Confluent with Somerford Associates Powers Data in Motion for Real-time Decision-making

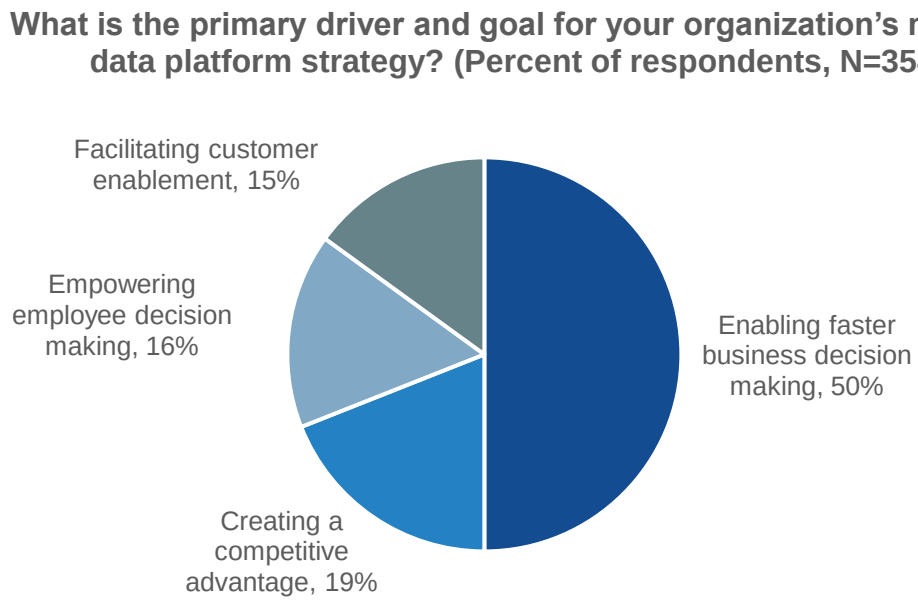
Stephen Catanzano, Senior Analyst

Abstract: Organisations worldwide know the necessity of embracing data streaming to empower real-time consumer and business decision-making as a core foundation of their operations. Confluent delivers the cloud-native platform built on Kafka, which is used by 70% of Fortune 500 companies to put data in motion and was built by the original creators of Kafka to manage real-time data. Somerford brings Confluent expertise, professional services, and the know-how to quickly enable any organisation to accelerate its streaming data usage by implementing Confluent.

Modern Data Platform Goals

As shown in Figure 1, TechTarget's Enterprise Strategy Group asked research participants about the primary goal for their organisation's modern data platform strategy. Overwhelmingly, 50% of respondents reported that enabling faster business decision-making was their top goal. Similarly, 16% ranked empowering employee decision-making as the top goal, with another 15% focused on facilitating customer enablement. Another 19% of respondents were driven to create a competitive advantage.[1]

Figure 1. Gaining a Business Edge through Real-time Data is the Primary Driver



Source: Enterprise Strategy Group, a division of TechTarget, Inc.

[1] Source: Enterprise Strategy Group Research Report, *Data Platform Trends*, to be published.

Challenges of Real-time Data Streaming

Real-time data streaming is a powerful tool for decision-making. Still, it also comes with challenges that Confluent and Somerford can help organisations quickly overcome. Some of these challenges include the following:

1. Data volume and velocity: Real-time data streams can produce large volumes of data at high velocities, which can be challenging to handle and process. It can require significant processing power and resources to manage the flow of data and extract insights in real time.
2. Data quality: Real-time data streams can be subject to data quality issues such as incomplete or inaccurate data, duplicate data, or missing data. It's essential to have processes in place to ensure data quality and accuracy to avoid making decisions based on flawed data.
3. Integration with existing systems: Real-time data streams need to be integrated with existing systems and applications to provide value. Integrating with legacy systems can be complex, and ensuring data consistency across multiple systems can be challenging.
4. Security and privacy: Real-time data streams can contain sensitive information that needs to be secured and protected. It's essential to have appropriate security measures in place to protect data in transit and at rest.
5. Decision latency: Real-time data streams require fast decision-making to provide value. Making decisions quickly enough to take advantage of the real-time data can be challenging.

Overall, real-time data streaming can be a powerful tool for decision-making, but it requires careful planning, management, and investment to overcome its associated challenges. But, when done right, real-time data streaming can amplify an organisation to a new level of efficiency, growth, innovation, and even profitability.

