

REGION FOCUS: WORLDWIDE

# Edge Computing Enhances Business Outcomes





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

(% of respondents)

industry topic.



The effective use of data can have a significant impact on overall business performance. However, effectively using data is not always easy, especially in situations where the creation of data is distributed across many locations. This is an area where cloud-based solutions can fall short and a key reason why edge computing has become a hot

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 all of this data to a centralized datacenter, there are limitations to that approach. For example, accessing an application that is hosted a thousand miles away will have a slower response time than one hosted in the city where the user is located. There are also considerations for the costs of moving all of this data around and the impacts on security.

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

IDC conducted a survey of both IT professionals and those in operational roles to understand how edge computing can improve business outcomes. 44% of respondents indicated that investments in edge computing solutions improved the quality of products and services. In the context of manufacturing, data collected inside of factories can be used for defect analysis. 42% identified improved customer experiences which is evidenced by retail stores using edge data to optimize floor plans and to reduce wait times at checkouts.

While those examples demonstrate how edge computing can improve external-facing business outcomes, there are many benefits to be realized inside a company as well. 41% of those surveyed identified increased productivity through automated processes. In transportation and logistics, the operational aspects of warehouse management and shipping are prime targets for resource optimization. Additionally, 36% of respondents reported improved business agility through faster decision making by taking advantage of edge data.

When asked about the percentage improvement in business outcomes by deploying edge computing solutions, the same respondents indicated: 30% better compliance with government and industry regulations; 27% reduction in costs (e.g., network bandwidth, compute/storage infrastructure, data transfer fees), and 27% faster decision making due to local analysis and action on data from digital interactions.

These are just a few examples of how distributing an application in alignment to where data is created and used can yield positive business outcomes. As these distributed solutions become pervasive, more organizations will leverage edge computing to create new revenue streams while reducing costs.

### Conclusion

Think of edge computing not as a specific technology, but rather a mindset of distributing applications outside of centralized datacenters making it possible to maximize the value of real-time business data.

#### IDC recommends the following steps to get started:

- · Identify the various locations where data is being collected today. In many cases, this information may be stored in siloed systems that are not integrated.
- Determine opportunities for deploying applications closer to those locations. This opportunity does not often involve an entire application but rather a subset of functionality that works in conjunction with cloud-based components.
- Select a technology provider that can help design, build, and operate the edge solution. As these solutions scale, managed service providers are removing many headaches for customers.

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