Business Intelligence (BI)

What Is Business Intelligence (BI)?

Business intelligence (BI) refers to the procedural and technical infrastructure that collects, stores, and analyzes the data produced by a company's activities. BI is a broad term that encompasses data mining, process analysis, performance benchmarking, and descriptive analytics. BI parses all the data generated by a business and presents easy-to-digest reports, performance measures, and trends that inform management decisions.

Business Intelligence (BI) Explained

The need for BI was derived from the concept that managers with inaccurate or incomplete information will tend, on average, to make worse decisions than if they had better information. Creators of financial models recognize this as "garbage in, garbage out." BI attempts to solve this problem by analyzing current data that is ideally presented on a dashboard of quick metrics designed to support better decisions.

The Growing Field of Business Intelligence

To be useful, BI must seek to increase the accuracy, timeliness, and amount of data. These requirements mean finding more ways to capture information that is not already being recorded, checking the information for errors, and structuring the information in a way that makes broad analysis possible.

In practice, however, companies have data that is unstructured or in diverse formats that do not make for easy collection and analysis. Software firms thus provide business intelligence solutions to optimize the information gleaned from data. These are enterprise-level software applications designed to unify a company's data and analytics.

Although software solutions continue to evolve and are becoming increasingly sophisticated, there is still a need for data scientists to manage the trade-offs between speed and the depth of reporting. Some of the insights emerging from big data have companies scrambling to capture everything, but data analysts can usually filter out sources to find a selection of data points that can represent the health of a process or business area as a whole. This can reduce the need to capture and reformat everything for analysis, which saves analytical time and increases the reporting speed.

KEY TAKEAWAYS

- BI represents the technical infrastructure that collects, stores, and analyzes company data.
- BI parses data and produces reports and information that help managers to make better decisions.
- Software companies produce BI solutions for companies that wish to make better use of their data.

Business Intelligence (BI) Explained

The need for BI was derived from the concept that managers with inaccurate or incomplete information will tend, on average, to make worse decisions than if they had better information. Creators of financial models recognize this as a "garbage in, garbage out." BI attempts to solve this problem by analyzing current data that is ideally presented on a dashboard of quick metrics designed to support better decisions.

Benefits of Business Intelligence

There are many reasons why companies adopt BI. Many uses it to support functions as diverse as hiring, compliance, production, and marketing. BI is a core business value; it is difficult to find a business area that does not benefit from better information to work with.

Some of the many benefits companies can experience after adopting BI into their business models include faster, more accurate reporting and analysis, improved data quality, better employee satisfaction, reduced costs, and increased revenues, and the ability to make better business decisions.

> **FAST FACT**
>
> BI was derived to help businesses avoid the problem of "garbage in and garbage" out, which is the result of inaccurate or insufficient data analysis.

If, for example, you are in charge of production schedules for several beverage factories and sales are showing strong month-over-month growth in a particular region, you can approve extra shifts in near real time to ensure your factories can meet demand.

Similarly, you can quickly idle down that same production if a cooler than normal summer starts impacting sales. This manipulation of production a limited example of how BI can increase profits and reduce costs when used properly.