



UK National Sizing Survey Information Document

Overview

SizeUK – the UK National Sizing Survey is survey 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; 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 just 8 measurements, such as height and weight. The results were made available in 2004. Sizemic, a UK company, is hosting the data on a secure, web-database service accessible through proprietary online data analysis tools and has the exclusive rights to sell the data on behalf of the Retailers. The potential commercial benefits for Retail clothing brands acquiring the data are considerable (see over).

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, 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 3 geographic regions containing a total of 8 data collection points:

Southampton	Cardiff	Birmingham	Manchester
London	Nottingham	Leeds	Edinburgh

Subjects, wearing underwear, were scanned in 2 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 can therefore arise between measurements produced by automatic and manual techniques.

Survey Results

The SizeUK results are available in the form of:

- **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 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.
- **Customised Data Analysis** through online access to the SizeUK database using a set software tools. This allows users to conduct their own analysis on a sub set of the data based on their customer profile (gender, age, region, ethnicity, socio-econ).
- **Data Analysis Services** provided by Sizemic. Sizemic offers a range of basic and advanced data analysis services for customers who would like analysis carried out on their behalf. This includes measurement and shape analysis, hit rate analysis, size chart development and 3D pattern generation. Sizemic now also offers a range of generic fit mannequins based on the SizeUK measurement and shape data.

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'.

Commercial Benefits

For clothing companies the data provides the potential amongst others to:

- Improve the fit and specification of your garments
- Optimise the efficiency of your size charts
- Maximise the percentage of your target customer profile that can fit your clothes.
- Increase sales by understanding the demand in certain size categories e.g. outsize, petites
- Reduce size related returns
- Improve buying ratios and size allocation to retail branches.

SizeUK Data Sales and Prices

Customers first need to purchase a Data Licence giving them rights to use the SizeUK data. The Data Licence Fee is a one off fee based on company size (turnover). The women's and men's data can be purchased separately. The Data Licence Fee includes provision of the Standard Data Analysis package.

Customers who wish to use the online analysis tools to carry out customised analysis need to purchase an additional Data Access License, which covers the provision of the software tools, maintenance and support. The Data Access License Fee is a fixed annual license irrespective of company size.

Customers who wish to use Sizemic's data analysis services must have purchased a Data Licence first.

If you are interested in purchasing the data please contact Sizemic on +44 (0)20 3051 2644 or by e-mail at info@sizemic.eu