VOLTDB

SURVEY REPORT

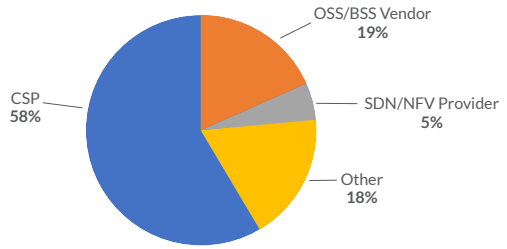
5G Revolution: 2019 Use Case Survey Results

As 5G gets rolled out across the world, Communication Service Providers (CSPs) are focused on reinventing existing apps to adapt to the high velocity streaming data generated by 5G networks. The technology that worked for 2G, 3G, and 4G will not meet 5G's stringent SLAs for latency, scale, and throughput. But do CSPs have the right technology in place to meet the real-time needs of 5G? Will the "Shared Data Layer" work consistently with 5G, 4G, 3G, and even 2G? What are the high priority use cases in the 5G roll-out? How important is real-time data processing to 5G business models? VoltDB surveyed 176 experts from leading telecom companies to find the answers.

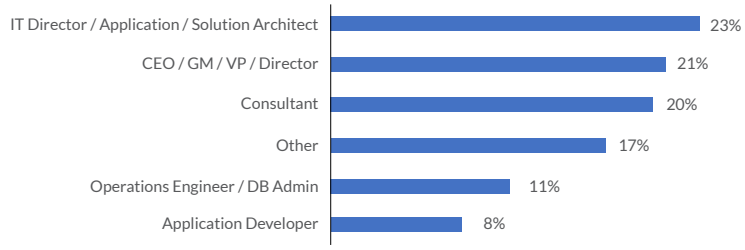
WHO WE SURVEYED

Survey responses were gathered from a cross section of organization types across the telecom industry, and captured perspectives from both business and technical roles.

Organization Types



Job Roles



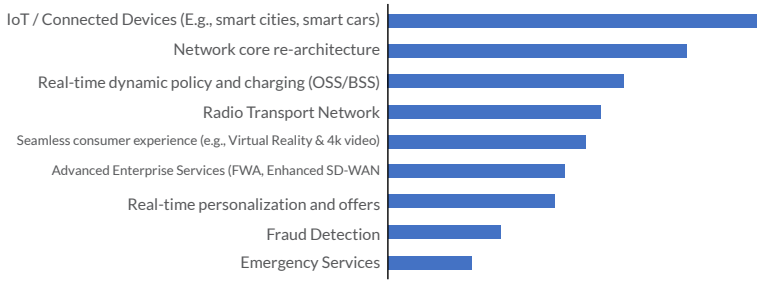
LEADING TELECOM ORGANIZATIONS ARE MOVING TO REAL TIME

Our survey uncovered that real-time data initiatives are becoming ubiquitous, with a full 90% of organizations saying they either had current initiatives in place or will in the future. This speaks to a world that is anticipating a sea-change in the need for real-time decisioning on streaming data for a wide breadth of applications. Are the 10% of organizations who answered 'No' to this question going to be exempt from these needs? Or will they be left behind?

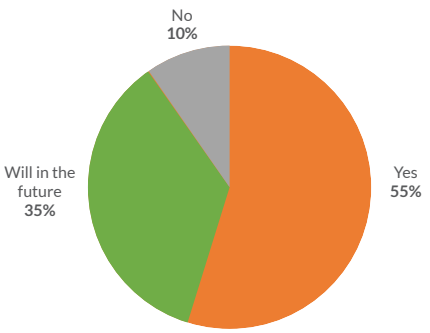
IOT IS THE HIGHEST PRIORITY USE CASE

5G will deliver global connectivity and power an explosion of applications spanning all industries, which will revolutionize the internet of things (IoT). While we are unable to know the farthest reaches of where 5G will take us, telecom experts have a vision for their top priority use cases. IoT takes the top spot, with 70% of respondents believing it will take priority, followed by network core re-architecture and real-time dynamic policy and charging for OSS/BSS.

In your organization, what do you believe are the highest priority use cases in the 5G roll out?

