Articulating the fashion product life-cycle
Jon Edward Spragg

Articulating the fashion product life-cycle

What is it about?

The paper describes a framework for developing demand (sales) forecasting models for the fashion industry that emulate the fashion product life-cycle model beloved by fashion marketing professionals. The framework employs formal models based on the Bass dispersion model and the News Vendor inventory management model. The framework produces a model that speculates about the sales growth, maturity, and decline of a fashion product over its life-cycle and suggests optimal levels of inventory that should be maintained over time to satisfy that demand.

In partnership with:

Why is it important?

My interest is how to control waste in a fashion supply chain through better forecasting and stock management. The fashion industry is particularly prone to waste; it is reckoned to be the fifth-most polluting industry in the world. According to a recent report consumers in the UK purchased 1.13m tonnes of new clothing while £30bn-worth hangs about gathering dust (Lucy Siegle: Guardian News and Media Sunday 30 July 2017). While consumers are urged by various campaigns to refrain from buying so many one-off garments and researchers are looking at ways to up-cycle obsolete fashion through redesigning discarded garments for re-sale, the real problem of waste is found further upstream in the value chain, caused by poor demand forecasts and over production. An industry insider, reported to Lucy Siegle (Observer Sunday 30 July 2017), reckoned that over production amounts to 3-5% of every factory's inventory.
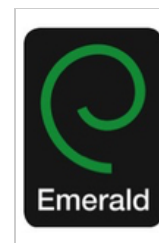
Perspectives

Jon Spragg (Author)

The framework described in the publication is very much 'work in progress'. I am currently exploring ways of enriching the model by employing Bayesian analysis techniques to better identify likely sales outcomes and the profitability of an enterprise. .

Read Publication

The following have contributed to this page: Jon Spragg