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BOWLING ALONG

A Design Model for a Small Business Niche Market



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ABSTRACT 2006

BOWLING ALONG

Lawn bowls is an outdoor sport which can be played all year round on a rink of either grass or astro-turf. Traditionally the game has attracted older or more mature players as it is a non contact, low impact and social sport but in recent years younger people are also enjoying the game. Since Sports TV has hit the screen, many sporting codes have made radical changes to their dress code and their game to make it more exciting for television viewers to watch.

Little investigation has been carried out into the changes in the style of dress for lawn bowls. Although there is still a need to conform to dress requirements for competition play, in recent years logos in club colours have been printed onto the traditional white shirts.

This study evaluates a number of design models used in the production of apparel. A preliminary model was created and used to develop a set of clothing for women lawn bowlers based on information gathered from the target market, available literature and visual analysis of clothing worn for lawn bowls in New Zealand over the period 1940 to 2006. The clothing was wear trialled and results evaluated and reflected upon. Through design practise, a new design model is created that is particularly relevant to small businesses manufacturing ergonomically designed sports apparel for a niche market.

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GLOSSARY

AATCC	American Association of Textile Chemists and Colorists. This is a society devoted to the advancement of textile chemistry that provides details of technical standards, regulations, specifications, logistics data and industrial catalogues etc. It also seeks to promote research and increase knowledge of the application of dyes and chemicals in the Textile Industry.
Astro turf	A manmade product resembling grass that provides a surface that can be played on all year round.
Bias cut	Fabric cut at a 45° angle from the warp or weft to enable maximum stretch in the fabric.
Blind tests	Tests where participants are unable to view the product being assessed.
Block pattern	A basic pattern from which style adaptations are made (Shaeffer, 1989).
CAD	Computer Aided Design. Computer software programmes that design, produce and manipulate patterns and create lay plans.
CMT factory	Cut, make and trim. Refers to a factory which undertakes to manufacture clothing from a given design. Patterns are usually supplied and the finished garment returned to the designer for distribution.
Crocking	The transference of colour from the surface of a coloured fabric to another fabric, principally by rubbing.
Design (garment)	The style and shape of a garment or combination of garments.
Design (model)	A system or process of creating, producing and marketing a range of garments.
Ergonomic	In this thesis, ergonomics relates to garments that have sufficient ease built into the pattern to allow for unrestricted movement without compromising the fit or design.
Grading	A method for increasing and decreasing patterns proportionally from one size to another in order to make a complete range of sizes (Shaeffer, 1989).

Grade rules	The set amount of increase or decrease designated to each grading point for any given pattern piece (Shaeffer, 1989).
Grinning	Stitching defect caused when threads are loose; the seam spreads to show the stitches which look like teeth in a grin (Laing & Webster, 1998).
Hydrophilic layer	A fabric layer in a material or garment which attracts and holds moisture.
Lay	A stack of fabric plies superimposed one on top of another.
Lay-plans	The placement of pattern pieces to meet technical requirements and to maximise fabric utilisation on any given lay.
NZWBA	New Zealand Women's Bowling Association.
Polar fleece	A brushed woven or knitted fabric generally made from synthetic fibres. The fabric is used mainly for casual or sports clothing because it is light and easily laundered (Collier & Tortora, 2001).
Seye	The underarm point from which shaping for the armhole begins.
Seam slippage	Fabric damage when yarns pull away from stitching lines because of excessive strain in the affected area (Laing & Webster, 1998).
Semiotics	The study of signs and symbols within the written word which transfer messages or express ideas, meanings and concepts to the reader.
Skort	A garment which is a cross between a skirt and shorts. The front is designed to look like a skirt with a centre front inverted pleat and the back to look like shorts.
Toile	A sample garment usually constructed in a similar or the same fabric as the intended final garment.