

Sectoral Human Capital Study

Fashion and innovative textiles industry

Results of the 2nd
edition of the study

Project information



Project name:

Sectoral Human Capital Study – Fashion and innovative textiles industry



Aim of the project:

To increase awareness of current and future demand for competencies and qualifications in the fashion and innovative textiles industry



Dates of fieldwork:

2nd* edition: June 2022 to June 2023, including:
quantitative research: March to April 2023

* The 1st edition of the study was carried out from October 2020 to November 2021

The report from the first edition is available on the PARP website

Research methodology



Involved in the research process:

- » Industry experts
- » Analysts of labour market trends
- » Members of the SRK (sector council for competencies)
- » Industry employers and employees

Industry information

The industry embraces:

- » the manufacture of textiles (PKD C13)
- » the manufacture of wearing apparel (PKD C14)



The fashion and innovative textiles industry is:

- » **36,169** business entities*, most of which are micro-enterprises (0-9 employees) – over 33,000
- » **PLN 53.3 billion** – the revenue of the Polish clothing market in 2022**

* Source: Structural changes in groups of domestic entities in the REGON register, GUS 2022

** Source: Arvato Supply Chain Solutions (2022) Clothing market in Poland (https://arvato.com/fileadmin/form_definitions/pl/rynek-fashion.pdf)

Main business processes

Key positions

Main business processes *

Creation process (design)	Production process	Product management process	Customer relationship management process
Clothing designer	Cutter	Marketing specialist	Social media specialist
Clothing constructor	Stitcher		CSR specialist
Clothing technologist	Tailor		E-commerce specialist
Specialist for innovative materials	Clothing production manager		
Trend-watcher/ trend-forecaster			
Fashion Buyer			

* the business processes and positions presented here were identified for the 1st edition of the study and explored further in the 2nd edition.





Industry trends

Circular fashion and sustainable development

- » an approach to the design, production and consumption of clothing that aims to minimise the negative impact on the natural environment and society

Slow fashion

- » giving up low-quality clothing in favour of creating durable and high-quality clothes

Production passports

- » documents aimed at ensuring transparency and quality control throughout the value chain. They enable the tracking and documenting of the clothing production process

New digital solutions

- » enabling the improvement of production, design, personalisation, value chain management and the customer experience (e.g. IoT, virtual clothing trials, blockchain in the value chain)

Fast fashion

- » a model of production and consumption in which clothes are quickly designed, manufactured and placed on the market, often in response to the latest trends. Prices are low, collections change frequently, and products have a short life cycle

Growth in e-commerce

- » enabling the sale of clothing online, which gives customers the convenience of shopping without leaving home

Challenges for the fashion industry and innovative textiles in the next 3 years

45%	Adjusting production to the relevant environmental standards	
37%	Finding local suppliers of materials	
33%	Acquisition of new employees in the sector	
30%	Taking fair trade issues into account in the production process	
29%	Development of digital technologies	
28%	Introducing solutions enabling easy product identification	
27%	Reorientation of production towards clothing that is more expensive but significantly better in terms of quality	
26%	Hiring employees with competencies related to e.g. sustainable development and the environment	





Scenarios of industry development

The future scenarios present action strategies with the potential for implementation by companies in the industry in the next 3 years, depending on the intensification or weakening of specific factors affecting the industry.

Scenario 1:

Holistic development of enterprises

Comprehensive development of companies in the industry, both in regard to products and in the organisation of work

Scenario 2:

Focus on ensuring business profitability

Companies focusing on maintaining business profitability, while refraining from development activities

Scenario 3:

An attempt at modernising

Company development in regard to products and organisation to the extent possible in the market conditions (a flexible approach to change)

Holistic development

- » Companies will strive to create more environmentally friendly products, and will be prepared for legal changes in environmental protection
- » Enterprises will actively counteract problems related to staff shortages. There will be collaboration between education and business in the creation of patronage classes, internships and practical experience, as well as through informing about competencies currently in demand in the industry
- » Companies will take steps aimed at rebuilding the prestige of work in the industry and improving its image
- » Companies will use local suppliers, thereby shortening supply chains (taking into account such issues as quality and ethical production)
- » Companies focusing on business-to-client trade will invest in digital development
- » The cost of products offered by companies will be higher, but they will meet environmental criteria
- » The challenge for companies will be to convince customers that the higher cost of products will be offset by their longer life cycle





