Deployment Risk

The risk factor awarded to each technology is based on the analysis of potential risks posed, including marketplace/vendor maturity, architectural fit/complexity, security risk, talent availability, regulatory compliance challenges, implementation cost, and disruption to existing processes and services.

Digital Workplace

Deployment Risk

3.

Deployment Risk

4.

Deployment Risk

5.

Deployment Risk

6.

Digital Workplace

7.

Digital Workplace

8.

IT leaders from more than 400 midsize enterprises collaborated to map the adoption of 115 emerging technologies according to their deployment stage, enterprise value and deployment risk.

Enterprise Value

The value factor awarded to each technology is based on the analysis of value drivers, including increasing cost efficiency, enhancing speed and agility, enabling resilience, enhancing employee productivity and increasing revenue through improved products and/or services.

Key Takeaways

1. MSEs are piloting conversational AI technologies to open new service-delivery channels. NGA are testing bots and virtual assistants to increase efficiency and new of interaction for employees, customers or other users. NGA value promises of increased customer and employee satisfaction more than they fear the risks associated with talent unavailability and implementation costs.

2. MSE CIOs are investing in hyperautomation technologies to focus on process automation. MSEs are piloting on-edge scenarios and machine learning platforms, and robotics platforms (RPA) to support their automation strategies. MSEs are investing in hyperautomation investments with 88% of MSEs planning to deploy these technologies by 2023.

3. MSEs are piloting citizen technologies to democratize development, integration and data analysis at scale. MSEs have moved from monitoring citizen technologies in 2020 to piloting citizen data science tools and citizen integrator tools. These tools enable resilience and enhance employee productivity. MSEs are keeping up with their citizen technologies to support self-service development and integration by business teams.

4. MSEs are high-boosting investments in edge computing to improve their speed and agility. MSEs have bypassed the planning stage to directly deploy edge computing technology after large enterprises overcome the risks as early adopters. Fifty percent of the MSEs view this technology by the end of 2021 to address concerns such as latency, bandwidth, data privacy and autonomy of the hybrid working environment.

5. MSEs are investing in digital reality technologies to improve connections and collaboration in hybrid environments. The year 2021 is ramping and piloting digital reality technologies like AR/VR, which are experiencing with virtual reality (VR) and augmented reality (AR) to expand both the real-world and virtual environments of users. Despite costs associated with implementation risks, CIOs see significant benefits to keeping customers and employee engaged in a virtual environment.

6. MSEs are deploying both Wi-Fi 6 and Wi-Fi 6E to support employee productivity. MSEs have accelerated their investment in Wi-Fi 6 and Wi-Fi 6E to support simultaneous voice and video communications for both the private and public environments. Despite costs associated with implementation risks, CIOs see significant benefits to keeping customers and employee engaged in a virtual environment.

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8. MSEs are investing in secure access service edge (SASE) to enable simpler, consistent end-to-end networking and access management. MSEs are piloting SASE to deliver the rich set of secure networking and security services in a consolidation infrastructure, and support the needs of digital business transformation, edge computing and social media. Despite high implementation risks, MSEs are testing SASE to address the needs of their enterprises, and then adopt or abandon the technology.

9. MSEs are investing in hybrid cloud storage for disaster recovery, cybersecurity and autonomic testing. In response to an increase in high public cloud storage breaches, 50% of the MSEs plan to deploy hybrid cloud storage by the end of 2021 to enable resilience in their organizations. MSEs are piloting hybrid cloud storage investments to create seamless data services among disparate data sources, edge computing environments and locations to integrate data in a hybrid working environment.