Using AI to Advance Factory Planning: A Case Study to Identify Success Factors of Implementing an AI-Based Demand Planning Solution

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Abstract : Rational planning decisions are based upon forecasts. Precise forecasting has, therefore, a central role in business. The prediction of customer demand is a prime example. This paper introduces recurrent neural networks to model customer demand and combines the forecast with uncertainty measures to derive decision support of the demand planning department. It identifies and describes the keys to the successful implementation of an AI-based solution: bringing together data with business knowledge, AI methods, and user experience, and applying agile software development practices.