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1. Introduction

La Mimi is a Product-Service system enabling women to make their own clothes, or clothes for others.

It is a Product Service System that takes the original service once provide by La Mimi, my grandmother, and updates it to today's technology and opportunities. Specifically, the opportunities brought by the fields of enabling solutions, collaborative networks, distributed production, social businesses and Freemium business models.

The core of this project is to be an enabling solution for people. To give them the tools to create the clothes they want to wear, and enable them all the way through to feel creative and capable of achieving a result. This result could also lead to make clothes for others, thus creating their own business.

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Collaborative networks will be the result of putting diversity of people together and allowing exchange and interaction. Here one will find designers interacting with enthusiasts, designers with designers and enthusiasts alike, in the hope that people from diverse economical backgrounds will be attracted, giving richness to the project.

Distributed production will be possible if people can access guides and tools for the clothing creation process. In this sense, users will make their own clothes without relying on a brand to set their style, but may find within themselves, or through other users, ideas to follow, while fostering and nourishing the exchange of value.

A **Social Business** could be the result of the enabling solution. If members with little resources can make a business out of the learning they got through La Mimi's service, then La Mimi would lead to the creation of social businesses by the users.

The PSS will make the service accessible to a potentially wide range of users through the **freemium model**. Value can be gained through the platform for free, but more value can be

obtained when buying other members' designs as patterns to make.

The Product Service is divided into two units: the Sewing Labs (one fixed and one mobile) for people to sew and have a work space, and an online platform for people to learn how to make clothes and have access to custom fitted patterns.

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1.2.1 Abstract English version

La Mimi is a service that uses the Product-Service System approach to propose an enabling system for people to make their own clothes, or clothes for others. It is a service that takes the original service once provided by La Mimi, my grandmother, and updates her methodology to a new experience to be accessed both online and in a physical space called the Sewing Lab, placed in Medellin Colombia.

The virtual platform, called 'La Mimi on-line' provides people the elements for learning to make clothes. This is done through a series of steps, guides and videos based on La Mimi's original book for teaching. On the platform people learn for free, in their own pace and time. It also provides users the opportunity to buy ready to make, custom fitted patterns. That is, patterns that have the measurements of the buyer's body, making them a perfect fit for each person.

6 The sewing lab is a physical space for people to sew and have a place to work in their clothing projects. In the sewing lab people work, create, and make connections with other users. Aiming to reach a wider diversity of users, the sewing lab has a mobile unit that goes around the poorer neighborhoods in Medellin. The Unit brings the service and its opportunities to economically less advantaged populations. By having the mobile lab unit connecting to this part of society I hope to bridge the invisible gap that divides the poor away from the rest.

Both the virtual platform and the physical sewing lab aim to bring back the power of local, small-scale, and on-demand production, for oneself or the market, creating looks based on personal choice, not on styles that the mass market pushes. This is all done rescuing and providing direct access to what has traditionally been in the hands of people, the power of producing clothes for themselves in the present and in the future.

1.2.2 Abstract Italian version

La Mimi è un servizio che si avvale dell'approccio Product-Service System per proporre un sistema abilitatore che permette a chiunque di produrre indumenti per se stessi o altri. È un servizio che si basa sul sistema originale una volta fornito da La Mimi, mia nonna, traducendo e aggiornando la sua metodologia a una nuova esperienza accessibile sia online che in uno spazio fisico denominato Sewing Lab (Laboratorio di Cucitura), situato a Medellin, in Colombia.

La piattaforma virtuale, chiamata 'La Mimi on-line', offrirà tutti gli elementi necessari per poter apprendere a creare vestiti. Questo sarà realizzato a traverso di una serie di passi, guide e video che si ispirano sul libro originale di La Mimi, che lei usava per insegnare. Su questa piattaforma, gli utenti imparano gratuitamente, al loro ritmo e nel tempo da loro disponibile. Fornisce anche la opportunità di acquistare modelli già prefabbricati, ma personalizzati alle proprie misure. Quindi, abbigliamento adattati perfettamente al proprio corpo.

Il laboratorio di cucitura apre uno spazio fisico a persone che vorrebbero cucire e lavorare sui loro progetti di abbigliamento. Nel laboratorio, individui lavorano, creano e si connettono con altre persone. Per raggiungere una maggior diversità di utenti, il progetto prevede una unità mobile che percorrerà anche i quartieri più poveri di Medellin. Questa unità renderà accessibile il servizio con tutte le sue opportunità alla popolazione svantaggiata in termini economici. Raggiungendo il laboratorio mobile con questi strati della società spero di poter contribuire a colmare il divario che separa i poveri dal resto della società.

La piattaforma virtuale e il laboratorio di cucitura fisica ambi hanno per scopo rivitalizzare le capacità di produzione locale, a scala piccola, e immediata (on-demand), per se stessi o il mercato, creando dei look in base alle proprie scelte, non seguendo stili imposti dal mercato di massa. Tutto questo sarà realizzato riscattando e fornendo accesso diretto a ciò che tradizionalmente è sempre stato nelle mani del popolo, ovvero la facoltà di produrre indumenti per se stessi, nel presente e per il futuro.

1.3 La Mimi PSS Italian version

La Mimi è un servizio che si avvale dell'approccio Product-Service System per proporre un sistema abilitatore che permette a chiunque di produrre indumenti per se stessi o altri.

Si tratta di un Product-Service System che si basa sul sistema originale una volta fornito da La Mimi, mia nonna, ma aggiornato alle tecnologie ed opportunità di oggi. Più specificamente, le opportunità cresciute da soluzioni abilitatrici, reti collaborative, produzione distribuita, aziende sociali e il modello di business 'Freemium'.

Al cuore di questo progetto c'è l'ambizione di creare una soluzione abilitatrice per persone, ossia procurare a quest'ultime strumenti ed attrezzi per poter creare l'abbigliamento che esse vorranno indossare, alimentando nello stesso tempo in loro il sentimento di essere creativi e capaci di attingere un risultato. Infine, tutto ciò potrebbe anche portare i fruitori del sistema a fabbricare abiti per terzi, quindi creando la possibilità di lanciare una propria impresa.

Aggregando una ampia diversità di persone insieme emergeranno delle reti collaborative, permettendo scambi e interazione. Designer collaboreranno con entusiasti, e designer con designer come con entusiasti, con la speranza che partecipanti si presentino da contesti economici diversi, arricchendo il progetto.

La produzione distribuita sarà possibile se le persone avranno accesso a guide ed attrezzi che le appoggiano nel processo della creazione di abiti. Così, gli utenti creeranno i loro propri indumenti senza doversi orientare alle grandi marche per identificare il proprio stile. Invece, potrebbero trovare in se stessi, o a traverso altri utenti, idee da seguire e potenzialità di scambio di valori.

Un Social Business, una impresa sociale, potrebbe essere il risultato del sistema abilitatore. Se persone con poche risorse riuscissero ad edificare una propria impresa grazie

alla formazione ricevuta a traverso del servizio La Mimi, quest'ultima avrebbe indotto alla creazione di un social business dei partecipanti.

Il 'Freemium' permetterà potenzialmente l'accesso al servizio ad un elevato numero di persone. Alcune potranno trarre vantaggio gratuitamente, ma potrebbero usufruirne ancora di più pagando per design forniti da altri sotto forma di modelli.

Il Product-Service è costituito da due elementi. Il primo è il laboratorio di cucitura (a sua volta composto da una unità fissa ed una mobile). Il secondo, una piattaforma virtuale online offrendo accesso a modelli customizzati alle misure proprie ed a istruzioni per apprendere l'arte della cucitura.

I laboratori di cucitura

I laboratori si situeranno in Medellin, Colombia. La locazione fissa si trova in un quartiere piuttosto benestante, dove persone con necessità di accesso ad attrezzi e spazio per i loro progetti di sartoria possono affluire. Gli saranno anche provveduti Internet, abilità di connettersi con altri, uso di macchinari e lo spazio per lavorare, come tra l'altro anche la possibilità di imprimere i modelli.

La unità mobile sarà posteggiata alla locazione fissa, ma visiterà zone dove vive la popolazione con ingressi più bassi. L'unità mobile ha come obiettivo di divulgare l'informazione sull'iniziativa, raggiungere individui con poche risorse, ed istruirli sul potenziale che nasce dal crearsi i propri abiti. Quest'unità mobile offrirà una serie di workshop basati su La Mimi Online, dove facilitatori aiutano persone ad interagire con l'Internet, e le assistono nell'uso delle macchine e degli attrezzi. Sarà piazzata in centri comunitari di quartieri scelti a secondo delle possibilità di congregare le persone.

Chiunque abbia visitato l'unità mobile sarà benvenuta o benvenuto alla postazione fissa, con un invito per una entrata gratuita. Se c'è interesse, si troverà un accordo con questi visitatori per una frequentazione continua, adattando il contributo di iscrizione alle proprie possibilità. Verrà anche considerato e ben visto il lavoro volontario, permettendo così a certi individui l'opportunità di lavorare ed avere accesso al

laboratorio senza disporre di mezzi monetari.

I due laboratori sono aperti a chiunque cerchi spazio per i propri progetti di cucitura, sia per dilettanti entusiasti che per professionisti.

La piattaforma virtuale

La piattaforma virtuale ha lo scopo di essere la finestra dei laboratori al mondo. Utenti possono:

1. Imparare gratuitamente come cucire indumenti per se stessi ed altri.
2. Comprare modelli adattati alle proprie misure, basati su disegni ottenibili a traverso la

piattaforma

1 Imparare a cucire

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Sull'Internet, gli utenti hanno una serie di opzioni per apprendere a fare vestiti con il metodo originale di La Mimi. Il metodo consiste nel prendere prima le misure del corpo, per poi trasformarle in modelli basici. Da modelli basici si arriva poi a modelli specifici predeterminati per un certo numero di abiti. Per ogni modello specifico gli studenti imparano come incorporare un certo elemento nella loro creazione.

2 Acquistare modelli

Gli utenti hanno anche l'opzione di comprare modelli forniti a loro grazie ad altri designer presenti sulla piattaforma. Modelli in vendita saranno adattati alle misure del corpo del cliente, e si possono imprimere insieme ad una guida per come confezionarli. Si crea così la possibilità di scambiare un servizio per denaro.

L'obiettivo sia dei laboratori di cucitura sia della piattaforma virtuale è di abilitare gli utenti a sentirsi creativi ed offrire a loro una opportunità, o una scusa, di unirsi ad altri per lavorare su progetti, fondare e mantenere amicizie, divertirsi e passare il tempo in modo creativo.

The aim of both the sewing labs and the web platform is to enable people to feel creative and give them an opportunity, or the excuse to connect to make projects, friendship and have a good time.

Uno degli elementi chiave di questo progetto è che si avvale della lunga esperienza di La Mimi, ed in un certo senso anche della mia propria con lei, e mette su un Product-Service System contemporaneo strutturato a secondo delle opportunità di oggi. Il sistema in più si propone come una visione futura per suggerire alternative di produzione e consumo più sostenibili, basati sui sistemi distribuiti.

Le conoscenze di 40 anni di La Mimi come sarta ed istruttrice dovrebbero essere divulgate per le persone di oggi, dando al suo servizio e alla sua storia l'occasione di vivere per molti altri anni, nella speranza che la sua vita ispiri altri che, come lei, vorrebbero costruirsi una buona vita grazie al mondo degli abiti.

1.4 Methodology

Starting from an already existing system, based on my grandmother's teaching of clothes making, I aim to develop an in-depth Product-Service System Design. To do this, I have divided my research in three phases: Why, How and What. These phases are based on the Golden Circle by Simon Sinek [66] articulating its components to those of design oriented scenarios presented by Professor Ezio Manzini in his paper, Scenarios of sustainable well-being. [46]

For the 'Why' I am answering the question -why is this scenario relevant?-. Here there are two parts, a descriptive process in which I recall my experience with my grandmother and her original service system based on teaching women to make clothes. From there I go into the theory to give a solid foundation to the scenario in which I propose to build the Product-service system as the final result from this research.

For the 'How', I attempt to answer the question -how the world would be like if...?-. A combination of both theory and in-depth study cases set the frame in which the given proposal takes its ground. For the study cases, I am following analysis techniques learned during PSSD courses. Tools include systems maps, schemes and business canvas analysis.

For the 'What', I address the question -'what has to be done to implement that vision?-. Here the final proposal and design solutions will be delivered under the PSSD structure studied during lectures and workshops. I will provide system maps, personas, user experiences and interactions through story telling, system mapping, and scenarios.

1.5 Objectives

_ Transform an existing service system into a Product-Service System adapted to the current global context.

_ Give importance to my family's values and heritage by sharing the knowledge carried on by my grand mother and her teaching business.

_ Deliver a detailed research and final project where all the concepts learned during PSSD are applied.

_ Detect and analyze on-going trends that support the scenario creation.

_ Develop practice in PSS thinking by carrying on analysis using PSSD tools.

_ Complete satisfactorily all requirements for graduation.

1.6 The Golden Circle

1.6.1. Why, how and what: building from the core meaningful scenarios

I would like to structure this project based on the Golden Circle. The golden circle, or why, how and what, is a scheme based on the idea that meaningful products or initiatives start their way to the world by having clear the reason why these products or initiatives exist. How is the way the idea is brought to the world, and what is the outcome: a product, a service, a social initiative and so on.

The relevance of the golden circle is that it goes deep into the reasons why there should be an outcome. To know why an organizations exists makes not only its what and its how coherent and clear to be carried out, but meaningful and valuable for both the producers and the users. This goes beyond profit, which can be seen as a result, not the raison-d'être of an organization.

According to Simon Sinek's TED talk How great leaders inspire action [66], hundred percent of the people who work for a company know what their business does, some know how it's done, but only a few know why they do it. Why is the reason, the purpose, the cause, the intention, the end why an organization exists. Still, most people don't know why their company does what it does.

In the real world, companies usually communicate what they do, and how it is done. And by doing so, they expect to be chosen among other competitors. But saying what is the offer and how it is offered does not set the company apart from others.

A company that knows why they do what they do, communicates what it does from inside out. From the core: first they say why, then how, then what. Their purpose inspires others who then follow them, and that's what sets them apart. [12].

There are examples out there of these kinds of companies that know why they do what they do: Apple, Camper, Prince. Companies that stand out among others with the same products; they do so, because they believe in their core values and visions; they believe in their whys.

The golden circle is then the structure on which inspiring companies and leaders build their thinking and communication. And that's what enables them to attract customers or followers who can relate with the whys behind along with the products or outcomes.

Why, how, and what questions, can also be asked in a Product Service System Design, specifically during the design of scenarios.

In a paper written by Professor Ezio Manzini, called Scenarios of Sustainable Wellbeing, professor Manzini states that design oriented scenarios¹ (D.O.S) have three articulated components: vision, proposal, and motivation². [46]

The vision answers the question 'how the world would be like

.....
1 Scenarios according to professor Luisa Collina are visions of contexts (the frames) (plurality of hypothesis: exploration of possibilities) with non-existing BUT possible (either a forecasting or a back-casting approach) artifacts in it presented in a way (narrative forms) that they can be observed, discussed and evaluated (self-consistency, exhaustiveness and completeness)[4]

2 D.O.S (Design Oriented Scenarios) are conceived as tools to be used in the design process (MANZINI) in particular for scenario building, which in this case comes very useful for a PSS design.

if... ' (...the service or initiative is implemented), the proposal addresses 'what has to be done to implement that vision?', and the motivation responds to 'why is this scenario relevant...?'

Clearly, the three questions are being asked again: why, how, and what.

This means that the golden circle and D.O.S have the same set of components. However, the Golden Circle has an order in which these components should be taken into consideration.

Finally, while the golden circle is focused on the analyses of existing cases, D.O.S is mostly used for the creation of new product-service systems scenarios.

The components of the D.O.S could be re-arranged in the order of the golden circle: the core values first. Hence, the motivation would be the first thing to be stated, then the vision and finally the proposal.

Based on the above, asking why, how and what, gives ground and coherence to a PSS project. Not only because it gives shape to the scenarios, but because it is meaningful from the core. According to Mr. Sinek this is the formula for successful ideas.

That's why this project's results are structured following the Golden Circle, hoping that La Mimi will keep her essence all the way through and will become a successful initiative.

1.6.2. La Mimi's Golden Circle Schema 1

Why

I come from a family of clothing makers. My grandmother, La Mimi, brought to the family the knowledge on how to make clothes. She was a teacher and taught other people how to make their own clothes.

I want to base my project on the heritage of my grandmother, who during her life has enable many people to make clothes, spreading her knowledge giving classes.

How

Now it a good time to deliver people opportunities to enable themselves. There is plenty of initiatives, activities, spaces, networks, and so on, of people who are gathering to be creative and in the best cases give something to the world.

These are the same people that have been here for a while, but today, they are interacting in different ways thanks to the Internet and widespread technology. This has enable them to build communities where everybody is happy, and that's why they are there.

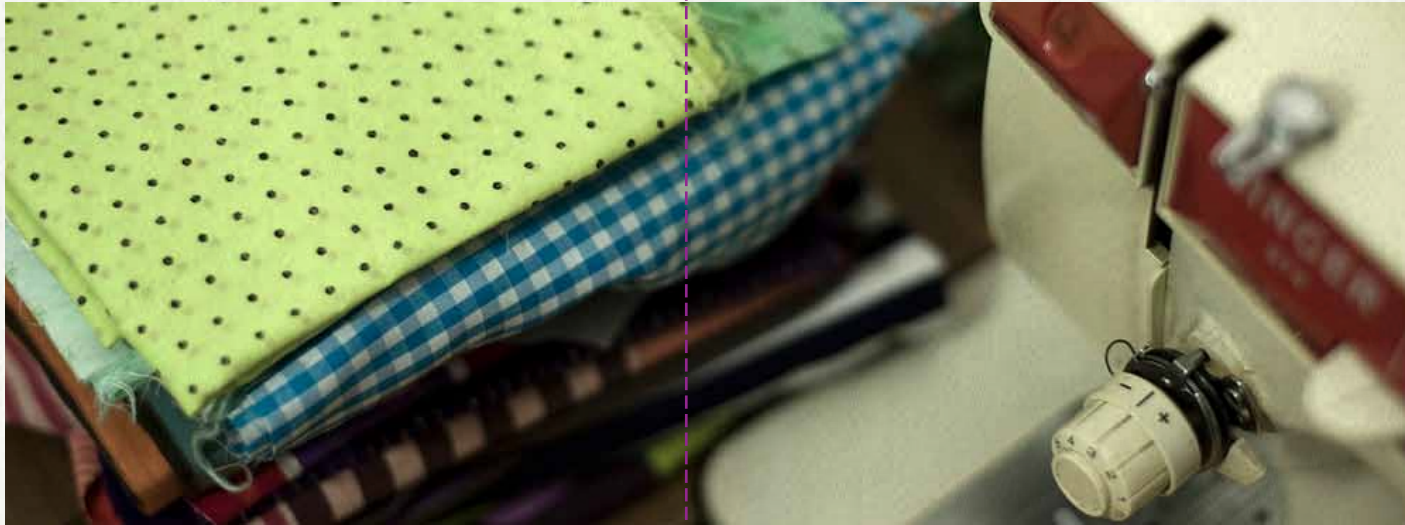
I want to pass on my grandmother heritage enabling people to make their own clothes by combining her already existing systems with the opportunities of technology and other the present is bringing.

What

La Mimi is a Product service system for people to learn how to make their own clothes.

The system has two main nodes: a sewing lab and a web platform. The sewing lab is a physical space with all the necessary element form making not only clothes, but also connection. It is place where people can learn, share, and give to the world their best.

As for the platform is the system's window to the world. In the platform people can learn to make pattern and designs created by the users themselves. The platform works as a virtual Mimi that will help people in the process of learning.



Picture 1

WHY

I come from a family of clothing makers. My grandmother, La Mimi, brought the knowledge about how to make clothes to the family. She was a teacher and taught other people how to make their own clothes.

I want to base my project on the heritage of my grandmother, who during her life has enabled many people to make clothes, spreading her knowledge giving classes. I hope that, by sharing her knowledge and facilitating interactions, people find something meaningful to do for themselves and for others.

2. Why

2.1. Personal Why

2.1.1. The Story

2.1.1.1. La Mimi

Nelly Moreno, also known as La Mimi, is my grand mother, to whom I own the topic of this project.

La Mimi is the mother of my mother. I learnt the art of making clothes through both. First with my mom, who had her own clothes making business at home, and later with my grand mother, who was teaching how to make patterns for clothes, in particular to women.

Sewing and making clothes has been part of my entire life. I have seen how clothes are made, from beginning to the end, and how, for example, during special occasions, the members of my family enjoyed wearing something made by my grandmother or my mom. La mimi is the person who has brought making clothes into our family.

She started learning how to make clothes when she was around 24 years old, when both my mom Beatriz and my aunt Angela had been born. At the time my grandma and her husband, my grandfather, lived together with my grandfather's parents and family in a big house.

In that same house lived my grandfather's mother, Mercedes. She had a sewing machine and used to make clothes herself. She first introduced my grandma to making clothes. Then my grandmother took classes to learn more.

La mimi first took classes with Maria Cristina Uribe, a woman who had just arrived from Italy where she studied how to make patterns. After returning to Medellin she created her own academy to teach women how to make patterns with 'european' cut.

My grandma liked it exceedingly. She learned all the lessons by

heart, she practiced making things for her little daughters and learning all the details from Mercedes.

Maria Cristina Uribe gave my grandmother her 'powers' of making clothes, and my grandmother passed them on to us: my mom, my two aunts and me.

But it was not only us who learned from her. La Mimi gave classes for many years to any women who wanted to learn, she was in her early thirties when she opened up her own academy imparting lessons. First, to groups of maximum 6 people, during the week regularly; and later on to smaller groups and only once or twice a week.

Giving courses was a service my grandmother was delivering to people for many years. She was an entrepreneur of her time, who like many other women in the city of Medellin had a sewing machine. She had knowledge and experience, so she decided to share these with people as a way to have an income. She has been giving the classes up to last year.

La mimi used to open a course by first announcing it with an advertisement posting in one of the city's local newspapers, and by telling people around, so that word of mouth would spread. Interested people then gave her a call and discussed possible and times and days of the week. Once La Mimi had formed a group, she would go back to the people who had called her to communicate the start date.

At the first meeting, the new students met and learned how to take measurements. La Mimi would give the students a set of photocopies that described the process she was going to go through. Students were welcomed to make notes onto the copies, as these remained theirs. [9]

The students first watched the process done by La Mimi, and then repeated it themselves. Every lesson followed more or less the same format, only the actions changed. For instance, at the beginning students learned how to take measurements of themselves, to then transform them into basic patterns. On one day it would be pants, on another a skirt, on another shirts and so on.

As the students were learning one part of the process, they were making the clothes that came out of their patterns. They were learning and creating at the same time. The course would last as long as the students felt they needed to be with la mimi and to have access to the machines she had.

Some students came back after years to practice again, or get better.

Throughout the years the format in which La Mimi has delivered her service has been the same of classes, techniques and guides, while many women have benefited and walked through it.

2.1.1.2. La Mimi as a PSSD project

Product Service Systems are about creating scenarios of interaction. As the name well explains, PSS designers develop systems where products and services complement each other. PSSD can be applied to a brand, to a public governmental initiative, on social innovation and so on. The possibilities are vast since PSSD is a tool, not an end in itself.

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Being a PSSD student has enabled me, among other things, to see design outcomes as dots on a system. Systems that build scenarios where people play certain roles aided by the use of technology and/or by social interaction.

I was once one of La Mimi's students, and during my PSSD years, I was able to recognize the traits of a product service system in her teaching service. La Mimi is a system of knowledge and method, where the actors create the content themselves (patterns and clothes).

I see potential in taking the original system of La Mimi to a designed Product Service System. I believe there is a transaction of value when a student agrees to pay for a series of classes. Even more, La Mimi's value, the core of the service, has remained unaltered for around 40 years. Nevertheless, it still represents value to exchange.

Today, the opportunities to harness this value and give it an update are enhanced by the use of widespread technology and



Picture 2
Nelly Moreno, La Mimi, in Cartagena 1960

the connections that Internet and personal computers allow. [17]

The service that La Mimi offered could now be spread using the internet, and more people could access this traditional 'new' kind of service.

The opportunities are there. There are people all over the world, who appreciate making clothes and who would like to learn to make them. On the other side, La Mimi has the experience to help people learning but she is not giving lessons anymore. It is a good time to take her service and give it a brand new second life.

It is now a matter of design. Of Product Service System design.

Here is where this project is scoped: to design a Product Service System that takes the existing system of La Mimi, and aims at placing it in the present using the best of the past, to ensure that it will persist into the future as La Mimi's heritage..

2.1.1.3. Making clothes

Clothes makers can be professionals, fashion gurus, or teachers. But there are also many enthusiasts who make clothes for oneself or for others.

Making clothes for oneself is a process that begins with the idea and ends with the physical garment. In this process one should follow a set of steps to achieve the final piece. This project describes the process as devised by La Mimi.

