CADENAS

BIMcatalogs.net

Digital BIM Catalog
for Manufacturers

Your data available in Revit, ALLPLAN, Archicad...

CADENAS GmbH
Setting Standards

CADENAS is a leading software manufacturer in the areas of Strategic Parts Management and Parts Reduction (PARTsolutions) as well as Electronic Product Catalogs (BIMcatalogs.net). With its customised software solutions, the company represents a link between building product manufacturers and their products, as well as wholesalers, architects, planners and craftsmen.

With its more than 400 employees at 17 international locations, the name CADENAS (Spanish for process chains) has stood for success, creativity, consulting and process optimisation since 1992.

BIM requirements can vary depending on the country or region, e.g. in terms of the required level of detail.

Therefore, cooperation with an internationally active company like CADENAS is important for a global BIM strategy.

🇩🇪 **Augsburg**
🇩🇪 **Wolfsburg**
🇩🇪 **Essen**
🇩🇪 **Heidelberg**
Wels
Wien
Slavonski Brod
Belgrad
🇬🇧 **Bristol**
Châtillon sur Chalaronne
🇮🇹 **Bologna**
🇺🇸 **Cincinnati**
🇺🇸 **Los Angeles**
Tokyo
Daejeon
Shanghai
🇮🇳 **Pune**

400+ Employees

5,500+ Digital CAD/BIM Catalogs

17 Locations

Since 1992

Profit from our experience

CADENAS has been setting standards with the electronic product Catalogs of the BIMcatalogs.net technology since 1992. Benefit from our many years of experience from our more than 5,500 successfully implemented product Catalogs. We will advise you in detail in advance on how to best tailor your Electronic Product Catalog to your needs and your target group. Together with you, we develop a detailed list of requirements and actively contribute with our knowledge to the optimal digital product Catalog for your customers and prospects. Working groups organized by CADENAS with suppliers and customers also help you to recognize and react to general market requirements at an early stage.

>> We have known CADENAS for a very long time. In our internal design, we often work successfully with components from various electronic Catalogs. In addition, CADENAS is one of the few providers of 3D CAD objects for both mechanical engineering (plant construction) and architecture (BIM). Thus, we kill two birds with one stone. <<

Herbert Pühringer
Design department and 3D BIM CAD libraries
Schiedel GmbH

Reasons for our expertise

With CADENAS, you have a valuable partner at your side who supports you in the creation and marketing of BIM and VDI 3805 / ISO 16757-compliant digital product data.

1. Renowned BIM & VDI 3805 experts advise you with us

Our CADENAS competence team, consisting of Karsten Spieß, Deputy Chairman of the VDI 3805 Main Committee, and Stefanie Enkler, is available to advise you on all questions. Through our work in various committees, associations and working groups (VDI, VDMA, BTGA, etc.), we have a deep insight into current developments.

2. We actively shape the position paper and PDTs of VDI 3805

Together with the associations, manufacturers and cooperation partners, we play a leading role in the development of the VDI position paper and the respective technical product sheets and thus define the framework conditions of the building services sector with regard to the implementation of Building Information Modelling (BIM).

3. We are technology partners of, among others, ARGE New Media, VDMA and BDH

We support the development of VDI 3805 guidelines in various sub-working groups and working groups and are, for example, in the function of coordinator of standardization a member of the steering committee "BIM for electrical engineering and building automation" Standardisation, we are a member of the Steering Committee "BIM for Electrical Engineering and Building Automation."

What are the challenges?
## BIM and digital product data

Many people involved in a construction project, such as planners, architects, structural engineers, technicians, craftsmen, etc. work together over a very long period of time.

If not everyone receives their individual information on time, the planned milestones are inevitably pushed back further and further. The mountain of costs grows and grows and grows...

Moreover, since projects are divided into different planning phases, new teams with different systems and BIM formats are active in each phase.

The challenge: Manufacturers of architectural components have to provide thousands of customers with a wide variety of requirements with suitable data for planning their construction projects.

