



### Portugal has a long-standing tradition in the T&C industry with a unique set of conditions and existing know-how...

For the purposes of this report, the scope of the T&C industry in Portugal encompasses:

Technical textiles

### The textile sector in figures | 2021



11.835 Companies



126.940 People employed



**€**8,0B Turnover

▲ 1%<sup>1</sup> (2017-2021)



**€**2,6B

Gross Value Added

▲ 2%<sup>1</sup> (2017-2021)

### Employment in the sector | 2021

The Northern Portugal comprises 84% of the T&C industry employment



### Portugal's textile products exports

Exports of textile & clothing products in 2022



CAGR1 2018-22 of T&C sector exports

#### Main export markets:



The national textile industry has a significant presence in key global markets including advanced EU economies and the USA

### The technical textiles segment

Portugal has one of the strongest technical textile industries in Europe, focusing on innovative, sustainable and high-quality products.



Portugal producing technical textiles

Europe's tech textile in 2021 (in revenue)

exports in 2021

- 2. Braga region comprises Cávado and Ave.
- 3. Oporto region comprises Oporto Metro Area, Tâmega and Sousa.

Source: Eurostat, Sabi, Statistics Portugal, Banco de Portugal, EURATAX.

<sup>1.</sup> Compound annual growth rate.

### ... that translate into an innovative ecosystem with multiple attractiveness factors

### **Textile & Clothing industry ecosystem**



#### **Education**

- Portuguese education has reputable degrees in the textile area, with more than 1.000 graduates<sup>1</sup> in 2022 in this field.
- ▶ Professional education in ▶ The number of this field is also notably strong in Portugal, with entities such as Citeve and Modatex providing high-quality training.



Innovation and **Technology Centers** 

- In 2021, the T&C industry was responsible for 28% of the industrial design applications in Portugal.
- researchers increased by 94% in the T&C industry, between 2015 and 2020.



#### **Companies**

▶ The T&C industry is mostly composed of SMEs, which represent 18% of the manufacturing companies in Portugal.



**Industry Associations** 

Institutional entities such as the Textile Cluster, ATP and ANIVEC/APIV play a key role in promoting relationships between R&D centers, companies and academia.

### **Main investors in Portugal**

Portugal has been chosen as an investment location by several multinational companies.



























### FDI attractiveness factors



Highly skilled workforce



Robust R&D system and innovation capabilities



Existing know-how across the entire value-chain



Long-standing tradition



Strategic location



Open and stable business environment



Industrial cluster in the Northern region

<sup>1.</sup> Includes the following courses: Textile and Fashion Design; Engineering Sciences (Textile area); Textile Engineering; Textile and Fashion Design and Marketing; Fashion Design; Fashion Design and Branding; Chemistry engineering; Chemistry; Sciences of Chemistry engineering, Industrial Chemistry; Technology Chemistry and Textile Chemistry.



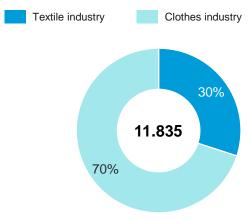
# Portugal has a well-established Textile and Clothing industry, being the fifth largest in Europe

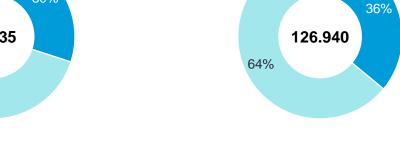
- ► The T&C industry has a long-standing tradition, widely recognized for its product quality, innovation, and short lead times.
- Over the years, this sector has developed a set of specific and unique competencies throughout the entire value chain (including design, engineering and production), strengthening its competitiveness.
- Clients seeking creative design, customization, production flexibility and reliability will find strategic partners in Portugal.
- ▶ The T&C Industry in Portugal is the 5th largest in

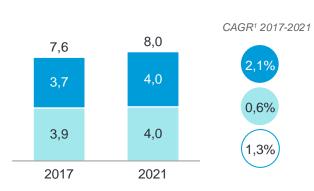
**Companies** 

- Europe (measured by revenue). In 2021, it comprised **18%** of both companies and employees in the total manufacturing industry in Portugal.
- According to EURATEX, the Portuguese T&C industry absorbed 9% of the investment made in Europe within this sector, in 2019.
- Aware of the heavy environmental footprint of the T&C industry, this sector in Portugal is greatly involved in the development of new materials, new production processes, the use of clean energy, digitization and advanced technical equipment.

