



## Contracting for Agile and DevOps

Recommended Practice for Sourcing  
Executives

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## The “as-is” state of Agile contracting

Only 27% of firms have reported more than 50% of Agile adoption across software teams

### Existing adoption

It has been nearly 20 years since the [Manifesto for Agile Software Development](#) was released; since that time, four key values and 12 principles that form its bedrock have been instrumental in revolutionizing product delivery across industries and organizations. However, even after almost two decades, many enterprises struggle to scale up Agile adoption – in fact, it is only the last two to three years that we have begun to see contracts customized to an Agile delivery model.

In an Everest Group research with over 150 C-level executives, we found:

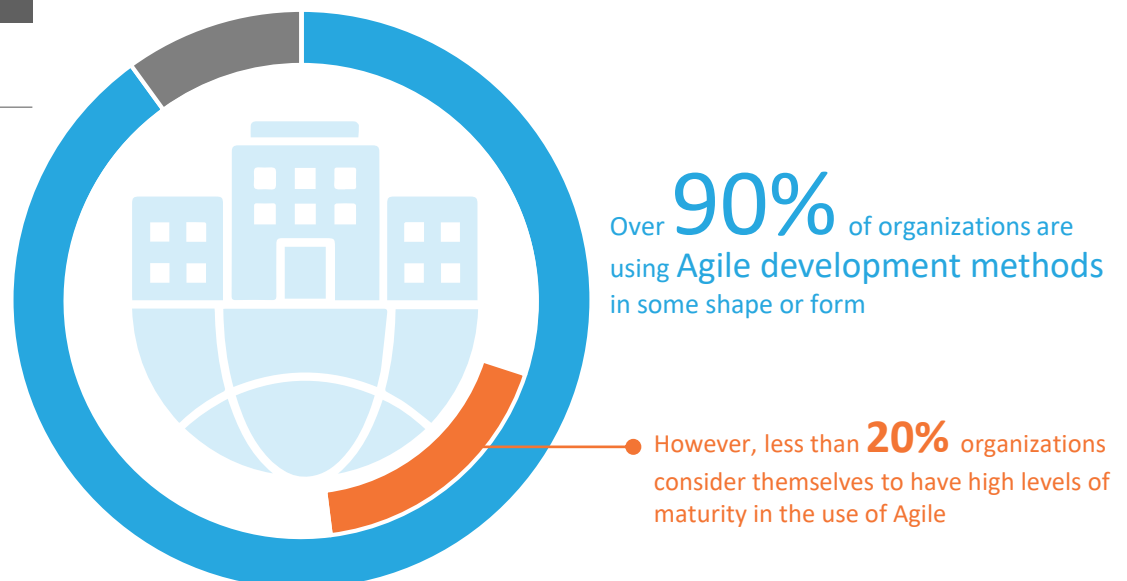
- 46% of the respondents reported that fewer than 30% of their software development teams leverage Agile methodology, which clearly highlights scalability challenges
- 31% of respondents reported challenges in contracting for something that is difficult to define
- 22% indicated that they had trouble aligning on the appropriate performance metrics

Our research also suggests that more than 80% of organizations consider themselves to have low maturity in Agile delivery. To address these challenges, enterprises are looking to third-party service providers to help them move toward enterprise Agile delivery.

### EXHIBIT 1

Agile adoption across enterprises

Source: Everest Group



In its current form, an Agile contract is shaped in alignment with the delivery methodology and generally consists of the components described ahead.

**Statement of Work (SOW):** The current SOW’s focus on sprint- based delivery with well defined responsibilities for the client and supplier teams. An Agile-based SOW focuses on the activities noted in Exhibit 2 (page 3) for a product deployment.

**EXHIBIT 2**

Agile phases and their expected outcomes

Source: Everest Group (2019)





Exhibit 3 offers a snapshot of a typical RACI signed between an enterprise and a service provider for the sprint planning stage.

