and, eventually, into customer and associate experiences.

"With the rich catalog of courses that Pluralsight brings to the table and the vehicle to deliver it when our associates need it and it's convenient to their schedule, it's just such a tremendous enabler for our folks to keep up."

Barbara Sanders, Vice President and Chief Architect, The Home Depot

Fujitsu: Investing in measurable skill development

TSD allows organizations to keep up with customer expectations for tech-forward service.

Highlights

- Greater depth of in-house teams
- Increased customer confidence
- Greater business agility to meet shifting needs of customers faster
- More engaged, collaborative and competitive teams, leading to new innovations
- Ability to track progress and report the value teams are adding to the company's larger objectives

Challenge

Fujitsu is a leading Japanese information and communication technology company that offers a full range of technology products, solutions and services aimed at shaping the future of society. As customer's environments change, the company needs to be ready, which means being able to adapt quickly is key.

Solution

By partnering with Pluralsight, Fujitsu can leverage on-demand video courses, learning paths, skill assessments and channels. Leaders identify the skills that will drive the organization forward on key objectives and drop relevant Pluralsight content into channels for employees to focus their development.

Results

With the Pluralsight technology skills platform, Fujitsu has been able to demonstrate greater depth of in-house technical skills. It has also created teams that are engaged, collaborative and competitive in their skill development, which has led to new innovations and greater customer confidence.

"What has become more streamlined is our ability to drop and change. So adding new things in really quickly, our ability to embrace things that are emerging in the market because the pace is so fast, and our ability to slot that into people's pathways is definitely a benefit for us."

Christian Benson, Vice President and Client Managing Director, Fujitsu

Global rollout

Once you've successfully completed a pilot, you can begin to roll out TSD across your organization. Here's what will help ensure organization-wide buy-in and adoption.

Create a TSD brand

Have your creative department or vendor work with your technologists to come up with a branded name to use across all TSD initiatives and communications. Create branded assets for recognitions, such as laptop stickers and mugs.

Examples:

- Wegmans' Developer Fitness Program was named with the idea being that it's all about keeping that active "developer" muscle engaged.
- 1-800 Contacts branded their program the CTAC University, which is an in-house skills bootcamp.
- Acxiom implemented a TSD program called Level-up, in which associates are given allocated time throughout the quarter to build skills.

Dedicate a "physical" space to TSD

At each location serving technologists, identify a large room or area for TSD where TSD events can be held. For remote teams, create a Zoom room or another virtual location.

Examples:

- The Home Depot created OrangeMethod, where it holds in-person bootcamp courses, as well as online courses using Pluralsight.
- Wegmans set aside conference rooms and other locations to hold TSD events like a monthly coffee hour.

Establish a significant TSD event

Create excitement and a buzz around TSD by creating a branded annual hackathon, fireside chat program or university.

Examples:

- During Acxiom's Level-up program, team members participate in hackathons—and it's already having an immediate impact on the business. Of the projects from the last three Level-up hackathons, **70%** have been put into production use.
- Wegmans holds TSD events like coffee hours, monthly challenges with rewards, Q&A sessions with mentors and hackathons.

Global TSD rollout worksheet

TECHNOLOGY INITIATIVE	
Technology-driven business goal for next 6-12 months	
Skills required	
Results of skill assessment	
Skills gaps identified	
Recommended members of TSD team for skill gap A: _____ _____ _____ _____	Executive sponsor: _____ TSD lead: _____ Mentor: _____ Learners: _____ Managers/Team leads: _____
Recommended members of TSD team for skill gap B: _____ _____ _____ _____	Executive sponsor: _____ TSD lead: _____ Mentor: _____ Learners: _____ Managers/Team leads: _____
Recommended members of TSD team for skill gap C: _____ _____ _____ _____	Executive sponsor: _____ TSD lead: _____ Mentor: _____ Learners: _____ Managers/Team leads: _____
Recommended members of TSD team for skill gap C: _____ _____ _____ _____	Executive sponsor: _____ TSD lead: _____ Mentor: _____ Learners: _____ Managers/Team leads: _____
Events	
Assessments	
Recognitions	

3

Make Technology Skill Development your competitive advantage

Discover how to ensure you have everything you need to build the right skills at the right time across your tech teams.

"Our people are the power of The Home Depot, so it's incredibly important that we continue to give them the opportunity to grow. Through that there's productivity gain, there's engagement gain. So tremendous impact, not only for us as a company, but for the individuals as well."

Anthony Gregorio, Director of Technology Enablement, The Home Depot

Assess your TSD

Just like technologists need to assess and identify skill gaps so they can have an individualized upskilling roadmap aligned with their current knowledge and future goals, organizations also need to understand where they currently are in their delivery of TSD and whether they are maximizing TSD to their full competitive advantage.

To help with this assessment, we've developed the TSD Maturity Matrix, which includes the following five categories:

1. **Unstructured:** There is no organization-wide strategy or culture around upskilling or reskilling. Any learning and skill advancement is motivated by individuals for their own career goals and individual growth.
2. **One-size-fits-all:** While there is organization-led training available, it's broad-based and doesn't meet the needs of a technology organization.
3. **Reactive:** L&D is aligned to the technology training needs of the organization, but training isn't aligned to business objectives and can still leave the organization struggling to have the right skills for critical projects.
4. **Proactive:** The organization has become more sophisticated with its training programs. L&D is embedded within the technology business unit and skills training is aligned to project goals, but there are still critical skills gaps that need to be filled.
5. **Strategic:** At this level, the organization is proactively meeting its technology skill needs and is also future-oriented.

