Gartner's Emerging Technology Roadmap for Large & Midsize Enterprises

Large Enterprises - Key Takeaways

1. I&O organizations see a need to continue technology investments in order to support the accelerated transition to a new virtual work environment, despite delays in some technology adoption plans caused by the economic impacts of COVID-19.

2. Sixty six percent of technologies on the roadmap are in pilot this year compared to 46% in 2019. Also, 23% of technologies on the roadmap are in deployment, as compared to 22% in 2019.

3. Improving speed and agility remains the primary driver for technology adoption. Two thirds of I&O leaders state that due to the current crisis, the importance of enabling resilience and reliability will either somewhat increase or increase while making technology investments in the next 12-18 months.

4. Experimentation in digital workplace technologies is accelerating in order to ensure employee productivity in the post-COVID shift to remote work.

5. Many IT automation technologies have moved from evaluation to deployment as organizations prepare to cope with the rapid pace and scale of digital business.

6. Storage and backup investments focus on supporting a hybrid environment through cloud and modernized on-premise storage. Investments in AI, Edge, and IoT have increased due to interest from the C-Suite outside IT. Technologies such as AIPaaS, Edge Computing and IoT platforms are in pilot, and AIOps platforms are in deployment in this year's roadmap.

Midsize Enterprises - Key Takeaways

1. CIOs plan to modernize their network infrastructure through investments in container networking, secure access service edge (SASE), and virtual eXtensible local area network (VXLAN).

2. CIOs are piloting cloud-delivered secured access service edge (SASE) to secure increased remote work and secure edge investments: Forty nine percent of MSE CIOs are piloting or deploying SASE to prepare for edge technologies, like IoT, AR, and VR, and secure increased remote work.

3. CIOs are democratizing tasks, including development, analytics, and integration, to business teams that crave speed and agility: CIOs expect data and application integration to be the first step toward democratizing traditional IT tasks and enabling citizen development, with plans to deploy low-code/no-code tools no later than 2022.

4. MSE CIOs are investing in IT automation and AI tools to streamline product delivery and enhance employee productivity: CIOs plan to pilot IT automation technologies such as event correlation and analysis, and IT workload automation.

5. MSE CIOs plan investment in monitoring technologies to improve their understanding of the employee experience: More than fifty percent of MSE CIOs are piloting digital experience monitoring (DEM) application performance monitoring (APM) and artificial intelligence IT operations (AIOps) platforms to have a centralized view of performance.

6. CIOs are investing in front-end operations technology while modernizing legacy back-end infrastructure: Three in four MSE CIOs plan to deploy serverless computing, OS containers, and microservices at scale by 2021 to support their cloud infrastructure and changing application development processes