

Making use of real-time data

Every business decision maker that relies on data to support their decisions should be interested in getting and processing their data in real time to rapidly make use of the information at hand.

But how fast is "real time" data, and what does a business need to do to prepare themselves to make use of this elusive capability?

I like to refer instead to "near real time" data, defining it as data that is obtained and processed only as fast as is reasonable for end users to make efficient use of it. I leave the term "real-time" reserved for control systems such as the ABS module in a car, where delays in the order of milliseconds could mean catastrophic results.

For most enterprises, a "near real time" definition measured in minutes, or sometimes seconds, is sufficient. And even then, that usually only applies to a subset of enterprise data. Any more than that, and the cost of processing that data in near real time can become prohibitive.

So how do you prepare your organisation to consume near real time data?

Define – Determine what "real time" means for your business case. This could be anywhere from every few minutes, to sub-second.

Identify – Identify the data domains, and then the subsets of data, that would benefit from near real time data. An automated processing plant may benefit from sub-second data decisions, but day-end operations reports, or month-end financials will likely not.

Source – The operational systems that generate the data will need to be able to make the data available in near real-time. Many modern applications have event-based APIs or data streaming capability to do just this. However, some organisations find themselves limited by batch extracts from legacy systems.

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Integration – Once the data can be extracted from an operational system in near real time it needs to be delivered to a data platform – usually via a streaming data platform such as Azure Event Hub, AWS Kinesis, or Kafka.

Processing – Finally the data needs to be consumed, processed, and presented to provide value back to the business. This can be in the form of a dashboard to inform and support human decisions, an automation pipeline for immediate flow on effect such as alerting on complex exception cases or feeding outputs back into other operational systems.

A scalable cloud platform such as Databricks unlocks data capabilities from building informative dashboards that are constantly updated, all the way through to enabling automated action based on complex event monitoring in conjunction with predictive modelling.

To see how we can help your business speed up their data, please contact a Fujitsu Data & Al specialist now.