



Fertile ground for innovation

Telefónica offers a Cloud Garden for enterprises with IBM Cloud Pak® and Red Hat® OpenShift® solutions

by Rob Spencer

5-minute read

Maybe it's time to update the metaphor for “cloud” computing.

More than just computing capacity in the sky, the cloud is a place where new ideas, like seeds, can take root and grow into something that bears fruit — in the form of real business value.

With these ideas in mind, Telefónica Tech, a division of the Telefónica Group, built an offering called Cloud Garden, a managed platform that brings the cloud down to earth, providing enterprises across industries with faster, easier access to resources that accelerate innovation.

The challenge, for Telefónica Tech, was how to bring all of the leading public clouds, including advanced services for AI, Analytics, IoT and Blockchain, into a single, seamless space where the underlying IT would be transparent to customers. For that, Telefónica Tech uses [IBM Cloud Pak](#) solutions.



Telefónica delivers
broadband, telephony
and television services
to more than

300

million subscribers in Europe and the Americas

One solution built
in the Cloud
Garden helps

8,000

businesses access a blockchain network

The opportunity



Álvaro Paniagua, Product Marketing Manager at Telefónica Tech, has helped raise the Cloud Garden from the ground up. He explains that his company wants to have the same impact on enterprises that it's had on consumers. Telefónica delivers broadband, telephony and

television services to more than 300 million subscribers in Europe and the Americas. Its infrastructure and service are major reasons why its home market, Spain, ranks second in the world in homes per capita with high-bandwidth fiber internet access.

Similar to consumers seeking fast, reliable access to online content and services, today's enterprises want fast, reliable access to the technology that will strengthen their business. They want AI and other advanced technologies to enhance and automate operations. They want the ability to quickly incorporate new services and use cases at any time and from any cloud platform. But they don't necessarily have the resources or expertise to make this happen at the speed or cost-efficiency they need.

This is where the idea for Cloud Garden was born.

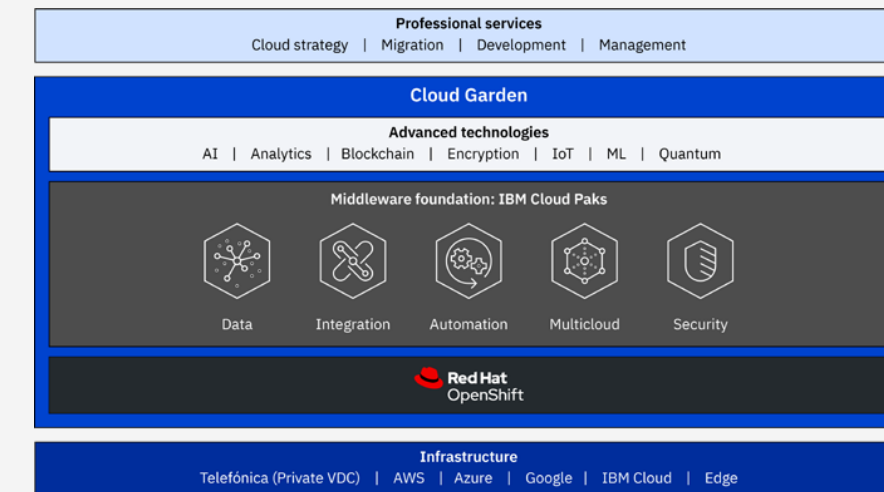
"We saw an opportunity to let customers focus on developing value for their business more than operating IT," says Paniagua. "In Cloud Garden, they can go very quickly to market with new services and technologies that will differentiate them from their competitors. But Telefónica Tech provides the data center and security, flexible SLAs, and transparent access to any cloud. So going to this new cloud-native era is easier than ever."

Bringing business to the multicloud

“Multicloud is critical,” says Paniagua. “Our customers need to choose the correct place to run their processes.” Each public cloud platform on the market, he explains, offers different capabilities and different prices. Thus, Telefónica Tech is partnering with the world’s leading cloud platform providers to bring their cloud capabilities to customers.

And it brings it all together using IBM Cloud Pak software, which allows customers to develop and run services and business use cases on any of these platforms, and combine it all into a single, seamless solution — including integration with legacy, on-premises systems.

