



DEEP DIVE: ENVIRONMENT PROVISIONING FOR APPLICATION DEVELOPMENT & DELIVERY SURVEY

EBOOK BY RAFAY

INTRODUCTION

For any organization to effectively test and release new modern applications or services, the appropriate on-premise or cloud environment needs to be in place. Environment provisioning is a method that organizations employ to create and manage environments throughout the development and deployment cycle.

Recent industry research titled “Understanding Environment Provisioning for Application Development and Deployment” surveyed 525 professionals at enterprise organizations with 1,000+ employees to explore the current processes, challenges and opportunities related to environment provisioning for application development and deployment. To better understand the attitudes and perspectives of both platform teams (i.e., platform and cloud engineering, architecture and operations professionals) and application developers, there was a 50/50 split between the groups surveyed. Specifically, the survey:

- Determines the importance of environment provisioning for application development and delivery and its related pain points
- Uncovers organizations’ current application/service development cycle and desired future cycle
- Identifies organizations’ current methods for provisioning and managing environments
- Pinpoints roadblocks to accelerating environment provisioning
- Compares and contrasts the opinions of developers and platform, cloud engineering, architecture and operations professionals

525 professionals
at enterprise organizations with
1000+ employees

The results of the survey demonstrate that environment provisioning for application delivery has been challenging because it is mired in manual processes and infrastructure dependencies that affect the developer experience.

A developer experience (DevEx) gap—between what developers require to quickly deliver new application capabilities and the methods currently available to them—was discovered. For developers, the current environment provisioning process is complicated, time-consuming and lacks enough automation. For platform teams, this process lacks standardization, visibility into resource spend and is labor-intensive. As a result of these inefficiencies and complications, both groups concur that a self-service environment provisioning process that streamlines the process for developers and provides the controls and guardrails required by platform teams would be valuable.

The following highlights the key learnings from the survey.

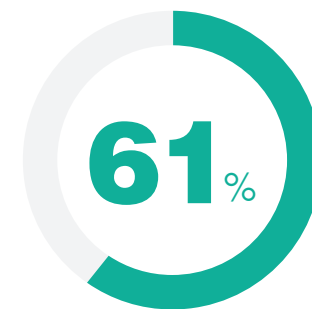
CURRENT ENVIRONMENT PROVISIONING PROCESSES ARE **RIPE FOR CHANGE**

Many organizations' current processes for environment provisioning are inefficient, complex and do not fully meet the expectations of developers nor platform teams.



1 in **4**
organizations

TAKE **3 MONTHS OR LONGER** TO
DEPLOY AN APPLICATION OR SERVICE
FROM CODE-COMPLETE TO PRODUCTION



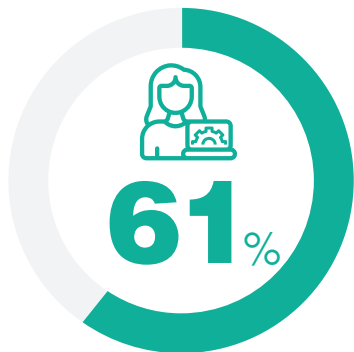
CITE ENVIRONMENT
PROVISIONING IS A
MAJOR ROADBLOCK TO
ACCELERATING THE TIMEFRAME
FOR APPLICATION DEPLOYMENTS



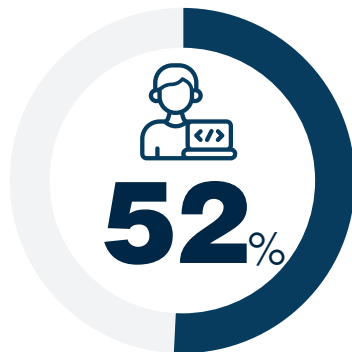
While 91% of respondents believe that environment provisioning is important for application development and delivery, nearly half (45%) are unsatisfied or just somewhat satisfied with their organization's current process.

