

THE TOP 4 CHALLENGES FACING DEVELOPERS

On the quest to deliver highly available software, developers frequently meet performance hurdles that can stop them in their tracks. Learn what they are and how to overcome them.

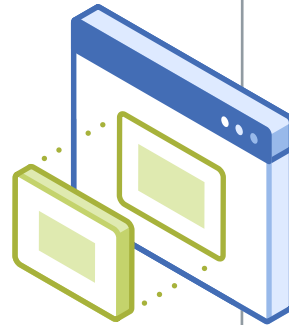


ISSUE 1: DEPLOYMENT FREQUENCY

QUESTION: For the primary application or service you work on, how often does your organization deploy code to production or release it to end users?

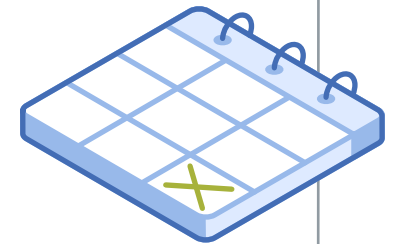
High-performing (Elite) developers...

- Have **208** times more frequent code deployments
 - Routinely deploys codes to production/end-users multiple times a day
- ~4** for many organizations,
upwards of **1000s** for large organizations



Whereas low-performing developers...

- Deploy **1 per month** (12/year)
or
1 per 6 months (2/year)



WHY: The smaller your organization, the better your deployment frequency is. In general, those with fewer than 5,000 employees are more likely to be “elite” developers. Reasons like most heavyweight process and controls and architectures that introduce delay and instability account for that discrepancy.

ISSUE 2: CHANGE LEAD TIME

QUESTION: For the primary application or service you work on, what is your lead time for changes (i.e., how long does it take to go from code committed to code successfully running in production)?

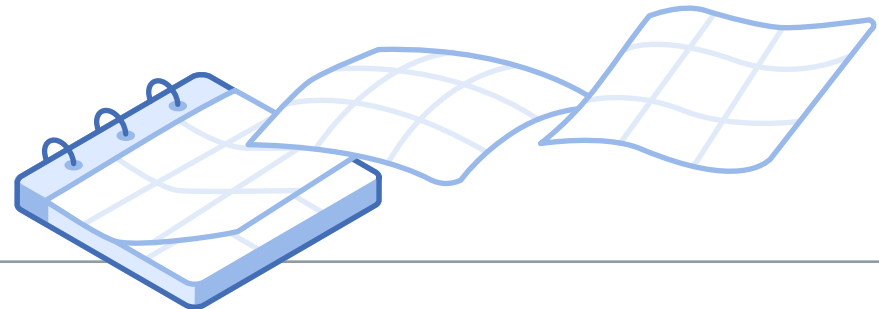
High-performing (Elite) developers...

- Have **106** times faster lead time from commitment to deployment
- Report lead times of **>24 hours**



Whereas low-performing developers...

- Require lead times between **1 - 6 months**
- Require an average lead time of **2,555 hours**

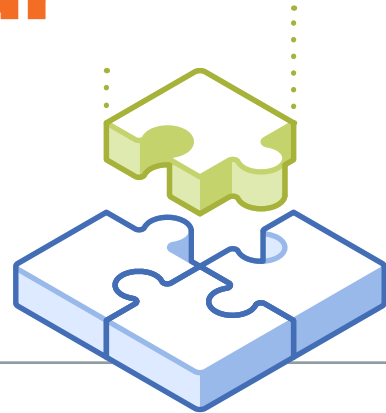


ISSUE 3: TIME TO RESTORE SERVICE

QUESTION: For the primary application or service you work on, how long does it generally take to restore service when a service incident or a defect that impacts users occurs (e.g., unplanned outage or service impairment)?

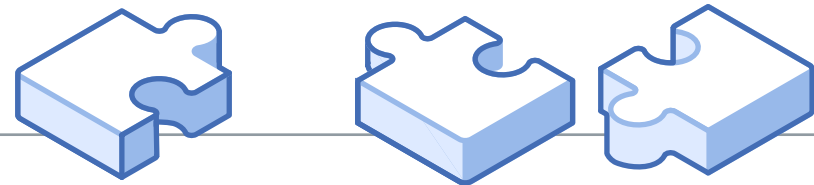
High-performing (Elite) developers...

