

Change in Textile and Clothing Industry

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REZUMAT – ABSTRACT

O schimbare în industria textilă și de îmbrăcăminte

În mod tradițional, industria textilă și de îmbrăcăminte a fost cunoscută pentru schimbările sale graduale, dar mediul de afaceri global actual creează premisele pentru mai multe schimbări organizaționale perturbatoare. Managementul schimbării îi ajută pe oameni să treacă peste schimbările structurale într-o manieră pozitivă și eficientă. Întreprinderile mici și mijlocii din industria textilă și de îmbrăcăminte se confruntă cu anumite provocări – noi tehnologii care necesită investiții mari, arbitrajul de relocare cu costurile forței de muncă, protecționismul industriei regionale, preferințele volatile ale consumatorilor, nevoia de noi abilități manageriale etc. – toate acestea necesitând o reechilibrare a concentrării manageriale, de la excelența operațională la excelența strategică și de management al schimbării. Un model de management al schimbării, cu o disciplină de implementare asociată și atenția acordată tendințelor pieței mondiale, reprezintă o necesitate pentru actualii manageri care activează pe piața produselor textile și de îmbrăcăminte.

Cuvinte-cheie: industria textilă, îmbrăcăminte, managementul schimbării, model de schimbare

Change in Textile and Clothing Industry

Traditionally, Textile and Clothing Industry has been known for its incremental changes but the current global business environment creates the premises of multiple organizational disruptive changes. Change Management helps people to transition structural change in a positive and efficient manner. Small and medium enterprises in Textile and Clothing Industry face a particular set of challenges – new technologies requiring high investments, relocation arbitrage on labor costs, regional industry protectionism, volatile consumer preferences, need for new managerial skills etc. – all these demanding a rebalance of managerial focus from operational excellence to strategic and change management excellence. A Change Management Model, with associated implementation discipline and attention to global market trends, represents a necessity for current managers active in Textile and Clothing Market.

Keywords: textile industry, clothing, change management, change model

INTRODUCTION

Business environment is in a continuously changing process. At macro level, local or regional economic crises are emerging, trends as deregulation, globalization and advances in information systems and technologies are impacting the economic environment, population ages, governmental regulations are changing, social movements and terrorism arise, international agreements are changing, nature is negatively affected by enterprises' activity and so on. At micro level, competition is intensifying due to market's globalization; consumers' requests become harder to satisfy, as their requests and needs are evolving together with their knowledge and access to information and latest developments in e-commerce etc. Internally, also, enterprises confront with a series of challenges – new strategies are adopted in order to adapt to external environment's requests, new technologies are implemented, know how is developed, managers become more professional and informed, new market segments are addressed, changes in leadership take place and so on.

In European textile and clothing industry 99% of enterprises are small or medium (SMEs) [1]. Compared to large enterprises, SMEs have very specific environmental threats, as limited material, financial, informa-

tional, human and managerial resources, lower negotiation power, higher interest rates available etc. Even though they are permanently ready to change in order to grow, usually SMEs have little information about the way to approach change effectively.

Change Management increases the efficiency of change projects, inducing employees' acceptance and involvement. After a complex research of Change Management theory and models, as well as of T&C industry's specificities TexChange, a customized change management model, was drafted. TexChange is a straightforward but efficient five-steps model, perfectly adapted to SMEs, to ensure the success of organizational change processes.

CHANGE IN TEXTILE AND CLOTHING INDUSTRY

For a long time, the main factors influencing change in Textiles and Clothing Industry (T&C) have been (2) "the changing habits and needs of consumers" and the "short life cycles due to fashion trends", fashion being practically synonymous with change [3]. Currently, even trends in fashion started to be influenced by macro and micro factors, as volatility of global economy, China's trading and production policies, new technologies in the supply chain etc. [4].