PLATFORM TEAMS AND DEVELOPERS HAVE DIFFERING EXPERIENCES WITHIN THEIR ORGANIZATIONS' ENVIRONMENT PROVISIONING PROCESS, **LEADING TO A DEVEX GAP**

How satisfied are you with your organization's current process for environment provisioning?



PLATFORM TEAMS
ARE VERY SATISFIED



DEVELOPERS
ARE UNSATISFIED OR ONLY SOMEWHAT SATISFIED

Developers highlighted that the current process for environment provisioning is complicated, time consuming and lacks enough automation.



There's a lack of automation between DevOps and core developer workflows

55%

Rolling out environments for applications takes too long

41%

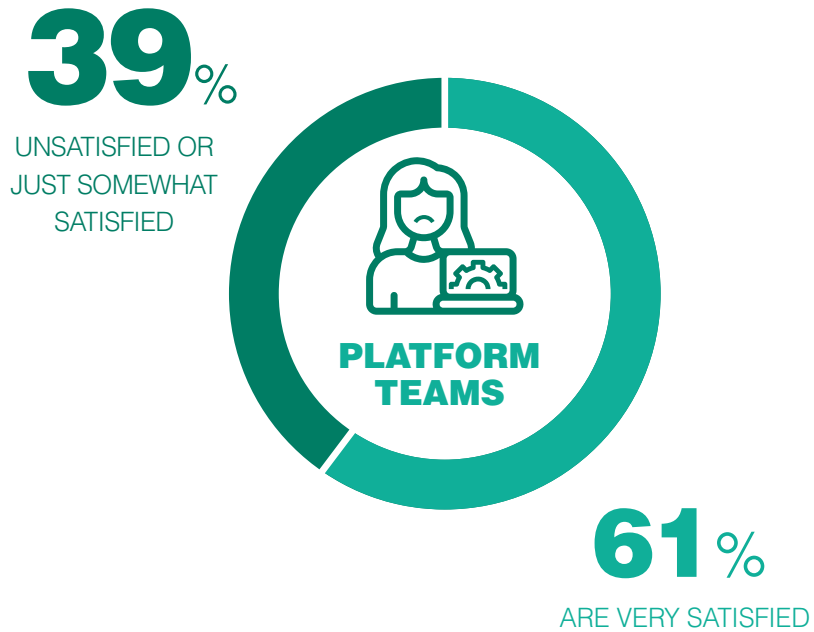
It takes too much time to learn about and stay up to date with how to provision environments in my datacenter or cloud infrastructure

36%

It's too complicated to provision environments in my datacenter or cloud infrastructure

33%

Despite most platform teams being satisfied with their organization's current environment provisioning process, **there is still a substantial number of those who expressed being unsatisfied or just somewhat satisfied.**



Platform teams indicated the following pain points, highlighting lack of standardization, training, visibility and governance:



No standardized way to deploy and manage environments

43%

It takes too much time and effort to train development teams on how to provision environments

41%

Lack of visibility into environment resources including usage, costs and performance metrics

38%

Lack of governance around software/tools that are used

35%

Not enough guardrails around operations, optimizing processes, reducing risk and controlling costs

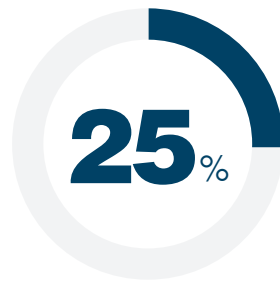
27%

TIME-CONSUMING APPLICATION DEPLOYMENT PROCESSES ARE STIFLING INNOVATION, DISPROPORTIONATELY AFFECTING DEVELOPERS

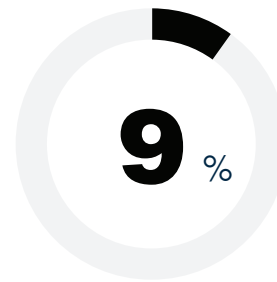
Although 59% of all respondents said it currently takes less than a month to deploy an application or service from code-complete to production, a **significant group of respondents (34%) report a longer process.**



TAKE LESS THAN
A MONTH



TAKE **THREE MONTHS**
OR LONGER



TAKE EVEN LONGER
AT **6 MONTHS**
OR MORE

When asked if this is the ideal timeframe to deploy an application or service from code-complete to delivery:



of platform teams
- **it's ideal**



of developers
- **not ideal**



Is environment provisioning a major roadblock to accelerating the timeframe for application deployments?

