



Research School for Operations  
Management and Logistics

**Pricing dynamic and experience-based maintenance contracts**

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This research will focus on dynamic and experience-based pricing models. Rather than fixing a contract price at the start of the contract based on a set of 'static' covariates that are known prior to the contract, the contract can be adjusted to include a baseline price that is augmented by a variable price based on dynamic time-varying covariates that are observed during the contract. This is in line with usage-based insurance products with tariff structures based on telematics collected data. Next to these, we will investigate how a posteriori price corrections (discounts or penalties) can be quantified and implemented, based on e.g. improper usage of the machine. This approach is in line with a posteriori or experience-based pricing mechanisms, such as bonus-malus systems in insurance. The doctoral research will be devoted to investigating how to include these IoT and maintenance adherence data, which covariates matter when quoting such contracts, and how to design meaningful multi-period pricing structures that are dynamic and/or experience-based and explainable to all parties involved.