

DEVOPS

Eight Misconceptions that Can Derail your Organization

DevOps engineers are some of the most sought after (and expensive) technical resources in the industry. This is because they maintain the rare overlap of both operations and software development skills. These "unicorn" engineers really are technologists in the truest sense.

After a decade working with organizations of all sizes supporting cloud operations, we've seen more than a few misconceptions arise surrounding the DevOps function. This has led us to compile the eight most common ones that have lead companies astray—often resulting in demoralizing, frustrating and expensive wasted efforts.

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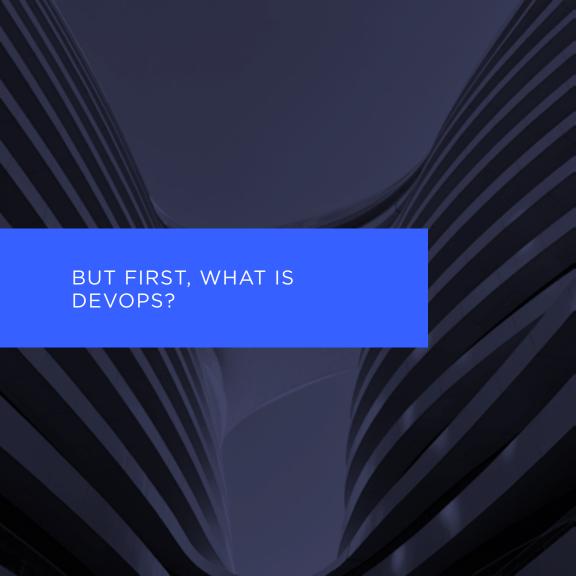
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Misconceptions

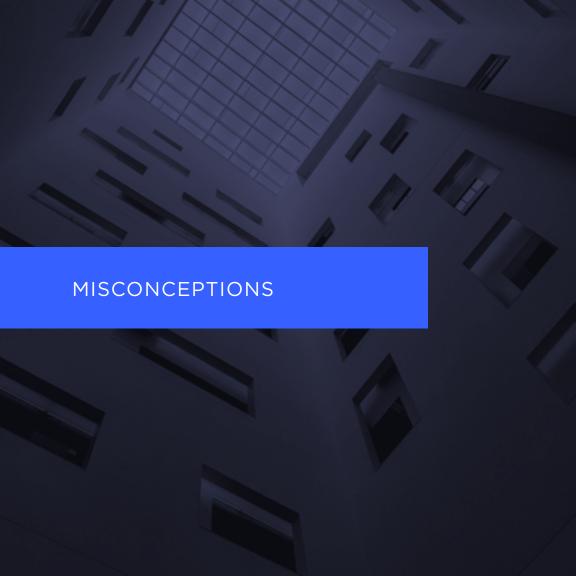
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Lightcrest & DevOps



Before we start detailing the misconceptions, let's define what exactly DevOps is expected to do. A lot of things come to mind, but a list would include:

- Preparing and managing source code repositories for CI/CD
- Leveraging best practices for automated testing and release engineering
- Optimizing the cloud architecture and systems components for performance without compromising security
- Providing disaster recovery and business continuity across multiple cloud regions and platforms
- Treating infrastructure as code and building automation into the DNA of the company's technical operations



That's a wide range of responsibilities requiring a diverse skill set. It's no wonder there's a host of misconceptions swirling around this role. Let's start off with the big three we've seen.

Misconception 1: Hire and Forget

Some DevOps engineers are hired and expected to make an immediate impact. However, the misconception here is that it's not just about hiring rockstar talent. For the new-hire to thrive it's imperative to have battle-tested processes and methodologies in place for them to adhere to. Absent this, simply throwing problems at the new-hire (rockstar or no) is going to be an expensive proposition.

Misconception 2: On the Cloud, Infrastructure Will Take Care of Itself

Here, the misconception is that on the public cloud your programmers can simply code and the infrastructure will take care of itself. It's true, in the early stages, a small development team can get you launched on AWS. However, long-term? That's a different question. More likely than not, you're going to need a team that owns ongoing performance management, cost controls, and site reliability. And because of the on-demand nature of public clouds, it is easy to spin up tons of infrastructure, resulting in sudden increases in cost and management responsibility.

