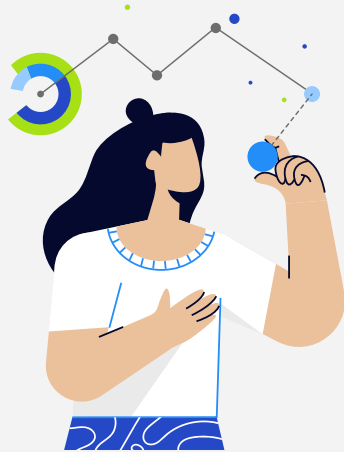


How to Maximize Business Value with Real-Time Data Analytics



AT THE HEART OF DATA



2.5X

IDC: companies that have adopted mature practices achieve 2.5X better business outcomes across the board.

23X

McKinsey Global Institute: data-driven organizations are 23X more likely to acquire customers.

80%

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19X

McKinsey Global Institute: they are 6X more likely to retain customers and 19X more likely to be profitable.

There is increasing evidence that data analytics maximizes business value. IDC says companies that have adopted mature data practices achieve 2.5x better business outcomes across the board. This is because over 80% of mature teams can get answers to data-related questions within minutes to hours, while for less mature teams, it takes days to weeks. As a result, according to McKinsey Global Institute, data-driven organizations are not only 23 times more likely to acquire customers, but they are also six times as likely to retain customers and 19 times more likely to be profitable.

Organizations are putting relevant, trustworthy, and actionable data directly into the hands of their front-line workers and decision makers, in a manner that improves situational awareness as change is happening, and thus empowers them to decide on the best courses of action in the moment. Organizations with traditional data analytics, data warehousing, business intelligence, and processes often take weeks to respond to requests for the right data.

Delivering on the promise of real-time analytics is challenging because companies need an easier way to connect, manage and analyze data. So how can you make data analytics easy? Success entails a new list of data analytics software capabilities alongside strategies to make your organization more data driven. We will also share a brief overview of a data analytics software solution that maximizes business value.

What Are the Business Imperatives for Real-Time Data Analytics?

Organizations need to be more agile through actionable insights that help them make better decisions. Organizations will be more strongly positioned if they have relevant data available at the right time. For example, visibility into customer behavior changes and market impacts as they happen can help organizations form the next-best actions in the moment. This is true across recent significant and unpredictable events that have shaken entire industries.

Pandemic and Associated Restrictions Have Changed Customer Behaviors

When COVID-19 exploded across the world and countries imposed lockdowns and other restrictions, customer behaviors changed more than any other event in recent memory. Not only was there an accelerated shift from in-person to online buying, but also the mix of products and services purchased changed dramatically. Additionally, consumers' initial focus on cost savings reversed as governments launched economic relief efforts. Organizations that were able to monitor these demand shifts in real-time were able to respond and pivot quickly, often taking market share from those that couldn't.

The Cost of Doing Business Keeps Going Up

The pandemic has led to business closures, production cutbacks and supply-chain disruptions. As costs for materials and labor have risen, businesses need to be smarter about how to manage these costs, including real-time monitoring of the availability and delivery of goods from suppliers, as well as their consumers' ability to absorb increased prices. Some businesses have been able to pass cost increases onto customers by providing a meaningful and memorable customer experience enhanced through data-driven customer insights, that can drive customer loyalty. Yet, other businesses are suffering from ballooning inventories that force steep price discounting, or stockouts. In the "new normal" of economic disruption, organizations thrive when they can monitor and react to changes as they occur. Those that can't struggle.

Supply Chain Shocks

War in Eastern Europe and its sanctions, export controls and other economic impacts, are leading to more disruption. Additionally, geopolitical concerns in East Asia have led to organizations reassessing their supply chains. To counter supply chain shocks, businesses need analytics that will help them reinvent their supply chains to adjust to new realities quickly and effectively.