**EXHIBIT 3**

RACI matrix between client and third-party provider teams during sprint planning

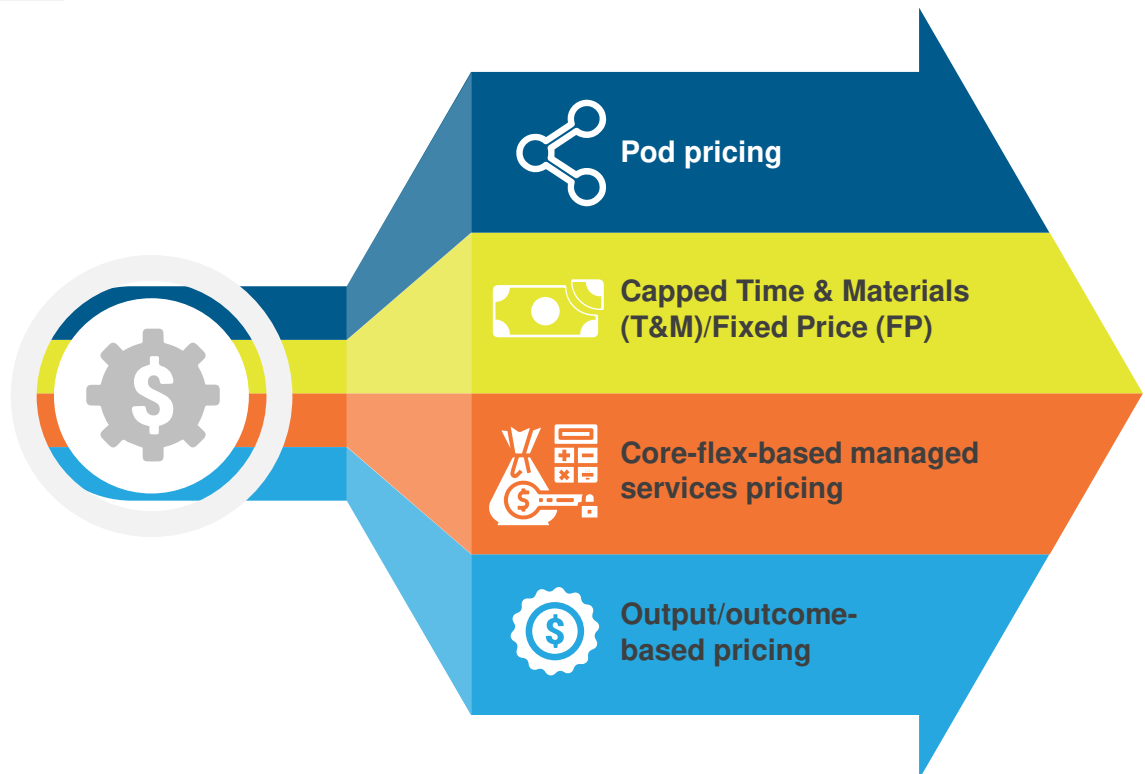
Source: Everest Group (2019)

Sprint planning		
Responsibility	 Service provider	 Enterprise
Manage consistent scrum practices	X	
Articulate sprint goals		X
Estimate user stories	X	
Align on infrastructure requirements	X	
Create and manage sprint backlog	X	
Ensure support from third party vendors		X
Align on estimate for user stories	X	

Most Agile projects begin as capped T&M model and then transition to fixed price

**Terms and conditions** – While service providers claim that Agile have changed many things, some evergreen traditional contractual clauses are also present in Agile contracts without much change. Clauses such as limitations of liability, IP rights, indemnification, and termination have remained similar to the traditional waterfall contracts. The only change in these clauses is that the risk impact on service providers and buyers is much less in Agile due to the iterative nature of development.

