EMCC case studies

Textiles and clothing sector: Farbolux Biliński, Poland

Company development
Overview of Łódź region
Company strategy
External relations
Localisation strategy
Main changes and challenges
Profile of the workforce
Working conditions
New technology
Future challenges
Contact details
Sources
Farbolux Biliński is a medium-sized, family-owned company located in the region of Łódź in central Poland – Łódź has been a major centre of the Polish textiles and clothing industry since the 19th century. The company specialises in dyeing, bleaching, washing, tumbling, cutting and finishing all kinds of textiles and fabrics. As a result of the ongoing process of modernisation within the company, significant layoffs have been avoided as existing staff have been retrained for other functions within the company. With a focus on flexibility of processes and producing high-quality products rather than outsourcing production to low-cost countries, Farbolux Biliński has continued to develop close connections with customers and suppliers, as well as introduce automation and up-to-date technology. In doing so, the company has managed to increase productivity levels, expand production and improve turnover in an increasingly competitive market.

Company development

Farbolux Biliński was founded in 1991 by the current owners, the Biliński family, and has grown to be a leading company within the textiles and clothing sector in Poland. Since its establishment, the company has undergone a continuous process of modernisation and has introduced automation in production processes. This has been achieved through focusing on state-of-the-art machinery and high-quality products.

To date, the modernisation process has not led to significant layoffs of workers. Rather, the existing workforce has been trained on a continuous basis to take on new job functions, which has led to an increase in productivity and expansion of production.

Table 1 presents an overview of the company’s turnover, spending on research and development (R&D) and the number of workers employed by the company over the last five years.

Table 1: Turnover, spending on research and development and number of employees, 2003–2007

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover (€)</td>
<td>3,454,000</td>
<td>3,346,000</td>
<td>3,326,000</td>
<td>4,456,000</td>
<td>6,280,000</td>
</tr>
<tr>
<td>Spending on R&amp;D (€)</td>
<td>334,000</td>
<td>452,000</td>
<td>29,000</td>
<td>714,000</td>
<td>1,597,000</td>
</tr>
<tr>
<td>Total no. of employees</td>
<td>134</td>
<td>142</td>
<td>136</td>
<td>125</td>
<td>137</td>
</tr>
</tbody>
</table>

Source: Interviews with Farbolux Biliński personnel, 2008

Farbolux Biliński is a business-to-business oriented company offering services primarily to clothing manufacturers. The company receives the fabrics for processing directly from customers and does not produce or buy any fabric itself.

The company’s current position in the market is regarded by management as relatively solid. Farbolux Biliński has focused efforts on developing and strengthening its current position as a technology-oriented textiles company and, up until now, the company has shown good results. In fact, in recent years, the company has managed to expand production and increase annual turnover and profits.

Overview of Łódź region

Farbolux Biliński is located in the province of Łódź in central Poland. The region is the centre of textiles and clothing production in Poland, and the textiles sector accounts for a large share of the companies and employment in the area. Moreover, a large base of research institutions is also present in the region, enabling synergies between research and production. This cluster of companies operating in the same field of industry has been officially recognised and will play a significant part in the Łódź regional development policy. In 2007, a formal agreement was signed in the region, making Farbolux Biliński part of an official textiles and clothing cluster in the Łódź region.
The city of Łódź has been dependent on its textiles industry for more than 150 years. During the communist regime, some 60% of all textiles employees in Poland worked in the province of Łódź and produced about 40% of the national manufacture of cotton and silk fabrics, and 33% of wool fabrics. However, the collapse of the Soviet Union in 1991 exposed the local industry to international competition, resulting in bankruptcies and a dramatic rise in unemployment.

The political leadership of the city tackled this challenge by creating investor-friendly conditions and providing incentives for local entrepreneurship. Furthermore, the city engaged in a transformation of the textiles and clothing industry from a labour-intensive to a research-intensive industry. In this regard, the initiatives undertaken included the establishment of different research consortia involving the Łódź Technical University with its centre for human-friendly advanced textiles technology ‘Pro Humano Tex’ and rebuilding bonds between research institutions and entrepreneurs by setting up a Polish Industry Platform. This platform is headquartered at the Department of Textiles Engineering and Marketing of the Łódź Technical University. It supports the development of the Łódź textiles and clothing cluster, as well as cluster-wide initiatives which aim to promote innovation. As a result of these initiatives, the city of Łódź has created good framework conditions for the industry, enabling the region to retain its important role in the European textiles and clothing sector.

