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Inhibitors of Restructuring Change in Textile and Apparel Enterprises

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Abstract

The paper addresses the problem of change inhibitors in textile and apparel companies. The textile and apparel industry is characterized by high dynamics of sector-specific change, the cyclic nature of its processes, and by changing fashion trends. Companies that change more slowly than their environment are characterized by inertia. The objective of the paper is to identify the factors inhibiting restructuring change in textile and apparel enterprises. The first part of the paper discusses the theoretical aspects of change inhibitors, placing them in the context of the theory of the population ecology approach and the notion of organizational inertia, that refer to the issues of restructuring change inhibitors. The second part offers an empirical illustration of change inhibitors. The study employs a quantitative approach. A linear regression equation is used to determine the factors most strongly inhibiting restructuring change in textile and apparel enterprises. The main inhibitors of restructuring change in the textile and apparel industry are identified.

Key words: textile enterprise, apparel enterprise, change inhibitors, inertia, seasonality.

Introduction

The paper addresses the problem of continuous restructuring change inhibition in textile and apparel companies. The issue of restructuring changes in the context of sector-specific change in the fashion industry is of great importance as it involves continuous adaptation processes and their inhibiting pressures. The textile and apparel industry is characterised by seasonality, which mobilizes product, marketing, and technological innovativeness. This sector-specific change is also linked with the recursive nature of the processes repeated for the purpose of manufacturing goods on time. Thus it should be assumed that textile and apparel companies use a variety of routines for the successful completion of a manufacturing cycle. At the same time, fashion products are strongly affected by the dynamics of esthetic and technological trends, hence their manufacturing and sale require the use of novel solutions. This duality in the functioning of textile and apparel enterprises, where the repetitiveness of processes is motivated by the need to seasonally launch new products, is suitable for research into change management. Thus the objective of the paper is to identify the factors that inhibit continuous restructuring changes in textile and apparel enterprises. The empirical part of the work illustrates the empirical thesis that the main inhibitors of restructuring change in the textile and apparel industry are sector-specific.

The inhibition of continuous restructuring changes may be explained using the notion of inertia. According to Pfeffer, inertia is the inability of companies to change as rapidly as the environment [1]. Thus the issue of organizational inertia becomes relevant in the context of comparing the rate of change within organizations with changes occurring in the external environment. In the population ecology approach, Hannan and Freeman emphasise relative evaluation of organizational inertia as weaker organizations become displaced by those that are better adjusted [2]. Therefore it is necessary to carry out relative evaluation of whether or not an organization, its structure, and core processes are characterized by inertia. While in the context of one set of external circumstances they might be considered rigid, they could be deemed relatively flexible under another. This has to do with the pace of changes in the environment, their nature, regularity, and scope, which are some of the constituent characteristics of a given market sector [3]. It may be argued that the notion of inertia is a relative category, and it cannot be evaluated without reference to a specific external environment. In the case of the textile and apparel industry, an approach incorporating the specific conditions of the sector seems additionally justified by the fact that sector-specific change is shaped by fashion and seasonal trends. Thus seasonality and global diffusion of esthetic patterns determine the way companies operate, including the repeatability of routines and processes reproduced within the fashion cycle.

