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Production specific language characteristics to improve NLP applications on the shop floor

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Abstract

A variety of assistance functions have been developed based on the rising data availability on the shop floor and increasing capabilities of artificial intelligence applications. An often-mentioned risk is the low data quality, especially in manual text entries for e.g. deviations or defects. This paper aims to evaluate production specific language characteristics to adjust natural language processing applications. To achieve this goal three industry data sets are analyzed and the findings are used to improve a recommendation engine for previously solved problems.

Keywords: digital shop floor management, shop floor language specifics, natural language processing