



TCBL PLACE LABS



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INTRODUCTION

Inside the TCBL system, in an anthropological dimension of innovation, the Place Lab is designed as a laboratory of persons and human interactions. If the Design Lab studies design and the Making Lab technological innovations, the Place Lab studies and tests the role of human interaction in garment production processes.

The Place Lab is the more exploratory of the Business Lab models, as it looks at some factors that have only recently been recognized as innovation drivers: local culture, community interaction, group dynamics, non-monetary exchanges, etc. In addition, the Place Labs look at the part of the T&C industry – garment manufacture – that has been the stage of production most subject to de-localisation, and can thus help address its root causes. In the process however, the act of sewing has been generally ignored by research and scientific examination and is currently a dying art in Western Europe.

The dramatic skills shortage that has appeared on the horizon with the beginnings of re-localisation therefore justifies a new look at sewing, cutting, and more broadly, the organisation of work in the production of garments, a process that has resisted technology innovation over the years. This also provides the opportunity to explore new models for the organisation of work as well as of the capture and exchange of knowledge related to garment production. The Place Labs in TCBL will explore these aspects in a variety of settings and contexts.

1 DEFINITION OF A PLACE LAB

The Place Lab concept attempts to explore and address these issues in a systematic way that facilitates the definition of new business models. More specifically:

- A Place Lab should promote sewing, for fun or to learn a trade, not only as entertainment but also to create responsible consumers, able to choose, appreciate, and recognize quality craftsmanship and feel a different empathy with the clothes they wear.
- Place Labs should travel on two tracks: experimenting with new and more flexible models of production, and interacting more with the consumer, to create users able to appreciate quality.
- The Place Lab can help to elevate the practice of sewing to something perceived as cool, attractive for both men and women, as has recently occurred in the world of cooking.
- The Place Lab is the ideal environment to prepare and test sewing manuals, written or on video, for all levels of learning, with a common glossary.

Finally, a Place Lab should explore all those areas of clothes production in which the human component has remained impervious to technological innovation. Here, the connection with the cultural roots of a territory plays an important role. An example is the production of raw materials such as wool, strongly linked to the territory and to ancient traditions such as sheepherding.

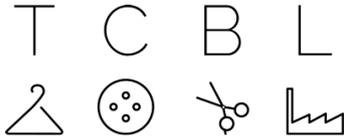
We can sum up what a Place Lab is and is not as follows:

A Place Lab is not...	However, a Place Lab...
A sewing school	Perfects the practice of sewing
community centre	Is sociable
A research centre	Generates innovation
museum	Protects intangible cultural heritage
A business incubator	Develops business models
A start-up	Suggests new business opportunities
A job centre	Restores dignity and future

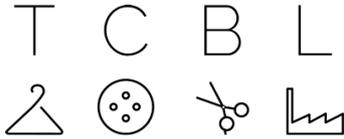
MAIN FEATURES OF A PLACE LAB

Based on these underlying principles, the main features of a Place Lab can be defined, according to the common TCBL Business Lab framework, as follows:

Lab Feature	Brief description
Main activities	<ul style="list-style-type: none"> • Cutting and sewing • Testing and experimenting new forms of organization in garment production • Writing and recording sewing tutorials • Socializing the act of sewing • Exchanging opinions, professional knowledge and skills in the field of sewing • Suggesting new business models • Having fun • Making people feel useful
Facilities	<ul style="list-style-type: none"> • Common space to experiment • Social space/community



