

Independent market research and competitive analysis of next-generation business and technology solutions for service providers and vendors

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CSP Attitudes Toward Digital Transformation: A Reality Check

A Heavy Reading white paper produced for The New IP Agency



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The telecom industry in 2017 finds itself in a state of chaos. Spending by service providers is way down. Layoffs are up. Uncertainty is rife. Conditions are such that a major telecom company like Ericsson – which has been around for 150 years, since the very start of the industry – is struggling to generate sufficient money from its existing lines of business through the end of the decade.

And network functions virtualization (NFV), which was supposed to be the next big money saver and revenue generator, has instead just turned into a complete mess. Four years after the telecom industry started working on NFV, there are still no universally accepted industry standards for it. This means there's no agreed way for companies to develop new services and applications and get them to run on virtualized infrastructure from other vendors. Worse, service providers that want to buy virtualized from multiple different vendors can't tell if they will work on their network without months of extra work and millions of dollars in investment.

What went wrong? To start with, the telecom industry was waylaid by three main groups, each of which had their own agendas, or simply didn't understand the needs of the telecom community:

- **The Open Source Community.** The good news is that the Open Source Community have an unlimited number of good ideas. The bad news is they have an unlimited number of good ideas, without sets of checks and balances required to control that output or deliver it in a format usable by service providers and carriers.
- **Enterprise Vendors.** Companies like Oracle and HPE made a simple argument: The future is a cloud. They've been building enterprise cloud networks for decades, so they could use that experience to start building telco cloud networks. This turned out to be a spectacularly bad idea.
- **The Media/Analyst Community.** The media got super excited about the hyperbole from both the open source crowd and the enterprise players. Now the telecom industry is paying the price for that over-exuberance.

Together, over the last few years these three groups spun a vision of the telecom future that was both impossibly optimistic and wildly inaccurate. The essence of their vision of the future can be summarized in five key assumptions:

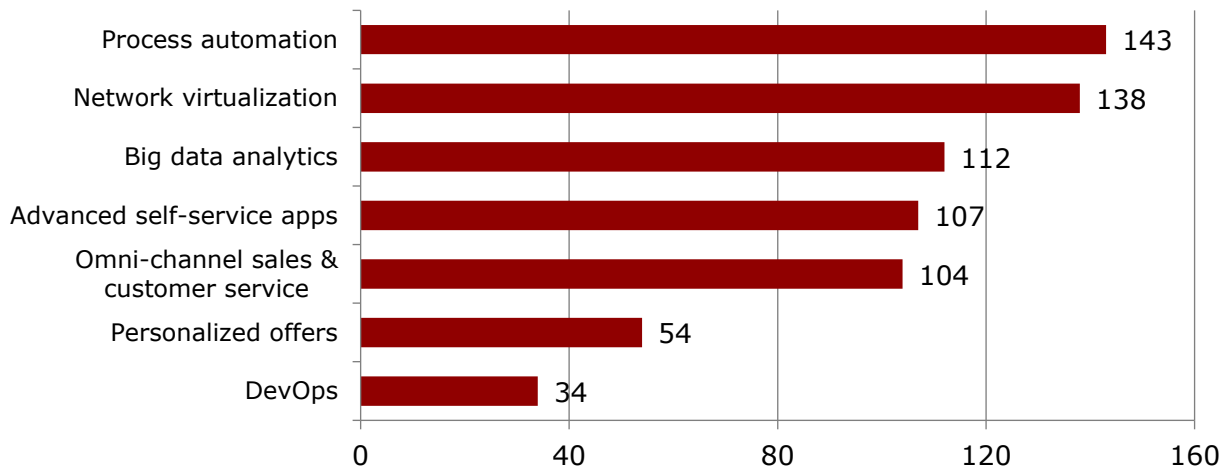
1. Everything's a virtual or telco cloud
2. Telco/enterprise vendors sell products and services that are portable and interoperable
3. Networks don't matter; the real money is in digital content & services
4. DevOps rules
5. Open source saves the world!

