

REGION FOCUS: WORLDWIDE

Edge Computing Improves Application Performance



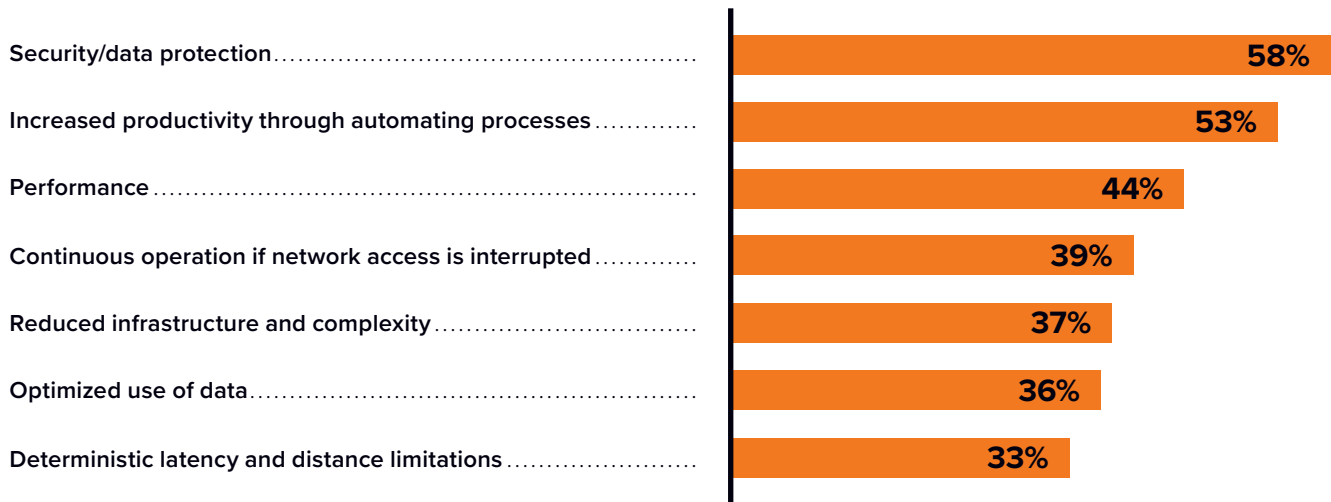
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Q. What are the primary technical-related benefits/outcomes your organization has experienced by deploying edge computing solutions?

(% of respondents)



n = 735; Source: Lumen Edge Solutions Thought Leadership Survey, IDC, November 2022

Edge computing is emerging as a strategic imperative for enterprise technical decision makers. These technical decision makers realize that application performance is highly impacted by the location of compute, storage, and networking resources. In today’s highly distributed compute environment, time-sensitive applications must reside as close as possible to these resources to ensure timely and deterministic outcomes.

The main premise of edge computing is to analyze and act upon data wherever it resides. In today’s world, smart connected devices are all around us. While it is possible to send this data to a centralized datacenter, there are limitations to that approach. There are also considerations for the costs of moving large amounts of data and its impacts on security.

IDC conducted a survey of both IT professionals and those in operational roles to understand how edge computing improves technical outcomes. These are the results:

- 58% indicated improved security and data protection, e.g. financial industry.
- 53% experienced improved productivity due to automation, e.g. manufacturing.
- 44% indicated improved application performance, e.g. retail use.

When asked about the percentage improvement in technical outcomes by deploying edge computing solutions, the same respondents indicated the following:

- 30% improvement in reducing infrastructure resources and complexity.
- 27% improvement in deterministic latency and distance limitations.
- 25% improvement in application operational performance.

These improvements are material and are key ingredients to the enterprise decision to deploy edge computing. These outcomes also align well with why enterprises pursue digital transformation.

Conclusion

Enterprises should view edge computing as a key pillar of modernizing applications that are critical to the operation of their business.

IDC recommends the following steps to get started:

- Identify the use cases that are time sensitive and critical to the operation of the enterprise.
- Determine the technical characteristics of these use cases in terms of deterministic latency, application performance, data integrity, and security needs.
- Select a technology provider that can help design, build, and operate these use cases. This managed service provider should derisk the full life cycle of deploying and operating these use cases.

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