- Recover from incidents **2,604** times faster
- Need **>1 hour** to restore services



Whereas low-performing developers...

- Need between **1 week - 1 month** to restore services
- On average, require **168 - 5,040 hours** for restoration

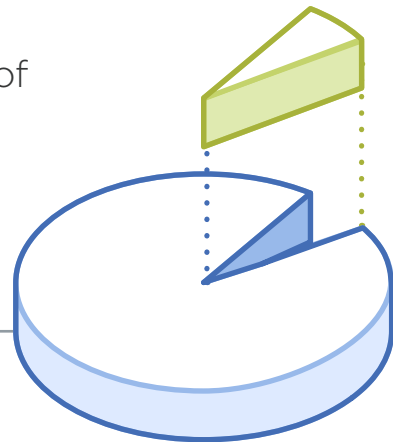


ISSUE 4: CHANGE FAILURE RATE

QUESTION: For the primary application or service you work on, what percentage of changes to production or released to users result in degraded service (e.g., lead to service impairment or service outage) and subsequently require remediation (e.g., require a hotfix, rollback, fix forward, patch)?

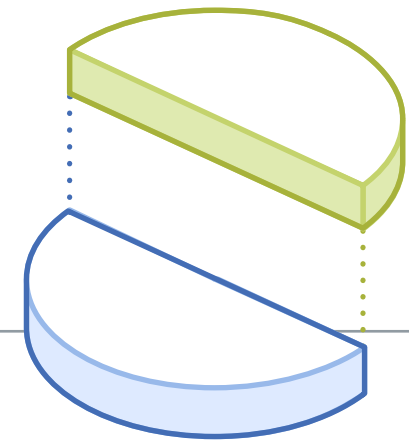
High-performing (Elite) developers...

- Have failure rates **7** times less often
- Report a change failure rate between **0% - 15%**
- Have a mean failure rate of **7.5%**



Whereas low-performing developers...

- Report a change failure rate between **46% - 60%**
- Have a mean failure rate of **53%**



GUIDE YOUR TRANSFORMATION IN THE RIGHT DIRECTION

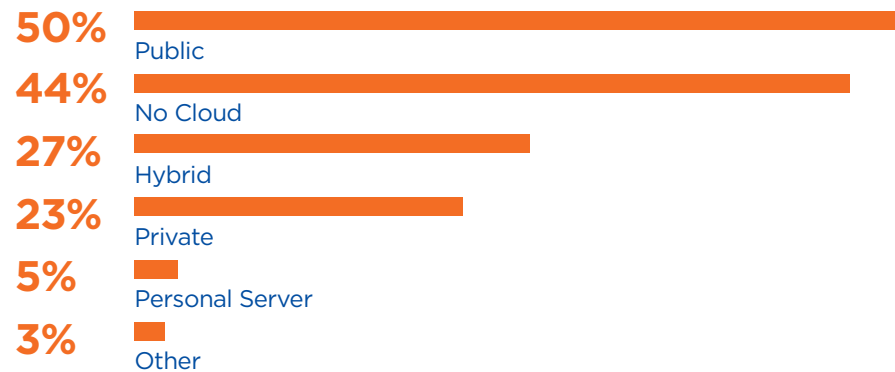
THE BRIGHT SIDE: Enterprises don't have to settle for poor performance, high lead times, slow recovery times, and high failure rates. There are a few key steps you can take to maximize your SDO and organizational performance and maximize your productivity.

Solution: Go for the Clouds

80% of developers say the primary application or service they supported was hosted on a cloud platform. Why? Businesses are always evolving, and more organizations have turned to the cloud to meet their scaling requirements. Even so, public-only or private-only cloud architectures are quickly being replaced by faster, more available, and more flexible alternatives: Hybrid and multi-cloud.

But looking at the present, where exactly are developers running their services and applications now?

Hosting for Primary Service or Application



So what's pulling more developers into the cloud?

The 5 Benefits of Moving to the Cloud

Developers either agreed or strongly agreed that the following 5 components of the cloud are crucial to their success.

1. On-demand self-service **(57%)**
2. Broad network access **(60%)**
3. Resource pooling **(58%)**
4. Rapid elasticity **(58%)**
5. Measured service **(62%)**

Ready to leverage the power of the cloud yourself?

[Explore the Developer Portal](#)