“Going from on-premises or private cloud to public cloud is very difficult sometimes,” explains Paniagua. Particularly for large organizations, whether corporate enterprises or public entities, existing IT infrastructure is highly complex. As much as an organization may seek to leverage cloud, it may also have on-premises systems that it’s not ready



to migrate. But cloud-based projects will inevitably need to integrate with those legacy systems. “They have to convert step by step,” says Paniagua. That is why IBM Cloud Paks software provides the ideal foundation for Cloud Garden.

Specifically, the cloud-native development components in the IBM

Cloud Pak software allow new services to be developed directly within Cloud Garden, while its Red Hat® OpenShift® container platform enables portability between legacy, private cloud and public cloud environments. According to Paniagua, “It’s the easiest way to convert applications or processes from the legacy world to the new world,” and to maintain

correspondence between the two environments.

The portability also enables customers to flexibly evolve their apps and processes over time. As an example, Paniagua explains that customers using an AI service may initially have the service running in a particular cloud platform but see a way to improve it, or cut costs, on another cloud. “Normally,” says Paniagua, “this is difficult. You need to start from zero on the new cloud. It’s a vendor lock-in.” But OpenShift changes the game. “It becomes very easy to transfer an application from one cloud to another, and you can keep the user experience for developers the same,” says Paniagua.

Further, the OpenShift platform, which is based on open-source Kubernetes software, provides advantages over trying to manage containers using Kubernetes alone, according to Paniagua. “In the market it’s easy to find different players that can deliver Kubernetes service. But Kubernetes is only one piece. Most likely, you need to layer a lot of features and tools around Kubernetes to get to production. With Cloud Pak software and OpenShift, more capabilities are built in to make it easy.”

Moving forward, Telefónica Tech is interested in IBM Cloud Pak multicloud management capabilities to unify and automate management of containers across multiple clouds.

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Innovation begets innovation



One of Cloud Garden's major early projects is a perfect example of the platform's potential to cultivate innovation.

The Association of Science and Technology Parks of Spain (APTE), comprising 52 industrial parks and 8,000 businesses, is using Cloud Garden to host a blockchain-based network and digital marketplace for the businesses to collaborate and share information and services. It's an experiment in connecting businesses so that they can serve each other and potentially work together to generate new value. And Cloud Garden and the hybrid cloud capabilities of IBM Cloud Pak software are key; without them, creating such a network would require each of the 52 parks to acquire blockchain expertise and manage the technology's inherent complexity. Instead, the blockchain network is hosted by Telefónica Tech with control

nodes ported to the individual parks. Thus, those 8,000 businesses simply plug into a ready-made blockchain network.

In addition, Spain's Information Technologies and Networks for Insurance Entities (TIREA) consortium is developing a new service offering based on Cloud Garden to accelerate the digital transformation of the insurance sector.

Specific capabilities Telefónica Tech has built into Cloud Garden include:

- A Cognitive Virtual Agents solution to optimize contact centers and to provide omnichannel customer relationship management
- Supply chain management optimization and product traceability based on blockchain technology
- Application development and modernization based on containers.

Surveying the growing landscape of Cloud Garden engagements, Paniagua sees that the platform is making a meaningful difference for customers. Because no matter the industry, organizations need to find the most efficient and agile way to turn strategies into reality. That's what they're doing with Cloud Garden. "Our customers are decreasing time to market," says Paniagua, "which is one of the most important goals for every company today."

As customers continue to develop in Cloud Garden, Telefónica Tech will continue its partnership with IBM and others to develop the platform itself. Currently, the companies are collaborating on the following:

- Improving and extending the Cloud Garden value proposition
- Developing new use cases, based on advanced technologies, to cover business and functional needs
- Providing professional services to help customers succeed in their journeys to cloud.



About Telefónica TECH

Telefónica Tech is a holding company owned by the [Telefónica Group](#) (external link). The company offers a wide range of integrated technological services and solutions in cybersecurity, cloud, IoT, big data and blockchain. Telefónica Tech's capabilities reach more than 300,000 customers in 175 countries.

Solution components

- IBM Cloud® Paks
- Red Hat® OpenShift®

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