The first thing, after the idea comes to mind, is to come up with patterns for the garment. Patterns can be made starting from basic patterns. If the basic patterns do not exist yet, it is necessary to produce them.

And to get to the basic patterns, first we need to take measurements. Taking correct measurements is very important, since good measurements will lead to good patterns.

With a set of accurate measurements, using a methodology

consisting of drawing and applying simple mathematics, we can create the basic patterns. Basic patterns are unique to the person's measurements and garment type. We would have each a basic pattern for trousers, skirts, dresses, tops and blouses, one for long and one for short sleeves.

The basic patterns are then to be transformed into the patterns of the garment desired. There are techniques to alter the peg for example, or the sleeves, or to change trousers to low rise, and so on.

Students learn to apply the basic patterns to create the final patterns for the product envisioned. First at a low level of difficulty, and then, over time, they gradually try more difficult pieces. They take the basic pattern, put it on paper, copy it onto the paper, cut and assemble the pieces - et voilà! The pattern is ready to go on top of the chosen fabric for cutting, placing it in a specific way, so that the stretching of the fabric, and consequently the garment, behaves like it should.

Once the fabric is cut it needs to be sewn together. Sewing is tricky and requires patience. For instance, sewing a zipper takes practice and method. This is true for all clothes making, patience is the mother of all virtues. It is very common to sew and unsew many times in the process.

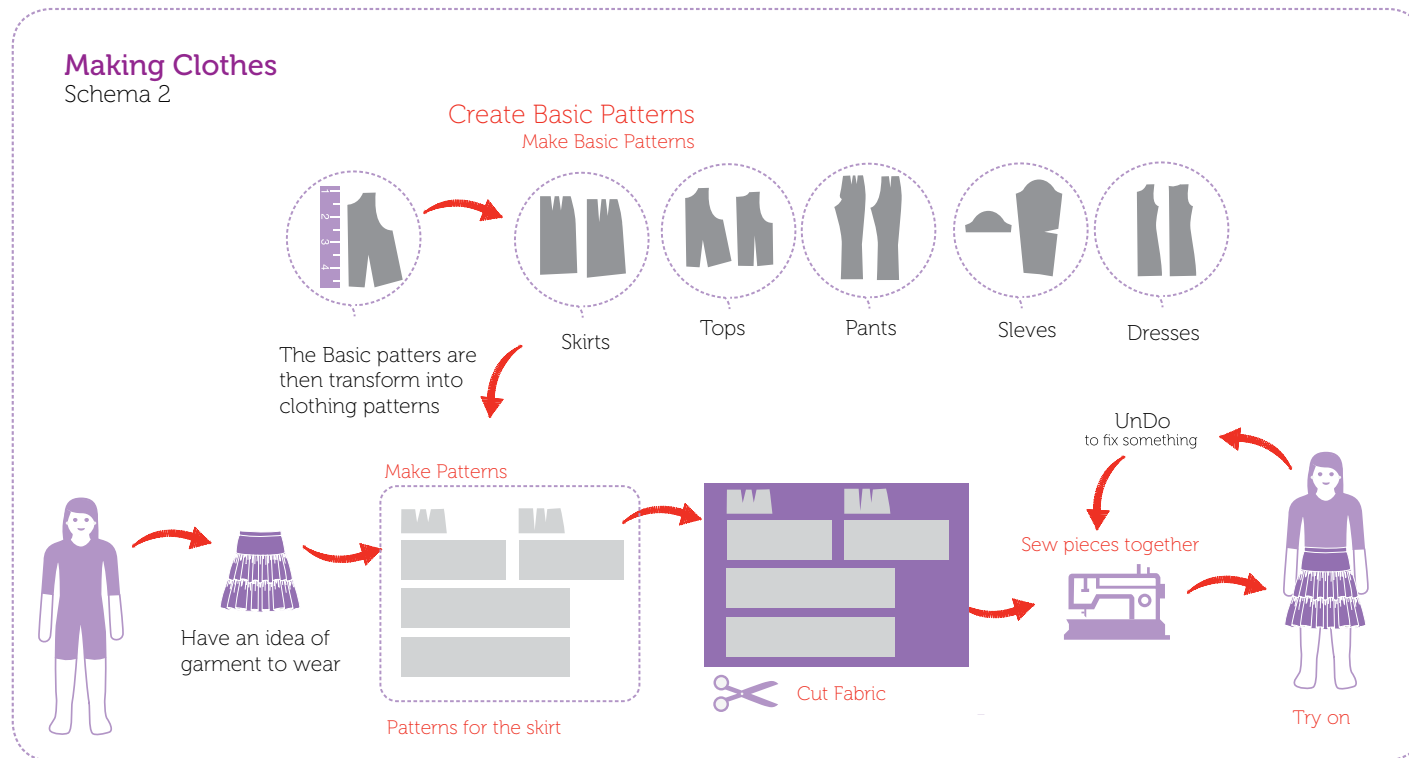
The process described can be seen in schema 1 next page. This schema describes the method used by La Mimi in her teachings.

La Mimi created her own teaching book where she explains step by step the process for making patterns and some guidelines for sewing [9]. There are different methods and cut types to be learned, usually from different regions. La Mimi's method follows the European style.

Once a student knows how to make patterns, it is a matter of having an idea and going on with it, improving and becoming an expert by practicing.

2.1.1.4. Of fabric and other matters

I grew up being always very close to fabrics. My mom ran her



own clothing making business at home and had all sorts of fabrics. In the house were rolls of fabric, folded pieces and two baskets full of medium and small pieces.

It was paradise, all those fabrics! Some of them where forbidden to me, while I could take as much as I wanted from others, asking first my mom for permission.

I remember one day, my sister did a beautiful bag to carry her books and notebooks to school, I think she was in 5th grade, and I was in third. It was a black and white, wide, vertical strips cotton fabric. She had taken the fabric without asking my mom. After my sister had already made the bag, she was told the fabric was for a client. I think my mom got a bit mad, but the bag was beautiful. My sister, who today is an architect, has

always been a good designer.

Fabrics are in fact one of the most important things in clothing making. The fabric should speak the same language of the final piece. There are huge differences in types of fabrics, some are heavy like jeans or 'drill', and some are lighter like silk or thin cotton. There are all sorts of fabrics and each one comes with its own personality.

Fabrics and clothes are a whole and the learning process should address them together: The characteristics of the fabric, how much is needed, how to cut it and how to sew it. What kind of thread to use and what kind of needles to use in the machines. All of these elements are part of fabrics and their use.

Making clothes is about considering every single element, the pattern, the fabric, and the design, as parts of a whole. But, above all, it is about the people who make the clothes, creatively engaging mind and body in the process.

2.1.2. Heritage and Tradition

"Heritage is the legacy we get from the past, what we live in the present and what we transmit to future generations. Our Cultural heritage is an irreplaceable source of life and inspirations, our touchstone, our point of reference, our identity" [33]

Heritage can be seen everywhere. It leaves traces and we can notice it in the present. Some of those traces can be seen in old buildings, in second hand shops, a monument, a street, a person. Heritage and tradition come from the past. Their signs are out there for people to know about them and recognize them as such.

Every place in the world has its own heritage and tradition, and Medellin, where I come, from is no exception. We are proud people, the majority believes there is nothing better in the planet than Medellin. They are proud of who they are, their heritage, and their tradition.

Medellin is located in Colombia, in a valley in the middle of the mountains, in the middle of the Andes, at 1700 meters above sea level. This location gives Medellin an extraordinary weather and a temperature of around 26 °C all year long.

Medellin got city status in 1675 when the Spanish monarchy recognized it as such.

Colombia was first 'discovered' by the Spanish with their arrival to the coast of La Guajira in 1499. As the Spaniards got inland, they created settlements along the way, mixing with other Spaniards, natives and black slaves. The settlements were created with locally available resources but strongly rooted in Spanish culture. [25]

During colonial times, that is the time after the conquest, society built up in a mix of indigenous and Spanish culture.

There were many social classes and hierarchies. Upper class young women had to learn the secrets of sewing and embroidery. Their job was to become perfect housewives and take care of their kids, house and husband. Even today, sewing machines are associated with women.

Medellin's story unfolded very much the same as in all Colombia: Spanish conquest and killing of indigenous, mixing races, religion, customs, food, and culture in the process.

Medellin however grew more organized compared to its neighboring settlements. In colonial times, the 'cabildo' or governor regulated money circulation, the Sunday market, the cleaning and decoration of the village, the layout of streets and other things that helped Medellin to become the commercial center of its region. [41]

The history of Medellin's economic growth went on. According to historian Catalina Reyes Cardenas, back in the XIX century, the flourishing industrialization in Medellin brought job opportunities for both men and women. [10]

The need for new jobs arose, such as secretaries, cashiers, telephone workers, store sellers - jobs that could be done by women. For many women these jobs were the opportunity to take an active part in society and improve their family's incomes.

By 1913, a new school for girls was professionally training women for commerce, clothing making, hat making, cooking, nursery, paint and music, to enable them to earn a living in banks, businesses, workshops and offices. Later on, other schools appeared, offering new skills that brought women many new opportunities. [11]

Medellin and its people flourished thanks to economical growth brought by industry. Women in particular found a very open context to take part in the work force.

One of the labors that were most practiced by middle class women was dressmaking. Since 1903 many clothes making courses were being announced in the newspaper. In middle class families, sewing helped improve the budget when

women manufactured clothing for family members. After working very hard some seamstresses managed to open their own sewing businesses, particularly to sell bridal dresses. This tradition later contributed to make Medellin a center for clothing making in Colombia. [23]

By 1906 eight thousand sewing machines were sold in Medellin alone [27]. Many dressmakers were itinerants going to people's houses to sew, others produced at home.

Medellin became leader in the textile and fashion industry of Colombia and South America, bringing forth around hundred years ago companies such as Coltejer, Fabricato and Tejicondor, companies that today are still running, nurturing the local and national economies. [54]

In 1960, when my grandmother started learning to make clothes, the textile and fashion industry was well rooted in city and culture. This explains well why someone like Maria Cristina Uribe, my grandma's teacher, went to Italy to learn and bring know-how in clothes making back to Medellin.

The textile and fashion industry has shaped Medellin and its people to the deepest.[60]

The city nowadays is still very much based on clothing design and making. It is not uncommon to find a sewing machine and a third aged person who knows how to sew. The textile manufacture industry, still very important, keeps the fashion industry going strong. The city is well established in the fashion business and many young entrepreneurs are starting today their own business.

Medellin is full of creative people. In one part, I believe, because of its difficult financial and social context. But also because, deep inside, it conserved and condensed the creative energy of bygone generations, who, with hard work and geniality, made of Medellin the city that is today, and made the people living in it today proud of its history and heritage.

Trends

_Unique and Best

Getting back to the proper values. Craftmans pride and being the best, because everyone says 'you are the best'

_Thrifty

Repair your old stuff and re-use it instead of buying more and more stuff. Wear again those old clothes from your mom, fashion recycles itself up, why should not you. [72]

_Back to old values

A new trend is taking the youth towards old values like virginity, beliefs, behaving. It feels good to rebel against the present freedom and do-as-you-wish theme. Today some people now go after clear rules instead of freedom.¹

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 1 Trends developed for Future Navigator during my PSSD internship (March and April of 2011). The trends are courtesy of Future Navigator. All rights reserved to Future Navigator.

2.2. Global Why

2.2.1. The Global Context

The gaps of free markets

After the dissolution of the Soviet Union in 1991, free markets as the main ideology conquered the world. Free Market economies grew rooted in China, South Asia, much of South America, Eastern Europe and parts of the former Soviet union.

In free markets the government only regulates taxes on transactions, but market participants enjoy freedom of action.

Free markets enabled money to freely move around the globe creating the best options to minimize costs and maximize profitability. Today many businesses run or source from factories located in places where labor and materials are cheaper thanks to free markets.

In countries with a long history of capitalism, like Western Europe and North America, free markets had worked very well, bringing wealth and development.

But wealth and poverty are not evenly distributed around the globe. Today, 94% of the total global income goes to 40% of people, while the other 60% of people must live on the 6% income left. [13]

The numbers are significant, more than half of the world population must live with less than a dollar a day. As there are not only the rich and the poor, there is a middle class that lives between the two worlds.

During the last century, a booming economy had been triggered and sustained by cheap oil. Technologies such as the Internet made the world transcend boundaries. But the benefits brought both by free markets and the availability of information have not reached everybody. While well-being became concentrated in Western Europe and North America, poverty affected the sub-Saharan Africa, South Asia and Latin America.

The 'developing' world (Brasil, Russia, India, China) is following the same paths as its 'developed' counterpart had taken in

the past. But in the rally to catch up, consequences led to environmental degradation and social problems. In other words, while some people get rich, many others are and will still be poor.

The reason is the current economical system and the nature of its profit based goals. For some people to win, some people must lose. This makes this economical system unequal, with the result that many people are left behind.

According to professor Muhammad Yunus, many people assume that if free markets can't solve social problems, governments will [13]. But the reality is that neither the government, nor NGOs, multilateral institutions, or corporate social responsibility initiatives have the means to solve the problems of those the system leaves behind. These institutions have contributed their part, and some of them are great success stories. But they are not enough.

The system has gaps, it has pieces missing, leaving people, traditions, values, and other very important human aspects, behind.

For professor Yunus, "our economic theory has created a one-dimensional world peopled by those who devote themselves to the game of free-market competition, in which victory is measured purely by profit. And since we are persuaded by the theory that the pursuit of profit is the best way to bring happiness to humankind, we enthusiastically imitate the theory, striving to transform ourselves into one-dimensional human beings." [13]

Even though evidence points to a main, omnipresent system, there are alternatives. As there is also not just one kind, but many kinds of human beings, with many ways of being and different personalities. There is not only one right way of doing things. There is diversity.

And it is in the diversity of human behavior that we can find interesting insights of how the gaps of the mainstream system are being filled by bottom-up initiatives.

It is interesting for instance to look at Social Innovation. Social

innovations are initiatives created by people for the people. Social innovation cases are proof that there is room for diversity in the mainstream economical system.

Successful cases of social innovation can be identified in the fields of food, socialization, fun and play, health and care, etc. These are all initiatives that either top-down, or bottom-up, had come to solve a given issue. Actions were taken where people fill in the gaps of the main stream economical system¹.

The answer to many of the problems that a dominant model imposes, often came from people not finding their place in the system. Thus, it is not new that solutions are proposed by individuals. What today is new is the power that information, technology, knowledge and awareness has brought into the hands of these people.

2.2.2. Collaborative Networks

Collaborative networks are networks of people who participate into collaborative projects. This phenomenon started with the open software movement in the latest decades. One very popular case of open source software is the case of Linux, originally developed by Linus Torvald. Today anyone can use Linux for free. Open source software licenses allow anyone to access, study, change and improve the source code, the instructions that a software is written with, and to distributed it. [44]

Linux is one example from the open source software movement, but a core emergent property of the initiative, which is, actors working for a common goal, is spreading outside the world of computing, and now its principles "are successful in proposing collaborative and effective organizational models." [45]

Some characteristics are to be emphasized from professor Manzini's words:

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1 Cases can be found in the CREATIVE COMMUNITIES BOOK <http://www.sustainable-everyday.net/>

"Collaborative networks are a mix of motivation and ways of doings that where not possible before, capable of catalyzing large members of interested people, organize them into a peer to peer modality, build a common vision and a common direction and develop very complex projects such in the case of wikipedia"

According to Rachel Botsman, human networked collaboration is happening, and it is happening fast because of mobile connection. Today, she says, we are more connected than we have ever been in the past. [18]

For Botsman, the raise of connectivity took place due to four drivers:

1. The renewed belief in the importance of community and a very redefinition of what friends and neighbors really mean.
2. That humans are changing the way they behave due to "a torrent of peer to peer² social networks, and in real time technologies."
3. 'Pressing unresolved environmental concerns', and
4. A global recession that has fundamentally shocked consumer behavior.

Collaborative networks arose out of the use people gave to the Internet and to mobile connections, and by doing that, human beings are shifting their behaviors.

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2 Peer to peer: direct communication among the parts with no intermediaries

Trends

New ways to work

People are connecting online not only for social reasons, but to work together. Each collaboration is different from one to other, and varies in each way the connection is established.

Example: Bettermeans.com is an online platform for open, democratic project management, where people decide together and get things done with no bosses needed. Bettermeans lets you use the same decision-making rules, and self-organizing principles behind open source to run your project. [19]

_Facebook

More than 120 million active users. Over 55,000 regional, work-related, collegiate and highschool networks. The fastest growing demographic section is those of the 25 years old and older. [72]

_Connect and develop

Co-create the future – and the right to reply. Customers can give important insights about the future. Create your own scenario game and let the customers fill in the blanks.

Example: Superstruct

Superstruct was a massively multi-player forecasting game, created by the Institute for the Future, and played by more than 8000 citizen future-forecasters. [68]

2.2.3. Distributed Systems

Distributed systems are horizontal system architectures, where complex activities are accomplished in parallel by a high number of connected elements (technological artifacts and/or humans beings). [44]

These kinds of systems are triggered by a technological platform at which core is the use of the Internet and the possibilities enabled by communication technology.

Distributed systems seem to be promising to tackle the challenges of the present since they have the ability to enable resilient systems. That is, systems able to cope with impacting events and crisis.

Distributed system architectures have also environmental, social, cultural, and political implications. In Professor Manzini's words, the implications are

1. socio-economic: bringing a large part of the value creation process at the local scale, distributed economies generate, and maintain, local wealth and local jobs. At the same time, intensifying local activities and interactions, they reinforce the social fabric and prepare a favourable ground to use at best, and to regenerate, the existing social resources.
2. Environmental: reducing the scale of their individual elements, distributed systems permit to use at best the local resources and to facilitate forms of industrial symbiosis (and, therefore, to reduce waste). In parallel to that, bringing the production nearer to both local resources and final users, they permit to reduce the average transport intensity of its activities (and, therefore, to reduce congestion and pollution).
3. Political: bringing the power of decision nearer to the final users and increasing the visibility of the systems on which decisions have to be taken, the distributed systems facilitate democratic discussions and choices. In particular, given that the advantages and problems that are related to a choice can be better compared, they facilitate individuals and communities in taking responsible decisions.

Distributed Systems have been seen in many areas, for instance in Power Generation. Distributed power generation refers to a set of connected electricity generators that together create the amount of energy required by the system. For instance a distributed power generation system could have plugged a wind turbine, a set of solar arrays, and be connected to the grid. In case one of the elements fails, the others support the system. This is a clear example of resilience inherent to distributed systems.[44]

Another very promising trend is distributed manufacturing that has its roots in the open hardware movement. Distributed manufacturing is manufacturing that is decentralized: production is in-place, just-in-time, in the quantity needed. [44]

Distributed manufacturing is at the heart of FabLabs, where 3D-printing, personal fabricators and multimachines lower the threshold of participation. In other words, the power of production is in the hands of people. In this model, production costs are not reduced with quantity, but with the diversity and customizability of and the access to open maker spaces, which foster creativity and small scale production. [58]

Trends

_Re invent, re-reproduce

Fab labs are high-tech laboratories for small-scale distributed manufacturing. There are in such diverse places as Iceland, Netherlands, Afghanistan, India, Costa-Rica, and counting. They are networked and interact with each other. Fab labs allows to create on demand for many needs, they are still in the beginning, but their future seems promising. [43]

_Products on Demand

Distributed production, among other things, is production on demand, when and where is needed. Today, products of all sorts, from computers to shoes, from appliances to books, can be created in small scale, on demand. This has been possible thanks to widespread access to technology.

Example: the bookscan service enables e-book creation on demand by scanning any book and converting it to a readable PDF for an Ipad, Iphone or Kindle. [72]

_I love to share my vision

All can be combined and connected. New opportunities arise. You can connect who you share values with and do things together. You can Google your condition before going to the doctor. You can live in the woods of Norway and work online in the USA.

2.2.4. Enabling Solutions

During the 20th century, for every human need there would be a business satisfying it. This has led to a strong market dependency to satisfy even the most basic needs.

The reason lays in the traditional way businesses were seeing and treating customers. In this view, people are passive subjects that will always want to be delivered a service. Fortunately, people are no mono-dimensional, but multidimensional subjects, and as they like to be delivered a service, sometimes they like to be active and take part in the offering itself.

Enabling solutions give people the chance to participate in the solutions they require. Enabling solutions are a combination of artifacts and activities, which in a given context, allow people's activation to accomplish a result. [21]

Examples of enabling systems can be seen in many fields, including, but not only, housing, transportation, food and farming, education, socializing, creativity, etc.

According to Professor Manzini each enabling solution is characterized by a specific enabling potential that indicates how much it empowers the users and/or the communities of users. The enabling potentials are divided in three clusters with its own categories, in this way [44]:

A. Individuals and/or communities empowerment:

1. cultural capabilities (skills and knowledge);
2. physical capabilities (material prostheses);
3. psychological drivers (cultural or ethical interests);
4. economical drivers (saving money or being paid).

B. Context conditions improvement;

1. accessibility (reducing physical or psychological barriers);
2. time to do it (making more efficient the proposed activity, or liberating time in other activities);
3. space where to do it (reducing the needed space, or liberating other spaces, or creating new spaces)

C. Systemic issues development;

1. organizational opportunity (to support the activity organization);
2. network building (to support the connection between different actors);
3. community building (to support the building of new forms of communities);
4. critical mass generation (to involve the necessary number of participants)

Enabling solutions provide cognitive, technical and organizational instruments so as to enable individuals and/or communities to achieve a result, using their skills and abilities to the best advantage. [21]

Enabling solutions have always existed, but it is only until recently that social enabling initiatives are starting to gain attention under the name of 'Social Innovation', as their structure and approach are proving to be socially and environmentally more sustainable than past initiatives in the same areas.

The beauty of enabling solutions is that people have to do the job by and for themselves. They have to take the knowledge, the technique and/or the tools to create an outcome that satisfies their own needs, or the need of their community. The beauty of the enabling solutions is that people has to do the job by and for themselves. They have to take the knowledge, the technique and/or the tools to create an outcome that satisfies and his or her own needs, or the need of their community.

Trends

_Quality Fit

Combination of two or more services that where not together before. Combining what already exists to provide solutions for new existing problems.
Example: Post service in Denmark, bringing food to the elderly at the same time the mail is delivered.

_Food + Recipe

Buy together the recipe and the food you need to create it.

Example: German Kochhouse – or "Cooking House"- is a shop that focuses on creating a set number of meals each day, selling the recipe together with the ingredients in the amount they are needed.

_Prosumers

Consumers who make their own products for consumption. People go to fablabs, ateliers, concept workshops/stores and create. They want to feel creative and original. [6]

2.2.5. Learning and Education

23

Back in 2008 while taking a course called "Design for Sustainability" at Schumacher College in Devon UK, I heard Satish Kumar, the centre's Creative Director, talking about "The Grand Mother's University", an initiative in India to bring grandmothers' knowledge to younger generations.

The Grand Mother's University is part of the Navdanya Institute, an initiative founded by scientist and environmentalist Dr. Vandana Shiva, to provide direction and support to environmental activism. [36]

As part of Navdanya, The Grand Mother's University "seeks to celebrate and promote the vast mine of knowledge women have at various fields" such as agriculture, music, crops, traditional medicine, water catchment, etc.

It is fascinating to see how at the University the knowledge of the elderly women is taken and given a voice. The elderly women's thoughts and practices are given the value they deserve. This initiative provides the elder women a space to share stories, music, recipes, planting techniques, etc. The

women show the link that exists between tradition and the 'know how'.

This knowledge that is held by the elderly is of extreme value because it represents who we are as part of our territory and our culture. What the elderly know could help us into understanding practices that provide answer to our environmental concerns.

I have always remembered the Grand Mothers University's story by Mr. Kumar. It is one of those stories that stayed in the memory and come out once in a while. It also makes me think of La Mimi. My grandmother carries knowledge and experience gained through the years.

Today we are facing big environmental and social challenges. It is clear that there is a widespread concern in every part of society, in most places of the world, and that the future looks indeed uncertain. Traditional knowledge can help us understand and hopefully tackle the problems we are facing.

24

Federico Mayor, general director of the United Nation Organization for Education, science, and Culture (UNESCO), stated that "building a viable future, democracy, equity, social justice, peace and harmony with our environment must be the keywords for the coming world. The notion of durability must be the base in our life styles, the way to direct our nations, our communities and our global interaction". [34]

To be able to bring about these changes, the UNESCO strongly believes that education, in its wider sense, plays a determinant role. Education is the "strength for the future. It is one of the most powerful instruments of change. The biggest challenge is to modify our thinking in a way that tackles the always-increasing complexity, the speed in which changes come, and the unpredictable of the world. To achieve this it is necessary to break the division that has traditionally divided the disciplines, and put together what, until now has been divided." Human development should be espoused with individual autonomy, communitarian participation and consciousness.

Trends

_Online Education

Today one can take any course online either for free or paying. Classes go from cooking to business. From dancing to playing an instrument, there are as many offers as one can imagine. Online education comes with all the possibilities, video, conference call, sharing with other students.

