UK National Sizing Survey (SizeUK) Database

Overview

The UK has recently completed its National Sizing Survey (SizeUK) of 11,000 subjects using 3D whole body scanners to automatically extract 130 body measurements from each subject using two stances; standing and seated. This highly accurate size and shape data, together with each subject's 3D point cloud, is held securely in a UK anthropometrics web-database, available for online data mining.

SizeUK is a collaboration of the UK Government, 17 major UK retailers, leading academics and technology companies.

The retailers were responsible for recruiting subjects to be measured, with subjects being encouraged to register online. The principal UK clothing colleges managed the data collection process; this was seen as an educational opportunity.

The USA scanner company [TC]2 developed special size extraction software to automatically extract 130 'SizeUK' measurements from a body scan, reducing manual measuring to eight measurements, such as height and weight. Bodymetrics, a UK company, is hosting the data on a secure, web-database service accessible through proprietary online data analysis tools.

SizeUK Retailers

The SizeUK data is owned by the UK Retailers: Arcadia Group, BHS, Debenhams, Otto UK, Great Universal Stores, House of Fraser, John Lewis Partnership, Littlewoods Retail, Marks and Spencer, N Brown, Monsoon Accessorize, Oasis Stores, REDCATS UK, Rohan Designs, Speedo International, Tesco Stores.

Recruitment & Data Collection

Volunteers were recruited through publicity in the national media, through the retailers – mails shots, in-store leaflets etc., and the SizeUK web site.

Volunteers were asked to provide information on age, gender, ethnicity, perceived size, choice of measuring location and contact details. Subjects were then selected using quota sampling to meet the national statistics of age, ethnic origin, socio economic group and geo-demographics.

The result was a statistically representative sample of the UK population of approximately 5,000 female and 5,000 male subjects between the ages of 16-90+. Children were not included in the survey.

Subjects were recruited from three geographic regions containing a total of eight data collection points:

- Southampton
- Cardiff
- Birmingham
- Manchester
- London
- Nottingham
- Leeds
- Edinburgh

Subjects, wearing underwear, were first scanned in two poses, standing and seated. 8-10 manual measurements, not covered by the scanning process were then taken.
Each subject was asked to complete an extensive market research questionnaire, which captured information on personal details, clothing issues, shopping habits and preferences, lifestyle habits including health & fitness, occupation and employment and ethnicity.

**Size UK Database**

**Information in the database includes:**

- Personal details on each subject (excluding name & address)
- 11,000 subjects – 50 % women and 50% men
- 140 measurements per subject
  - 130 electronic
  - 8-10 manual
- 1,540,000 measurements in total
- 22,000 scans – 2 per subject
- Market Research Information – 40 clothing, shopping and lifestyle sets of information

**Automatic Measurement Extraction**

Accuracy speed and cost are the prime benefits of using automated measurement extraction. Trials have shown that automatic measurement extraction is more reliable than traditional anthropometric measuring methods. This is due, in part, to measurements being taken without physical contact and from a person in a relaxed pose.

This stands in contrast with manual methods of measuring, where there is body surface contact that can lead to the compression of soft tissues; this particularly affects some girth measurements. Small differences thus can arise between measurements produced by automatic and manual techniques.

**Survey Results**

The SizeUK results are available in the form of:

1. A CD-ROM containing Standard Data Analysis of the measurements, shape data and market research. This includes:
   - Tabulated statistical analysis of the Market Research Information.
   - Statistical analysis of the measurement information covering (for each measurement) mean, max/min and frequency which can be provided in total or cut by age, region, socio economic group or ethnicity.
   - 3D shape analysis (models of selected population subsets) which can similarly be provided in total or cut by age, region, socio economic group or ethnicity.
   - Cross-correlation charts of measurements and 3D shape.

**UK National Sizing Survey (SizeUK) Information**
2. Online access to the SizeUK database through a suite of software tools.
   o This allows users to conduct their own targeted and private data analysis based on their customer profile. Access will be available for up to five years.

3. A Bureau Service provided by Bodymetrics which allows:
   o Subsets of the data on the CD-ROM to be extracted according to the customers requirements
   o Bespoke versions of the reports in the CD-ROM, customized to your requirements.
   o Bespoke analysis using the software tools based on the customers requirements and target profile. This service provides a range of more advanced analysis to be performed and can even provide fit mannequins produced to match the size and shape of your “average” customers.

Due to the Data Protection Act and the need to preserve Subject privacy, SizeUK Clothing companies and any third parties who purchase the results, are restricted from accessing individual ‘raw data’.

**SizeUK Data Sales and Prices**

Customers will first be required to buy a Data License giving them the right to use the SizeUK data. This also prevents the data from being misused or copied. The level of the Data License Fee will depends on turnover of the company and the amount of data required. (See attached chart).

The women’s and men’s data can be purchased separately.

Customers will also be required to pay a Data Delivery Fee. This will vary according to the form in which the data is required. For the CD-ROM, it covers the purchase of the Standard Data Analysis reports and for online access using the software tools it covers the provision of the software tools, maintenance and support.

Bodymetrics is offering a set of Bureau Services to those customers who would like bespoke analysis carried out on their behalf. This does not include the Data License Fee. These are also set out on the attached sheet.

If you are interested in purchasing the data, please contact Bodymetrics on 020 7679 5205 or email info@metrics.com