**Textbox 1: Promoting innovation and regional development in Łódź**

A range of national and regional programmes have supported the transformation of the Polish textiles and clothing sector from a labour-intensive to a knowledge-based sector. One important initiative is the regional innovation strategy for the Łódź region ‘LORIS TEX’, funded by the European Social Fund and the Polish government. LORIS TEX is a regional project that ran from 2005 to 2007 with the aim of increasing the attractiveness of the region for investment purposes and to promote innovation in the textiles and clothing sector.

As an extension of the LORIS TEX initiative, a further educational project was launched – TEX PLUS – focusing on improving the standard of staff training and supporting the use of innovation in enterprises in the textiles and clothing sector. A comprehensive training offer to benefit 350 people has been put forward within the framework of the project that involved a range of companies and institutes in the sector. The TEX PLUS training project ended in July 2007.

Source: Entrepreneurship and Economic Development Research Institute (EEDRI) website

**Company strategy**

Farbolux Biliński’s mission is to be the chosen partner in the processing and finishing of textiles for clothing manufacturers in Poland and throughout Europe. To achieve this objective, the company places an emphasis on the following four strategic aspects of production.

- **Quality**: Providing high-quality products and solutions to its customers is the overriding goal of Farbolux Biliński. This means that the company has to keep abreast of technological developments in the sector, but also that the company can be and is recognised for its ability to produce high value-added products. As part of the quality approach, Farbolux Biliński is PN-EN: ISO 9001:2001 certified. The company has also been certified to produce fabrics with the European Union’s environmental quality mark, the ‘EU Flower’.²

- **Flexibility**: As fashion collections change evermore rapidly, Farbolux Biliński strives to provide customers with the flexibility of procedures that they need. Clothing manufacturers often have to produce a number of fashion collections throughout the year, which means that being able to respond quickly to changes in fabrics, patterns and colouring is essential for the company.

- **Close dialogue with customers**: The company always seeks to offer customised solutions and thus considers close dialogue with clients as particularly important.

- **State-of-the-art machinery**: Since its foundation, Farbolux Biliński has placed the highest emphasis on having access to the best possible machinery in the industry in its production facilities. This means that the company focuses on high value-added products, but also, that R&D is an integral part of the company’s strategy.

In terms of its focus on national and international markets, the company has adopted a ‘50/50 policy’. This means that, ideally, half of the company’s customers will come from the Polish home market and the other half from international markets, primarily from those in the European Union (EU). At present, Farbolux Biliński has many Scandinavian customers.

The ‘50/50 policy’ has been adopted because it leaves the company less vulnerable in the case of any single customer or market experiencing a slowdown or recession.

Over the last few years, Farbolux Biliński has participated in five projects funded by European structural funds. These projects have mostly focused on the modernisation of the machinery used by the company and have played a significant role in the restructuring of the company into a high-value production company. Based on the positive experiences associated with these projects, Farbolux Biliński also intends to participate, if possible, in future projects of this kind.

---

² ISO 9001:2000 is an international standard developed by the International Organization for Standardization (ISO) that provides a set of standardised requirements for a quality management system. The standard requires an organisation to audit its quality control system to verify that it is managing its processes effectively. In addition, the organisation may invite its clients to audit the quality system in order to give the organisation’s management confidence that the organisation is capable of delivering products or services that will meet their clients’ requirements. In September 2001, the Polish/European norm PN-EN: ISO 9001:2001 was published by the Polish Standardization Committee (PKN). See: [http://www.pkn.pl/?lang=en&pid=en_strona_glowna](http://www.pkn.pl/?lang=en&pid=en_strona_glowna)

External relations

Due to its location in the textiles region of Łódź, Farbolux Biliński benefits from cooperation with several local companies and institutions operating in the same field – most notably with the Łódź Textile Institute, an education and research institution with a special focus on the textiles and clothing industry. The company exchanges knowledge with the Łódź Textile Institute and provides the students at the institute with access to modern machines to carry out their work. Farbolux Biliński also recruits many graduates from the Łódź Technical University. According to the company, the Łódź Textile Institute has grown more industry-oriented over the years and this has stimulated further cooperation between the company and the institute. However, cooperation is not a goal in itself for the company; on the contrary, the level of cooperation depends on the institute’s research profile. In this regard, Farbolux Biliński wants to engage with the institute in carrying out new technology-related research and product development, not necessarily only in basic research.

