

The State of Enterprise Cloud Services

September 2016

Data and Dilemma

The rise of service

Over half (51%) of companies now use Infrastructure as a Service (IaaS) according to a poll of 200 IT managers, system engineers and DevOps.

Enterprise cloud services are in more demand now than ever before. These services hold steady appeal for both companies that require support for on premise IT, as well as those who use fully external services.

Enterprises are attracted by the flexibility and the lack of infrastructure overheads that cloud solutions can offer. Massive scalability and up-or-down elasticity give companies a whole new sandbox for testing new business ideas and growing them if they take off.

In fact, the demand has been so great that it has elevated and popularized the title of DevOps, and moreover the demand has changed the landscape of tools and hardware used to support these IT services.

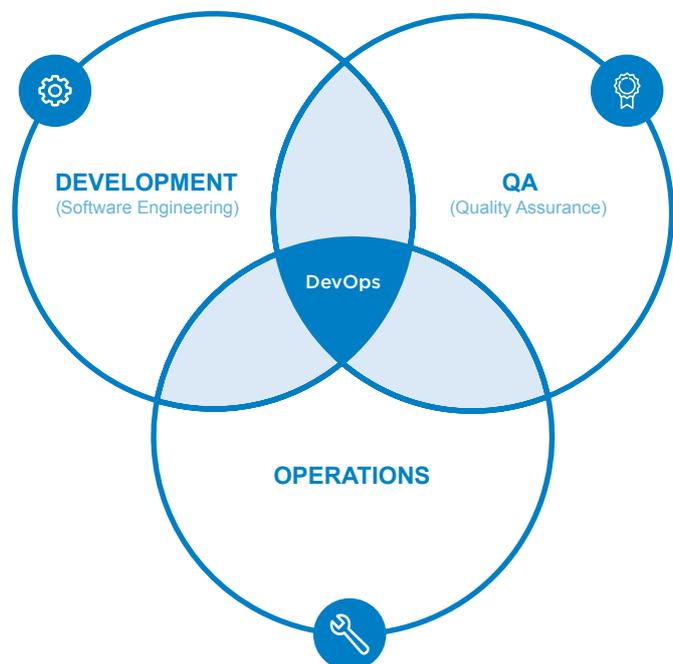
The role of DevOps is now evolving into a distinct function within IT services. It signifies a shift in culture that emphasizes collaboration, communication and the automation of software delivery and infrastructure changes.

The emergence of this approach brings with it new challenges that require different tools and skill sets to maintain and grow corporate IT.

IaaS is the most popular service

In all three areas there is continued IT interest and growth, however it is IaaS that is the focus.

- 51% of companies that deployed cloud solutions used an Infrastructure as a Service over PaaS (22%) or SaaS (20%).
- However, 65% of system engineers say they use PaaS.



Managing the Environment

DevOps Ninjas continue to spend a significant amount of time maintaining and supporting the tools and platform.

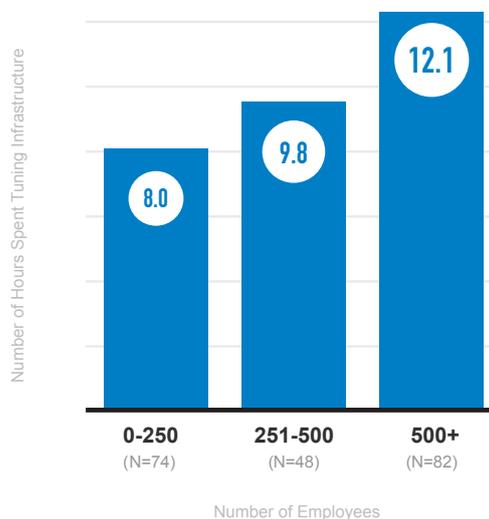
The average time spent using, monitoring or evaluating tools/solutions is 25.1 hours per week. Key activities include:

Breakdown of the average time per week spent using, monitoring or evaluating tools/solutions



