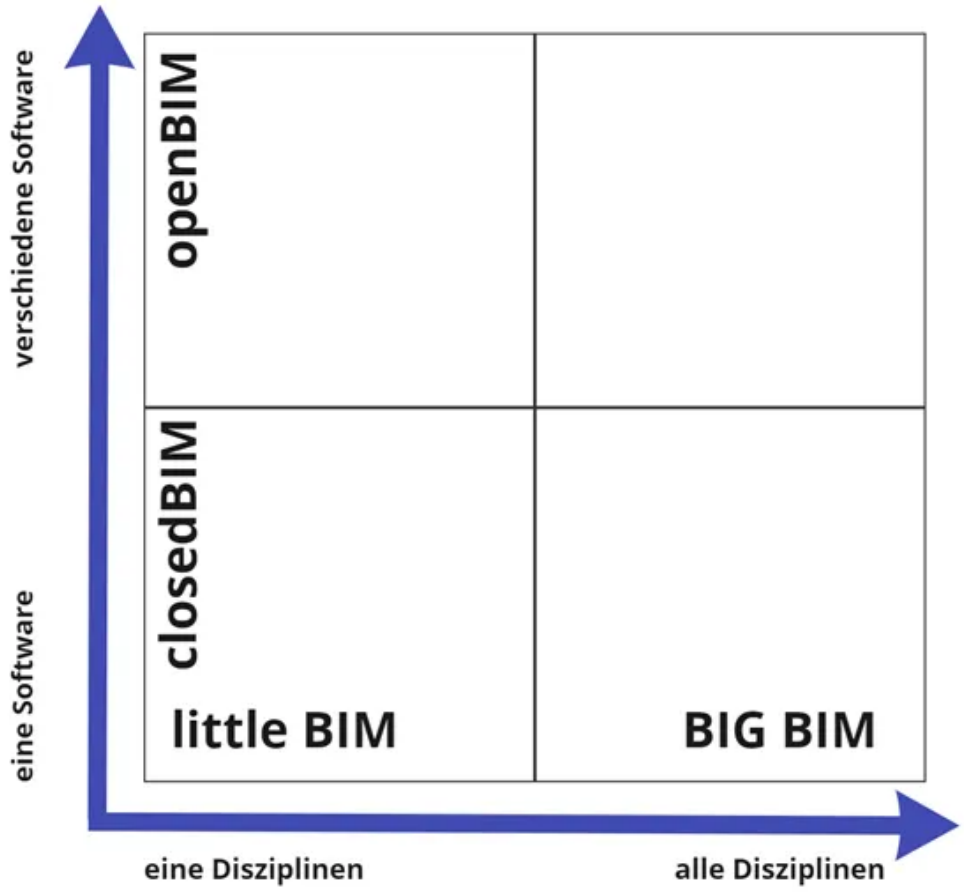
1.2 open BIM

The advantages of the BIM method must be fully exploited, not only from a technical point of view, but also from a structural one. That's why we recommend using the openBIM method in all projects. In terms of implementation and collaboration, the advantages are: software independence and freedom of choice for the application of all project participants, thus no competitive disadvantage due to the fixing of application uses, possibility of long-term use of model data (sustainability thanks to ISO certification of IFC and IDM) and self-sufficiency of software-specific model information (transparency). The BIM development stages provide a clear classification in this respect.

- **little BIM**: BIM islands, use of BIM only in isolated disciplines
- **BIG BIM**: integrating BIM into all disciplines
- **closedBIM**: closed solution, use of one software (software family)
- **openBIM**: open solution, interchangeability between different BIM-compatible software packages



openBIM

Building Smart explanation of openBIM

OpenBIM extends the benefits of BIM (Building Information Modeling) by improving the accessibility, usability, management and sustainability of digital data in the construction sector. At the heart of openBIM is a collaborative process that is vendor-neutral. openBIM processes can be defined as shareable project information that

promotes seamless collaboration for all project stakeholders. openBIM facilitates interoperability for the benefit of projects and installations throughout their lifecycle.

openBIM empowers stakeholders to develop new ways of working by transforming traditional peer-to-peer work processes. By breaking down data silos, openBIM can dramatically improve project progress and facility performance. Companies that adopt an openBIM approach, develop collaboration between parties, better communication and industry-standard methods of exchange. The result is better project outcomes, greater predictability, improved performance and enhanced safety with reduced risk. Throughout a plant's lifecycle, openBIM helps link people, processes and data to achieve plant delivery, operation and maintenance objectives. openBIM and seamless digital workflows make important projects accessible to everyone. Project information is accessible in real time to all stakeholders to facilitate decision-making at different stages of the project, from design to delivery, rehabilitation and even demolition. openBIM eliminates the traditional problem of BIM data, which is typically limited by supplier data formats, disciplines or project phase.

By respecting international standards and workflows, openBIM extends the breadth and depth of BIM use by creating a common direction and language. Technical applications developed for openBIM improve data management and eliminate inconsistent workflows. Independent quality criteria guarantee the reliability of open data exchange.

openBIM enables digital workflows based on manufacturer-independent formats such as IFC, BCF and others.

OpenBIM enables the creation of an accessible digital twin, which forms the central basis of a long-term data strategy for built facilities. This ensures greater sustainability of projects and more efficient management of the built environment.

The principles of openBIM :

1. Interoperability is the key to digital transformation in the construction industry.
2. Open, neutral standards should be developed to facilitate interoperability.
3. Reliable data exchange depends on independent quality criteria.
4. Reliable data exchange depends on independent quality criteria.
5. Flexibility in the choice of technology creates more value for all concerned.
6. Sustainability is ensured by long-term, interoperable data standards.

The advantages for the construction industry are :

1. OpenBIM considerably improves collaboration in project management.
2. OpenBIM enables better asset management.
3. OpenBIM provides access to BIM data created during the design phase for the entire lifecycle of the structure.
4. OpenBIM extends the breadth and depth of BIM results by creating a common direction and a common language. It also enables compliance with international standards and commonly defined work processes.
5. OpenBIM enables a common data environment that provides users with opportunities to develop new workflows, software applications and technology automation.
6. OpenBIM makes it possible to create an accessible digital twin, which forms the central basis of a long-term data strategy for built facilities.

openBIM

OpenBIM data must :

- be **readable** by all.
- be **commentable** for many.
- be **modifiable** only to a limited extent.