## Comparison of 3D Body Scanning Mobile Applications: A study of MeThreeSixty and 3D Look Mobile Apps Body Measurements

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## Abstract

Clothing industry around the globe frequently used human body measurements for garment production. The study aims to determine the potential of 3D body scanning feature of mobile application for product development and selection of right size and fitted garment using fashion e-commerce platform. Digital measurement methods have been introduced recently and developed extensively replacing the traditional manual measurement techniques. The paper addresses to determine the practicability of digital measurements acquired from 3D body mobile scanners in terms of reliability and validity. Formerly, for size and fit recommendation and visualisation, using technology driven interfaces user interaction was approached in terms of receiving body size and shape information manually as well as past purchase history of a garment. However, recently the web 3.0 metaverse fashion technology feature such as 3D body mobile scanners have the potential to enhance the fashion virtual size and fit e-commerce platform for online apparel shopping. Therefore, 3D mobile scanners would be helpful to enrich the accuracy of garment size and fit prediction and garment construction for online shoppers without using user's manual information input in the interface. An exploratory quantitative study has been conducted. The two mobile application scanners (3D Look and MeThreeSixty) have been studied for this paper. The digital body measurements have been analysed comparatively to determine the difference of body measurements extracted from both applications for each participant. Reliability comparison have been estimated in terms of Standard allowable error (cm) of Measurements. Validity was analysed according to ISO 20685 (BS ISO 20685, 2010). The reliability of 3D body scanning technologies has been evidenced in various studies. The Pakistani female, age 18-65+ years has been recruited to participate in the study. The data has been collected by self-scanning method using their own smartphones at home. The mobile applications are available free for users on both Android and iOS.

Keywords: Mobile app scanners, Fashion e-commerce, 3D body scanning

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