Lab Feature	Brief description
Setting	<ul style="list-style-type: none"> • Sewing machines • Cutting and sewing tools • Samples of fabrics and haberdashery • Knowledge, libraries • Literature/web/study • Repository • Digital equipment <ul style="list-style-type: none"> • In geographical areas that have been hit hard by textile manufacturing crisis • In geographical areas of high creativeness/skills/knowledge • Shops • Ateliers • Factories • Social enterprises • Schools • Fablabs
Service concepts	<ul style="list-style-type: none"> • Socio manufacturing service • Testing prototypes • Testing new materials • Testing tools and machinery • Making sewing tutorials
Audience	<ul style="list-style-type: none"> • Local stakeholders • Cooperatives • Tailors • Mature and young unemployed • Students • Old people willing to share their skills and stay together • People who want to sew for fun or for the family
Supervision	<ul style="list-style-type: none"> • Supervision can depend on the level of support: give more, ask more – give nothing ask nothing • Shared ownership, collaborative governance, volunteer employees
Sustainability & Environment	<ul style="list-style-type: none"> • The capital is the innovative network • The labs should start self-sufficient. Going on they can make business providing services • Testing prototypes • Small series productions • Summer schools • Support in on-line platforms (such as Etsy) • Fab-lab model • Training agency
Fairness	<ul style="list-style-type: none"> • Test models of fair trade and fair production • Lower cultural, religious, race, and gender barriers • Promote a type of production in which everyone can find satisfaction • Avoid the danger of ‘social stigma’



Lab Feature	Brief description
Openness	<ul style="list-style-type: none"> Open to everyone, walk in / walk out

HOW PLACE LABS CAN HELP

The table below provides a simple overview of how Place Labs can help address some the key trends affecting the textiles and clothing industry. Appendix 1 discusses the theoretical framework in more detail.

Trends	What can a Place Lab do
Over-production of low-quality clothing has a significant environmental impact.	Recover the lost heritage of tailoring knowledge, identifying weaknesses that can be overcome through innovation.
Some brands are re-locating to Europe, focusing on quality. This has led to a growing demand for tailors and dressmakers.	Promote the pleasure of sewing. Overcome gender stereotypes.
More than twenty years of delocalization has resulted in the loss of tailoring knowledge in Europe	Bring together people who want to enter or return to the world of work, promoting collective learning and skills exchange.
The fast fashion system has created a decline in quality. Producers of quality (not luxury) clothes struggle to find their market spaces.	Educate consumers on quality and respect for the dignity of those who produce. Educate consumers in buying less and spending more for each item, feeling empathy for the clothes they wear.

2 ACTIVE PLACE LABS

The following Table provides a brief overview of the six Making Labs that have been accepted following the first (internal) call.

Lab	Brief description
Etri Place Lab (Ljubljana, Slovenia)	The Etri Lab is a centre for helping and assisting start-ups and young entrepreneurs focused on social and sustainable business concepts, who want to implement their ideas through cooperation with others. Etri lab is thus an incubator for new business ideas with a strong accent on social development.
Hisa Sadezi Druzbe Place Lab (Murska Sobota, Slovenia)	Hisa Sadezi Druzbe is a voluntary non-profit centre with the main aim of supporting an inclusive society and improving the quality of life and social wellbeing of people. It is located in Murska Sobota in the most eastern and underdeveloped part of Slovenia, once the most important textile industrial district in Slovenia but now hard hit by crisis and record-high levels of unemployment. It is thus a Place Lab truly focused on people, who are the centre of all activities. It aims to become a reference lab for local stakeholders and an engine to empower local users.
Oliva Creative Lab (São João da Madeira, Portugal)	Sanjotec Place Lab is focused on encouraging the development of new products based on inventions/patents/knowledge already available in Universities and R&D Centers from regional and international entities. Is a creative hub that supports startups in the textile industry, open to all citizens, supporting the creation of new startups in the textile sector, encouraging social responsibility and inclusion.
Palermo Place Lab (Palermo, Italy)	Place Lab Palermo will explore ways to capture and preserve the traditional sewing knowledge of Southern Italy, recovering the Neapolitan School of cutting and combining it with new technologies and modern approaches. The Lab's main aim is to collect and valorise traditional artisan knowledge by various means of digitalisation and transmission, using this material to develop learning and training resources interactively with the lab's users.
Textile Lab Amsterdam - Connecting Explorers Amsterdam, Holland)	Place Lab Amsterdam will explore ways of facilitating and connecting the textile craftsmanship network in Amsterdam. The Lab is closely connected to the program of the TCBL Academy (Design Lab) and Your Textile Tools Lab. Open evenings will be held weekly, during which people can visit the TCBL Academy Lab and the Your Textile Tools Labs to connect to the network and try out things themselves and develop projects together from there. Once a month a bigger event (Textile Task) takes place focusing on a TCBL related theme.
Time Laboratory (Prato, Italy)	This Place Lab is situated in the Time Laboratory initiative of the Municipality of Prato, an existing centre for social innovation supporting women's entrepreneurship in the field of sewing. The Laboratorio del tempo is a place where people work towards self-employment offering equipment and training related to T&C and with them explore new ways of T&C production.

