Active Intelligence

Capture the Moment with Analytics-Ready, Real-Time Data
It’s time for real-time.

Today’s markets move fast and turn on a dime. To succeed, organizations have to get in front of events as they unfold. But traditional data integration isn’t designed for real-time data-streaming or an automated analytics data pipeline. And that makes it nearly impossible to deliver insights in the moment.

Our vision at Qlik® is Active Intelligence: a state of continuous intelligence in which real-time, up-to-date data triggers immediate action. Within data integration, this means taking people beyond the daily refresh with an active end-to-end data pipeline – including dynamic business content and logic – to deliver the right data to the right people in the moment, as events evolve.

With Active Intelligence, users and organizations can accelerate business value in new ways. They can more rapidly respond to events and trends in their business. They can adapt strategy, processes, and even products on a moment-to-moment basis. And they can collaborate in new ways around data. All of which adds up to better outcomes across the board.
Why data isn’t flowing.

In most organizations today, data is handled like a hot potato. First, a data ingestion team brings in raw data and moves it to a repository. Then they hand the data over – with no collaboration or communication – to a second team, which transforms it. When the data is analytics-ready, this transformation team lobs the data over to the BI or analytics group, again without collaboration. This lack of coordination leads to problems – including data requests that take a long time to fill, inadequate governance, and data that hasn’t been optimized for particular needs.

To be truly agile, you need to establish a continuous flow of data from the moment it enters your organization all the way through to your analytics platform.
How Active Intelligence improves on traditional data integration.

To explore its role in Active Intelligence, let’s consider three aspects of data integration:

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<th>THE PACE OF DATA MOVEMENT</th>
<th>THE PROCESS OF DATA MOVEMENT</th>
<th>DATA GOVERNANCE</th>
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<td><strong>Traditional Solutions</strong></td>
<td>Data is moved through manual processes – i.e., extract, transfer, and load (ETL) coding developed by experts.</td>
<td>Governance is uneven. One repository may have many safeguards while another has almost none. Or there may be some restrictions over actions on data but none on who can move it.</td>
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<td><strong>Active Intelligence</strong></td>
<td>Data is moved in real-time.</td>
<td>Data is governed from end to end. Only the right people can access and act on it at every step of the journey, from ingestion through analytics.</td>
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In the following pages, we’ll address each of these aspects in turn.
Moving data in real-time.

Traditionally, data is delivered in batches. Whether it’s once a week or once a day, data is pulled on a predefined schedule. Active Intelligence, on the other hand, uses a push model, where data is replicated and propagated every time there’s a change, also known as an event. Rather than waiting until a set interval, change data capture (CDC) technology delivers a continuous stream of updates in real-time.

Traditional solutions also limit which data you can pull from, what kind of data you can use, where you can put that data, and which analytics tool you can use. Conversely, Active Intelligence enables the replication of any data from any source to any target – including any BI tool. You should never be limited by a particular vendor or cloud.

- Push model
- Event-driven
- Real-time change data capture
- Any source, target, cloud, and analytic tool
Automating data movement at every step.

Active Intelligence dramatically accelerates the pace of data by automating the processes used to move it. Data warehouse models aren’t created ad hoc, with no consideration for how the data will be used downstream. Instead, the data integration solution very rapidly automates a model-driven transformation with the goal of creating analytic-ready structures.

Active Intelligence also solves for data drift. When not only the source file but also the model itself has changed, automation tools can immediately reflect that change within the target. And what about data classification? Traditionally that can be haphazard, with some data classified and other data neglected. Or you may have two sets classified differently, such that putting them together creates confusion. With Active Intelligence, all datasets are automatically registered and tagged within a single catalog.
Governing data everywhere.

Active Intelligence revolutionizes data governance, too – by automating the entire data quality operation. Instead of requiring manual profiling and quality checks, the data integration solution conducts automated policy inspection, even suggesting modifications. And instead of governing only over the last mile – which can be done by any number of solutions – the solution governs from start to finish.

What about data access? Rather than requiring intense manual intervention to ensure that people in various groups are set up properly, Active Intelligence offers across-the-board data security and protection by automating access permissions – over both the data and the actions that can be conducted on the data – at every step of the pipeline.
An end-to-end approach to Active Intelligence.

At Qlik®, we have an end-to-end set of capabilities to activate your complete journey from raw data to actionable insights. You can use our combined Data Integration and Data Analytics capabilities – unique in the market – to empower all your users to immediately access, understand, and act on data.
Action-oriented capabilities within Qlik.

Within Qlik Data Integration, you’ll find capabilities to address and establish every aspect of Active Intelligence.

- **Efficient delivery to the cloud and beyond**
- **Change data capture**
- **Any data type, format, or location**
- **Configure, not code**
- **Model-driven transformation**
- **Accelerate data migration efforts**
- **Data warehouse and data lake automation**
- **Ensure trust in the data**
- **Data quality and standardization**
- **Minimize risk while expanding data access**
- **Data security and access**
- **Move Data in Real Time**
- **Automate Data Movement**
- **Govern Everywhere**
Transforming airport operations with Active Intelligence.

Vancouver International Airport dramatically increased efficiency with real-time awareness.

**CHALLENGE**
- Get better insights on how passengers, bags, and planes move through the airport
- Scale and optimize BI operations leveraging interconnectivity of data in real time
- Optimize minimum connection time and improve passenger experience

**SOLUTION**
- Data hub ecosystem connects everything and delivers data across the organization
- Situational awareness dashboard leverages real-time data to inform fast decisions
- Apps give immediate insights on intertwined subprocesses: security, customs, baggage screening

**RESULTS**
- Reduced minimum connection time (MCT) from 90 min to 80 min (70 min without COVID)
- Significantly cut time to run MCT report from 33 hours to 40 seconds
- Stayed competitive as major hub airport between Asia and North America

**ACTIVE INTELLIGENCE SUCCESS STORY**

“By showing in real time the flights that are at risk of being delayed because of slow baggage loading, we can make adjustments to make sure the plane is in the air on time.”

Hanif Vallani
Lead Data and Analytics Architect
Why choose Qlik?

To compete in the digital economy, you need a dynamic relationship with information that reflects what’s happening right now, in your business and in the market. The Qlik Active Intelligence Platform is the only platform that helps you free, find, understand, and trust your data so you can act on it in real time.

With Qlik, you can:

- Deliver trusted, analytics-ready data in real-time
- Bring actionable data into every business decision
- Collaborate beyond historical barriers by bringing together data producers and data consumers
- And deliver all of the above on a flexible, multi-cloud platform that can scale – with no fear of vendor lock-in

With Qlik, you can vastly accelerate the discovery and availability of real-time, analytics-ready data to the cloud of your choice by automating data streaming (CDC), refinement, transformation, and cataloging.
Qlik’s vision is a data-literate world, where everyone can use data and analytics to improve decision-making and solve their most challenging problems. Our cloud-based Qlik Active Intelligence Platform delivers end-to-end, real-time data integration and analytics cloud solutions to close the gaps between data, insights and action. By transforming data into Active Intelligence, businesses can drive better decisions, improve revenue and profitability, and optimize customer relationships. Qlik does business in more than 100 countries and serves over 38,000 active customers around the world.