Why LSO is the Next Big Thing

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I'm going to stick my neck out and introduce you to a new buzz-croynm (that's a combination of a buzzword and an acroynm, which is a new buzzword in itself!), in the hope that you don't feel like your email and marketing decks aren't already overloaded with NFV (https://www.sdxcentral.com/nfv/definitions/which-is-better-sdn-or-nfv/)s, SDN (https://www.sdxcentral.com/sdn/definitions/why-sdn-software-defined-networking-or-nfv-network-functions-virtualization-now/)s, and ETSI (https://www.sdxcentral.com/nfv/definitions/who-is-etsi-network-functions-virtualization-nfv/) MANOs.

It's a dangerous jump, I know. And here she goes: It's called Lifecycle Service Orchestration (LSO). This is Part I of a two-part column on LSO. This is where I tell you what it is: It's a new layer of management software, designed for global service providers, that lives high up in the services stack, controlling all manner of services provisioning and orchestration, fulfillment, assurance, monitoring, and analytics, among other functions. It's a next-generation, open, standards-based management platform.

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Yes, I know. LSO sounds mysterious and dangerous. As Axel Clauberg, VP in the CTO office at Deutsche Telekom (https://www.sdxcentral.com/listings/deutsche-telekom/) AG (NYSE: DT), joked at a presentation about LSO that I gave on the floor of Mobile World Congress: "If you were in Amsterdam or Denver you might think it's a new drug."

I assure you that LSO is not a pharmaceutical. But it does have the potential to solve many service provider aches and pains. Think about all of the new technology that service providers are using to deploy enterprise connectivity or data services — optical switching, Ethernet switching, SDN controllers (https://www.sdxcentral.com/sdn/definitions/sdn-controllers/), and network functions virtualization (NFV) (https://www.sdxcentral.com/nfv/definitions/whats-network-functions-virtualization-nfv/) software and hardware. What's the point of all this new open, transparent technology? The point is to make it easier to provision, deploy, and enable new services. But what happens when you get the infrastructure in place? You need some way to more rapidly connect the customer to these services and have them dynamically control them. This is where LSO comes in.

I did not come up with the concept of LSO on a lark. I worked with the MEF (https://www.sdxcentral.com/listings/metro-ethernet-forum/) to help define it as part of a research project. The MEF had already done good work in defining the emerging LSO market as part of its "Third Network" initiative, looking at the technology functions and standards that could be developed to create more dynamic, automated enterprise business services. We decided to take it a step further.

The MEF (http://www.metroethernetforum.com/) and the Rayno Report (http://www.raynoreport.com/) came up with a joint survey, known "Emerging Dynamic 'Third Network' Services & the Role of LSO." We received responses from more than 60 individuals at global service providers (the survey tool is still actively collecting data). I did additional digging, interviewing two dozen operators and software and hardware vendors about what they want. The results were compiled in my new report, "Service Provider Lifecycle Service Orchestration (LSO) Market Overview and Forecast. (http://raynoreport.com/products/R004/)"

The message is clear: Global Operators are ready for something new, and developing NFV (https://www.sdxcentral.com/nfv/) and software defined networking (SDN) (https://www.sdxcentral.com/sdn/definitions/what-the-definition-of-software-defined-networking-sdn/) are going to drive the need for a new software management layer known as LSO. The chart below details some of these LSO functions and what the operators polled think of their importance.

How important are the following LSO capabilities for your organization?

LSO Capabilities	Somewhat Important	Important	Very Important	Priority Importance
Fulfillment - orchestrate service ordering; provision and assign resources; verify, test, and turn-up service	0%	24%	46%	31%
Security - safeguard management & control mechanisms, network access, and service-related traffic that flows across network	4%	15%	55%	27%
Assurance - support alarm surveillance, including detection of errors and faults	4%	20%	47%	29%
Performance - collect service performance information across all network operators who participate in service delivery	6%	26%	44%	26%
Usage - gather and provide usage measurements, traffic measurements, and service-related usage events (e.g., changes in service bandwidth, etc.)	4%	36%	40%	20%
Policy - prescribe the set of rules under management & control logic must operate. Service policies may be encoded in such rules in order to describe the design and dynamic behavior of the services that are implemented	7%	38%	44%	11%
Analytics - support fusion and analysis of management & control information across management domains in order to assemble a complete operational picture of end-to-end services, service components, and supporting network infrastructure	7%	44%	38%	11%
Control - dynamically manage elastic behavior of service instances, including connectivity and service endpoints	9%	36%	49%	6%

MEF

MEF & Rayno Report Joint Survey - Emerging Dynamic "Third Network" Services & The Role of LSO (1Q 2015)

