





## Lambda Architecture

In this lesson, you will learn about Lambda architecture of data processing.

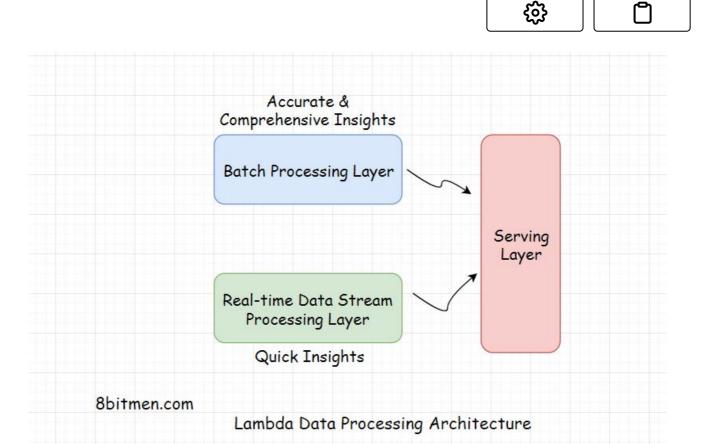
## We'll cover the following



- What is lambda architecture?
- Layers of the Lambda architecture

## What is lambda architecture?

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



*Batch processing* does take time considering the massive amounts of data businesses have today. However, the accuracy of the approach is high, and 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 or 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, and the *serving layer* combines the results obtained from both the *batch* and the *speed* layers.

