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Technical Risk Management for the Smart Factory

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Abstract: Future production systems - often described as smart factories or factories of the future - place much higher demands on their protection with regard to the partly controversial topics of safety, security and privacy. In this paper, the most relevant changes of this future type of production will be identified and their challenges are highlighted based on the three topics. Subsequently, potential areas of tension between the three target variables will be explained by means of some examples. To identify potential risks, the FMEA - Failure Mode and Effect Analysis is one possible approach. However, in order to identify the risks in the three dimensions in a targeted manner, the necessary methodological adjustments are presented.