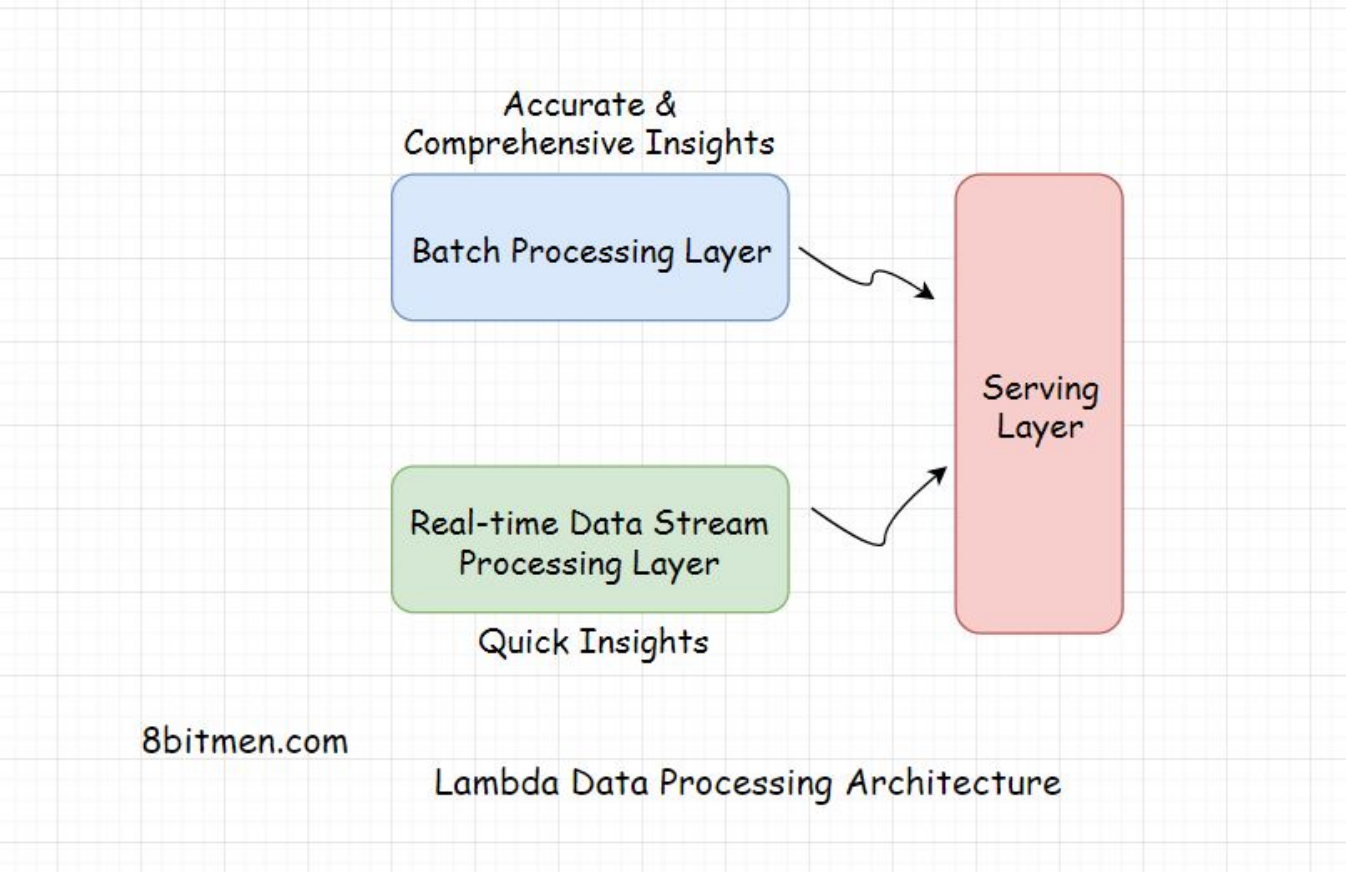
Lambda Architecture

In this lesson, we will learn about Lambda Architecture of data processing.

WE'LL COVER THE FOLLOWING

What Is Lambda Architecture?

> *Lambda* is a distributed data processing architecture that leverages both the *batch* & the *real-time* streaming data processing approaches to tackle the latency issues arising out of the *batch processing* approach. It joins the results from both the approaches before presenting it to the end user.



Batch processing does take time considering the massive amount of data businesses have today but with it the accuracy of the approach is high & the results are comprehensive.

On the contrary, *real-time streaming data processing* provides quick access to insights. In this scenario, the analytics is run over a small portion of data so the results are not that accurate & comprehensive when compared to that of the batch approach.

Lambda architecture makes the most of the two approaches.

Layers Of the Lambda Architecture

The architecture has typically three layers:

- Batch Layer
- Speed Layer
- Serving layer

The *Batch Layer* deals with the results acquired via batch processing the data. The *Speed layer* gets data from the real-time streaming data processing & the *Serving layer* combines the results obtained from both the *Batch* & the *Speed* layers.