Visits Report

Team A

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1 Introduction

The idea behind the *Fas.P.onSite* project is at this point well known and consolidated. This concept is now steering toward a practical realization: for the implementation to be effective and successful, many companies and external advisors have been involved.
The purpose of this report is to document such cooperations and sum up what changes in the project are to be made.

2 Visit to Shima Seiki

Visiting *Shima Seiki* branch factory has been fundamental to understand the real potential of real-time customization of clothes *on site*.
The visit has been divided into:

- the explanation of the garment-customizing program operation
- an overview of machineries and show-room

Garments are customized by using a software and a PC directly released by *Shima* at the moment the operators purchase a Wholegarment machine. The software employed is neither simple nor intuitive. It requires from the operator a wide personal experience (that he has got to get during a formation period in Japan) and a direct practical experience in the field; these conditions are inseparable. Availability and cost of the staff are thus the first difficulties we noticed during the visit, for the realization of our site.

The software main interface shows a viewport where one can see tools to work

with, and the digital model of a knitwear garment, on which customizations can be operated. These actions are not meant as modifications of a formerly completed garment, but as real manufacturing inputs that the machine will later realize. As a consequence of this, a precise awareness is required, of which machines are being used within the same process, to avoid the selection of manufacturing operations that machines with unsuitable finenesses of needles could not carry on. It is in fact

impossible an on-the-spot substitution of needles: it is necessary to have a group of machines with different finenesses, shifting from 18 (for lighter garments, i.e. cashmere or silk) to 3 (for heavier sweaters). It is preferable to have about 5-6 machines, in order to cover all possible finenesses (each machinery can deal with only two finenesses), and it means an expense of about one million euros: nevertheless, 4 machines can be enough to manage a manufacturing shifting from fineness 18 to 3. For what is concerning colors, a fast substitution of pre-colored yarns is possible, but one can also choose for the successive dye of the completed garment.
Operators zoom in the area the customer wants to be modified, then, once selected a tool corresponding to the required operation, he applies it on a reticular structure representing the zoomed knitted area, and the same goes for any possible decoration.
The total customization of a garment requires, thus, many working hours and a process of translation of customer's desiderata in precise and detailed technical features. It is not so obvious that the same operator working at the software will be also capable of enacting this translation, or that the client himself will supervise the customizing process. This issue generates the idea of introducing two professional figures in our site, a **software-expert** operator and a **stylist** one, capable of advising the customer and having at their disposal an adequate sensibility and awareness about the modifications that can be actually realized within times and costs arranged with the customer. By the way, the software offers, since the beginning, a range of base-cloths which is customizable in dimensions and suitability without any extra cost, and allows the creation of libraries disposing various modifications and finishes.
Once the customization process is completed, the operator sends the manufacturing order to the machineries directly from his pc: the transmission of instruction makes use of a wireless network, thus avoiding the multiplication of wires and devices.
In the factory we visited, machines were hosted in a room of about 400 square meters: it is maybe the minimum of surface we should consider for our site. Excluding the space required by warehouse and machinery operating area, we should still have room enough for waiting areas and designing areas. It is also to be added that the machines are really cumbersome and noisy: a detail that should not be neglected when creating our site and choosing its location.
Machines of different sizes are available: those realizing gloves, scarves and other knitted accesories have smaller dimensions. The garment comes out of the machine completed, but it needs further, non negligible, operations: it leads to extra costs, that have to be added to the already high price of the Wholegarment machinery itself (3 times the single-cloth system). The meeting with the fashion operator of *Sintesi Fashion Group*, *Recton*, has definitely made this issue come out.
The production of a flawless garment, correctly realized and capable of being sold, requires a former prototyping of at least 2 items with some defects, followed afterwards by a regular production not influenced by factors such as humidity of climate.
Cleaning and maintenance of machineries depend on the yarn chosen, since some can leave a little more dust, while others could require almost no operation.
Aiming to the design of an efficient service, the lifecycle of these machines has to be considered, and it is rated about 20-25 years, but of course it can also undergo

a quick obsolescence process linked to the frequent updates of electronics and mechanics. It is also necessary to add a sketchy precautionary consideration of the costs of the whole sytem, placed around 170000 euros per machine+pc+software set, or 60000 euros in the case of accessories-knitting machines.
In *Shima Seiki*'s show-room a large number of realizations can be seen, widely differentiated in colors and fabrics. By the way, design and image are not that attractive, and it seems to be due to the small range of customizations that can be operated, so as to the difficulty of adding accessories after the main manufacturing. A particular interest could nevertheless be accorded to garments such as sweaters in simple or more refined wool.
The quality of yarns and fabrics, the small range of operable customizations and the realization of made-to-measure garments can be a competitive advantage to investigate and deepen, in order to reach the level of a really innovative proposal.