3. THE THEORETICAL FRAMEWORK

TERRITORIAL INNOVATION

In the context of TCBL, the Place Lab grounds its innovation model very broadly in the so-called Place-Based¹ approach to economic development that pays attention to the specificities of local contexts in the growing recognition that for policy makers “one size does not fit all”.

This approach is in part an application of the concept of territorial innovation in regional and economic planning, including models such as industrial districts, *milieux innovateurs*, new industrial spaces, local production systems, etc.² More specifically, the Place Lab draws on the process-based participatory model of territorial innovation first proposed by Marsh in 2008³ as “an integration between technology innovation and social, economic, cultural and institutional innovation based on the valorisation of Territorial Capital.” Rather than observe and intervene on the spatial dynamics of economic transactions, this approach focuses on the specific features of a given place in relation to its potential for creativity-based innovation.

This model of creativity-based innovation was further developed in the MED Programme’s CreativeMED project.⁴, which identified five success criteria that, when abstracted from the specific Mediterranean context, are also relevant to TCBL:

1. *Cultural anchoring*, i.e. having some relationship between the value proposition and the specific cultural heritage of place;
2. *Open networked people*, with a civic infrastructure that goes beyond the confines of the single organisation to emphasize multi-disciplinary and informal collaboration;
3. *Innovation mixes*, blending and balancing high technology with traditional practice, and industrial with social innovation;
4. *New business models*, where the value proposition includes an active role of the user/consumer in a collective knowledge exchange about the product or service.
5. *Shared values*, where the new product or service embodies and transmits a broader ethical dimension and contributes to shared value creation.

From there, a model of innovation based on collective creativity is derived, based on three key elements:

- *Community scale partnerships*: Spontaneous alliances between different types of stakeholders (following the PPPP Public-Private-People Partnership model) with different multi-disciplinary perspectives, at a community scale (rural district, town, or urban neighbourhood).
- *Territorial innovation*: a specific (place-based) form of product-service innovation that is underpinned by technology – predominantly ICT – while primarily driven by citizen

¹ Barca, F. (2009): *An Agenda for a reformed cohesion policy. A place-based approach to meeting European Union challenges and expectations*. Independent report prepared at the request of Danuta Hübner, Commissioner for Regional Policy.

² Moulart F. and Sekia F. (2003) “Territorial innovation models: a critical survey” *Reg. Studies* 37 , 289-302.

³ Marsh J. (2008) “Living Labs and Territorial Innovation” in *Collaboration and the Knowledge Economy: Issues, Applications, Case Studies*, IOS Press, Amsterdam .

⁴ The “CreativeMED: Mediterranean Creativity and Innovation for a New Model of Development” project was funded by the European Union’s ERDF under the ETC MED Programme 2007-2013 with contract n. 1CAP-MED12-10.

needs and the specific features of a given place: natural resources, cultural norms, geographical specificities, etc.

- *Trans-local socio-economic ecosystems*: emergent forms of work and business that shift the emphasis from the single local company or network to a ‘trans-local’ transaction system that cuts across vertical sectors (e.g. business-oriented cultural associations, peer-to-peer exchanges, etc.), traditional value and supply chain configurations (e.g. ad hoc partnerships, co-working, etc.), and naturally regional borders. Such configurations also tend to promote and/or ‘repair’ inter-regional value chains.



Figure 1. The CreativeMED model for collective creativity.⁵

The Place Lab applies these concepts to the TCBL Business Lab framework, by promoting the social dimension and the link to the community and relying strongly on territorial knowledge capital as a source for innovation.