**Pricing mechanism** – For Agile delivery, the most commonly adopted models are:



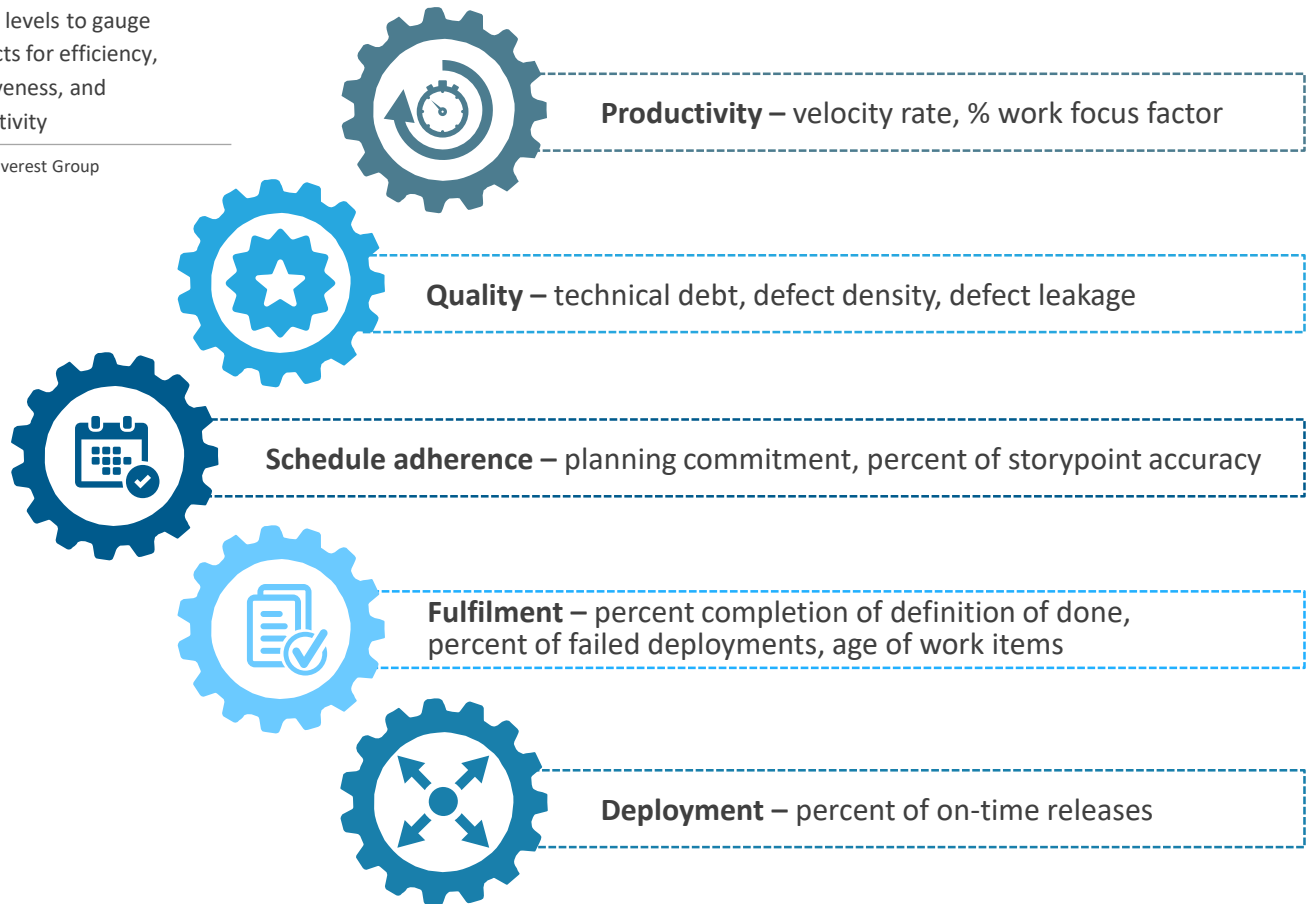
- **Pod pricing** – A pod consists of several dedicated resources – developers, testers, the scrum master, and product managers – and other shared resources, such as performance engineers, solution architects, and release engineers. We have seen organizations that have robust demand management processes following this approach
- **Capped Time & Materials (T&M)/Fixed Price (FP)** – Organizations tend to use a capped T&M approach if they have reasonably fair visibility into, and vision of, the end product. While predictability goes against the very fabric of Agile, organizations that want to implement a product in Agile, while maintaining tight control over the budget, prefer this model. This model incentivizes service providers to control costs
- **Core-flex-based managed services pricing** – In this model, service providers propose a fixed fee for a base team consisting of a mix of developers (mobile, web, microservices, etc.), testers, solution architects, project managers, program managers, and others. For additional resources beyond the fixed fee capacity, service providers can provide a pod-based or T&M pricing model
- **Output/outcome-based pricing** – In very mature buyer enterprises, we have observed alternate pricing models such as per-storypoint deployed or mechanisms that leverage traditional concepts such as holdback fees for Agile deployments. The outcome based model typically links the per-sprint fees to the sign-off on the definition of done