In addition, Farbolux Biliński cooperates with other companies in the city and region of Łódź, primarily by exchanging knowledge and know-how, but also by placing orders with local companies. Farbolux Biliński has maintained good relations with its suppliers. This is mainly because the company only has a few specialised suppliers of machines, dye, as well as other products. Good relations with these companies have been developed on purpose.

As part of its policy of fostering good relations with customers and suppliers and ensuring that the company’s efforts are focused on clients’ needs, Farbolux Biliński sends out a questionnaire twice a year to its clients. The resulting customer feedback ensures that the company can stay competitive and offer tailor-made solutions to its customers.

Farbolux Biliński is a member of several associations, such as the Polish Association of Textile Employers, and participates in seminars and conferences in order to obtain knowledge of new technical and technological developments in the sector and to establish new relations with other companies and suppliers.

Localisation strategy

Farbolux Biliński is currently located in the city of Łódź, which lies about 130 kilometres southwest of Poland’s capital city, Warsaw. The company’s production activities take place in some of the old factory buildings in Łódź.

The company has decided not to move its production facilities outside Poland. This decision is mainly based on the fact that moving to one of the two main options for relocation – namely, eastern Asian countries like China or eastern European countries like Belarus and the Ukraine – would require too much investment and having to deal with a lot of bureaucracy. Moreover, the company management does not consider the level of flexibility and the quality of products coming from the aforementioned locations to be of sufficiently high standards. As the company places a high emphasis on these two dimensions – flexibility and high quality – in its competitive strategy, relocating outside of Polish territory is not regarded as a viable solution.

Since 1 April 2008, Farbolux Biliński has taken ownership of another textiles company, M.W. Bilińscy, which is located in the town of Konstantynow Łódzki, situated 20 kilometres outside the city of Łódź. This takeover provides an opportunity for the company to grow by acquisition and to expand its production, which is not physically possible at the current location in Łódź city. As the company is operating at full capacity in its current plant, increasing the production capacity is regarded as vital for the company’s ambition to continue growing. The current production site in Łódź city will, however, not be sold, but used instead for other purposes such as research facilities and offices.
Main changes and challenges

The single most important political change for Farbolux Biliński has been Poland’s accession to the EU on 1 May 2004. As a result, rules and regulations have been tightened, thus putting added pressure on the company. On the other hand, EU accession has also made it possible for Farbolux Biliński to trade more easily with other European companies. In addition, the EU structural funds have provided the company with much-needed access to finance, enabling it to modernise the equipment used in production.

A main future challenge for Farbolux Biliński will be the implementation of EU Regulation 1907/2006 concerning the registration, evaluation, authorisation and restriction of chemicals (REACH), as this will significantly affect the sector in which the company operates. Modernisation of equipment has also impacted on the company’s environmental profile, as new energy-efficient machines and recycling projects have been implemented.

Many companies in the sector have moved production to countries in the east – such as those in Asia – due to lower wages and production costs in these countries. Farbolux Biliński has tried to counter this development by focusing on flexible, high-quality products and services. So far, the company’s efforts have proved successful.

With regard to technology, Farbolux Biliński has kept up to date with the developments in process technologies related to dying and bleaching. In this case, the company has focused particularly on minimising production costs and maximising productivity, as new and more efficient machines have been installed.

Profile of the workforce

The current composition of the workforce mirrors Farbolux Biliński’s position as a company that has undergone a process of modernisation. At present, 19.6% of employees have a degree from a higher education institution such as a college or university, while 29.4% have a secondary school education or equivalent, 31.5% are skilled workers and 19.5% are unskilled workers. Most of the higher educated employees are engineers – who work either in the R&D field or directly in production – or administrative personnel. Skilled and unskilled workers are mainly employed in the company’s production facilities.

The technology-intensive production is also reflected in the gender profile of the company’s workforce, which differs significantly from the ‘typical’ gender division of the workforce in the textiles and clothing sector, usually characterised by a high proportion of female workers. At present, about 86% of the company’s employees are men, while only about 14% are women.

Current and future skills needs

Farbolux Biliński does not expect any significant labour shortages in the near future. However, the company is likely to continue facing different skills needs. As expected, the basic skills required by the company depend on the job function concerned; however, in general, the company needs workers with basic skills and highly-educated personnel to carry out the required tasks. Due to a lack of workers with the required skills, the company considers it necessary to provide basic training for employees after they have been hired.