Evaluate your TSD maturity

As you work through the following TSD Maturity Matrix, you will likely find that your organization, like most, doesn't fit solely into one category. That's OK. Circle the category that most resonates with how your organization currently operates. On the next page, we'll help break down what it means.

	UNSTRUCTURED	ONE-SIZE-FITS-ALL	REACTIVE	PROACTIVE	STRATEGIC
WHO'S THE CHAMPION?	Individual technologists	HR	Tech team managers	Tech VPs & directors	CIOs/CTOs
WHO'S EXECUTING?	Individual technologists	A centralized L&D team	L&D aligned to the tech business unit	L&D embedded within tech business unit	A director of technology skills development
WHAT'S THE TOOL?	None	LMS	LMS + other tools	LMS + designated online learning library	Technology skills platform
WHAT'S MEASURED?	Nothing	Course completion	Course usage/ view time	Skill proficiency	Skill and role proficiency
WHAT'S IT ALIGNED TO?	Skill gaps	Broad-based training	Technology training needs	Technology project goals	Strategic tech and business objectives
WHAT'S THE CHALLENGE?	"We need some organized training."	"Training isn't tailored to the needs of the technology org."	"Do we have enough of the right skills?"	"We need more talent in these key roles."	"Are we preparing for what's next?"
WHAT'S THE IMPACT?	There's no organized focus on tech skills	The needs of the tech org aren't being met	Tech skills aren't measured or aligned to objectives	Skills are quantified and developed with purpose	Tech skills are a competitive advantage and driver of business outcomes

Understand your TSD competitive advantage

Every organization will score differently. From our experience, very few organizations will meet all the criteria for the strategic category.

Most organizations will have a blend of maturity that may look something like this:

- **Champion:** Unstructured or one-size-fits-all
- **Executing:** Unstructured
- **Tool:** Strategic
- **Measured:** One-size-fits-all, sometimes reactive
- **Challenge:** All of the above
- **Impact:** Unstructured

54% of organizations feel their skills approach is unstructured, one-size-fits-all or reactive.[39]

The more areas that your organization ranks as unstructured, one-size-fits-all or reactive, the more likely it is that you are moving too slowly and with too much effort to keep up with the pace of change. Where you are proactive and strategic, your organization has the right levers in place to move quickly and effectively toward achieving your business goals.

Regardless of where your organization lands on the TSD Maturity Matrix, the most important factors for improvement are **executive buy-in** and **an organizational culture that is supportive of and willing to embrace change.** Without these two elements, even if you have the right technology skills platform, a strong TSD champion, and the ability to measure and understand the impact, it will still be challenging to achieve maximum success.

It is also critical for your technologists to know that leadership supports their efforts and that, by investing their time and energy in TSD, they will be rewarded with career growth opportunities while also helping the organization achieve its key business goals.

Finally, the organization needs to have a culture that is open to optimization. This means that HR and L&D teams are willing to work closely with the technology business unit to align on technology project goals, and that HR and L&D are willing to measure learning against skill proficiency rather than traditional KPIs, such as course completion or time spent learning. It also requires that leadership, managers and technologists begin to think strategically about where the market is headed, and to plan for the skills they will need to continue to disrupt and innovate.

Communicate your commitment

Leadership and management must set the example to employees that TSD supported by a technology skills platform is the best, fastest and most necessary path forward to reach business goals. Show your team you value them and want to invest in them and their skill sets.

Leadership and managers need to send a unified message that conveys:

Leadership

- We are fully supportive of TSD.
- We believe in investing in a platform that supports technologists who want to improve their skillsets.
- We will work with teams to understand which key skills are needed to help expand the organization's internal capabilities.
- We will use TSD to support our workforce, which in turn allows us to more strongly support our organization's own technologies and business outcomes.