### People employed







Turnover (€B)



Gross Value Added (⊕)

The Portuguese unit is a reference in Europe, having available lastgeneration equipment capable of producing everything in a single SORGSTENA space."

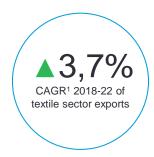
Jorge Machado, CEO Borgstena (South Korea) was established in Portugal in 2018

Source: Statistics Portugal; Euratex; EY-Parthenon Analysis.

<sup>1.</sup> Compound annual growth rate.

### Portuguese exports have increased over the last 5 years, keeping pace with its European peers

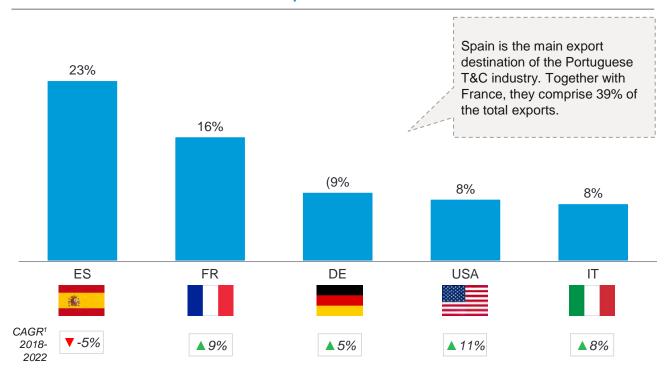




Weight of textile exports in total Portuguese exports, 2022

- ► The textile sector in Portugal exported €6,0B in ► In 2022, Portugal showed an increase in the T&C 2022, showing a positive steady growth since 2018 (16%) and a relevant share of the total exports in Portugal (8%).
  - industry exports, with over half (54%) of its total production being distributed to international markets.

### Main export markets | 2022



### Main exporters in the EU | 2021



- Over the years, Portugal has reinforced its strategic position in the European market.
- According to EURATEX, Portugal is the seventh largest exporter of textile products in the European Union.
- Main products exported: T-shirts, singlets (15%), Bedlinen, table linen (10%), Jerseys, pullovers (10%), Men's suits, ensembles, jackets (5%) and Women's suits, ensembles, jackets (5%).

<sup>1.</sup> Compound annual growth rate . Source: Eurostat; Banco de Portugal.

# The T&C industry is highly concentrated in the Northern Region of Portugal

Geographical distribution of employment in the T&C sector and top 15 T&C companies (by people employed) | 2021



- Most manufacturers are in Northern Portugal, an area distinguished as one of the finest T&C production hubs due to its endogenous resources and existing know-how.
- ► The Northern region, namely Oporto and Braga, have the highest number of enterprises and turnover. Together, these regions accounted for 82% of all textile companies and 85% of total turnover, in 2021.
- ➤ The top 11 companies with the highest turnover are in the northern region. Two of the largest employers, are in Braga (Riopele) and Oporto (Lankhorst Yarns).
- Moreover, there's a notable expansion in the technical textiles sector in Covilhã, situated in Castelo Branco region, fueled by strong technological competitiveness.

- 1. Braga region comprises Cávado and Ave.
- 2. Oporto region comprises Oporto Metro Area and Tâmega e Sousa.
- 3. Viseu region comprises Viseu Dão Lafões.
- 4. Castelo Branco region comprises Beira Baixa.

Source: Statistics Portugal, Sabi.

# Portugal has been selected as an investment destination by several multinational companies

Most recent investments undertaken by foreign companies in Portugal

- ▶ In 2021, Mehler Engineered Products (owned by the German Group KAP) started a new investment project for manufacturing stretch fabrics in Vila Nova de Famalicão, North of Portugal. In the meantime, the first production line for producing the texturized threads has been installed.
- This investment allowed Mehler to cover the entire production process of stretch fabrics in-house: from texturizing, assembling, twisting, to weaving, tumbling, treating and testing the stretch fabrics with high elongation.







