

Zentrale Reporting-Möglichkeiten in Power BI

Power BI - where BI stands for "Business Intelligence" - is a platform from Microsoft that can be used to prepare and analyze business data. The results that emerge from the analysis are then presented interactively and clearly. They can now be accessed by the recipients of the reports from mobile devices. The up-to-date insights gained from the analyses help project members make informed decisions. The following points characterize the tool and make it worthwhile to use:

- The BI platform is used to connect, prepare, model and visualize data. Since this platform was developed by Microsoft, it is directly embedded in the Microsoft Office environment - which enables access via Office without complications.
- Individual and interactively functioning dashboards and analyses in real time provide users with decision-relevant data at any time. No programming skills are required to use and thus access these valuable analyses.
- With Power BI, all users gain insight into dashboards, analyses and reports - regardless of their current location and digital end device. The tool can also be used as a mobile app.

Due to its compatibility with MS Office, the BI tool is particularly suitable for companies that already use other Microsoft products. Especially the seamless cooperation with MS Excel should be emphasized here. The tool is suitable for all companies that perform software-supported analysis of business data. The focus of these analyses is the target-oriented optimization of the company's own business processes. Since Power BI can be scaled in stages, it is just as suitable for small and medium-sized enterprises (SMEs) as it is for large, internationally operating corporations.

Power BI works cloud-based and includes several business intelligence tools - they are offered as a "Software-as-a-Service" solution. The data sources from which the data material is fetched in order to be able to create the reports come from a wide variety of databases, but also web services as well as their appropriate formatting. Since it is compatible with other Microsoft apps, users get barrier-free access to various other Microsoft programs such as MS Excel or Data Warehouse. The clear focus of Power BI is therefore on the clear visualization of data and the creation of professional reports.

Create meaningful reports with Power BI

The modern market environment is becoming increasingly complex and volatile. Therefore, not only financial factors have to be taken into account, but also soft and external points. Particularly against the backdrop of increasing digitization, it is becoming critical for success to produce well-founded reports at any time and from anywhere. To ensure and further increase the efficiency and quality of reporting, it is becoming increasingly important to retrieve so-called instant reports - without neglecting standard reporting. Such instant reports otherwise take a lot of time and expertise to compile.

As more and more data and information accumulates in the company, competent data management becomes more and more challenging. The increasing flood of data almost automatically leads to a loss of quality in the data material, which obscures the view of the essentials. At the same time, reports are overloaded and very complex. Due to the digital transformation in the company, which is essential for the company's success, an appropriate processing and evaluation of the existing data material must be carried out professionally. However, many companies lack the necessary IT know-how for this.

Components of MS Power BI

The reports created by Power BI Reports support companies primarily in the areas of purchasing, marketing, production and sales. The analyses created with the tool help companies compare past and present figures and derive forecasts for the future. By combining a wide variety of data sources, the tool's evaluations provide a 360° view of the company.

At the same time, planning and decision making is simplified and made more secure. As mentioned above, Microsoft Power BI includes several apps for use. These include a desktop application for computers with Windows operating systems, a Power BI service with which additional reports can be added, and the Power BI app for location-independent access via mobile devices.

If required, it is also still possible to integrate a Power BI report server into a company's own IT infrastructure. In this case, however, the data material used is not located in a cloud, but within a company's firewall. By integrating the report server, users gain comprehensive insight into all report creation functions via a modern, local solution.

Functions of MS Power BI

The tool is designed to be particularly user-friendly, so even those with less technical know-how can use it with ease. Basically, it is enough to get acquainted with the three key terms - datasets, dashboards and content packages:

1. Datasets or data sets are a collection of data that form the basis for the reports. The data consists of either simple excel tables or complex data structures extracted from various source systems.
2. Dashboards are software-based workspaces on which the desired information can be displayed in a bundled manner. Dashboards can display reports in real time. If changes occur, the views are automatically adjusted.
3. Content packages include templates for presenting data and analyses. The templates, which are already used by other saas services, can be integrated at the push of a button.

This creates an all-encompassing picture of the company's current situation, trends can be identified and the clear graphical presentation provides a clear overview of the current status quo.

What services does Power BI offer?

Power BI can extract data from a wide variety of data sources. On the one hand, this is due to its compatibility with other Microsoft programs - first and foremost MS Excel, the spreadsheet program that has been used for years as a number crunching and spreadsheet program. Other valuable applications such as Salesforce or SharePoint can also be used with Microsoft Power BI. After importing data from such sources, the BI software can be used to

- Create reports and dashboards that can be modified interactively. There are many different visualization options, such as bar charts, column charts, pie charts, so-called heat maps - the visualization based on mathematical formula - and create maps.
- Develop models from business data. In addition to the models, relationships between the data can be established at the same time. In the long term, trends can be read from these models, which on the one hand are considered a success factor, but on the other hand also show which factors still need to be worked on.
- Powerful analyses can be made from the available data. MS Power BI can also perform analyses of business information. In this way, those responsible gain a deeper insight into the business data and can make well-founded decisions on the basis of the data.
- Create reports. The tool Report Designer is used for this purpose. To do this, the datasets must be analyzed at an early stage for possible subtopics. The datasets can then be transferred to these reports using the Report Designer. Several pages and graphics are prepared and clearly show the developments.

Another major advantage lies in the simple nature of access. Central analyses and evaluations, together with illustration through graphics and dashboards, can be distributed both directly via the intranet and via the Internet. MS Power BI is available free of charge in its basic version, in which it analyzes data and prepares it graphically. The two paid versions, which are still available, have a broader range of functions. The Pro version integrates the sharing function, while the Premium version provides additional server capacity.

The query functions

Regardless of the version used, the so-called Power Query - a query wizard integrated in MS Excel - is a function for data discovery and data transformation. The focus is on detailed data analysis and the development of interactive reports. Which items these analyses include and which interactive reports can be created will be described in more detail in the next two sections:

Even large amounts of data can be analyzed in detail using MS Power BI. The analyses can be used to create dashboards that reveal patterns that would otherwise not have been visible. Users can apply various auxiliary functions - such as grouping, forecasting or clustering - to process the analyses graphically. In addition, Microsoft supports DAX formula language, which can be used to perform user-defined calculations and develop sophisticated models.

Interactive reports can be created that are specifically tailored to the needs of the company. At this point, one of the software's great strengths becomes apparent - the visualization of the data material. This function contributes significantly to a better understanding of the reports and gives them a higher informative value. At the same time, the software supports direct integration with other files and documents. Via the sharing function, these reports can subsequently be shared with customers and partners.

THE business intelligence solution for interactive data analysis

Microsoft is considered the world market leader when it comes to solutions in the field of business intelligence and data analysis. MS Power BI is particularly interesting for small and medium-sized enterprises (SMEs). They benefit from the graphically prepared dashboards and reports, which they can display and visualize via login to the website, via mobile app or in the ERP system. For creation, MS Power BI accesses hundreds of data sources and connectors, which can later be used to create meaningful and visually appealing analyses.