Managers

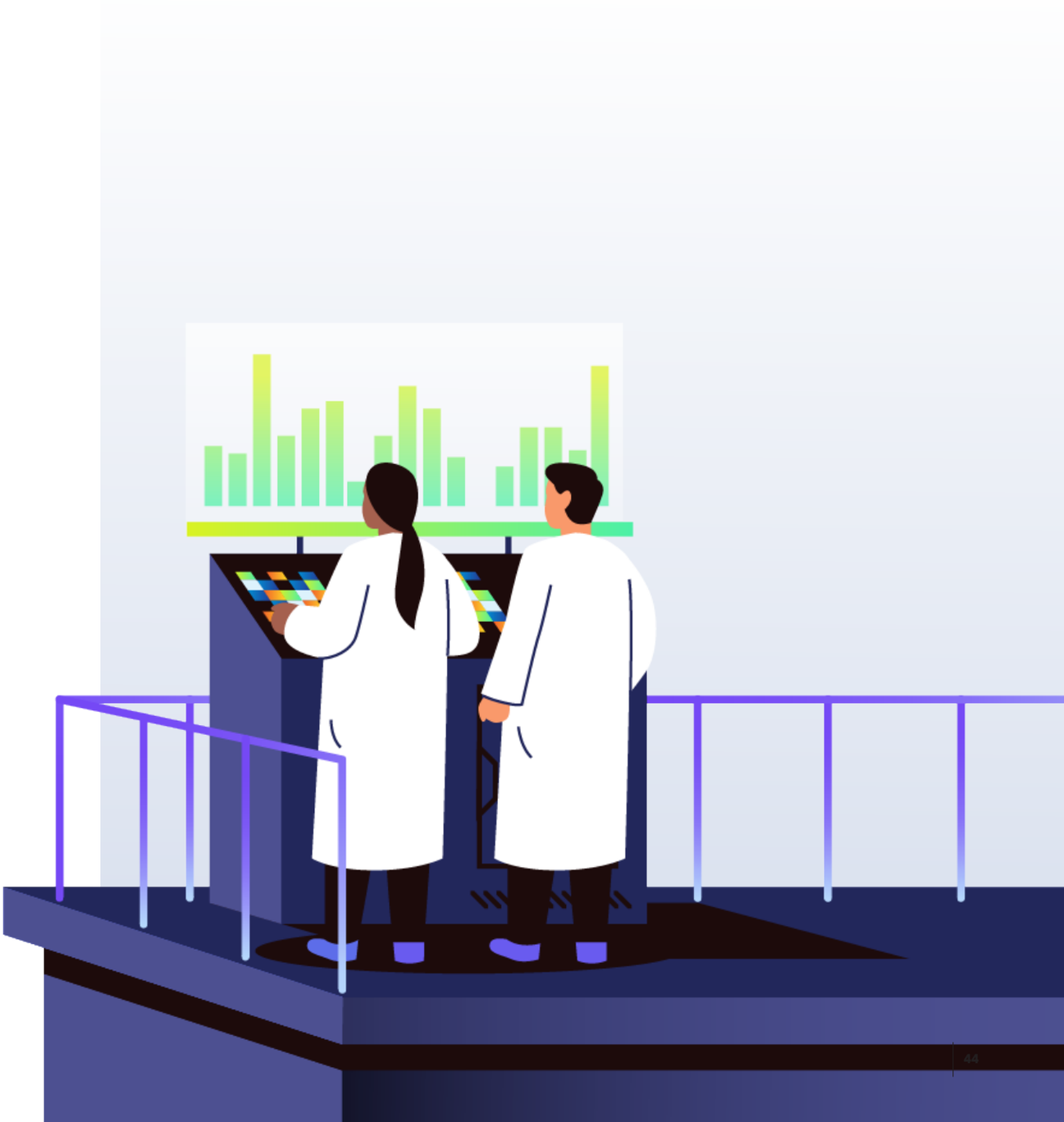
- TSD is our present and our future.
- TSD is necessary to reach business goals.
- TSD solves the problem of finding time to upskill.
- TSD solves the problem of figuring out what skill to develop first, as well as next.
- TSD allows our organization to identify where skill gaps exist that need filling.
- TSD ensures what you are learning is clearly tied to the growth of the business.
- TSD allows us to advocate for and align your goals with the business' goals.
- TSD allows us to support you by approving and making time available for you to improve your knowledge and abilities.

Select the right platform to support TSD

Once you have executive and internal buy-in, finding the right platform to support TSD is the next step.

Here are the key criteria to look for in a best-in-class platform that can support TSD:

- Supports tech-specific skill development through tech-focused content.
- Offers dynamic skill assessments technologists can use to measure skill proficiency.
- Provides level-appropriate and personalized TSD content recommendations based on proficiency.
- Delivers trusted, quality content with a credible and proven author database/ecosystem.
- Offers content that is ever-growing and innovative, including customer-informed content.
- Gives technologists a safe environment to apply and practice newly acquired skills.
- Provides reports and analytics on skill proficiency and changes in skill proficiency over time.
- Gives upper management, L&D and HR organization-wide visibility and insights into skill progress.



Marsh & McLennan Companies:

Strategically aligning skills and roles to accelerate outcomes

Your technology skills platform should allow your team to create channels with curated content, so you can quickly onboard new hires and upskill them to the languages and software of a particular team.

Highlights

- Ability to curate content to ensure skill sets and roles align.
- Less time spent trying to figure out what to train on and more time upskilling.
- Employees have the technical skills to deliver the quality the firm expects.
- Added agility to respond to customers' and firm's goals.

"Where we are today, versus where we were a few years ago, are worlds away. And I think the Pluralsight platform has really helped us to make that leap."

Rebecca Fishbein, Innovation Product Development Expert, Marsh & McLennan

Challenges

Marsh & McLennan Companies is a professional services firm of approximately **75,000** people. They are involved with the big issues that clients worldwide are wrestling with, from increasing resilience to climate change. However, the firm wasn't providing employees the chance to learn about critical technologies, like open source code, that could have an impact on their clients' businesses and give the firm greater agility.

Solution

Partnering with Pluralsight, Marsh & McLennan identified learning paths for different roles. Pluralsight Skills makes this easy because it allows them to curate content on different channels for different roles. This allows the firm to define what it means to be, for example, a Java developer or a cybersecurity expert, and then to invite colleagues to be part of the channels and complete the training for a specific role.

Results

With Pluralsight Skills, Marsh & McLennan has been able to make sure that their team upskilling efforts led to quality and consistency throughout. They've also become much more agile, able to upskill in areas like cybersecurity so that they can handle the massive amounts of data from their clients.

Overcome organizational barriers to TSD

There are a number of barriers to TSD. Here are some of the most common:

Lack of partnership between HR, L&D and technology leadership

TSD is often folded under the organization-wide skill development umbrella, meaning it is led or managed by L&D or HR. However, because tech requires very specific skill sets, has an accelerated pace of change and has strong competition for talent, it's critical that TSD be led by someone who is dedicated to technology excellence. L&D and HR have a role to play. They should be kept in the loop so they understand the projects that the technology business unit is working on and what skill sets tie to those projects. Decisions about what skill sets are needed, training pathways and business objectives should come from a technology executive or manager.

