

## ArCADia BIM - do I need BIM technology today?

The term Building Information Modeling (BIM), as defined by Wikipedia, is the modeling of information about building and buildings. Although this term has become quite common recently, many people still don't quite understand this concept because it's interpretations and explanations are very varied. Some fit into this concept of software aiding design. Others think that this is a building model created in the virtual world. A commonly used definition is a database in which building data is contained. For us, the closest to the truth, is the definition of this term as a process in which the most important role is played by co-operation and communication between its participants. This process is the design and construction of a building or structure, and then it's management and maintenance until the demolition. It is based on the joint creation of a complete, virtual, "living" model of the building by all participating parties, which add the consecutive elements to the information library. Its partners are primarily: the investor, architects, constructors and installers, contractor and the building administrator. However, it is important to emphasize that the real essence of BIM is to model the whole building rather than using it in a single industry, even if it is the architectural industry - leading in the design process.



*“We have created the first Polish, also unique on the global scale, object-oriented building information modeling system (BIM), assisting in the preparation of construction documentation. Now thanks to the ArCADia system, designing takes on a new dimension.”*

Jarosław Chudzik, MSc  
CEO of INTERsoft, owner of ArCADiasoft

When talking with our customers, we come across very different opinions about the work of

the designer. Quite often we hear, "Why should I invest my precious time in some technical novelty, since up until now I was managing quite well at designing a project in the form of a CAD drawing, and not a building model in BIM technology?" Exactly – until now. Probably decades ago, architects were saying the same thing, leaning over the drawing board and looking with doubt at their colleagues sitting in front of computer screens with not very intuitive and complicated CAD program installed, in which creating a few strokes required much more knowledge and time. Twenty years ago, the computer conquered the drawing board due to the fact that this time paid the designer dividends when it came to editing the drawing or duplicate it in subsequent copies. Today everyone considers the computer as something obvious in the work of an architect or engineer. If we do not go forward with the we regress and sooner or later we will discover that the train of new technology is going too fast for us to catch up. Today no one is thinking of making a CAD drawing on a drawing board. Designers have at their fingertips modern software that features a simple, intuitive interface already familiar to the user from common computer applications and in accordance with his habits not exclusively related to CAD software. A good example of this is our companies ArCADia BIM system, comprised of programs dedicated to various design industries. It reconciles ease of use with high functionality of the system, and without a doubt it does not force users into time-consuming learning of a new software that uses BIM technology. In our thinking about the possibilities and advantages of BIM technology, we put great emphasis on the cooperation of designers from different industries. We believe that proper communication between them and their mutual understanding of their needs is key to the future success of the new design approach. The current design practice causes many design flaws and unforeseen aspects only to appear at the construction site, and the consequently of this is the increase in the costs of the investment at its final stage. Among the designers there is a conviction that the implementation of a BIM design is expensive, and the use of BIM by installers and constructors unnecessarily negatively affects the price of the project and may cause the investor to choose a cheaper traditional solution. Nothing could be further from the truth. With regard to the overall investment, the financial benefits will be spectacular - And the task of the designer is to convince the undecided and uninformed investor. Thanks to BIM-based solutions he will receive a project that is a comprehensive and clear 3D model. It will contain full and always up to date information on each of the building's components: cubature, equipment, installations, material consumption and construction costs - depending on the changes made during the design and implementation of the project. Thanks to this model, we can easily track the impact of changes on the final costs. The 3D building model gives the designer the ability to accurately check all the details, and the fact that the program allows for capturing errors and collisions, any potential construction problems will be removed at the design stage, that is before they appear, saving time and money. Further measurable financial benefits await in the operational phase of the building. The key to success is not so much the software itself but rather the information you put into it during the design, construction and after completion, which will allow you to effectively administer the building and minimize the cost of maintaining it throughout its life cycle. The ArCADia BIM system takes into account all aspects of a building project and includes tools for every design industry ranging from architects, plumbing, gas, telecommunications and electrical installers

to energy auditors. ArCADia BIM software is available to everyone. It is important that the modularity of the program and the way it is licensed and the technology used in no way restrict the designers from making available and passing on their designs and drawings to other participants in the process. Regardless of your ArCADia BIM functionality, all designers get access to the full building model data, they can also transfer or export the design to competing third-party applications.