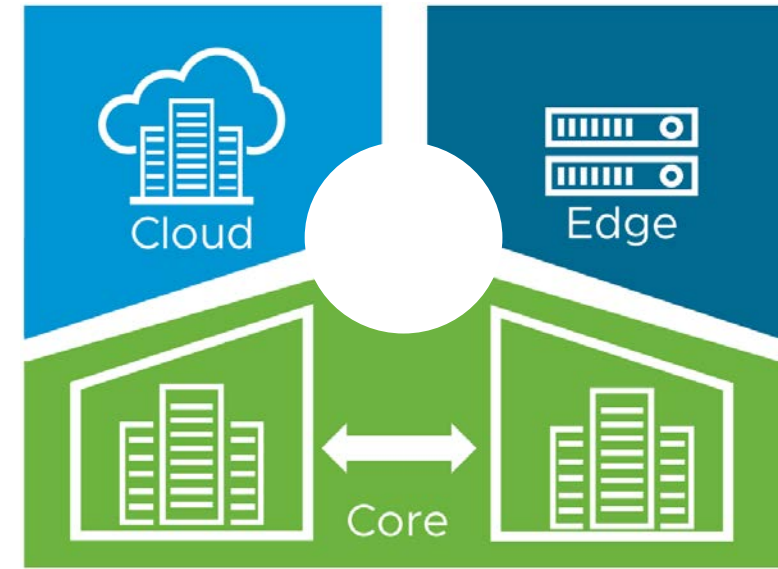


Impact of Flash Trends On Hyper Converged Infrastructure (HCI)

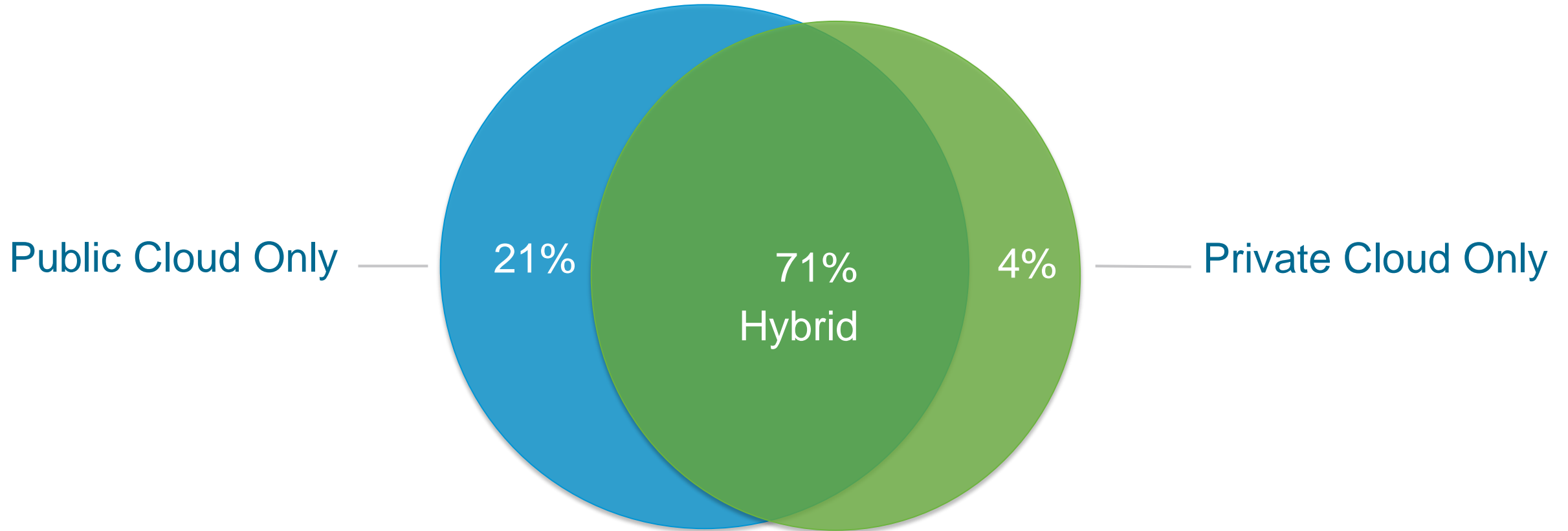
Aysen Ilkbahar
Director, Product Marketing at VMware

