Companies’ reports indicate a mixture of success and failure in Product Configuration Systems (PCS) projects. Moreover, the attention paid to PCS across different industries is increasing. Therefore, more studies are needed to analyze risks, costs, and benefits of PCS. This paper uses real case projects to demonstrate the cost-benefit analysis of PCSs in real industrial setups. Hence, this article quantifies savings in terms of reduced working hours, and the cost implications with reference to development, implementation, and maintenance. The study fills the gap in previous research by addressing what the influence of other factors on gained cost-benefits from PCSs are likely to be. This study aims to explain why some PCS projects are more cost effective than the others. While there are a number of factors affecting the cost-benefit analysis in PCS, the focus of this study remains mainly on the number of users and complexity of the project. The comparison in the case studies revealed that both factors have a positive direct correlation with the gained cost benefits from PCSs can be forecasted. Aiming to investigate these effects, the following propositions were developed:

Proposition 1. The higher the number of users in PCSs, the higher Return on Investment (ROI) and cost-benefits.

Proposition 2. The higher the complexity in PCSs, the higher ROI and cost-benefits.

Firstly, we calculate the cost of three different projects during their last four years. Secondly, we calculate the cost-benefits during the last four years. In this research, we focus on the saved man-hours in calculating the ROI on multiple case projects in one case company, while investigating different factors influencing the ROI. Then, the data related to the number of users in the last year and the complexity of PCSs is retrieved. Finally, based on the knowledge in the literature and our research propositions, we demonstrate the results using graphs and discuss the findings.