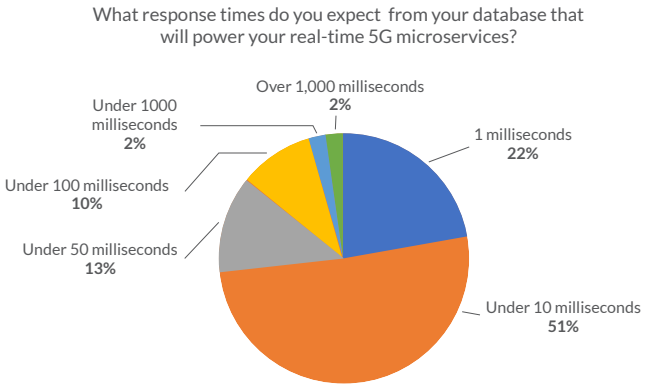


Does your organization have initiatives in place to meet real-time needs of 5G?



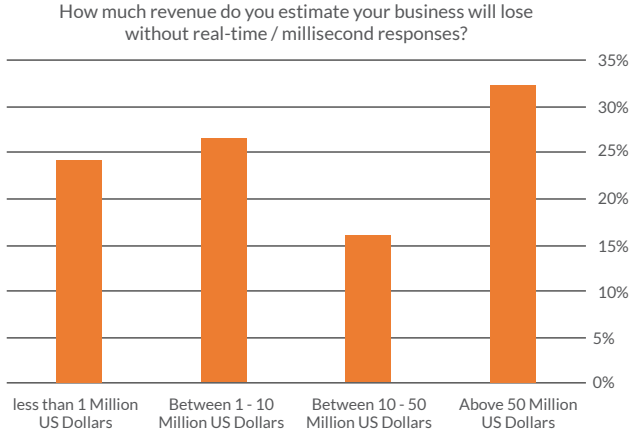
MILLISECONDS MATTER

5G will power critical applications that require rapid response times and will be up to 120 times faster than 4G. Processing speed will be critical for key 5G microservices, with 51% of those surveyed saying they expect under 10 millisecond response times from their database and 22% saying they expect under 1 millisecond.



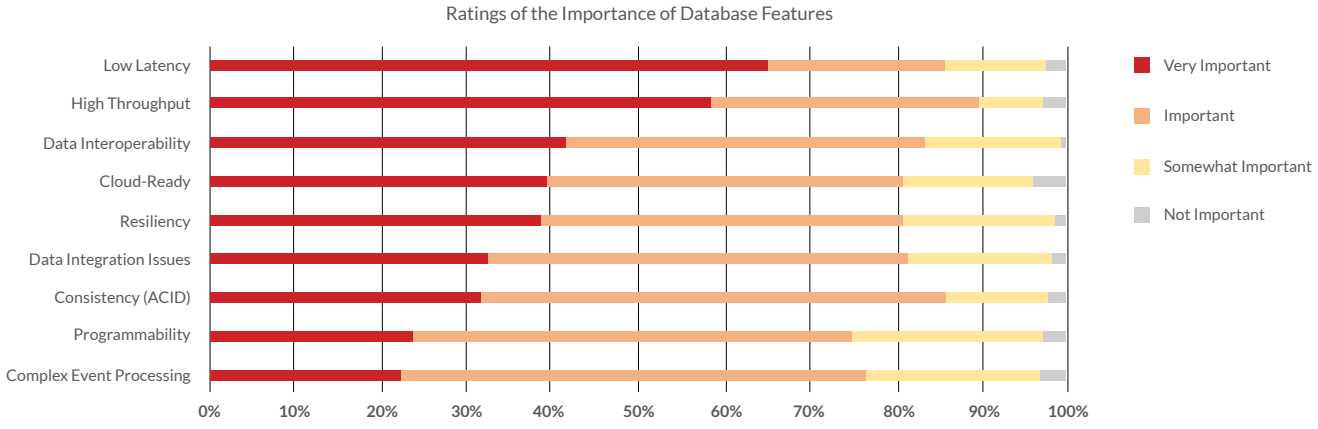
WITHOUT REAL-TIME CAPABILITIES ORGANIZATIONS WILL LOSE MILLIONS

Having the ability to process millions of transactions in milliseconds will be a competitive advantage for organizations that will increase market penetration and drive new revenue growth.



THERE ARE 9 KEY DATABASE FEATURES TO PROCESS REAL-TIME DATA

The Shared Data Layer will play a key role in monetizing 5G. While all of the features shown in the chart below were identified as important elements for the underlying database powering the Shared Data Layer, the most important attributes were low latency and high throughput.



LEARN MORE

See the full 5G survey infographic of the survey results, or read about how VoltDB's architecture was designed to meet the rigorous demands of the 5G network.