Current approaches to assess consumer products for usability and comfort often involve expensive user trials. For external ear products such as headsets and bluetooth communication devices comfort is an issue leading to many concepts being rejected at the late stages of the product development process once prototypes are developed and tested. Current databases for anthropometric data e.g. Peoplesize Software [Peoplesize 2008] lack data regarding useful ear dimensions of the external ear area. This paper examines the incorporation of anthropometry in the design of external-ear devices, resulting in a faster development process and better quality products. Anthropometric dataset have been acquired through existing databases and a series of anthropometric methods performed on population samples. The context of the study is to assess the methods to collect data utilising a case study from the ear industry. The intention of this approach is to investigate and evaluate the methods leading to a recommendation of their usage during the different phases of the product development process. The current study explores the complicated relationships between comfort, technology and humans through the assessment of the various methods.