Example: P2P University where people connect online. Anyone can offer a course or take one. [59]

_Paperless Classes

Some schools are providing digital book readers their students, or requesting to use Ipad for taking classes notes, for doing teamwork and individual homework. [39]

_Freedom

I have to exploit my personal freedom to construct my personal ME. There are not scripts anymore.

2.2.6. Social businesses

Last year (2010) I went to hear a talk given by professor Muhamma Yunus. Professor Yunus gained a Nobel Price for his work on erasing poverty on earth. He believes every single human being should be provided with the opportunities to construct a dignified life.

His proposal to achieve this is based on something he calls 'Social Businesses', businesses that are either meant to help society to achieve well-being goals (health, food, education, recreation and so on) or are businesses owned by the poor

providing the means to escape poverty. [13]

According to professor Yunus, "The capitalist system has gaps, and it is necessary to introduce another kind of business that takes into account the multi-dimensional nature of human being".

To be able to address our most pressing social problems, he continues, it is necessary to introduce businesses that address this multi-dimensional nature, that do not exist only for profit, but to solve social and environmental problems.

Profit maximizing businesses (PMBs) will still have their place in the world. But social business goals are different from PMBs. The objective of social businesses is to create social benefits for those whose life it touches. Social businesses may make money, but they are cause-driven, not profit driven. They recover their full investment, can grow as well, and by that they offer benefit to society.

As stated at the beginning, there are two kinds of social businesses. One aims at bringing benefits to society based on the nature of the services or the products provided. The other type is like any other business, but the ownership is in the hands of people.

In businesses of the first type it is the nature of products, services or the operating system that creates social benefits. Food, housing, health care, education or other goods to help the poor are provided. For example, they might clean up the environment, reduce social inequality, or work to alleviate drugs and alcohol abuse, domestic violence, unemployment and crime.

Any business achieving this, while covering the full costs through the sales of goods or services, but not paying dividends to its investors, is a Social Business.

As for the second kind of social businesses, their products or services might not create social benefit. The benefit comes from the ownership structure, for example by either poor or disadvantaged people. Any financial benefits generated by the company will go to help those in need.

Social businesses are real, they exist in real life, and in Bangladesh they are proving to be effective, alleviating the problems of the poor. Still, more of them could be promoted, as more people understand the nature of such a business and the opportunities that they bring to society.

Social businesses could be initiated by:

- _ Existing companies as part of their social responsibility.
- _ Foundations that might create funds for Social Businesses.
- _ Individuals with experience in Profit Maximizing Businesses who would like to be challenged, to get retribution, or to try something new.
- _ International or bilateral development donors such as the World Bank that chooses to fund a social business.
- _ Government providing funds to support and encourage social businesses.
- _ A retired person with wealth, or someone who has inherited wealth.
- _ Young, inspired people, recently graduated from university, who feel like wanting to have an impact in the world.

Trends

_Generation Care

Google has launched project 10100 encouraging the public to submit ideas that help other people, with the most helpful concepts eventually being implemented with a share of USD 10 million. Submissions can fit into a number of categories, including community, environment, health and education. [57]

_Alternative Currencies

New currencies are being born around the world, as communities and governments are trying to build resilient local economies. Example Totnes Pound. Alternative currency in Totnes, UK, in the first transition town ever. [71]

_Conscious-cool

MyC4 is facilitating microcredits via the Internet to small businesses in developing countries. MyC4 enables you to contribute directly to eradication of poverty in Africa. [50]

2.3. Conclusions

Today the world is changing very fast and Globalization has had a profound impact in how people behave in their territory and their culture. We came to live in a system where the strongest and biggest are those having the best advantages. This system has left people from various contexts behind, for many reasons. Globalization has, at the same time, given and taken opportunities away from people.

26

The opportunities that arose from the mainstream system are important, given that these opportunities offer the chance to organize and tackle the problems encountered as individuals and social beings every day.

All the while the consumption of genetically modified food is pushed, advocates of the organic food movement have become strong. While there is increasing traffic and high pollution in cities, many are taking the decision to travel by bike, and prefer public transport. Just like there are supermarkets that sell imported goods, there are small shops that promote local products. There is undeniably a big mainstream system, but small-scale is sprouting and spreading as well.

The changes are even more important since the Internet confers visibility to those initiatives, making more people aware. As a result, more individuals are changing behavior and making rearrangements, which are then shared on the net.

Something is changing for the better in global society. It is doing so because people are more aware of the pressing environmental and other such problems, from which issues

arise.

In this process that a minority is leading, many important developments are taking place.

Things are happening. Good things.

Now is the time to take the good energy that is nurturing the process of change, and embrace it to the fullest, using the energy to impulse initiatives in which people feel good and valuable. This is about feeling as human as possible, not about making money.

These are exciting times for designers, times where we go beyond the domain of products, to enter the world of human interactions. A lot of value is being exchanged through human interaction. It is a challenge to strengthen the value of traditions, proposing initiatives like the one being proposed in this project.

La Mimi PSSD has value right now for a reason. It always had, but today even more, because its structure is so proven that the new technologies could support the already existing experience, allowing new interactions, thus new added value.

Learning and education through collaborative networks and distributed systems seem to be a good promise into nurturing the revival for traditions and heritage. In particular the tradition of making clothes at home or for oneself.

Distributed production, traditionally part of clothes making, could become renewed using the Internet and other communication technologies. There are good examples showing how new connections and initiatives can be carried out today.

In the next part, I will go deeper into how La Mimi PSSD will come to take shape.



Picture 3

HOW

Now is a good time to create opportunities to empower people. There are plenty of initiatives, activities, spaces and networks of people who are gathering to be creative and in the best cases give something to the world.

Today, individuals can interact in different ways thanks to the Internet and widespread technology. This has enabled them to build physical or virtual communities where people are happy to be, and that's why they are there.

I want to pass on my grandmother's heritage, enabling people to make their own clothes, by combining her already existing system with the opportunities of technology and other positive conditions the present is offering.

3. How

3.1. Original Service of La Mimi

The original service of La Mimi sets the base to work on the PSS. I will make a deep analysis of the original system to structure the outcome of the new one.

The original system of La Mimi goes as follows.

There are two parts in the original system, the first one is to assemble a group. The second starts when the classes start. This second part is divided into 3 other parts: taking measurements and basic pattern creation, making patterns for clothes, and finally sewing.

First part

Assembling the group.

La Mimi first thinks she wants to form a group and then lets the people know about it. She uses two channels to tell people, one is the local newspaper, where she posts a notice. The other channel is word-by-mouth.

People that read the announcement and are interested must call La Mimi. La Mimi provides information, requirements, cost, course duration, and other details. If the person is still interested, there is a telephone number exchange to reach each other after La Mimi reaches the number of participants required to start the group. Up to last year the minimum number of students was 4.

Once she gets to an agreement among all the participants on the best time to meet, she calls back to confirm. Confirmed students are scheduled for a date of start.

Second Part

Classes.

Classes with La Mimi are divided in the three parts that follow an order. 1. Take measurements and make basic patterns. 2. Transform basic patterns into patterns for clothes. 3. Cut the fabric and sew the garment.

1. Take measurements and make basic patterns.

One day of class (3 hours) is required to make one basic pattern and learn. During the course students make basic patterns for skirts, a pants, dresses, shirts and sleeves, and learn to transform those into garments.

The first day is for taking measurements and make the basic pattern of a shirt. La Mimi first takes the measurements of one of the students while the others watch. Students take notes as La Mimi talks and demonstrates, then they repeat. Each student is provided with a copy of the guide of how to do what La Mimi is showing, taken from La Mimi's book.

After La Mimi finishes, each student should do the same process with one of the other students.

After all students learn to take the measurements, La Mimi explains how to transform those into a basic pattern.

She distributes the copies with the steps and then students start working. She explains how to place the paper, the ruler, and how, step by step, to draw the pattern. Students make notes and ask any questions. Afterwards La Mimi hands out paper to draw and asks them to do the basic pattern by themselves.

The same process is repeated to do the other basic patterns. Basic Patterns are then traced into thick paper for keeping. They are the basic element into creating clothes.

2. Transform basic patterns into patterns for clothes

After one basic pattern is finished, La Mimi goes on explaining how to transform the basic pattern into pattern for clothes.

She takes the basic patter from one of the students and draws

it on top of paper. Then she starts altering the pattern using scissors and scotch tape. Depending on the design of the desired garment, the basic pattern takes its final form.

She shows the students how to make different basic designs that the students then take and try to apply to their own basic patterns. La Mimi always announces what will be next, and encourages students to bring their own designs.

3. Cut the fabric and sew the garment

When students have got their patterns, either made during class, or at home, it is time to cut the fabric. The fabric's length is defined by the pattern and the width of the fabric. Students learn to estimate the required fabric area, acquire it and bring it to class.

With the fabric on the table, La Mimi explains how to place the fabric and how to place the patterns on it. After positioning the fabric, she cuts it and leaves it ready for sewing. Each student

then goes to a table and cuts her own fabric.

After the fabric is cut, La Mimi demonstrates how to sew it. She explains both with and without sewing machine. Students then use the machines available in the space to make their own garments. For complicated details, as to sew a sleeve, a neck, a zipper, or others, La Mimi does the process using the machine and shows it.

La Mimi helps whoever needs help and lets people work on their own. A piece of garment can take more than one class to make. Sometimes students start one garment in class and finish it at home.

The second and third process are repeated many times for the duration of the course. It takes practice for people to be able to transform basic patterns into clothes. In many cases people create patterns during class and work with the same design over and over again, without going for new styles.

3.1.1. Journey Original System of La Mimi

First part

Assembling the group.



① When La Mimi wants to open one group she lets people know about it.



② She posts a notice in a local newspaper and tell friends around



③ People interested give La Mimi a call and they talk to arrange the classes

Second Part Classes



① First day of class students arrive and La Mimi welcomes them.



② The first thing La Mimi teaches is to take measurements. She first show the students how to do it



③ The students repeat the process after using their guides and notes. La Mimi helps all the way.



④ La Mimi then show how to make the basic patterns out of the measurements



⑤ The student repeats to see if she understand



⑥ La Mimi shows how to transform the basic patterns into a pattern for clothes. After the student repeats.



⑦ La Mimi takes the student's patterns and places them on the fabric, explaining how to do it and the distances for cutting



⑧ The student cuts her own fabric and gets all the elements for sewing the garment



⑨ La Mimi shows the student how to sew the garment. The student watches and learns



⑩ The student starts her project and comes back to sew every week in class



⑪ The process repeats itself transforming basic patterns into clothes. As the student gets practice she can do it all by herself while La Mimi can help her to solve any issues that might be encountered



⑫ Students go for a year to learn and have fun. La Mimi and her students usually become good friends.

3.2. Creative spaces

Creative spaces are places that enable people's creativity.

This can be achieved through several ways, like providing tools for creation. Also, space gives people the chance to feel creative. Places where workshops take place are creative spaces, because inside, lots of creative things happen.

Today we can find many types of creative spaces: indoor, outdoors, permanent or temporary. Creative spaces can be in warehouses, buildings, offices, houses, museums, plots, open fields, farms, malokas¹, etc. Really, any structure holding a place for people to gather and work on projects, either by themselves or with others, could be a creative space.

Some creative spaces resemble adult playgrounds, with structures for people to freely play and create their own modes of interaction. One good example is the Carlsberg Beer Company in Copenhagen. They moved away from their location in the city, leaving much unused space behind. This space in turn is sparking the imagination of many engaged individuals, to make it creative for people to go and use it.

Creative spaces trigger creativity if creativity is properly enabled; sometimes some facilitation is needed to get the best

.....
1 "Maloka" is an indigenous word for "house" or "cabin" used by Colombian aborigines

out of people.

I analyzed two creative spaces of very different in nature, but both examples of creativity enabling spaces. One is The Hub in Rotterdam, the other is Soho House in Copenhagen.

The Hub in Rotterdam is a node of in a network of Hubs around the world, 30 in total. Every Hub has its own feel and its own dynamics, but a core common vision is shared: nurturing spaces to empower people with good ideas for a better world.

Soho on the other hand is a privately owned hotel for offices. It claims to be a creative space holding offices of all types: design, consulting, magazines, online shoe stores, architecture studios, etc. Inside the big building, besides offices, there are many meeting rooms, a coffee area, a huge eating and party area, two terraces, and corridors, where among other things, art items are exposed and constantly rotating.

Both cases have things in common, but their nature is very different. They both are a combination of working space and socialization, enhanced by scenarios of art, design, fun, or wonder.

The analysis of creative spaces is important in the sense that my PSS needs a creative space for people to gather, with the aim to trigger people's creativity and socializing. By analyzing actual cases I expect to get ideas into how this could be done.



Picture 4

Ropes hanging from the ceiling for people to tie, climb, and play creatively in one of Carlsberg Beer Company old factory's creative spaces.



Picture 5 Connecting wall, The Hub Rotterdam

3.2.1. Case Study 1

The Hub // Rotterdam, NL

The Hub in Rotterdam is one of the many Hubs that exist today in the world. Hubs are a new concept, they were born in the UK about 4 years ago and today there are 30 Hubs in the world, and there are about 700 requests around the world to open one. [74]

Hubs are places for people who would like to make the world a better place. Anyone can participate, the more diverse the people is, the better. In Hubs, people go and have a space to work, but more important than the space to work, is the opportunity to connect to people, network, share, and join with others to start up new projects.

Every Hub has its own feeling and rules, but they all share the same root, also called The Hub. But this is not a Hub like the others; the core Hub is more an organization than a place.

When someone feels like starting a new Hub, the core Hub will evaluate and eventually approve each place to be created. They also couch it for a while until it is mature enough. Each Hub is a node in a network of Hubs, which allows Members, besides being part of the network, to rent spaces in any other Hub of the world.

The Hub in Rotterdam is around 3 years old, it was in fact one of the first Hubs to be opened after the very first one was launched in London. By now, the Hub in Rotterdam is self-sustaining, with an engaged community of 190 members.

To use the Hub, people pay memberships. Memberships go from one day, to unlimited. The more you pay, the more benefits you get. For example, if you acquire an unlimited membership, you will get the keys to the place plus a mailbox where you can receive mail.

The dynamic is very simple, you pay and you use the space to work. The place offers spaces for different uses: a larger co-working area that is included in the membership, and two others for renting, one room for meetings, and one suitable for workshops and meetings..

Members can also rent, at a reasonable price, a video beam projector and other support material that may be necessary for a meeting or an activity.

There is a fully equipped kitchen that connects to the garden in the back, and a coffee area right in the entrance, mostly



used for socializing. Members can make full use of the kitchen. Parties are allowed if part of a project hatched at the Hub.

The coffee area is also for renting, but only during nights, when not in use by Hub members.

Everyday at 12:30 there is the community lunch and everybody is welcome to participate by bringing their own food and sharing. On Thursdays the theme is salads, the idea being that the Hub's resident urban farm project would provide some of the greens for those days.

According to the the type of membership acquired, the payment entitles to use the working spaces, Internet, printing, fax, and other benefits.

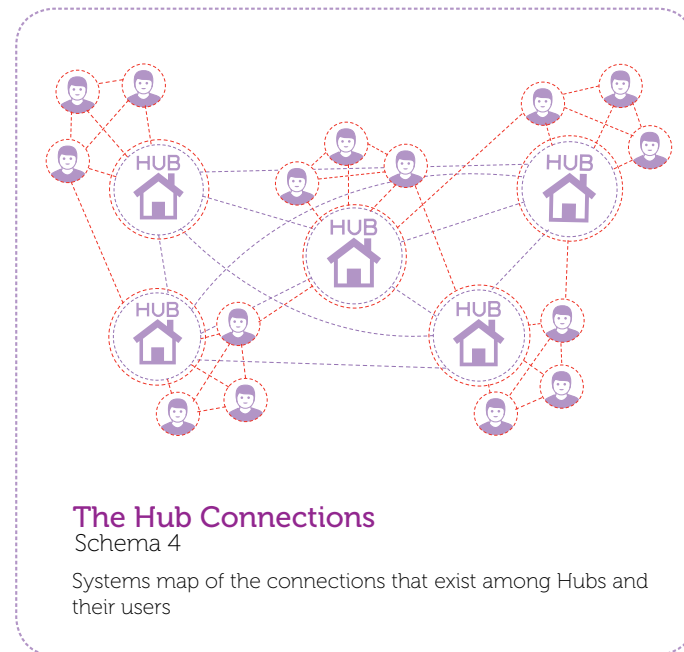
The main value the HUB offers to its members is connections. To enable these connections, one person at the Hub, called the Host, is in charge of fostering connection among the people. The Host will welcome people and try to get to know them better. She or he will then start up connections and introduce to each other for potential collaboration..

The host is a facilitator, and to work as such, they need to be trained. Training is based on the Deep Democracy method.

Deep Democracy is a method born right after apartheid in South Africa ended. It was necessary to facilitate between people who once were divided by the color of their skin. Deep Democracy is used for decision-making, where both the majority and the minority are taken into account.¹

The Hub itself is very interesting, but more interesting are the initiatives that take shape there. There is for instance sort of a library, books are brought and left there for anyone to look at. Members are not allowed to take these books with them. The same space enables people to swap the books they do no longer want. Leave one book and take another in exchange. A system like this, since based on trust, may seem very fragile.

1 <http://deep-democracy.net/>



But at the Hub in Rotterdam it seems to work. No book so far has been stolen.

Another initiative run by Hub members is the growing of edible plants. The backyard garden holds two composting barrels where good soil is produced. The yard is planted with some fruits that are starting to grow. The third floor has many pots with edible plants.

Other two members started their own Hub Shop. This works by renting shelf space for the showcasing of products. Customers can also rent online. This is the first shop under the Hub's wing, and even though it is an independent initiative, it looks interesting enough to be implemented by other Hubs.

The Hub is also an Art gallery featuring works of artists. One of the Hub members cures a temporary exhibition that rotates every month. During my visit there were some paintings and sculptures, labeled on the wall with pencil, I guess to prove that printing is not necessary!

Some members use the Hub to work with others for their own businesses. There are people couching others for instance. Also, the Hub's accountant offers assistance and help in accounting. That way he can help others and get back some business.

At the Hub ideas are encouraged. According to Sofia Van Ruth, one of the Hubs volunteers, "you just bring an idea and we tell you, yeah! Do it! Cool!"

This particular Hub does not run workshops of its own, but other members do, as they find the appropriate audience here. Workshops vary widely in topics, but something is common to all, they all are about doing good to the world.

Overall the Hub is a place for creative people who find there the opportunity to grow their initiatives. The beauty that arises from this scheme is due to the diversity that is deliberately looked for by the Hub leaders. The more diversity, the more opportunities for new unknown connections and projects.



Picture 6 Entrance The Hub Rotterdam



Picture 7 Urban edible gardens in the balconies.



Picture 8 Coffee area The Hub Rotterdam



Picture 9 Urban edibles in the rooms



Picture 10 Working area, third floor, The Hub Rotterdam

Business Canvas The Hub Rotterdam

Table 1.

Key partnerships	Key activities	Value proposition	Customer relationship	Customer segment
Main The Hub People	Networking Space for working	Support and connect people with initiatives for a better world	One to one and self service	Adults from any Background
	Key resources		Channel	
	Space Wifi Printer People		Web Word of mouth Social media	
Cost structure		Revenue		
Bills Wifi	Rent for space Paying Host	Memberships The Hub Anchor Renting spaces for workshops and office space		



Picture 11 Counter, Soho House, Copenhagen

3.2.2. Case Study 2

Soho House // Copenhagen, DK

www.soho.dk

SOHO House is an office hotel building that holds Future Navigator, the company where I did my PSSD internship. SOHO House is located in Copenhagen, Denmark.

Soho sits in a warehouse complex in one of the oldest neighborhoods of Copenhagen. It had been used for animals slaughter in the past, pigs especially, as the Danish love pork meat.

SOHO House is now an office building very different from many other office buildings. Inside, there are offices of all sizes. Some are conventional office spaces, but a few, placed in unusual parts of the building, are very unconventional. For instance, there is one office where the big industrial freezer used to be. The door is a big metal fridge door, and the walls are covered in white tiles. The feeling inside though is not of a fridge anymore.

Soho House holds architecture studios, computer game developers, design companies, Internet based businesses, magazines, and translators, among many other small and not so small businesses.

The entrance, placed in the second floor, welcomes you with a green wall of plants, while the counter top features a fish tank inside. Next to the entrance there is a waiting area with modern furniture, two fish tanks, and a screen that's always showing fire.

In this floor there are offices, the coffee area, and the lunch area named 'the shaw'. Lunch is served from 11:45 until 2:00 every weekday. Companies pay a monthly fee for meals of their employees.

The lunch area is also used for parties and gatherings. It is a huge space connected to an industrial kitchen, with tables and chairs. A small terrace for outside sitting during the warmer times of the year can be accessed from there.

The coffee area is where people buy coffee, both cash or a prepaid card are accepted as payment. Sometimes parties and social events are hold in here too. There are sofas, long tables with benches, and a 'telephone room' with an armchair and no phone.

Besides office spaces, there are meeting rooms the associates can use. Each meeting room has a theme; the hunting, the underground, the white, the red room, and many others. Some are bigger or cooler than others. All are equipped with the necessary elements to conduct meetings or organize gatherings.

Also the corridors are taken into consideration. In them you find hammocks, chairs, tables, airplane seats. They even have a play area with a Nintendo Wii, a pool table, and other games.

The third floor has more offices and meeting rooms, and a staircase that leads to the terrace. The latter is connected to a big architecture office.

40 The terrace has tables and an artificial lawn. It offers views over the city. It is very cozy and welcoming. There are also tables and long benches attached to the balcony where people can sit and hang around. People use this space for smoking, eating, partying, and gathering.

Soho is open for office spaces and meeting areas rental. Associates get keys and can enter at any time.

Soho holds events for social interaction, like parties or special lunches, among others. Members renting space can also organize workshops open to the public there.

The facilities include mail reception, Internet, telephone line, tables, chairs, lighting, and a very engaging social environment.



Picture 12 Telephone room



Picture 13. Sitting area in the Corridors



Picture 14 Games room. Nintendo Wii and other games.



Picture 15 Corridor in the second floor. Art on the walls.

Business Canvas Soho House Copenhagen

Table 2.

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Key partnerships	Key activities	Value proposition	Customer relationship	Customer segment
Clients	Rent office space Renting social spaces	Offer creative spaces for creative businesses	One to one and self service	Businesses that require working space
	Key resources Space Wifi Kitchen Social Space Furniture for offices		Channel Web Word of mouth Printed Material	
Cost structure		Revenue		
Bills Wifi	Maintenance Run the Kitchen	Renting spaces Lunch sold in the Kitchen		

3.3. Enabling solutions

Enabling solutions give people the possibility to participate in the creation of the solutions they want. Enabling solutions are a combination of artifacts and activities, which in a given context, allow people's activation to accomplish a result. [21]

Tools are a simplified example of enabling solutions. However, more than a tool, enabling solutions provide people a set of tools and knowledge to enable themselves to achieve results.

The cases I analyze here offer insights into how enabling solutions become successful when they come to life not only through tools, but also through the process of how to use them.

The studied cases include The Moda Lab at Politecnico di Milano, the Protospace in Utrecht, Netherlands, and +BC in Milan. These are all cases where people have access to tools and space to realize their own projects.

The Moda Lab at Politecnico is an institutional space under the Politecnico's wing. The personal working there is employed by Politecnico, and students are the users. The space opens and closes at certain times and users are meant to work there. Socialization is carried out in the corridors and the school social areas. In a sense it is a rigid space that only offers people access to tools they need. [26]

Protospace on the other hand is a privately owned initiative for public use. People use the machines and the space paying a fee, although Thursdays, they have an open day, and visitors only pay for materials. Inside the space, users are enabled to produce any outcome that the Fab Lab format allows. Fab Labs are essentially small-scale workshops with a set of tools permitting digital fabrication. These tools usually include a laser cutter, a milling machine, a rapid prototyping device (frequently referred to as 3D printer), and often CNC machines. Fab Labs are nodes in a bigger network, knowledge and information is distributed and exchanged through the net. Users are an active part of the Lab initiatives and outcomes. [58]

As for +BC, it consists of assisting experts and tools to help

people to fix their bikes themselves. The private initiative gets both sponsorship from private organizations and the government. +BC is both a mobile unit and a fixed office where people can go and be helped. [8]

All of these cases are examples of enabling solutions in different contexts and with different goals, but they all enable their users to produce a tangible outcome out of their own ideas or needs.

Enabling solutions are very important in this project because the core of my PSS is to enable people to feel creative and make something out of that creativity.

3.3.1. Case Study 3

Moda Lab POLIMI // Milano, IT

www.polimi.it

The Moda Lab is one of the workshops that Politecnico di Milano offers its students to develop fashion related projects. At the lab, students have access to tools and machinery necessary to carry on knitting and fashion projects inside the space.