However, Textile and Clothing Industry (T&C) is larger than fashion, including textiles' value chain (natural and man-made fibers, yarns and fabrics) and clothing' value chain (finished fabric, clothes, home textiles, technical textiles etc. – sold retail or B2B), each being affected by another set of change factors [5]. For instance, new technologies are developed to improve T&C manufacturing and trade, in order to: (1 respond to fashion trends (new types of fabric, new dyeing techniques etc.), ensure the efficiency of mass production (computer-aided design, cutting, sewing etc.), respect ecologic trends (eliminating or rationalizing the use of the toxic chemicals needed in production process, recycling fibers as raw materials, rationalizing transportation etc.), adapt to increasingly sophisticated shoppers (selling online, offering added value through quality or price, ensuring a long term relationship etc.) and create new products for new needs (waterproofed fibers, no iron fabrics, smart fabrics etc.) [1–5].

Innovation is the key of success for textiles' companies, just as in other economic field [6]. This is why it is expected a significant growth on global smart textiles, like military smart textiles that include GPS and wireless weapons, architecture smart textiles that generate energy, sport smart textiles that monitor speed, distance and pulse rate, fashion smart textiles that emit lights, medical smart textiles that monitor health conditions etc. [7].

Although, traditionally, innovation in textile sector has been more incremental than disruptive, as “technologies were built closely on previously available technologies”, the current market developments seem to change the situation [8].

A research of McKinsey & Company showed that specialists consider 2016 as “one of the hardest years the fashion industry has ever experienced. Across all market segments, product categories, and geographies, the industry has been shocked by tremors in the global macroeconomic and geopolitical sphere, large scale shifts in consumer behavior, and intensifying business pressures to produce more for less – less time, less money, and less effort” [4]. The most important challenges identified by T&C executives in this study are: Dealing with volatility, uncertainty and shifts in the global economy; Competition from online players and decreasing foot traffic; Speed of change in consumer preferences; Margin erosion due to discounting; Sales and profitability growth; Speed of market and fashion cycle. These trends offer an image of a very active and modern industry, influenced by the disruptive economic, technologic and social environment.

Globalization offers to T&C enterprises both opportunities – to collaborate beyond national and even regional borders, and threats – especially related to a more challenging competitive environment [9]. These are possible due to formation of complex global value chains. “Value chains are flexible constructions that continuously adapts to market conditions, at an

extremely rapid process of change” [10] and includes activities needed to bring a product “from conception through different phases of production (...) to delivery to final consumers” [11].

The geographic distribution of T&C global value chain depends on factors as workforce's specialization, production costs (as water, energy, technologies, wages, transportation, interest rates etc.), negotiation power etc. For instance, comparing manufacturing costs in low cost countries, can be seen that while Eastern European countries have lower energy costs, they practice higher wages and interest rates (delta Y-o-Y%) than other countries as India, Sri Lanka and Pakistan, with higher energy costs and lower wages and interest rates [11]. Therefore, cost efficiency of each value chain element needs to be carefully analyzed by interested companies.

Somehow, contrary to globalization policies, after USA's tendency to relocate T&C production from Asia to its own territory, UE initiated reshoring and recovery policies, ensuring this way “creation of European chains and vertical integration” [10]. UE's main strength, which helped it to become the first supplier of T&C in the world in 2016 [12], is having on its territory “each step of the value chain – from fiber through fabric to ready-to-use product” [5]. Romanian Textiles Industry has also all levels of the value chain, but not equally developed or growing with the same speed. For instance, “synthetic or man-made filaments” is the largest segment of T&C Romanian Industry (41% in 2015), but “knitted or crocheted clothing and accessories”, one of the traditional Romanian products segments, recently grew the most (26% in 2010–2015), having an important share in the industry (14% in 2015) [13].

It is obvious, therefore, that change is impossible to avoid for any enterprise, including T&C. As a response, we see an increased interest in management of supply chains in order to achieve a quick response and to reduce lead times. There are two main management concepts developed with this purpose: lean supply management reduces waste (raw materials or time), while agile supply is market sensitive, helping the company to react to factors from “a constantly changing and highly competitive business environment” [14–16]. Change Management, also, proved itself useful to companies in the whole world, in all industries, in approaching efficiently the continuously changing environment.