No alignment of skills to business goals

Skill development may be happening within the organization and on an individual level, but there is no strategic forethought as to what skill sets are most needed to support business goals. Often, technologists (and even managers!) don't understand the benefits of upskilling.

The complexity of coordinating TSD

Managing TSD across teams, skill levels, tech stacks and goals can feel overwhelming as it's a complex and time-consuming endeavor. However, quick and accurate skill assessments, more manager input and individualized and curated content plans can help alleviate any perceived burden.

A culture of learning exists in place of a strategy for skill development

There is a focus on learning within the organization, rather than a skill development mindset. Learning is passive. Learning is about consuming content. Technology Skill Development is tied to measuring skill proficiency and changes in skills over time.

Competing demands eat into skill development time

In principle, organizations may agree that TSD is a good and necessary endeavor. However, as many as **38%** of technologists say they are too busy or have other demands on their time that take precedence.[35]

Fear that upskilling employees will lead to turnover

Leaders fear the technologists they develop will leave for other companies. The data says otherwise. Not only do engineers and technologists value learning and training opportunities and career development options more than job security, financial compensation and their interest in the day-to-day, research also shows that **73%** of technologists are extremely satisfied with their current job and that only **20%** are actively looking for a new job.[36]

66% of tech leaders say CIOs and CTOs are extremely dialed into technologists' needs while only **42%** say HR & L&D have a similar level of understanding.[40]

Overcome manager-level barriers to TSD

The complexity of managing TSD across teams, skill levels, tech stacks and goals is a primary organizational barrier, which means there is a need for more manager input and individualized plans.

Current processes may be preventing managers from providing proper input or individualized plans for learners. In these cases:

Skills are being assessed, but poorly

Using spreadsheets to have technologists list their skills and rate their proficiency level introduces bias and is immediately out of date. Without dynamic, accurate awareness and a baseline of the current skill set of the team, managers cannot plan for or preempt future needs.

Immediate and day-to-day needs are more pressing

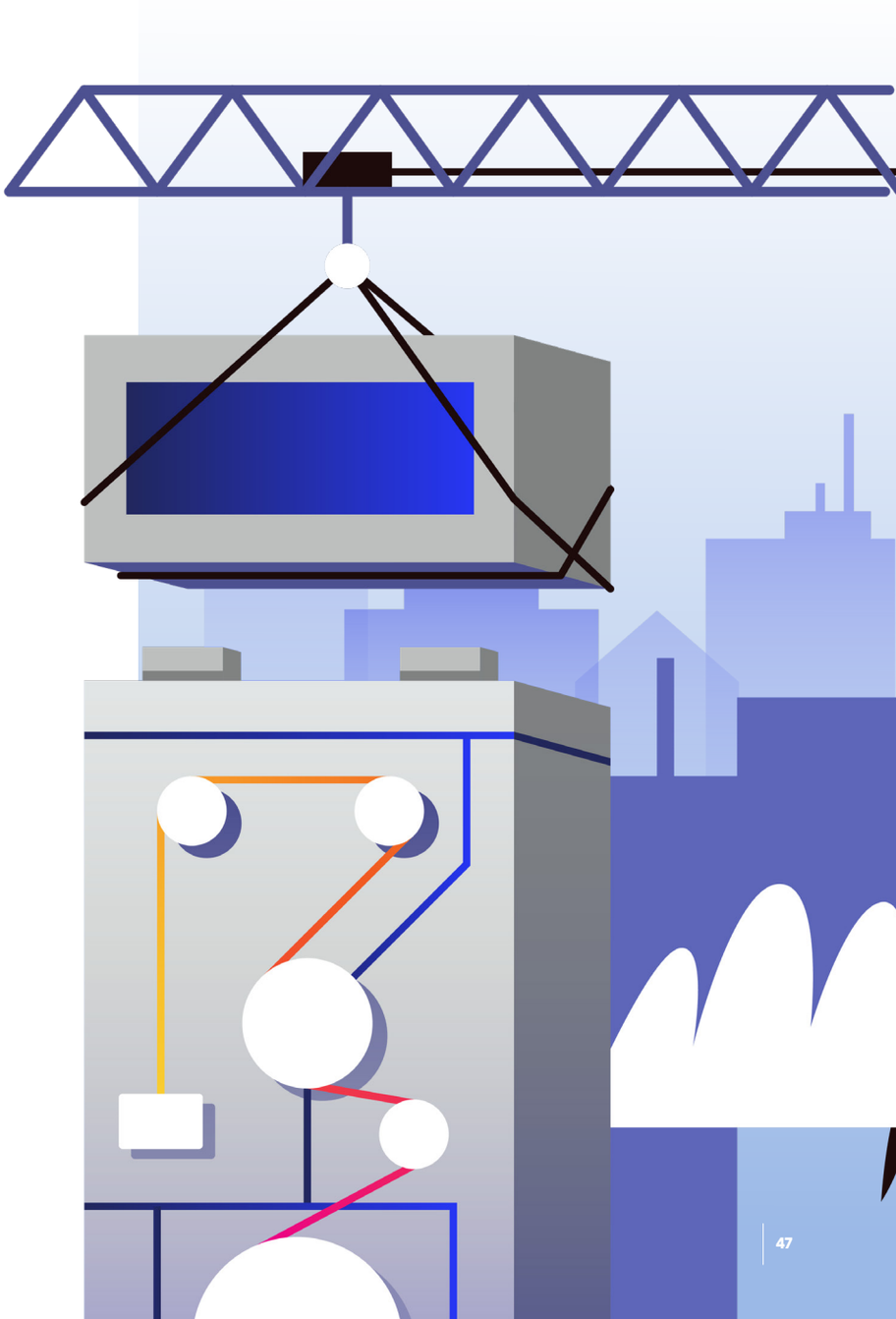
Managers are often concerned with addressing immediate business needs—they do not want to detract from current issues by focusing on hypotheticals. Unfortunately, this means upskilling gets constantly pushed back as a priority.

