

# WHY EVERY DEVELOPER SHOULD BE IN LOVE WITH THE CLOUD?

### Introduction

The development of business applications is anything but an easy job, but someone's gotta do it. And as any development professional will tell you, anything that can make the oft-tedious, time-intensive development process easier is a godsend. The cloud does just that.

Today, we're going to take a close look at where cloud computing fits into the application development process. By the end of our discussion, you'll realize the same thing we have. That is to say, you'll understand precisely why every developer that's worth their salt should use the cloud.

### Why Is The Cloud a Superior Development Environment?

It's understandable that many developers are resistant to the idea of moving their work into the cloud. There's a certain degree of comfort in knowing that your code lives on systems that are under your control. This is especially true when your livelihood depends on that code.

Here's the thing, though - a developer's livelihood also depends on productivity and efficiency. Cloud computing offers significant enhancements to both. The workflow benefits it provides are more than enough to justify the purported loss of control.

Moving development entirely into the cloud allows for the integration of coding, test, and build systems. This has the potential to make coding cycles far more efficient. There's also the matter of continuous integration - with both the development and compilation environment closely tied together on a flexible cloud infrastructure platform, integrations can take place seamlessly and automatically without the developer ever having to worry about deploying hardware or the infrastructure layer.

Testing, too, becomes much faster. Developers no longer need to wait for hardware deployments in order to test their applications. Instead, they can simply deploy ready-made development environments whenever they require them. No need to fill out any forms, and no need to wait for a server to show up in the data center.

Deploying test infrastructure is a key aspect of the development workflow, and anything that introduces friction into the testing process reduces the speed of iteration. From unit testing to stress testing, the cloud provides unbeatable flexibility. If you need a hundred servers for a few hours to stress test an app, it can be done with a simple script, and you'll only pay for what you use.

Lastly, by moving development into the cloud, the deployment process becomes a breeze. There's no longer any need to worry about an application not working when it hits a production environment that's radically different from your own - you keep your environments consistent and predictable.



Maintaining a centralized and consistent development environment also makes it far easier for developers to collaborate with one another - even if they aren't in the same building or country. Consider, for example, the open-source world's love affair with GitHub; essentially an SaaS version control system that enables collaboration on software projects which might otherwise be dogged by management complexity.

If you want a more concrete idea of how much more efficient the cloud makes the development process, the Evans Data Cloud Development Survey found that cloud platforms can reduce overall development time by almost 12 percent, and 38 percent of developers said cloud development introduced time savings of up to 20 percent.

Not bad, right?

It isn't just a matter of efficiency, either.



# Optimizing Application Development And Management Can Lead To 50% Cost Reduction

For modern IT-dependent businesses, the cost of cloud development and management is significant. Between provisioning, infrastructure management, and the facilitation of business operations, one's organization is bound to chafe under large capital and operational expenditures.

Case in point: ADM consumes 34% percent of most IT budgets.

The good news is that if you know what you're doing, this cost can be significantly reduced - and with minimal effort, at that. According to a recent report from Gartner, businesses that optimize their app development and management have the potential to cut ADM costs in half. Cloud platforms are a key technology for such optimization.

Though ADM is an iterative process, businesses are frequently hampered by technical debt and ROI requirements tied to historical ADM investments. IT lifecycle phases tend to be slow, the result of an unwillingness to move forward and the technical difficulties of doing so. This in turn drives up ADM costs far more than is necessary.

For greater efficiency and reduced costs, businesses must eliminate legacy applications and abandon complex architecture in favor of modern development and deployment paradigms.

IaaS and SaaS offer the perfect means to do so.

Cloud platforms naturally reduce up-front infrastructure costs, in addition to presenting positive effects on Total Cost of Ownership. There are other benefits, as well - faster iteration, the avoidance of future legacy issues, and the ability to develop and deploy in response to changing operational needs. In other words, business agility.

And for those of you who still aren't convinced that the cloud is the way to go, beware - your employees may well make the choice for you. It's called Shadow IT, and its here to stay - in response to perceived inefficiencies in legacy applications, employees are adopting cloud solutions outside the purview of management. Clearly damaging from a security perspective, but nevertheless an indication that businesses need to better optimize their development and management processes.

Otherwise, employees will look for alternatives under their own initiative.

By moving to the cloud, businesses and their IT department gain scalable infrastructure with low capital costs, enjoy greater control over the deployment and management process, and have access to ADM-relevant metrics that help generate insight into application development, deployment, and management. All of this can, in turn, be used to further streamline operations.

Additionally, SaaS deployments are significantly less expensive than enterprise-size deployments in in-house data centers and office desktops, lowering the cost of iteration, innovation, and agility.



# Developers Should Seriously Consider A Move To The Cloud

So, let's summarize. Why should developers embrace the cloud?

## Lower Burden of Software Management

Many companies are already convinced that moving workspaces into the cloud can cut costs and reduce the burden of IT management. Managing, configuring, and securing dozens of desktop computers is at once both tedious and unnecessary. That goes double for workstations that include complex integrated development environments.

Using cloud-based IDEs enables companies to maintain a consistent development environment across development teams, and make software management a breeze in the process.

## Tight Integration between the Development Environment and ITS Resources

However powerful a development workstation gets, it's never going to be able to match the resources a cloud platform offers with the mere flick of a switch. Instant access to large amounts of storage and compute power allows for the implementation of a more efficient development process that includes continuous and incremental compilation; it allows for the implementation of a process that's never delayed by limited local resources.

Even better, carrying out development, testing, and deployment carried on the same platform allows developers to immediately test their code, significantly increasing the speed at which code can be iterated on and pushed into production.

## True Abstraction of the Development Environment from the Physical Environment

Reliance on local processing and storage places artificial constraints on the development process. Moving development into the cloud allows programmers to work on code from anywhere in the world, and do so in a collaborative environment, to boot.

While developers are attracted to the romantic idea of moving their .vim files or their IDE configs from one workstation to the next, that mode of development limits the efficiency of the development process. Cloud-based development environments help companies and programmers to maximize their productivity and lower the overall cost of development.

## In Closing

Application development is an involved, complex process. Businesses must seek out anything that can make that process more streamlined and efficient - such as the cloud. Although some developers might resist a move to the new platform, once they realize how much easier it makes their jobs, they won't be able to help being enamored with it.