CHANGE IN ROMANIAN TEXTILE AND CLOTHING INDUSTRY

In 2015, European Union's T&C turnover was 169 Bn euro, realized by 174.000 companies and 1,7 Mil employees, while Romania's T&C turnover was 3,6 Bn euro, realized by 6111 companies with 0,17 Mil employees [1,13]. The fact that Romania is the second employer in UE's textile and fashion sector (10% of EU's employees) is not consistent with

Romanian's share in European T&C turnover (only 2,1%). This discrepancy suggests a low level of efficiency and added value in Romanian T&C industry [1]. Considering the Index of turnover, the whole European Textile & Clothing Industry contracted significantly in 2008–2009 and started to grow back in 2010 [17]. Romanian T&C had a good evolution regarding Index of turnover, moving up from the last place of EU countries in 2007 (89% of 2010 value) to the 3th place in 2015 (147% of 2010 value) and 2th in 2016 (155% of 2010 value, growth exceeded only by Poland with 186%) [17].

Romanian competitive advantage on this market is the low-cost labor force, average net nominal earnings per employee being just 292 euro/month or 3 euro/hour, but “analyzing the top, considering value added per employee, Romania is placed on second to last place, before Bulgaria” [10, 17]. In 2014, Gross value added by Manufacture of textiles, wearing apparel and leather products represented 2,23% of total Romanian Gross value added. Nevertheless, labor productivity per employee decreased, during 2010–2015, with 18% in textiles and 1% in wearing apparel [13]. Industry's productivity can also be expressed by metrics such as Turnover per employee (20.476 euro/employee) and Turnover per company (58.397 euro/company) [13].

It is hard to believe that Romanian T&C industry might improve its productivity, considering the decreasing share of investments in T&C turnover (only 4% in textiles and 3% in wearing apparel in 2015, compared to 7% and, respectively, 6% in 2013) and the low share of research and development personnel (only 0,42% from total number of employees in 2015) [13]. The benefit of external investments determined by the low-cost labor force (compared to other European countries) can be easily counteracted by the low productivity of labor caused by lack of investments in new production and management technologies.

Romania has lower wages and interest rate (delta Y-o-Y%) than other European countries, but higher than some low-cost production countries, as India, Sri Lanka and Pakistan [11]. In this context, the general tendency to relocate T&C production on European territory is favorable to Romania [5, 10, 13]. Even so, Romanian Balance of Trade for T&C industry decreased constantly in 2010–2015, reaching a 65 Mil euro trade deficit in 2015 [13]. It is interesting to observe the comparative evolution of Romanian and EU-28 Trade Balance [13, 17]. While EU-28 Trade Balance is lowering slowly (–27% in 2012–2015), Romanian Trade Balance is dropping abruptly (almost four times in 2012–2015). This trade deficit is a serious alarm signal for an industry that have a high potential for Romanian economy (2,23% of total Romanian Gross value added, 2nd employer in European T&C etc.).

Sometimes the trade deficit is caused by increasing imports, determined by the improvement of domestic economy, but this does not seem to be the case,

since Romania has the lowest average European household consumption for textile and clothing – 100 euro (next to Bulgaria, Hungary, Macedonia and Serbia) compared to European average of 600 euro [17]. This, in spite of the fact that local manufacture of wearing apparel is better represented than manufacture of textile in Romanian market: the turnover and net investments are almost double, the average number of employees is fourth times higher etc. [13]. Since organizational and market changes are often determined by the competition level, it is useful to analyze it. Evaluating the competition between Top 10 Apparel Brands in the world and Romanian market can be done with few indicators. While Hirschman-Herfindahl Index is usually used to measure market concentration, it weights in favor of larger companies. Entropy Index, using market shares as the weight, relatively increases the importance of small competitors [18]. This is why both indicators have been used. Both showed a very intense competition on apparel market (table 1).

The competition in Romania is just as strong as at global level. It is interesting to observe that some of the Romanian brands are effectively competing with global brands on national market, proving both that Romania is a good competitor and that on this market the entry barriers are still low, in spite of technological progress.

A highly competitive market determines its constituents to aspire to change in order to differentiate themselves and attract a larger part of the market. The fact that Top 5 companies in Romanian T&C industry are covering only 12% of their market also reflects the highly competitive environment [13].

