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Managed services vs. hosted services vs. cloud services: What's the difference?

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Remember when IT leaders and tech pundits endlessly debated the meaning of the word "cloud"? The good news is we left that debate behind in the 2010s. The bad news is that the modern world of "cloud services" still has some linguistic growing up to do: As a result, IT leaders will have to explain an array of related terms to their bosses, colleagues, customers, and partners.

We're talking about managed services vs. hosted services vs. cloud services. What's the difference? At the end of the day, are we just talking about good old SaaS? (Spoiler alert: No.)

Let's get to the bottom of what each term means in plain terms - and what each type of offering can do for IT organizations.

What is a cloud service provider?

As we recently reported, cloud service provider (CSP) has become a catch-all term for companies ranging from Amazon Web Services (AWS) to SaaS application vendors. Red Hat defines it this way:

"Cloud service providers are companies that establish public clouds, manage private clouds, or offer on-demand cloud computing components (also known as cloud computing services) like Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), and Software-as-a-Service (SaaS)."

With that kind of breadth, there's room for confusion when people are discussing or comparing the companies and their solutions. And the organizational stakes are large: IT leaders are looking to cloud service providers to help with critical goals such as modernizing strategy, deploying faster, managing spending, and keeping flexibility for the future.

"When working with cloud service providers, it's important to align the platform with the company's unique business objectives."

Moreover, while you might have some plain-vanilla workloads, most of our realities are complex. "When working with cloud service providers, it's important to align the platform with the company's unique business objectives," as Scott Gordon, enterprise architect director, cloud infrastructure services at Capgemini Americas, recently told us. "Every organization has its own situation, and the cloud strategy must be catered to solve those customized business challenges to create value and results."

Cloud service providers vs. managed service providers

A cloud service provider like Amazon, Microsoft, or Google has hundreds of services, says Red Hat's Stu Miniman, Director of Market Insights, cloud platforms team. When you log into a provider's portal, you choose how you want to build things. "Some things are tools and building blocks, and some are services that deliver a solution," Miniman says. "For example, I can choose a computer network storage instance device as a cloud service. By itself, I would need to wire that together with a bunch of things to make a complete offering."

"Or they might have a database service which is more of a managed service, where it has the computer, network, and storage underneath, it has the database, and I just start consuming that. It's more like what people would think of as a traditional SaaS model." In this example, you're buying a *managed service* from a cloud service provider.

What is a managed services provider?

Managed service providers (MSPs) existed first - before we were talking about the big public cloud providers. "I've seen some definitions where MSPs are a superset and all CSPs are MSPs, but not all MSPs are CSPs. That seems a reasonable definition to me," says Miniman.

One historical example of a managed service provider you may know is Rackspace: Their company name literally reflected that you were buying space in their rack to run workloads. The way their business started out was as a hosted service: Your server ran in Rackspace's data center. But Rackspace also offered other types of services to customers - managed services.

What are some examples of managed service providers?

Who are the managed service providers today? Beyond the major cloud service providers, the most common examples today are regional integrators and VARs, some of whom run a chain of data centers in a particular geography.

If they have their own data centers but are aligned with AWS, Microsoft, or Google, these companies will often offer cloud services of their own (say disaster recovery), plus access to the big public cloud provider's services. This might be a managed service from the public cloud provider - for example, a well-known example is a managed database in the public cloud.

What is a hosted service? Hosted service vs. managed service

Now let's look at the third term you encounter in this cloud services realm: Hosted service. How is a hosted service different from a managed service?

"When I think of a hosted environment, that is something dedicated to me."

"When I think of a hosted environment, that is something dedicated to me," says Miniman. "So traditionally, there was a physical machine...that maybe had a label on it. But definitely from a security standpoint, it was "company X is renting this machine that is dedicated to that environment."

Public cloud service providers sell hundreds of services: You can think of those as standard tools, just like you'd find standard metric tools walking into any hardware store.