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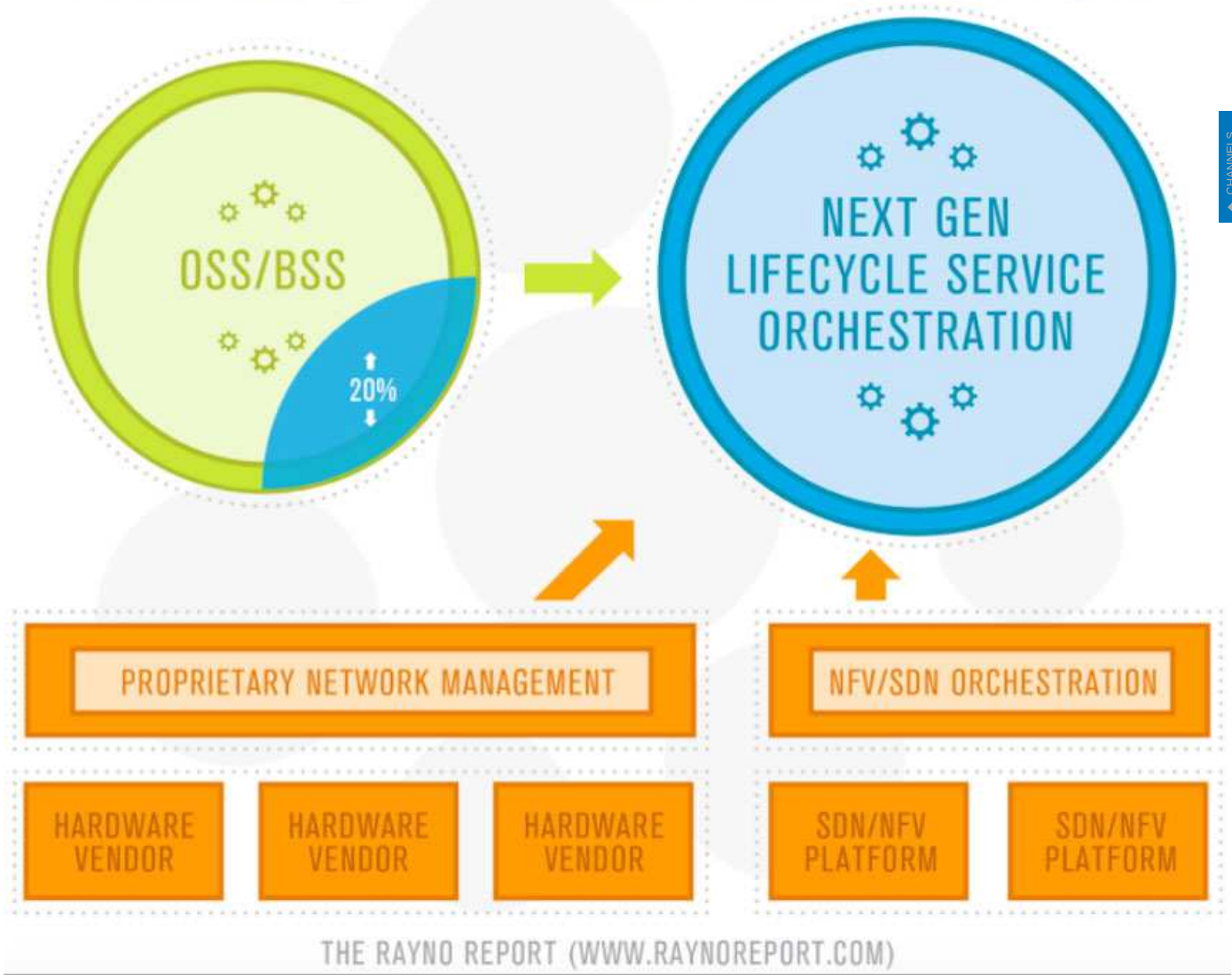
Why do they want something new? The operators that we surveyed and spoke with said their existing operations and support systems (OSS (https://www.sdxcentral.com/term/operations-support-systems-oss/)) simply aren't cutting it, and they're not equipped to deal with SDN (https://www.sdxcentral.com/sdn/definitions/) and NFV advances. For example, 54.6% of operators regard their OSS systems as "outdated" with a need to be updated or overhauled, according to the survey results. Sixty percent (60%!) said they were lacking a capability to launch new services in a cost-effective and time-effective manner.