The circumstance that many enterprises in T&C are of small or medium size (99% of European T&C are SMEs), according to Euratex [1], only increases the difficulties they are facing – investments are more difficult, managerial skills are sometimes low, their negotiating power with large companies is low etc. Regardless their size, companies on this competitive market need strong, innovative, strategic management, as Change Management, in order to be successful in a continuously changing environment.

TEXCHANGE – A CHANGE MANAGEMENT MODEL FOR TEXTILE AND CLOTHING SMALL AND MEDIUM ENTERPRISES

Considering the previously described business environment, change is inevitable. Talking about this, Filiep Liebeert, President of Euratex (European Apparel and Textile Confederation), emphasized the main directions of change in T&C industry: moving from commodity to specialty on a particular market segment, moving in a different segment of manufacture (from apparel to textiles, to technical or high-spec areas), moving toward delocalizing its activities to lower labor costs, or moving toward job cuts and

Global market (million euro)		Romanian market (million euro)		
Christian Dior S.A.	34,944	H&M Hennes&Mauritz	172.9	
Nike	25,704	Roumasport	139.4	
H&M	18,060	C&A Moda Retail	85.2	
Zara	13,356	Pepco Retail	76.3	
Adidas	12,852	NY'er Romania	53.3	
GAP	11,592	Peeraj Brands International	52.2	
Kering	11,172	Peek & Cloppenburg	47.5	
Ralph Lauren	6,384	FF Group Romania	42.3	
Hermes	4,536	Takko Fashion International	31.2	
Levi's	4,032	LPP Romania Fashion	25.9	
Source: http://fashion2apparel.blogspot.ro/2017/01/top-apparel-brands-world.html		Source: http://www.topfirme.com/caen/4771/cifra-de-afaceri/		
Estimated competition intensity				
	Global		Romanian	
Hirschman-Herfindahl Index				
$H = \sum_{i=1}^N s_i^2$	0,14	Very intense	0,14	Very intense
Entropy Index				
$H = \sum_{i=1}^k (p_i * \log_2 \frac{1}{p_i})$	0,91	Very intense	0,92	Very intense

closure. Regardless the direction of change an organization is taking, a good management of this process is essential.

Many enterprises started using Project Management to handle change processes toward organization's goals. Complementary to this, Change Management, a strategic managerial approach helping people in an organization to transition changes, became increasingly used. In 2003, Change Management was used in only 34% organizations, but ten years later, in 2013, it was used by 79% organizations worldwide [19]. In a large survey, managers showed that companies with excellent Change Management programs were six times more likely to meet or exceed their objectives [19].

Romanian T&C enterprises are operating in a tumultuous global environment, with frequent changes in value chains, and having to bear a mostly unfavourable national economic conjuncture. These, next to the fact that Romania is the second T&C employer in Europe, are only few of the reasons why organizations should adopt Change Management and managers should be trained to help their employees implement changes initiatives efficiently. Only in this way organizations will ensure their long term survival, based on value added, investments in research, new technologies and upgraded management practices.

Change management is a strategically planned process, where organizations are committed to cross from one state to another desired one, in order to be

efficient within their turbulent environment, while handling personnel's resistance and preparing the organization for implementing and sustaining change [20–25].

Since 1911, when Taylor described the necessity of people accepting organizational change, numerous scholars and enterprises developed a series of models to help organizations implementing change management [27]. But change happens differently in each enterprise, depending on its culture, resources, managerial capabilities, structure, organizational life cycle etc. This is why, organizational change methodologies should be general enough to permit adoption in all organizations, but operational enough to permit directing the change in a practical way.

After analyzing Change Management literature review (over 60 books, 100 articles and 40 websites), 34 Change Management models (Lewin, Hersey & Blanchard, Lippitt, Watson & Westley, Hard Systems Model of Change, Bullock & Batten, Prosci, PMI, Anderson, Kotter etc.) [19–27 etc.], and after evaluating T&C distinctiveness [1–17], we developed a simple and straightforward model for implementing Change Management, applicable also in textile SMEs – TexChange (figure 1).