The labs consist of a space, machines, tools and people.

The people of Moda Lab are technicians who help students accomplish their job, and fix problems with the machinery. They are in charge of rules compliance and of managing the flow of students.

The space is divided into two main areas, Knitwear and Fashion. Knitwear is divided into two spaces, Fashion into three. Each space is equipped for planning, developing and carrying out the project.

For the purpose of this work I will only analyze the Fashion lab, because it is the space with relevant elements for the sewing lab.



Picture 16
The Moda Lab Politecnico di Milano.

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Inside the Fashion Lab there are working tables, mostly 1x2m, arranged in pairs. The tables are high, and some of them have a surface underneath to keep bags and materials. Most tables have high chairs with rounded tops.

The space is bright with lots of light coming from the big windows in front of the entrances and the artificial tube lights. The ceiling is high and it helps to keep the air and light flowing. Machines also have individual lighting. Users always have a good amount of light at all moments.

There is also some furniture that holds threads of all kinds and materials. Trash bins for paper and rubbish, some baskets with pieces of cloths, smaller tables with scissors, pins, tailor meters, plaster, studs, weights to fix the fabric on the table and rulers; rolls of paper and fabrics, racks with patterns, some extinguishers, and posters and signs with safety instructions.

The space has a modular configuration, so it can be re-arranged depending on needs. It changes from time to time, but only small changes at the time, moving one table away, or placing more machines into an area. Users are encouraged to give their opinion on how to better use the space.

Close to the walls are the sewing machines and irons. Against the wall there is usually one machine, although there are some configurations with two.

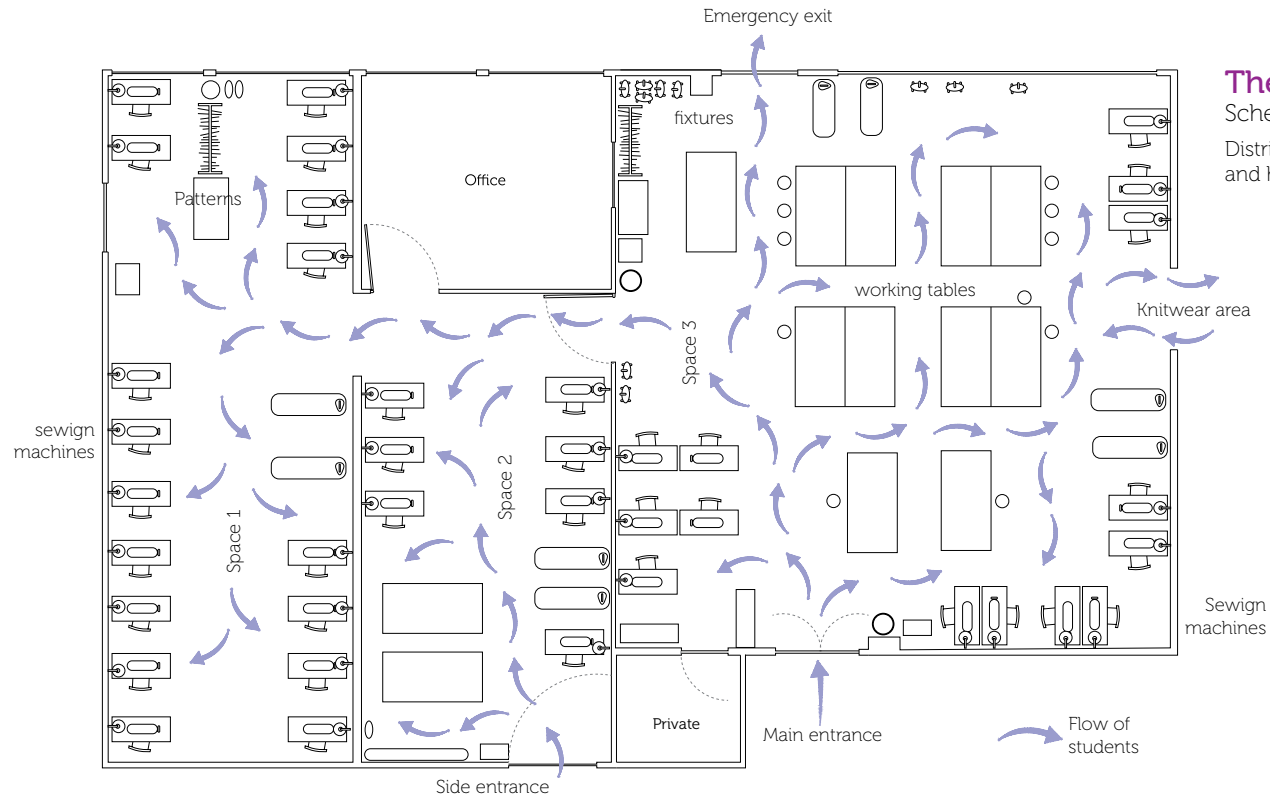
The sewing machines are close to an energy connection with safety plugs.

There is an office where the personnel has desks, papers and computers. This area is reserved to employees. The office is divided with glass windows from the open space, allowing free sight.

To be able to access the space, students need to take both a written and a practical test to prove they understand the safety procedures and able to use the machinery. Students prepare for the written test by downloading a safety manual from Politecnico's website that comes both in Italian and English.

The manual serves the students to:

- Learn the proper working procedures,
- Be aware of the possible physical and chemical risks involved



The Moda Lab
 Schema 5
 Distribution of the space
 and human flow

with the use of machines, tools, materials and substances,

- Learn to correctly use machines and tools,
- Learn to use the necessary Personal Protection Equipment.
 (Taken from the safety manual of POLIMI)

The Lab also offers machine operating manuals.



Picture 17. Space 3 Moda Lab. Polimi.



Picture 18. Space 2 Moda Lab. Polimi.

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Picture 19. Detail space 3. Moda Lab. Polimi.



Picture 20. Detail space 3. Moda Lab. Polimi.



Picture 21. Working room, Protospace. Utrecht, The Netherlands

3.3.2. Case Study 4

Protospace // Utrecht, NL

www.protospace.nl

Protospace is a FabLab located in Utrecht, in The Netherlands. FabLabs were first developed at MIT when professor Neil Gershenfeld came up with the idea to in one place host all the tools and machines that would be necessary to create almost anything, at least ideally. His initial idea was to bring FabLab units to the undeveloped world, and enable people to produce goods locally which are too expensive to bring otherwise. Today there are FabLabs in many places of the world. Each FabLab works as an independent unit inside an interconnected network.

Protospace is one of those nodes.

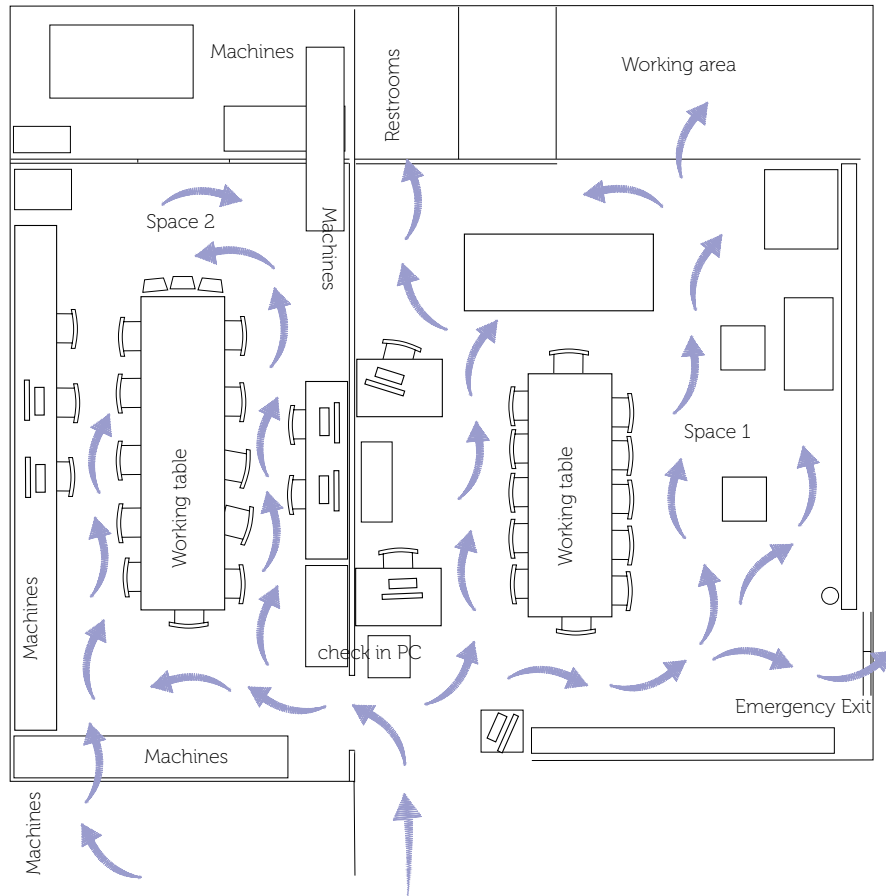
To enter Protospace the visitor is invited to sign in on a

computer. The space is open to anyone wanting to use the space and the machines; there is a fee for space usage that includes the use of the machines. Users are charged by invoice. Thursdays are open days: it is free to enter and use the machines; users only have to pay for the materials they use.

The space is divided into two sections. The first has work desks and tables, but almost no machinery. The second contains most of the machines and a work table in the center.

The first is bigger than the second, and also features a kitchenette, restrooms, a kiosk-style computer to sign in, a similar to sign out, then samples of things created on-site, tables, chairs, and a small room at the back for dirty work (painting and coating).

The smaller room has, besides the central table, tables along the walls with computers and the following machines:



ProtoSpace

Schema 6

Distribution of the space and human flow

Modela Roland MDX-20
 Epilogue Mini24
 LaserPro
 Z-Corp Z450
 Roland CAMM-1 Servo GX-24
 Seron 1326
 RepRap
 Formech 660

- Milling machine
- Laser cutter (35 Watt)
- Laser engraver
- 3D-color printer
- Vinyl cutter
- Wood working router
- Self-replicating rapid prototyper
- Vacuum Former

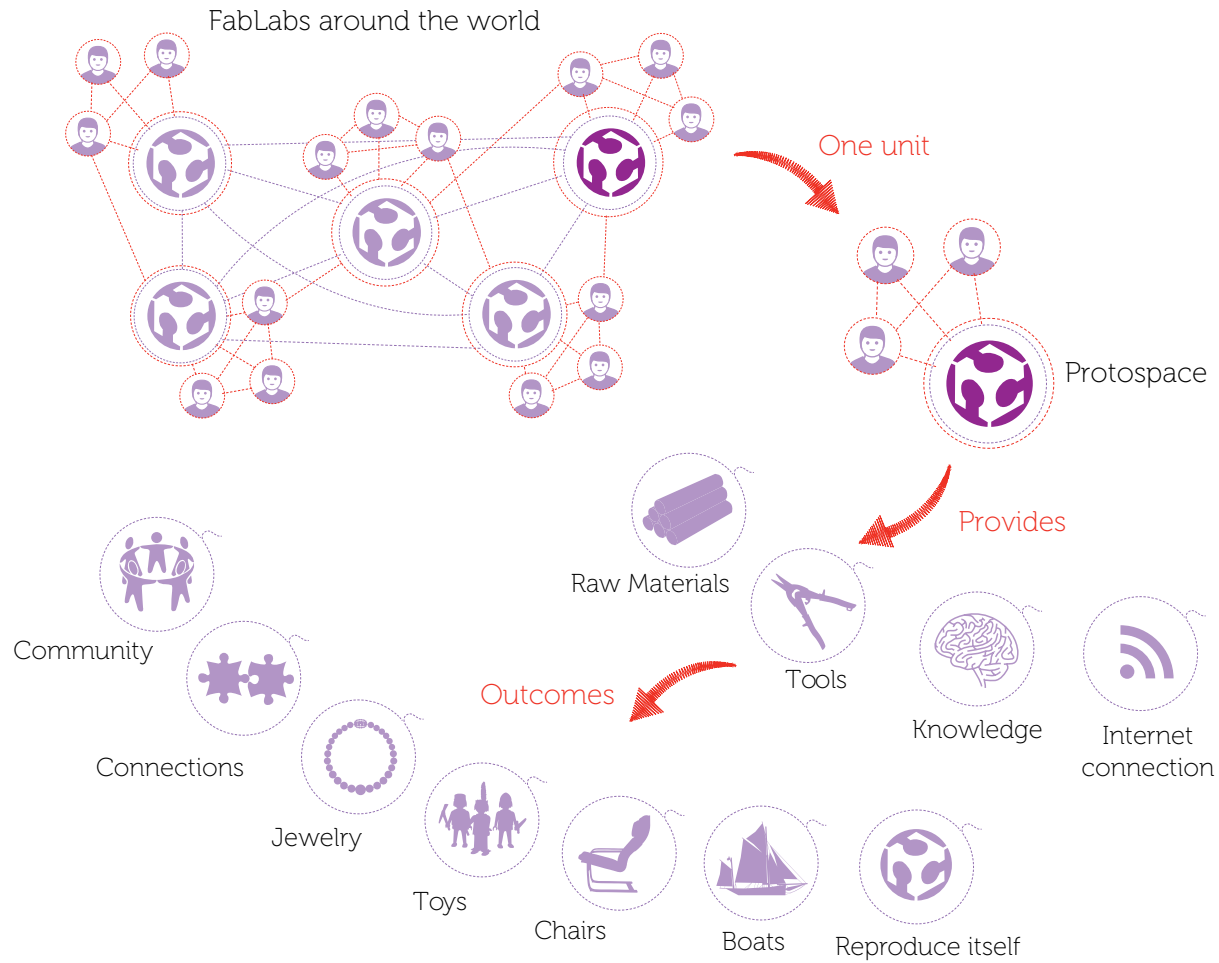


Picture 22. Space 1. Protospace. Utrecht.

ProtoSpace

Schema 7

Relation between all FabLabs and Protospace





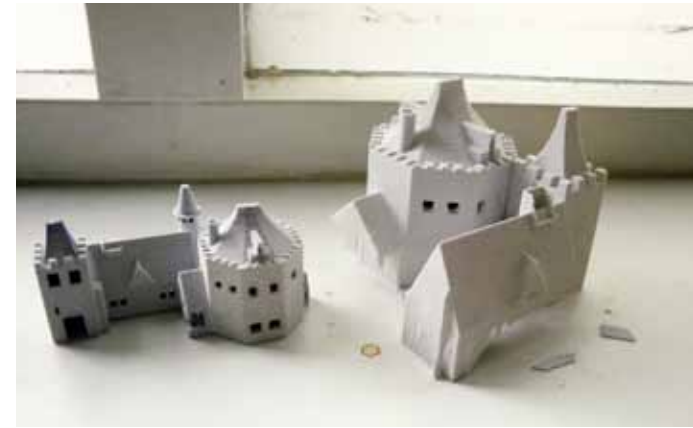
Picture 23. Some of the Machines in Protospace



Picture 24 Space 2. Protospace.



Picture 25 Some Products made in Protospace



Picture 26. Castles made on 3D print

Business Canvas Protospace

Table 3

Key partnerships	Key activities	Value proposition	Customer relationship	Customer segment
Sponsors Users Other FabLabs	Space for working Machines for use Workshops	FabLab open to everybody	One to one and self service	Students Entrepreneurs Designers Engineers
	Key resources		Channel	
	Machines PC's Space Materials Wifi		Web Physical Place Word of mouth Social media	
Cost structure		Revenue		
Bills Materials Wifi Machines repair		Payment for using the space and machines Materials sold workshops		



Picture 27. +BC in Politecnico di Milano

3.3.3. Case Study 5

+BC // Milano, IT

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www.piubici.org

+BC ('more bicycles') is an association of bicycle experts, inventors and enthusiasts who encourages and supports the culture of cycling in the city of Milan. They do so by enabling people to take care of their own bike, and offering workshops and advice to those who would like to commute by means of sustainable transportation.

+BC provides bike rental service, mechanical help, maintenance workshops (managed by the users, under the supervision of an expert mechanic), and safety equipment for bike parking facilities.

+BC's services are open to all in both their fixed and mobile location.

The fixed location opens during certain times of the week. Users find a wider range of tools and spare parts than they will find at the mobile unit.

The mobile unit tours around student areas of Milan. One day

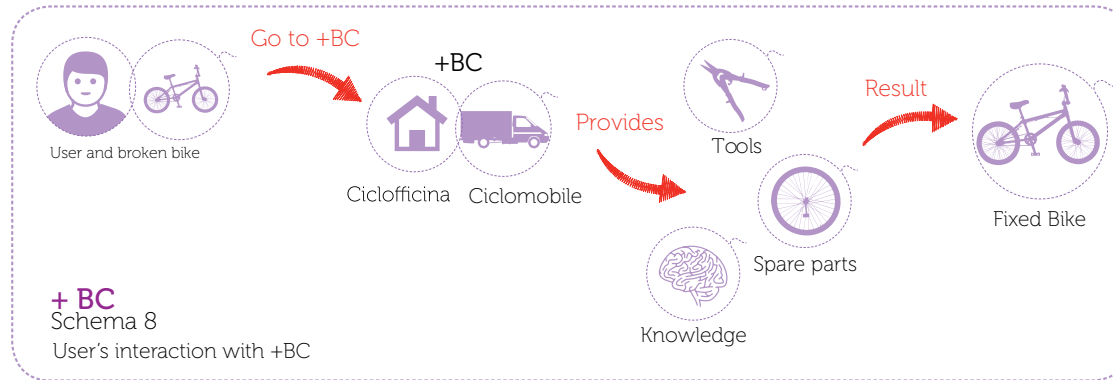
it visits one university, the next day another one, and so on, for the whole week.

Piu Bici came to exist in 2003 and is sponsored by the government and private donations. Today +BC is having problems with the land the Ciclo-officina is located on; and the mobile unit has not been to universities for a month or so. They are to be taken outside the land where the ciclo_officina is and that is generating problems.

The Ciclo-officina is close to the Porta Garibaldi train station in Milan, an area that is undergoing significant transformation due to lots of construction activities. The workshop, once an abandoned lot, contains a main building with tools, spare parts and bicycles. Another building contains books, tables and teaching materials; outside there are some gardens, a smaller construction that holds a sort of bar, and the restrooms.

The dynamics inside the Ciclo officina are essentially the same as in the mobile unit. Users can take advantage of the tools to fix their bike by themselves, and there is someone around to help. But the work has to be done by the users on their own.

The Mobile unit consists of an adequate van with tools and a kitchenette. When the van is parked and ready for display, a tent can be pulled out, creating the space of a working area for bike



fixing. The van, in addition to all the essential tooling for bike repair, also carries spare parts for replacement in users' bikes. When the van is parked, a tent comes out and draws the space

of a working area to fix the bikes. The van carries, in addition to all the essential tools to fixing bikes, spare parts in case they are needed to replace the parts from users' bikes.

Business Canvas +BC

Table 4

Key partnerships	Key activities	Value proposition	Customer relationship	Customer segment
None	Teaching and fixing	Learn, fix, share	Members card	Bike lovers
	Key resources		Channel	
	Members Bike knowledge		Ciclofficina Ciclomobile	
Cost structure		Revenue		
New spare parts Tools and materials	Building maintenance	Members fees Donations	Parts sold Auction sale	

3.4. Collaborative networks

Collaborative networks are networks of people who participate in collaborative projects: individuals, locally or globally, participate in building a common result. One very popular example of a collaborative network is Wikipedia, the encyclopedia where knowledge and contents comes from a very wide range of users from all over the world.

In this kind of collaboration, people address a challenge to come up with a good solution. Some solutions root well and are then diffused to other contexts and people. Collaborative networks can be leveraged to social innovations that create a new way of acting in the world and being more environmentally friendly.

As collaborative networks case study, I analyzed both a physical and a virtual network, since both cases are important for the development of my PSSD.

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The physical network is situated in Medellin, Colombia. It is a time bank. Time banks have existed for a while, but this time bank is new to Medellin. It is a fairly new initiative but has all the characteristics of a collaborative network. It is exceedingly relevant to my work given that it is placed in the same context where I would like to set the physical space of the PSS.

The second case is an online fashion community called Openwear, a collaborative network that aims at ethical and sustainable fashion, through sharing of knowledge and a common brand for distributed production. At Openwear, participants can build their own collection, 'copying' from a common set of designs, and then sell them under the creative commons label.

Collaborative networks are important for this project because they show how people do connect and manage to setup, initiate and move on with a specific project, and also to illustrate how common goals can lead to common achievements.

3.4.1. Case Study 6

OpenWear // The Internet

<http://openwear.org/openwear/frontpage>

Openwear is an online collaborative platform for fashion (garments) creation and sharing. Users share values, access knowledge and practice on collaborative and distributed work. [22]

Openwear is a community of people, schools, and the government whose mission is to "promote an alternative approach to fashion through a learning environment that reconciles two social trends: the rising demand for no-sweatshop, ecologically sustainable, locally produced, fairly traded apparel, and the growing relevance of a self-managed workforce focused on independent, socially engaged, critical and multitasking creative production."

Openwear is open to everybody wanting to take open fashion design collections, use them to make actual garments, and sell these under a brand licensed as Creative Commons. In this way Openwear strives to foster enterprises in micro-communities and support sustainability.

On the platform, participants can open a profile where they share their activities and look for possible collaborators; they can access fashion tools and discuss best practices for micro fashion production, and find solutions to shared problems and learning opportunities.

One of the main assets of the platform is the hosting of online collections that members can download and make, just as-is, or customized with their ideas.

According to the website "Openwear is an open brand. Openwear is a type of collective trademark that recognizes the productive role of co-production, engages in strategies that aim at redistributing the value thus produced and seeks organizational solutions that give co-producers a say in determining the overall governance of the brand."



Picture 28. Open Wear Collection. Back to Basics.

“Openwear wants to be a practical experiment to institutionalize mechanisms of revenue sharing through which co-creating consumers can benefit from the value that they produce and involve consumers in determining the overall social values towards the brand should contribute to.”

Openwear community members are authorized to use the Openwear brand provided they conform to the Openwear License.

To obtain an Openwear license, users need to subscribe. Once subscribed, members can start downloading the digital representation of clothes of any collaborative collection and then produce the garments and accessories. They can

customize or alter them. These pieces can then be sold using the Openwear label and any other label members would like to include.

To access the license, members have to agree to produce the garments or accessories partially or completely handmade, to share at least one nice picture of the work done, and to do an update on their profile about how to produce the piece.

Openwear is a tangible example of how networks can carry and efficiently deliver information. The information leads users to be enabled to create an outcome. The concept of value that is shared among the users is the base of the whole initiative. Members all share the same vision.



Picture 29. View of Medellín, El poblado.

3.4.2. Case Study 7

58

Time Bank // Medellín

<http://www.redsiclos.org>

Time banks have existed for a while, but the time bank in Medellín is a new initiative led by John Jairo Lara, and engineer that dedicates himself to finding radical approaches where other solutions seem to fail. [28]

A time bank works with people or businesses exchanging time doing something, providing a service or selling goods. Here the exchange is done in a unit called 'time' instead of money.

The initiative starts with the premise that wealth is in each person and that there are alternatives to monetary exchange.

The time bank enables people to promote themselves and be reached by their knowledge, time or skills. It works like a regular bank, however people have their account in payment units -hours-, with which they pay for access to services.

For instance, on the platform there is a woman who sews, but

her sewing machine is broken. Via the time bank she can get a professional to fix her machine. In return, the latter can also get any other service offered at the time bank.

This also works with products. If someone offers a product, it will have the price in hours. If another user has the necessary credit on the account, he or she can purchase the item.

As for businesses, Mr. Lara explains it works the same. A business can offer products or production capacity in hours. For example, a business, instead of giving away its merchandise at a discount price, can place it onto the platform in the equivalent of hours, and generate revenue by selling in 'hours', which will benefit the business later on. The company in return can get exchange services for machine repair, a computer expert, a carpenter, etc.

The time bank runs with all the infrastructure and safety required for such a service. The system works with an open source software developed by a Dutch social trade organization that has been working with alternative currencies and alternative economic models.

The time bank is a way to allow access to services even without cash for payment. This is the most important social aspect, because it is an inclusive system. Anyone with value to exchange can enter the game.

The time bank operates in one of the many neighborhoods in Medellin, but there are plans to expand offices into other areas of the city. In this kind of collaborative networks, the local aspect is absolutely important, since an user can only use the hours of someone who is easily at reach.

This case is relevant because it shows how people in Medellin are embracing the change of mentality for approaching and solving problems. It is very meaningful that an initiative is trying to build social cohesion and overcome the lack of trust left behind due to the violence that plagued Medellin for many years.

There are many monetary systems, and if one is more inclusive than the current one, then it should be considered.

3.5. Freeconomics and Freemium

There are many things that come for free, at least that's what we believe, but in many cases, free is not really free. For those things that are not really free there is somewhere some shift in pricing and it may look as free for you, but in reality it is not, maybe for you but not to someone else who ends up paying for what you are getting for 'free'.

