

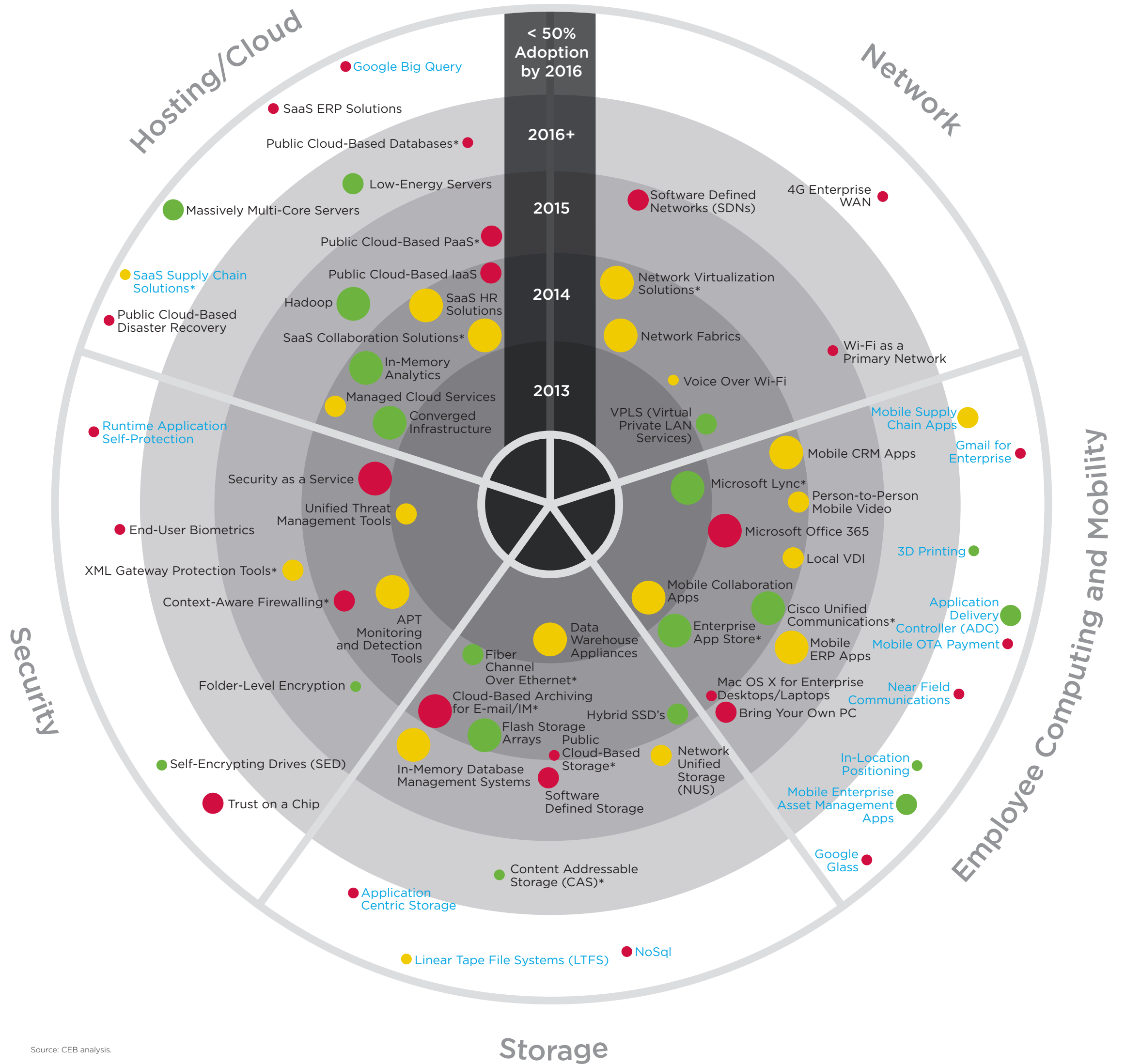
Emerging Technology Roadmap, 2013-2016

Over 400 IT Professionals from 84 Companies Collaborated to Benchmark the Adoption of 73 Infrastructure and Operations Technologies

PARTIAL LIST OF PARTICIPATING COMPANIES



Technologies by Mainstream Adoption Timeline, Value, and Risk



KEY TAKEAWAYS

1. Migration to cloud-based architectures has accelerated, especially as infrastructure makes more use of managed cloud services. Infrastructure organizations plan to triple their use of managed cloud services over the next two years, while use of public cloud will hold at just under 10% of capacity. Cloud usage is clearly maturing, as its use is being split more evenly across development, test, and production environments.
2. CRM/marketing and e-mail/collaboration services are on the front lines of public cloud and mobility. Infrastructure organizations are taking advantage of the cloud and mobile environments to advance collaboration—the first wave of mobile collaboration apps development is already underway, and Microsoft's 365 solution is anticipated to see mainstream adoption in large enterprises in 2014.
3. More infrastructure investments to support big data are anticipated over the next two years. Over one-third of infrastructure teams have invested in technologies such as big data-ready storage, Hadoop, and in-memory analytics. But only one-fourth of organizations have made the necessary process and talent investments to enable big data capabilities effectively.
4. Anticipated near-term investment in "software-defined infrastructure" signals a shift in critical dependency from hardware to software. Despite concerns over marketplace maturity, more organizations are planning to deploy software-defined networks and software-defined storage in 2014, reflecting an ongoing trend toward commoditization in the hardware space.
5. Security technologies are maturing faster than organizations' adoption readiness. Organizations are poised to adopt new tools for APT monitoring and detection, unified threat management, and context-aware firewalling by 2014 amid concerns over organizational and process readiness to take advantage of these technologies yet.

MAINSTREAM BY 2013H1:

Hosting: SaaS CRM Solutions* Storage: Primary Storage Data Deduplication Network: 4G Mobile Data* Security: Web Application Firewalls,* Identity Management Tools, Security Analytic Tools

ENTERPRISE VALUE



Calculated based on a prescriptive analysis of three factors where the technology has the potential to demonstrate enterprise value:

- Reduces Infrastructure Cost
- Improves Infrastructure Service Speed
- Improves Infrastructure Service Quality

Please note: Security uses modified assessment factors.

Employee Computing and Mobility includes an additional factor: Improves enterprise employee productivity

UNCERTAINTY FACTOR

Blue denotes technologies for which significant uncertainty exists on value and risk (33% or more responded "no opinion").

DEPLOYMENT RISK



Calculated based on a prescriptive analysis of four factors where the technology presents potential risks to value capture when deployed:

- Marketplace Maturity Risk
- Architecture Fit Risk
- Security Risk
- Support Risk

Please note: Security uses modified assessment factors.

SUSTAINABLE RESPONSIVENESS

Asterisk (*) denotes investments correlated with Infrastructure's ability and confidence that it can sustain service speed and quality regardless of demand/supply shifts.

Source: CEB Infrastructure Services Sustainability Benchmark Data.