In order to fix what has gone wrong in our industry, we need to start by refuting this conventional wisdom – or stupidity – that has been running through our industry recently. And the best place to begin that process is by understanding what CSPs *really* need in order to have successful business outcome.

To that end, in April the New IP Agency (NIA) and Heavy Reading collaborated on a survey of 150 major CSPs and carriers, in which we dug into their needs and aspirations for next-gen communications. The results are eye-opening:

Most Important Aspects of Digital Transformation

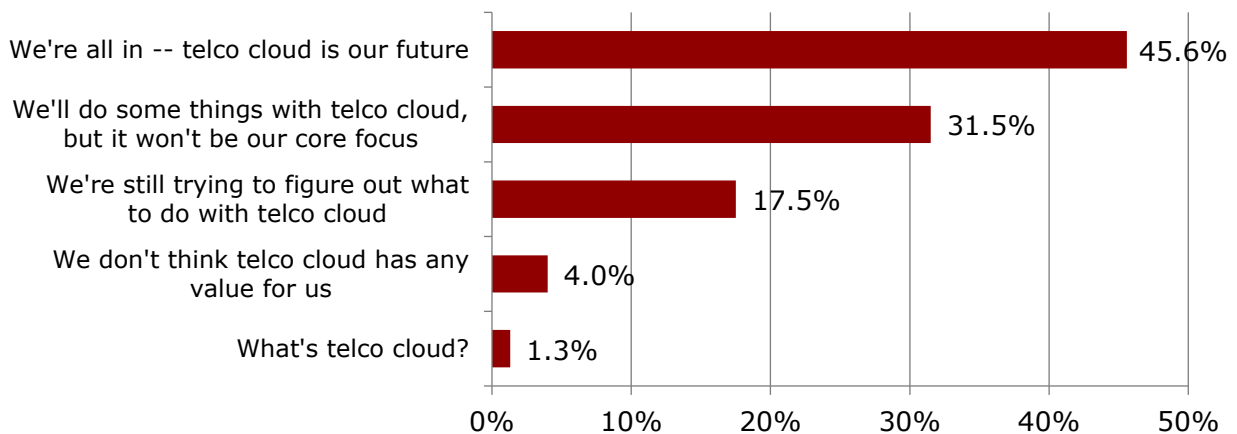
What are the three most important aspects of digital transformation for your company?



What's most important to service providers? Virtualization is up there, of course, in second place, but the no. 1 spot is occupied by – surprise! – process automation. This goes all the way back to a concept first posited by AT&T's Hossein Eslambolchi with his Concept of 1 at the start of the 21st Century, which proposed a massive simplification and automation of the multitude of software processes and packages on carrier networks. 20 years later, we are not much closer to Eslambolchi's vision, but carriers are no less excited about it. And note DevOps – another surprise, nestled down there in last place in terms of importance. Apparently, telecom suppliers have some work to do on lining up their priorities with those of their major customers.

Telco Cloud Strategy

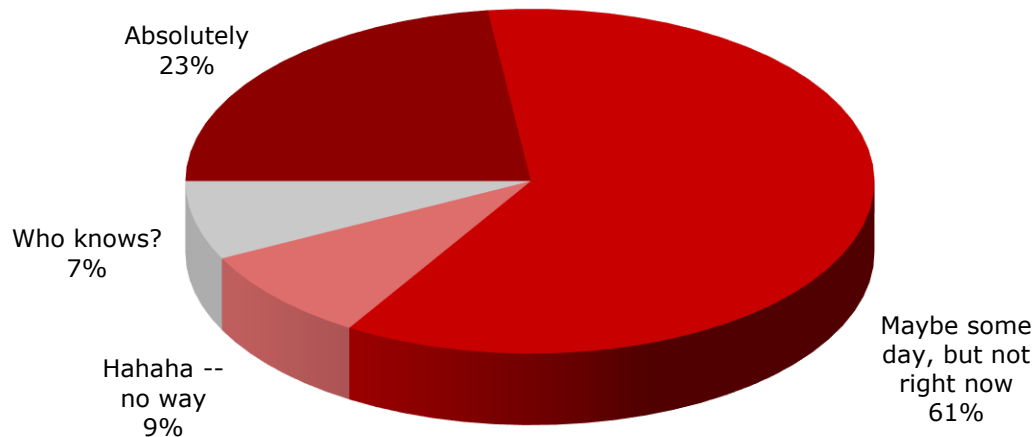
What's your company's strategy regarding telco cloud?