Data Drives Tremendous Opportunity



IT can get really complicated

Hybrid Cloud is the Preferred Enterprise Strategy



Source: RightScale 2018 State of the Cloud Report



The information on the roadmap is intended to outline our general product direction and it should not be relied on in making a purchasing decision. It is for informational purposes only and may not be incorporated into any contract.
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#1. A Common Operational Model Simplifies Hybrid Cloud

Simplification



Consistent Infrastructure

VM Infrastructure /
Container Infrastructure



Consistent Operations

Automation and Operations / Across
Clouds



Consumable Developer Experience



Public Cloud



Data Center

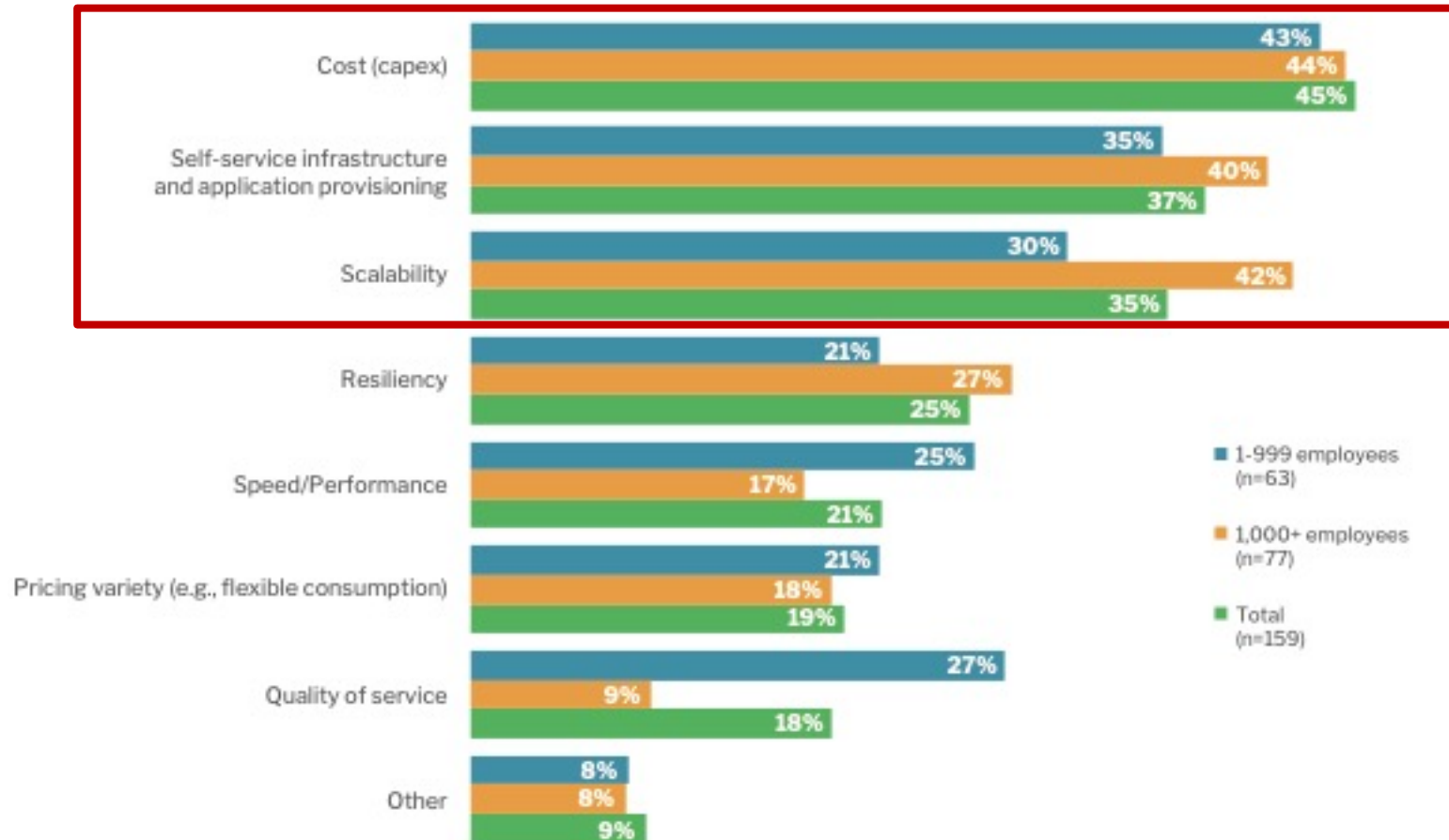


Edge

Enterprise Infrastructure Pain Points are the Storage Pain Points

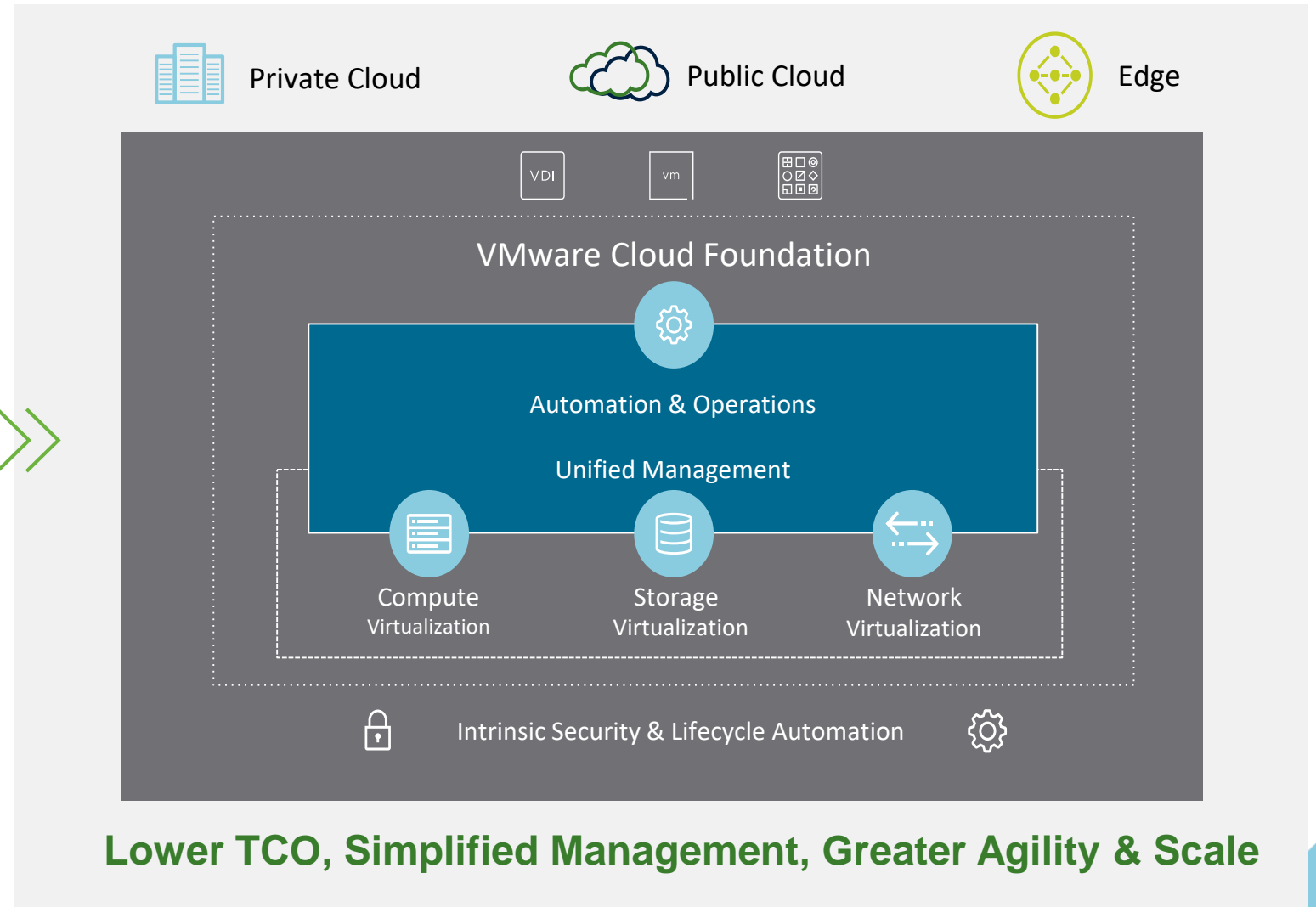
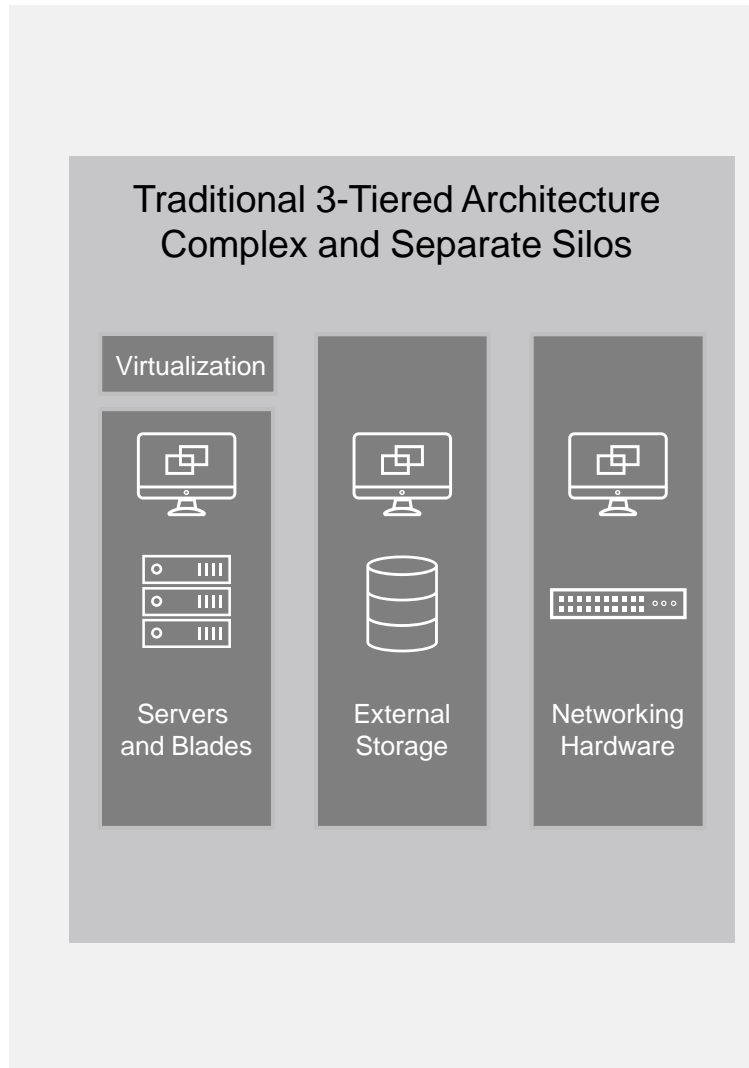
INFRASTRUCTURE PAIN POINTS BY ORGANIZATION SIZE

