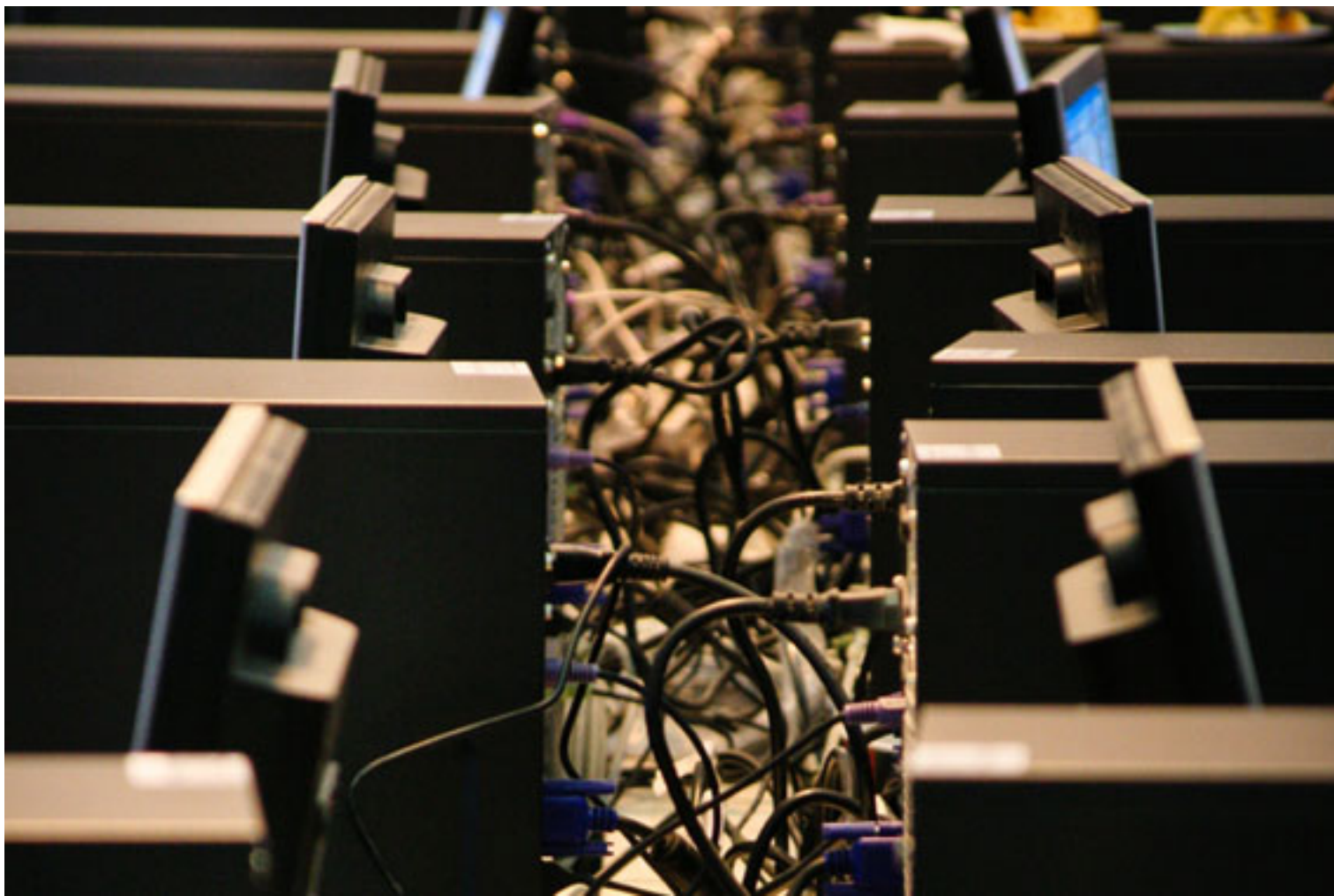


Do you have the right network for the wrong times?

The static networks of just a few years ago won't cut it today



Static networks are dead and being buried with glee. The most important characteristic of a modern network infrastructure is its ability to remain agile, competitive and rapidly responsive even as market conditions and requirements change. Today, the needs and demands of clients of telecommunications companies are evolving rapidly; these, in turn, require a flexible networking infrastructure—especially as the cloud and cloud-based resources become ever-more prominent.

Telcos are full of highly proprietary routing that works only in legacy networks. That sets up a tension with what today's flexible networks need: gear that plays well with open standards, not proprietary protocols. Software-defined routers that can be quickly updated and uprated are the only choice in a vastly interconnected, heterogeneous, international and boundary-free world.

Legacy infrastructures date from a time when demands were comparatively static and circuits were slow and largely adapted from tip-and-ring and ISDN infrastructure. Many client circuit sales were specific to client hardware infrastructure. ATM ruled, with OC-192 on the wish list. Online commerce barely existed.

Today, online commerce is a \$38bn industry, on its way to \$50bn and more.¹ To keep up, clients use whatever commodity components suit their needs or simply rent them from cloud providers. The expectation has become that a telco will be both savvy about the enormous variety of possible client needs and will be able to rapidly respond to those needs (or, at least, not impede their clientele).

This gets to the crux of the issue: legacy telcos have been forced to reconsider and amend their network hardware strategies primarily because their customers demand it. Internet communication is pervasive today; applications have breathtakingly short lifecycles. The mix of business and IT requirements can change overnight, so the routing for communications fabrics must be able to rapidly adapt while surviving security analysis, audit scrutiny and reliability tests. All that, while ensuring that core business processes proceed uninterrupted and allowing for growing the infrastructure using both internal and cloud assets.

The convenience of virtualized resources, be they operating systems instances, storage, user sessions, web resources or agile software development, has allowed organizations to reconsider where, when and for how long resources are located physically. Add in the popularity of Software-as-a-Service applications, the rapid evolution of content delivery networks/(CDNs) and the emergence of Big Data analytics, and it's clear that flexibility has become key for a telco's client organizations.

That's a very different set of demands from the ones telcos have grown up with. The old way of doing business, with proprietary hardware, won't be able to keep up with these new requirements. But hardware that relies on open standards will—and will be able to handle the demands of the legacy business, too. In looking to and planning for the future, telcos can also ensure that they're taking care of the present.

¹ <http://www.statista.com/markets/413/e-commerce/>