However, a hosted environment might be a custom configuration for the particular customer. "This is not something with tens of thousands of nodes, it's a smaller environment," Miniman says. "It could be what we tend to call a 'snowflake' - it's a special environment. It's not just a standard service that I can stand up and run anywhere."

And yes, IT organizations can expect to pay more for a provider to manage a snowflake, versus managing a standard service.

Here's another flavor: A hosted service doesn't have to be off-site. It may reside in the customer's own data center. In some cases, the provider sets up and manages the workloads in the customer's data center and the customer doesn't touch it. "My (IT) people don't think about it," Miniman notes. "There's someone outside who takes care of that." What might this model remind you of? Outsourcing.

Thus, the words "hosted" or "managed" don't necessarily designate whether the workload is in your data center or a provider's remote data center.

Hosted is the older term, industry-wise. You will find more solutions today described as managed services. The key difference is "hosted" tends to be used to describe more customized offerings. In the above example, a company offering a "managed service" in your data center would often be much more prescriptive. "So they're not going to say 'Oh hey you have some stack, we're going to manage that.' Typically they will say 'Here is a config that we're going to run in your environment and that I will manage," notes Miniman.

How are cloud services, managed services, and hosted services different from SaaS?

The logical part of your brain would probably like to be able to show people a three column chart with a bunch of checklist items to describe why something is or is not a managed service or SaaS. Unfortunately, there's a lot of nuance right now in how offerings are bundled, described, and delivered. You'll need to explain it.

A managed service is more often a bundle of tools that lets you just consume it - faster and easier.

Here's one way to think of it: A cloud service is a tool, which may sometimes feel a lot like a SaaS tool. A managed service is more often a bundle of tools that lets you just consume it - faster and easier.

"At Red Hat, our cloud offerings, we call them cloud services because they are available through the cloud, but they are also managed services, because there is an SRE team managing that environment for customers," notes Miniman. This is where Red Hat OpenShift on AWS (ROSA) and Microsoft Azure Red Hat OpenShift (ARO) come into consideration for IT teams.

A lot of this comes down to that managed aspect. One benefit for your whole organization here is speed: With a managed service, there is much less configuration, so the start time is shorter. You should just be able to say "yes I want it."

How to explain managed services: The drive-thru restaurant analogy

"It's more like going to the drive through, and having your meal handed to you with a managed service, versus cooking my own based on the ingredients of the cloud services that are there," Miniman says.

While all cloud service providers are managed service providers, most managed services are made up of a number of cloud services (aka tools) if it is something that is built in the public cloud. Not all cloud services are really managed services.

Here's one more food analogy you can use in explaining cloud service provider terms to others – the pizza analogy:

- IaaS = Take and bake pizza

- PaaS = Pizza delivery
- SaaS = Eat pizza at a restaurant

Parting tip: Comparing managed services vs. DIY with cloud service provider tools

Knowing whether your IT organization should build or buy is a classic IT dilemma - one that IT leaders have evaluated with many kinds of tools in the past. What advice do cloud experts have for IT leaders grappling with this question right now, with regard to cloud service provider offerings?

One of the biggest challenges IT leaders face right now is talent management - including the Great Resignation, talent retention, and some skills shortages. "All things being equal, if a managed service meets what you need, the way you need it, and the price makes sense, a managed service should be less work for your team," Miniman notes. Of course, there are always tradeoffs, and IT leaders should consider what the specific tradeoffs will be and how they match up against business goals – such as faster deployment speed.

Here's one example: "If my team was managing my data center and I owned the infrastructure, networking, and virtualization, and I went to the public cloud, would that team take over those same things, or would I just buy database-as-a-service, in which case it takes care of all of the storage and networking pieces, and only my database person has to work with it," Miniman says. "My storage and networking people can go do something else."

For IT leaders, this is often the holy grail: Being able to move IT people off of such tasks in order to put them on more innovative or experimental projects.

As we recently reported, when IT teams don't want to invest in the operational skills to manage and maintain Kubernetes, they can consider using managed Kubernetes cloud services.