(% of respondents)

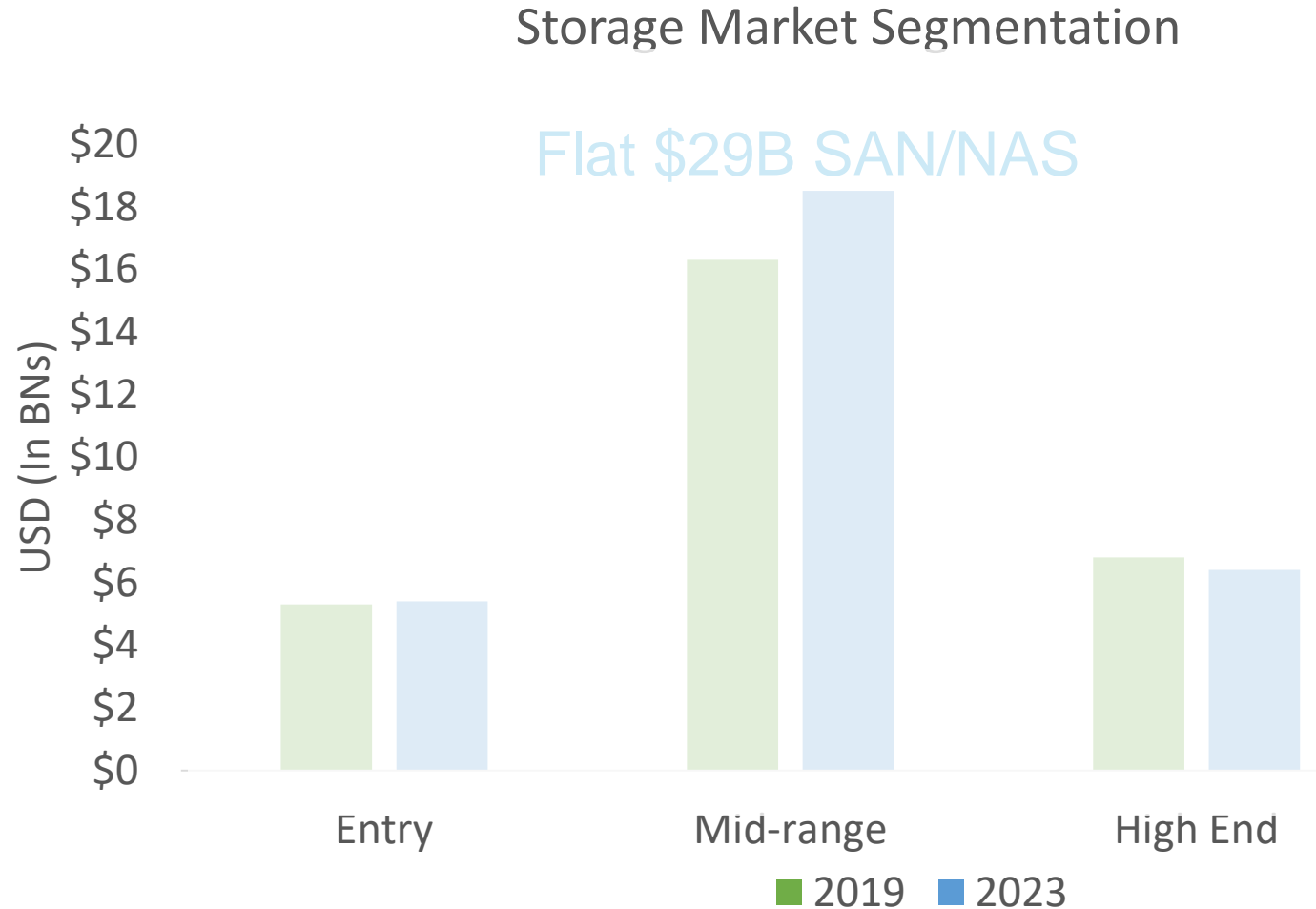


- High Cost of Storage
- Capacity Planning/Forecasting
- Dealing with Growth

#2: Modernization of the Data Center Is Being Fueled by Full-Stack HCI

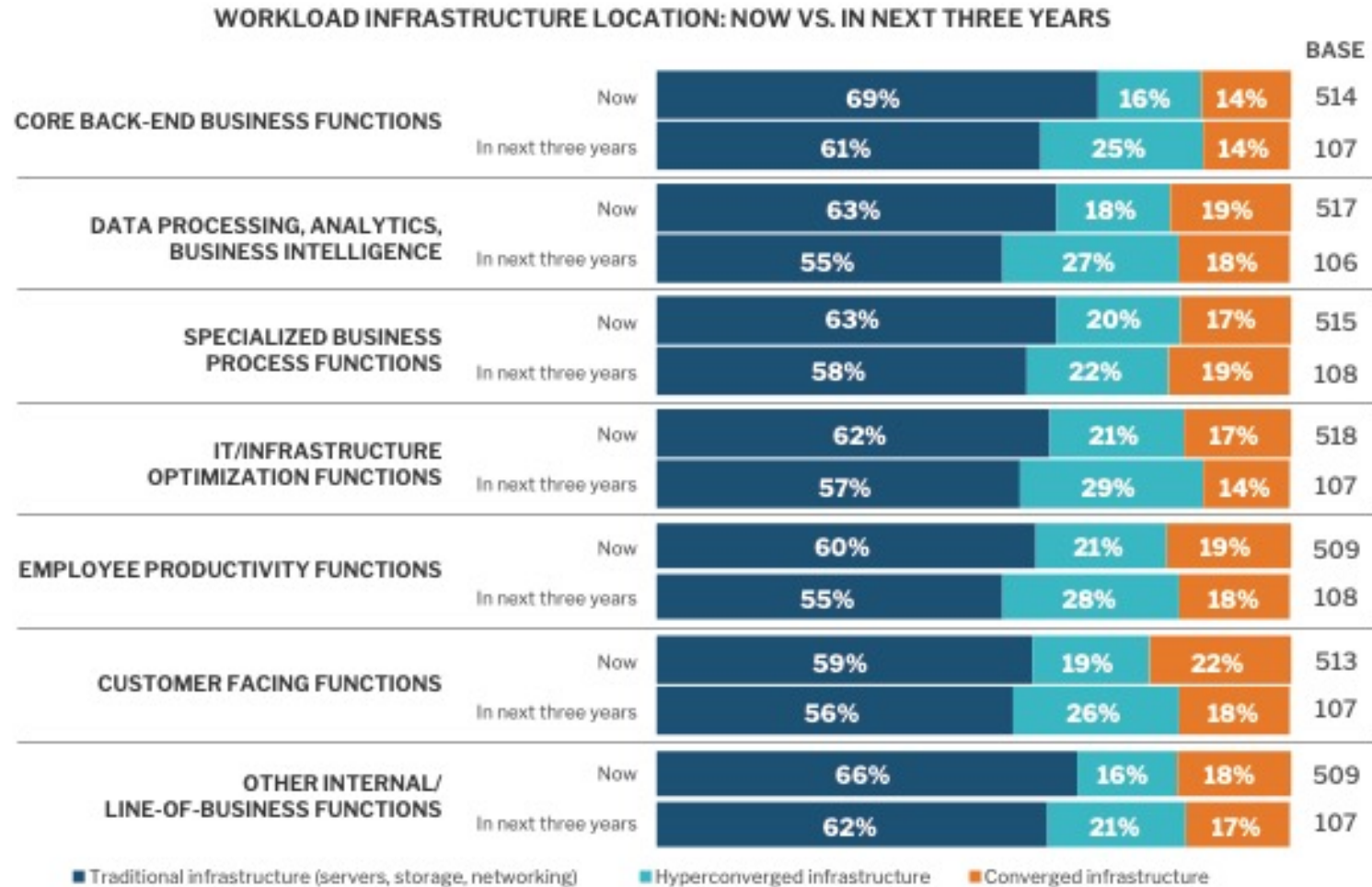


A Massive Shift to HCI Spend