Desire to avoid being too strict or formal with training

Managers don't want to be seen as being "strict" or "too formal" with TSD and would rather let their employees use a technology skills platform as needed. But this means training is neither strategic nor deliberate, nor is it tied to skill proficiency and growth.

Default to hiring externally

Managers default to hiring out to fill skill gaps while their teams are hungry for skill development opportunities and promotions. This often happens largely because there is no skill clarity or sense of what skills are in-house that a manager can harness or leverage to prepare for upcoming projects or changes in business priorities.



Overcome learner-level barriers to TSD

For technologists, a lack of internal support and a lack of dedicated time to train are some of the biggest obstacles to taking a strategic approach to upskilling.

Upskilling is engineer-led

Many learners are left to figure out on their own what skills they need. There is often no mentor and little engagement from managers. There may be a platform for training available, but there's no clear training path. Engineers are simply selecting courses of interest, rather than the most strategic training that could impact business goals.

Fear of assessments

Engineers and technologists fear that skill assessments will be weaponized against them. They are also concerned with the validity of the assessments and feel that learning plans are "assigned" to them rather than "designed" for them.

"Why bother" career approach

Engineers have seen organizations emphasize hiring out over upskilling, so they don't see the investment in TSD as offering them much benefit, especially when they haven't been given the time or support to train during their work hours. Offering more stretch assignments and promoting from within can greatly impact engineers' attitude to upskilling.

Technologists are too busy

In the Pluralsight State of Upskilling report, **38%** of technologists say they are too busy or job demands prevent learning.[37] Because they're so busy, any skill development is reactive—undertaken to address day-to-day needs, rather than to foster proactive career development or business growth. Likewise, there is an implicit or direct expectation that engineers should upskill on their own time, outside of work hours.

"Having a tool like Pluralsight, where the content is curated and prepared with the correct information, it feels like I'm going more spot-on to the information that I need to learn, instead of chasing my tail searching around online."

Yessenia Figueroa, Senior Software Engineer and Instructor, 1-800 Contacts

Overcome HR and L&D barriers to TSD

HR and L&D know how to spot skill gaps that exist within the organization, and they may be able to more easily solve for these gaps when there is close alignment with technology leadership.

Need partnership with technology leaders

HR and L&D are committed to upskilling teams to help meet strategic business goals, but the pace of change within technology and the highly skill specific requirements for different projects make it a challenge for them to know exactly what skills are needed and when. Strong partnerships with tech leaders can allow HR and L&D to better support TSD.

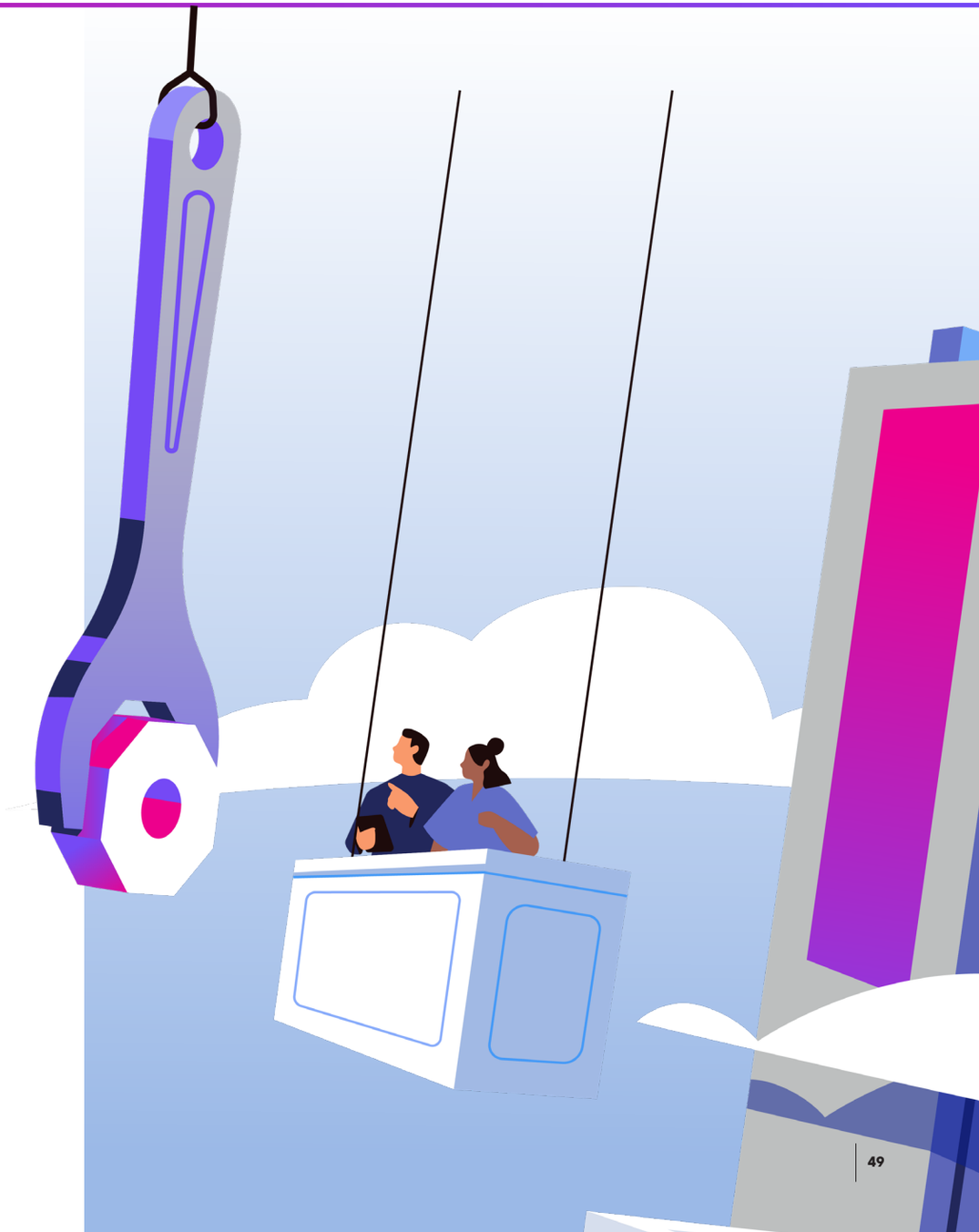
Need to evolve training from one-size-fits-all