Ensuring profitability

- » Maintaining business profitability will be companies' main motivating force
- » Companies will use materials of foreign origin, most often from Asia, and will also locate their production there, which will give rise to ethical and environmental dilemmas
- » In the area of environmental legislation, companies will strive to meet the requirements, but will not take any measures going beyond the required minimum
- » Companies will be less likely to collaborate with education, and will not actively support the process of preparing the country's workers for the sector. The employee deficit will be temporarily offset by the employment of foreigners
- » Some companies with financial reserves will invest in the development of e-commerce
- » Companies' activities will keep product prices relatively low, which will be looked upon positively by the section of society immersed in fast fashion

An attempt at modernising

- » Companies will aspire to attain the standard of companies caring about the environment, improving the quality of their products and engaging in collaboration with education; however, due to insufficient funds or not having the right network of contacts, they will be forced to take a more flexible approach to change, and their actions will be selective
- » Companies will look for local suppliers and try to move production to Poland
- » Personnel shortages will be eliminated by employing foreigners. Companies will collaborate with the education sector, although due to insufficient financial resources, they will prefer to take on students for internships and transfer knowledge regarding their own needs. They will also take steps to increase the prestige of work in the industry, as long as it does not require financial outlay
- » Companies will be interested in the development of e-commerce, but their actions will be selective





Plans for the next 3 years

58% of enterprises plan to raise the prices of their services

43% of companies will launch new services or products

31% of the companies surveyed want to increase expenditure on innovation

26% of companies want to invest or increase expenditure on the development of employee skills

26% of enterprises plan to automate selected company processes

16% of companies want to start or intensify R&D work and increase investment outlay on new technology

12% of enterprises plan to hire employees

11% of companies want to start or strengthen collaboration with the education sector

Impact of global events on company operations

The inflation-fuelled price increases of 2022, and – to a lesser extent – the energy crisis, had the greatest impact on the industry's operations

91% of employers declare that inflation and price increases had the greatest impact on company operations

86% of companies point to the energy crisis as the main factor impacting the industry

64% of companies indicate the effects of the COVID-19 pandemic as a significant challenge

The percentages given above are for the sum of the answers that it impacted company operations „to a large extent” and „to a moderate extent”





Impact of the war in Ukraine on company operations

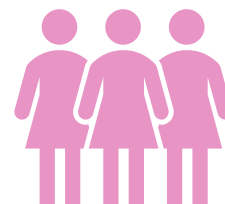
47% of companies believe that no change caused by the war was lasting

27% of companies see a need to find new suppliers due to disruptions in supply chains

22% of companies indicate the need for intensified monitoring of their security status

Foreign workers

12% of enterprises employ foreigners (medium and large companies – 24%)



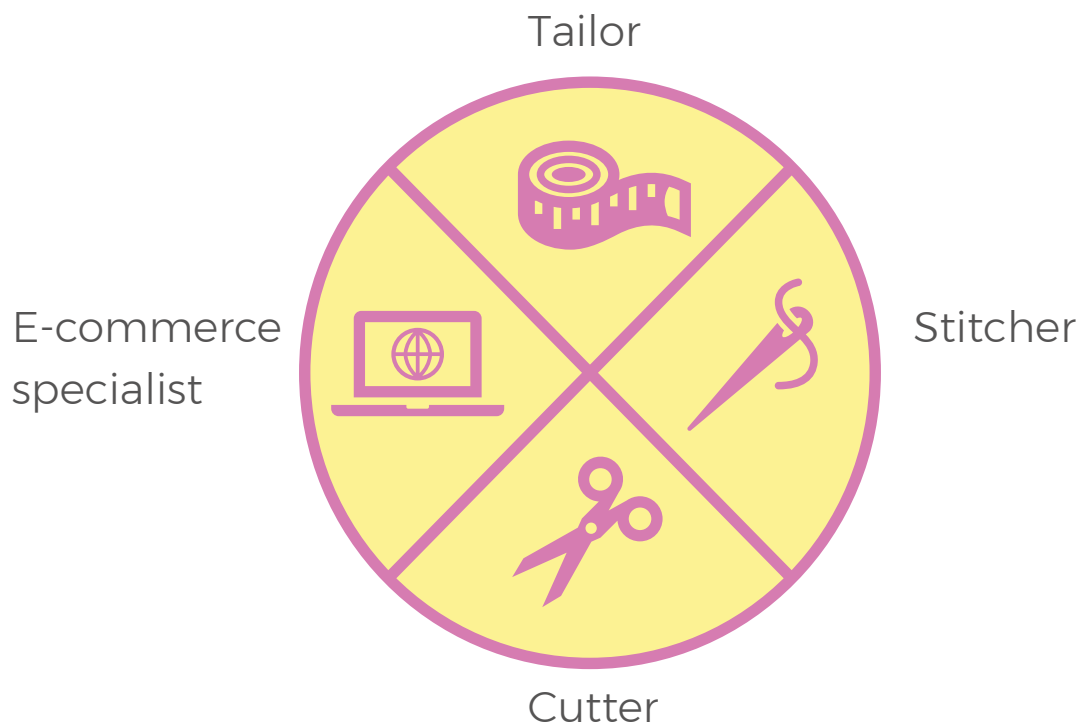
- » Of all companies currently employing foreigners, 32% hired them within the last 12 months
- » All companies employing foreigners have workers from Ukraine among their staff
- » 60% of companies claiming to employ foreigners indicated that between 2021 and 2022 the number of their employees from outside of Poland increased
- » Foreigners are most often employed in the positions of clothing designer, tailor, clothing technologist and clothing production manager



