In the contemporary world, real-time data analysis is a critical business process that many organizations have to embrace to remain competitive. As more companies adopt data-driven decision making, the use of batch processing is no longer sufficient. Real-time data streaming enables organizations to receive and use data in real-time, which provides an almost instantaneous response to increase effectiveness and productivity.

The accumulation of digital information, the growth of mobile applications, and the expansion of IoT devices create a huge volume of data that needs to be analyzed in real-time. Event-driven architectures have come into practice, and real-time streaming has been found to be crucial in effectively incorporating and coordinating data between different systems for improved management and operation. Companies can monitor changes in the market, consumers' behavior, and system status and respond to them quickly, which is more effective than the reactive approach.

The new-generation data architectures, i.e., Microsoft Fabric Lakehouse, are built to address different data needs, such as batch, streaming, and ML, thus making them suitable for real-time data processing. Through the use of messaging and streaming services like Apache Kafka, Azure Event Hubs or Confluent Cloud, organizations can create strong pipelines for the continuous flow of data, which is a key enabler of real-time analytics, better customer interactions, and sound business decisions.