The findings were dramatic. The results of the study and the report show that the service providers are indeed serious about building LSO systems. To think of this market, think of a new open, standards-based management system that replaces the existing OSS, BSS, and network management markets. This is exactly what the survey results indicated that service providers want.
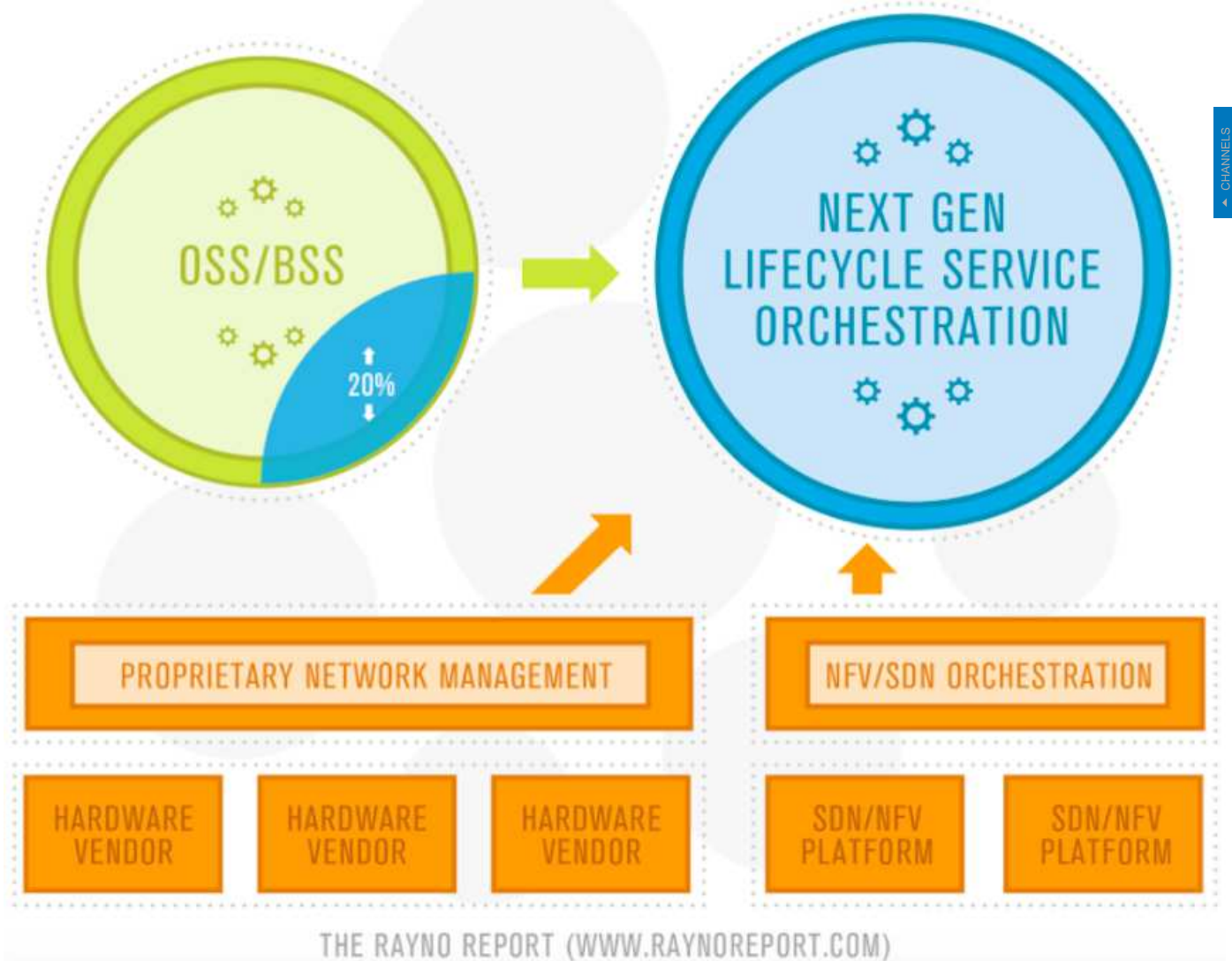
Another interesting development is that there are a group of startup companies taking the concept of LSO and running with it — companies such as CENX (https://www.sdxcentral.com/listings/cenx-inc/), UBIqube (https://www.sdxcentral.com/listings/ubiqube-solutions/), and Wedge Networks are developing new automated provisioning, orchestration, and fulfillment software that helps services providers roll out new enterprise B2B services such as Ethernet, IP-VPN, and virtual firewalls in a more efficient, automated way. This is exactly the goal of LSO.

THE LSO MARKET EVOLUTION

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(https://www.sdxcentral.com/wp-content/uploads/2015/03/The-LSO-Market-Evolution.png)

LSO is coming whether you believe it or not. The operators have said so. Now, I hear your skepticism: 'But Scott, we've never heard of LSO!' Well, that's the point. It's new. And yes, the MEF and I are admittedly trying to coin terms here (isn't that what analysts are supposed to do)? But I'm putting this stake in the ground because I've done enough real, fundamental market research to convince me that the customers actually want it, and they say they are going to be spending money on it.

How much will they spend on it? I'll cover that in Part II, next week.

The Rayno Report's **new 32-page premium report (http://raynoreport.com/products/R004/)** *describes in detail the emergence of the LSO market, including extensive customer feedback about what service providers want to see in native LSO implementations and next-generation OSS systems. "***Service Provider Lifecycle Service Orchestration (LSO) Overview and Market Forecast (http://raynoreport.com/products/R004/)***" can be purchased for $850 for a single-user license.*

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