The purpose of the master thesis was to determine the critical success factors in Vendor Managed Inventory (VMI) implementation projects and develop a toolbox for companies adopting VMI. A comprehensive literature study of the theoretical aspect of VMI and its adoption was conducted to identify the possible success factors in VMI implementation. Subsequently a pan-European survey was conducted in the form of online questionnaire to test the success factors in practice. Fifty eligible responses to the survey out of the total 64 were received from 11 countries. The results of the research confirmed general understanding and earlier studies that among the business relationship factors the most critical success factors in VMI implementation were trust, quality of the relationship between partners, and commitment of partners and people. Secondly, user training, strong project management, and aligning the business processes to VMI play vital role internally in the company. Finally, accuracy of the shared demand and master data, using EDI, and the suitable IT solution were the most important technical key success factors. The main value of the study lies in the pan-European extent of the survey, practical contribution in the form of VMI Implementation Toolbox, and input of the results into the new pan-European VMI Manual of ECR Europe.