- In 2019, Lantal announced a new production facility in Santo Tirso, North of Portugal, to expand its production capacity of textiles for the transportation industry.
- With an investment of €1.7m, Lantal wanted to expand its production capacity by around 90%.
- In 2018, Nextil Group acquired the Portuguese company Playvest located in Braga.
- Playvest is specialized in sports textiles, creating fabrics and garments that boost the athlete's performance.





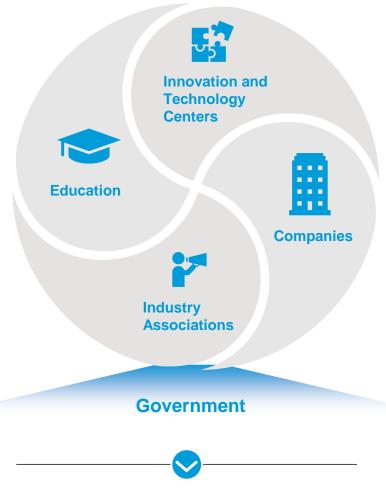
- Micropolis was established in 2002, as a spin-off of the University of Minho to produce and commercialize microcapsules developed by the Center for Textile Science and Technology.
- In 2008, it was acquired by Devan Chemicals, which specializes in sustainable technology for the textile industry.

Source: Companies' website.



# The strong dynamics of the T&C ecosystem allows its positioning in the international context

**Textile & Clothing ecosystem in Portugal** 



In general, the **T&C** ecosystem in Portugal comprises four main axes, connected with each other and the Government, a key stakeholder in facilitating its growth.

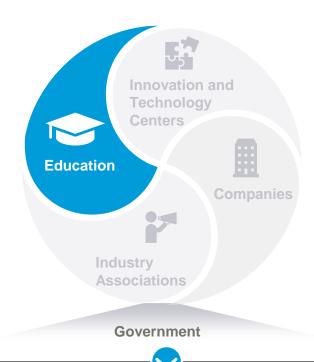
- Considering the strategic importance of the T&C industry in the national economy, the Portuguese Government has demonstrated a commitment to support and strengthen the sector.
- Namely, in 2019, the Government and the Textile Cluster signed a Competitiveness and

#### Internationalization Pact.

► This Pact embodies a set of initiatives in areas, such as human capital, technological capacity and creativity, knowledge and innovation, sustainability and international projection.

### Portugal presents a highly qualified workforce, supported by its renowned universities

### Textile & Clothing ecosystem in Portugal | Education



- Portugal is internationally recognized for its training programs in the textile area, namely in textile engineering and other complementary engineering.
- In 2022, in Portugal, more than 1.000 people graduated¹ in the areas of textile engineering, fashion design, as well as chemistry, nanotechnology, polymer engineering and advanced materials and processing.
- Professional education in the textile field is also notably strong in Portugal, with entities such as CITEVE and Modatex providing high-quality training, from design and production to marketing and sales.
- ▶ CITEVE and Modatex play a central role in strengthening the workforce with core skills aligned with the main challenges and requirements the Technical Textiles Industry faces.

### Portuguese Universities in the textile area<sup>2</sup> | 2022









Modatex presents a wide range of courses in the textile area, contributing to a better strategic and operational coordination in the sector



The Portuguese company is the most advanced when it comes to digitalization provided by the very strong connection with investigation centers and universities."

Alberto Tavares, CEO

Mehler Engineered Products (German Company) was established in Portugal in 1995

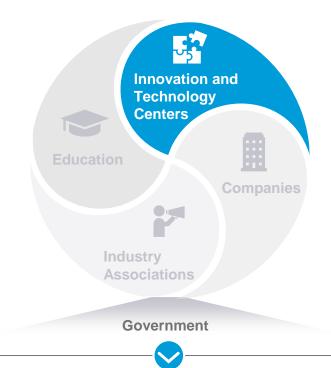
2. These universities were chosen according to publications made by the ATP.

Source: DGEEC.

<sup>1.</sup> Includes the following courses: Textile and Fashion Design; Engineering Sciences (Textile area); Textile Engineering; Textile and Fashion Design and Marketing; Fashion Design; Fashion Design and Branding; Chemistry engineering; Chemistry; Sciences of Chemistry engineering, Industrial Chemistry; Tecnological Chemistry and Textile Chemistry.

