

Manifatturiero

PARTNER SEARCH PMI7-EU-BSGSME-19

01 dicembre 2017

Oggetto: PARTNER SEARCH PMI7-EU-BSGSME-19

Richiesta di una PMI dell'Estonia alla ricerca di partner da includere in un loro progetto. Contattare spagnoli@apre.it facendo riferimento al codice PARTNER SEARCH PMI7-EU-BSGSME-19

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<Reference n.: PMI7-EU-BSGSME-19>

<Deadline: 04/09/2007>

<Programme: >

<Project Title: DIGITAILOR - Physical representation of DIGItal body measurements to give custom TAILORs worldwide market reach>

<Financial Scheme: >

<Description: The aim of the project is to develop a system to reduce direct client involvement in the fitting of custom tailoring products. This will be reached by developing a shape-shifting physical mannequin that can take on the exact shape of nearly any human body based on data from 3D body scanning process. Such a solution is beyond current state of the art as so far the body measurements have been represented only virtually.

Despite the availability of lower cost ready-made or made-to-measure garments, many people prefer custom tailored clothes as they are crafted uniquely for the specific customer to get best possible fit. However, this means a client has to come to the tailor for several fittings and hence a tailor can serve only nearby customers. Fittings also carry an extra cost for the customer - the time commitment. In addition, a tailor has to schedule her production according to the dates that the customer can come for a fitting. That can prolong the

fulfilment of order and the increased wait is another barrier for customers.

The project aims to eliminate these problems by creating a technology that can replace customers in fittings. It has already become possible to obtain extensive data on customer body shape by 3D body scanners. The data can be used to create a virtual model of customer's body or obtain precise measurements. However, a virtual model can not be used in fitting of a physical suit. Therefore a mannequin will be developed that can physically take the shape of the customer based on the data from 3D body scanner.

As a result, customers can get scanned in the nearest body scanner and send the measurements together with an order to a tailor equipped with the system anywhere in the world. The tailor will use the mannequin to perform fittings at any time convenient to her and mail the finished garment to the customer.

Existing physical mannequins are not computer controlled and their ability to change is limited to only most basic measurements. The challenge in this project lies in creating a physical design of the mannequin that allows maximum freedom of change and precision while using minimal number of parts to keep reliability high and cost affordable; control algorithms that can govern the effects of interrelation of moving inner parts on the dimensions of outer shell; and software that ensures compatibility with most used 3D scan data protocols. The project relies largely on input from users (tailors) to identify the body dimensions relevant to custom tailoring and thus limit the changing capacities of the mannequin to only those that are necessary for tailoring, so that cost objectives can be met.

At the end of the project, the consortium will showcase a tested demonstrator system that includes both male and female physical mannequins capable of changing shape with sufficient freedom to be usable in fittings of custom tailored clothes and that is driven by software that uses raw data from different 3D body scanners as input.

Tailors using the system will have the following benefits:

- o Increased market - instead of being limited to serving only local clientele, they can take orders from all over the world. The increase in potential market is most advantageous to tailors in sparsely populated areas and lower income regions of EU whose market has been very limited so far. Other big gainers are renowned tailors and designers whose highest quality products are less affected by price competition.
- o Lower cost to customers - together with travel time, the fittings can take up to 10 hours of time from the customer. Depending on customer, the value of this time might be anything from a few percent up to several times the price of the garment.
- o More efficient production process - the mannequin is available for the fitting at any moment, eliminating delays in production and giving more freedom in scheduling. That increases productivity and shortens order fulfillment time, both of which make the products more competitive.

<Organisation Type: PMI >

<Partner Sought: Target Partner - SMEs:

Type of partner:

Custom tailoring company or fashion designer creating clothes for individual customers

Role:

Providing requirements for the system

Testing the system in its business

Expertise:

Custom tailoring process

Body measurements and properties relevant in fittings of custom tailored clothes