The most important systems and applications for which manufacturers should provide suitable formats are listed below. With the CADENAS data model, a manufacturer can export these formats, which supports a barrier-free exchange.
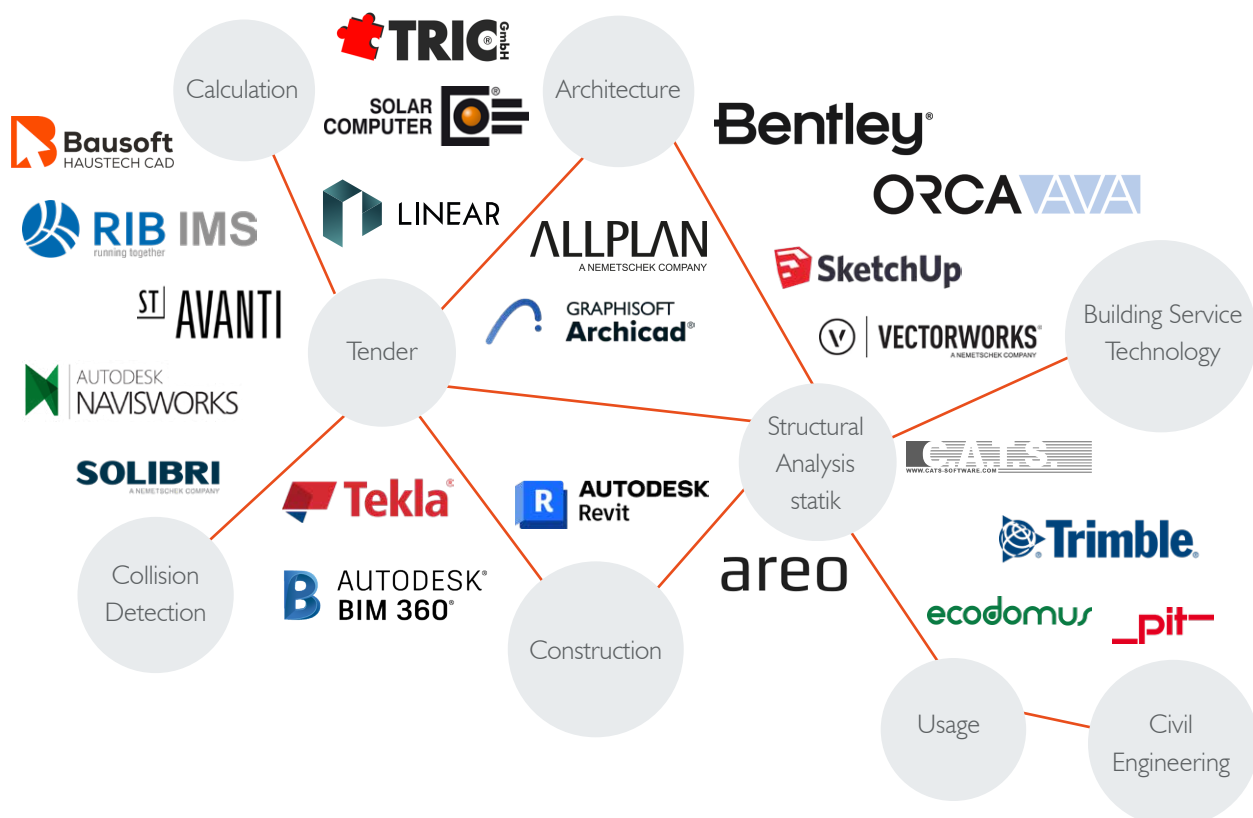
5 reasons for BIM-compliant planning data

1. BIM is becoming mandatory

"First build virtually, then build for real!" – This is what it says on the page of the German Ministry. The Ministry has drawn up a step-by-step plan for the introduction of the BIM method in Germany to help it achieve a breakthrough. The focus is on infrastructure construction and infrastructure-related building construction, but the method can also be used as a model in other areas. Even though the introduction of the "BIM obligation" in Germany has been postponed to the start of 2023, comparable legal framework conditions already exist in other countries. BIM is particularly widespread in Scandinavia. In Norway, Finland and Denmark, BIM has been mandatory for all publicly-financed construction projects since 2016 and 2017 respectively. Sweden followed in 2019.

2. Planners and architects have demands on your web presence

What criteria are most important to planners and architects when researching components online?*

47%
Search by part number

49%
Configurability of product options

48%
Detailed technical information

45%
PDF datasheets for download

5%
Video content

72%
Simple, easy-to-use website

9%
Possibility of online purchase

4%
Online chat

65%
Native CAD / BIM models downloads

*Result from a survey among 128,000 architects, planners & technicians

3. Wholesalers are increasingly involved in the planning processes

By integrating wholesalers into the BIM process, the required materials and products can also be planned and ordered early and accurately. In addition, information on ecologically and socially responsible produced products is becoming increasingly important to be taken into account early in the planning process. Therefore, if possible, BIM-compliant planning data should also be made available to the wholesale trade.

