

Mass Customized Fashion: Importance of Data Sharing in the Supply Chain

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Nordic Retail and Wholesale Conference, NRWC 2018, 7-8 November, Reykjavík Iceland.

Introduction

The presence of mass customization (MC) in the fashion industry was recognized a long time ago, but still, has not reached its full potential. Surprisingly, MC is still confused with mass produced ready-to-wear fashion (Fiore, Lee, & Kunz, 2004). MC is a production strategy to generate individual uniqueness at low cost, where globalization and technological improvements, has made the fashion industry even more competitive (De Raeve, Cools, De Smedt, & Bossaer, 2012). In our contemporary fashion retail world with an expanding supply from omni-channel retailers and e-tailers, the market for fashion has become overwhelming, and might become a serious threat to sustainability if the industry keeps on producing to an overheated market (Claudio, 2007). With an overflow of fashion products, retail strategies are changing, embracing motivational drivers such as individualization of shopping in terms of services, often illustrated as curated retailing¹ (Sebald & Jacob, 2018). This phenomenon could be seen as mass customization of services, where retailers are trying to tailor both online and offline shopping experience to every unique customer with the help of personal shoppers and/or advices, combined with individual offerings and campaigns (price, delivery costs, brands, and customer happenings). But where can we identify true MC with promising ideas, contributing to a more sustainable fashion industry?

Today, individualized offering in terms of garment's style, fit and color can be found on many online mass customization stores, with limited reach to physical stores mainly because e-channel makes information collection and order processing faster and easier (Li, Huang, Cheng, & Ji, 2015). For instance, the Swedish online retailer Tailor Store AB, started offering mass-customized shirts for men in the year 2003 ("Tailor Store: One Size Only – Yours. Skräddarsydda skjortor.," n.d.). This online fashion retailer has an interactive online product configurator that allows the customer to tailor the shirt according to individual needs and wants. People can change the style, fabric and fit by interacting with their online product configurator. However, a configurator like that increases the complexity of production processes (Mukherjee, 2017) and affects the objective of low costs. Many operations still require manual work like adapting the standard size pattern to the newly obtained measurements, adjusting the production plan, as every garment is unique in some way. This becomes a hindrance to achieve cost-efficiency and hence is an unresolved issue from the industry point of view (Zancul, Durao, Rocha, & Silva, 2016). Due to the need of manual work described above, the so called mass customization can't really be seen as "mass" produced. In addition, another company called Unmade ("Home | Unmade," n.d.), realized a business opportunity in this regard. It introduced an online platform that connects the customer and manufacturer by transforming customer needs into production ready information. With this platform they combined the roles of various supply chain actors to provide a common solution for several participants.

It can be inferred from the above instance that every actor in the fashion supply chain holds a certain type of end-user data. It is not certain, however, that there is an effective mechanism of information sharing within the fashion chain, even if many agrees upon the promising future for MC. MC requires an integrated supply chain to facilitate seamless information flow. This can provide additional data that can be utilized for designing an efficient MC Service and in turn enhancing customer experience (Grieco et al., 2017).

¹ "Curated retailing combines convenient online shopping with personal consultation service to provide a more personalized online experience through curated product selections, orientation and decision aids, and tailor-made solutions based on the customer's preferences" (Sebald & Jacob, 2018, p 189).

Purpose & Research Question

Currently, the major reason for disintegration in the MC supply chain is due to competition. Because of which the manufacturer offer standardized garments through retailers and customized garments through their online channel (Li et al., 2015). We believe that the fashion industry is ready to seek joint ventures among its various actors to innovate the processes that can facilitate mass customization. There is a need for the actors to recognize the value of data they possess for the development of the fashion industry as a whole. In this regard, the aim of this paper is to address the following research question:

What kind of data is available in the fashion supply chain and what are the barriers that restrict various actors to share this data and work together to cater to the mass customization business model?

Design/methodology/approach

We plan to present a Swedish case study based on interviews with various stakeholders (fashion designers, textile designers, fabric manufacturers, garment manufacturers, merchandisers, logistics & operations manager, and retailer) in the supply chain of a mass customization company.

Findings

We hope to present a case indicating that the promising idea with mass customization does not have to mean the downfall of the retail stores. In fact, the phenomenon should provide retailers with an opportunity to make use of the upcoming digital technologies, internet of things (IoT) and big data analytics for providing high-value services and unique experiences that drive the customers to the stores. Our ambition is to identify opportunities with data sharing and joint ventures with the common goal of designing a customer-centric supply chain that offers a completely customized purchasing experience, truly transforming the fashion retail industry.

Preliminary findings from projects performed by one of the authors, supports the idea that data in the fashion supply chain is crucial in understanding customer behavior and knowing their preferences. Handling this big data smartly can give answers to umpteen questions related to but not restricted to most promising customer attribution channels and technologies (Shao & Li, n.d.). This data cannot only help in personalization but also target offers at point of sale and other touchpoints (any point of interaction with the customers), blending their offline and online presence (Meyer & Schwager, 2007).

The most common type of data collected by the retailers is the customer's purchase history, which does not help to comprehend each customer's interests and preferences. The data collected by the retailers is of utmost importance as it is collected directly from the customer. However, the type of data that the retailers are gathering is not sufficient. According to a Forrester study, over 60% of the customers are willing to provide information directly to the retailers by filling short surveys or questionnaires. However, only 39% retailers are actually practicing this. In addition, the kind of information asked is not the ones customer actually would like to share (Murray & Consulting, 2017). The end aim should be an on-demand supply chain where it's not just customization. Customization requires active participation from all the actors in the supply chain, so it is also the ability to re-stock the shops more efficiently and respond to trends quicker.

Keywords: Mass Customization, Big data, Smart data, Integrated Supply Chain

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