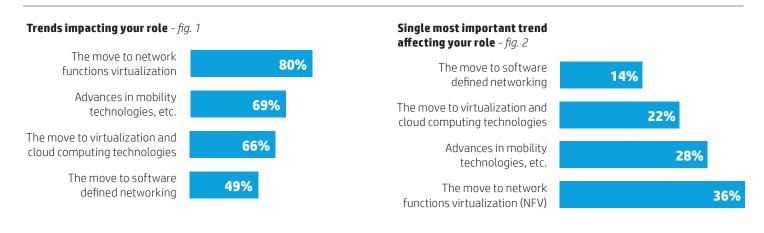
HP survey of NFV priorities for service provider CIOs and CTOs



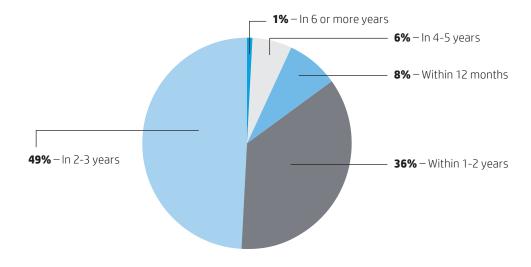
The following are findings from a January 2014 survey by Coleman Parkes Research on behalf of HP. Research is based on phone interviews of 50 ClOs and 50 CTOs¹ from Tier 0, 1, and 2 Communications Service Providers (CSPs) globally. 25 interviews were undertaken in each of four regions globally: Europe, Middle East, and Africa (EMEA), North America (NAM), Asia Pacific (APAC) and Central America/Latin America (CALA).

NFV tops the list of important trends

- •80% of executives (including 84% of CIOs and 76% of CTOs) surveyed said that the move to NFV is a top trend impacting their role. (See figure 1.)
- 36% chose the move to NFV as the most important trend. (See figure 3.)
- NFV will be a major player in the single most important CSP market within three years according to 93% of respondents. (See figure 2.)

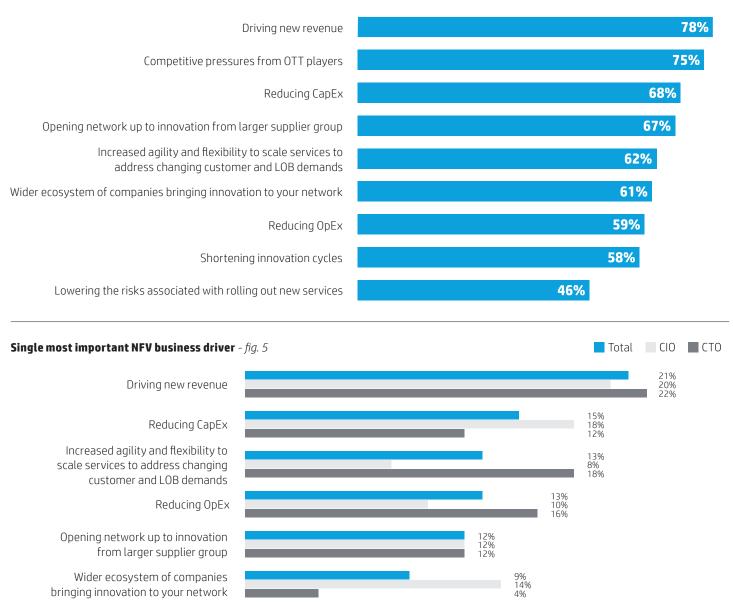


When will NFV be a major player in the CSP market? - fig. 3



¹ We use CIO as shorthand for all titles that indicate "head of IT" and CTO as shorthand for all titles that indicate "head of network operations."