Telco cloud has been widely acknowledged as the future of everything for the telecom industry. About half of the service providers in our survey would agree with that... but the same number are either committed to just doing something with it, at some point, or simply don't know where it fits in their future strategy. Not quite as universal a level of support, then, as many would have had us believe.

Where Enterprise Meets Telecom...

Are enterprise vendors like HPE and Oracle capable of building telco-class cloud networks?

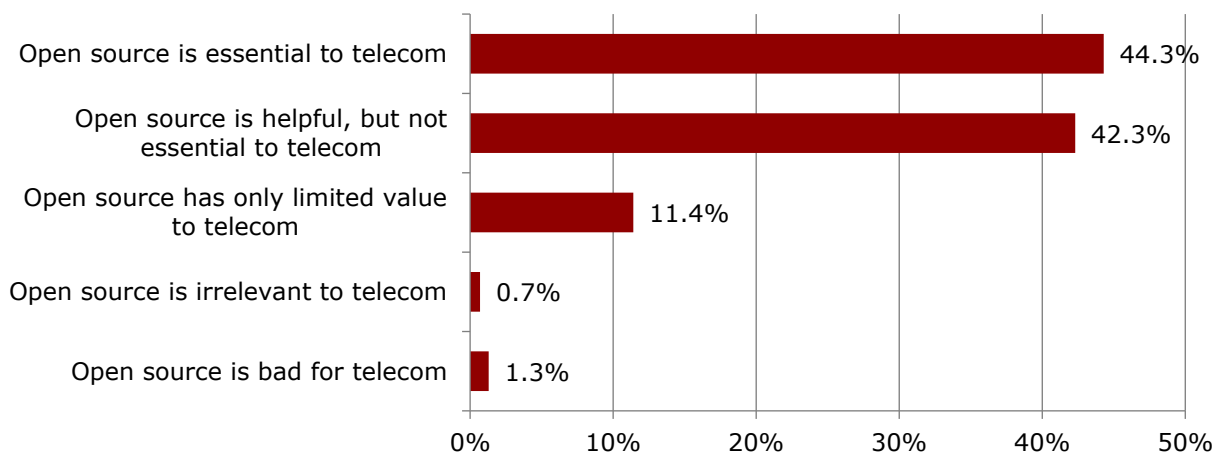


Does the advent of cloud really open the door to enterprise vendors to build telco cloud networks? That's what Cisco, and HPE, and Oracle, and Intel were all saying a couple of years ago...

Service providers don't think so. Less than a quarter think enterprise vendors are "absolutely" capable of building telco networks. 77% say either "maybe," "who knows?" or "hahaha no way." Not exactly a ringing endorsement.

Importance of Open Source

What's your take on the importance of open source to the development of next-gen telecom technologies?