**Service metrics** – Current contract SLA/KPIs are a mix of traditional and next-generation metrics. Some of the valuable metrics to track Agile delivery include those noted in Exhibit 4.

#### EXHIBIT 4

Service levels to gauge contracts for efficiency, effectiveness, and productivity

Source: Everest Group



In order to be ready to be a truly Agile organization, the most important aspect that many enterprises should focus on is stakeholder education and buy-in. Stakeholder coaching should be streamlined; relevant stakeholders should be coached first on the merits of being a truly Agile organization and their concerns proactively addressed. While internal or external resources can do the coaching, generally it is done by an Agile coach, who is responsible for the education of all relevant stakeholders in the organization, from business executives to program/project level managers.

## The to-be state of the Agile contracting

### Key focus areas for enterprises

**Scope definition** – It is widely known that Agile contracts do not define an exact project scope or project plan. However, if we look at recent contracts, the majority have elaborated on the significance of definition of done, which generally includes the following concepts:

- Completion of activities, including unit, system, and integration testing based on pre-defined acceptance criteria. These acceptance criteria are usually include functional and non-functional requirements that need to be passed as part of an overall checklist
- The product manager's sign-off for the user stories in development and updates to the product backlog for any pending tasks
- Defect identification and closure
- Code deployment into test and higher environments

One of the major challenges that enterprises and service providers face is a common framework for estimating the user storypoints. Many organizations have developed their own estimation models, while service providers in many cases follow a t-shirt-based effort estimation model (effort distributed as small, large, and extra large) . In many cases, a difference in approach can result in major roadblocks that may derail the program. Hence, it is important to align on a common set of practices and frameworks in the early stages of the engagement.

Contracts are often unclear on the number of iterations within which a defect, which can be functional or non-functional, needs to be resolved. Service providers must promptly address defects identified in the N-1 cycle that impact the user stories planned for delivery in the N cycle; lack of clarity on how to address defects can potentially result in high technical debt and rework.

**Managing the vendor lock-in challenge** – We have also noted that in majority of contracts, infrastructure services continue to be managed separately with all the key activities such as environment setup, support, performance engineering, and deployment under a different third party. While this model is suitable to avoid vendor lock-in, it often becomes a chokepoint in the effort to achieve high-frequency delivery.

**Service metrics** – In the current format, while the SLA/KPIs seem to be exhaustive in terms of the scrum team delivery, key areas may be missing, including

- Time-to-market
- Product satisfaction
- ART (release), solution, and portfolio-level productivity

**Scaled Agile RACI** – While many contracts talk about the importance of teams such as ART in a SAFe (Scaled Agile framework) and roles such as release train engineers, solution train engineers, very little is included on the roles and responsibilities of release trains, solution trains, and portfolio trains that clearly articulates the responsibilities and how they interact with the downstream scrum teams. Current contracts focus on individual scrum teams and their productivity, while program-, solution-, and portfolio-level metrics are still missing.