TexChange is a sequential model, easy to implement in small and medium textile and apparel companies, including five steps:

1. Diagnosis of current situation – analyze global and national T&C business environment to find change ideas, in order to ensure company growth (new

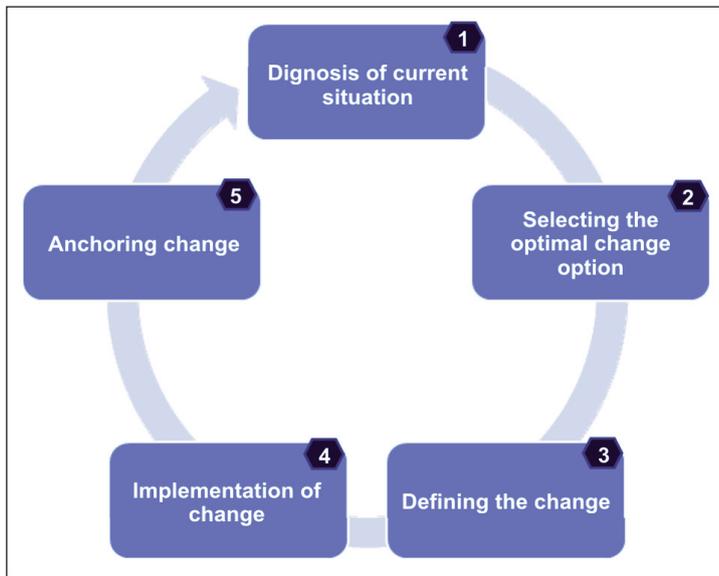


Fig. 1. TexChange – a Change Management Model for SMEs in T&C industry

and available technologies, new strategies or products from competitors, new suppliers/clients/contractors, even outside the national borders etc.).

Fashion industry is changing so often, T&C technologies develop so fast, market is so competitive, employees are so resistant to scary or risky changes, while shareholders push for change in order to prosper – these are some of the reasons to use Change Management and start with a diagnosis. Also, since value chains are so fluid and geographically segmented, the environment analysis must cross the national borders, in order to achieve the best value chain x-raying. There are numerous methods of diagnosis, the most famous and simplest to use in T&C being SWOT Analysis.

2. Selecting the optimal change option – use a rational decision making process to evaluate and to rank options, considering the possible benefits, obstacles and strategies to overcome them, feasibility in achieving the objectives, etc.

Most small firms are failing because they choose to do too many changes in the same time and lack the resources to implement and finish them. Additionally, decision makers are not very proficient with online informational tools and channels, social media and online marketing strategies; simply they are not aware of the fastest ways available for spotting shifts in consumer preferences and market trends.

Although SMEs are interested in changing, they often fail to finalize the process because of the restricted funding and market data knowledge, and also for limited change process standardization and formalization. The last two favor the openness to change and for taking risks, but also creates problems regarding change implementation and consolidation on long term. Therefore, selecting the most important change for the organization and continuing with it in a standardized way focus organizational efforts and investment in the most appropriate project.

Desired investments in new technologies are hard to get financed by reluctant and risk averse banks, demanding strong balance sheets and steady profits, alongside with limited dependence on big fashion retailers that can quickly change their suppliers.

3. Defining the change – involves establishing change's vision, purpose and objectives, elaborating an operational plan to state each action and resource needed to realize the objectives, and especially planning a strategy to manage employees' resistance to change.

Planning a Change Management Project can be challenging for small or medium enterprises, especially because of the reduced managerial experience in global TC market and change management. This is why T&C SMEs need Change Management knowledge (training, consulting, global TC market analysis), even more than larger companies, in order to ensure the success of the new

strategy implementation and the continuity of change. TC companies are particularly exposed in this phase due to limited experience of their owners (in many situations acting also as general managers), this kind of exceptional analysis and decisional phase having long term implications. Also, funds unavailability for hiring external consulting support or even lack of acceptance of the need for specialized help create additional barriers. Good employees with adequate skills are hard to find, being attracted by higher salaries and jobs in multinational or big TC companies.