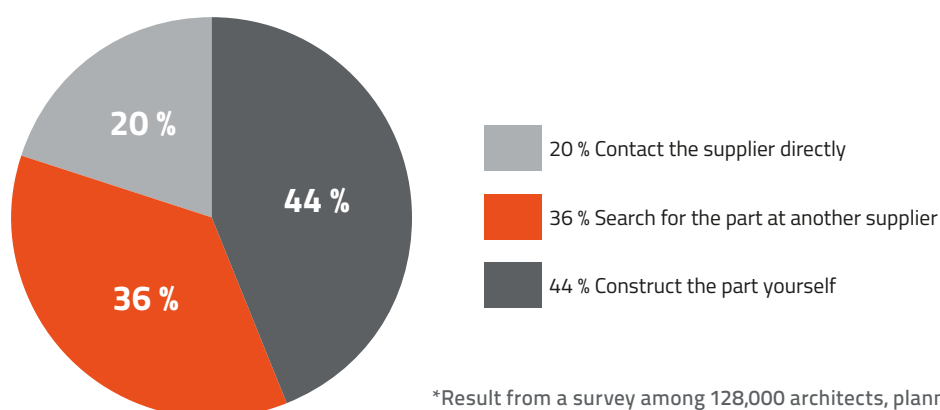## 4. Holistic consideration of the building project

If construction and planning teams do not have access to digital tools to transfer project data and perform facility management, they are forced to search arduously for the information they need. This can lead to delays, error-proneness and cost increases. Working collaboratively allows all project stakeholders to access and edit data in real time, improving collaboration and efficiency and reducing the risk of errors.

BIM-compliant design data enables better collaboration between the different stakeholders involved in a construction project, such as architects, engineers, contractors and facility managers. This leads to better communication, fewer errors and more efficient project execution. This positive effect works through all planning phases into the operation of the construction project.

5. Be considered early in the tendering process

What do planners and architects do if a manufacturer does not offer CAD / BIM models online? *

20 % Contact the supplier directly

36 % Search for the part at another supplier

44 % Construct the part yourself

*Result from a survey among 128,000 architects, planners & technicians

Our solution

Individual data for individual planning requirements

Regardless of which BIM / CAD system, level of development, classification, specification or language your customer requires, a central database (single source of truth) allows the appropriate data to be generated live for everyone.
In addition, information from PIM, ERP and other internally-available databases such as prices, article numbers etc. can be provided.
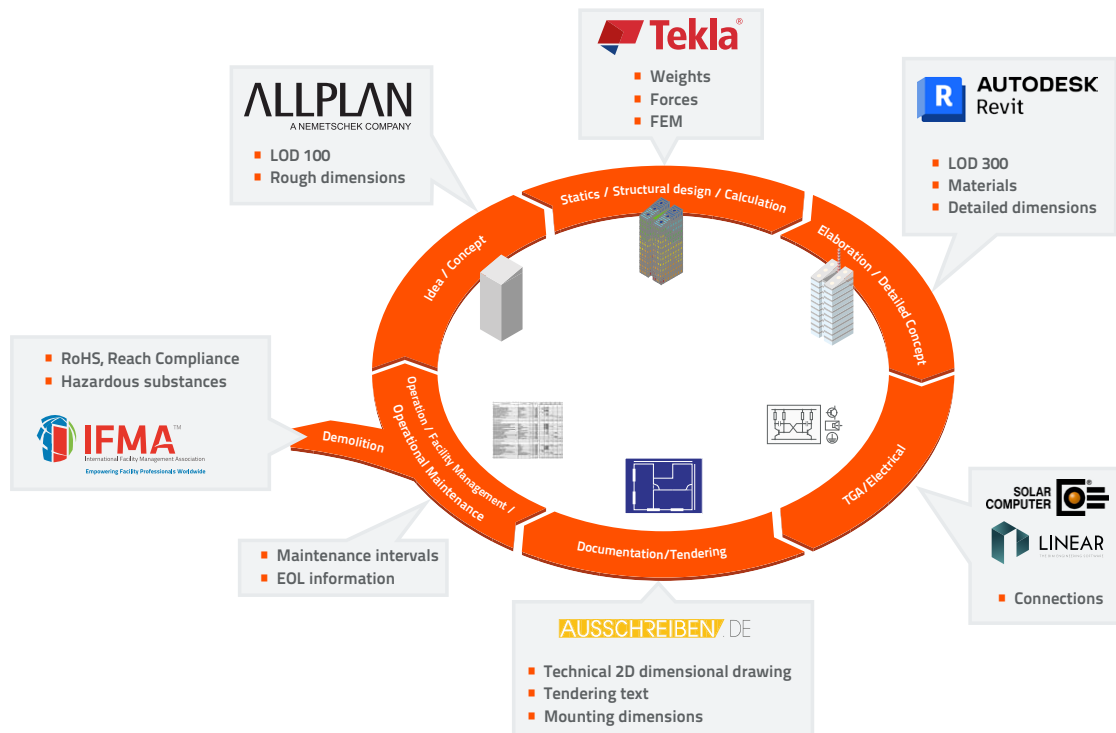

