

# **Libraries of the BIM components: Past, present and future**

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**Abstract:** In the recent years, a new method for building design, analysis and maintenance – Building Information Modelling (BIM) – has been finally delivered to the practice. It helps to integrate the processes of the construction industry under one hood. However BIM models are very complex, they go in a great detail and the particular components contain a number of various specifications, thus it takes more resources to create them in comparison to the traditional method of the design. One of the tools, which could help to reduce the BIM model creation costs, are BIM component libraries, which contain a collection of the needed component in an appropriate quality and in a format, which is readable by the target BIM platform. The British “National BIM Library” (NBL) is currently an example of this kind of tool. In this article, I am proposing embedding ontologies to a BIM library with the following claims: Processing of the BIM components in a higher semantic level will lead to higher automation and elimination of unnecessary manual man’s work. Moreover, output of components in one of the widely supported ontological formats we enable use of the components data in the environment of the semantic web.

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