---

Moreover, Farbolux Biliński’s business strategy has important implications for the company’s future skills needs. The company’s strategy requires the employees to be able to adapt to new technological developments and to integrate new and modern machines into the production process. This also means that employees should be well-educated, which is a crucial factor in achieving the highest possible quality of products. The dual focus on national and international markets has meant that foreign languages, particularly English, have also become an important element of the company’s recruitment strategy.

In general, Farbolux Biliński expects the company’s future skills needs to be much the same as they are at present. Language skills may become more important, but this is likely to be the case for the middle and upper levels of management and not for workers directly involved in production. Technical skills and skills in using information and communication technologies (ICT) may also carry increased importance in the future.

As a result of the company’s focus on quality and flexibility, the personal skills of the employees are considered highly important. Farbolux Biliński encourages employees to be ambitious, innovative and ready to adapt to changes.

**Company responses to skills needs**

In general, Farbolux Biliński’s response to new skills needs can include one or both of the following options:

- re-training of employees to perform new functions;
- hiring new employees with the required skills.

The decision taken by the company depends on the specific problem encountered and the resulting skills needs. Layoffs are not considered an integral option for the company, as it prefers to re-train employees to carry out new functions instead. This is exemplified in the fact that, in spite of modernisation and automation of production processes, the company has not experienced large-scale layoffs.

Farbolux Biliński’s response to skills needs is also reflected in the company’s recruitment strategy. In this regard, the company does not subcontract activities or import skilled labour from other countries.

**Recruitment and retention strategy**

The current recruitment policy reflects that the company places a high emphasis on quality and flexibility. In general, the company tries to hire young people, as they are considered more attractive employees in terms of educational attainment and ability to adapt to change. However, Farbolux Biliński has not initiated any specific measures to attract employees. Such measures are considered unnecessary by the company, due to the fact that it has a solid brand name and is recognised for its good working conditions.

The intake of both highly-educated personnel and skilled and unskilled workers is likely to continue in the future, thus continuing the necessity for the existing training programmes. Farbolux Biliński has no immediate plans to change significantly the current training schemes or methods.
Training strategy

Due to its strong focus on quality of products and services, Farbolux Biliński places a high emphasis on having a well-educated and suitably trained workforce. The company aims to reach this objective in two ways: by hiring only the best candidates for each position and by continuously re-training employees.

Once hired, an employee goes through an informal introductory programme, during which the functions of the job are taught. This programme is carried out by other colleagues so that the transfer of knowledge and know-how is maximised.

All employees affected by the purchase of new machinery are offered mandatory on-the-job training. The training is carried out in direct cooperation with the manufacturers of the machines and takes place both on the factory floor and in classrooms. Employee training generally takes place at the company’s premises. Job rotation is also part of the company’s training approach, giving employees the opportunity to perform different functions over time. This both enhances the company’s flexibility and enables the workers to take on more interesting jobs. Furthermore, employees in charge of workplace health and safety are trained in specific issues on a regular basis.

Management personnel are offered a special English-language training course twice a week to assist the company in improving communication with international partners and customers. Moreover, engineers and administrative personnel also regularly attend training courses and seminars in order to stay abreast of the latest technological developments.

All training initiatives, both for management and employees, are paid for by the company.

Working conditions

Farbolux Biliński seeks to ensure a good and safe working environment for all employees. To this end, the company has implemented specific policies regarding the involvement of workers and the physical environment, including safety issues. The company seeks to offer a competitive salary and benefits package. Some of the benefits afforded to employees include health insurance and financial aid to those in need.

The company’s wage policy seeks to reward good employees. In recent years, the number of employees who have received a salary increase has been particularly high, suggesting that employees can advance rapidly in the company, both in terms of salary and position, if they strive to maintain company standards. Employee performance is assessed by management in order to identify possible areas for improvement and perhaps re-training options.

In general, Farbolux Biliński has a relatively flat managerial hierarchy, which means that regular employees always work closely with management. In order to evaluate the company’s situation in terms of working conditions, Farbolux Biliński issues a work satisfaction questionnaire to employees once a year. Thus, this allows employees to give their opinion on specific aspects of working conditions within the company.

Health and safety is taken very seriously by the company because of the potential danger posed by the dyes and chemicals used in production. As mentioned previously, employees in charge of health and safety are trained in specific issues on a regular basis to minimise the risk of occupational accidents and diseases. The company also actively cooperates with local health institutions to monitor employees’ health.