3 Visit to Shima Seiki's partner

The visit in the establishment of our façonist partner *Anna Rachele* has introduced some practical difficulties to the realization of our site. In particular the possibility of implementation and delivery of garments to customers within a few hours.
In the factory there are many *Shima* machines, all Wholegarment. Even here the noise and the size of the machines cause some doubt on the space required and on the location of the headquarters of our site.
The item comes out from the machines deformed, even if complete. It needs a restful night to resume the desired size, a wash, a cutting process of the filaments in excess after the previous working and the identification of any defects; in some cases (eg. cashmere), specific treatments (milling, ironing, etc. ...) are needed. While the last two tasks are achievable without major difficulties directly on our site, there are some doubts about the time it takes for the item to assume the desired size, in addition to costs and time of washing a single article at a time. It is inconceivable that the customer, once drew the piece, does not want to wear the garment before buying it. The idea could emerge, of delivering the item to the customer the next day. However both these difficulties have to be overcome.

4 Visit to Sintesi Fashion Group

The meeting with the founders/operators of the company *Sintesi Fashion Group Spa* has been useful in order to deepen and to discuss the more properly business details of our project, although these operators are more experts in the detailed technical issues of production of garments and in logistics. The idea suggested by Andrea Scacchetti, president and CEO of the company, was to find a partner already operating in the fashion industry, and able to support our idea in what's concerning media and promotional aspects. Instead if we want our business to be a new one, it should be developed with a retail model (few showrooms in select locations) or, why not, with the franchise one.

5 Visit to BasicNet

BasicNet is a complete new way of thinking the common cycle of clothes production. Basically, it is founded on the idea of a Network, that allows the control center to externalize all different stages in the creation of a product. The *BasicNet* company now offers support to some of the most worldwide-known Italian brands, as Robe di Kappa, Kappa, Superga and K-Way.
There are several different figures in such a Net:

The Control Center based in Turin, it has the role of organizing the communications between other stakeholders and develop the network infrastructure.

Sourcing Centers a large number of productive sites, spread all over the World, where clothes could be realized at low fares (even exploiting scale-economies possibilities).

Licensees each country has his own licensee, that is the one who can sell in his shops (whose appearance is under the central control) the products ordered and produced by one of the Sourcing. It doesn't need any storage site, because each piece sold is immediately and automatically re-ordered by the Network.

Brand Outlet pieces ordered and not sold are discounted in outlets, in order to avoid oversized stores.

In this Net-based system, the role of *BasicNet* is **linking**. It provides an easy platform for communication between Licensees and Sourcing Centers for the realization of products. *BasicNet* has no risks connected to production: if a Sourcing has slow or faulty production, the Licensee can ask for compensation directly from him, otherwise the Sourcing will be unlinked from the network. For such a service, *BasicNet* is rewarded both from the Sourcing and the Licensee. What's more, *BasicNet* has his own stores in Turin, where new market strategies and new advertisement could be tested before being spread worldwide.
Our visit to *BasicNet* has brought to two important reasonings:

- the licensing model lowers many of the risks connected with the textile production field but it is unfeasible to simply copy *BasicNet*'s model. For instance such model wouldn't fit several aspects of the *Fas.P.onSite* project, such as production.

- similarly to what Andrea Scacchetti, president and CEO of *Sintesi Fashion Group*, said, Marco Boglione, President of *BasicNet*, suggested to find a strong partner which could promote and invest in such a new business model. In this way initial costs connected to setting up a new company, buying the necessary machineries, and promoting the *Fas.P.onSite* experience would be partially covered by the partner, making it significantly easier to make the project take off.

6 Conclusions

The meetings and exchanges of ideas we had with the leaders of the industrial partners of our project, first in Carpi and in Turin later, helped to bring out in us the awareness that *Fas.P.onSite* must face and overcome many difficulties. Most of these concern the process of design (customization) and production: the availability and cost of personnel able to operate the software *Shima*, the need to have at least four Wholegarment machines that guarantee working on various refinements, the translation of customer's ideas in rigorous and detailed technical specifications and the ability to run on time manufactures post production on the items (washing, fulling, ironing) without charges and in the same site.
However, many questions have also emerged concerning the organization of space within our site and what is a suitable location. Noise and size of machines, and their relative abundance, the need for a setting of at least 400 square meters are limits that can not be neglected in the design. Finally both *BasicNet* and *Sintesi* suggested the idea of identifying a partner, that already operates in the fashion industry, able to support our idea or at least, if we want our new business,to strenghten it from a promotional point of view; this does not depend on the business model that is used, a retail model (a few showrooms in select locations) or why not, the franchise.
We will have to address three different kinds of difficulties, production and design, design of space and choice of location, marketing and promotion of business, with awareness of the need to find a single coherent solution. Eventually, however, we know the major shortcomings of the project and we can leave with more criteria and maturity of ideas in the search for a suitable solution.