This concept of free has its roots in marketing: as a way to sell a good, something else is given for free or at a very low cost. This model still continues today. It is in fact the business model of many of the services we receive today, such as free razor, and expensive razor blades, or free cooking books to introduce a new product, and so on.

The digital era brought forward new types of free. Many interactions occurring in the virtual world are for free or at a very low cost. Here, free really means free, either thanks to the widespread abundance of information or because value creators choose to give away value simply for altruism.

According to Chris Anderson [1] the concept of free has four facets, two older traditional ones, and two newer one.

The two older ones:

1. Direct cross subsidiaries.

Here free is only free to the extent that at some point someone ends up paying one way or another. This is the case of cell phone companies giving away the cell phone for free, but charging for phone minutes. At the end the costumer ends up paying for the cell phone and the minutes altogether. The notion of free is based on psychological suggestion instead of the real free.

2. The three party market.

Here a third party pays to participate in a market created by a free exchange between the first to parties. This form of free is the business model of most media. In the traditional media model, a publisher provides a product for free or nearly for free, and has advertisements paying to ride along. Newspapers and magazines are not selling papers and magazines to readers, they are selling readers to advertisers. This makes them a three-way market.

Economically this is called 'two sides market' because there are two distinct groups who synergistically support each other. Advertisers pay media to reach costumers, who in turn support the advertisers. Consumers ultimately pay, but indirectly paying higher prices on products due to marketing cost.

The two new ones:

3. Freemium

A freemium service generally matches a premium paid version with more value. Freemium can take different forms, for instance with software where a free version has some of the features of the full paid version. Or flickr and its 25\$ fee for flickr pro.

This business model abounds on the Internet: like dropbox, the freemium service in which you get online file sharing to

a certain storage space. If you need more, you have to go premium. The free resembles a lot the premium, it's only that it is limited.

In here, the hope is to hook clients. Give them a piece, to making want them go for the whole. A typical online place follows the 5% rule which states that for each person paying for a premium version, other 19 users can go free.

4. Non-monetary markets

In this scheme, money is not always expected as a return. Individuals give or add value for free altruistically. This is the case of wikipedia, where altruism finds a platform on which a single human being can have global impact.

In non-monetary markets, the concept of value diverts from money. The value created is based on reputation or potential attention. Using a less measurable indicator, people do it for self-expression, fun, good karma, satisfaction or self-interest.

60 Sometimes giving is unintentional or passive. We often give away information to Google when searching the net or visiting some websites which are affiliated to google marketing tools. We may give away aluminum cans to whoever happens to recycle them without even wanting to do so.

The concept of freeconomics is important because it is happening everywhere we look. The younger generations are getting used to this freedom of information as something normal, while many adults see it as one of the many business tricks they have seen.

However, the underlying technology of the digital age has enabled 'free' to really happen, developing itself away from mainstream economics.. In fact, this phenomenon was happening even before there was any theoretical business model explaining it.

I believe in freeconomics, because I have benefited from the freedom of information for many years. The challenge today is to come up with business models with which free makes money.

In June 2011 I went to Amsterdam to attend the launch of a book called 'Open Design Now'. The book is about creative commons in design, and how designers should shift the perception that they are not the only creatives and capable of making things. [10]

A substantial part of the panel discussion at the event was focusing on what should be then the business model for open design. Although no real conclusions were made, one thing became clear: there is a pressing need to come up with creative business models in which design is open, while still allowing people to make a living.

The only reasonable conclusion was that free should lead to a purchase of something else to cover the cost.

Take for instance Fab labs, in which people can take online free information to create inside the lab. However using the Lab is not free (unless one is in Utrecht and happens to visit a promotional open day).

There you have free, but also have a cost. However, those who get the money are not always those who opened the information in the first place. The challenge thus is how to give people just enough so they want more, while the flow of money also reaches the givers.

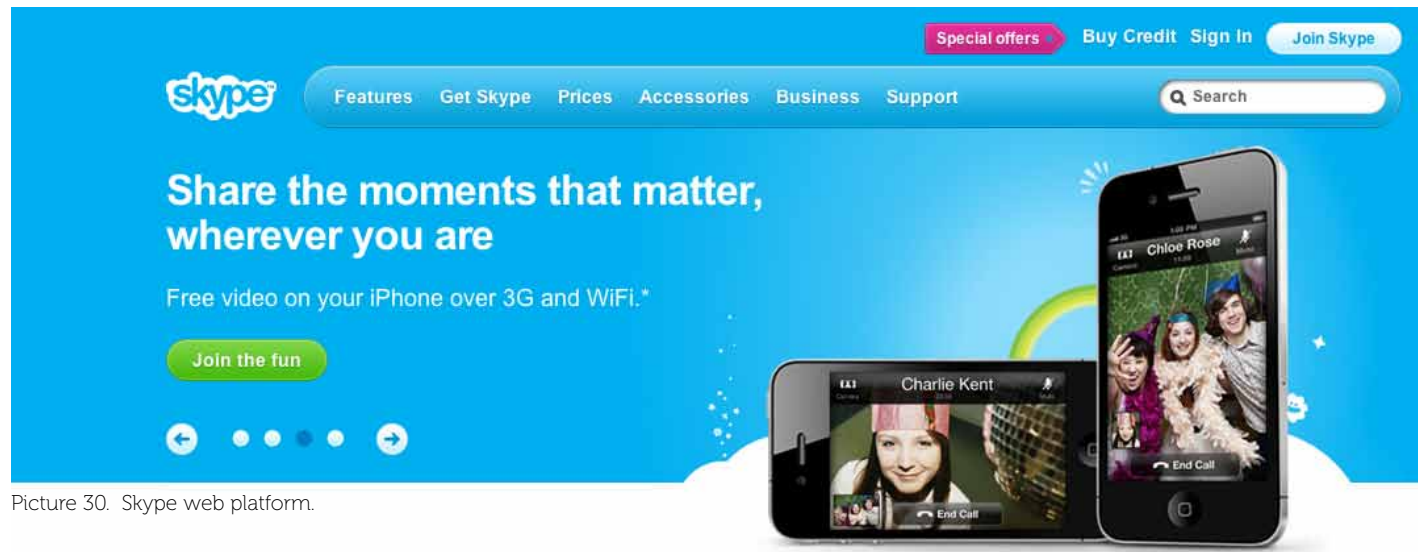
3.5.1. Case study 8

Skype // Luxembourg

Skype is a computer software to connect people all over the world. It is used by individuals, companies, governments and institutions.

Skype is a free Voice-over-IP software that can be downloaded by anyone. It is free to all when making audio and video calls from computer to computer.

Skype offers other services against payment. To call from a computer to a land-line or a cell phone, Skype credits are needed. These can be purchased on the platform itself with credit card.



Picture 30. Skype web platform.

People get one service for free but have to buy credits to reach land-line and mobile devices. Here is a perfect example of a Freemium service.

Skype also offers SMS and Skype Manager, a tool to manage Skype in a business.

Thus Skype can be set up and used at home, at work, or with any mobile device, since there are applications available for Mac mobile units and androids.

Companies of any size can use Skype to change the way they communicate, collaborate and compete. Real-time communication tools help them to work better, smarter and more efficiently. Skype is a global solution that is easy to implement and supports the management of all communication needs among employees and costumers.

Skype is a very popular example of a business adopting the freemium model. Every user can use Skype's proprietary software to make free audio and video calls between each other. They generate revenue by selling SkypeOut minutes to landlines and mobile phones from the end user's device.

Because it is very cheap for them to replicate and distribute the free product, the software, the company is able to make substantial profit. In 2010, it reported 663 million users and a total of 12.8 billion USD billed minutes.

Skype is a good example of how a useful software can enable millions of people, in many cases without even involving payment.

3.6. Conclusions How

There are two key elements in common between the original system of La Mimi and the study cases I have analyzed. The common elements are: Creativity, either because is triggered (so it comes to people) or is enabled (so people can do something out of their creativity). Making connection with people, because of communication, or because people may like to get together with people alike and create projects together, or to give something of oneself (time) for something's else in exchange.

The original service of La Mimi is a creative process where the access of information triggers creativity. Once people learn the new skill new opportunities for creation arise, some people get more creative than others but they all create to some extend.

The original service is also a place to make connection, but the connections don't go beyond socialization time. Connections are also important in the original system, in the sense that La Mimi has relied in word of mouth for letting people know about the classes, thus, she has been connected to other people this way.

It is interesting to note that in some of the study cases, connections made are very important as from them new initiatives can happen. In the case of the Hub, connections are the most important value delivered, where there is even one person (the host) making sure connections are being made.

Another important comparison is how in the original system of La Mimi the tools to enable people are only used when there are classes given, while in cases such the Moda Lab or Protospace tools are the central source of value, everything else is secondary. Still learning and workshops do happen inside the space that contains the tools, but the tools are the core value proposition.

Common to +BC and Protospace is that people can use the tools by themselves, there is not one pushing the bottom for them to start up a machine in Protospace, and no one fixing your bike completely in the case of +BC. In both cases there is an expert, but the expert is only available to help someone, not

to do their job.

Another important result of the study cases is the strength that internet has brought to people so they can learn, share and do something they like or enjoy.

Today one can find as many options in the Internet as one can imagine, and this availability is moving into physical life. Many of the transactions that happen over the Internet stay in virtual form, but many others have a result in the physical world.

One example of this are the free designs people can download and make in a FabLab. Information is virtual, but the result will be physical. Or for instance the collections offered by Open Wear Project to be made and sold under the creative common label.

Another valuable conclusion is the use of Freemium business model to be able to get a sustainable business. This model is also inclusive since some of the users are paying just enough to give chance to others to participate.

In a city like Medellin where there are social classes that go from very poor to very rich, maybe a Freemium model could allow the people with not money have access to those things the richer are subsidizing.

It is possible to take the original structure and give it a make up based on the experiences taken from existing cases. The time is now when people are experimenting with their selves as they try to find the missing something in their life. I believe people can feel happy and satisfy without having to go shopping, but by feeling creative and follow a process to achieve an outcome. Outcome that will hopefully make them feel proud of themselves. This I believe is one of the recipes for happiness.



Picture 31

WHAT

La Mimi is a product service system to enable people to make their own clothes.

The system has two main nodes: a sewing lab and a web platform. The sewing lab is both a physical and a moving unit with all the necessary elements for making clothes, and connect to other people. In the sewing labs people can learn, share, and give the best of themselves to the world.

As for the web platform, it is the system's window to the world. Users can learn making patterns and buy custom fitted patterns created by the users themselves. The platform works as a virtual Mimi that will assist people in the process of learning.

4. What

4.1. Introduction

La Mimi is a Product-Service system enabling women to make their own clothes, or clothes for others.

It is a Product Service System that takes the original service once provide by La Mimi, my grandmother, and updates it to today's technology and opportunities. Specifically, the opportunities brought by the fields of enabling solutions, collaborative networks, distributed production, social businesses and Freemium business models.

The core of this project is to be an enabling solution for people. To give them the tools to create the clothes they want to wear, and enable them all the way through to feel creative and capable of achieving a result. This result could also lead to make clothes for others, thus creating their own business.

Collaborative networks will be the result of putting diversity of people together and allowing exchange and interaction. Here one will find designers interacting with enthusiasts, designers with designers and enthusiasts alike, in the hope that people from diverse economical backgrounds will be attracted, giving richness to the project.

Distributed production will be possible if people can access guides and tools for the clothing creation process. In this sense, users will make their own clothes without relying on a brand to set their style, but may find within themselves, or through other users, ideas to follow, while fostering and nourishing the exchange of value.

A **Social Business** could be the result of the enabling solution. If members with little resources can make a business out of the learning they got through La Mimi's service, then La Mimi would lead to the creation of social businesses by the users.

The PSS will make the service accessible to a potentially wide range of users through the freemium model. Value can be

gained through the platform for free, but more value can be obtained when buying other members' designs as patterns to make.

The Product Service is divided into two units: the Sewing Labs (one fixed and one mobile), and an online platform for people to learn how to make clothes and have access to custom fitted patterns.

The Sewing Labs

The Sewing Labs are placed in Medellin, Colombia, the city where I grew up.

The fixed Sewing Lab would be in the affluent neighborhood called 'El Poblado'. People who need access to tools and space for their sewing projects would go there. Also, access to the web would be provided, as well as facilitation to connect with others, use of the machines and the working space, and the ability to print patterns.

The space works under membership agreements and has different fees based on the profiles of the user. Voluntary work is also welcome in exchange for membership benefits.

The Mobile Sewing Lab, anchored at the fixed location, visits areas where people with low incomes live. The Mobile sewing lab's aim is to allow people with fewer resources to get in touch with the initiative and to learn about the possibilities and potential of making clothes.

The Mobile Sewing Lab will tour in poor neighborhoods to provide a series of workshops based on La Mimi Online. Facilitators help interact with the web platform, and assist in the usage of the machines and the tools. The unit will be hosted inside a community center in neighborhoods selected based on the possibilities to bring people together.

The lab will come 4 times in one month (3 hours each Saturday). This time span should be enough to learn how to make a piece of garment. During the last workshop session, La Mimi mobile Sewing Lab will give a pep talk to encourage the group to continue learning online, and to organize themselves

for the creation of a sewing lab of their own.

La Mimi will link people to possibilities and programs that the government provides. Likewise, La Mimi will support any entrepreneur that would like to go on into creating a sewing lab with La Mimi's same business model, or any other model of choice.

Workshop participants of La Mimi Mobile Sewing Lab are welcome to visit the fixed Sewing Lab and enter once for free (with the use of a voucher). If interested to keep on going, a membership based on his or her income (like Protospace, which offers different price levels based members' needs). Voluntary work can also confer the opportunity for meaningful engagement and access to the Lab for free (like at the Hub Rotterdam)

Both sewing labs provide people the tools to realize sewing projects like garments.

The sewing labs are open to anyone who would like to have a place to make clothes, both enthusiasts and professionals. Although the place is open to anyone, there are target person types for this project. These can be found later in this chapter.

Why have both a fixed and a mobile lab? To reach a diversity of people that can

1. Enrich the whole experience.
2. Bridge the gap that exists in Medellin between those with access to opportunities and those without, or in other words, those with money and those with lack of it.

The Web Platform

The Web Platform is the labs' window to the world. Users can do several things, divided into two clusters:

1. Learn for free how to make clothes for themselves and for others.
2. Buy patterns generated for one's own body measurements of designs posted throughout the platform.

1. Learn to make clothes

On the web, users have a set of options to learn how to make clothes with La Mimi's original method, which is to take measurements of the body and then transform those into Basic Patterns. Those basic patterns are then transformed into patterns for clothes based on a predetermined set of clothes to make. Each style enables people to learn how from the original Basic Pattern they can come up with clothes that have a certain feature, for example, how to get low rise bottoms (pants, skirts) or 'princess style' tops (shirts or dresses) and so on.

In this part people go from learning the basics steps, to the application of those into real clothes

2. Buy Patterns

Once people know how to make clothes, they can look at styles to inspire themselves for what to do next.

After people accomplished the first part of the training, they are capable of seeing a design and come up with the pattern themselves. There is however a gap after the first stage, and it can only be filled with experience. That is, students know how to make clothes, but it takes practice before they get it completely right.

So in order to help them gain experience, they can do this in two ways: by buying patterns generated by the platform, or by looking at patterns provided in the details of the design they choose. By looking at those details they can venture into making the patterns themselves. The pattern is created with the measurements entered by the user and can be printed together with a guide for making it. Thus, allowing the exchange of value for money.

People will practice as they find it better for their goals and likes. The platform enables people to do this by giving them the two options.

If a pattern is sold, both La Mimi and the designer get money. A bigger percentage goes to the design.

The aim of both the sewing labs and the web platform is to

enable people to feel creative, give them an opportunity, and the means (or the 'excuse') to connect to find projects, make friendships and have a good time.

One of the key elements of this project is that it takes the experiences of La Mimi, and in that sense my own personal experience with her, and creates a contemporary product service system that is grounded in present opportunities. It also looks into the future proposing alternatives for sustainable models of production and consumption based on distributed systems.

The knowledge of 40 years of La Mimi's sewing would be delivered for people today, giving her service and her story the chance to persist for many more years, hoping her life will inspire others who, like her, can make a good living from making clothes.

4.2. Context.

Medellin, Colombia

Medellin is the second biggest city in Colombia, with a population of 3'591.963 (2005 Dane). The city is divided in 5 – corregimientos-, 16 –comunas- and 249 barrios. [14]

Medellin is a city that is a historical example of entrepreneurship in Colombia. In Medellin industrialization flourished at the beginning of the 20th century. This process helped the development of a well-traced and organized city that boomed economically during most part of the last century.

Since the end of the 40's, in a period known as 'La Violencia', forced displacement in Colombia triggered the arrival of peasants into the city. They created so-called invasion neighborhoods, where poverty abounds still today.

In the 80's and 90's in Medellin there was a period of decadence and fear brought by drug cartels flourishing during that period. Medellin became known all around the world for

being one of the most violent cities in the world and for drug lord icon Pablo Escobar.

During the first decade of the 21st century initiatives lead by Mayor Sergio Fajardo were proposed to bring back to life to the city and try to change the negative image that it had among its inhabitants and people around the world. He proposed to use a coherent and inclusive urban strategy under the slogan: "Medellín: from fear to hope." [5]

Medellin, thanks to these initiatives, has become an example of how urban transformation based on good architecture can reshape the mentality of its inhabitants.

According to Architect Giancarlo Mazzanti: "They (the major and his team) worked to decrease poverty and violence by creating opportunities for employment and entrepreneurship, all while reducing social inequality through educational policy reform. In this way, they decreased the indexes of violence and insecurity and reduced the isolation of the inner city's poorest areas through integration-focused architectural projects like parks, libraries, and modernized schools." [31]

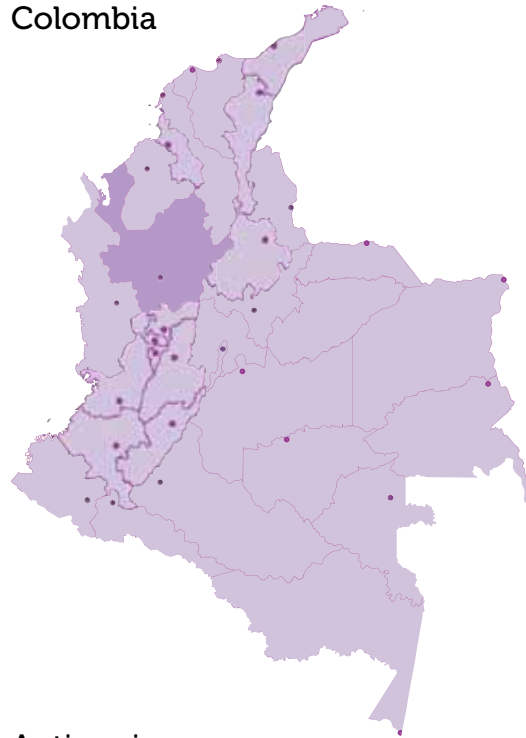
The starting point was to build some very attractive buildings and realize urban projects in the poorest areas of the city. The hope was that these building and urbanization plans would become a reference point for the city and its inhabitants.

Medellin today is a city still struggling to balance its social equity and include as much as possible every part of society, but the challenges are still great.

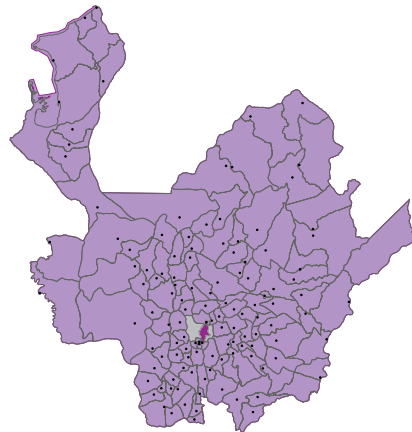
There is an invisible gap that divides Medellin in basically two major social layers: the poor, and the middle and high class people. There is no wall, but the city is divided. The initiatives led by Mayor Sergio Fajardo aimed at bridging the gap by creating some most beautiful buildings in poor areas, attracting tourism and other sections of the population to these zones.

Today one can find people of every social class visiting public parks, schools and libraries. One can also find tourists from all over the world wandering around the beautiful architecture and the folkloric Colombian living.

Colombia



Antioquia

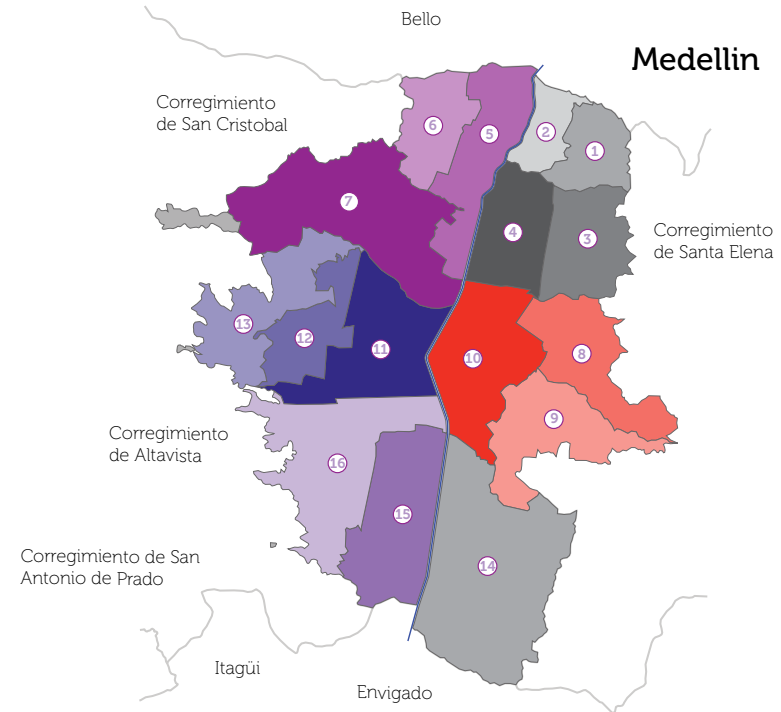


Colombia, Antioquia and Medellin

Schema 9

Medellin belongs to Antioquia State in Colombia.

Medellin has 16 municipalities



16 Municipalities of Medellin

- | | |
|-----------------|---------------------|
| 1 Popular | 9 Buenos Aires |
| 2 Santa Cruz | 10 La Candelaria |
| 3 Manrique | 11 Laureles Estadio |
| 4 Aranjuez | 12 La America |
| 5 Castilla | 13 San Javier |
| 6 12 de Octubre | 14 El Poblado |
| 7 Robledo | 15 Guayabal |
| 8 Villa Hermosa | 16 Belen |

Along with the urban projects, other projects were devised and realized, bringing opportunities for study and progress.

There are two initiatives in particular that need to be taken into account: The Participative Budget and Cultura E. They are important for this project because if people want to launch an initiative like La Mimi, people can get access to funding that is offered by any of those two programs.

Participative Budget

The participative budget is a part of the city budget given to each municipality for people to self-organize and manage the municipality's needs. The counselors of each municipality can obtain money from the government if an articulated proposal is publicly accepted by the municipality's members, making it clear where the money will go.

This program enables municipal projects of diverse nature. The government has set up a group of areas where initiatives have to fit. The areas are: Social protection, sports and fun, culture, education, public works, environment, economical development, coexistence, participation and citizens safety.

Inhabitants can ask for money to fix a public park, or to buy plants for the neighborhood, or for example to buy musical instruments for a public music school, among many other initiatives. [14]

Cultura E.

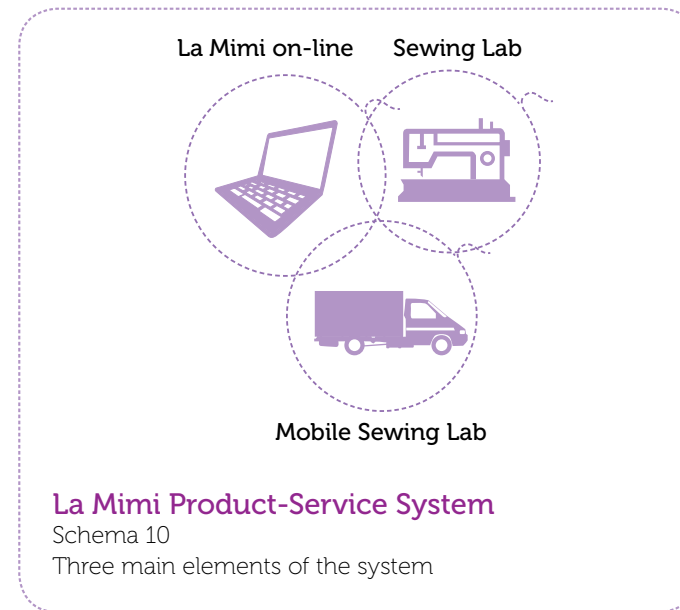
Cultura E is an initiative to encourage entrepreneurship and job creation among the younger generations. [54]

The government launches an annual call for business projects. The projects selected are then financed and get accompaniment during the beginning of project execution. The winning project initiators are given a set of classes and support to strengthen the initial idea and make it financially sustainable.