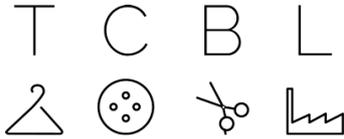
INDUSTRIALISATION OF GARMENT PRODUCTION

The TCBL Place Lab applies this general model of social and territorial innovation to the specific nature and history of the textile and clothing industry. In order to do so, we start from an analysis (as in Abernathy et al)⁶ of the transformation over time of the garment making industry. The historical grounding, in fact, helps us to understand the nature of local traditions and culturally embedded knowledge, as the foundation for territorially-driven collective creativity in future models for TCBL.

The authors trace the history of the manufacturing progress in the field of garment production from the industrial revolution of the mid-nineteenth century, when production processes begin

⁵ CreativeMED Project (2014) White Paper: The CreativeMED Model for Smart Specialisation ETC MED CreativeMED Project .

⁶ Abernathy F.H., Dunlop J.T., Hammond J.H., Weil D. (1999) A Stitch in Time: Lean Retailing and the Transformation of Manufacturing, Oxford University Press .



to adopt Taylorist theories with the standardization of time and the definition of discrete steps for each production process. Two systems in particular are introduced:

- Progressive Bundle System (PBS), in which each worker is specialized in one, or at most a few sewing operations
- Standard Allocated Minutes (SAM), in which a specific time of execution of a given step is defined.

PBS provided apparel manufactures with a means for improving labour productivity along with adaptability to day to day variations in shop-floor conditions. SAM allowed time-study engineers to calculate the standard allocated minutes for an entire garment for an experienced

worker as the sum of the number of minutes required for each operation in the production process, including allowances for worker's fatigue, rest periods, personal time, and so on. Since the 1930s, PBS and SAM continue to be the most widely used systems.

Despite these efforts to make the production process more efficient, improvements in weaving, cutting, and knitting have historically been greater than those in sewing.⁷ Translating from Italian a classic manual for dressmakers:⁸

The basic technique of apparel production has remained essentially unchanged over time; it is still based on the use of the needle and the tread; the sewing tool is still the sewing machine, invented in the mid-800's and from then improved in terms of operational speed and variety of achievable points.

The sewing operation is thus the focal point of technical developments, but so far has resisted several attempts to introduce a high degree of automation. The other operations in clothing manufacturing, especially the operations prior to stitching, proved more accessible for new technologies.

While the PBS-SAM approach could not increase the effective productivity of the garment production process, it did allow the introduction of lower-skilled labour, given the repetitiveness of the tasks assigned, leading in turn to lower wages and a decrease in the cost of production. In parallel, the stages of weaving and cutting saw substantial increases in productivity with the introduction of new and more sophisticated looms and cutting devices, leading to higher wages for these operations.

Recent years have seen the effects of cost pressure on this unbalanced situation, with increasing investments in innovation for all stages of production except for garment production, which instead has witnessed a continuous drive towards the exploitation of low-wage workers with productivity still at 19th century levels. In this context, the unionisation of labour in Western countries led to delocalisation in the search for ever cheaper labour.

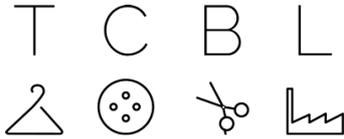
Citing an article in the *Guardian* a year after the disaster of Rana Plaza in Bangladesh⁹

Through the 50s and 60s, producers hunted cheaper labour in east Asia – first Japan and then, in the 70s and 80s, in the so-called Asian Tiger economies of Hong Kong, Singapore, South Korea and Taiwan. Employment in the garment manufacturing industry in the west has declined steadily decade on decade – despite attempts to protect local industries with quota systems and tariffs.

⁷ https://en.wikipedia.org/wiki/Timeline_of_clothing_and_textiles_technology

⁸ <http://www.technica.net/NT/Confezione/abbigliamento.htm>

⁹ <http://www.theguardian.com/world/2014/apr/19/rana-plaza-bangladesh-one-year-on>



Production in newly industrialised China, as well as in Indonesia, Turkey, Mexico and India, has increased exponentially.

