



Although Big Data was identified as an IT Megatrend almost a decade ago, many organisations have failed to implement effective Business Intelligence solutions based on huge datasets now available within organisations and coupled with publicly-available information.

Business Intelligence (BI) is a collective term for the various tools and techniques employed by organisations to analyse data and provide historical, current and predictive views of business information.

It is often considered an evolution of reporting from printed, paginated reports to live, interactive **Dashboards** that present **Key Performance Indicators** (KPIs) in a visual representation.

A key feature of BI solutions, is that they are independent of any specific application used in an organisation, such as an ERP, HR or CRM system. Instead, they exist as an independent reporting solution that is connected directly to each individual data source, or alternatively to a data warehouse that consolidates information from multiple systems.

Relationship to Machine Learning

While BI solutions don't necessarily require **Machine Learning** (ML) to provide effective information and analysis of data, they can benefit from ML algorithms to enrich the insights generated from related data points.

Data as an Asset

Many organisations have realised the value of the data within. A tremendous amount of intellectual property resides within the information stored within a business.

Too many organisations store a wealth of data, without ever understanding the knowledge locked therein.

Dashboards

Presentation of data is a significant influencer in improving understanding and creating opportunities for improved decision-making across layers of an organisation.

Many individuals would refer to themselves as 'visual people' and dashboards are designed to fill that need.

However, dashboards are more than just pretty pictures. They allow for the presentation of summarised information with an ability to 'drill-down' into the detail.

Dashboards are often updated in real time, provide instant access to the latest data on which to base timely decisions. This can be contrasted with traditional printed reports that offer no ability to delve into detail and are out-of-date the moment the reports are generated.

Automation

Business intelligence solutions that utilised dashboard technology often include the ability to not only identify actionable insights, but also create the triggers necessary to engage **Robotic Process Automation** systems to activate alerts, reminders and other actions based on data.

This may include things such as sending a message or generating a report because a threshold has been met, such as a customer exceeding their credit limit or a shortage of stock being predicted based on expected customer demand.