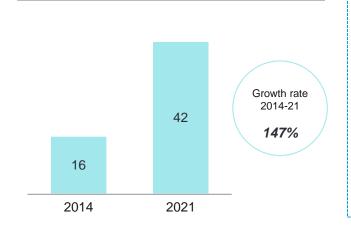
# Portuguese Innovation and Technology Centers are internationally recognized with award-winning researchers

Textile & Clothing ecosystem in Portugal | Innovation and Technology Centers



- ➤ The continuous investments made in innovation, digitalization, and the development of highly technical products and equipment have been facilitated by the installation of high-tech textile engineering interface centers.
- CITEVE, the Portuguese research institute focused on the T&C industry, offers a wide range of services covering R&D, testing and certification, technical and technological consulting and training, among others. CITEVE is currently implementing 66 national or European-funded R&D projects. On a European level, CITEVE is part of 18 project consortium, coordinating three of them.
- ► CeNTI is focused on Nanotechnology and Smart Materials applied to the textile industry, being already recognized internationally.
- CENIT is a strategic intelligence centre, with a special focus on monitoring the national and international competitiveness positioning. CENIT actively focuses on promoting external actions, offering entrepreneurial support, facilitating networking, and enhancing training development for this industry.

### Textile industry investment in R&D (€M)

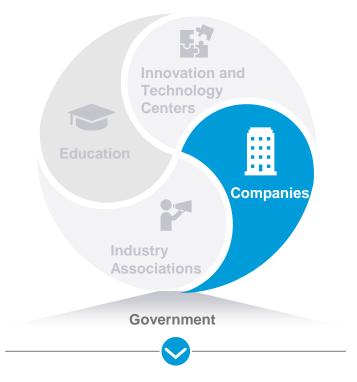


Share of industrial design applications related to the T&C industry in Portugal (2021).

Growth in number of researchers in the T&C industry (2015-2020).

# The T&C industry in Portugal widely recognized for its product quality, flexibility, skill set and innovation

### **Textile & Clothing ecosystem in Portugal | Companies**



- ► The T&C industry, mostly composed of small and medium-sized companies, plays a significant role in Portugal's economy, representing 18% of SMEs in the manufacturing industry.
- Over the years, T&C industry has developed a set of specific and unique competencies throughout the entire value chain, including design, engineering and production, strengthening its competitiveness.
- ▶ Portuguese companies specialise in a wide range of technical textiles with different applications, including sporttech, clothtech, protech, medtech, mobiltech, hometech, among others.

### Top 10 foreign textile companies in Portugal in terms of revenue<sup>1</sup> | 2021





















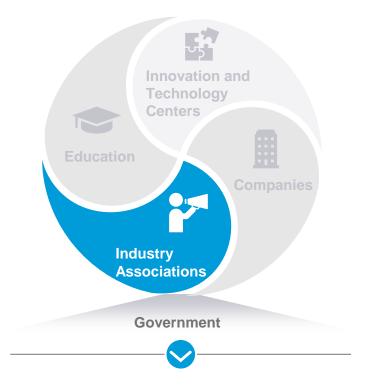
The competitiveness and eagerness demonstrated by Portuguese companies opens new opportunities to investments from the Swiss Group."

Constantino Silva, former CEO

Lantal Textile (Swiss Company) was established in Portugal in 1988

# The textile business associations play a key role for the sector growth

### **Textile & Clothing ecosystem in Portugal | Industry Associations**



- ➤ The competitiveness of the T&C industry has been reinforced by a set of industry associations, promoting the best interest of the T&C industry.
- ▶ Institutional entities such as the Textile Cluster, ATP and ANIVEC/APIV play a key role in promoting relationships between R&D centers, companies and academia, helping the sector to

#### develop its activity.

These associations have also established industry pacts with the Government to foster a friendlier business environment, enhance international competitiveness, promote FDI attraction, and encourage R&D and entrepreneurship.



Cluster Têxtil is a competitiveness cluster, focused on adding knowledge and skills to the T&C industry.

**Cluster Têxtil** is managed by CITEVE and brings together companies and business associations.



ATP comprises over 500 companies from the T&C industry, promoting synergies between textile, clothing and fashion companies whilst providing them with a high visibility.

ATP is one of the most important T&C business associations in Europe.