The Great Resignation

The Great Resignation is a trend where employees are voluntarily leaving their jobs because they are not happy with factors such as their work environment and work-life balance or have decided to take early retirement due to pandemic and other health concerns. Additionally, talent shortages in data and analytics pressure organizations to make the most of their existing talent, ensuring productivity and engagement with the employee base that they already have. Remote/hybrid work has made this an even greater challenge as organizations need to better engage with employees who are key professionals that influence customer experiences, customer satisfaction and overall successful business operations.

Social and Political Unrest

Factors such as political identity and social injustice have a significant impact on customer behavior, employee sensitivity and markets. Advanced analytics can help businesses better monitor social media and other communication channels with customers, employees, and other stakeholders. This helps take stands on social causes and demonstrate a deeper commitment to social justice, diversity, equity, and inclusion. Moreover, government regulations can change after every election, leading to the need for fast response.

Visibility into customer behavior changes and market impacts as they happen can help organizations form the next-best actions in the moment.



4 CAPABILITIES MY DATA ANALYTICS SOFTWARE SHOULD DELIVER

- How do we scale and manage data analytics across the enterprise?
- How do we source, manage, and deliver data that is timely, relevant, and trusted, to the right consumers?
- How do we change the culture, train, and empower employees, and hire and retain data talent that makes this possible?
- How do we democratize data while protecting privacy, complying with regulations, and ensuring ethical use?

What Capabilities Should My Data Analytics Software Deliver?

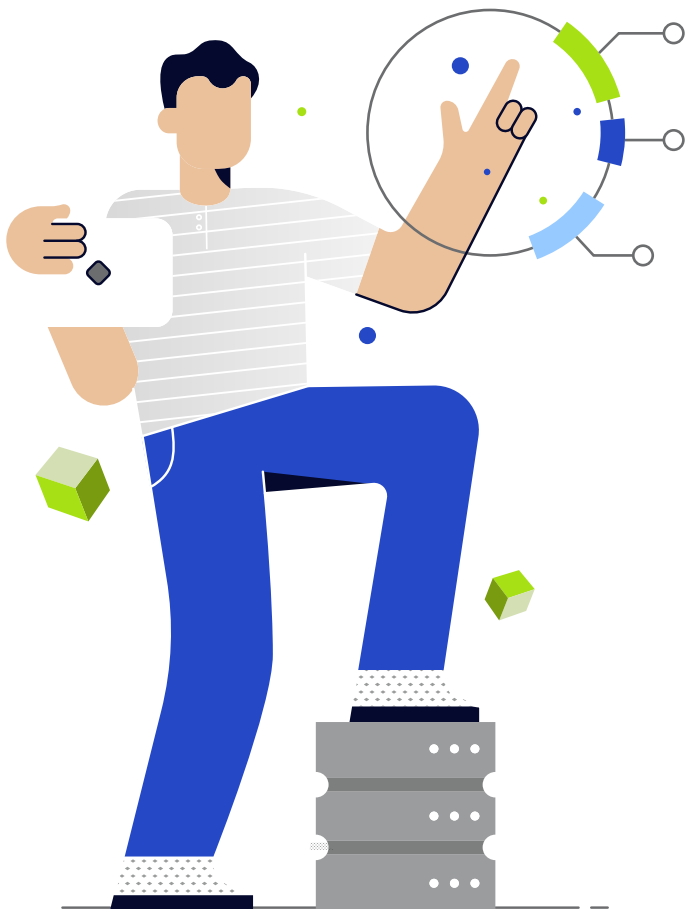
Innovative approaches to real-time analytics bring a new set of issues that slow adoption and add friction to analysts' ability to consume and act on relevant data in real-time. Here are four examples illustrating new analytics requirements:

- **Scaling across the enterprise.** Organizations have started migrating to the cloud, or mandate that new projects must be cloud-first, to achieve greater agility at lower cost. But then they struggle to expand beyond their first few projects. Extending projects and sharing data with others is challenged by their inability to scale with data volumes, reuse data pipelines, and ensure privacy and regulations are met. How do we scale and manage data and analytics across the enterprise?
- **Data for the people.** We want near real-time data, empowering “next best action” decisions in the moment. But organizations struggle because data is not presented to their front-line workers in a manner that is actionable, in the context of their job. The best real-time analytics is embedded within the environment its customers operate in. How do we source, manage, and deliver data that is timely, relevant, and trusted, to the right customers?
- **Data Democracy + Privacy.** We want to share data, empowering teams, and functions to be smarter. Simple encryption is not enough. General Data Protection Regulation (GDPR) and other privacy regulations mandate that an organization strikes a balance between identity protection and usefulness for the analyst. New data security techniques such as column-level and record-level protection and dynamic masking have emerged to help organizations meet these requirements but many cloud-native databases and analytics tools don't support them. How do we democratize data while protecting privacy, complying with regulations, and ensuring ethical use?
- **Culture Transformation.** We want greater awareness of what it means to be “data driven”. Self-service analytics is hard when the culture has been “producing the right report is IT's problem”. Ensuring data is actionable is hard when data owners don't consider business objectives. Collaboration and trust between data owners, engineers and analysts are important to build and nurture. How do we change the culture, develop and empower employees, and hire and retain data talent that makes all this possible?

What Should I Look for When Choosing Data Analytics Software?

Scalable Analytics in the Cloud

Companies tend to start small and then run into trouble as they scale their cloud analytics. Often, organizations choose a simple point solution for their first project, but as they try to implement additional projects, are quickly overwhelmed by the sheer volume of data, enterprise, Software as a Service, Internet of Things and web data sources, consumers, use cases and data pipelines. You need a plan from the very start to make sure your data analytics software can scale for this type of growth, choosing real-time data analytics that can meet your key performance indicators and service level agreements readily share data across use cases and provide consistent management, governance, and compliance.



Data Quality

High quality data fuels real-time analytics. Certainly, a huge task for data quality is to clean up bad data. But this is not enough. To enable the optimal “next best action” though data, it must be relevant, timely, in-context, trustworthy and actionable to the data consumer. Data should be transformed and delivered in a form that front-line decision makers can easily interpret and act on in the context of their jobs. Delivering data in the right context helps teams rely on data to make effective decisions quickly and align on shared goals and priorities across the enterprise.

Data Privacy

New data sharing use cases demand new approaches to data privacy. You need to comply with relevant data and privacy regulations in your geography and industry while also making sure that data is useful to analysts and decision-makers. Encryption to prevent unauthorized access is a good start but it is a blunt instrument by itself. Different stakeholders need visibility to different slices of sensitive data to do their jobs. Finer-grained techniques such as column-level de-identification and dynamic data masking prevent inappropriate access to personally identifiable information, sensitive personal information, and commercially sensitive data. Column level de-identification protects sensitive fields at rest while dynamic data masking applies protection on read depending on the role of the user. Role-based policies that can be quickly updated provide the most flexible way to enforce the wide range of data access requirements across users.

Connecting Business Value with Cost

Cost does matter. Real-time data analytics initiatives must align costs with business value delivered more than ever before in today’s economically challenged markets. This requires cost optimization rather than cost cutting. A cost-optimal solution should not only process analytics workloads cost effectively, but also include data integration, data quality, and other management workloads that add more costs, and complexity when sourced from multiple vendors.

How Do I Become More Data Driven?

While data analytics success requires that your data analytics software provides the right technical foundation and capabilities, it also requires transitioning to a data driven organization to realize the full potential of data analytics software.

Data Driven Culture

Companies need to move from having a core team of data-engineering superheroes who are constantly overwhelmed by the ongoing flow of data requests, to empowering everyone to be a data practitioner. Data analytics software that enables universal access to data analytics can create opportunities to generate new revenue and drive operational efficiencies throughout an organization, without any team being a bottleneck. Here are some of the ways real-time data analytics helps create a data driven culture:

- Self Service gives users insights faster so businesses can realize the value of data faster.
- Enterprise-wide collaborative iteration engages talent at all levels across an organization to improve decision making.
- Analytics embedded within day-to-day tools and applications deliver data in the right context
- Inclusion of employees in decision making helps attract and retain talent.

