

# SIMPLIFY CSP DATA INITIATIVES WITH CONTROL-M



In today's hyper-connected digital-first world, having reliable phone, internet, and television services is non-negotiable. That means communications service providers (CSPs) must remain on the cutting edge of technology and maintain stellar customer relationships to stay competitive. They do this by leveraging massive amounts of data generated from sources like subscriber information, call detail records, and sales.

The need to operationalize this data puts CSP data and analytics teams on a critical mission: To find ways to use insight-based analytics to support business transformation and create competitive advantages. The executive pressure behind it is strong. CSP data architects and their teams often struggle with deciding which data is needed and how it can be acquired, ingested, aggregated, processed, and analyzed so they can deliver the insights the business demands. Data isn't a project—it's a journey, and one that often comes without a roadmap.

Delivering data and analytics capabilities with the scope and scale CSPs need requires the flexibility to accommodate disparate data sources and technologies across varying infrastructure, both on-premises and in the cloud. To meet the demands of executives and business conditions, companies need a robust application and data workflow orchestration platform and strategy. This helps CSP organizations orchestrate essential tasks across the complete data lifecycle, so they can coordinate, accelerate, and operationalize their business modernization initiatives.

One of the biggest challenges on the data journey is not letting all the details and decisions about architecture, tools, processes, and integration distract from discovering how to deliver valuable insights and services across the organization.

All too commonly, organizations get bogged down by foundational data questions like:

*Do we have the right framework to manage data pipelines?*

*What are the best options for feeding new data streams into our systems?*

*How can we integrate disparate technologies?*

*How can we leverage our existing systems of record?*

*Where should our data systems run?*

The list goes on and on. As they try to find answers, companies can lose sight of the overall goal of creating systems that will provide better insight and improve decision-making. The details are essential, but so is staying focused on the big picture. The less time planners need to spend on the details of how data will be managed, the more they can focus on finding value and insight in their data.

To deal with the complexity, CSPs need industrial-strength application and data workflow orchestration capabilities. Many tools can orchestrate data workflows. Some of them—such as Apache Airflow—are open source. However, most of those tools are platform-specific, targeting specific personas to perform specific tasks. So, multiple tools must be cobbled together to orchestrate complex workflows across multi-cloud and hybrid environments.

End-to-end orchestration is essential for running data pipelines in production and an organization's chosen platform must be able to support disparate applications and data on diverse infrastructures. Control-M (self-hosted and SaaS) does that by providing flexible application and data workflow orchestration for every stage of the data and analytics journey, operationalizing the business modernization initiatives every organization is striving to achieve. It offers interfaces tailored to the many personas involved in facilitating complex workflows, including IT operations (ITOps), developers, cloud teams, data engineers, and business users. Having everyone collaborating on a single platform, operating freely within the boundaries implemented by ITOps, speeds innovation and reduces time to value.

Control-M expedites the implementation of data pipelines by replacing manual processes with application and data integration, automation, and orchestration. This gives every project speed, scalability, reliability, and repeatability. Control-M provides visibility into workflows and service level agreements (SLAs) with an end-to-end picture of data pipelines at every stage, enabling quick resolution of potential issues through notification and troubleshooting before deadlines are missed. Control-M can also detect potential SLA breaches through forecasting and predictive analytics that prompt focused human intervention on specific remedial actions to prevent SLA violations from occurring.

Data pipeline orchestration offers CSPs unique opportunities to improve their business by operationalizing data. For example, CSPs can reduce customer churn by leveraging data to identify signals and patterns that indicate potential issues. With that analysis, they can proactively target at-risk customers with retention campaigns and personalized offers. Additionally, CSPs can utilize customer data to optimize pricing, provide targeted promotions to customers, and deliver excellent customer experiences.

## **Case study**

A major European CSP and media conglomerate utilizes Control-M throughout its business to harness the power of data. With more than 12 million customers, the company collects a staggering six petabytes of customer data per night, including viewing habits from television cable boxes, mobile network usage information, and website traffic. Using this information, it creates a 360-degree view of each customer. That means its customer information is never more than 15 minutes out of date, allowing it to provide the best customer service possible. In addition, this information is

used to deliver targeted advertising so that each customer sees what is most relevant to their interests.

Control-M manages and orchestrates the entire data science modeling workflow end to end, both on-premises and in the cloud, through technologies including Google Cloud Platform (GCP), BigQuery, DataBricks, and many more. With Control-M, the CSP can use this massive amount of data to understand its customers, provide an optimized customer experience, slash cancellations, and help create new revenue streams.

## **Conclusion**

Turning data and analytics into insights and actions can feel impossible—especially with the massive amount of data generated by a CSP. Control-M orchestrates and automates data pipelines to deliver the insights your organization needs.

Control-M helps CSPs orchestrate every step of a data and analytics project, including ingesting data to your systems, processing it, and delivering insights to business users and other teams that need to better utilize the refined data. It also brings needed consistency and integration between modern and legacy environments. The benefit to this integration and automation is that you can operationalize data to modernize your business, innovate faster, and deliver data initiatives successfully.

To learn more about how Control-M can help you improve your business outcomes visit our [website](#).