Source: IDC Converged Systems Tracker Forecast, Q42018, Published April 2019
IDC Worldwide and U.S. Enterprise Storage Systems Forecast 2019-2023, IDC. Published May 2019

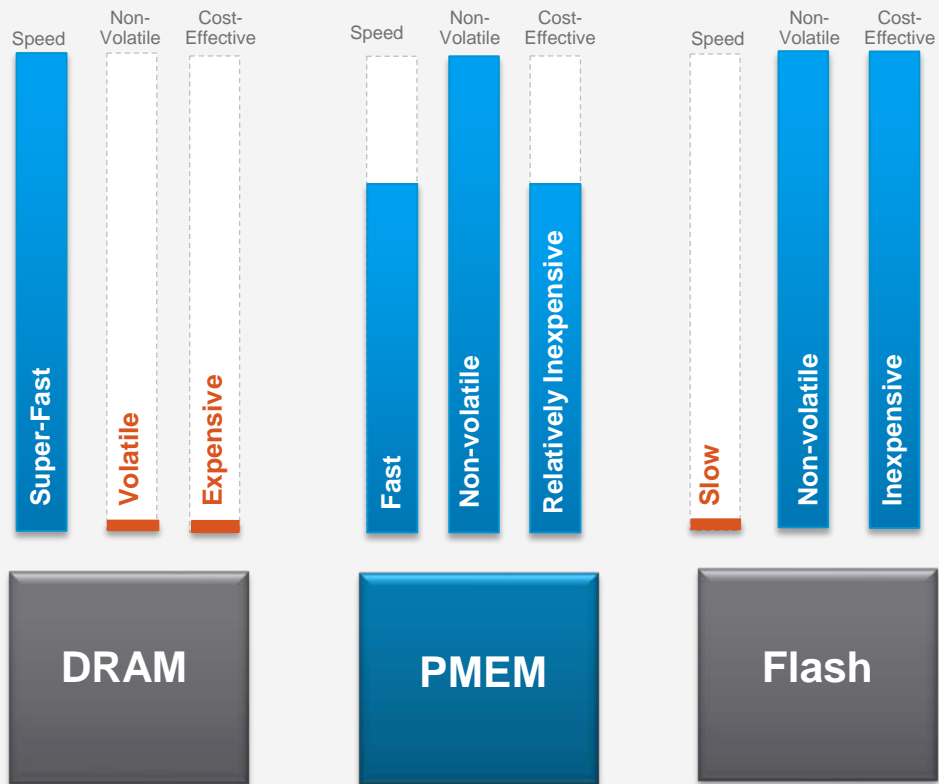
HCI Capturing Increased Share of Workloads