Data Driven Vision

Successful data analytics initiatives have never been just about data. Having access to data is not enough to enable business decisions. Yet organizations stand up a data set that they hope is useful to the business, then find it isn't a good fit for business needs. Instead, organizations must start with a vision and defined goals to improve business processes, decisions and interactions that trusted, relevant and timely data enables. In other words, start with business goals in mind, then work back from there to determine what data is needed to achieve them. "Product" thinking that first understands user needs and then designs functionality to address them can be applied to data as well.

Data Product Thinking

Understanding your users' needs to be a fundamental real-time data analytics design rule. Here are a few pointers:

- **Know your users.** Data analytics users have traditionally been data engineers and data scientists who represent a small percentage of an organization's employees. The power and accessibility of a real-time data analytics platform will invariably bring in a broader base of business users such as financial analysts, sales and marketing operations, supply chain and distribution analysts, customer service and customer success specialists, healthcare and spend management analysts and fraud and risk management teams.
- **Know their pain.** Organizations should try to better understand what is preventing users from getting insights they need. Are data analytics software, access and user experience issues adding friction to usability? Does data lack meaning and relevance for user needs? Is data timely and presented in the right context?
- **Know how they measure success.** You will need to prioritize data that will help users meet their goals. This often depends on how they measure their performance. Are users trying to improve customer satisfaction (CSAT) and Net Promoter Score (NPS) data? How are they measuring operational excellence? What financial metrics are important to them?

How Can the Avalanche Cloud Data Platform Help?

The Avalanche Cloud Data Platform provides a trusted, flexible, and easy-to-use real-time data analytics platform. This highly scalable platform can be deployed in any cloud, on-premises, and in hybrid and multi-cloud environments. With built-in data integration, businesses can quickly build pipelines to ingest and transform data from any source, providing accurate, complete, and timely data. Businesses grow revenue and improve customer experience by bringing together data from enterprise systems, third-party data sources, and Software as a Service (SaaS) applications.

Delivering Today While Building for the Future with the Avalanche Cloud Data Platform

The Avalanche Cloud Data Platform makes data easy so businesses can connect, manage, and analyze their data to make the most informed, meaningful decisions. The Avalanche Cloud Data Platform is trusted, flexible, and easy to use. Here are a few things it can do:

Accelerated data modernization: Quickly ingest data into the platform with a single user interface for self-service integration, analytics, and management. This enables anyone to be a data practitioner and helps build a data-driven culture organization-wide.

Superior price performance: Built to maximize resource utilization delivering unmatched performance and an unbeatable total cost of ownership.

REAL real-time: Patented technology allows real-time data set updates without impacting query performance and costs. This enables data consumers to analyze always up-to-date data; thus, they are confident they are responding to current reality. This is critical when unpredictable changes impact customers, suppliers, and employees in real-time.

Single platform: One solution for data integration, data management and data analytics lowers risk, cost, and complexity while allowing easier sharing and reuse across projects than cobbling together point solutions.

Flexible anywhere deployment: Any cloud, hybrid, and on-premises – plus it is API-driven to embed analytics within applications and systems so that relevant data is delivered in context.

Role-based security policies: Reduce the time and effort to comply with data and privacy regulations without compromising the usefulness of data to intended consumers.



Leading companies across industries use the Avalanche Cloud Data Platform to maximize business value.

LEARN MORE

How Do I Get Started?

Start with these four ways to jumpstart your organization:

- Have a vision and defined goals to improve business processes, interactions, and decisions through data. Start with understanding your data users. The better you understand them, the more likely you are to deliver real-time data analytics that works well for them and maximizes business outcomes.
- Embrace the “new normal” and build a culture of responding well to the unexpected with data-supported decisions. Focus on agility, iteration, and self-service as part of your analytics strategy.
- Have a plan for your data analytics software to deliver timely, relevant, trusted, and compliant data at enterprise scale.
- Choose a solution that connects business value with cost to demonstrate a positive return on investment.

Check out the Avalanche Cloud Data Platform and learn how to make data easy with real-time data analytics that will maximize business value.

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