This Bachelor thesis deals with the complex evaluation of the Xiaomi Band wearable device. The opening theoretical section offers insight into the general issue of self-measurement and describes the smart bracelet functional properties from the technical point as well as the accompanying application. The practical part presents the results of research that looked at the properties of the smart bracelet and data attributes from the perspective of its user. The aim was to determine the meaning of long-term self-measurement and to assess the objective benefit and effect on its user. The research was mainly focused on establishing the accuracy of Xiaomi Mi Band smart bracelet data measurements as a general precondition for the meaning of long-term self-measurement.