

Outsourcing – An Innovation Tool in Clothing Companies

Abstract

The clothing industry has modern management and gains a competitive advantage in the marketplace owing to organisational innovations implemented in its firms. The research conducted confirmed that the vehicle of process change is outsourcing, and helped identify the scope of outsourced processes. Another finding is that outsourcing definitely simplifies a firm's organisational structure, which reduces production costs and improves product competitiveness.

Key words: innovation, clothing firms, outsourcing.

Main directions of innovation in clothing firms

The notion of innovation has changed over time. It was initially only associated with high technologies, but contrary to this opinion, the clothing industry is implementing innovative measures even though it is a low-tech industry. D. White claims that a great majority of innovations do not utilise modern technologies but employ currently available technologies to improve organizational, management and marketing spheres [11]. This type of innovation can be found in the clothing industry, whose effect is increasing the competitiveness of the industry. Because clothing companies in Europe and Asia take action in response to the impacts of external developments, the European Commission appointed a group of experts within the High Level Group in 2004, responsible for charting lines of action likely to boost the development of the textile and clothing industry. Within the entire spectrum of such actions [3, 4], the following apply to the clothing industry:

- Development of innovative manufacturing technologies.
Relevant solutions should encourage the replacement of existing technologies that involve large inputs of manual labour.
- Development of design, creation of fashion, and customisation of services. CAD-based design, the establishment of a database for new products and technologies, and better cooperation along the chain of supply are all expected to improve the competitiveness of EU clothing and establish new market niches.
- Development of the production of textile materials with innovative applications.
Relevant examples of innovative materials are non-wovens such as Comfortemp, which contains microcapsules reacting to external tem-

perature variations by changing their state from liquid into crystalline (which allows such clothing to retain its thermal comfort), innovative firefighter protective uniforms that adjust themselves to the working conditions (hazardous to health and life), and "memorizing" underwear changes in parameters of the human body (applicable to therapeutic procedures, sports exercises, and working under critical conditions).

- The clothing industry's participation in public R&D programmes and easier access of firms to such programmes. Both instruments support clothing manufacturers, and the scope of essential R&D needs and innovative measures must be identified. The system of programme priorities should be reviewed in order to improve the general conditions of access to EU funds earmarked for such purposes.

- Long-term visions of research instead of selected actions.

It is recommended to broaden cooperation between clothing firms, and between tertiary education institutions and scientific institutes. This measure is expected to help utilise research results and plan research activities that meet the clothing industry's needs.

- Supporting innovations other than technical and technological.

Organisational and management innovations applicable to clothing firms can be as important a source of competitive advantage as innovative R&D. The first type of innovation was investigated by the authors and the results

will be presented in the subsequent sections.

Research goal and method, seeking the size of the research sample

In 2007 the authors conducted an investigation that aimed at identifying process innovations in clothing firms, as well as the lines of transformation in the industry. The sample accepted comprised medium and large-sized enterprises (MLE), because relations of the output value to the size of employment show that these are key organisations in the branch analysed. **Table 1** confirms this observation, because this group of enterprises made up only 3.1% of all clothing manufacturers at home, but their share of production sold in total sales accounted for 49.3%, and employment for 48.4%. The MLE seem to be the optimal segment for organisational innovations, because the solutions they apply can be effective owing to their scale.

The sample was assembled using the non-probabilistic method, which is useful when the future investigation is expected to provide certain generalisations, and the structure of the examined population is well known to the researcher. Owing to this method, the researcher can choose objects to be analysed, reject objects using the non-random rules, and determine the sample size [2]. For this investigation, the sample was put together using data from **Table 2** (see page 14). The 19 examined MLEs represent a sufficiently large average-sized sample, when

Table 1. Shares of medium and large-sized manufacturers of clothing, 2006. **Source:** developed by the authors based on data derived from the *Rocznik Statystyczny Przemysłu 2007, GUS, Warsaw 2007, pp. 45, 51, 113, 210.*

Specification	Total	MLE	Share, %
No. of enterprises	18,426	573	3.1
Production sold [million PLN]	8,300.2	4,092.8	49.3
Employment [thousands]	161.3	78.0	48.4

the target is business organizations operating inside Poland.

The results were obtained using the following methods: analysis of the relevant literature, data derived from secondary sources (statistical data), participant observations (the authors are experienced business practitioners), individual interviews, and questionnaire surveys.