**Removing the waterfall mindset** – Many current scrum teams have specialists for individual functions such as development, testing, release and deployment, UX, etc. This division of labor approach suffers from bottlenecks created by individuals trying to address his/her own goals. As teams mature, it is necessary to develop full stack development talent, all of whom have a common KPI of product deployment. This approach also removes dependencies on specific team members whose absence can result in project delays.

Incentives are one method organizations can use to influence a service provider's behavior in moving toward a full stack developer model. Doing so will ensure that the idea of fast-moving Agile teams – sold during the proposal stage – actually becomes a reality during the course of the engagement.

**Value-based pricing** – A search of our deal database shows a very low prevalence of outcome-based contracts; clearly, expecting enterprises to simply turn on a switch and use outcome-based pricing for Agile delivery models is unrealistic. However, we believe enterprises that are on the path to Agile transformation should experiment with the idea of value- (revenue enablers) based pricing. This value-based pricing would ideally be linked to the portfolio epics, which are, in turn, linked to the business stakeholders' revenue areas.

However as a caution, one should take small steps and gauge program-based pricing or solution-level pricing before jumping directly into value-based pricing.

## DevOps: a logical extension to Agile

42% of enterprises have planned or have ongoing DevOps initiatives along with Agile  
 Source: Everest Group (2019)

### What is DevOps?

In simple terms, DevOps is a methodology that integrates the traditionally siloed teams of development and operations. Its goal is to improve software development and deployment cycles, deployment frequency, and the quality and relevance of software releases to enable tighter alignment with business objectives.

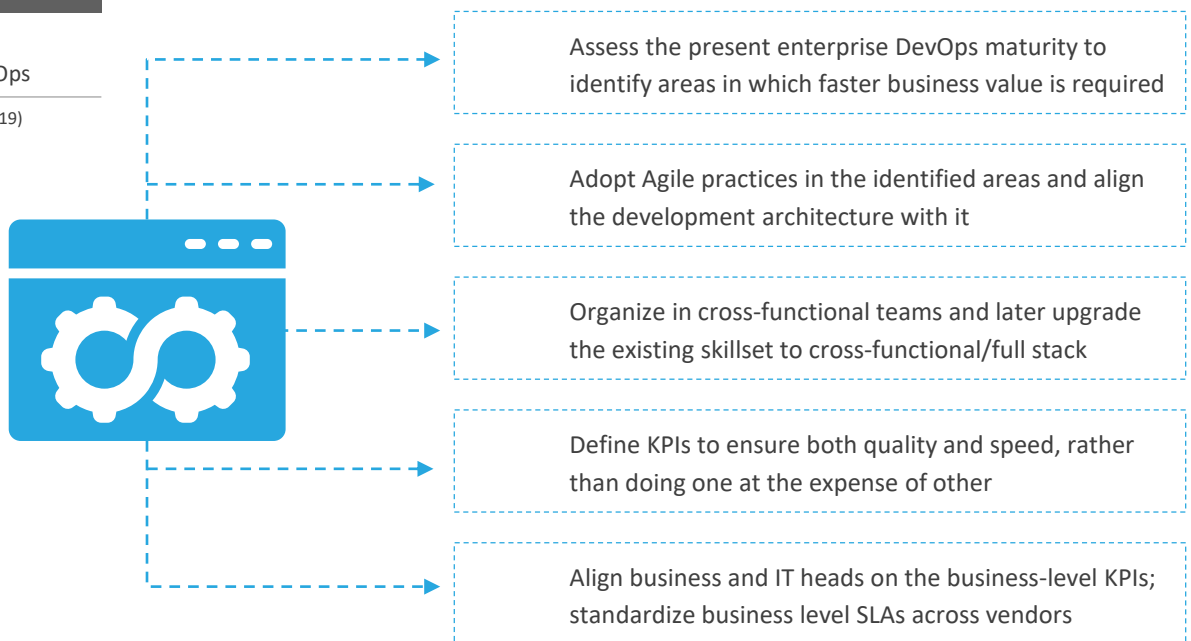
### How does the transition from Agile to DevOps takes place, and why it is important?