THE FAST FASHION MODEL

In parallel with these trends, and driven by the increase in sophistication of the logistical management systems that accompanied this globalisation of production, emerged the industrial model known as Fast Fashion: “a term used to describe cheap and affordable clothes which are the result of catwalk designs moving into stores in the fastest possible way in order to respond to the latest trends”¹⁰

Citing again the above *Guardian* article:

For the consumer, of course, this has all meant that while prices of everything else except communications have risen, clothes cost less. In 1900, 15% of a US household's income was spent on clothing. In 1950, it was still 12%. Even as late as the early 1990s, major purchases of clothing – a suit, a dress, a coat – marked a special occasion or a rite of passage. But by 2004, the total amount spent by households on clothes had dropped to just 4%. By 2010, according to the US Bureau of Labour Statistics, clothing cost the average American family only \$1,700 (£1,017), 2.8% of their income. And for that money the consumer gets much more. Cheap no longer means nasty; it just means affordable. In 1997, the average woman in the UK bought 19 items of clothing a year; in 2007, she bought 34.

As the price of clothing drops, the end effect is simply to buy more, leading to ‘overflowing closets’. The Fast Fashion model drives the consumer with a desire for accumulation more than a choice of quality. By now, the ability to recognize a good fabric and good workmanship is fast disappearing. The enjoyment of a purchase is a restricted act in itself, perhaps extended to the test at home in front of the mirror, but then the adrenaline ends. The remaining manufacturers who produce quality garments are at a crossroads; they must either lower costs and thus product quality or search for increasingly scarce niche markets.

The production bottleneck of sewing also raises issues for cutting fabric. It makes little sense to cut tons of clothes at once, if production is bottlenecked in the sewing phase. Cutting thousands of clothes at a time is also a business risk, because a mistake in design or sales forecasts can have disastrous economic consequences. Moreover, cutting too much also carries an environmental cost, since the unsold fabric is thrown into landfills (multiplying the already negative impacts of dyeing and finishing). According to Eileen Fisher, a clothing industry magnate, **fast fashion is the second dirtiest industry in the world next to big oil.**¹¹

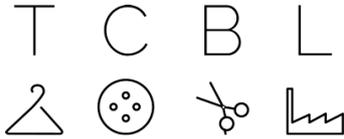
ISSUES FOR RE-LOCALISATION

Fortunately, in recent years there has been a trend to return production to Europe, especially for niche markets.¹² There are different causes for this: difficulties in quality control, increasing wages even in areas with a low cost of living, the risk of seeing products rejected due to their

¹⁰ <http://www.macmillandictionary.com/dictionary/british/fast-fashion>

¹¹ <http://ecowatch.com/2015/08/17/fast-fashion-second-dirtiest-industry/>

¹² <http://www.theguardian.com/sustainable-business/sustainable-fashion-blog/returning-fashion-manufacturing-uk-opportunities-challenges>



environmental impact and even toxicity, and finally a growing awareness of consumers demanding quality and transparency. It appears that the tragedy of Rana Plaza was a tipping point in swaying public opinion.¹³

Businesses who decide to return production to Europe must face one of the consequences of two decades of delocalisation: the problem of recovering what in Europe has become the lost art of sewing.¹⁴ Talented tailors are now getting old and have not transmitted their art to the generations that have followed, especially since young people perceive sewing as boring and outdated. Companies who want to keep production in Europe must look to Eastern Europe (e.g. Romania), where it is still difficult to engage workers under the age of forty.

The reason for this is that sewing is not an art that can be learned in a short time. Even at the hobby level, although the market offers Do-it-yourself (DIY) kits and patterns, many become frustrated before getting to the satisfaction of a job well done. More popular leisure activities are easier to learn, while handbooks for sewing are generally outdated, with unnecessarily rigid procedures. In addition, terminologies, rules, conventions in body measurements and other fundamentals of sewing can vary significantly from one country to another, even from shop to shop.

