Toward a new paradigm in fashion design and communication, digitalization and integration of diverse processes

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Abstract
Today it is possible to digitally render and visualise three-dimensional garments. However, in comparison to other design disciplines, such as industrial design or architecture, 3-D digital visualisation in the fashion industry is still done in a limited scale. Three-dimensional visualisations open up for new ways of communicating and presenting garments and also radically changes the design process as two-dimensional sketches become obsolete.

This work shows how concept, design, production, communication and sales of fashion goods may be interlinked through digitalization of the full process, thus changing the processes of design driven fashion brands to one where all these aspects permeate each other. This is developed through experimentation and tests of new models in a small scale in the Atacac design studio. As such this is practice based design research presenting new foundations for design.

Based on the ability to digitally visualize the garments before they are made, combined with online sales, we present a business model in which the garments are for sale before they are produced, and priced according to an algorithm similar to that used for flight tickets with dynamic pricing. This means a lower price before the item is produced, a "normal" price when the item is stocked and an increased price when the goods are about to run out of stock.

Such a process is beneficial both from a liquidity perspective and from a sustainability perspective as it permits a more efficient and sustainable production, logistics and consumption, meaning the opposite of today's short-term cycles where garments are sold at reduced prices after a few months.

The purpose of the model is:

(A) The first part of the sales functions as a crowd funding to finance production addressing the liquidity problem to finance the production of many start-up fashion brands.

(B) The model allows brands to check the interest in new products and when X number has sold the production starts.

(C) Tackling today's unsound short cycles with frequent sales intervals by highlighting the value of goods instead as they are displayed.

Atacac is a Swedish based fashion research studio founded by Rickard Lindqvist and Jimmy Herdberg. Atacac rethinks and reworks the way of designing, presenting, producing and selling garments by challenging every step in the process. Atacac develops methods of 3D visualisation in collaboration with the creative studio Kokokaka based on the recent theories of pattern making and design presented by Lindqvist (2015).

www.atacac.com
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