Employee recruitment

During the last 12 months* every fourth company (25%) was on the lookout for employees. This was most common in small (32%) and medium and large companies (38%). 47% of companies looking for employees had problems finding them

The following positions proved the most difficult to fill:



*March 2022 – March 2023

Forecast change in employee numbers in the next 12 months and next 3 years

87% of employers believe that over the next 12 months their number of employees will remain at the same level

In the course of the next 12 months, the largest increase in demand for workers is expected in the following positions: CSR specialist, tailor, clothing designer, and social media specialist



As for the next 3 years, businesses expect most often to be hiring for the following positions: cutter, CSR specialist, stitcher and tailor





Job satisfaction among employees

Employees in the industry are generally satisfied with their jobs

Employees value most*:

42% Relations with colleagues

41% Relations with superiors

41% Relations with colleagues

40% Relations with superiors

The aspects of work rated the **least favourably** were: promotion opportunities and the possibility of choosing one's mode of work

* Percentages of „very satisfied” responses

Assessment of employees' skills

41% of businesses claim to assess their employees' skills, while 20% of them do so regularly (at least once in year)



the most common way of assessing employees' competencies is to talk to their superiors

72% of employers declare that their employees' competencies are completely satisfactory



in the opinion of employers, competency deficits apply above all to soft skills, e.g. self-organisation, inventiveness, punctuality



Employers' action strategies for deficit competencies

62%

of employers send their employees for training



33%

of companies focus on hiring new employees with the appropriate competencies



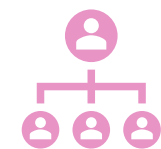
12%

of companies hire new workers and then train them



8%

of companies reorganise their employment structure in order to make better use of existing employee skills



Ways to motivate employees

Bonuses and enabling a good work-life balance are the most common ways companies use to motivate their employees

64% of businesses use annual bonuses as a way to motivate employees

48% of employers focus on ensuring/enabling a good work-life balance for their employees

46% of employers strive to create a friendly work environment in order to motivate employees



Forms of employee skill development

A significant portion of employees claim not to be developing their occupational skills either at work or independently

Forms of development at the workplace indicated most often:



Instruction regarding e.g. the operating of new equipment

Reading trade journals



Periodic observation of work performed by another employee'

The most common sources of knowledge used for self-development in the last 12 months are videos and materials on the internet, books, magazines and other printed materials, and computer software

Collaboration between business and education

12% of companies collaborate with schools

79% of employers believe that school graduates have skills relevant to companies' current needs*

Competencies indicated most frequently as those that should be taught in vocational schools:



- » Basic skills related to the occupation
- » Specialised skills
- » Creativity and problem-solving skills

* Total of "yes, definitely" and "yes, probably" responses

New position in the industry (3-year perspective)

Microbiologist



A specialist primarily responsible for the development of innovative materials and textiles used in the production of the final product, obtained by improving existing materials or inventing new, non-standard materials

The role of the microbiologist is also to ensure the microbiological safety of clothing products

The appearance of this position is related to the ever-increasing need to adapt production quality to applicable environmental standards

Balance of skills

Skills balance – a summary of assessments of key competencies in specific positions in the fashion and innovative textiles industry from the perspective of employers and employees, in order to better balance the labour market in terms of the supply of employees with the right competencies and employers' demand for them

The audit was based on:

- » employers' assessment of the importance of competencies
- » assessment of the difficulty in hiring employees with particular competencies
- » forecast of changes in the importance of competencies over the next 3 years
- » employee's self-assessment of their competencies





Balance of skills – key findings

Hot skills*:

- » handling new production technologies and tools
- » knowledge of the specifics of materials
- » knowledge of the environmental impact of the materials used
- » knowledge of the specifics of the fashion industry

Important competencies that are difficult to find:

- » knowledge of innovative materials
- » knowledge of the environmental impact of the materials used
- » knowledge of issues in labour rights
- » the ability to speak English

Own competencies rated the highest by employees:

- » knowledge of the properties of materials and the rules of working with them
- » knowledge of the specifics of the fashion and textile industry
- » knowledge of new production technologies

Competencies that employees want to develop:

- » searching for and sorting through information about the market and trends
- » knowledge of materials and rules of working with them
- » knowledge of foreign languages

* Competencies whose importance, according to employers, is already growing rapidly or will grow rapidly in the next 3 years

Balance of skills: Clothing designer

Important competencies that are difficult to find:

- » knowledge of market trends in terms of material science and the artistic aspect (Trendbook)
- » knowledge of product manufacturing technology (basic)
- » the ability to assess current and future market demand
- » knowledge of the impact of a particular material or resource on the natural environment

Hot skills:

- » knowledge of market trends in terms of material science and the artistic aspect (Trendbook)
- » the ability to use software for clothing design (i.e. Adobe Illustrator, CorelDRAW)

Competencies of increasing importance – 3 years:

- » knowledge of the impact of a particular material or resource on the natural environment
- » the drive to achieve / being goal-oriented
- » the ability to assess current and future market needs





Balance of skills: Clothing constructor

Important competencies that are difficult to find:

- » knowledge of the properties of materials and rules of working with them
- » knowledge of anthropometric dimensions
- » knowledge of the principles in constructing and modelling clothing forms
- » the ability to operate computer systems for creating clothing structures (CAD/CAM)
- » knowledge of foreign languages (especially English)

Hot skills:

- » knowledge of the process related to sewing a given model (the ability to assess the quality of workmanship and sewing technology used in the prototype)
- » knowledge of basic design principles

Competencies of increasing importance – 3 years:

- » spatial imagination
- » the ability to obtain and use environmentally friendly materials
- » the ability to operate computer systems for creating clothing structures (CAD/CAM)

Balance of skills: Clothing technologist

Important competencies that are difficult to find:

- » the ability to choose technology for making products (including innovative technology based on digital machines)
- » the ability to control the quality of clothing materials and finished products
- » professional experience in working with materials
- » the ability to speak foreign languages (especially English)
- » knowledge of foreign languages (especially English)

Hot skills:

- » knowledge of new technological trends in the clothing industry
- » knowledge of the principles of cutting and sewing

Competences of increasing importance – 3 years:

- » knowledge of the properties of materials and the rules of working with them
- » knowledge of foreign languages (especially English)





Balance of skills: Specialist for innovative materials

Important competencies that are difficult to find:

- » up-to-date knowledge of market trends
- » professional experience in working with materials
- » the ability to find new applications for existing materials
- » knowledge of innovative materials and principles of working with them

Hot skills:

- » knowledge of new production technologies (e.g. gluing seams, zippers, rainwear)
- » knowledge of the impact of the materials used on the environment (e.g. taking into account the method of their production)

Competencies of increasing importance – 3 years:

- » up-to-date knowledge of market trends
- » the ability to find new applications for existing materials
- » the ability to use foreign languages (especially English)
- » knowledge of the specificity of new environmentally friendly materials and the rules of working with them

Balance of skills: Trend researcher

Important competencies that are difficult to find:

- » knowledge of issues in data analysis, statistics, management and economics
- » the ability to identify and predict fashion trends
- » knowledge of foreign languages (especially English)
- » the ability to formulate recommendations based on data from many sources (including catalogues, online data, influencers)

Hot skills:

- » knowledge of issues in data analysis, statistics, management and economics
- » knowledge of tools and services (e.g. Google Analytics) enabling data analysis
- » knowledge of the specifics of the fashion industry

Competencies of increasing importance – 3 years:

- » the ability to analyse data from various sources





Balance of skills: Cutter

Important competencies that are difficult to find:

- » knowledge of the specificity of materials (including innovative materials) and the rules of working with them
- » the ability to cut non-standard clothing elements
- » the ability to adapt to the required pace of production

Hot skills:

- » knowledge of the principles of cutting materials
- » accuracy and precision in the performance of work

Competencies of increasing importance – 3 years:

- » the ability to operate cutting tools and machines

Balance of skills: Stitcher

Important competencies that are difficult to find:

- » knowledge of the specificity of materials (including innovative materials) and the rules of working with them
- » the ability to cut non-standard clothing elements
- » the ability to adapt to the required pace of production

Hot skills:

- » knowledge of the rules of cutting materials
- » accuracy and precision in the performance of work

Competencies of increasing importance – 3 years:

- » knowledge of the specificity of materials (including innovative materials) and the principles of working with them
- » the ability to operate cutting tools and machines





Balance of skills: Tailor

Important competencies that are difficult to find:

- » the ability to independently carry out the entire process of creating a specific garment
- » the ability to find and propose a solution
- » the ability to verify customer needs

Hot skills:

- » knowledge of the principles of cutting and sewing various elements of clothing
- » knowledge of the principles of clothing construction

Competences of increasing importance – 3 years:

- » knowledge of materials (including innovative materials) and the principles of working with them
- » the ability to independently carry out the entire process of creating a specific garment

Balance of skills: Clothing production manager

Important competencies that are difficult to find:

- » the ability to supervise the work of design and production teams
- » working under time pressure
- » having management knowledge
- » the ability to solve problems independently

Hot skills:

- » knowledge of the duties and tasks of employees related to production
- » having management knowledge

Competencies of increasing importance – 3 years:

- » the ability to estimate the amount of materials and other elements needed for production
- » the ability to speak foreign languages (especially English)





Balance of skills: Marketing specialist

Important competencies that are difficult to find:

- » knowledge of the specifics of a given company and the products it offers
- » the ability to identify sales trends based on data search and selection
- » knowledge of current sales trends
- » having knowledge of psychology
- » the ability to create advertising campaigns
- » the ability to segment customers of a given company based on data

Hot skills:

- » knowledge of current sales trends
- » knowledge of the specifics of the fashion and textile industry

Competencies of increasing importance – 3 years:

- » knowledge of the specifics of a given company and the products it offers
- » having knowledge in the field of marketing, sales, advertising
- » the ability to identify and segment customers based on social groups, the so-called „mindset”
- » effectively increasing conversion levels

Balance of skills: Social media specialist

Important competencies that are difficult to find:

- » knowledge of current trends in online communication
- » the ability to build effective and attractive content
- » the ability to conduct advertising campaigns (including paid campaigns)
- » knowledge of tools and software for creating posts and graphics (e.g. Adobe Photoshop, Illustrator)
- » the ability to use the internal tools of social networking sites

Hot skills:

- » the ability to build effective and attractive content
- » the ability to run advertising campaigns (including paid campaigns)

Competencies of increasing importance – 3 years:

- » the ability to manage communication via the company's social networking sites
- » knowledge of foreign languages (especially English)
- » a creative mind





Balance of skills: CSR specialist

Important competencies that are difficult to find:

- » teamwork ability
- » the drive to achieve / being goal-oriented
- » knowledge of the basic tools used in the production process and their operation
- » knowledge of issues in labour rights

Hot skills:

- » knowledge of tools and methods leading to achieving the company's pro-environment goals
- » the ability to speak foreign languages (especially English)

Competencies of increasing importance – 3 years:

- » knowledge of basic tools used in the production process and their operation
- » creativity

Balance of skills: Fashion buyer

Important competencies that are difficult to find:

- » the ability to search for trends (including trends in the field of the latest technologies)
- » general technological knowledge
- » readiness to work with frequent business trips

Hot skills:

- » the ability to search for trends (including trends in the field of the latest technologies)
- » the ability to analyse data, draw conclusions and present recommendations

Competencies of increasing importance – 3 years:

- » openness to finding solutions
- » management of the procurement budget





Balance of skills: E-commerce specialist

Important competencies that are difficult to find:

- » knowledge of current trends in running online stores
- » industry knowledge in the field of fashion and innovative textiles
- » analytical skills (data analysis, formulating conclusions based on sales data)

Hot skills:

- » the ability to implement sales strategy guidelines
- » the ability to oversee online sales processes
- » formulating understandable content and messages

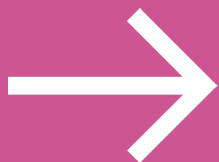
Competencies of increasing importance – 3 years:

- » content positioning in web browsers (SEO)

A full discussion of the
research results can be found in the
report:

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industry**

Report on the 2nd edition of the study:



[https://www.parp.gov.pl/component/site/site/
bilans-kapitalu-humanego#wynikibadanbran-
zowych](https://www.parp.gov.pl/component/site/site/bilans-kapitalu-humanego#wynikibadanbran-zowych)