PIM

ERP

Int. DB
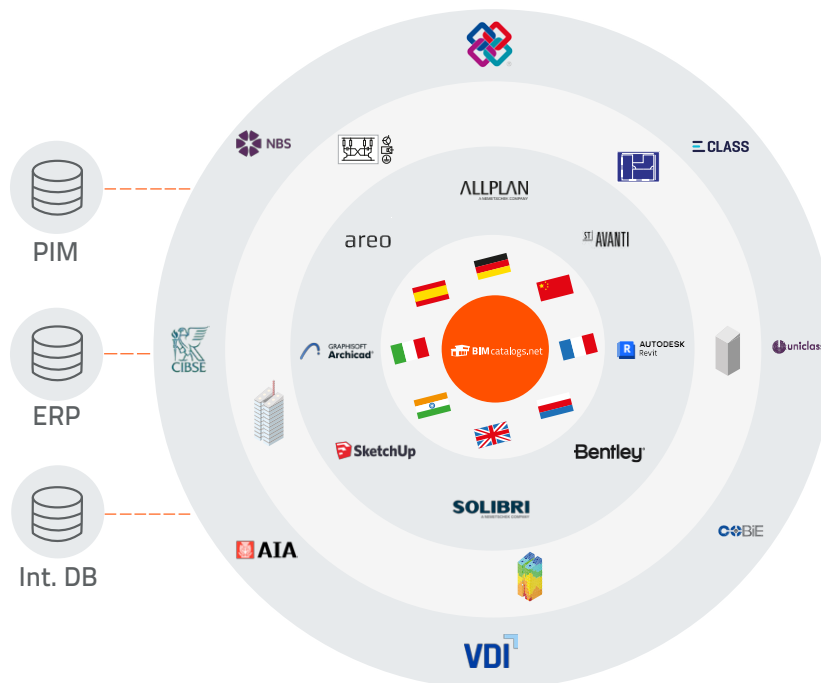
Watch the CADENAS solution in this video:

**All customer requirements are thus optimally fulfilled and the BIM data is always up to date....**

...and it's over the entire life cycle of a building!

Tekla
- Weights
- Forces
- FEM

ALLPLAN
A NEMETSCHEK COMPANY
- LOD 100
- Rough dimensions

AUTODESK Revit
- LOD 300
- Materials
- Detailed dimensions

- RoHS, Reach Compliance
- Hazardous substances

IFMA
International Facility Management Association
Empowering Facility Professionals Worldwide

SOLAR COMPUTER
LINEAR
- Connections

- Maintenance intervals
- EOL information

AUSSCHREIBEN.DE
- Technical 2D dimensional drawing
- Tendering text
- Mounting dimensions

Circle labels: Idea / Concept · Statics / Structural design / Calculation · Elaboration / Detailed Concept · TGA / Electrical · Documentation/Tendering · Operation / Facility Management / Operational Maintenance · Demolition

The 360° solution for nationally and internationally successful manufacturers

BIMcatalogs.net offers a solution that perfectly covers everything: from marketing and sales to technical service.

- **Marketing:** Draw attention to your products with groundbreaking features, such as incorporating 3D previews on your website or augmented reality. Your target group connects the innovative product presentation with an innovative product technology.

- **Sales:** You receive 100% GDPR-compliant personal data of the planners, architects and craftsmen who have scheduled your products.