Source: 451 Research, Voice of the Enterprise, Compute Infrastructure, 2019

#3 PMEM - HW Technology Driving Application Innovation

Trade-offs – Speed, Non-Volatility, Cost



- **Large Capacity Memory**
server consolidation for memory bound apps
- **Faster DB**
with low-cost, large capacity Memory
Keep data in-memory, avoid write to disk
- **Faster reboot of Apps**
with low-latency Persistent Storage
- **Faster HA restarts**
1000x lower latency than SDD
4 mins w. PMem vs 50 mins w. SSD
- **Improved Real-time processing**
Byte-addressable Persistent Memory

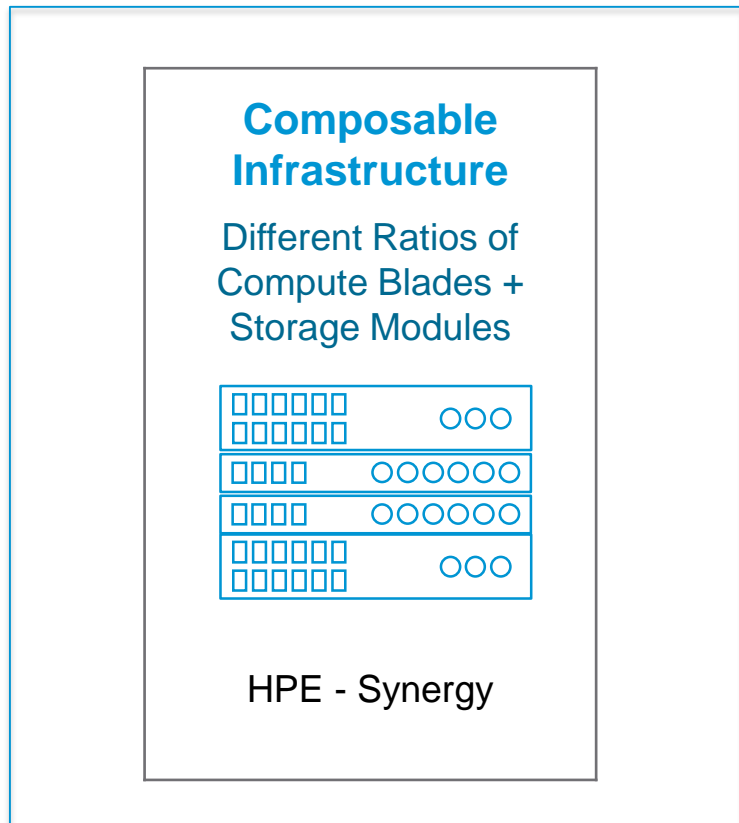


Developers can now make memory trade-offs to optimize apps; realize new capabilities

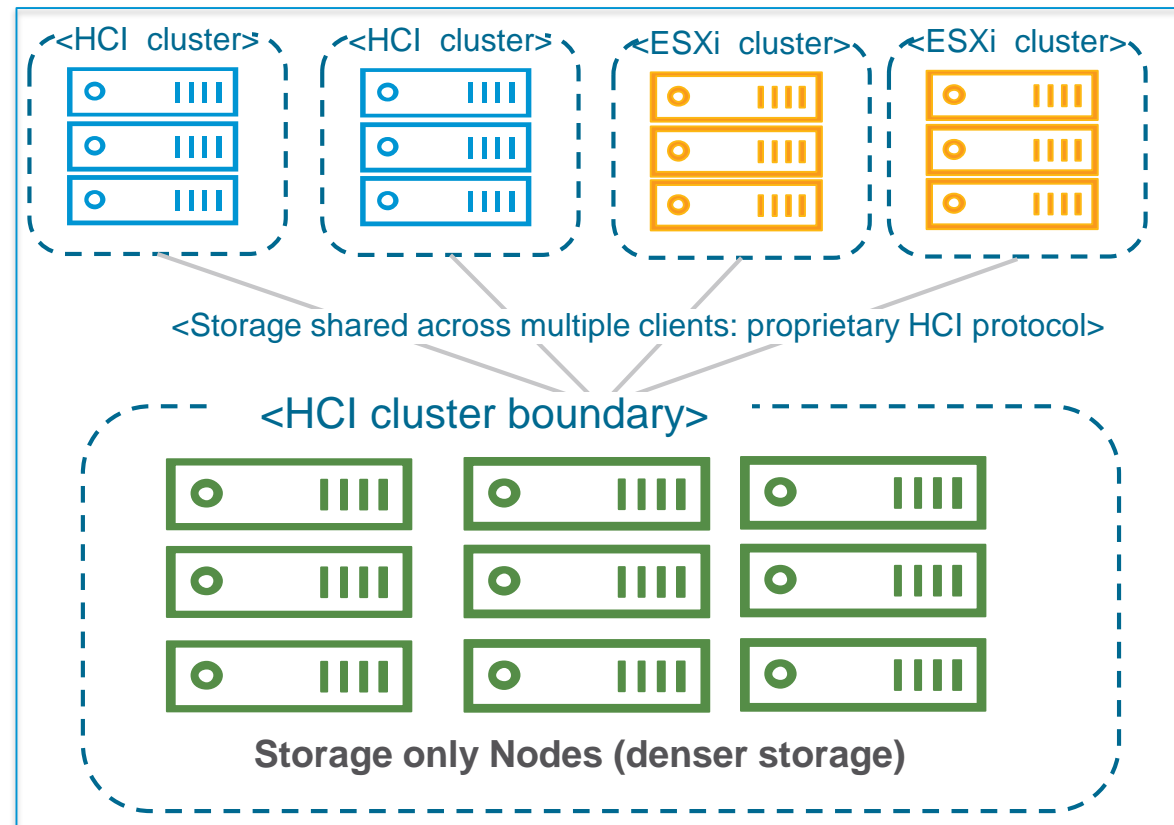
#4 Disaggregation being fueled by workloads requiring different ratio of Compute & Storage

