Chapter 3
Mastering Fashion Supply Chain Management and New Product Development in the Digital Age

Kijpokin Kasemsap
Suan Sunandha Rajabhat University, Thailand

ABSTRACT

This chapter indicates the perspectives on retailing and Supply Chain Management (SCM); trends and issues with fast fashion industry; the overview of Fashion Supply Chain Management (FSCM); fashion retail supply chains and fashion sales forecasting; fashion retail supply chains and sustainability; the overview of New Product Development (NPD); NPD process, social media, and digital environments; NPD, ecological marketing, and Life Cycle Assessment (LCA); NPD performance and supplier-buyer relationship; and the importance of NPD collaboration. In addition to the traditional functions of logistics management in fashion companies, which include inventory management and transportation management, FSCM places a strong emphasis on both collaboration and partnership among various channel members along with the fashion retail supply chains. With the advance of the Internet and social media, NPD strategy provides a beneficial framework for creating the new products and improving the product performance, product cost, and quality of the existing products.

INTRODUCTION

In recent decades, the fast fashion industry has been characterized by various operations across both developing and developed countries (Turker & Altuntas, 2014). Fashion retail is recognized as having a strong focus on product-centric innovation and seasonal product development (Sorescu, Frambach, Singh, Rangaswamy, & Bridges, 2011). Fashion retail is the major sector in retailing by number of stores, brand proliferation, and importance for urban atmospheres regarding fashion supply chain management (FSCM) (Sen, 2008). Challenges specific to the fast fashion industry include the massive product variety and the very short product life cycles (Mehrjoo & Pasek, 2014).

DOI: 10.4018/978-1-5225-1865-5.ch003
New product development (NPD) projects are the important drivers for organizational performance (Lechler & Thomas, 2015). Kettunen et al. (2015) indicated that any NPD project is susceptible to uncertainty concerning the success of its development. This uncertainty relates to the quality of the resulting product and to its commercial success, which is influenced by market conditions (Kettunen et al., 2015). To ensure product quality and consistency, the relevant combination of product and process elements is important (Hayakawa, 2015). A customer-based structure enhances the ability of NPD companies to coordinate the needs of given customer segments based on the new product information from different sources across organizations (Reinartz, Krafft, & Hoyer, 2004).

NPD in the fashion industry covers a wide range of activities, such as market research, trend analysis, merchandising, product design, and product prototyping (Frings, 2008). Because of both technological developments on the Internet and user preferences, customer involvement in NPD is becoming more popular and receives broad attention from both academia and businesses (Weber & Geerts, 2011). In order to expedite the NPD process in the fashion companies, it is necessary to improve the internal processes in a fashion enterprise as well as the connections with external parties (Choy, To, Ning, Lee, & Leung, 2015). The utilization of information and communication technology (ICT) in the NPD effort leads to the market success of a given product when launched (Jespersen & Buck, 2010).

This chapter aims to bridge the gap in the literature on the thorough literature consolidation of FSCM and NPD. The extensive literature of FSCM and NPD provides a contribution to practitioners and researchers by indicating the advanced issues and implications of FSCM and NPD in order to maximize the supply chain impact of FSCM and NPD in the digital age.

Background

Fashion is a cross-sector concept (Brun et al., 2008), which is not only applicable to the clothing industry, but can also be extended to other fashion organizations operating in other sectors, such as leather goods, shoes, accessories, and jewelry. In recent decades, fashion retailers revolutionized the fashion industry by following what has become recognized as the “fast fashion” strategy (Čiarnienė & Vienažindienė, 2014). Fast fashion is a business strategy which aims to reduce the processes involved in the buying cycle and lead times for getting the new fashion product into the fashion stores, in order to satisfy the consumer demand at its peak (Čiarnienė & Vienažindienė, 2014). In the fashion industry, there is a tendency toward developing retail concept stores along with traditional sales in multi-branded stores (Teller & Reutterer, 2008).

The combination of sales channels comprised by multi-brand stores, department, chain stores, and concept stores is a major challenge to the innovation and technology development capabilities of the brand owner (Grewal & Levy, 2009). Organization of retail chains is expected to be a prerequisite for the understanding of organization of innovation in retail settings (Tambo, 2014). The increasing request for speed and efficiency in the fashion retail supply chains, is adding more complexity to the system which asks for the high product availability and quick response to the changing market demand (Iannone, Martin, Miranda, & Riemma, 2015). Regarding fashion retail channel, the preeminence of distribution and retail upon purchasing and manufacturing is taking place in the fashion industry (Caniato et al., 2007).

In order to face the new competitive challenges of globalized markets, industrial small and medium-sized enterprises (SMEs) must be able to adapt to the new organizational approaches, to innovate and to further develop their networks (Moreira & Freitas da Silva, 2015). Nowadays, the Internet facilitates the electronic business-related NPD process that organizes the virtual resources (Strang & Chan, 2010).