Enterprises as Model-Driven Systems

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Abstract
In this keynote, we will look at enterprises (companies, organizations, agencies, factories, ...) from the perspective of them being essentially model-driven systems. We will start with a short reflection on what a model is, where it is important to realize that the notion of model involves more than "boxes and lines" diagrams. From this broader perspective, we then explore the natural role that models play in the (continuous) development, operation, and regulation of enterprises. New technologies, such as AI, low-code, rule engines, IoT, Digital Twins, etc, provide enablers for the usage of models (in the broader sense) in enterprises, while some of these technologies (e.g. low-code, rule engines, big data, and explainable AI) actually put even more stress on the role of models. We therefore finish this keynote with a discussion on some of the resulting opportunities and challenges.