

## Discover the Digital Technology Application in Fashion Business Models <sup>★</sup>

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### Abstract

In the last few decades, there has been a surge of interest in the development of fashion business models to assist fashion companies in reducing the cost and to efficiently manage business processes. These business models are developed to manage the internal operations within the company through adopting complex formulae and algorithms to reduce the waste at each procedure. However in today's fashion business market, global sourcing and global corporation are much more important than before. The relationship between the fashion company and its suppliers, the relationship between the fashion company and its customers, and the management of these relationships. All of them are crucial parts in the business strategy. The competition between fashion companies is no longer in company level but instead is supply chain versus supply chain. Trying to take the massive information into consideration by using traditional digital technology is not a wise decision when developing business strategy. Further thinking, the information flow through the supply chain has the same characteristics "5Vs" as big data: Volume, Velocity, Variety, Value and Veracity. Put another word: the management of information flow in supply chain is the management of big data. There is no doubt that the digital technology under big data environment will fundamentally change the whole supply chain.

The first objective of this paper is to identify the key weakness of lean and agile logistic supply chain models in literature. The second objective is to point out the technology challenges to develop the Tomorrow's models which build an agile response upon a lean platform: How to set up virtual networks from the early designing stage to the last consuming and feedback stage? How to set up the information standardization and synchronisation process in the system? How to specify the consumer requirements in fitting effects and functional performance of garments? The last objective is to discover the digital technology under big data environment which enable the information efficiently to flow through the whole supply chain.

*Keywords:* Business Model; Supply Chain Logistic; Big Data; Information Flow Management; Digital Technology

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## 1 Introduction

Business models have always attracted great attention from the academics and practitioners over the past years. Rasmussen considers business models as a tool to understand the company working process, and could be assessed, analyzed and extended to other companies [2]. The business model is a concept that a company manages commercial activities with proper business strategy in order to achieve competitive advantage. In this fast changing world, the successful and sustainable business models cannot be invariable. In fashion industry, the requirements for quickly response, frequent assortment changes and quality control are main challenges to traditional and current fashion business models [3]. Review of fashion business models in recent literature reveals that some research works are focus on managing internal operations within the company, which is mainly company-centric view in a lean thinking logistics [4,5]. Others introduce agile thinking logistic to address the quick response and frequent assortment while the quality of the products is ignored. A hybrid strategy (also called ‘leagile’) is introduced while the decision of de-coupling point brings another problem [6]. Within individual companies, the de-coupling point is mainly decided based on its inventory capability which causes postponement actions. In this paper, the lean and agile logistics are studied and compared with each other. Then a hybrid strategy is adopted to propose Tomorrow’s models which followed by the identification of its features and technology challenges. The possible technology gaps are identified. When dealing with this complicated situations and problems, the writer provides the new digital technology solution (big data) that could enable the Tomorrows models to come to realize. Further thinking, the big data technology which brings new functions for the Tomorrow’s models may fundamentally change the whole supply chain management.

## 2 Review Fashion Business Models and Supply Chain Management Logistics

### 2.1 Literature Frame

The business literature: it offers insights about the history of business, the key elements of business process, and how people develop the business models.

The information and information technology literature: it offers insights about the level of information in business process, the development of information technology, the roles information and information technology play in business models.

The supply chain management literature: it offers insights about how to quantify and measure the IT influence on firm performance.

### 2.2 From Business Models to Supply Chain Models

It is well acknowledged that the business is something involved with buying and selling, service, goods or company. Business is defined as the activity of buying and selling commodities, products, or services cited from the American heritage dictionary. The mainstream of academics is likely to study the business history linking with the age when an event happens in the human history. Learning from current published literature, people tend to classify and study the business