Confluent for Data in Motion

Confluent provides a platform for building and managing real-time data streams and applications. Based on Apache Kafka, Confluent includes additional tools and features to make developing and managing streaming data easier. The Confluent Cloud is a true cloud-native SaaS solution that makes running Kafka simple and helps organisations deal with the growing number of data sources and data users looking for decision-making-ready data in real time. Some of the key features of Confluent are shown in Figure 2 and include:

- **Cloud-native architecture:** Confluent is a fully managed SaaS Apache Kafka solution re-architected for the cloud. Users are able to pay only for what they use, when they use it. Confluent's cloud-native architecture enables the following:
  - Elastic Scalability: Serverless, scalable clusters on demand.
  - Infinite Storage: Decouple storage from compute and retain Kafka data with no limits.
  - Resiliency: Stream with 99.99% uptime service-level agreement.
- **Complete:** The Confluent solution consists of all the essential tools for a comprehensive data streaming platform.
  - Stream Designers: Build, test, and deploy streaming pipelines with a visual interface extendible with SQL.
  - Connectors: 70+ fully managed connectors.
  - ksqlDB: Build and deploy stream-processing apps and pipelines with SQL syntax.
  - Stream Governance: Discover, understand, and trust data streams with governance for data in motion.
  - Enterprise-grade Security: Uphold strict security and compliance requirements.
  - Non-Java Clients: Support for Java, C, Python, Node.js, Ruby, and more.

Figure 2. Confluent Solution Overview

Source: Confluent

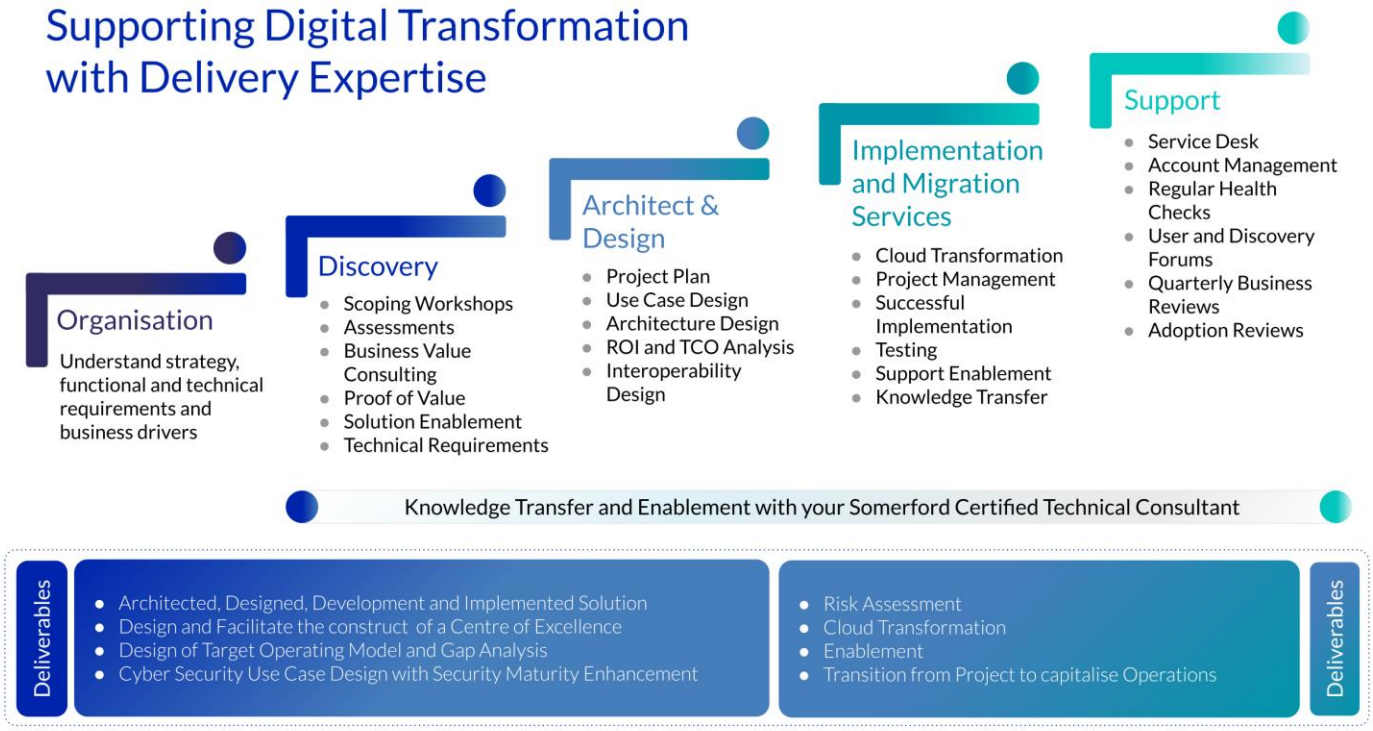
- **Everywhere:** Users can connect data in real time with a platform that spans from on-prem to the cloud and across clouds.
  - Multi-cloud: Provision Confluent Cloud on AWS, Azure, and Google Cloud across 60+ regions.
  - Hybrid: Deploy Confluent Cloud for on-premises and private cloud workloads.
  - Unified: Unify data across clouds and hybrid environments with clusters that sync in real time.
- **Event-driven Microservices:** Confluent enables developers to completely decouple an architecture and eliminate inter-service dependencies.
  - Build Faster: Developers can build business logic faster.
  - Build at Scale: Developers can build a new class of highly scalable event-driven microservices that are resilient in design and contextually aware.