Tuning the Infrastructure

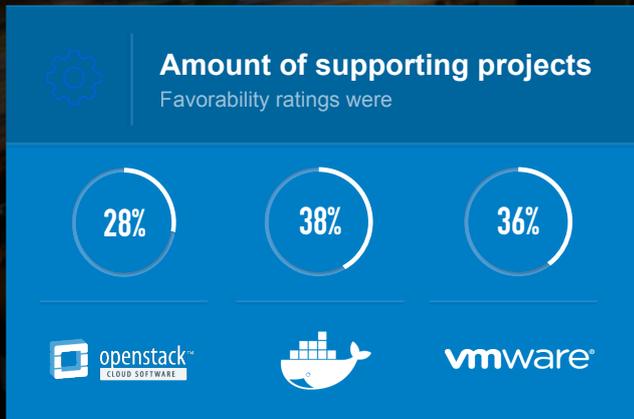
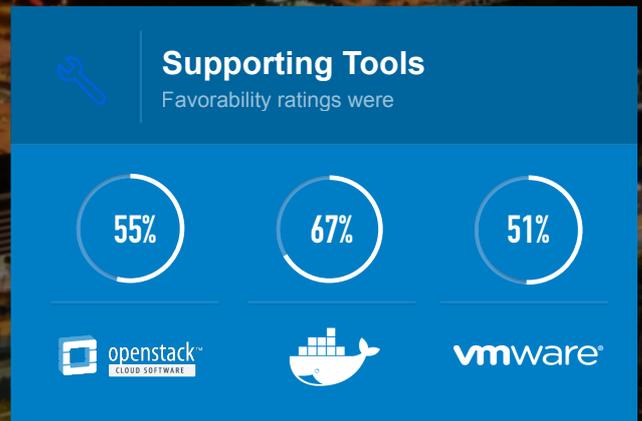
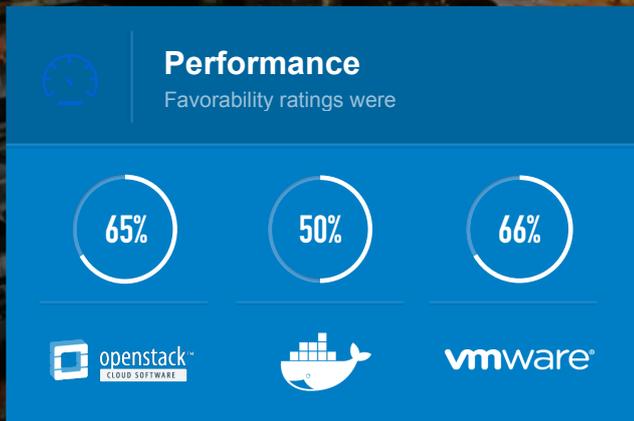
DevOps people in larger organizations require more time to tune and support their environment demonstrating their tools don't scale the way they need to.



Performance

The tools and solutions continue to evolve but still remain a mix of open source approach and commercial solutions...

Overall performance and supporting tools were often viewed very favorably. At present, solutions are less likely to stand out in terms of the amount of supporting projects and rarely stand out in terms of Active Community.



69% of those surveyed said that they are aware of the noisy neighbor problem...
82% of those who are aware, say that they have a strategy to account for this.

As the technology evolves, customers are increasingly developing strategies to manage their environment

- Most enterprises/IT Directors/Admin's now have strategies
- 84% of VMware users have a Container deployment and management strategy
- 82% of those who were aware of the problem have developed strategies to combat the Noisy neighbor issue
- About half of companies with a strategy either emphasize container use (55%) or implement on bare metal (50%)



About the Survey

A survey of 204 IT managers / directors, software engineers, and DevOps in the US. The survey was conducted online by Morar Consulting and commissioned by Intel DCM during June 2016.

Results of any sample are subject to sampling variation. The magnitude of the variation is measurable and is affected by the number of interviews and the level of the percentages expressing the results. In this particular study, the chances are 95 in 100 that a survey result does not vary,

plus or minus, by more than 6.9 % percentage points from the result that would be obtained if interviews had been conducted with all persons in the universe represented by the sample.

Summary of findings:

With this data it's clear a lot of time is spent in maintaining the operation, monitoring, or orchestration tools to enable the flexibility organizations desire. This is because IT still needs to address all the constraints in a datacenter without having them impede the expected value from virtualization and containerization of workloads. While having to continually mature the area of practice and the tools needed for the job.

Whilst the role of DevOps is now evolving into a distinct function within IT services, only pockets of DevOps know and focus on all the potential issues. For example, the noisy neighbor problem is a well-documented performance issue, but only half the population are aware of and actively addressing it. This indicates just how far we are from a mature area of practice.

Enter Intel® Data Center Manager:

Intel® has been working with Cloud Service Providers and is focused on providing solutions for server and infrastructure performance. An example of this is Intel® Data Center Manager and Intel® Virtual Gateway health monitoring. www.intel.com/content/www/us/en/software/intel-dcm-product-detail.html

