Thesis for the degree Doctor of Philosophy in Textile Management

Mass Customised Fashion

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Abstract

The background to this thesis is the dynamics and institutions of the fashion world. They have developed out of reasons of convenience and on the whole they work, but there are possibilities of improvement. Time from style and colour-direction to market is up to 18 months, from design to market 12 months and from forecast to market six months. With such long lead-times, there will be a few inherited problems such as matching supply and demand and offering sizes to people with non-standard body shapes. Some of the problems are related to mass and volumes, it is simply not possible to produce garments that fit everybody’s needs and to keep them in stock. The result of the long lead-times and need for mass and volume is low forecast performance, a forecast error of ±40% six months prior to the season is not unusual, which in turn leads to a sell-through percentage of about 60 percent.

To address some of the problems of the fashion world a research initiative called Knit on Demand has been developed. It is a research project at the Swedish School of Textiles, in collaboration with the knitwear manufacturer Ivanhoe AB and the fashion retailer SOMconcept AB. The purpose of the project was to “…develop and test a new production and logistic solution for agility in customer relations.” To fulfill the purpose of the project, a supply chain for customised knitwear was set up and then tested. Customers customised and bought their garments at SOMconcept in Stockholm; the order was then transferred to Ivanhoe who produced the garment and then delivered it to the customer within a couple of weeks. The supply chain has been analysed on supply chain performance, customer behaviour, design and technology. In addition to the Knit on Demand supply chain, SOMconcept’s other products have been analysed and a simulation of Shima Seikis Ordermade system has been performed.

The methods in the thesis are mostly qualitative with elements of quantitativeness. An action research methodology was applied to develop the project and then a number of case studies and simulations.

The results show that most of the customers that are purchasing mass customised garments are niche customers that would have problems finding garments that fit them in the conventional fashion outlet. Important to the customers are service in the store and the experience of customising their garments. Since a mass customisation concept works on niche markets it would benefit from the Long Tail economy that gives better access to niche customers.