BUSINESS OVERVIEW

POWERING REAL-TIME CUSTOMER MANAGEMENT FOR TELCOS

VOLTDB IS AN IN-EVENT DECISIONING PLATFORM THAT UNLOCKS THE REVENUE YOU'RE CURRENTLY NOT GETTING FROM YOUR 5G-ENABLED FAST DATA

This paper is a summary of what that means and why it matters for customer management

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FROM BIG DATA ANALYTICS TO SUB 10-MILLISECOND DECISIONS

Customer Management, also known as Customer Value Management and Customer Experience Management, used to mean preparing, as best you could, for future cross-sell and upsell offers based on historical data. Now—it means using powerful technology like digital twins to improve real-time customer experience through a better understanding of customer needs and to drive business innovation and transformation through intelligent actions made in the moment they are most effective.

Over the last decade, most telcos and communication services providers (CSPs) have focused on how they can use the increasing volume of digital data to enable better and faster decisions. Their goal: to ingest, store, and analyze the data in order to make better decisions regarding a range of business outcomes and investments.

But in most cases, that data analysis takes place some time after the data is generated. And while the data itself does not decay over time, the value of the insights we may be able to obtain from it does. Hence the rise of "fast data", or actionable data—where the goal is to act on data in real time in order to make the best possible decisions.

With any conversation about fast data, it's impossible to ignore the impact of 5G. Gartner, whose analysts have been following and reporting on 5G and its business impacts for a long time, points out that 5G is literally forcing organizations to rethink how they do business. The pressing, fast-data question many organizations are facing right now is:

How can you, the telco, capitalize on 5G to monetize in-the-moment customer management opportunities?

VoltDB's data platform has already proven to make offers 1.5 to 2.5 times more successful and to produce even a 253% improvement in acceptance rates for one company. This was no fluke. This paper will explain why.

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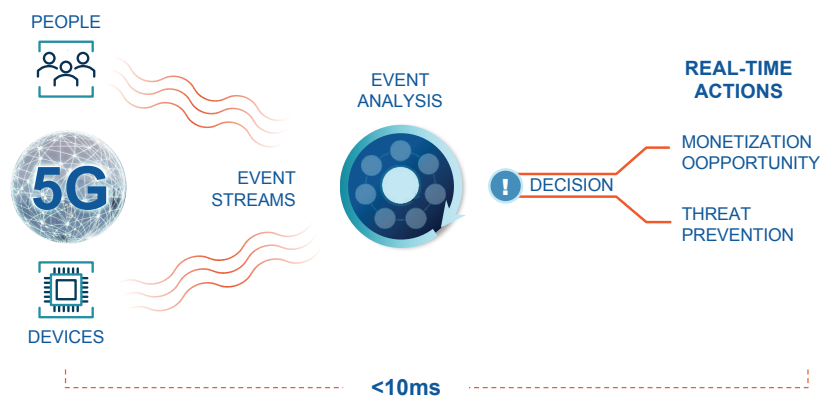# NEW LATENCY DEMANDS ARE DRIVING NEW CUSTOMER MANAGEMENT-RELATED DEMANDS

5G is driving a new level of demand for fast-data decisioning.

Telco operators have a very limited number of opportunities to interact with customers, which means they need to be able to power applications that can capitalize on the few moments when customers are motivated to act.

5G continues the long-term trend of decreasing latency and reduced cycle times between end-users and backend systems. We thus need new and powerful applications that can capitalize on this new speed of operation.

As service providers better understand their customers, they can better-create delightful "in-the-moment" experiences, which leads to higher loyalty, which, in turn, leads to more revenue. However, the timing of these offers is critical.

THE REAL-TIME OPPORTUNITY

Although VoltDB isn't in the business of developing applications, our platform enables our customers in the telco space to take full advantage of the enormous opportunity presented by 5G and fast data.

Our partners and customers share a common goal: to process data the instant it is created and thereby maximize its value. For Customer Management solutions, that means increasing average revenue per user (ARPU) while presenting offers of value to customers (i.e. subscribers) when they are most open to an offer—somewhere between saying goodbye and hanging up. That's what we mean by "real time"—we mean in single-digit milliseconds.

Customer data has the most value—for insight, opportunity, and response—the moment it is generated, and its value decreases rapidly as soon as that moment has passed. The opportunity to deliver an exceptional experience and profit from it has evaporated.
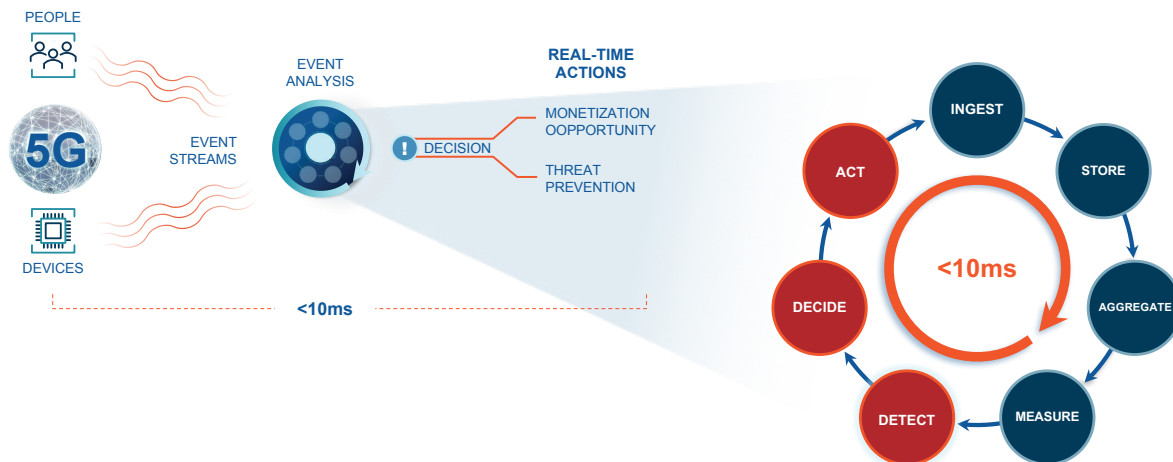
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WHY IS 10 MILLISECONDS THE NEW CUT-OFF?

