# Smart Meter Analytics (Utilities)

This segment is part of the use case implementation of Smart Meter Analytics.

## Challenge

Modern utility companies need to capture, transmit, analyze and store smart meter data in order to meet their business objectives associated with installing Advanced Metering Infrastructures. But their data architectures were designed during a simpler time when a monthly measurement was the norm. Smart meters collect information multiple times every hour, creating a vast, constant, and rich stream of data that utility companies are ill-equipped to process and store efficiently on legacy database platforms.

## Description

With Hadoop , utilities enhance their grid visibility by orders of magnitude. It can helps them monitor their data-in-motion from operated assets in real-time and compare that to deep historical analysis on past trends. That [data discovery](http://hortonworks.com/solutions/data-discovery/) powers actionable intelligence for remote operations support, and also delivers real-time insights to: increase grid reliability, balance loads, reduce outages, and detect fraud.

## Useful Links

<https://pramanicks.wordpress.com/2012/09/05/think-big-act-small-use-case-series-part-5-of-5-using-big-data-in-insurance-utilities-ecommerce-hi-tech-digitial-and-travel-industr>

<https://hortonworks.com/solutions/energy/>

<https://www.researchgate.net/publication/261226446_Smart_meter_data_analytics_using_OpenTSDB_and_Hadoop>