Workload Examples: Data warehouse, Search engine databases, Log aggregation, Analytics

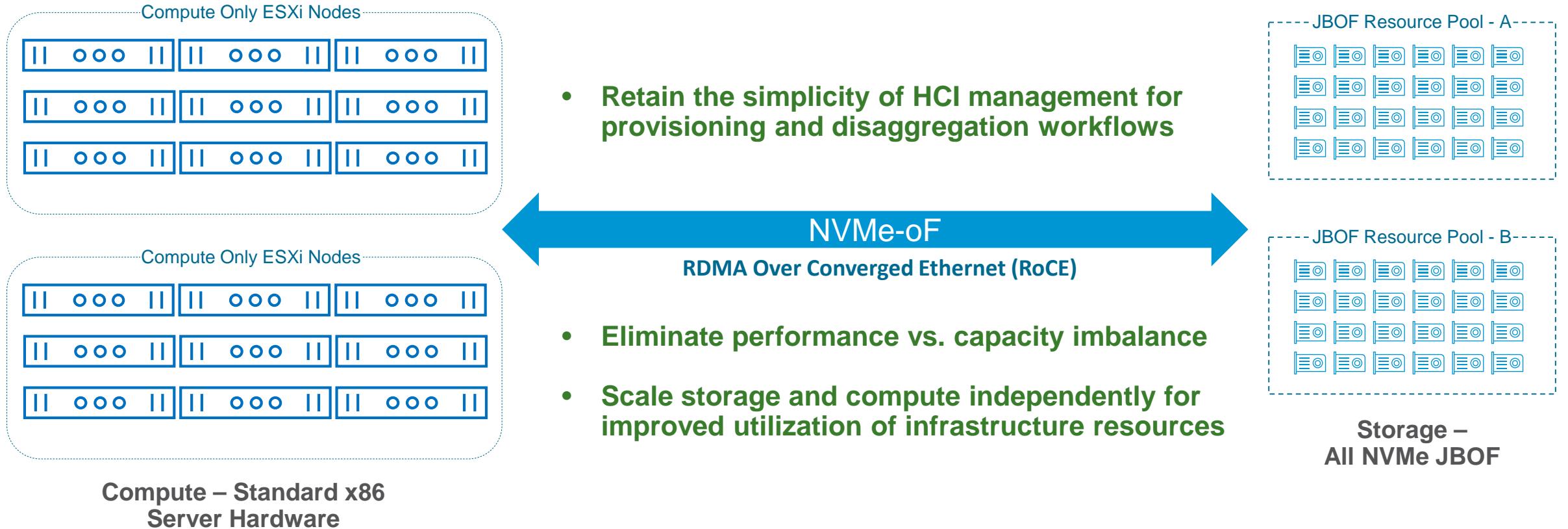
Hardware Based Disaggregation



Software based Disaggregation



HCI with NVMeOF Delivering Scale and Performance





Thank You

Aysen Ilkbahar
Director, Product Marketing at VMware

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