Theoretical background

Drawing on the concept of inertia by Gilbert, one may assume that the factors inhibiting restructuring change may be divided into two broad categories: process-related and resource-related [4]. The basic tenets of population ecology theory were adopted by Gilbert [4, 5]. It was assumed that in the context of change proponents, organisations are affected by their environment. Observations were carried out at a time when technological change resulted in the need to conduct strategic reorientation. Gilbert made a distinction between two types of inertia: resource rigidity vs. routine rigidity [4]. According to him, inertia due to resource factors (resource-based profile) is easier to overcome than routine rigidity. It is more difficult to modify embedded behaviour patterns, beliefs, and, most importantly, the acquisition of new skills than to make investment-related decisions [4]. The resource and routine categories of organizational inertia and the way of looking at sector-specific changes correspond to different mechanisms of initiating organisational change [4]. Such a dual character of organizational inertia is characteristic of textile and apparel enterprises. The subject of research conducted by Wenting including the process of routine replication in top designer fashion houses is clearly based on this kind of dualism. Wenting draws attention to the role of the mechanism of standardisation of cyclical creative processes [6]. The specific character of the fashion industry is based on cyclicality. Work on seasonal collections is performed under the pressure of time, which on the one hand stimulates routine behaviour mechanisms [6], but on the other, tight schedules encourage hurriedly looking for creative solutions. Thus the process of routine replication, to a certain extent, conditions the functioning of textile and apparel enterprises, although it can also be the reason for organizational inertia and collapse.

Textile and apparel companies operate within a seasonal cycle, based on the repetitiveness of certain actions in the course of interplay between product development, marketing strategising, and product delivery. The day-to-day activities are classified as routines. According to Feldman and Pentland [7], routines

represent the form of human activity that determines both the stability and development of organisations. The notion of routine has also gained an important dynamic dimension, largely thanks to the contribution of the evolutionary approach. Routines encode the order of processes in an organisation [8]. Thus the concept of order emerged as an important category already in the writings of Weber. It may be defined as an "exemplary" or "obligatory" prescription for how to act [9, 10]. Referring this to the specific character of textile and apparel enterprises, one can draw a conclusion that the category of schemas of action is of great significance. Runfola and Guercini put forward the notion of the fast fashion formula, which defines the way of functioning and shaping routines in a seasonal cycle [11]. In this context they mention several models: a) a model concerning manufacturing companies oriented towards providing a quick response to their retail business customers, b) a model developed by retailing firms aimed at reducing the time of marketing, and c) firms that have a time lag between the design process and product availability in stores. Such models impose a certain schema of action to which other smaller companies from the sector aspire. The fast fashion formula dictates not only the way of acting but also the timing of completing the processes, providing a basis for desired routines, but at the same time posing a risk of inertia development. In the case of the textile and apparel industry, it would be worth indicating factors inhibiting change in the fashion cycle, as this would respond to a certain cognitive gap in change management.

Sector-specific change in the textile and apparel sector

The textile and apparel sector is largely driven by fashion phenomena. Fashion is a mode of communication between humans. In the Internet era, it is a globally spoken language that makes it possible to create and differentiate social groups and cultures. Fashion is also a changing mechanism that defines the textile and apparel sector in very specific terms. The traditional fashion periods are spring/summer and fall/winter. Nevertheless, as a result of technological and logistics advancement, the product lifecycle has shortened to about two weeks. This

model has been adopted by global corporations, but it is very challenging for smaller players and, especially, small and medium enterprises. The lifecycle of fashion and textile products also largely depends on the product development cycle, leading to great changeability in garment lines. Additional apparel lines may be added to collections and mid-season sales may be organised. In management terms, the product continuous restructuring process is continually ongoing in the textile and apparel industry.

Methodology and sample selection

The present study was conducted in the form of a survey. The entities examined were small and medium textile and apparel enterprises based in the Łódź and Mazovia Provinces. The survey was addressed to the owners or employees of those firms. In order to increase the sample size for the quantitative part of the study, three sampling frames were used. Firms were sampled randomly from the Kompass Database, the database of the Polish Textile Association (branch in Łódź), and that of an educational institution based in both the Łódź and Mazovia Provinces. The sample consisted of 337 small and medium enterprises (SMEs). The survey was conducted from April to July 2013. The statistical methods used included analysis of variance (ANOVA) and linear regression analysis [12].

