How to unleash the power of edge computing

Edge services thrive when combined with a robust data platform and advanced connectivity

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EDGE COMPUTING HOLDS a great deal of promise as a stand-alone capability, but when paired with technologies such as advanced connectivity and enterprise data platforms, edge computing can fuel new customer and employee experiences at scale.

When agencies combine edge computing with advanced connectivity, for example, they can empower rich, personalized experiences for customers as well as employees. Imagine moving from a 2D world of video consumption to a 3D world with immersive experiences personalized at scale for the individual. Edge computing coupled with advanced connectivity and SAP's data platform can serve as the foundation to bring these new experiences to life.

To help fuel this innovation, advanced connectivity such as 5G and Wi-Fi 6 play an integral role. With edge computing woven into a 5G network, the result is a stronger, more secure network. With SAP's HANA data management suite integrated into the mix, SAP can extend data management to the edge so that the processing happens on the device, on the IoT sensor or on the autonomous vehicle rather than in a distant data center or cloud-based service. This allows faster access to analytics and a streamlined ability to meet customer needs in real time.

Making better decisions at scale

For example, a state's Department of Motor Vehicles could use video cameras and analytics at the edge to track the facial expressions of customers and gauge their level of satisfaction with their experience in the DMV's offices. DMV officials could proactively engage with customers by providing real-time content that would improve the customer's experience.

Edge computing combined with 5G and a robust data platform also allows agencies to make better decisions about the type and quality of the data they need to capture and retain. The best examples are snapshots the DMV should save from video feeds. The edge servi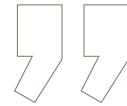ce becomes a filter for deciding what kind of data stream is valuable, through the use of artificial intelligence and machine learning, and providing new capabilities in a cost-effective manner.

For example, in disaster recovery missions, agencies could create a network as well as a common operational picture by combining information from satellite imagery, drones and sensors deployed in the disaster zone. That would streamline relief efforts to identify the resources needed and the best ways to help survivors.

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Demonstrating the 'Art of the Possible'

SAP is uniquely positioned at the intersection of advanced connectivity, edge services and data management at scale. As such, SAP launched a 5G Council to showcase the "Art of the Possible" to develop new business models and new approaches to help customers at the federal, state and local levels. The council is a cross-industry collaboration of SAP customers and partners who have an interest in the benefits of new business models and new operating models. This allows them to take advantage of new technology.

Overall, SAP helps customers innovate at scale and think differently than they have before because they no longer need to follow old processes. SAP engages not only with finance and IT leaders but also with business leaders across the agency to examine new ways to operate. Our mission is to understand the customer and employee experience the agency would like to enhance moving forward. With this data, SAP designs solutions to meet those demands — and provides the technology and the business process support to bring those experiences to life. ■

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