Title (EN): **Decision influence and proactive sale support in a chain of convenience stores**

Title (SK): **Vplyv na rozhodovanie zákazníka a podpora aktívneho predaja v sieti kamenných obchodov s rozličným tovarom**

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Cooperating partners: Datapac s.r.o.

Final customer: Slovnaft, a.s.

Obtained funds: in negotiation

Annotation: In online shops, different methods are currently applied to customer decision-making when buying goods. These methods rely on identifying the customer either by using a cookie or require login into customer area. Once the customer is identified, various information is collected in order to customize offers. The situation is somewhat more complicated in brick-and-mortar stores. Usually, the identification is not possible or it is performed during the payment, when there is not enough time for recommending relevant goods to the customer. In this cooperation with the commercial sphere, we are trying to solve the problem of effective recommendation of goods in the network of shops at Slovnaft filling stations. We come out from the history of transactions in pilot stores where we got detailed bill information. We also have a customer card number assigned to some transactions. In the first step, we designed and tested a recommendation model to help the vendor recommend the most likely goods to customer based on the accounted products and various attributes; e.g., location- or temporal- based. Offline evaluation over historical data provided encouraging results; i.e. 70% of accuracy in recommending a suitable product type while having the base of choices of about 4.5 thousand products. Currently, we are working on improving the model by including customer card data.

Main scientometric outputs:

1. DLUGOLINSKÝ Štefan - NGUYEN, Giang - ŠELENG, Martin - HLUCHÝ, Ladislav: Decision influence and proactive sale support in a chain of convenience stores. IEEE International Conference on Intelligent Engineering Systems INES 2017, pp. 277-284, ISBN 978-1-4799-7677-5