Statistical methods for quantitative data

An empirical indicator of inertia was developed based on measurements of actions that may be characterized by inertia in organizational processes and routines. This synthetic indicator consists of measurements of 12 different types of actions and processes which may or may not be undertaken in companies operating within a seasonal cycle. (In the study, the process of internationalization was treated as an additional constituent element of continuous restructuring change. However, specific issues related to internationalization, or the forms and extent of activities undertaken abroad, do not fall within the scope of this paper [see: 13, 14]). For the sake of facilitating measurement, each constituent element of inertia was assigned the same weight. The correctness

Table 1. Operational areas within the seasonal cycle and partial dynamic as well as inertia indicators. Source: [12, 13].

Operational areas	Partial dynamic indicators	Partial inertia indicators	
Researching trends	Using trend researching services in the product development process, such as WGSN, Peclers Paris, etc., taking part in fairs such as Premiere Vision and Fashion Week, comparative shopping.	None.	
Product development within a seasonal cycle	An increase/decrease in average product production costs, an increase/decrease in the number of models/colors/pieces under a given model, introducing technologically advanced products, strengthening internal quality controls.	A decrease in the number of different garments, colors, or units of a given garment. Absence of product change in terms of apparel construction and material/fabric use in the face of internationalization. Fulfillment of unusual orders has not boosted internationalization or investment in cutting-edge technologies. The fulfillment of unusual orders may be hindered by: insufficient machinery, insufficient knowledge and skills concerning production processes, and a lack of raw materials/fabrics.	
Elements of the marketing strategy: sales dynamics, presentation of a collection in the seasonal cycle	Price differentiation within homogenous groups of products, visual merchandising, intensifying outdoor advertising, advertisements in glossy magazines, working with models, photographers, using social media.	A decrease in the sales of products/services over the past two years in the process of internationalization. Internationalization has not resulted in new ways of visual merchandising or advertisement.	
Distribution and logistics elements	Shorter delivery time, strengthening internal quality control and outsourcing services such as packing; opening stores abroad, building distribution channels abroad.	of a sales office abroad or to increasing exports.	
Investments	Opening of stores, the development of cutting and sewing rooms, investment in modern mannequins, furnishing, and store lighting, Making investments, introducing technologically advanced products.	Sale of some machinery during the process of internation-	

of the inertia indicator was tested by calculating correlation coefficients between particular constituent variables and the indicator (values exceeding 0.3). At the initial stage, analysis of variance was conducted to test for differences between means in different groups of companies. Subsequently a regression equation was developed to determine the factors most strongly determining inertia (the factors inhibiting continuous restructuring change in the seasonal cycle).

Development of the inertia indicator and measurement of restructuring change inhibitors

Within the quantitative methods applied, the basic aspects of the factors inhibiting continuous restructuring change were determined. The dependent variable was the inertia indicator, empirically evaluating change inhibition. It was constructed by inverting the aspects covered by the indicator of change acceleration [13] (however, factors accelerating change fall outside the scope of the present paper). A brief outline of the structure of the dynamic (acceleration) indicator illustrates how the approach to the research problem was explored and shows the

logic behind it. The dynamic indicator incorporated changes that can be potentially introduced in the process of product restructuring within the seasonal cycle in textile and apparel enterprises. The inertia indicator consisted of partial indices related to various aspects of operational areas (Table 1). The inertia indicator was developed as an inverted version of the dynamic indicator. The functioning of companies within a seasonal cycle is linked to the repetitiveness of certain actions in the course of product development, implementation of the marketing strategy, and timely product delivery. Work on a new apparel collection starts at least one season in advance. Throughout the season, additional garments may be developed and a subsequent collection planned. A given collection may be subdivided into product lines differing in terms of design, fabric, finishing and pricing. In these areas, firms follow routines and repetitively reproduced processes. At the same time, due to the specific nature of the sector, apparel enterprises have to engage in continuous product restructuring, develop new solutions, and enable spontaneous decision-making. It is assumed that one of the elements triggering micro-changes within the seasonal cycle