- **Engineering:** Product configurators that can be used both internally and by customers create freedom for the development of new products.

Engineering · Marketing · Sales
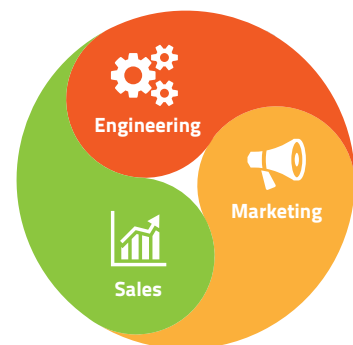
Profile planning data
Changes in the provision of information

In the past, projects were mainly based on printed documents. As Digitization progresses, documents are provided in digital formats, and virtual models are becoming more common. In the future, the amount of documents delivered at project handover or used during operation is expected to continue to decrease. Geometric models have changed the way project conditions are visualized and communicated. But geometry only serves as a placeholder for the actual information. The biggest growth area is in the alphanumeric content of information models, i.e. the structured and machine-readable data.
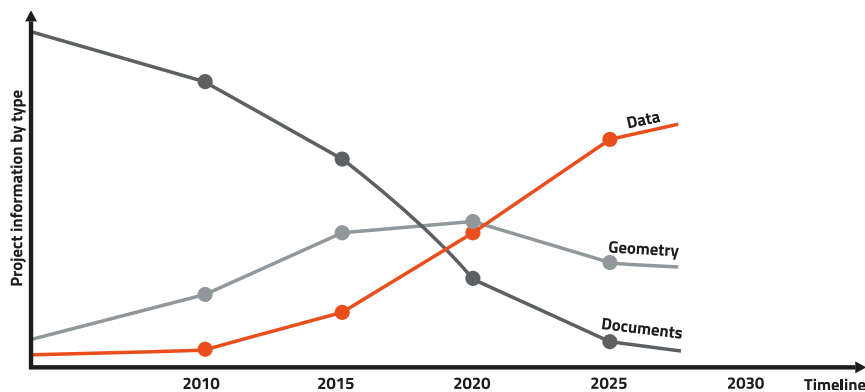
In the future, however, alphanumeric data will be considered the highest priority, followed by geometric models and supporting documentation. BIM planning systems are increasingly becoming calculation tools, especially in the field of Mechanical Electrical Plumbing (MEP) and electrics, so the need for classified alphanumeric data continues to grow. The importance of correct and unambiguous alphanumeric data in BIM planning is not to be underestimated in the later use of the building. The use of standardized classification systems is an important measure to increase data quality and avoid errors.
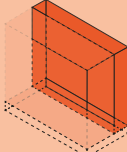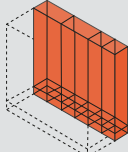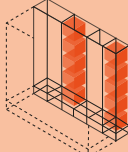
Start small, grow big

For component manufacturers, BIM presents a wide range of opportunities. CADENAS offers a tailored solution for every individual requirement. BIM is still undergoing dynamic changes, and requirements are evolving. Therefore, the CADENAS solution is designed to be implemented gradually and individually. This gradual approach facilitates flexible adaptation to changing market demands without requiring significant financial investments from the outset. This enables you as a manufacturer to act agilely, drive innovations, and maintain competitiveness. The solution provides manufacturers with the necessary freedom to effectively harness the transformation of BIM without incurring excessive risks.

Information request

Different levels of detail (LOG/LOI) using the example of a control cabinet

LOG					
	100	**200**	**300**	**400**	**500**
LOI	- Basic volume	- Basic and maintenance volume	- Single components	- Equipment	
Specification data	- Usage requirements - Overall performance - Required energy values - Earth safety requirements - Distribution concept	- Space requirement - System function - Dead weight - Basic functions - System consumption - Ventilation requirements - Fire & Smoke protection requirements - Substrate - Fixing/support system - Safety	- Connections - Basics of the Functional diagram - Part of the overall performance - Technical specifications - Material - Fire protection (components) - Maintenance/operating rooms - Surface - Sound insulation - Fire protection system - Installation situation	- Connections - Mounting and attachment parts - Installation accessories - Specifications for installation	- Documentations
Manufacturer and product data	- Requirements on the part of by interested parties	- Systems, Products	- Manufacturer and product information of the main elements	- Manufacturer and product information of the components/ accessories	- Article number
Cost data	- Cost per unit area	- Component costs	- Costs of parts and individual components	- Total manufacturing costs	- Total costs - Operating costs
Energy data	- Required energy values - Energy demand	- Requirements for the components - Classes	- Gray energy	- Evidence	- Operating data
Facility data	- Specifications for the operation	- Performance values	- Element numbers	- Delivery ID	- Maintenance information - Guarantees - Life cycle

# Your modular product Catalog for all output formats and distribution channels

With the CADENAS solution, you utilize on a product Catalog that grows with your requirements as well as those of your customers today and tomorrow.