If the premise of Agile adoption is achieving incremental business value more quickly, that goal cannot be achieved with an Agile-only philosophy. While an Agile-only approach can help organizations achieve greater frequency of development, an Agile + DevOps approach would be helpful in achieving faster time-to-market and better business-IT alignment by focusing on the entire lifecycle. Successful transition from Agile to DevOps calls for extending the Agile mindset beyond the software team to the IT operations team.

#### EXHIBIT 5

Best practices for transitioning to DevOps

Source: Everest Group (2019)



### How to select a service provider for DevOps

Before jumping into the question of how to select a service provider for DevOps, enterprises should assess the areas in which they can make a business case for DevOps adoption. Outsourcing DevOps often is best due to the inherent challenges related to infrastructure and security involved, making it both difficult and potentially counterproductive for the in-house teams to handle. Enterprises should assess current organization readiness for DevOps and chose a service provider that aligns well with that level of readiness. To chose the best fit service provider, keep in mind that the service provider should:



## EXHIBIT 6

Key considerations for  
DevOps service provider  
selection

Source: Everest Group (2019)



Have experience in tools/platforms but should be able to deliver DevOps-as-a-service



Be able to handhold the enterprise through the change management journey



Have the capability and experience to orchestrate different functions, tools, vendors, and stakeholders



Be able to deliver on top of the enterprise's existing toolset



Have a good understanding of the enterprise's existing apps and infrastructure



Have proven expertise in translating technical metrics into business-level outcomes and vice versa

**How the SOW changes**

While most of the work items from an Agile contract continue in place, environment provisioning and deployment-related work items are added to the contract. Given the sensitive nature of the work item, the enterprise keeps the final deployment approval-related work items to itself. The responsibility for other work items such as infrastructure and tool provisioning may or may often lie with another third-party provider to avoid vendor lock-in. In self managed data centers, the development and operations teams should work together to have a single KPI instead of separate KPIs for app and infrastructure.

EXHIBIT 7

The goal of DevOps contracts is end-to-end responsibility for the cross-functional teams

Source: Everest Group (2019)



Below is a typical responsibility matrix in a DevOps contract:

Principal activities	Responsibility	
	Service provider	Enterprise
DevOps		
<b>Tooling</b>		
Infrastructure provisioning for hosting tools		X
Provide licenses, credentials, and access to tools		X
Install and configure tools	X	
Administer tools	X	
Support and maintain tools (incidents, patches, upgrades, monitoring, etc.)	X	
Coordinate with the enterprise and third parties for tool support and maintenance	X	
Agree on agreements with third parties on tools, where reasonably required and agreed upon by the parties		X
<b>Code build</b>		
Maintain version control	X	
Enhance build pipeline automation	X	
Create, update, and maintain build services scripts	X	
Approve deployment of build services scripts		X
Deploy build services scripts to non-production environments	X	
Deploy build services scripts to production environments	X	
<b>Environment provisioning and deployment</b>		
Define deployment automation framework	X	
Approve automation framework		X
Provide access and accounts in all environments used for development, testing, and operations		X
Create, update, and maintain scripts for automated environment provisioning and tear-down	X	
Provide inputs for automation of deployments	X	
Approve deployment scripts		X
Deploy scripts	X	

Less than 25% of enterprises have meaningful SLAs/KPIs laid out in their DevOps contracts  
 Source: Everest Group (2019)


**Key SLAs to keep in mind when contracting for DevOps**





















Though transitioning to DevOps is more about a mindset shift, having the correct contractual levers in place can accelerate the transition. SLAs help not only to align business and IT heads on a common set of business objectives, but they also establish accountability. Most of the SLAs for Agile hold true for DevOps but the underlying interpretation changes as described in Exhibit 8.