is the way of responding to unusual orders. Such orders may result in innovative use of knowledge concerning how the product is made or the service provided. They may also enable the firm to offer products different in terms of their construction or materials. In a sector characterized by the volatility and global diffusion of fashion trends, product innovativeness is an essential element in maintaining the continuity of firms. A lack of product restructuring within a seasonal cycle and response to unusual orders are thus understood as elements of process inertia in textile and apparel enterprises. The various corporate operational areas and corresponding examples of partial dynamic and inertia indicators are given in Table 1. The inertia indicator covered such areas as the product development process, elements of marketing strategy, distribution and logistics elements, as well as investments. Within these areas, the level of organizational inertia was measured. In the case of the product development process, inertia was indicated by, for example a decrease in the number of different garments, colours or units, absence of product change (apparel construction, silhouettes, fabrics), and hindrances of unusual orders. Inertia partial indicators of marketing strategy

are a decrease in sales and no new ways of ad and visual merchandising due to internationalization etc. As far as distribution and logistics are concerned, partial inertial indicators are as follows: unusual orders did not result in a new sales office abroad or higher exports etc. Investment inertial indicators include as follows: closure stores, sale of machinery, and no boost in hi-tech investments due to internationalisation.

One-way ANOVA was conducted to test for differences between the mean values of the dependent variables, that is, the inertia indicator, in particular sub-groups defined with respect to the values of the independent variable. The analysis included those variables which had a statistically significant effect on the inertia indicator (the significance level for the F-test was p < 0.05). Thus the null hypothesis, according to which the mean values of the dependent variable do not differ among the various categories of independent variables describing the companies studied, was rejected. Subsequently a post-hoc procedure was applied using the Duncan test to check which groups differed statistically significantly from each other and whether there were any uniform groups with no differences between them. In this way, it was determined which independent variable categories were characterised by higher or lower levels of inertia. Thus the following independent variables were used in further analysis and dichotomised:

- No new garments/lines added to the collection throughout the season (1 = yes; 0 = no),
- 2. Distribution through the Internet (1 = yes, 0 = no),
- 3. Income in the years 2008 2013 unaffected by the classification of products into fashion and basic products (1 = yes; 0 = no),
- 4. Share of fashion products in exports in the years 2005 2008 (1 = less than 30%, 0 = from 30% to 100%).

Restructuring change inhibitors in the linear regression model

Table 2 shows the most important factors leading to inertia (inhibiting restructuring change) in textile and apparel enterprises. The equation estimate is statistically significant (the significance level for the

Table 2. Restructuring change inhibitors in apparel enterprises in a linear regression equation.

	Partial correlation	Significance level
Distribution through the Internet	0.361	0.001
Income in the years 2008–2013 unaffected by the classification of products into fashion and basic products	0.252	0.004
Share of fashion products in exports	0.263	0.003
No new garments/lines added to the collection throughout the season	0.216	0.014
R ²	0.240	
F	9.934	< 0.001

F test was p < 0.001). In the inertia model, the independent variables explain 24% of the variance of the dependent variable (R^2 equals 0.24). All independent variables incorporated in the equation have a statistically significant effect on the dependent variable.

As can be seen from the table, the factors having the greatest effect on inertia levels are distribution through the Internet, a share of fashion products in exports of less than 30%, and income unaffected by the classification of products exported into fashion and basic products. A weaker, but also statistically significant, effect was observed for the variable defined as "no new garments/lines added to the collection throughout the season". The study revealed a number of restructuring change inhibitors and the fundamental elements of adaptation to the specific characteristics of the sector: internet communications, the right structuring of collections, an appropriate share of fashion products in exports, and operating in line with fashion seasons. Fast fashion formula consists of everyday and routine actions, being the very areas of operating within the fashion cycle that are also prone to inertial processes.

