



Success stories from the European Digital Innovation Hubs (EDIH) Network

Digitally transforming businesses just like yours!

ARACNE - Machine vision for needles and sinkers control for zero defect manufacturing: from proof of concept to spin-off company

EDIH involved

Customer



Catalonia Digital Innovation Hub (DIH4CAT)

CANMARTEX Spain

> <https://canmartex.com/>
> SME in the manufacturing of circular knitting machines

Challenges



Improve the **early detection** of fabric defects caused during knitting



Upgrade **economic efficiency** in the fabric production chain



Cut down **industrial waste** caused by defected fabric

Services

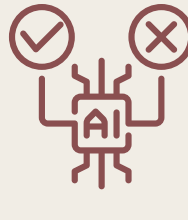


Test-before-invest solutions

Technologies



Photonics



Artificial intelligence & decision support



Internet of Things

Empowered by the EDIH Network's expert guidance, CANMARTEX successfully:



Designed and implemented an innovative **predictive quality system**.



Secured funding for the solution's proof of concept.



Generated market interest at the **2023 Textile & Garment Technology Exhibition**.



Accelerated the system's potential by creating the **spin-off company ARACNE**.

Benefits

Maximum efficiency

The final predictive quality system can identify **100%** of the defects during the weaving process. It can predict more than 50% of the defects before the fabric is made, avoid 15% of them with photonic regulation systems before the start of production and detect the remaining 35% in the machine itself with an advanced vision system.

Optimised costs

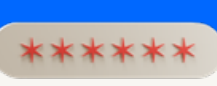
The new system can prevent millions in losses by catching weaving defects early: if undetected, a defect can multiply costs by six by the time it reaches the garment stage.

Advanced innovation

The company stepped up its innovation practices by relying on its partner's expertise, **patenting cutting-edge systems** that use AI, advanced statistics, as well as optical and photonic technologies.

New business opportunities

CANMARTEX and Eurecat, the entity leading the advanced manufacturing and robotics node of the DIH4CAT EDIH, jointly created a new company called ARACNE to offer the developed solution to the market.



20%

increase in sales of machinery



10%

increase in the price of machines, resulting in higher turnover



4

new digitally skilled people hired by ARACNE

The ARACNE solution **cuts down industrial waste**, directly reducing the environmental impact of the textile industry.

Companies in the knitting industry using the new system **improve their competitiveness and productivity**.

By working with machines currently in use and up to 30 years old, the solution empowers textile producers to **advance their digitalisation level**.



Discover how the EDIH Network can accelerate your business's digital and sustainable transformation.

Visit the [website](#) & become our next **success story!**