4. Implementation of change – is initiated, communicated, coordinated, evaluated (feedback instruments and key performance indicators) and adapted accordingly, by the General Manager or another delegated Agent of Change.

The close relationships between employees and managers in T&C SMEs determine a better communication regarding the vision of change compared to larger organizations. This is a favourable factor for change implementation, but decreases managers' authority to reinforce it. Implementation must follow the planning from the previous point.

5. Anchoring change – into organizational culture and practice; can be realized through evaluating and communicating the intermediary results, celebrating success and rewarding contributions, adapting the operational plan to received feedback.

The low level of standardization and formalization in SMEs create problems regarding consolidating change on long term, people having the tendency to return to the old way of doing things when they are not compelled by a formalized process or incentivized adequately. Low wages might be one of the most important competitive advantage of Romanian T&C industry, but it is also a cause of dissatisfaction for personnel and lack of involvement in discretionary activities, as those involved in changes initiatives.

When monetary rewards are limited, anchoring change process needs more creative incentives.

Padilha and Gomes [2] analysed the factors that encourage development of innovation culture in textile industry, which proved to be very similar with change management factors: **company strategy** (mission and vision, focus on client, management processes, leadership and support mechanisms, guiding behaviour and actions), **structure** (fostering innovation, hindering change resistance), **support mechanisms** (rewards and recognition, information and creativity, time flexibility, therefore a favourable organisational culture), **behaviours that stimulate innovation** (multidisciplinary teams, failure causes identification, fault tolerance, rewarding success, recognizing contributions) and **communication** (clarity, communication routines). Their research showed that “the dimensions of Innovation Culture that had a greater impact on Performance in Innovation of Textile Products were Structure and Behaviours – which foster innovation. Thus, it is noticed a strong influence of the decision-making process formalization, flexibility of working structure, work in teams, appreciation of ideas and update knowledge on performance in product innovation” [2]. Change management nurtures all these.

Main factors determining the success of a Change Management Project [19, 27] are: (1) actively promoting and supporting the change initiative – realized by an Agent of Change, which in SMEs often is the General Manager, sometimes, helped by a consultant in Change Management; (2) communicating clearly about the change initiative – messages have to be adapted to the public, have to reflect the solutions for possible problems, determining the reduction of change resistance; (3) integrating Project Management with Change Management raises the chances to have a successful project, meaning to achieve organizational objectives in projected time and budget; (4) approaching Change Management in a formal and structured manner in order to maximize its results; (5) understanding the role of time in Change Management – measures must consider both short term and long term adoption of change, as well as short term and long term results of change; (6) building an organizational culture open to change.

CONCLUSIONS

Textile and Clothing is an industry currently facing tremendous challenges and disruptive changes, triggered by new and capital intensive technologies, relocation arbitrage on labor costs, regional formal and informal protectionism, volatile consumer preferences and, most important, a real need for updated managerial skills. Trends as globalization, search for lowest costs, increasing competition, reshoring the production, technologizing products, technologizing production and commercialization processes etc. determine changes in every enterprise – small, medium or large. Small and medium enterprises are encountering higher levels of turbulence in their environment, due to their scarcity of resources and challenging relationships with their stakeholders. Their need to adapt to continuously changing environment and strategically influence their success can be fulfilled using TexChange, a Change Management model for T&C.

In spite of some positive indicators (Index of turnover, employees and companies number, etc.), analysis of Romanian T&C industry showed a lower turnover per employee than in other countries. This situation is probably determined by multiple factors, such as reduced level of investments in new technologies, limited funding, highly competitive market etc., and suggests that strategic change is highly needed.

Operational superiority has to be complemented by strategic and change management excellence. In a highly fragmented market, dominated by big multinational brands, survival and success of the rest of SMEs active in this industry will rely on flexibility and capacity to adapt to the new rules of the game, access to information in real time and competent change management skills. Current paper offers a structured and straightforward strategic approach for Romanian and foreign T&C SMEs, in order to improve their turnover and profitability: objective (self)assessment, selection of optimal change alternative, change definition, planning and implementation, finalizing with a stable and reinforced change anchoring.

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