HR and L&D have traditionally viewed training and upskilling employees as a classroom activity. While classroom training still has a place, individualized learning should be the focus, especially where technology learners have different skill sets or different levels of proficiency within a skill.

Even though **94%** of technologists say their companies facilitate TSD to some extent, only **23%** of leaders report TSD practices tailored to the individual needs of the technologist.[38] When HR and L&D partner closely with tech leadership, offering individualized learning becomes much easier to do because leadership can help align technology needs with identified skill gaps.

Need for a centralized technology skills platform

Half of technologists prefer self-paced, online courses, but only **50%** of organizations offer such programs.[39] A centralized technology skills platform, with trusted content quality and visibility that allows managers to standardize training across teams allows for self-paced training and, more importantly, for HR, L&D and technology leadership to strategically scale TSD and tie it to company priorities.



Overcome platform barriers to TSD

Having a centralized platform with one place for all technologists to upskill saves time, improves efficiency and standardizes upskilling only if the platform is equipped to break down common barriers to TSD.

Few training providers are designed to support TSD. Instead, they promote inefficient one-size-fits-all training paths that cause frustration, waste time and ultimately lead to poor adoption among technologists. Watch out for platforms where:

- Training is ad hoc, not strategic
- Content quality is subjective
- Content is not standardized or managed
- Content curation capabilities are limited or non-existent
- Content is delivered in a one-size-fits-all manner and isn't necessarily level-appropriate
- Skill assessments are not dynamic and cannot measure changes in proficiency
- There is no way to create an individualized skill development road map with level-appropriate learning recommendations
- Skill application and retention are not emphasized

Choose a platform that focuses on strategic upskilling

If you want to have high engagement from your learners, as well as buy-in and support from managers and executives, you need to make sure to choose the right technology skills platform up front—one that can support personalized learning, application of skills in the flow of work, dynamic skill assessments and high-quality content that maps to your strategic business objectives.

> *"We're seeing a shift towards more and more self-improvement and self-development, and tied to that you can see real excitement and buzz around the place... Teams are engaged, collaborative and competitive in their skill development, leading to new innovations."*
>
> **Christian Benson,** Vice President and Client Managing Director, Fujitsu

4

Measure the impact of your Technology Skill Development

Track progress against key metrics so you can see where you're winning and where you can continue to improve.

"We have the tools and analytics to monitor progress and feedback, so we can ensure we're growing technology leaders versed in high-demand skill sets."

Lisbi Abraham, Chief Information Officer, Andela

Important TSD metrics

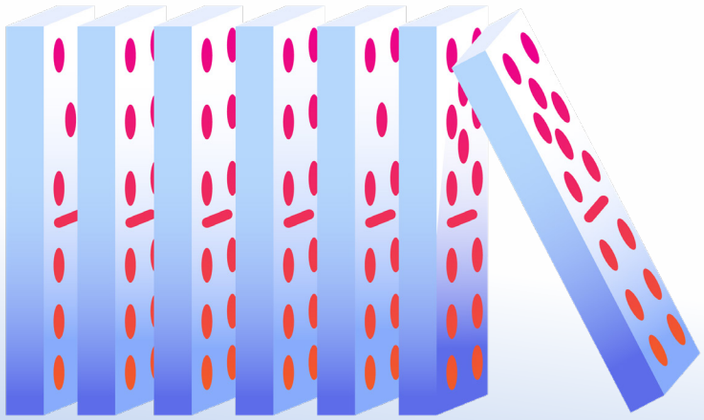
Traditionally, organizations have measured TSD success based on tool use or learner adoption. Since the goal of TSD is to improve operational efficiency and innovation, the real measure of success is whether technologists are getting faster and more effective at bringing innovation to market.

What most organizations focus on

Currently, most organizations primarily measure adoption metrics like:

- Course completion
- Total/average content viewed
- Total/average view time
- Usage (number of licenses globally, by business unit/group, etc.)

However, these aren't as helpful to measure if you're applying TSD to improve operational efficiency and innovation. Course completion and view time are key measures of engagement, but are not a proxy for what you actually want: skill proficiency.