61% cited that it is a major roadblock

Why does environment provisioning inhibit the ability of both groups to deploy an application or service from code-complete to production in their ideal amount of time?



Platform teams and application developers cited the following reasons:

They and their team have to wait on someone else (e.g., operations) or a ticketing-based system to provision environments

57%

Too many software/service dependencies between the application and environment that need to be tested/approved/validated

49%

It takes too long to gain/configure/approve access to new environments

30%

Lack of automation to procure environments or environments must be manually deployed

27%

They and their team have limited expertise with environments

26%

Lack of a standard or a repeatable process for procuring environments

12%

PLATFORM TEAMS AND APPLICATION DEVELOPERS SAY YES TO SELF-SERVICE

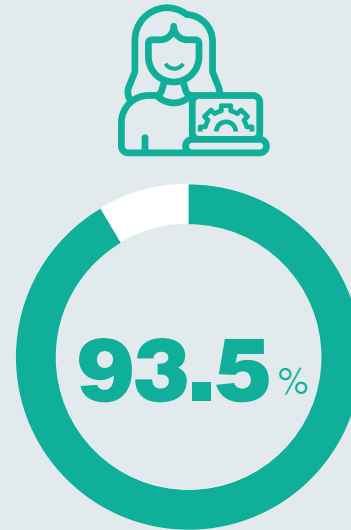
The biggest hurdle to speeding up application deployment times for both groups is that they often have to wait on someone else or a ticketing-based system to provision environments.

As a result, platform teams and application developers unanimously agree on a solution for shortcomings in their current environment provisioning process—self-service.

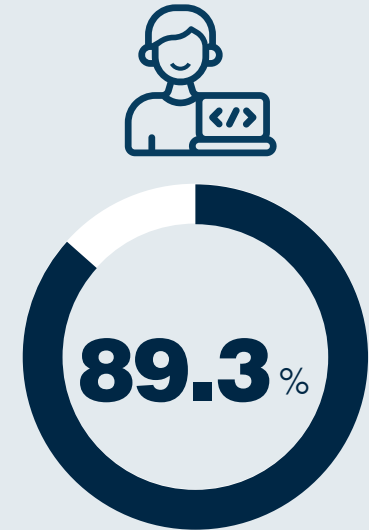
Similar to our research, a Gartner Cool Vendor report in Platform Engineering for Improving Developer Experience shows that by 2025, 75% of organizations with platform engineering teams will provide self-service, internal developer platforms to improve developer experience and accelerate product innovation.



For example, interfaces built with software such as Spotify's open source platform Backstage can help streamline the developer experience and self-service capabilities.



PLATFORM TEAMS



DEVELOPERS

THINK IT WOULD BE **VALUABLE TO HAVE A SELF-SERVICE WORKFLOW OR PORTAL** WHERE THEY CAN PROVISION ENVIRONMENTS THEMSELVES

