

We're All in the App Business Now

If you thought that the Internet has come to dominate our lives, you should see what's coming next. More web users and devices, faster broadband speeds and the continuing explosion of video are all contributing to global digital transformation. What's more, everything from cities to cars is becoming networked, as the Internet of things takes shape.

How Can Service Providers Make the Most of Their Network Infrastructure?

In June, Cisco's [VNI Global IP Traffic Forecast, 2015-2020](#) predicted that by 2020, there will be 26.3 billion networked devices and connections across the world (up from 16.3 billion in 2015), and that IP video will represent 82 percent of global traffic by 2020, up from 70 percent in 2015. In the midst of this revolution, it's easy to forget that the virtual world is rooted in physical infrastructure. But service providers can be cruelly reminded of this by the pressure to keep up with ever-increasing speed and capacity demands on their networks. Updating network equipment can be expensive and impractical.

But today, IT infrastructure is increasingly being made available as a service. move beyond the limitations of their physical network architecture, designing virtual programmable networks to suit their purposes.

At Cisco, we are leading the way in helping service providers bridge the gap between networks and apps, enabling them to thrive in a digital world.

The Programmable Revolution: A Springboard for Innovation:

In a competitive market where connectivity is taken for granted, service providers need to make sure that they are offering the best possible value.

A network whose virtual ‘brain’ is at arm’s length from its physical ‘muscles’ can help you do this because it is **both simpler to operate, and more flexible**, meaning that businesses can provide a better service at a reduced cost.

One service provider developing this approach is the Qatari company Ooredoo, which has agreed to **create a relationship with Cisco** to set a roadmap for network function virtualisation (NFV) and deliver virtual managed services to the Qatar market. Ooredoo will be trialling Cisco’s Cloud VPN, part of our Virtual Managed Service portfolio, which offers secure business connectivity and routing for site-to-site, remote access, and internet gateway applications.

Technology pioneered by Cisco, like segment routing, enables businesses to distribute their data more efficiently, managing its flow like the conductor of an orchestra directs music. Programmable networks can also be **automated** to a large extent, significantly cutting down operational costs.

The ability to better handle high traffic is a key advantage of programmable networks – but it’s not the only one. They can also empower service providers to increase their revenue through custom options and new business models. Areas getting a lot of attention right now are the delivery of OTT services such as Internet TV and cloud storage, as well as services related to the Internet of Things, like in-car networks for the automotive industry.

The Door to the Future is Open:

The future is collaborative – which is why we build our technology using open APIs. This means that different components can communicate easily with each other, and networks can be restructured and adapted to reflect changing conditions and new challenges.

Equally, we want to equip other organisations with the skills and tools to make the most of the digital revolution. Our DevNet programme provides developers with the resources to build innovative, network-enabled apps, and our Digital Network Architecture community within this is a place for developers, architects and operators to come together, learn and share ideas. We're leading this community through our commitment to open standards. Because when it comes down to it, innovation is about human as well as digital networks.

KEY TAKEAWAYS

- More web users and devices, faster broadband speeds and the continuing explosion of video are all contributing to global digital transformation.
- In the midst of this revolution, it's easy to forget that the virtual world is rooted in physical infrastructure. But service providers can be cruelly reminded of this by the pressure to keep up with the speed and capacity demands on their networks.
- Updating equipment can be challenging and sometimes costly. But a network made available as a service enables businesses to move beyond the limitations of their physical architecture, and design virtual programmable networks to suit their purposes.
- A network whose virtual 'brain' is at arm's length from its physical 'muscles' is simpler to operate and can be automated, enabling businesses to cut down operational costs.