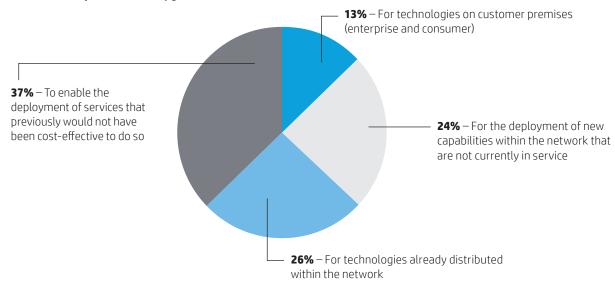
NFV key business drivers - fig. 4



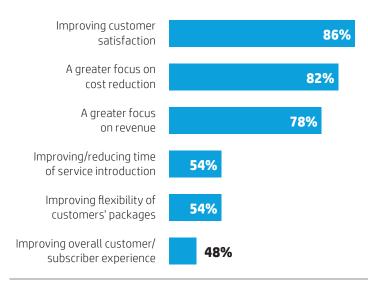
Revenue is #1 driver, but reducing CapEx is important too

- 78% of respondents said that driving new revenue is a key business driver for the adoption of NFV; 75% said competitive pressure from OTT players; and 68% said reducing CapEx. (See figure 4.)
- When asked to choose the single most important business driver, 21% chose driving new revenue (more than any other driver) vs. 15% for reducing CapEx.
- When selecting the single most important business driver, respondents most often chose driving new revenue, but CIOs and CTOs split their responses in second place. CIOs were more concerned with reducing CapEx (18% of CIOs vs. 12% of CTOs) while CTOs were more concerned with increased agility and flexibility to scale up or down services to address changing customer and line-ofbusiness demands (18% of CTOs vs. 8% of CIOs). (See figure 5.)
- 79% of respondents said their NFV plans will allow them to launch and tear down new services at a rate that enables them to improve their competitive position vs. OTT providers.
- •When asked to choose a single priority, 37% of respondents (more respondents than any other) said that their primary priority for the implementation of NFV is to enable the deployment of services that previously would not have been cost-effective to do so. (See figure 6.)
- When asked about changing key performance indicators (KPIs), 86% of CTOs think they will have a greater focus on improving customer satisfaction, followed by 82% who expect a greater focus on cost reduction and 78% who expect a greater focus on revenue. CIOs have a different view of the changing role for CTOs. 92% of CIOs think the CTO will have a greater focus on revenue, followed by 84% who expect a greater focus on improving time of service introduction, and 80% who expect a greater focus on cost reduction. (See figure 7 & 8.)

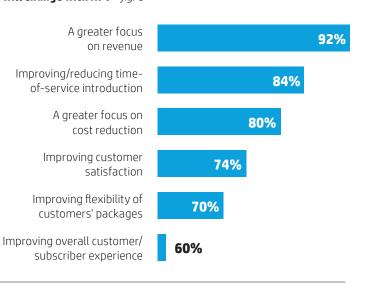
Priority area for NFV implementation - fig. 6



CTOs' view of how their own KPIs will change with NFV - fig. 7



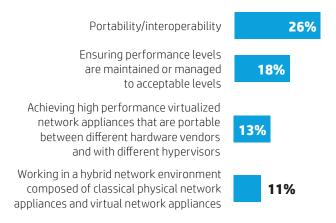
CIOs' view of how the CTOs' KPIs will change with NFV - fig. 8



Openness and portability are top technical challenges

- 85% of respondents see portability/interoperability as a key challenge with respect to NFV.
- When asked to identify the single most important technical challenge with respect to NFV, 26% of respondents chose portability/ interoperability, more than any other technical challenge. (See figure 9.)
- 83% of respondents said that integrating multiple virtual appliances from different vendors is a core challenge.
- 75% said that the move to NFV will drive the use of a new set of vendors for the company.

Most important technical challenge - fig. 9



Bringing together the network and IT

- 68% of respondents said that the convergence of the IT data center and service network is the only real driver for CapEx reduction going forward.
- 89% of respondents said that the convergence of the IT data center and service network will underpin major technology-focused developments in the foreseeable future.
- 78% of respondents said that the convergence of the IT data center and service network is essential to provide a sustainable competitive position a CSP needs.

It is clear from the survey results that NFV is going to have a major impact on the CSP community. The NFV movement is driven by a need to increase revenues and meet the OTT competition head on as well as a need to reduce costs. The top technical challenges in implementing NFV are expected to be around openness and portability to enable CSPs to work with a wider ecosystem of vendors. But bringing together the network and IT will drive technology advancement and competitiveness for CSPs going forward.