The National Association of T&C Manufacturers represents the T&C industry in Portugal (e.g. Government, and Trade-Unions) and internationally (e.g. IAF, IFTF, Ginetex and Intercolor).

ANIVEC also plays a crucial role services, encouraging in disseminating information, encouraging networking development and train opportunities and providing specific training.

ANIVEC also plays a crucial role services, encouraging networking, boosting development and train spreading crucial information.



The Portuguese Association of Textile Engineers and Technicians (APETT) plays a significant role in representing the sector.

Core responsibilities of APETT include delivering support services, encouraging networking, boosting development and training and spreading crucial information.



# Portugal's competitive advantages in technical textiles enhance its position in the European market

#### **Technical Textiles**

- Textile companies in Portugal are specialized in a wide range of technical textiles with different applications. According to the Textile and Clothing of Portugal Association, currently more than 10% of textile companies in Portugal are producing technical textiles.
- ► There is a strong and active scientific and technological system, where CITEVE (Technological Centre for Textile and Clothing Industry) and CeNTI (focused on Nanotechnology and Smart Materials) excel. Furthermore, through the robust partnerships between R&D centers, companies and academia, several innovative projects have been promoted, achieving international recognition.
- Training programs in textile engineering and other complementary engineering are crucial to the development of the T&C industry where CITEVE and Modatex play a central role in strengthening the workforce with core skills aligned with the main challenges and requirements the Technical Textiles Industry faces.
- This industry is characterized by its robust export orientation, which is fueled by its distinctive offerings, technological sophistication, and strategic proximity to the primary European markets.

#### Main international inverstors<sup>1</sup>





















## 8<sup>th</sup>

Portugal's rank (21 countries) in Europe's tech textile industry (revenue) | 2023

Source: IBIS World

## €368M (6%)

Tech textiles exports (weigh on T&C industry) | 2022 Source: Eurostat

### Main applications of tech textiles in Portugal

















Sporttech

Clothtech

Protech

Medtech

Mobiltech

Hometech

Agrotech

Indutech

### Did you know...



Cork-A-Tex was a project with the aim of developing textile substrates with the incorporation of cork waste, namely cork stoppers, old cork products, etc. This project have been distinguished with several international awards, such as Techtextil Innovation Award 2019 and German Design Awards – 2022.

<sup>1.</sup> SABI. Top 5 international firms with highest turnover (2021). Source: IBIS World Portugal, Eurostat, ATP.

# In recent years, technical textile exports has substantially increased

### Most exported products in the tech textile sector in Portugal<sup>1</sup> | 2022

Product name	Exports in 2022 (€M)	CAGR <sup>2</sup> 2018-22 (%)
5902.10.10: Tyre cord fabric of high-tenacity yarn of nylon or other polyamides, impregnated with rubber	45	▲17%
2 5911.90.99: Textile products and articles, for technical purposes, specified in Note 7 to chapter 59, n.e.s.	38	<b>▲</b> 1%
3 5902.20.10: Tyre cord fabric of high-tenacity polyester yarn, impregnated with rubber	20	<b>▲</b> 3%
5806.32.90: Narrow woven fabrics of man-made fibres, without real selvedges, with a width of <= 30 cm, n.e.s.	13	<b>▲</b> 6%
5807.10.10: Labels, badges and similar articles, of textile materials, in the piece, in strips or cut to shape or size, woven, with woven inscriptions or motifs	11	<b>▲</b> 6%
6 5806.32.10: Narrow woven fabrics of man-made fibres, with real selvedges, with a width of <= 30 cm, n.e.s.	9	<b>▲</b> 7%
5807.10.90: Labels, badges and similar articles, of textile materials, in the piece, in strips or cut to shape or size, woven, not embroidered (excl. those with woven inscriptions or motifs)	8	▲16%



Portugal provided Devan a young, dynamic team with a know-how in an emergence area as microencapsulation with patented and differentiated technology."

Raquel Vaz Vieira, Former Thermoregulation Business Unit Manager

Devan Micropolis (Belgian Company) was established in Portugal in 2008

Source: Eurostat.

<sup>1.</sup> The Top 7 includes all products that have a turnover higher than €5M.

<sup>2.</sup> Compound annual growth rate.

### Portugal has been on international investors' radar, being able to attract companies with innovative projects

Did you know<sup>1</sup>...