**EXHIBIT 8**

Key SLAs/KPIs for DevOps contracts

Source: Everest Group (2019)

Low  High

SLA/KPI	Impact <sup>2</sup>	Description
 <b>Deployment frequency</b>		Unlike Agile, DevOps practices makes frequent deployment possible. The deployment frequency is the direct measure of team’s efficiency/cohesiveness
 <b>Release timelines adherence</b>		Release timelines adherence is also tracked under Agile; for DevOps the control becomes stricter
 <b>Application availability</b>		Application availability is an important SLA for both traditional and DevOps contracts
 <b>Environment availability</b>		Environment availability often becomes the biggest roadblock in DevOps success, so accelerating it becomes important
 <b>Lead time for provisioning</b>		Lead time to provisioning is also an indirect metric to control environment availability and measure the effectiveness of the automation
 <b>Lead time</b>		Lead time from development to deployment is a direct measure of the time-to-market, and its relevance increases significantly in the DevOps model
 <b>Build time</b>		Contemporary tools have been able to automate major portions of the build time
 <b>Percentage of successful deployments</b>		Percentage of successful deployments also is tracked in an Agile contract as it is a direct indication of the efficiency of the CI/CD pipeline
 <b>Test automation percentage</b>		A true DevOps pipeline is expected to have achieved 100% test case automation
 <b>Customer satisfaction</b>		DevOps only makes a business case if it is able to deliver value to the customer quickly and accurately; thus, customer satisfaction metrics become important

1 Impact here refers to the impact on relevance of the metric when moving from traditional models to DevOps

## Recommendations for sourcing executives

Most enterprises already have some form of Agile and DevOps adoption in at least a few areas within the organization, but scaling these initiatives to drive transformational value will require a structured method.

We recommend that enterprises create short-, mid-, and long-term views for their Agile and DevOps contracting model.

**In our research with successful enterprises, we have seen the following scenarios.**

### Short-term (0-6 months)

- Identify the right stakeholders and conduct agile readiness workshops
- Institutionalize coaching for agile across stakeholders
- Analyze current Agile maturity and perform metrics assessment to capture for coverage and completeness
- Improve the automation of existing CI/CD pipelines
- Perform impact analysis for potential changes
- Continue pricing in pod-based or other capacity-based models

### Mid-term (7-24 months)

- Evaluate contracts to clarify the traditional and Agile/DevOps mix
- Prepare a playbook for Agile/DevOps contracts
- Rework the MSA and SOWs and align them to Agile/DevOps methodology
- Synchronize a two- to three-week cadence across teams
- Build new CI/CD pipelines for one or more technologies
- Perform capability and risk assessments across teams to gauge impact
- Develop a Proof of Concept (PoC) for solution-level pricing moving beyond teams or pods

### Long-term (24 months+)


- Overhaul contracts where necessary
- Institutionalize solution-based pricing
- Restructure the organization to align to value-based streams
- Fully automate DevOps setup and monitoring
- Perform portfolio-level assessments to gauge impact
- Perform a POC for value-based pricing

We believe sourcing professionals have a great opportunity to become business partners if they can drive successful Agile and DevOps adoption across businesses. Though contracting will play a crucial role in this journey, limiting Agile and DevOps to contracting is counterproductive. Therefore, sourcing professionals need to develop a deep understanding of Agile and DevOps models to educate their business partners who are not thinking along these dimensions. Sourcing executives also should continue to evaluate potential service partners that can drive this transformation. Transformation presents a golden opportunity to move beyond procurement-centric activities to become an effective business partner.

## About Everest Group


Everest Group is a consulting and research firm focused on strategic IT, business services, and sourcing. We are trusted advisors to senior executives of leading enterprises, providers, and investors. Our firm helps clients improve operational and financial performance through a hands-on process that supports them in making well-informed decisions that deliver high-impact results and achieve sustained value. Our insight and guidance empower clients to improve organizational efficiency, effectiveness, agility, and responsiveness. What sets Everest Group apart is the integration of deep sourcing knowledge, problem-solving skills and original research. Details and in-depth content are available at [www.everestgrp.com](http://www.everestgrp.com).


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