INTRODUCING RAFAY'S ENVIRONMENT MANAGER

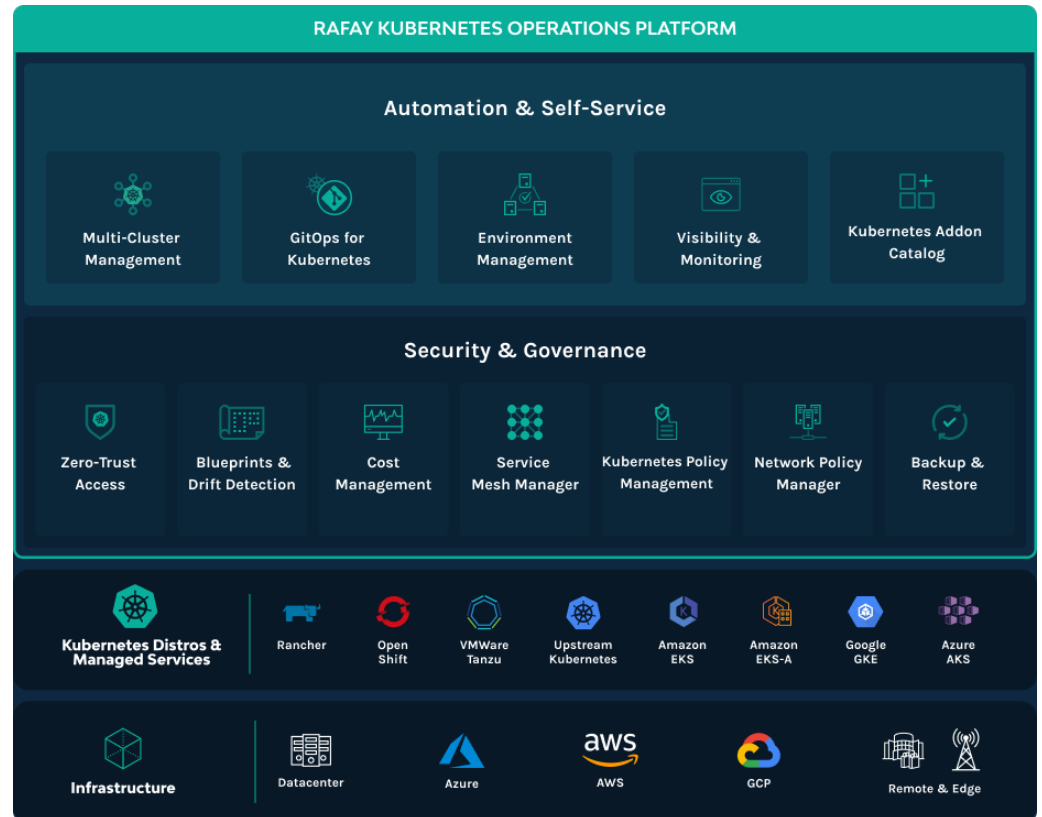


Environment Manager is a solution that empowers enterprise platform teams to improve the developer experience by delivering self-service capabilities for provisioning environments.

It is a purpose-built solution for platform teams and developers, providing a seamless, self-service experience to provision environments from code to deployment.

Integrated with Rafay's Kubernetes Operations Platform (KOP), Environment Manager enhances the developer experience by abstracting the complexity and reducing the time required to provision environments, while enabling platform teams to operate the same Kubernetes practice that runs in their organization today.

To learn more about the company that provides platform teams at MoneyGram, GuardantHealth, Verizon and more with a centralized approach to manage and operate their modern infrastructure across data centers, public cloud and Edge environments, schedule a **Rafay product demo** or start a **free trial today**.



Source : The Rafay survey titled "Understanding Environment Provisioning for Application Development and Deployment," which canvassed 525 platform teams (i.e., platform and cloud engineering, architecture and operations professionals) and application developers at enterprise organizations with 1,000+ employees.



```
private fun initView() {  
    mTabLayout = findViewById<TabLayout>(R.id.tabLayout)  
    mViewPager = findViewById<ViewPager>(R.id.viewPager)  
    mToolBar = findViewById<AppBarLayoutView>(R.id.toolbar)  
}  
  
private fun initView()  
    mViewPager.add  
        override fun  
  
        override fun  
  
        override fun  
            select  
        }  
    })  
    mTabLayout.get  
    mTabLayout.tab  
    mTabLayout.tab  
    mTabLayout.set
```

```
findViewById<View>(R.id.viewPager)  
    = findViewById<TabLayout>(R.id.tabLayout)  
    = findViewById<ViewPager>(R.id.viewPager)  
    = findViewById<TabLayout>(R.id.tabLayout)
```

