## THE MAGIC TOUCH: HOW AI HAS BEEN TRANSFORMING THE RETAIL AND SUPPLY CHAIN IRREVOCABLY?

## **ENGIN YESIL**

Getron, GTRN GmbH, Antonstr. 39, 01097, Dresden Germany engin.yesil@getron.com

## **ABSTRACT**

Artificial Intelligence (AI) has significantly transformed the retail and supply chain industries, revolutionizing the way businesses operate, optimize processes, and enhance customer experiences. AI technologies are employed to analyze vast amounts of data, predict trends, streamline operations, and personalize interactions. The wide range of applications AI in the retail and supply chain, include autonomy, modeling, forecasting, and optimization to reduce supply chain delays, while optimizing demand and capacity planning, and simultaneously decreasing costs. AI can deliver improvements to large parts of the global supply chain.

Collaborations between companies and universities are essential drivers of innovation. These relationships have long been a mainstay of corporate R&D and served as an extended "workbenches" to solve short-term problems, provide new talent flows, and created the knowledge foundations for future solutions. As many corporations turn to open innovation to supplement their internal R&D efforts, universities have become essential partners.

Significantly, there is a growing need to connect academia with companies working in the field of AI applications. These will foster the innovation ecosystem and help meet the demand for expertise in this rapidly growing technology. Here, the focus will be on examples of AI in retail and supply chain with some real-life AI solutions for retailers which have proven to realize the above mentioned aims and the efficacy of academia and industry collaborations.

**Keywords:** Artificial Intelligence (AI), retail, demand forecasting, optimization, fuzzy logic combiner