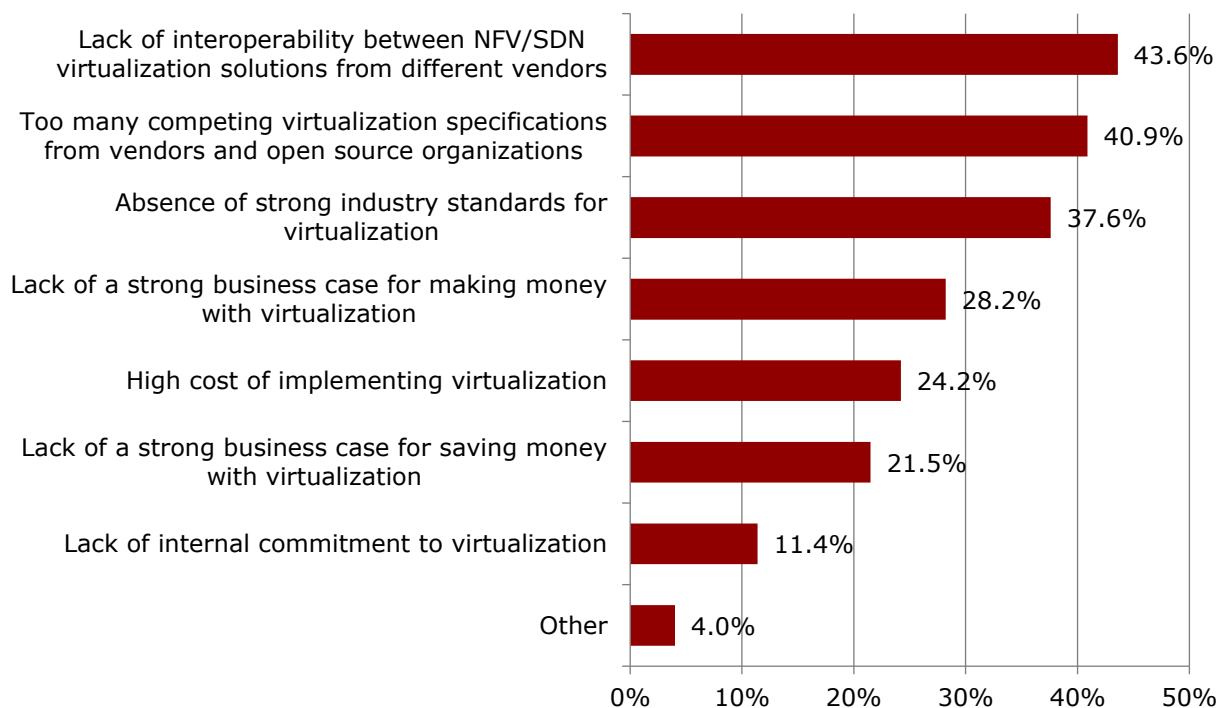


There's something about Linux and open source that captured the imagination of the telecom industry earlier this century. But looking at the results from our survey, for a large part of our industry – service providers – the love affair is either over or never started. 44% of service providers think open source is essential – so that's nice.

Over half think it's just ok, or has limited application.

Biggest Challenges to Virtualization Efforts

What are the biggest challenges your company now faces regarding its virtualization efforts?



Our survey results indicate that service providers are under no misapprehension about what is causing the disarray in the telecom industry today, citing the lack of interoperability, overabundance of NFV specs, and lack of standards as the roots of the problems.

THE SOLUTION

The New IP Agency (NIA) is now working with leading communications vendors and service providers to resolve current issues with NFV by agreeing upon a common MANO resident API that will provide the jumping-off point or interface between NFVi and VNF services and applications. This will enable interoperability between NFV solutions from different vendors – thus making possible a virtualization "free market technology economy."

From a technology perspective, the NIA's intention is to avoid reinventing the wheel; instead, it will repurpose one or more of the many specs already developed in the industry as the basis for our final specification. And, since the NIA is not a standards body, whatever specification it agrees on will subsequently be up-streamed to the appropriate body for standardization.

Defining the API is only the start. Once we have agreed on a specification, we will then use it as the basis of certification testing that will be conducted by multiple independent labs around the world.

If you are interested in being part of the NIA's work, please contact me at saunders@newipagency.com.