Finally, the physical work environment of the company is in good condition and has recently been renovated in line with modern standards.
Industrial relations
As a result of the historical development of Polish society, trade unions typically exist only in larger companies. For the most part, these trade unions are specific to the company in question. It is not customary for workers in small and medium-sized enterprises (SMEs) to be members of a trade union. Against this background, trade union coverage in Farbolux Biliński is almost non-existent.

However, employers are involved in managerial decisions through a formalised channel, where a number of employees are appointed by their colleagues to represent the workforce. Due to the absence of trade unions, collective bargaining primarily takes place through this channel.

New technology
Farbolux Biliński tries to encourage innovation among workers within the company, as the focus on new technology plays a central role in the company’s strategy. In light of this, the company is involved in research in various areas of activity such as nanotechnology, antibacterial surfaces and microcapsules. The company also tries to implement innovative solutions to environmental concerns, such as waste-water treatment.

The single most important barrier to innovation is access to finance and capital. Farbolux Biliński would like to increase investment in this area, but often lacks the necessary finances needed to participate in research and innovation projects.

Farbolux Biliński has cooperated to a small extent with various research organisations. However, this is likely to change in the future, as an agreement has been made with local technical research institutions to collaborate on the development of new products and solutions in the textiles and clothing sector.

External sources of know-how
On account of its involvement in and cooperation with many different companies and institutions, Farbolux Biliński obtains a lot of know-how from external partners. The main external sources of know-how are customers, suppliers, (cluster) networks, research institutions such as the Łódź Textile Institute, professional organisations and other companies. For example, Farbolux Biliński cooperates with other companies in order to perform specific tests that require highly-advanced equipment which the company does now own. Another source of know-how comes from the company’s workers, as they are experienced in and understand the various production processes.

The main gaps and challenges in terms of access to know-how for Farbolux Biliński stem from gaining access to the latest technologies and machinery in the field. The company has successfully solved this issue by maintaining continuous and close cooperation with suppliers and manufacturers.

Future challenges
Farbolux Biliński is a family-owned company that has managed to undergo modernisation by itself and to stay competitive through a process of automation and a focus on flexibility, producing high-quality products and using state-of-the-art machinery. Despite operating in a highly-competitive sector, the company has survived and even prospered because of its clear focus on product quality and technology.

One point worth noting is that the process of modernisation within the company has not led to significant layoffs of workers. Rather, the existing workforce has been continuously trained to carry out new job functions. As a result, productivity has increased and production has been expanded. However, Farbolux Biliński continues to face challenges,
the main one being competing with low-wage countries like China and eastern European countries such as Belarus and the Ukraine.

**SWOT analysis**

Table 2 outlines the main strengths, weaknesses, opportunities and threats (SWOT) facing Farbolux Biliński.

Table 2: *SWOT analysis*

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility and short delivery time</td>
<td>New technologies</td>
</tr>
<tr>
<td>Quality of products and reliability</td>
<td></td>
</tr>
<tr>
<td>Advanced machines</td>
<td></td>
</tr>
<tr>
<td>Strong brand</td>
<td></td>
</tr>
<tr>
<td>Part of regional network of companies and research institutions</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weaknesses</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need for better tools to reduce costs, such as a planning system</td>
<td>Competition from Asia (China) and Eastern European low-wage countries</td>
</tr>
<tr>
<td>Current location as a space for expansion is limited. Relocation to a new production plant outside Łódź will enable greater production</td>
<td>Skills needs</td>
</tr>
</tbody>
</table>

Source: *Interviews with Farbolux Biliński personnel, 2008*

**Contact details**

Company name: Farbolux Biliński
Website: [http://www.bilinski.biz.pl](http://www.bilinski.biz.pl)
Company address: ul. Milionowa 5a, 93-102 Łódź, Poland
Phone: +48 42 684 75 96
Fax: +48 42 640 25 73
Email: farbolux@rai.pl

**Contact details of acquired company**

Company name: M.W. Bilińscy
Company address: ul. Mickiewicza 29, 95-050 Konstantynów Łódzki, Poland
Sources

Website
Farbolux Biliński: http://www.bilinski.biz.pl

Interviews
Interviews were conducted in February 2008 with:

Company President, Waldemar Biliński
Vice-president, Robert Biliński
Information technology specialist, Piotr Stankiewicz
Information technology specialist, Grzegorz Pogoda

Danish Technological Institute (DTI)