Somerford

Somerford Associates has certified and security-cleared consultants who build and integrate bespoke platforms that significantly reduce risks and drive productivity through a broad range of enterprise clients across industries, including the public and defence sectors. Somerford drives greater value in data by helping organisations derive real-time insights to support effective decision-making. With the end-to-end services shown in Figure 3, Somerford delivers specialised knowledge, skills, experience, and a long reputation for enabling digital transformation at scale and pace. Somerford Associates provides full delivery, including design, implementation, deployment, and support.

As experts in the Confluent solution, Somerford consultants engage customers to understand their data-driven goals and learn how best to implement and manage Confluent in their environment to address their data-in-motion needs and desired outcomes. Planning, functional testing, implementation, and delivery are closely implemented with clients.

Figure 3. Somerford Services Overview



Source: Somerford

Confluent and Somerford: Delivering Real-time Results

Confluent partnered with Somerford to offer the best scalable and secure solution to manage data in motion and help any organisation maximise the value of its data and turn data into actionable results. Some use cases for businesses include:

- **Real-time Data Processing**: Enables organisations to process large amounts of data in real time by ingesting data from various sources.
- **Fraud Detection**: Enables users to connect and access all the data required to analyse, detect, and prevent fraud in real time.
- **Data Integration:** Enables businesses to integrate data from multiple sources and transform it into a common format for analysis.
- **Data Streaming:** Enables businesses to stream data in real time to various systems, including databases, data lakes, and data warehouses.

Public Sector Example

Somerford works with Confluent across industries to empower organisations to leverage data in motion, including in the public sector.

Organisations in the public sector understand that making more intelligent, more effective use of their data is critical to improved fiscal stewardship, accountability, public policies, program effectiveness, and mission success. The Confluent event-driven data-in-motion platform enables organisations to unlock and repurpose their existing data for countless modern applications and use cases.

Data Modernisation

Using an event-driven architecture, Confluent shifts data from being passive to being an active asset for an organisation. Confluent drives application behaviour as fast as the mission rhythm allows, collapsing the space between data and mission. Confluent can connect to any data source, whether mainframe or legacy systems, cloud-based storage, applications, or even real-time data. This can be within the organisation enterprise or beyond. Once a connection to a data source has been established, it can be reused and recombined with other sources to rapidly create new applications and user experiences. With this decoupling of sources and targets, Confluent relieves organisation’s of the time-intensive and the resource-intensive chore of building point-to-point integrations every time they build a new application.

Security Operations

Securing an organisation's data is critical. Confluent makes it possible to run as a central platform, streaming and securing data to support the operation or mission. A central piece of securing data is the collection, logging, and sharing of events in near-real time across tools and organisations. Collecting and getting a view across these events is the only way to have visibility into all the attack vectors adversaries can take. Traditional SIEM vendors focus on their own agents directly pushing all data into their proprietary stores, making it challenging to leverage tools outside their ecosystem. The Confluent platform, powered by Apache Kafka, is purpose-built for scalable, durable, and highly efficient event logging and processing.

Engagement of Responsive Citizens

Confluent enables public sector organisation’s to deliver faster, more personalised, and more responsive engagements with citizens and other organisation stakeholders with event streaming. Public sector organisations recognise that citizens increasingly expect responsive, personalised, and efficient government services, which result in better mission success, improved cost-effectiveness, and increased citizen trust.

Citizen-facing public sector organisations understand that this requires effectively harnessing numerous disparate data sources, yet many organisations struggle.

Above is just one example of how Somerford, using Confluent technology, can deliver robust, modern, secure data services.

Conclusion

Managing data in motion is an essential requirement for modern organisations that are rapidly adopting solutions to empower faster decision-making internally for the business, for employees, and for customers. The challenge is building the right solution to extract actionable data insights from massively growing volumes of data, from more real-time sources, and in demand by more data users than ever before.

Confluent's data-in-motion solution, coupled with the services delivered by Somerford, can help any organisation implement a scalable solution quickly to accelerate its time to value.

If your organisation's goal is to empower real-time data-driven decision-making, Enterprise Strategy Group strongly recommends that you consider Confluent and Somerford as your partners for success.

About Enterprise Strategy Group
TechTarget's Enterprise Strategy Group provides focused and actionable market intelligence, demand-side research, analyst advisory services, GTM strategy guidance, solution validations, and custom content supporting enterprise technology buying and selling.

contact@esg-global.com
www.esg-global.com