There are many cases of successful business ideas which went through this model, rooted well, and now are examples of good business and entrepreneurship.

La Mimi could also be one of the projects presented for funding.

4.3. La Mimi Product-Service System



La Mimi PSS has two main components: a sewing lab, and a web platform. The sewing lab has a mobile unit that reaches community centers in the city.

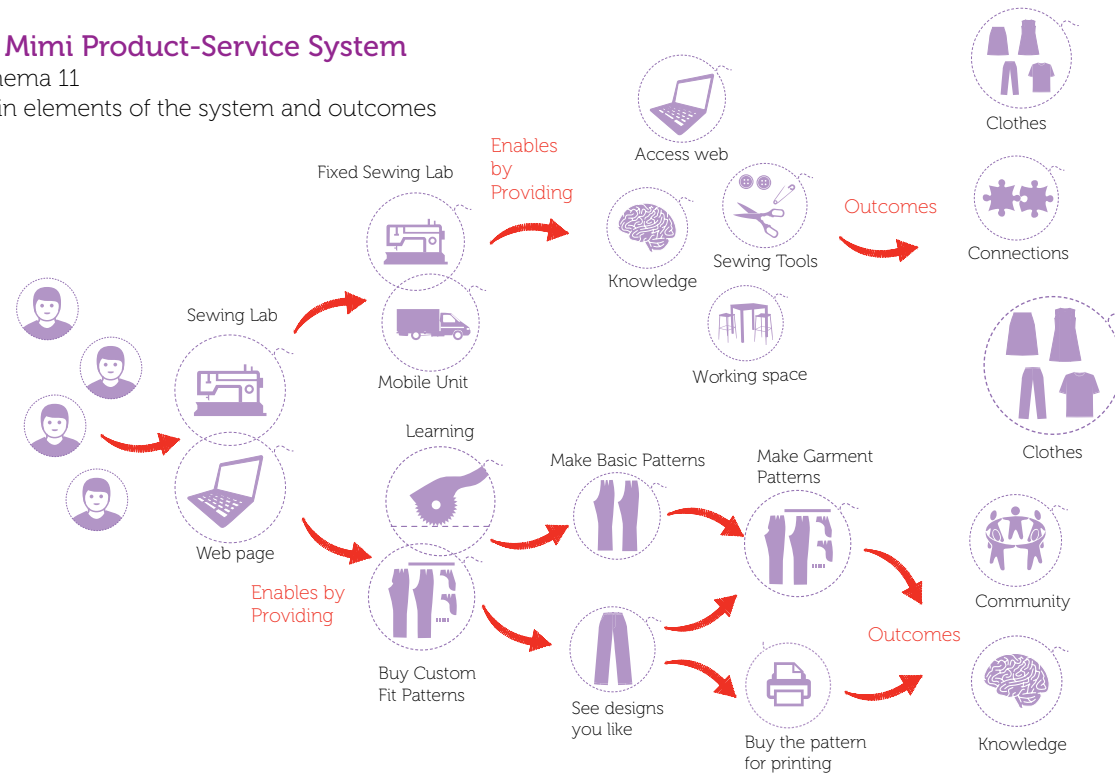
In each component users can access to a set of tools for learning and making clothes.

In the next graphic each element notes the key elements that are offered in each unit.

La Mimi Product-Service System

Schema 11

Main elements of the system and outcomes



Sewing Lab



Mobile Sewing Lab



La Mimi on-line

4.3.1 La Mimi Product-Service System in Medellin

The sewing labs in Medellin

The main sewing lab is to be placed in El Poblado (comuna 14) in one of the streets known for its small shops of independent designers. In Via Primavera, the name of the street, one can find clothes and products locally designed and manufactured by the many talented young designers in Medellin.

In one of the streets that lead to Via Primavera, there is a place perfect as a strategic point for the Sewing Lab. The shop that holds the space is called Mango Morado. In there, a group of independent young designers have a workshop and a store where they sell their own creations.

Mango Morado features space where the workshops could be hold, while taking advantage of Mango Morado's resident designers and the creative groove that fills Via Primavera. I

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Mango Morado is a good place to set the fixed sewing lab. In this neighborhood the aim is to reach the high and middle class of the city. I have already had initial conversations with Mango Morado's team, and they so far fully support the project.

The mobile sewing lab will be in the fixed location and will go around once monthly to offer workshops for people. The neighborhoods visited are those with economical disadvantage.

The more critical neighborhoods are those in peripheries. Most parts of those neighborhoods were created by locals, and no urban design had been applied.

The aim of visiting the poorer neighborhoods is to reach different parts of society and trigger common initiatives connecting people from different parts of the city and from different economical backgrounds.

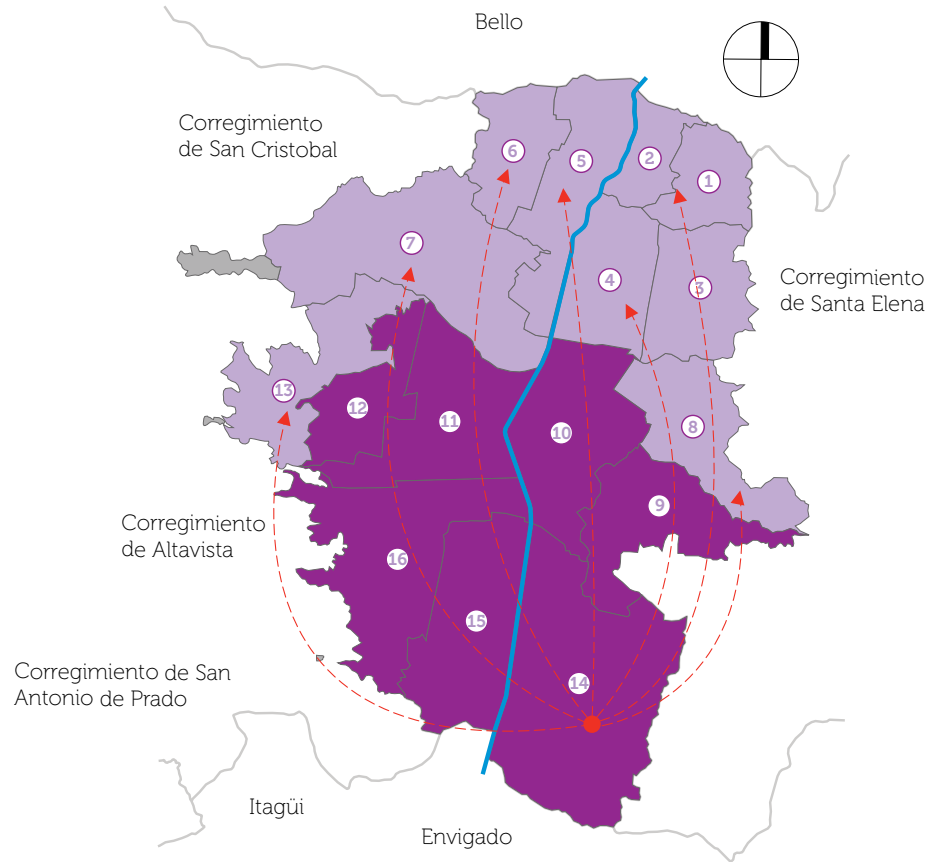


Picture 32. Studio Area Mango Morado



Picture 33 Mango Morado's Shop

Fix Sewing Lab and Mobile Sewing Lab location's Map
 Schema 12



Medellin

- Areas to be reached by Fix Sewing Lab
- Areas to be reached by Mobile Sewing Lab
- Fixed Sewing Lab

- | | |
|-----------------|---------------------|
| 1 Popular | 9 Buenos Aires |
| 2 Santa Cruz | 10 La Candelaria |
| 3 Manrique | 11 Laureles Estadio |
| 4 Aranjuez | 12 La America |
| 5 Castilla | 13 San Javier |
| 6 12 de Octubre | 14 El Poblado |
| 7 Robledo | 15 Guayabal |
| 8 Villa Hermosa | 16 Belen |

4.3.2. Personas

Persona 1

Valentina Patiño

17 years old

From Medellin

Lives in El Estadio.

Background:

_10th grade student, at Palermo in Poblado, with boys and girls.

_She lives in Estadio and uses public transportation to go to school every day.

_She leaves school in the afternoons and likes spending time around Via Primavera and El Poblado Park with her friends.

Goals:

_She would like to do something with her afternoons for a change.

_She likes to sew because her mother has a sewing machine at home, but she does not know how to make clothes.

Needs:

_Needs a place to have fun besides school and beside the shopping malls. She is tired that all her outside school activities are around shopping. She does not have a big budget for shopping.

Internet usage:

She spends about 6 hours online to do homework and communication using social networks. She uses her Facebook daily.

How did she find out about La Mimi.

_ She found out about La Mimi because a friend of her talked about it in Facebook.

_She looked at it online and will try to learn on her own. Sometimes she will visit the sewing lab after school to see how it is and if she can see herself going there.

"I want to spend my free time doing something usefull and that makes me happy"



Persona 2

Catalina Gomez

23 years old

From Medellin

Lives in the Buenos Aires neighborhood

Background:

_Fashion design Student. Lives in the Buenos Aires neighborhood and studies at Universidad Pontificia Bolivariana, this is her last semester. She likes walking to school and spends more of her time there because she finds all she needs for her school projects.

_She has a boyfriend and likes to make things for him. She has done some clothes for herself and her boyfriend as part of design projects for school..

Goals

_Finish her degree and make her own brand of clothes.

_Meet new people to find a place in the design world for herself in the future.

Needs

_She is working on her final project and needs to use sewing machines but she does not have them. She uses the sewing lab at school but sometimes the space is not available. Her final project is about regional costumes of Colombia and she will make some costumes.

Internet usage

_She has a smart phone and is always connected.

How did she find out about La Mimi.

_She heard at school she can use the sewing lab at El Poblado when the school facilities are occupied or closed. She will use the lab next time she needs to sew for her thesis project. She also watched once La Mimi talking on Telemedellin about the Mobile Sewing Lab.

"I want to make cool clothes and have my own personal style!"



Persona 3

Paula Bernal

32 years old

From Medellin

Lives in the Suramericana neighborhood

Background

_She studied arts in la Universidad de Antioquia and works part time at the MOLA museum store. Some of her objects are exhibited in the shop. She also makes her own independent exhibitions at small art events.

_She has a boyfriend but they don't live together yet. They have been dating for a year.

Goals

_She wants to try new techniques for her art displays.

_She wants to play with fabrics and sewing to create new effects in her art.

Needs

_She likes to dress differently and tries to have her own style.

_She buys many of the clothes that are sold at the museum shop because local designers make them and their style is not mainstream. Sometimes she wants to make herself some clothes and save some money.

_At the moment she is working for an art exhibition and is planning to make some pieces using fabric. She does not know how to make them but a friend of hers will help her.

Internet Usage

_She has access to Internet most of the time. She uses flickr and vimeo to post her works. She also uses facebook.

How did she find out about La Mimi.

_Her friend who is helping her sewing stuff for her art exhibition told her they should work there. She likes the idea of having a space to create clothes and have all the sewing machines available for different kind of fabrics.

*"I want to be a result of
my own art"*



Persona 4

Ana Maria Gonzalez

39 years old

From Medellin

Lives in the Center

Background

_Graphic designer from la Escuela de Artes. Lives with her partner. They don't have kids but plan to have soon.

_She has a freelance job and works from home.

_She also has a brand of clothes and sells exclusive small edition collections.

Goals

_She wants to learn how to make patterns to create patterns for her own collections.

_She wants to find more possibilities for her collections.

Needs

_She makes clothes for selling, she designs them, while her mother sews. She would like to learn to make patterns herself but she does not like going to school. She rather would learn in her own space and time.

Internet usage

_She stays online most of the day working and using social media: facebook and flickr. She posts her work and offers her services using both channels.

How did she heard of La Mimi

_Browsing the internet she found about la Mimi as a way of learning making patterns on her own.

_She will take the course of La Mimi from home and see if she can handle the patterns. She will also go to the sewing lab to check out the machines they have to open up her design potential.

_She is also a photographer and likes taking pictures of rural areas and expressions of the culture. She heard about the mobile sewing lab and wants to learn how she can be part of the workshops.

*"I want to make people free
to wear whatever they feel
like wearing"*



Persona 5

Adriana Salazar

45 years old

From Medellin
lives in the Santa Teresita neighborhood.

Background

_She is married and has two teen kids. Works at a public office as an accountant.

_She spends most of her time between the office and her house. She likes to make dolls with old clothes for Christmas.

_She likes crafts and collecting old boxes.

_Her Mother used to sew for her when she was a kid and she remembers with lots of love the clothes her mom used to make. She wants her kids to feel this way.

Goals

_Meet new people and learn a new skill. She likes making clothes but rather does it where there are other people sewing.

_She would like to make clothes for herself and her kids but she needs help to learn.

_She still keeps some old clothes her mom made for herself and then passed on to her. She thinks of those clothes as pieces with value. She would like to make more valuable pieces for herself.

Needs

_Needs a place to sew her clothes with other people and interact. She needs to have someone to ask when she has doubts..

Internet usage

_She uses Internet at work a lot. She uses email and knows well how to move online. She does not use Internet at home much.

How did she heard of La Mimi

_She found out about La Mimi while walking in Via Primavera. Went home thinking to go back and regularly access the Lab.

_She will mostly go on Saturdays and maybe once a week after work. She finds it very good to have other people with projects,

"I want to do something different, better if I need to use my skills"



to see how they make things and how she can make them herself.

Persona 6

Ligia Vallejo

65 years old

From Medellin

Lives in the San Diego neighborhood

Background

_Mother of two young adult children. Divorced. She used to work as a nurse but now she is retired and has a lot of free time. She likes to go out and talk to people. It makes her feel good to be around people and help them if they need something.

_She likes participating in groups of her age. In the morning she exercises with them and does activities around the city like going to parks or museum.

Goals

When she was younger she used to make clothes and still remembers how to do it. She wants to sew again but does not have the tools and the light in her house is not very good.

Needs

_She needs a place where to make clothes while being with others. She has seen courses at schools but she rather goes somewhere more informal where she can remember and have fun.

Internet usage

_She knows how to check her email, look around for pictures and search Google. She needs one of her children to help her with her Internet very often. She has a computer at home.

_She has a facebook account to keep in touch with her family abroad.

How did she heard of La Mimi

_She heard about la Mimi through another friend and went to see how she could go more often. She likes to see people of different age and from different backgrounds.

"I want to enjoy my life to the maximum, I want to feel creative, I want to feel alive."



4.3.3. La Mimi Sewing Labs



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Picture 34. La Mimi Sewing Lab. The host and an user talking.

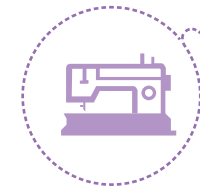
Welcome to La Mimi Sewing Lab, a place to learn and make! In the Sewing Lab users can learn to make clothes using the website and the expertise of our hosts. People have all the tools they need to make any sewing project. They can use the space and connect to other users.

The Sewing Lab welcomes everyone who wants to start creating and wants to share her or his experience.

There is one main Sewing Lab located in Medellin.

The space has all the tools users need to realize any sewing project. The machinery also includes some irons, and a big format printer for users to print the patterns generated through the web site.

Users enter the space once for free, and then under a membership agreement. There are several models based on



usage hours and the economical situation of a member.

A new user needs to take a test and a basic training on machine use and safety. People whose profession is mainly sewing and clothes making may skip the training.

Once a user has taken the training he or she can use the space autonomically.

The space has a host that welcomes users and becomes aware of the activities they are doing, in order to support in any need and to create connections and synergies among people working in similar projects, or people that have potential to work together.

In the space people can use the tables and the chairs, the fixtures, the machines and the printer. Users need to bring their fabrics and the basic sewing instruments like scissors, chalk, pencils, pins, needles, etc.

In the Lab people also have access to the web through their personal computers or by using one of the Ipads provided at

the Lab. Ipads 'project' the interaction of the website onto the tables and machines. Users can take the Ipads and work with them while they are in the lab.

The Lab is open every weekday including Saturdays. Sunday, only users with extended membership can enter using their own set of keys.

Extended membership users have also a place for storage and a mail box.

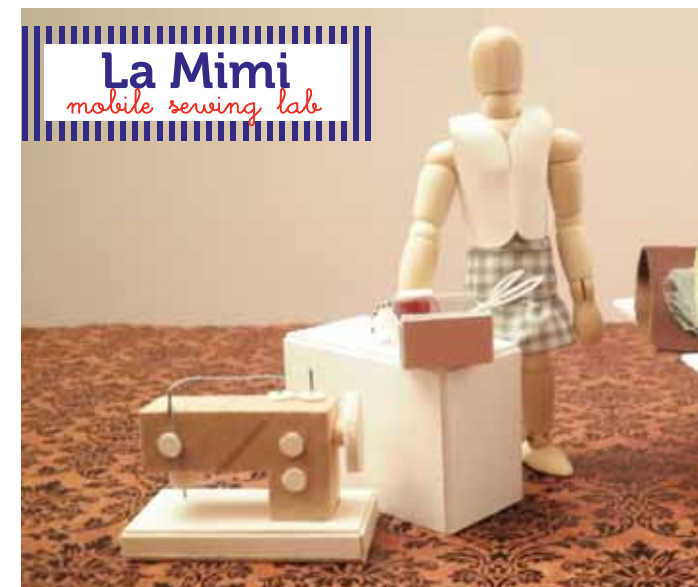
The Mobile Sewing Lab is a set of machines and tools that can be taken to another location. The Mobile Sewing Lab's main activity is to reach different areas of the city to motivate people for making clothes and introduce them to the possibilities and potential.

The Mobile Sewing Lab carries also a set of Ipads for accessing La Mimi on-line during the workshops.

The Mobile Sewing Lab can also be rented when not in use.



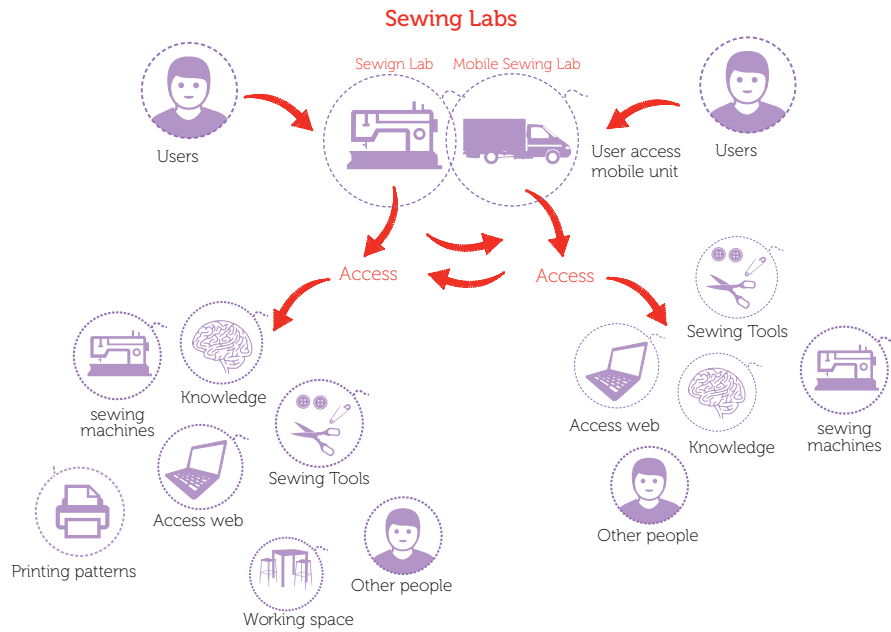
Picture 35. La Mimi Sewing Lab. Interaction in the space.



Picture 36. La Mimi Mobile Sewing Lab. ready to set itself in another place

System Map Sewing Labs

Schema 13



4.3.5. Journeys Sewing Labs

4.3.5.1. Journeys Fix Sewing Lab

First time user Sewing Lab



① Adriana found out about La Mimi sewing Lab walking by. She now wants to try to see if this place is for her.



② When she arrives the host welcomes her and explains everything about the place.



③ Adriana is really excited and she is now taking the test to see if she can use the machines.



④ Adriana needs to take a basic training. She will do this next time she comes.



⑤ She talks to the Host and wants to start up a membership to try out. She said she will come in two days.



⑥ Once Adriana takes her training she can start using the space

Journey

Frequent user Sewing Lab



① Ana Maria has been at the Sewing Lab because she needed to work on her personal project. She is a frequent user.



② In the space she can use the tables for working



③ She can request one of the Ipad available where she can access La Mimi on-line, where she is learning to make patterns for dresses for her one of her projects.



④ When Ana Maria needs help, any of the Hosts of the day can help her. Or she can get help by one of the volunteers.



⑤ She is able to use the big format printer available for printing patterns. She needs to ask for help every time she needs to print.



⑥ She can sew using any of the many machines there are. There are machines for different purposes, and she can use them if they are free.

Journey

Making Connections Sewing Lab



① Ana Maria is in the sewing Lab and the host would like her to meet Jenny, a girl that went to the Mobile Sewing Lab workshop. She thinks they should meet.



② Ana Maria likes Jenny and shows her what she is working on. She tells her she is now working on a new collection of dresses and likes to make the patterns to try some ideas.



③ Jenny tells Ana Maria that she makes birdcages for selling. She tells her she went to the Mobile Sewing Lab to bring one cage, and that now she wants to try some ideas too. They plan to meet again.



④ Later they meet at Jenny's shop. Ana Maria likes the place and tells Jenny she will make a collection of dresses based on her cages.



⑤ Jenny likes the idea very much and she also has an idea to work at the lab, she will make fabric covers for her cages.



⑥ They meet again in the Sewing Lab several times, while Ana Maria creates her collection, Jenny creates her covers. Ana Maria is advising Jenny on the design.

4.3.5.2. Journeys Mobile Sewing Lab

Setting a workshop by the Mobile Sewing Lab



① Jenny went to one of the community centers to deliver one birdcage and she found out about a workshop for sewing. She will come.



② La Mimi Sewing Lab takes its tools and goes to a location the day of workshop (4 times in one month)



③ In the location a temporary Sewing Lab is set and it is ready to start workshop

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Journeys

Workshop day by the Mobile Sewing Lab



① Jenny arrives to the community center to take part of the workshop and the Host welcomes her.



② The Host gives Jenny an introduction about the tools and the method to use



③ The host also shows her how to work with the web platform by providing one iPad



④ Jenny starts by learning how to make pants. She will try to see if she can make it by herself



⑤ Jenny keeps on going to the workshop and advances with her pair of pants. The host explains now how to sew.



⑥ While Jenny sews the Host pays attention to the details to see if Jenny is doing well.



⑦ At the end of the workshop Jenny is very happy and proud of the pants she made.

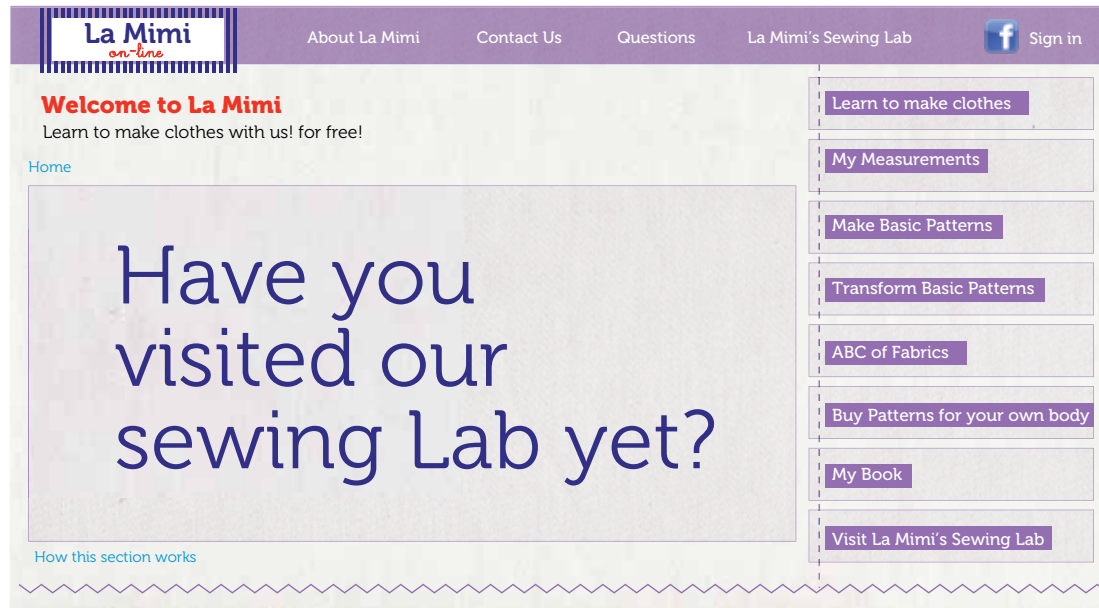


⑧ Jenny talks to the Host at the end and asks more about the Sewing Lab in El Poblado. She would like to go and visit



⑨ She says good by and leaves happy and knowing something new to make.