What leading organizations focus on

A more accurate picture of TSD success is how well technologists are increasing their skill proficiency and their efficiency in order to build better, ship faster and innovate more. This means the metrics you should be tracking are:

- Development of skills to implement new technologies
- Deepened expertise in existing technologies
- Time to onboard and ramp up team members
- Ability to align people and teams around key initiatives
- Rate of product development
- Ability to identify future opportunities and align to skill proficiencies

You can also track changes to skill proficiency over time by identifying a skill proficiency baseline of what skills you have in-house, then measuring the changes in skill proficiency over time. This is a percentage of growth or positive change in a skill or language (such as Python) over time (such as six months).

1-800 Contacts:

Upskilling to disrupt vision care

To implement new tech stacks that can meet customer needs and keep the business ahead of market and technology changes, 1-800 Contacts is applying TSD across departments within the organization.

Highlights

- Ship faster with the best-skilled people on business-critical projects
- Engaged employees who feel valued and motivated to help the company thrive
- Cost savings over in-person trainings
- Skilled tech talent to place on key projects
- Diversified IT department

Challenge

Rapidly adopting new technology has been a cornerstone of 1-800 Contacts since the company's founding. Continuous innovation requires a steady stream of skilled workers capable of keeping up on the latest technologies. To address this challenge, leadership at 1-800 Contacts decided to elevate existing talent within the organization to IT roles.

Solution

Recognizing that many of their IT gurus started in the call center, 1-800 Contacts created CTAC University, an in-house skills bootcamp that provides a formalized path from the call center to a career in technology. CTAC-U consists of in-person classes combined with Pluralsight courses and skill assessments in key technologies for the company's objectives.

Results

By enabling TSD using Pluralsight Skills, 1-800 Contacts has seen significant cost savings over in-person training and workshops with skill-development content customized to each person's skill level. Employees feel valued and motivated to help the company thrive because of the company's willingness to invest in them. Having a steady stream of talent has also enabled the company to continue to disrupt and get to market faster by being able to have the tech skills needed to meet their business objectives.

"We're all about wanting to move faster, but with quality. That's one of the huge benefits in using Pluralsight. It's allowed us to get up to speed quicker and move faster."

Chris Wilsher, Director of Enterprise Software Development, 1-800 Contacts

Build better with Technology Skill Development

The need to upskill and reskill tech talent is only going to increase as the pace of technological innovation continues to grow. To stay at the forefront, the path forward is clear: close your organization's tech skills gap in alignment with business priorities. Technology Skill Development is the most efficient and effective way to meet this goal.

Deliver measurable cost savings

TSD is more budget-friendly than traditional training and less costly than hiring new talent. Retaining and developing employees can save you a minimum of **$36,472** per employee and add **12%** to your bottom line.

Solve the talent shortage problem

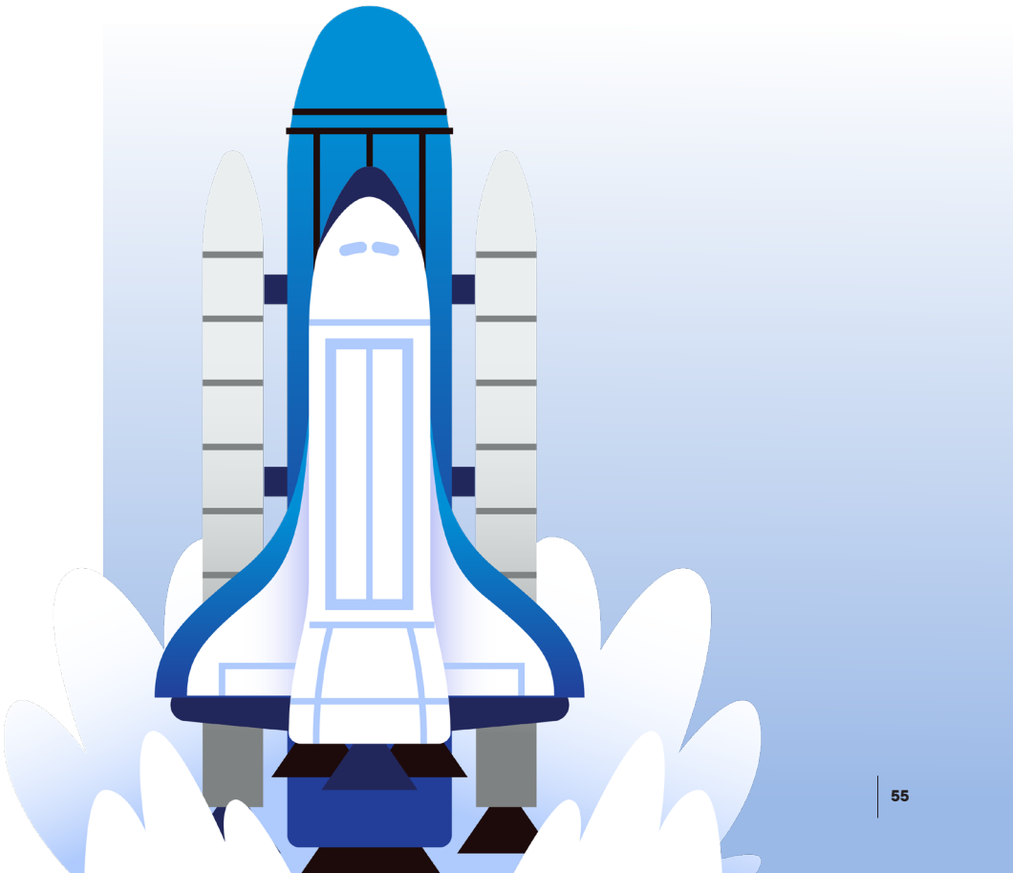
With **90%** of S&P 100 companies competing for talent to fill the same 39 roles and only **20%** of employees having the skills companies need, hiring outside talent is difficult because the demand for tech talent significantly outpaces the supply.