Scope of process innovations in clothing firms

This article deals with organisational innovations undertaken by companies. One of these is outsourcing (using outside-resources). Management theory defines outsourcing as a transfer of orders, production processes, services, business processes or parts thereof to a different organisation [9]. Off-shoring is similarly defined, but here the elements are moved outside the country's borders [1]. The manufacturing of clothing by service providers has been known to world industry for many years. Polish industry joined this trend in the 1970s as a provider of outside processing services for clothing companies based in Western Europe and the USA. In 1998, following integration with the Single European Market, the textile and clothing sector contributed to 87% of the country's export in value terms, in which clothing accounted for 93% [5], mainly as the export of outside processing services. Although this type of activity started to show negative growth starting from 1997, because the Polish textile industry was gradually losing its cost-based advantage, clothing products retained their

competitive advantage due to the high quality of workmanship and relatively low production costs [12].

In the 1990s domestic manufacturers of clothing started to innovate within the management area by taking certain functions outside their organisations and entrust them to service providers. This new approach was brought about by the transition and changes in Poland's economy.

Results of the authors' research

Basic organisational innovation implemented by domestic manufacturers of clothing consists in separating two operational areas from an organization's structure, which can be, as the investigation showed, performed elsewhere. Parent companies retain such functions as:

- Market research and analyses of its outcomes.
- Product creation, i.e. preparation of clothing designs (EU is central to world fashion), development of new constructions as well as product-relevant manufacturing technologies.
- Organisation and supervision of production processes in order to match the technological potential of service providers with the technology of production required and the quality standard of the product expected.
- Strategic decisions.

The other operational area, i.e. the manufacturing of clothing, is transferred outside to domestic and foreign companies that specialise exclusively in providing business-to-business services (B2B). The

scope of such services may range from the delivery of a portion of a season collection to the entire collection, depending on the production capacity of the customer. According to the authors' research, the bulk of clothing production (low-end) is handled in Asia where labour costs are low, while short series of (high-end) clothing articles are produced by providers of B2B services in Poland or in adjacent countries. There are two arguments behind this approach: the luxurious apparel needs high quality workmanship, and finished goods must be transported on hangers which cannot be insured in intercontinental transport.

The results of investigations conducted by the authors in 2007 revealed different levels of outsourced production among clothing manufacturers, for instance:

- 6.9% of companies in the sample contracted out all production to service providers,
- 6.9% of the sample companies contracted out more than half of their production to service providers,
- 37.9% of the sample companies used service providers occasionally (in periods when their own teams could not handle the excessive workload),
- 48.3% of firms only used their own teams to produce clothing.

In other words, 51.7% of the organizations investigated outsourced production tasks. The investigated phenomenon is different from cases presented in the literature of the subject, because the external conditions triggering outsourcing in the domestic and foreign companies were dissimilar. The only goal guiding the foreign companies was lower labour costs, whereas 1980's Poland witnessed a mushrooming of privately-owned clothing firms that recruited sewing-machine operators from among the SOE's workforce. Determined to retain their manufacturing capacities, the SOEs had to separate certain production processes from their structures and move them to those parts of the country where industrialisation was low. Therefore, lower production costs were an outcome of organisational modifications, rather than their primary cause.

Lower operational costs became the target in the organizational changes of companies as late as the 1990s, when the domestic market was opened to imported clothing, which caused many enterprises to go bankrupt and output to go down.

Table 2. Examples of sample sizes. Source: developed by the authors based on Z. Kędzior, K. Karcz, *Badania marketingowe w praktyce*, PWE, Warsaw 1996, p. 79.

Sample size	No. of firms in the country	No. of firms in a region
Small (1-9)	200-500	50-200
Average (10-30)	500-1,000	200-500
Large (more than 30)	Over 1,000	Over 500

Table 3. Domestic market for clothing [million Zł] – data as of 2007. Source: calculated by the authors based on GUS data, *Rocznik Statystyczny Przemysłu 2003 and next*, GUS, Warsaw 2003 and next.

Year	2001	2004	2005	2006
Total output of clothing	9,285.9	10,253.7	8,893.1	9,116.8
Export	6,950.7	6,393.6	5,224.5	4,666.0
Import	5,057.2	4,976.9	3,949.5	3,619.1
Export surplus over import	1,893.5	1,416.7	1,275.0	1,046.9
Volume of domestic market for clothing	7,392.4	8,837.0	7,618.1	8,069.9
Incl. the offer of domestic manufacturers	2,335.2	3,860.1	3,668.6	4,450.8

According to the data presented in *Table 3*, the value of total output started to stabilise in 2001. Afterwards the domestic market for clothing expanded (the 2005-2006 rate of growth was 105.9%, and 109.2% in the years 2001-2006). Domestic producers steadily increased their share in the clothing market, which reached 4,450.8 million zlotys in 2006 (a growth rate of 199.1% between 2001 and 2006). The value of imported clothing dropped to 3,619.1 million PLN (by 28.4% between 2001 and 2006). For many years clothing exports exceeded clothing imports in Poland, and although the absolute value of the surplus decreased, in 2006 it was estimated at 1,046.9 mln PLN, and the share of exported clothing in the total output stood at 51.2%. Especially B2B services, domestic manufacturers of clothing supplying firms based in EU-15, showed declining exports (due to a strong zloty). Clothing exported from Poland to EU-15 made up 80-90% of all exported textiles and clothing products [13].