4.3.6. La Mimi On-line



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Home

A welcoming board where different events and happenings will be displayed. From here people browse around and access the features of the page.

Welcome to La Mimi online! The place where people can learn to make clothes for themselves, and for others.

On this site you will find a step by step process for making clothes for women with the original method used by La Mimi, my grandmother.

The web site has, besides the services to make clothes, a service for people to buy patterns with their own body measurements, in this way those who simply want to make clothes without having to make the patterns themselves, can

find here designs created by other users and recreate them.

Users can also create their own book with their own measurements and basic patterns which they can update with measurements and print at any time.

The Book also stores the patterns that the user has bought from the platform in case the user wants to make the design again.

One of the main features of La Mimi on-line is the service of teaching people how to make clothes. It is this the core of La Mimi, and the way it hopes to engage people to enter the other parts of the system.

People learn to make clothes for free, and they can also store their measurements and their basic patterns. The platform enables people to both learn how to make the patterns, and generate them in the platform itself for download and printing.

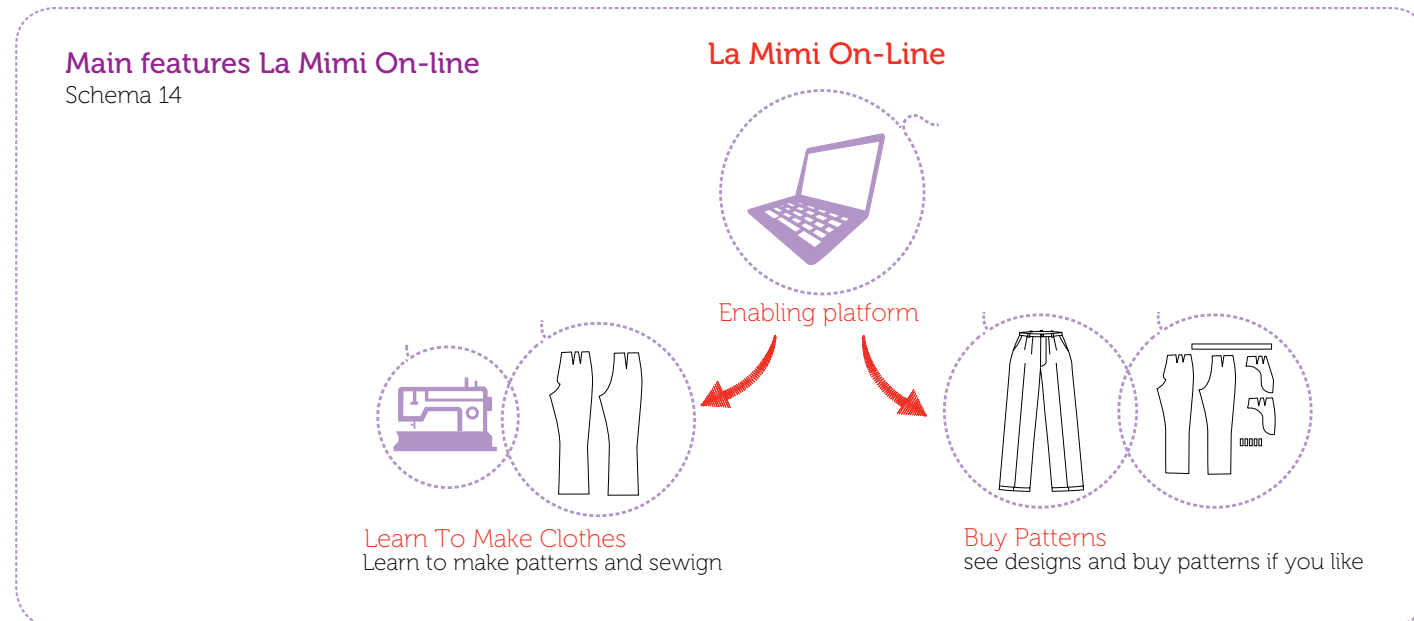
Users can make the learning journey in two ways, one watching all the videos made by La Mimi, where she explains how to do the process, or they can download ready to make patterns of designed clothes at a cost.

Users have a set of free patterns to download: the basic patterns as many times as the user wants, and the patterns of some clothes that will help a user to understand how to

transform the basic patterns into patterns for clothes. This allows users to get a taste of how these printable PDFs work. And if they like it, they may find value in patterns that are for purchase. The main value proposition of the purchasable patterns is, they come with the users measures, thus, each one is unique and made just for them.

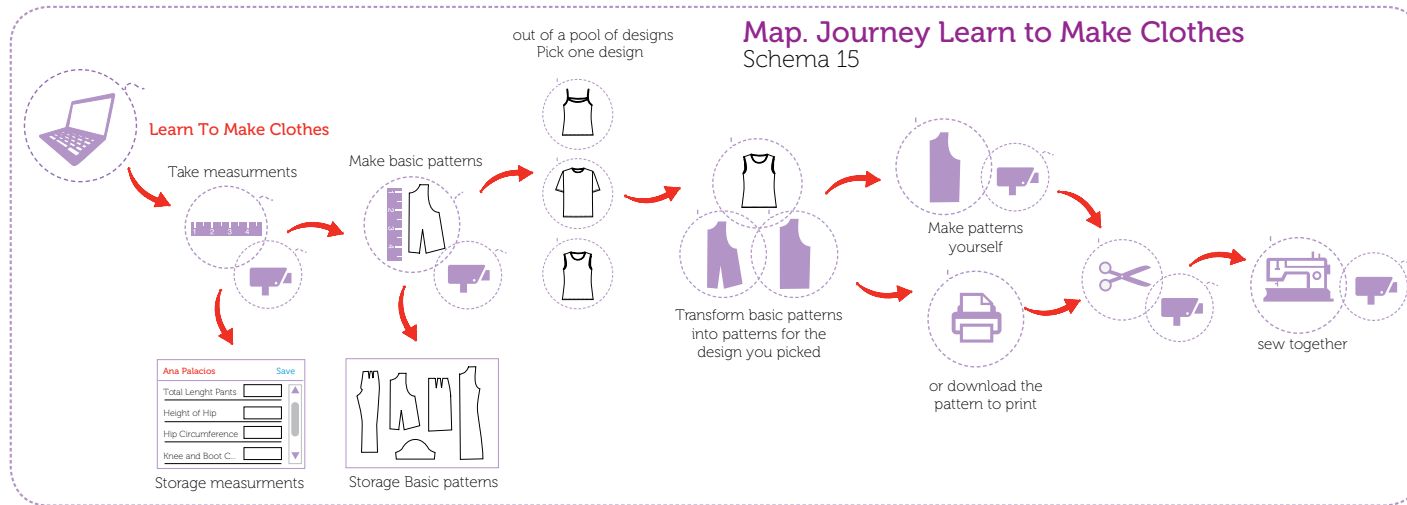
These patterns for sale are patterns of designs posted by other users. When a user wants to sell his or her design, he or she will need to upload the pattern in a format required by La Mimi. The patterns are then stored and can be used on demand to generate custom fitted patterns.

If one pattern gets sold, both La Mimi and the designer get money. A bigger percentage goes to the design.



4.3.7. Journeys La Mimi On-line

4.3.7.1. Learn to Make Clothes



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La Mimi
on-line

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Learn to make clothes
Collect your measurements

[Back Home](#)

Find out how you can make clothes for yourself and for others

For free!!!

You can learn to take measurements, store them, make your basic patterns and any other designs you choose!

[Watch the video](#) to find out how you can learn!

[Sign up](#) now and be part of La Mimi!!

[How this section works](#)

Learn to make clothes

My Measurements

Make Basic Patterns

Transform Basic Patterns

ABC of Fabrics

Buy Patterns for your own body

My Book

Visit La Mimi's Sewing Lab

Learn to make clothes

An introduction video explains how people can learn to make clothes and how to use the features of the process

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My Measurements
Collect your measurements

[Back Home](#)

Ana, Welcome Back!
Click [here](#) to enter your book

Welcome

Click to see where to take the measures and insert them in the chart to be stored.

Move avatar to see the exact location

My measurements Save

Neck	<input type="text"/>
Back Width	<input type="text"/>
Front Width	<input type="text"/>
Shop Front	<input type="text"/>
Back Fall	<input type="text"/>
High Bust	<input type="text"/>
Separation Bust	<input type="text"/>

[Learn to make clothes](#)

[My Measurements](#)

[Make Basic Patterns](#)

[Transform Basic Patterns](#)

[ABC of Fabrics](#)

[Buy Patterns for your own body](#)

[My Book](#)

[Visit La Mimi's Sewing Lab](#)

[How this section works](#)

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My Measurements
Collect your measurements

[Back Home](#)

Ana, Welcome Back!
Click [here](#) to enter your book

Reset avatar

Neck

From the bone in the middle of the back to the place where the shoulder begins in the neck

Move avatar to see the exact location

My measurements Save

Neck	<input type="text" value="12 cm"/>
Back Width	<input type="text"/>
Front Width	<input type="text"/>
Shop Front	<input type="text"/>
Back Fall	<input type="text"/>
High Bust	<input type="text"/>
Separation Bust	<input type="text"/>

[Learn to make clothes](#)

[My Measurements](#)

[Make Basic Patterns](#)

[Transform Basic Patterns](#)

[ABC of Fabrics](#)

[Buy Patterns for your own body](#)

[My Book](#)

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[How this section works](#)

My measurements

Learn to take correct measurements with the dynamic avatar. Pick a measure from the table and see it showing up in the avatar.

You can insert your measurements and alter the avatar to resemble your figure.

La Mimi on-line About La Mimi Contact Us Questions La Mimi's Sewing Lab Sign out

Make Basic Patterns
Click in one category to learn

Ana, Welcome Back!
Click [here](#) to enter your book

[Back Home](#) [Back to my measurements](#)

How this section works

- Learn to make clothes
- My Measurements
- Make Basic Patterns**
- Transform Basic Patterns
- ABC of Fabrics
- Buy Patterns for your own body
- My Book
- Visit La Mimi's Sewing Lab

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Make Basic Patterns
Watch video to learn to make this style!

Ana, Welcome Back!
Click [here](#) to enter your book

[Back Home](#) [Back to categories](#)

My Measurements

Ana Palacios [Save](#)

Total Length Pants

Height of Hip

Hip Circumference

Knee and Boot C...

[Download guide](#) [Download these patterns](#)

How this section works

- Learn to make clothes
- My Measurements
- Make Basic Patterns**
- Transform Basic Patterns
- ABC of Fabrics
- Buy Patterns for your own body
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Make basic patterns

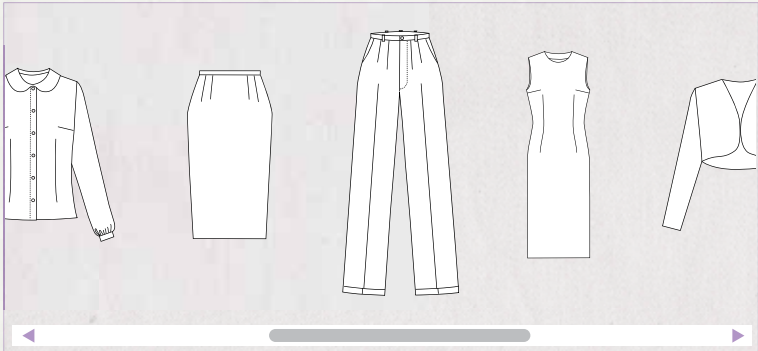
Learn how to transform your measurements into basic patterns. You can make them yourself or the platform can generate them for you and store them in your personal book.

La Mimi
on-line

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Transform Basic Patterns
Click on one category

[Back Home](#)



[How this section works](#)

Ana, Welcome Back!
Click [here](#) to enter your book

[Back to Make Basic Patterns](#)

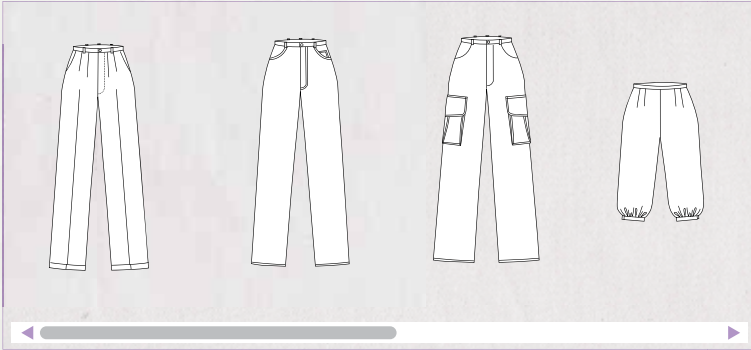
- Learn to make clothes
- My Measurements
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- Transform Basic Patterns**
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La Mimi
on-line

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Transform Basic Patterns
Click on one style

[Back Home](#)



[How this section works](#)

Ana, Welcome Back!
Click [here](#) to enter your book

[Back to categories](#)

- Learn to make clothes
- My Measurements
- Make Basic Patterns
- Transform Basic Patterns**
- ABC of Fabrics
- Buy Patterns for your own body
- My Book
- Visit La Mimi's Sewing Lab

Transform basic patterns

Once the user has the basic patterns he or she can start transforming these into patterns for clothes, choose one category and start learning.

La Mimi on-line About La Mimi Contact Us Questions La Mimi's Sewing Lab Sign out

Collections
Click in one collection
[Back Home](#)

Ana, Welcome Back!
Click [here](#) to enter your book

-Mi Mama las hace- is a brand created by Angela Gonzales, she believes people should un-match their look. This, she believes, is the way to democratize fashion, to learn more [click here](#)

[Learn to make clothes](#)

[My Measurements](#)

[Make Basic Patterns](#)

[Transform Basic Patterns](#)

[ABC of Fabrics](#)

[Buy Patterns for your own body](#)

[My Book](#)

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[How this section works](#)

Collections

Designs posted by designers can be seen in the collection tab. All collections can be previewed here..

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Collections
Click on one style
[Back Home](#) [Back to Collections](#)

Ana, Welcome Back!
Click [here](#) to enter your book

[See specifications](#) [See specifications](#) [See specifications](#) [See specifications](#)

[Learn to make clothes](#)

[My Measurements](#)

[Make Basic Patterns](#)

[Transform Basic Patterns](#)

[ABC of Fabrics](#)

[Buy Patterns for your own body](#)

[My Book](#)

[Visit La Mimi's Sewing Lab](#)

[How this section works](#)

Collections

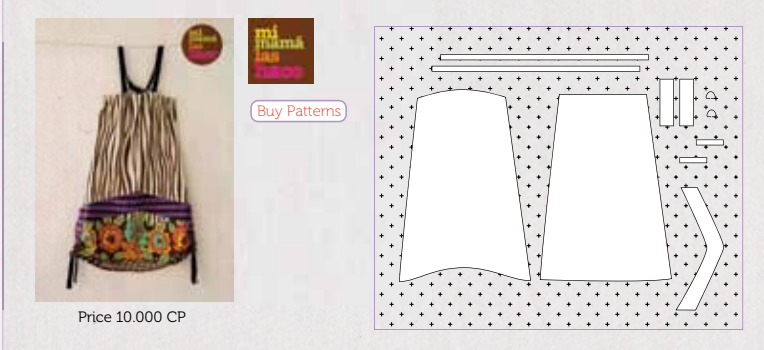
Click in one collection to see the Styles

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Collections
Click on pattern to buy with your measurements

Ana, Welcome Back!
Click [here](#) to enter your book

[Back Home](#) [Back to Styles](#)



Price 10.000 CP

[How this section works](#)

- Learn to make clothes
- My Measurements
- Make Basic Patterns
- Transform Basic Patterns
- ABC of Fabrics
- Buy Patterns for your own body
- My Book
- Visit La Mimi's Sewing Lab

Collections

See a preview of how the patterns look. People with enough experience should be able to reproduce the design. Those who cannot can buy the printable pattern.

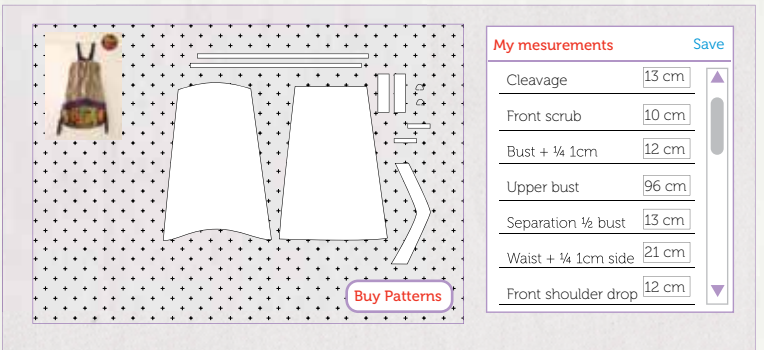
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Collections
Buy pattern or make it yourself!

Ana, Welcome Back!
Click [here](#) to enter your book

[Back Home](#) [Back to Styles](#)



My measurements	Save
Cleavage	13 cm
Front scrub	10 cm
Bust + ¼ 1cm	12 cm
Upper bust	96 cm
Separation ½ bust	13 cm
Waist + ¼ 1cm side	21 cm
Front shoulder drop	12 cm

[Buy Patterns](#)

[How this section works](#)

- Learn to make clothes
- My Measurements
- Make Basic Patterns
- Transform Basic Patterns
- ABC of Fabrics
- Buy Patterns for your own body
- My Book
- Visit La Mimi's Sewing Lab

Collections

For a purchase, first the user needs to update the measurements. If they are right, just buy the pattern.

La Mimi on-line About La Mimi Contact Us Questions La Mimi's Sewing Lab Sign out

My book
Ana, Welcome Back!

Ana Isabel Palacios

My measurements

Neck

Back Width

Front Width

Shop Front

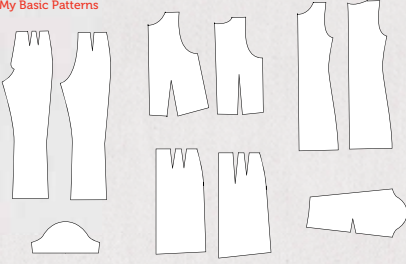
Back Workshop

High Bust

Separation Bust

Update basics ↻

My Basic Patterns



[How this section works](#) [Download patterns](#)

- Learn to make clothes
- My Measurements
- Make Basic Patterns
- Transform Basic Patterns
- ABC of Fabrics
- Buy Patterns for your own body
- My Book**
- Visit La Mimi's Sewing Lab

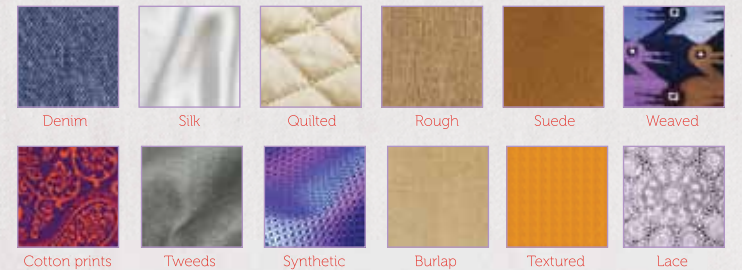
My Book

Users need to create a profile to get access to all parts of the platform. The profile creation activates the personal book, where people store their measurements, the basic patterns and the patterns they purchase on the platform.

La Mimi on-line About La Mimi Contact Us Questions La Mimi's Sewing Lab Sign out

ABC of Fabrics
Find out the fabric you need for your project

Ana, Welcome Back!
Click [here](#) to enter your book



Denim **Silk** **Quilted** **Rough** **Suede** **Weaved**

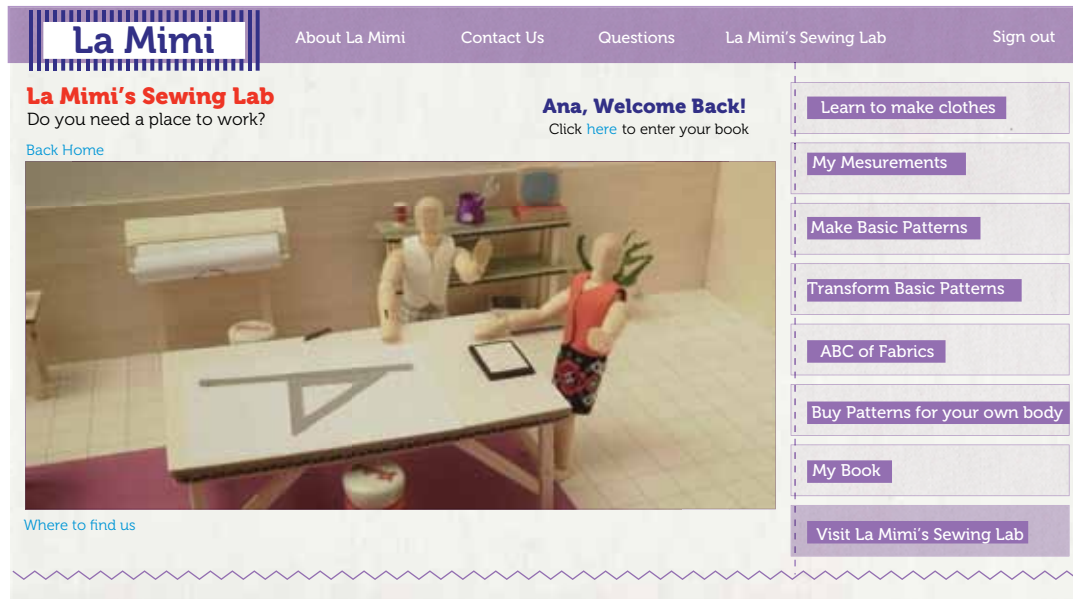
Cotton prints **Tweeds** **Synthetic** **Burlap** **Textured** **Lace**

[How this section works](#)

- Learn to make clothes
- My Measurements
- Make Basic Patterns
- Transform Basic Patterns
- ABC of Fabrics**
- Buy Patterns for your own body
- My Book
- Visit La Mimi's Sewing Lab

ABC of fabrics

Learn about fabrics. What are they used for and what is the best fabric for your projects. Also learn what needles and threads are required for the type of fabric chosen.



Link to the Sewign labs

All information about the sewing lab can be accessed through here. Schedules, fees, opportunities and so on.

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4.3.8. Future Scenarios

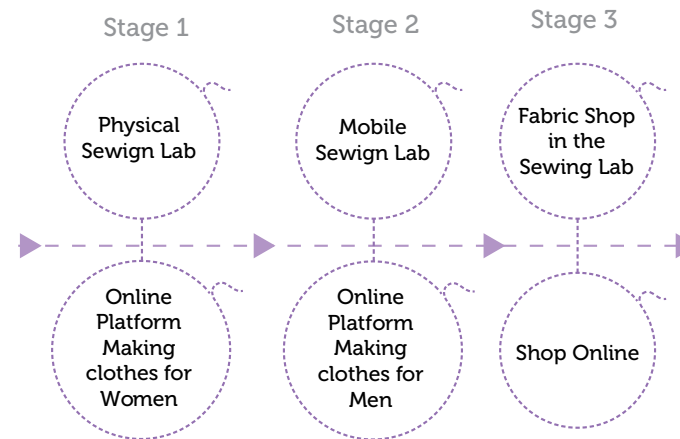
The first stage of La Mimi is launching at the same time La Mimi on-line and La Mimi Sewing Lab. The fix Sewing Lab will be the headquarters of all services.

Once both the web page and the fix sewing lab are well functioning, the Mobile Sewing Lab will do its first workshop. The mobile unit will go to one community center well suited for the purpose and conduct the workshop.

The mobile unit requires a small van for transportation. The community center needs to have a covered space for setting up the workshop.

The Mobile Sewing Lab plans to do 6 workshops a year during two years to reach all neighborhoods in Medellin.

