Having immediate access to impactful data is imperative for doing business today. With optimal value achieved when machine learning is applied to data in real time. But to do so requires the ability to operationalize the disparate components, from data ingest through analysis, that process vast amounts of data. That means building streaming data pipelines. An exceedingly difficult task. Until now.

Akka Data Pipelines accelerates time-to-value with a framework that makes it simple to develop, build, deploy and manage this ‘always on’ architecture. Giving organizations the ability to quickly make data actionable and apply machine learning to that data for making business critical decisions and delivering unsurpassed customer experiences in real time.

**How It Works**

Using the streaming engine of your choice, Akka Data Pipelines takes care of the heavy lifting of tying together the different components that comprise each stage of a streaming pipeline so teams can quickly construct pipelines.

"The next frontier of competitive advantage is the speed with which you can extract value from data."

—Mike Gualtieri, VP and Principal Analyst, Forrester Research
Akka Data Pipelines provides the tools that remove the headache and time associated with deploying and managing streaming data pipelines. Freeing teams to focus on developing business logic and applying machine learning models that infuse intelligence into data for real-time decisioning.

**Boilerplate Management** – serialization, port configuration, operational parameters, and data durability between processing staging

**Single Step Deployment** – deploy a multi-stage pipeline with one command

**Visual Insight** – observability into system health for preventative maintenance and optimal performance

### End-to-End Solution

Akka Platform, a set of building blocks for rapidly building, testing and deploying reactive* microservices, complements Akka Data Pipelines for a comprehensive solution that further accelerates developer productivity, time-to-market and bottom line growth.

Because Akka Data Pipelines is built on Akka Platform, both event driven and more traditional request/response microservices can be built and integrated into an overall solution. These microservices can directly leverage the distributed state management and high-speed compute capabilities Akka Platform delivers. Applications and microservices have the ability to self-heal by themselves, resist failure, and effortlessly scale up and down. They take full advantage of the distributed, operationally complex nature of cloud-native infrastructure while utilizing less infrastructure regardless of deployment environment.

### The Value of Akka Data Pipelines

There’s a reason many globally recognized brands choose Akka Data Pipelines for their most digitally transformative projects:

- **Reduced Risk**
  - Loan qualification approval in **1 second** (previously 55 hours)

- **Increased Market Share**
  - More efficient use of equipment, greater customer satisfaction and **increased follow-on sales**

- **Deepened Customer Engagements**
  - Daily real-time monitoring of **billions of sensors** with predictive analytics

- **Accelerated Time to Value**
  - Renewable energy virtual power plants **resilient to failure**

*Reactive Systems are loosely-coupled, tolerant of failure, easier to develop and amenable to change*

### Let’s Go

Whether teams have experience with Lightbend technology or are starting from scratch, Lightbend subscriptions prepare teams (and any of your implementation partners) with the technology and expertise needed to quickly begin executing transformative business strategies.

[www.lightbend.com](http://www.lightbend.com)

Lightbend is the originator of open source application frameworks Akka, Play & Lagom, Cloudflow, Cloudstate, and the Scala programming language. ©2021 Lightbend, Inc. All rights reserved.