Discussion

Textile and apparel enterprises operate in an environment that is regulated by the seasonality of fashion changes and the global diffusion of trends. Technological advances in the sector concern not only product development but also marketing. Internet communication (websites) is an important element of brand building and strengthening the position of firms in a fast-evolving sector. While Internet tools are now generally available, firms' competencies in terms of promoting their products/services on the web vary greatly. The fact that the Internet may actually be a factor inhibiting change implies that Internet tools are used to varying degrees by different firms, which is a subject for further study. In the context of sectorspecific change, marketing communication and online tools are important elements of functioning in the industry, being elements of the fast fashion formula referring to retailing firms that want to quickly communicate information about their products. The globalization and diffusion of fashion enhance the need for the brand and product to be present on the Internet. Limited use of such marketing communication tools is one of the elements inhibiting continuous restructuring change. In the textile and apparel industry, the creation of a firm's image and brand identity is strongly founded on the firm's products. Product development consists of seasonally introduced changes or innovations. Sometimes distinct fashion products, despite selling worse than more classical products, define the profile of the collection and are drivers of the overall sales. Therefore a low proportion of fashion products in exports (less than 30%) is a factor inhibiting continuous restructuring change. Similarly appropriate product differentiation into fashion and basic products in the structure of the collection is a major issue from the perspective of the seasonal cycle. From this perspective, tight time scheduling can be a factor having a negative influence on the creation of routines which include not only the methods of working on the product but also the design process. A lack of strongly trend-related, seasonal models weakens the brand and renders it invisible on the market. The apparently safe production of classical models, which are easier to sell, may result in a lack of interest in the offer of a given company. Con-

stantly standing out in a seasonal cycle is a difficult task consisting in cyclical design and making-up of new sillhouettes. Thus routines should be mixed up here with creative processes: otherwise the organisation faces the risk of inertia. After all, a fundamental element determining the survival of a textile and apparel enterprise in the market is its adaptability to the fashion rhythm: collection segmentation into spring/summer - fall/winter seasons and the addition of within-season apparel lines, the introduction of new garments and accessories throughout the season, and holding clearance sales. This entails the need for constant and recurrent reproduction of routines, as well as changing these routines into new ones. Otherwise the company falls out of the fast fashion formula, and such an organization no longer fits the branch schema of action and becomes inertial.

Conclusions

The process of continuous restructuring change inhibition is an important element that should be taken into account while considering organizational change in textile and apparel enterprises. The introduction of product, marketing, and technological changes on a regular basis is an essential part of the business of companies in the fashion industry. From the perspective of population ecology theory, changes in an organization are strongly interrelated with those in the external environment. Thus it can be assumed that the thesis of this study was confirmed empirically, proving that the main inhibitors of restructuring change in the textile and apparel industry are sector-specific. Sector-specific change in the textile and apparel business results in very demanding business conditions. The results of this study indicate certain areas that should be further explored as part of in-depth qualitative research.

Textile and apparel enterprises cyclically reproduce processes and actions, which at the same time determine product changes in the context of fashion trends. Product restructuring is an important element of maintaining process continuity in companies working within a seasonal cycle. This type of restructuring consists of changes in the process of product development. This is also an area where mechanisms initiating and inhibiting

change to cyclically replicated practices collide. These phenomena bear on textile and apparel companies functioning in a seasonal cycle, where some routinization is a natural part of the product development process. The quantitative study presented determined factors inhibiting restructuring change in the context of the seasonal cycle of company operations. These factors include the use of the internet for product distribution, adding new garments/lines to the collection throughout the season, the proportion of trendy vs. basic products in exports, and the division of products into fashion and basic ones. An inadequate collection structure, the absence of planning for the right collection development throughout the season, and the lack of internet communications are some of the major aspects that disrupt the continuous course of process restructuring. Here these inhibitors are of a sector-specific type, which may potentially invalidate the profile of the textile and apparel enterprise and its business model. They are embedded in the external environment of the firm. The restructuring inhibitors identified by the regression equation concern organizational adaptation aspects within a seasonal cycle. Thus they can be considered important factors inhibiting continuous restructuring in the fashion industry.

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