All relevant product information is managed in a central database (single source of truth). Thanks to the modular system, seamless integration into your website is just as possible as, for example, integration into many BIM/CAD systems, publication via other web channels or the generation of 3D PDF datasheets.

In addition, you can benefit from our large partner network, where your data is also made available. You can see who has downloaded your products from our statistics and analysis tools, which we make available to you.

Export to more than 100 native BIM / CAD formats

Your components are available to planners and architects as genuine native 3D BIM / CAD models in over 100 different file formats of popular systems, such as Autodesk Revit, Allplan, ArchiCAD Vectorworks and many more.
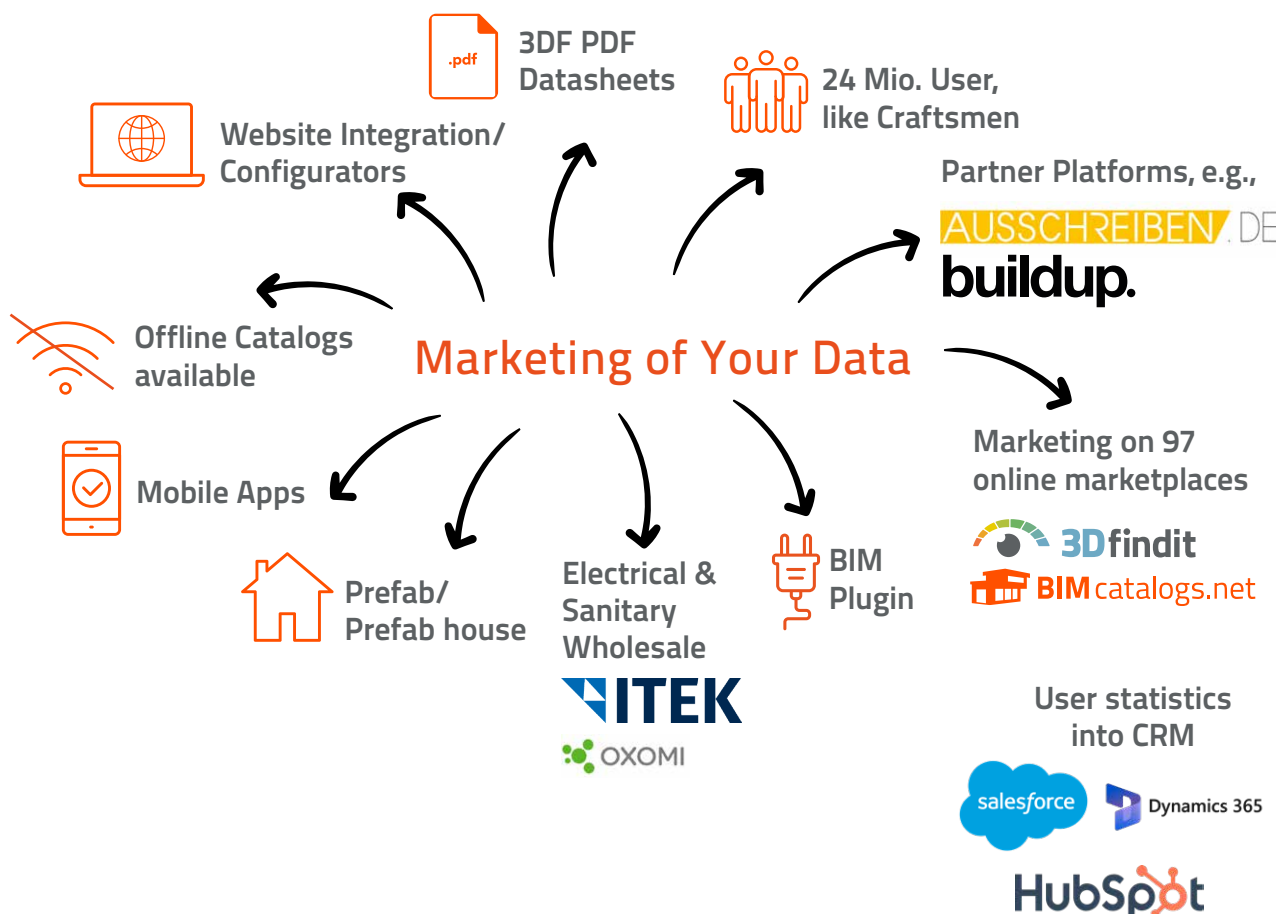
BIM Plugins as a multiplier for your product Catalog