Other types of services provided under the B2B arrangement were:

- preparation of drawings of season collections
Some firms find it economically unreasonable to employ their own designers. To comply with the law, they purchase designs after the customer has specified their expectations (type of clothing, raw materials, price range, etc.).
- development of clothing patterns and preparation of the original model
Patterns are provided by an external constructor who also cuts the fabric and supervises the production of the original model. The patterns are adjusted in the course of fittings. Once the original model is complete, its attractiveness and correctness of construction can be assessed.
- expansion of a seasonal line of clothing for selling purposes
To win large orders, companies must offer models to many customers in a short period of time (the contracting period being 5 weeks). Outsourcing is then used to expand a collection.
- preparation of relevant technical and technological documentation for the models
The cutting, gluing and thermal bonding parameters, as well as the assembly of clothing parts, interim and final ironing, quality control, product marking and packaging are determined

by the operators of the CAD/CAM system. The investigation conducted by the authors shows that it is economically justified to purchase such a system, to recruit and train the operators when relatively large numbers of models are produced, and when they must be frequently replaced.

- preparation of promotional and advertising campaigns.

To promote a clothing manufacturer and its products, a team of persons has to be employed, but this approach is rational only in large enterprises. Its alternative is outsourcing. After determining the preliminary requirements of the campaign, the advertising firm draws up a project specifying the extent and scale of promotion, the type of media to be used and the costs.

According to "The Harvard Business Review", outsourcing is one of the most important management concepts that has been put into business practice over the last 75 years [10]. Until recently, the only effect of organisational innovations has been lower production costs. Today a new approach to the concept of outsourcing can be observed. In a growing number of cases, outsourcing has not only become a method for cutting down costs, but also a strategic approach to running a business, which makes it possible to [10]:

- reduce the risk of technological changes,
- focus actions on the core business,
- choose the strategy of enterprise operation.

As the most recent literature on the subject shows, the concept of outsourcing/off-shoring is evolving towards smart-sourcing. "Smartsourcing enables an organization to focus on what it does best, while the outsourcing partner takes responsibility for innovating change and cost-control in non-core operations. The result is a strategic and synergistic relationship that enables each organisation to benefit from the other's expertise and ultimately increase productivity and profitability. Smartsourcing provides a roadmap for navigating today's shifting marketplace, and shows how outsourcing can add value to your business, your products and your customers" [7].

The most-up-to date domestic and foreign sources [1, 7, 9, 10, 11, 13] quoted in this article indicate that outsourcing triggers organisational innovations in enterprises, including manufacturers of clothing.

Summary and research conclusions

When firms decide which processes should be handed over to external providers (outsourcing/off-shoring), they assess their workers' skills against labour costs. The authors' research into medium and large-sized clothing manufacturers in Poland confirms that firms implement organisational innovations, the most representative of which is dividing a firm's structure into manufacturing and other functions (product development, market development, distribution of clothing). This is a new organisational solution in the Polish clothing industry.

The research conducted in 2007 has provided the following conclusions:

1. The main vehicle of organisational innovations in Poland is the outsourcing/off-shoring of clothing production. For instance, 6.9% of manufacturers contract their production out to external organizations, 6.9% of manufacturers contract more than half of their production tasks out, another 37.9% use outsourcing occasionally, and 48.3% are completely independent producers. Altogether, 51.7% of domestic firms take advantage of outsourcing and/or off-shoring to manufacture.
2. The original reason for the domestic manufacturers to apply outsourcing was the mass outflow of sewing-machine operators from the state-owned sector to the private. The outsourcing of production processes helped the SOEs enhance their manufacturing capacities, despite declining levels of employment. Lower production costs were an effect of organisational efforts but not the original goal, which contrasts with the outsourcing mechanism applied by enterprises in developed countries.
3. Outsourcing has helped the clothing industry to reduce its costs and enhance competitiveness, as shown by the results of the authors' research presented in *Table 3*. Between 2001 and 2006
 - the domestic clothing market expanded at a rate of 109.2% growth rate,
 - Polish clothing manufacturers increased their share in the domestic clothing market clothing by 199.1%
 - the share of imported clothing in the domestic market declined by 28.4%,
 - the share of exported clothing in its total output was still high – 51.2%,
 - in 2006, clothing exports exceeded clothing imports by 1,046.9 m zlotys.

Further implementation of organisational innovations, including smart sourcing, by manufacturers of clothing will make it possible to transform this branch into a better managed industry, which is able to gain a competitive advantage on the marketplace and become one of the engines of economic growth in the country.



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