



Marketplace

# Are your Engineering IT Standards ready for AI?





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AI MARKETPLACE

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# 1 Introduction

Data is literally the „new gold“ of our time. While two zettabytes (equivalent to one billion terabytes) of data were generated worldwide in 2010, this figure had already risen to 47 zettabytes by 2020. Moreover, this immense growth is predicted to exceed 2142 zettabytes (in 2035) in the coming years [Sta22-ol]. In addition to the amount of data, the number of end or producer devices is also increasing: According to Statista, the number of Internet-enabled products is estimated to reach 75 billion by 2025.

The use of artificial intelligence holds enormous potential for utilizing this flood of data, especially for product development. The successful use of AI can lower production costs, reduce development time, and help to optimize the use of resources. For example, it is assumed that the use of AI will increase profitability by an average of 38% by 2035 [Dau17-ol].

In order to fully exploit the potentials of artificial intelligence for product creation, the data from product creation plays a central role: The heterogeneous, complex data from the different software frameworks used in Engineering IT must be usable (or made usable) for AI appli-

cations. Vendors of software solutions, especially in the AI field, are adapting to the increasing demand from industry. But industry standards and those in the still new „AI sector“ differ, which is why collaboration between the two domains has not yet reached its full potential. For this reason, the „AI Marketplace“ project is investigating, among other things, the extent to which the data standards commonly used in Engineering IT can be read in and used directly by the most common AI frameworks, and in which cases this will not work without problems. For this purpose, the project defined the term „AI readiness“ of a standard as the ability of the standard to be read by defined AI frameworks or to be transformed into formats that have this ability. The goal is to provide a recommendation on the use of appropriate data standards from Engineering IT for use in AI applications, as well as to address specific challenges. This white paper provides an initial overview of the results of the analysis. The focus is on neutral, open standards to ensure a cross-tool and cross-vendor view.

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*It is a challenge to make the heterogeneous, complex data from Engineering IT usable for AI.*

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*Goal: Identify Engineering IT Standards that are „ready for AI“.*

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