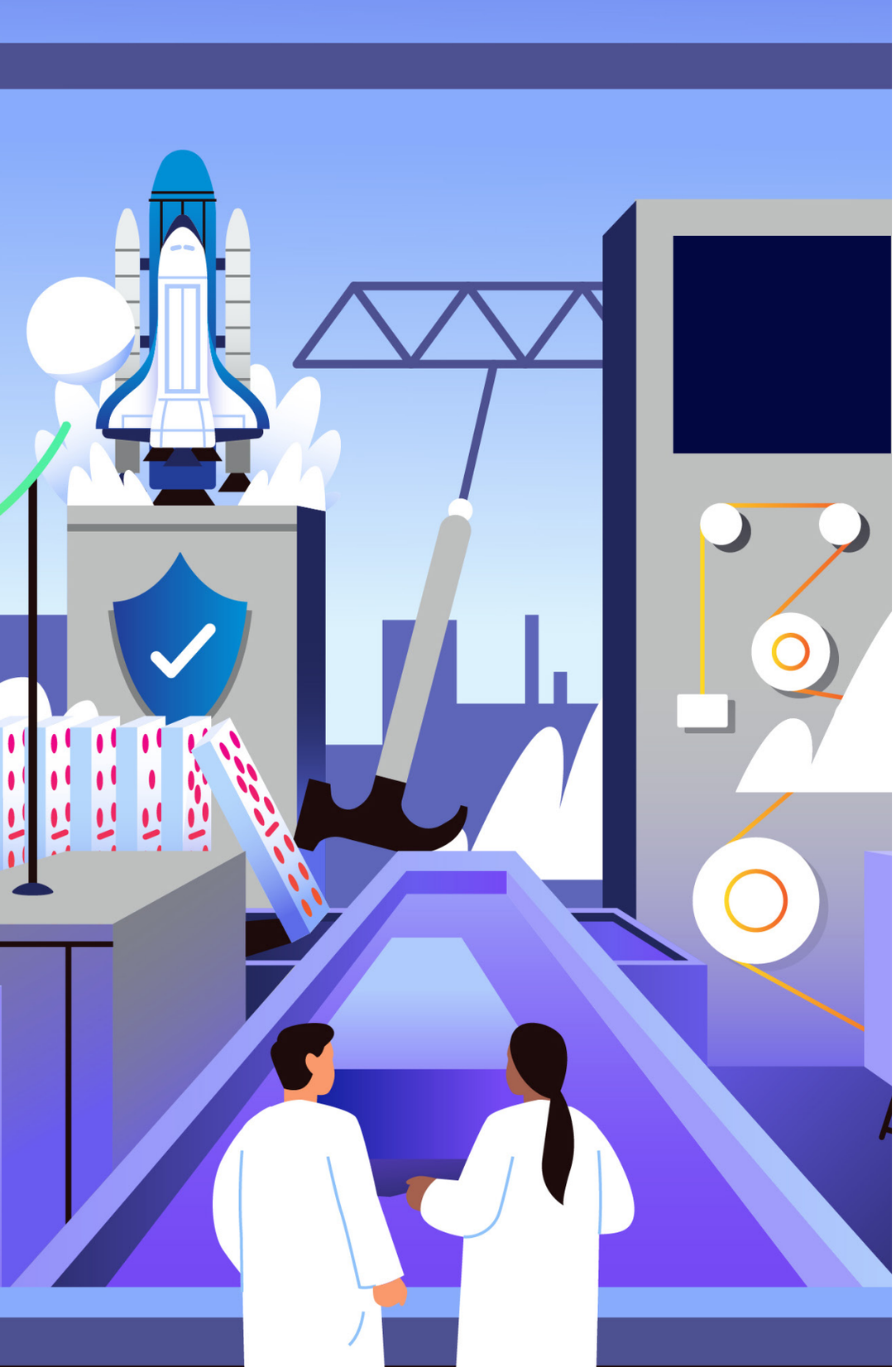
Align to your business goals

TSD ensures that training focuses on strategically closing skill gaps to help your organization reach its business goals faster and more efficiently.

Give you a competitive edge

Only **33%** of companies have upskilling programs in place, giving those who do a significant advantage to innovate and disrupt at a faster pace.





Leverage the team you have today to build the organization you envision for tomorrow

- Spend less time trying to figure out what to train areas requiring more training.
- Curate content to ensure skill sets and roles align.
- Ship faster with the best-skilled technologists on business-critical projects.
- Gain greater business agility to meet rapidly shifting customer needs.
- Empower and engage employees to innovate faster.
- Track progress and report the value teams are adding to the company's larger objectives.
- Apply skill progress insights to future initiatives.

Leading organizations have made Technology Skill Development their core strategy.

Ready to make it yours? Talk to us about implementing TSD with the help of our professional services team.

sales@pluralsight.com | 1-888-368-1240 | 1-801-784-9007

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Build Better

PLURALSIGHT

Pluralsight is the tech workforce development company that helps teams build better products by knowing more and working better together. Using our Skills product, teams can consistently deliver and quickly adopt new tools by building critical tech skills. Our Flow product gives engineering teams actionable data to improve workflow efficiency. And our professional services help you develop a strategy for the future, overcome roadblocks and customize your team's experience.