In a second stage the web site will also broaden its public to include teaching to men how to make their clothes. This will lead to open design posted also for men's clothes. The Sewing



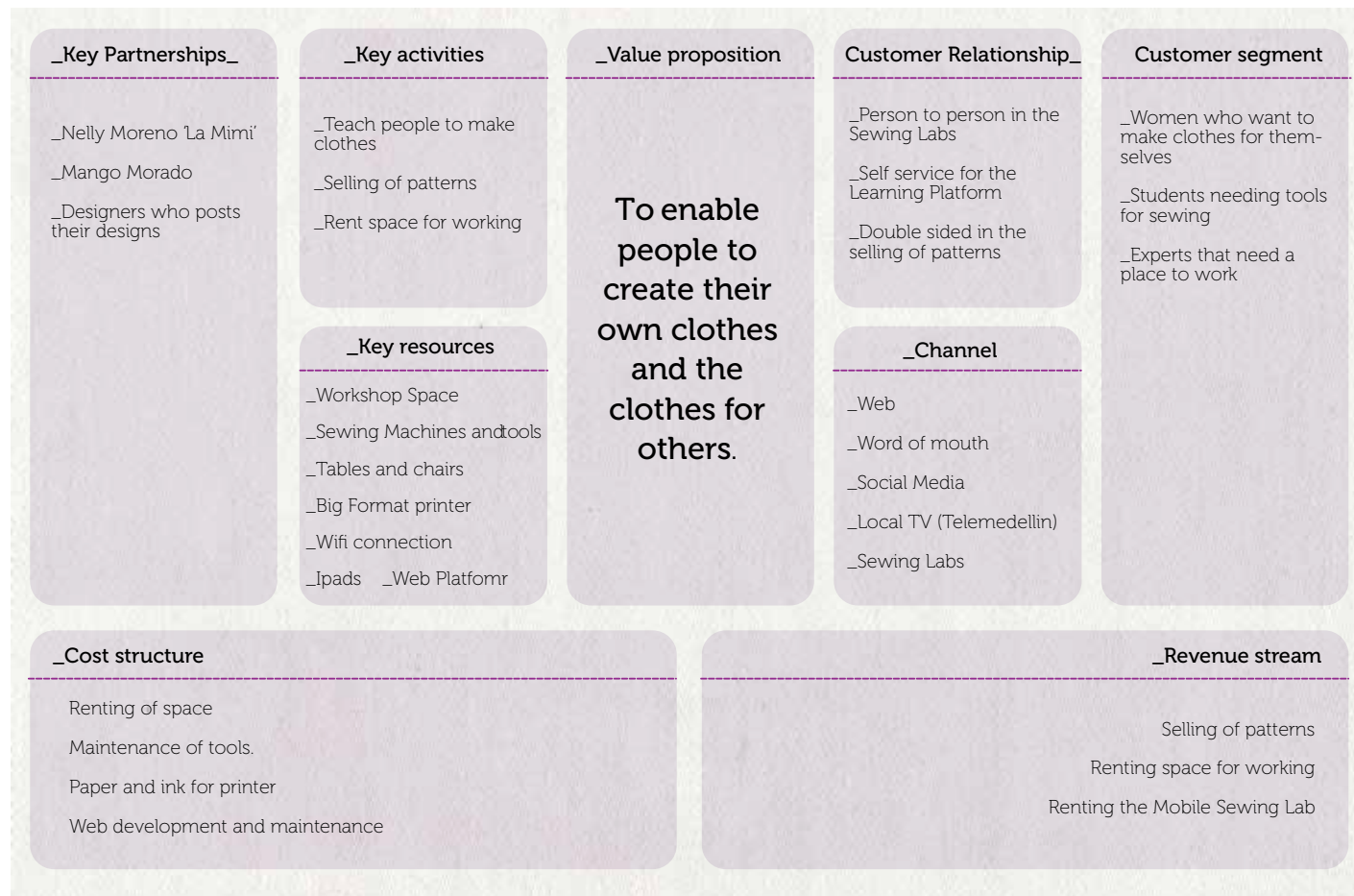
Stages of La Mimi
Schema 17

Lab remains open for men from the beginning.

In a third stage La Mimi Sewing Lab will have a shop inside the Lab to sell fabrics and materials for making clothes. The shop will specialize in natural fiber fabrics produced organically.

The aim is to open a channel for handmade fabrics coming from different regions of Colombia. Also to give people good fabrics for their work in order to add more value to their final garments.

4.4. Business canvas



4.4.1. Income in the system

La Mimi Product Service system will generate income in two ways, one, by selling patterns online for people to print, and two, by people paying membership to access the sewing lab.

For the Web, La Mimi is presented as a Freemium service, that means people get part of the service for free but they should pay if they would like to have access to more. People can learn to make clothes for free, and they can access to some patterns to print for free. However those free patterns are limited and their aim is to introduce people to the different features of the clothing making process.

People who want to continue to keep on making clothes have to keep on making the patterns by themselves, or can buy in the web site creating money flow to feed La Mimi's system.

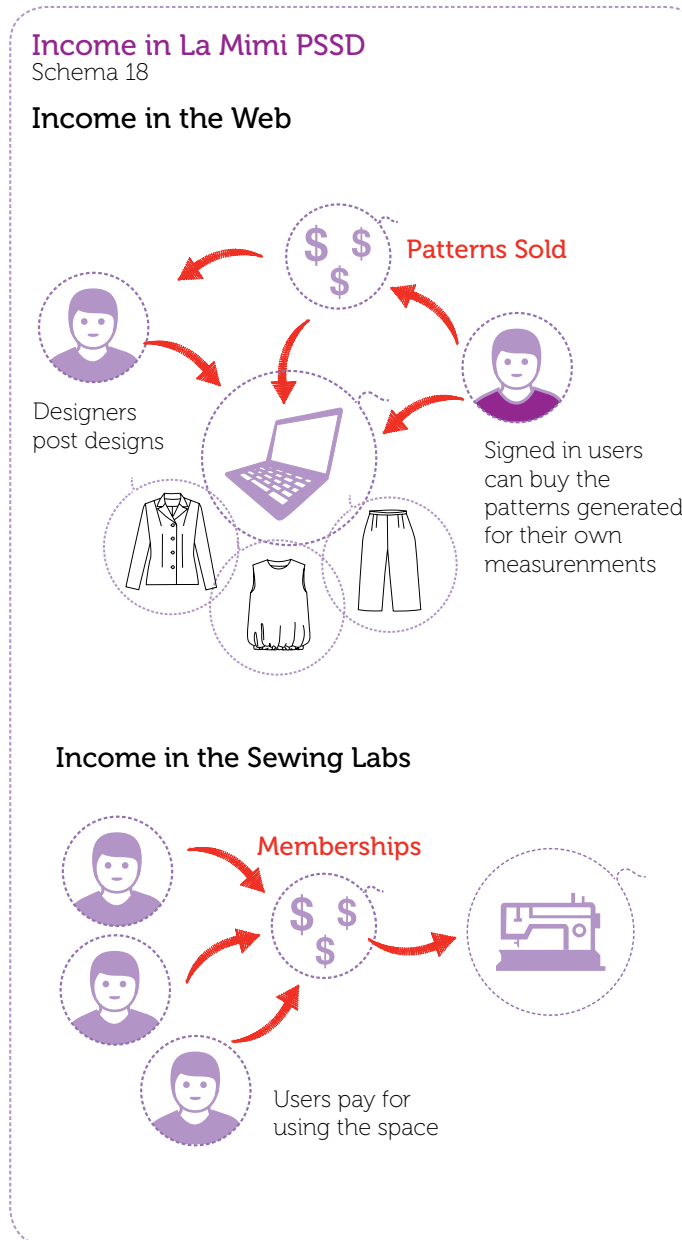
The designs that are for sale are posted by designers or experts who can manage to use the software provided by La Mimi for pattern generation. Each designer creates a profile and an account where they will see the amount of patterns sold and their credit at the moment.

Credits can be used for buying patterns, accessing the Lab, or for credit given to a personal account.

In the Sewing Lab, users need to pay for use. There are different types of memberships and options people can choose from that better fit their needs. For instance students pay less than others, or someone un-employed can be offered voluntary work in exchange for use.

People can choose also to pay by single use, or pay less by paying monthly use.

The money that system will bring in will be used to upgrade the web and improve it constantly, for maintaining the Sewing Lab and have a very active Mobile Sewing lab.



4.5. Possible Partnerships

Sewing Machines Manufacture

Sewing machines manufactures such as SINGER or PFAFF could benefit from a partnership with La Mimi as they would let people try their machines. A company could rotate some reference device for testing, or let customers try machines to trigger their desire for purchasing.

Printing Shops

Local printing shops could partnership with La Mimi for users to print purchased patterns. A printing place can offer a reduced price for distributed quantity, that way users can pay less. A printing service could also deliver the patterns and charge an extra fee.

Printing shops could get advertisement through La Mimi's Sewing Lab and through La Mimi's website.

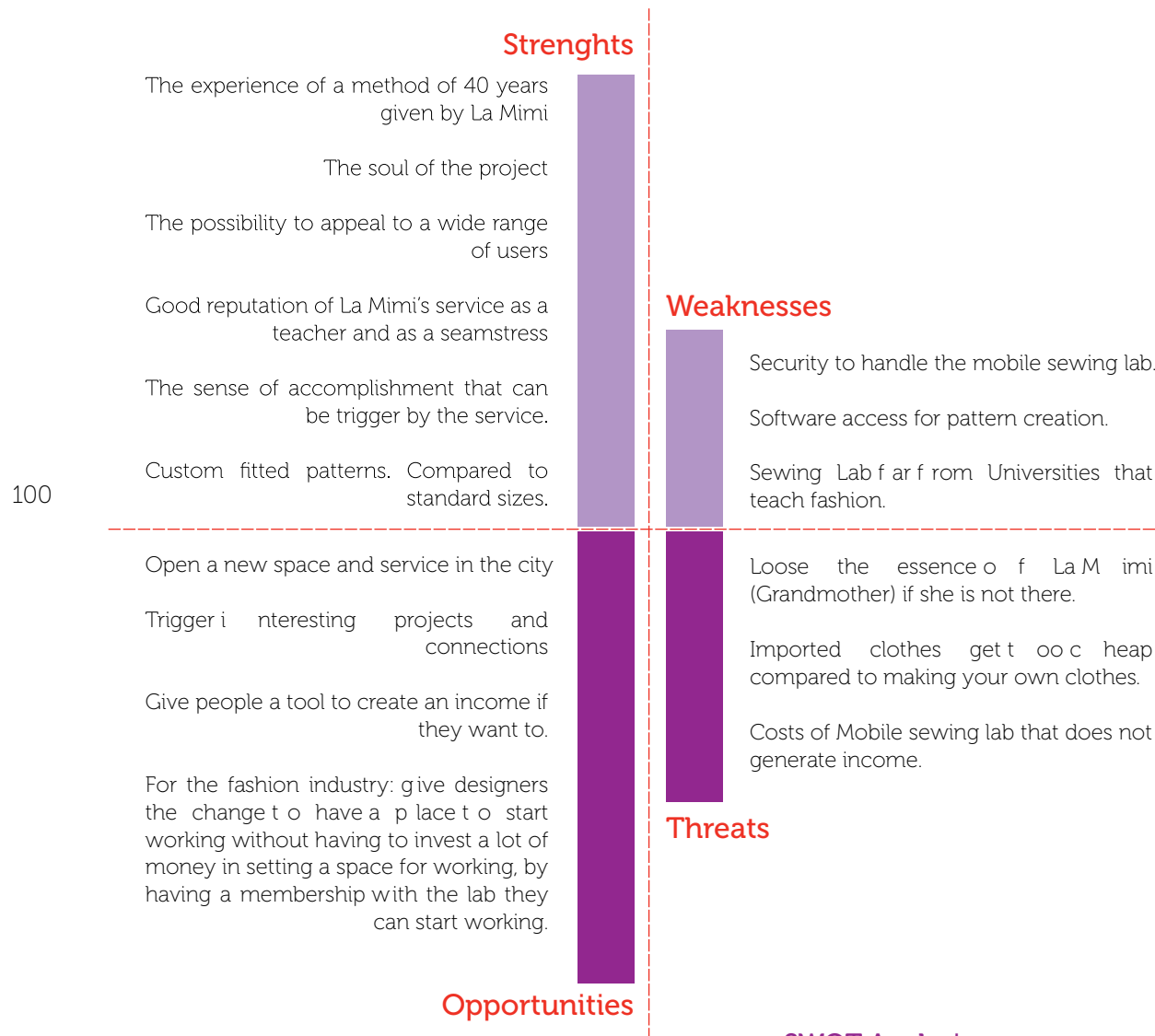
Time Bank

Both the stationary and the mobile Lab could be part of the time bank. People in the time bank could use their time credits in the shop, or rent the mobile unit. The credits La Mimi accumulates could be used for maintenance, cleaning, or to buy tools and materials needed. Also to pay back experts who sell their time to help others in the lab with their sewing projects.

Fabric Shop

La Mimi could team up with people from a fabric shop to sell their products in the lab. In the future the Sewing Lab will have a shop, a partnership could help the shop becoming a reality sooner.

4.6. SWOT analysis



Maintain the strengths

- _Keep on working in the image of la Mimi and develop the online experience with La Mimi taking part.
- _Appeal to diversity of people by trying to reach out as much as possible and bring people together.
- _Encourage accomplishments by being aware of the process of the users and let them know La Mimi cares.
- _Try to reach a vast among of designers to upload their designs to offer people the opportunity to choose. It would be good to have the platform both in Spanish and English to reach designers from outside Colombia and give richness to the offer or patterns.

Change weaknesses

- _Choose well the places where to go with the mobile sewing lab to avoid security problems and theft.
- _Create partnerships to be able to use already existing software for all application in the web platform.
- _See how to location works with the different targeted students. If there is the need the mobile sewing lab could also reach them closer to school.

Take advantages of the opportunities

- _Advertise well the initiative to make people aware of it. Local TV channel could be a good way to make people know about La Mimi and invite them to come.
- _Launch projects for people to join other and work. The Sewing lab could manage to get a booth in Colombiamoda for users to participate.
- _Introduce people to the opportunities the government offer to finance any project that may start after an user gets access to the service.
- _Provide young professional deals to access the Sewing Lab and start their own business.

Minimized threats

- _Keep la mimi around to give some of herself to the service in the Sewing Lab.
- _Encourage responsible consumption
- _Male Mobile sewing lab generate income by renting it out when not in workshop

4.7. Conclusions

La Mimi is a project I would like to develop. I want to see La Mimi (my grandmother) again and record her teaching on how to make clothes. I would like to edit those videos and start making the web page a reality.

I believe having the Internet today allows many good projects to start up with low budget. As I have designed, La Mimi could start by offering people how to make clothes, and from there start growing into its sequent steps.

It would be good if people from other nationalities and cultures can also use the platform and post designs that can be shared around the globe. If I was to launch the service today it will be both in Spanish and English and allow the flow of diversity of people.

I also believe the Sewing Lab can offer access to what people needs to make sewing projects. In the analysis of study cases it is clear that this kind of format (common working space for rent) has potential users. In the case of the Hub Rotterdam, one can see the place has sustained itself for 4 years and keeps strong, or in the case of Protospace where people use the space because they need the tools which they can't access anywhere else.

La Mimi Sewing Lab needs to offer what people can't usually get in other places, to persuade them to use go. La Mimi Sewing Lab a place to experiment, it would be optimal if the place can also offer laser cutting for fabrics and allow users to go

beyond of what they can be at the moment. I believe to have a big format-printing can also enable people to experiment. The Mobile sewing lab could also be one successful tool to reach knowledge and moments of communitarian work. The unit can reach out and give to people opportunities, knowledge, fun, and feeling of personal accomplishment that is a basic human need.

I believe we are in times of change. Everything is changing, the weather, the economy, cultures, and so on. It is also clear that our impact in the environment has gotten out of hands. We need to change, but the change I believe needs to be conscious about the real impacts of our behavior and completely rooted in the past, on the ways we used to make things to harm less the environment.

I believe one of the main things that have to be done in order to tackle unsustainable behaviors is to reduce consumption. But consumption can not be reduced if we keep trying to satisfy the needs of people with more objects, or more experiences they never experienced before, or knew even existed. There are things we used to make in the past that are fun, good for us and for others. things that made us feel proud and in balance.

The elder people and natives have a lot of knowledge that is important to rescue today. Just like the seed are being storage to save them from genetically modified seeds, heritage needs to be rescued, storage safely and then disseminated so it nurtures the present and future generations. People can feel satisfied and happy without having to spend endless hours in shopping malls. They can be happy by feeling creative. This project is about that happiness that enters the creative process, about people who wants to be themselves and show they can, it is about feeling special, about being able to accomplish.

La Mimi PSS is the result of many years being a designer and being also a clothing maker from my family. The mix of my background and my personal experience has come together in this project to bring every aspect of my profession.

As an industrial designer I see the potential of creation on the

hands of people, the distributed production model could be taken by the people and for the people like distributed knowledge has done in the Internet.

As a graphic designer I see the importance of the interface and the experience through the website. The importance in the way the teaching is carried out and how users can have a better understanding of the method. I see the potential of the graphics into these on-line experiences.

Once I heard by professor Manzini said design has to be sustainable and good because that's what design does. Fortunately this is truth. I have faith that La Mimi PSS is also a sustainable initiative, because it aims to reduce consumption and improve the contexts in which the users live, and the feeling of the users towards themselves and others.

I want to be a responsible designer and give the people who I encounter projects that aim a better future. I hope La Mimi is able to come to life and start building what I believe.

Appendix

Interviews

1. Nelly Moreno, La Mimi.

Born in 1939.
Colombian.

She said she has given class to women. The minimum age was between 20 and 25.¹

La Mimi went to an European cut academy led by Maria Cristina Uribe. When she started she did not know how to sew. Her mother in law knew how and was teaching my grandmother some things. The rest she did by intuition.

She said the course lasted two years. She was so excited about it that she was learning the guides by heart. Everywhere she went she practiced remembering in her head how to make a pattern. At nights, she said, she used to stay up re-doing the lessons until she felt she remembered all.

She talked about her academy. She said she had groups of 12 to 15 students. She had students in the morning and in the afternoon. Her academy lasted from 1969 to 1979 when due to an illness in her throat she had to stop.

After that time she went to work as a designer in a company. We go back to talk about the classes. She said she posts in a local newspaper when she is starting a course. She said some people contacted her after consulting the Yellow Pages, so she is now listed there. La Mimi says she is listed as: "clase de corte Nelly Moreno". She said interested people call her and they arrange a day that is suitable for a class.

In her house, La Mimi has tables, chairs, 3 sewing machines, paper (rolls of paper) and her book. She is very proud of her book. She made it based on Maria Cristina's book, but she changed a few things based on her own experience.

.....
1 When I was 13 I was to take classes with my grand mother. I wanted to take classes and when she started a group she let me know. I only went once because I remember the other ladies already had breasts, and I did not. The guidelines my grandmother was giving were for women with breasts, and I felt it did not make sense for me to learn this.

La Mimi points out her technique is based on the 'European cut'. She thinks the European cut is the best. The reason is that it is based in more measures of the human body, that makes fit better.

She used to give classes that lasted 3 hours. Last year she gave 2 hour classes.
La Mimi started giving classes because she thought that if Maria Cristina could, she could also do it.

When I ask her about the classes with Maria Cristina and how long they lasted, she said they lasted until the day Maria Cristina Died, in class. She suffered a heart attack. She was 35 years old..

La Mimi also recalls the feeling after making her first dress and how beautiful the first dresses she made for her two little girls were.

2. Maria Chiara Cacciani

Italian
23 years old. Born in 1988

Communication designer
She would like to make her own clothes, because they fit better and one can choose what to wear.

Sewing is an act of patience, you do things little by little, like an artist. Chiara thinks that clothes are like an art.

She also thinks some clothes you buy in shops don't fit quite right. She knows what fits best. If she makes her clothes she can make them to fit just right.

She usually designs her clothes but can't make them. Her grandmother makes her designs sometimes. Her grandmother does knitted clothes, so Chiara's designs are only knits.

Her grandmother has a sewing machine that Maria Chiara uses. They both live in the same house, her grand parents live on the second floor. She has used the machine for fixing some things, but she does it by instinct because she has never taken a course for clothes making or repairing.

When she was a kid she used to play with fabrics. She used to make dresses out of pieces of fabric that her little sister used to model.

She would love to know a method for making clothes. she will invest 3 hours a week if that was the time it would take.

She designs by looking around and mixing styles into her own style. She draws these designs. She really likes clothes and fashion design but she did not choose to study that because she thinks it is a heavy profession; you need a pretty face to be able to move around and have contacts. She does not like that.

Making clothes is like art.

3. Angelica Bello

Colombian
28 years old. Born 1983
Industrial designer.

She does not know how to sew nor make clothes. She would like to learn to make her ideas into prototypes.

She is a professional in shoe design. She worked as a shoe designer for 4 years. When she designs shoes she would like to have access to machines and the ability to make those designs for herself and keep them.

She likes to design clothes, but only for important events, for example for her graduation. She designs dresses to wear when she likes to be recognized as a creative person.

When she was growing up, the mother of one of her friends from school used to make clothes. Angelica designed stuff, and her friend's mother made it for her. She charged Angelica a fair price.

Since then she really likes creating her outfits for special occasions, to make the design, choose the fabric, the buttons, the shoes, etc.

Another passion she has is for old clothes. Like clothes of her mother or her grandmother. Pieces of clothes from her family that represent value. She likes to keep those clothes and wear them, or take the buttons of a very old shirt and put them in a new one.

She wears those old clothes or she recycles part of them, like the fabric or the accessories.

She likes two things. One, when she is in the street and sees someone wearing shoes she designed.

The other is to design a garment and get compliments, like 'you look

very pretty' or 'I like your outfit'.

To wear clothes is like wearing a costume. You transform your personality with your clothes. It is a ritual, people even do diet to wear some garments.

4. Angela Gonzales

Colombian
39 years old. Born 1972
Graphic and fashion designer

She did not study fashion design but she designs clothes. She thinks that a designer can design anything; for her it is the same to design a shirt than to design a book.

She thinks ideas for designs come in a moment of awakening, like when one is doing nothing and then, a good idea occurs! And then it is a matter of connection. Design is to make connections, to mix things that were not together before.

She likes designing clothes because they express what people are. She believes people should un-match their clothes and then wear whatever they want, however they want. It would be cheaper that way. That is her philosophy, she wants people to dress well and pretty without having to spend much money. This philosophy is not for everybody she says. Some people like to un-match their clothes, but many other wouldn't.

She does not see the need to learn to sew. She sees there is a need for her to make patterns. She went to take a course in pattern making. She failed because she did not have time to do homework. She did study though. She made the patterns for her later's collection herself.

In her house there was a sewing machines that belonged to her mother. She grew up with the sound of the machine. She thinks many people can't take the noise, but for her it is a relaxant. She is looking for a job in textile design. She wants to learn more about fabrics for personal reasons. She thinks this would be good for her brand development.

She has a brand of clothes called "Mi mamá las hace". She never before designed clothes for herself. One day one of her friends was wearing a skirt she liked and went to make it. Someone then asked Angela to make one for selling and that is how her brand evolved. Making clothes is like making oneself.

5. Miriam Sanchez

Colombian

58 Years old. Born in 1953

Two years ago she wanted to make clothes again and she found out La Mimi was going to start a course. She knows La Mimi because they live in the same residential area. Miriam thinks La Mimi is a good seamstress, so when La Mimi decided to launch the course she joined.

She has always had a sewing machine at home because she has always liked to sew. Long time ago, when she was living with her family, her mother bought a sewing machines. At the time (1970) SINGER opened an easy credit for women to buy sewing machines, with the aim to improve the well-being of people. The machines back then worked by using a pedal. Her mother bought the machines and since then Miriam has been sewing.

She had never taken classes before. But she used to make clothes without even using a pattern. At the time, she says, she draw directly onto the fabric. She said it worked and her dresses for pregnancy were beautiful.

She also has been repairing her husband's clothes. For example, turning inside out a neck, or shortening pants.

About la Mimi's class, she thinks it is all very clear and easy to understand. She thinks ones has to be very dumb for not understanding it. She remembers one student who could not follow La Mimi. She quit soon after the first classes. But Miriam thinks that this has been a strange case. She believes if one understands basic math and geometry one can get the idea very easy.

For her to dress someone is to make that person feel comfortable and well dressed.

She has only done clothes for herself. She did pants, shirts, dresses, and skirts.

6. Consuelo Garces

Colombian

71 years old. Born in 1940

She started to make clothes 9 years ago with La Mimi. She likes it very much because they had a lot of fun together and used to make a lot of stuff. She thinks after the classes with La Mimi "it is very hard to find clothes that are just perfect. Nothing really fits well and you can find the defects in the clothes you buy".

In her house there has always been a sewing machine. She has six sisters and her mother used to say 'it is not normal to have so many women and not one sewing machine'.

She says the clothes she made with La Mimi she will never get rid off. She thinks they are the most precious pieces of clothes she has.

She has a niece who is a nurse and for whom she used to make her uniform. Her niece keeps asking her to make her uniforms again because she has not been able to find a uniform that fits her so well.

She was a beginner when la Mimi taught her how to make clothes.

7. Diana Mejia

Colombian

46 years old, Born in 1965

She took the course last year. She went to every class.

She is an Architectural Draftsman. She used to work in La Gobernación de Antioquia with Angela (my aunt) and they both wanted to meet. She said the classes where an excuse to meet again and share time. She thinks sometimes, when you do something, the reason behind why to start is different than the main activity itself.

She thinks Angela Maria (my aunt) knows a lot, that she knows how to make everything.

She thinks patterns are easy to make. But sewing is hard. She thinks you have to practice to get it right. Nowadays she does not sew much, she thinks it would take time before she could sew properly again.

She sees making clothes as a challenge. She likes the satisfaction she feels after she accomplished the work. She used to tell people she made what she was wearing and felt proud of the compliments people made.

To make clothes for her is to create something that has not been created before. Even if it does exist. If you make it, it is unique. It is like art.

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