Misconception 3: My DevOps will Mostly Code

Another significant pitfall is the notion that "my developers can spend 70% of their time coding and 30% of their time doing DevOps". This might work in the greenfield stage of your application deployment, but once you get any reasonable volume of traffic, your developer cycles are going to be harshly impacted by additional operational duties such as systems administration, security, monitoring, and even cost optimization. The end result is that you may end up with the worst case scenario: missing feature milestones while constantly putting out operational fires.

Beyond these three misconceptions are a myriad of others. This list is neither comprehensive, nor static - it expands and contracts depending on the size of the business. However, we've identified five more misconceptions that can often impact small but growing companies:

Misconception 4: "I only need one good DevOps engineer".

Wrong. Good DevOps engineers are commanding \$160-\$200k/yr, and for a 24x7 operation, you need more than one if you don't want team-burnout.

Misconception 5: "My DevOps engineer can solve any problem that doesn't involve writing application software".

If you're a growing business and revenue positive, chances are that you will need more than one to cover all your operations bases.

Misconception 6: "My DevOps engineer can work 24 hours a day."

You need more than one to cover a 24x7x365 production operation. One possibility is to stagger junior people in 2nd and 3rd shift to control your costs, but sometimes the most complicated issues arise after hours - then where are you? Waking up your already overworked single DevOps engineer.

Misconception 7: "If my rockstar DevOps engineer quits, I'll just poach another one from Google."

You are going to have a hard time finding great DevOps engineers, and an even harder time retaining them over a reasonable period of time.

Misconception 8: "My developers can 'wing' release engineering, and manage day-to-day testing and CI/CD."

This is a very painful fallacy - if your developers are also managing test cases and automation, they're going to be spending about 50% less time building actual features.

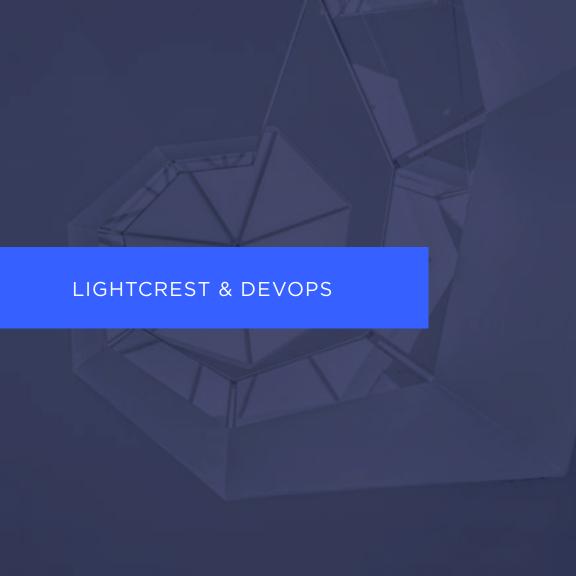
A POSSIBLE ALTERNATIVE: OUTSOURCE THE DEVOPS FUNCTION

A team of skilled DevOps engineers can transform your business and drive risk out of your production environments. They can anticipate scalability issues before they happen, and provide laser-focused expertise to put-out fires that your developers simply didn't expect to arise, nor know how to fix on the spot. But they also need reference architectures, scheduling rotations, and the toolsets required to transform your infrastructure from a "bag of cloud resources" into a repeatable design pattern, deployable on any cloud.

An alternative to hiring your own resource might be to bring on a third party Managed Service Provider to provide DevOps resources to your existing platform.

Benefits to your organization of doing so include:

- <u>Immediate expertise.</u> Instead of hiring/firing, you have ninjas placed on your team overnight.
- <u>Decades of experience.</u> The engineers assigned to your team are likely to be senior-level and already exposed to a huge set of real-world problems.
- <u>Lower costs.</u> Through a shared DevOps infrastructure, you will likely pay a fraction of the cost for outsourced DevOps.



Lightcrest empowers its customers to navigate the hybrid cloud landscape and minimize their cloud overhead. With the Kahu Compute Fabric powering their environments, customers get best-of-breed cloud technology that enables a turn-key hybrid cloud without any of the data center overhead or required staffing costs associated with a home-grown solution.



Find out more about what Kahu can do for DevOps in your organization or speak to someone directly, contact Lightcrest today for more information.

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