

Operational Intelligence – Extract Business Value When it Matters Most



When I first heard “Operational Intelligence” and it is something achieved by analyzing machine data in real time, my reaction was hmmm...

The truth is that it didn’t strike me at first, but intrigue set in! Hiking on my curiosity trail, I researched this topic extensively and what I discovered was startling!

[Wikipedia](#) defines Operational Intelligence as a category of Real-Time Dynamic, business analytics that delivers visibility and insight into data, streaming events and business operations.

In today’s growingly complex economic climate, monitoring, assessing, and improving the effectiveness and efficiency of operating activities can be a source of competitive advantage and a value-driver. Enhanced IT capabilities and digitization of business operations are bringing a rich stream of data to make better decisions and run intelligent business operations.

Take for example a manufacturing unit producing a million dollar worth of goods. Failure of one set of operations in the assembly line might appear at first inconsequential, but each passing hour of inaction could lead to a quantum of both tangible and intangible losses such as loss of revenue,

missing production and delivery timelines, supply chain disruption, and most importantly dissatisfied customers and lost future business opportunities!

Now imagine the possibilities if there is a real-time business process monitoring mechanism in place. With sensor-enabled data capturing and analytical capabilities, it will be so easier to convert the machine-generated data into actionable insights, helping predict, avert, and remediate any operational failures. Further, a proactive approach towards asset management and maintenance, guided by the insight derived from operational intelligence, can help run a successful, safe and profitable organization.

Healthcare industry is another beneficiary from the vast potential of OI. A sensor, attached to a pacemaker devices of a cardiac patient, transmits real-time information about the patient’s cardiac activity to the medical facility. A timely relay of any malfunction in the device or the patient’s medical condition can help physician intervene, saving a precious life. Here Operational Intelligence is turning out to be a lifesaver!

Key difference OI and BI is that OI enables the organizations to run their everyday operations effectively by aiding in key operational decision-making, which otherwise is not possible with the huge amounts of machine-generated data in real-time. Business Intelligence, on the other hand, helps organizations making future strategic business decisions using the past data sitting in their Enterprise Data Warehouses.

	Operational Intelligence	Business Intelligence
Analytical approach	Proactive	Reactive
Type Of Data	Predominantly Unstructured	Predominantly Structured
Event Accessing	Always Real-Time	Batch Mode
Visualization	Report format	Dash-Board
Data Value	Short-Term	Long-Term

According to Technavio, the Global Operational Intelligence market is forecasted to grow by more than 13% CAGR by 2019. According to another recent Gartner research, "By 2017, organizations using predictive business performance metrics will increase their profitability by 20%."

Clearly, there are huge advantages and values that can be gained provided organization make concerted efforts in adopting OI as part of their strategy framework. The visibility that OI can provide in the manufacturing operations, product/service demand, supply chain, customer satisfaction, and so many other key business operations can help reduce operating expenditure, increase revenues and margins, and play a significant role in every organization.