...LASA with the project "smart-bed", developed sheets made with cotton fibers, that could sensitize the liquids that fell on them. This product won the 2017 Natural Fibrenamics Green Awards...

...TMG has developed new materials for the automotive industry with the FibrelnSurface project where natural fibers are included in the materials used in vehicle interior surfaces, to increase the sustainability of the final products. These materials are used in the structure and interior of BMW electric models...





...Borgstena with the SATEX (Smart Automotive Textile) project introduced several types of R&D activities in the weaving, knitting and printing process, incorporating 3 types of lightening in the door panel and headliner of vehicles...

... Petratex has co-created the LZR Racer suit that Michael Phelps wore in the Beijing Olympics. It also develops products in the health sector such as the VitalJacket by incorporating electrodes that work as a heart monitor...





# Portugal offers a set of unique conditions to attract foreign investment



#### Highly skilled workforce

The T&C industry has a longstanding tradition in Portugal, presenting a highly-skilled workforce. This industry is especially strong in engineering and production design



### Robust R&D system and innovation capabilities

Portugal, with its world-class research institutions, universities and innovation centres, can invest in innovation and digitalization, as well as in developing technical products, equipment and nanotechnology



### **Existing know-how**

Portugal's T&C industry benefits from pre-existing knowledge and know-how. This expertise spans across key areas, from fiber production, spinning, weaving, knitting, dyeing, finishing, to garment manufacturing



### Long-standing tradition

Portugal's T&C industry benefits from local strong expertise, a legacy that not only fosters innovation and streamlines processes from raw materials to final products, but also garners international recognition.



### Strategic location

With the rise of fast fashion and the constant renewal of products in stores, Portugal has a wide range of possibilities to increase its logistic efficiency.



### Industrial cluster in the Northern region

The T&C cluster in North
Portugal not only cultivates a
dynamic environment for
innovation but also fosters skill
development across the entire
value chain, escalating the
industry's efficiency and
competitiveness.



### Open and stable environment

Portugal has a stable political and economic situation and a well-developed infrastructure network. Thus, it offers a sustainable and predictable environment for business operations.



### External challenges to which T&C Industry in Portugal is responding

- ➤ The rising focus on sustainability and circular practices is impacting the T&C industry, driving changes in production processes and consumer behaviour towards more environmentally friendly alternatives.
- ► The introduction of new technologies like IoT, Industry 4.0, and AI is revolutionizing the textile
- industry, transforming production practices and improving efficiency. The **3D printing market** is expected to reach \$270B by 2025<sup>1</sup>.
- ► The ongoing energy crisis, fluctuating raw material prices, and value chain shifts are impacting the T&C industry's dynamics, leading to adjustments in production strategies and cost structures.





### Economic Activity codes and combined nomenclature<sup>1</sup>

NACE	Description
13	Manufacture of textiles
14	Manufacture of wearing apparel

CN	Description
5902.10.10	Tyre cord fabric of high-tenacity yarn of nylon or other polyamides, impregnated with rubber
5911.90.99	Textile products and articles, for technical purposes, specified in Note 7 to chapter 59, n.e.s.
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5807.10.10	Labels, badges and similar articles, of textile materials, in the piece, in strips or cut to shape or size, woven, with woven inscriptions or motifs
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<sup>1.</sup> The combined nomenclature codes mentioned in the table above are exclusively the ones referenced in this report in page 19. For the purpose of computing the industry's overall figures, the list available at Invest in Portugal website was used.

AICEP is a one-stop shop entity responsible for attracting top foreign companies to invest in Portugal. It offers comprehensive support services, including guidance and coordination with Portuguese entities involved in the investment process.

AICEP works as a flexible government business entity with streamlined free-of-charge services, offering a dynamic approach focused on the client/investor and allowing direct negotiation with companies through a tailored approach to their requirements.

AICEP is a single point of contact for foreign investors in all phases of the decision process:

- Enquiry-handling phase: provides comprehensive, accurate information, data, and benchmark reports.
- **Site Location**: provides different site proposals according to project specifications. Help partnerships with local entities.
- Fact-finding visits: organizes site visits to meet local authorities, recruitment firms, office space providers, and universities, among others.
- Aftercare: a key account manager will assist regularly.

### **EY** | Building a better working world

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