The window of opportunity for making the best possible offer for any given subscriber in a hyper-personalized manner is now 250 milliseconds. However, this requires the identification of the offer to be accomplished within 10 milliseconds of the event happening.

The new Customer Management landscape demands that the entire data management cycle—from ingestion through processing—be completed within single-digit milliseconds.

If you're building fast-data applications for Customer Management, you need a platform that can make "in-event" decisions —"in-event" meaning within 10 milliseconds of the event happening and before the data involved gets sent to a data lake.

Why 10 milliseconds?

Because every task, from recharging your calling plan to adding data to cancelling your subscription to a particular service, comes with a number of subtasks, each with its own latency that eventually —if your database isn't up to par — adds up to taking too much time, leading shoppers and subscribers to bounce and your ARPU to go out the window.

Think of a customer who has been with your telco for 10 years. This subscriber is now getting approached— via SMS, email, and many other channels—by competitors with aggressive marketing approaches that dangle extremely cheap pricing plans in his face. He's tempted to leave. And now he is leaving, as he just cancelled his account.

But with the right offer, presented at just the right time—ie, not after he's left but right when he starts to think about leaving—you could have kept him as a customer.

Your historical data would have told you that, for example, he travels to Europe a lot, and you could have offered him a special data plan for travel in Europe. If you know he travels on business, you could have added a business angle to the offer, making it available only for business-related travel. You then could have known that the best time to present this offer to him was on weekend evenings, which your historical data tells you he has always re-subscribed to your service every year and is most open to spending money.

And with a fast-decisioning database that can make intelligent decisions in sub 10 milliseconds, you could have pinpointed the moment when he started to think about leaving because, for the first time ever, he clicked on your competitor's offer and began to engage with them.
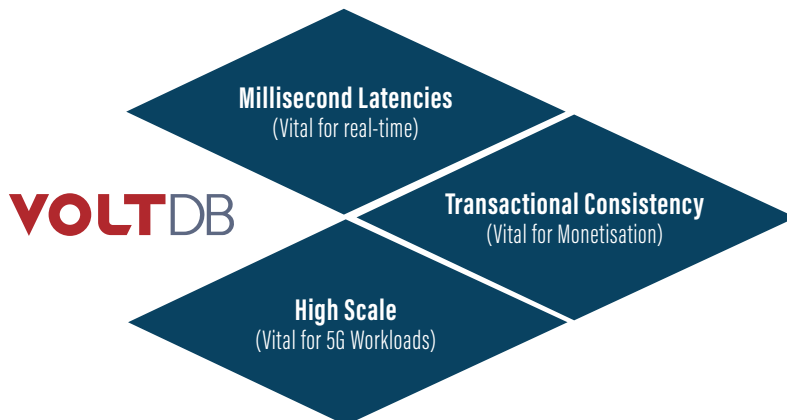
That's the power of real time. That's the power—and importance—of sub-10 millisecond decision-making.

WHY VOLTDB FOR REAL-TIME CUSTOMER MANAGEMENT?

Only VoltDB can offer the database architecture required for true 5G monetization via precise and personalized real-time offers.

Only VoltDB can:

- Automate decision-making by processing real time event data (sub-10 ms)
- Act on the data before it begins to lose value, in other words to minimise the latency between producing/ingesting events and intelligently acting on those events.
- Scale seamlessly as the amount of data coming into your tech stack increases.
- Ensure consistent, predictable low-latency while maintaining data accuracy.

Millisecond Latencies
(Vital for real-time)

Transactional Consistency
(Vital for Monetisation)

High Scale
(Vital for 5G Workloads)

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VoltDB was designed to support powerful Customer Management applications in the telco space. We offer a simplified stack that allows your applications to make rapid, sophisticated, and personalized decisions with predictable low latency and transactional consistency, without compromising on data accuracy. And, as a bonus, it's easy to deploy and helps you avoid technology sprawl.

VoltDB is the event-driven decisioning platform that unlocks the revenue you're not currently getting from your 5G-enabled fast data.

VoltDB is used by a wide range of enterprise clients who are creating and rolling out leading-edge CVM applications, including AT&T, HPE, Huawei, Vodafone, T-Mobile, Mitsubishi Electric, Barclays, China Mobile, China Merchant Bank, Nokia, Openet (Amdocs) and CGI.

To get started with VoltDB today > CLICK HERE

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