With a digital product Catalog, the BIM / CAD models of your products are seamlessly integrated into many BIM / CAD systems. This means that planners and architects can easily integrate your product data into their planning.

Tendering text and a strong partner network

Our technology partners include leading companies that also set standards, and innovative organizations that develop and support related technologies.

The digital partnership between AUSSCHREIBEN.DE and CADENAS combines product information, tendering text and BIM / CAD data on one platform.

Over 1 million tendering text and additional product information are available for download on the online portal AUSSCHREIBEN.DE. Through the partnership, building products can be displayed as vivid 3D graphics and offered for free download in various native and neutral BIM / CAD formats. The cooperation brings together what belongs together and ensures that your data is directly available to planners and architects.

Product marketing and trade fair entertainment

Augmented Reality (AR)

Augmented reality is an ideal complement for trade fair entertainment as it offers an interactive experience that presents products to visitors in an innovative and engaging way. By combining real surroundings with virtual elements, AR attracts attention, encourages visitor engagement and creates unforgettable memories that set exhibition stands apart.

Now try it out!

Rendering

Creating images based on existing CAD models offers a cost-effective option compared to traditional photography or externally commissioned renderings. The detailed digital models capture every detail and enable the creation of realistic and appealing images. This saves time and money, allows for quick adjustments, promotes consistent quality and speeds up the process of getting to market.

>> Especially with the 3D and augmented reality presentation of Afag's new products, Afag was able to impressively demonstrate at MOTEK that Afag is a leader both in the quality of its products and in the use of the very latest computer technology. Afag and CADENAS complement each other "Yesterday. Today. Tomorrow." as technology leaders at the highest level. <<

Armin Doser
Business Unit Manager Sales and Marketing
Afag Automation AG

3Dfindit

The visual search engine for 3D CAD, CAE & BIM models

3Dfindit takes the design process to the next level: millions of users find CAD and BIM models in thousands of verified manufacturer Catalogs for free download every day.

Best of all: With a single registration, planners and architects have access to over 5,500 3D CAD, CAE and BIM Catalogs from various industries such as mechanical engineering, electrical engineering, architecture and many more.

✔ Search engine with a focus on technology-related content for international manufacturer

✔ Free download of manufacturer-approved BIM / CAD models including intelligent metadata

✔ A single login gives access to over 5,500 Catalogs with countless products

✔ High-quality 3D models in over 100 native CAD formats

✔ Search even faster with useful search functions

✔ Direct integration of the parts library into many leading BIM / CAD systems
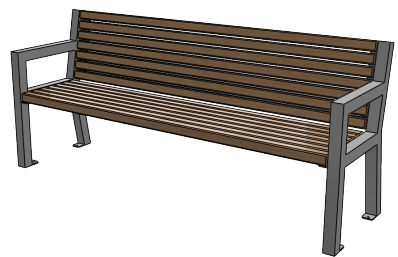
You can find more infos here!

Checklist for your optimal BIM strategy

	3Dfindit BIMcatalogs.net	Your current solution
Multiformat	✔ Over 100 native 2D & 3D BIM formats and much more	
Catalog Update	✔ All formats are updated simultaneously	
Multilingualism	✔ 15 available languages	
Data migration and Creation	✔ With or without already existing CAD data ✔ Cooperation with associations	
Marketing	✔ Platforms & Partner Platforms ✔ Worldwide publishing ✔ 3D PDF datasheet ✔ CAD / BIM Plugin ✔ Free Mobile App	
Product Configurator	✔ Simple implementation possible	
Website Login	✔ Seamlessly integratable into your website	
Statistics as a Sales Tool	✔ Detailed personal leads ✔ CRM Connection	

CADENAS