In sum, the field of sewing has the potential to offer new job opportunities for youth and the recently unemployed. But more than a mere increase in demand is required: the market itself will have to shift towards new business models with a more humane and efficient trade as well as innovations in the organisation and distribution of work. In addition, it is necessary to explore new methods of learning with new technologies (video tutorials, augmented reality, online forums and video-conferencing), re-examine traditional sewing techniques, restore dignity to “slowness” (when necessary), establish a common glossary, and keep an eye on new developments such as body scanners, laser cutting, and 3D printing.

EXPERIMENTATION WITH THE ORGANISATION OF PRODUCTION

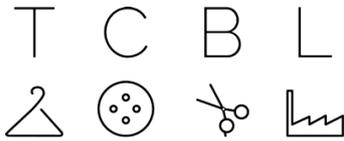
Throughout the twentieth century Taylorism has been called into question, in particular by labour psychologists such as David G. Myers, Elton Mayo, and Elliot Jacques¹⁵ affirming that greater worker involvement improves productivity. The debate is still going on, but in the case of the highly specialized activities in clothing production, it would be useful to experiment a greater involvement of employees and a more harmonious arrangement of workstations, so as to foster the exchange of knowledge but also social interaction and suggestions about the work that is being carried out. Although highly specialized, sewing leaves a gap in the mind that, if not filled by conversation or by listening to audio books and music, can lead to alienation, which means a loss of interest in the job and a greater tendency to make mistakes.

Given that Taylorism has not brought the desired results, other approaches in labour psychology could be experimented, including the recovery of elements from the environment and organization of artisan workshops. A new attention to the complexity of sewing, rather than being simply nostalgic, could suggest new business models to experiment. For example, some steps such as hems and finishes, could be carried out by the end customer. “I want a quality garment and I cannot afford that? Then I’ll finish it myself to lower the price.” (In essence, the

¹³ <http://fashionrevolution.org/>

¹⁴ <http://www.wsj.com/articles/SB10001424052748704680604576110103805374390>

¹⁵ Ashleigh M., Mansi A., Di Stefano G. (2014) *Psicologia del lavoro e delle organizzazioni*, Pearson.



IKEA business model). DIY kits and unfinished products could be a solution for the future, provided they are accompanied by very clear, step by step instructions accessible to all. The short-lived pleasure experience of fast fashion could be replaced with a new interpretation of the “tailor/dressmaker experience” of previous generations: imagining a dress for weeks, choosing from a catalogue, attending fitting sessions, choosing custom accessories, relishing the tactile and olfactory sensations and the human relationship with sewers.

In conclusion, new business models in clothing manufacturing could, on the one hand, deal with more human and sustainable production processes, and on the other on offering consumers new knowledge, new awareness, and new experiences.

RELEVANCE OF BACKGROUND MODELS TO TCBL

The following table summarizes the relevance of the models discussed above to the definition of Place Labs and their role in TCBL.

Model	Relevance to TCBL
Territorial innovation	Territorial innovation is an important model guiding the definition of the Place Lab concept, especially in the community dimension and the link between local knowledge and creativity. This is also likely to have an impact on the Design Labs (e.g. the inspiration lab concept) and Making Labs (local making cultures and knowledge)
Industrialisation of Garment Production	The main techniques of garment production are behind the delocalisation trend and some of the more unsustainable aspects of the current T&C industry. Place Labs will in fact be exploring alternative and innovative models.
The Fast Fashion Model	The Fast Fashion model is driving a consumption-oriented trend in the T&C industry that requires a deeper consumer understanding of the garment making process to reverse. Place Labs aim to spread a culture of clothes-making to this end.
Issues for Re-localisation	Re-localisation brings with it an enormous skills challenge that can only partially be overcome through traditional training approaches. Place Labs will be placing a significant emphasis on recovering territorial knowledge and social learning, especially as concerns how to sew.
Experimentation with the Organisation of Production	Place Labs intend to experiment new forms of organisation of production, taking advantage of motivated groups of self-interested experts and learners willing to work together in new ways. This can be the basis for an important service of experimentation for the T&C industry.

DOCUMENT INFORMATION

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STATEMENT OF ORIGINALITY

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